Characterization and numerical simulation of liquid refrigerant flow emerging from a flooded evaporator tube bundle

by

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Appendix A: Triangular bundle with R-134a, part I

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DOCTOR OF PHILOSOPHY

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A.2.4.2 Matched Only Droplets for .LB Image 446
A.2.4.2 Depth N 447
A.2.4.2 All Droplets for .LA Image 448
A.2.4.2 All Droplets for .LB Image 449
A.2.4.2 Matched Only Droplets for .LA Image 450
A.2.4.2 Matched Only Droplets for .LB Image 451
A.3 - 1556 R-134a 40F 5000Btu 30000Lb Tri 452
A.3.1 Liquid Level 1 452
A.3.1.1 Lens 100mm Mag 0_29x 452
A.3.1.1 Depth J 452
A.3.1.1 All Droplets for .LA Image 453
A.3.1.1 All Droplets for .LB Image 454
A.3.1.1 Matched Only Droplets for .LA Image 455
A.3.1.1 Matched Only Droplets for .LB Image 456
A.3.1.1 Depth K 457
A.3.1.1 All Droplets for .LA Image 458
A.3.1.1 All Droplets for .LB Image 459

A.3.1.1 Matched Only Droplets for .LA Image 460
A.3.1.1 Matched Only Droplets for .LB Image 461
A.3.1.1 Depth L 462
A.3.1.1 All Droplets for .LA Image 463
A.3.1.1 All Droplets for .LB Image 464
A.3.1.1 Matched Only Droplets for .LA Image 465
A.3.1.1 Matched Only Droplets for .LB Image 466
A.3.1.1 Depth M 467
A.3.1.1 All Droplets for .LA Image 468
A.3.1.1 All Droplets for .LB Image 469
A.3.1.1 Matched Only Droplets for .LA Image 470
A.3.1.1 Matched Only Droplets for .LB Image 471
A.3.1.1 Depth N 472
A.3.1.1 All Droplets for .LA Image 473
A.3.1.1 All Droplets for .LB Image 474
A.3.1.1 Matched Only Droplets for .LA Image 475
A.3.1.1 Matched Only Droplets for .LB Image 476
A.3.1.2 Lens 50mm Mag 0_13x 477
A.3.1.2 Depth J 477
A.3.1.2 All Droplets for .LA Image 478
A.3.1.2 All Droplets for .LB Image 479
A.3.1.2 Matched Only Droplets for .LA Image 480
A.3.1.2 Matched Only Droplets for .LB Image 481
A.3.1.2 Depth K 482
A.3.1.2 All Droplets for .LA Image 483
A.3.1.2 All Droplets for .LB Image 484
A.3.1.2 Matched Only Droplets for .LA Image 485
A.3.1.2 Matched Only Droplets for .LB Image 486
A.3.1.2 Depth L 487

A.3.1.2 All Droplets for .LA Image 488
A.3.1.2 All Droplets for .LB Image 489
A.3.1.2 Matched Only Droplets for .LA Image 490
A.3.1.2 Matched Only Droplets for .LB Image 491
A.3.1.2 Depth M 492
A.3.1.2 All Droplets for .LA Image 493
A.3.1.2 All Droplets for .LB Image 494
A.3.1.2 Matched Only Droplets for .LA Image 495
A.3.1.2 Matched Only Droplets for .LB Image 496
A.3.1.2 Depth N 497
A.3.1.2 All Droplets for .LA Image 498
A.3.1.2 All Droplets for .LB Image 499
A.3.1.2 Matched Only Droplets for .LA Image 500
A.3.1.2 Matched Only Droplets for .LB Image 501
A.3.2 Liquid Level 2 502
A.3.2.1 Lens 100mm Mag 0_29x 502
A.3.2.1 Depth J 502
A.3.2.1 All Droplets for .LA Image 503
A.3.2.1 All Droplets for .LB Image 504
A.3.2.1 Matched Only Droplets for .LA Image 505
A.3.2.1 Matched Only Droplets for .LB Image 506
A.3.2.1 Depth K 507
A.3.2.1 All Droplets for .LA Image 508
A.3.2.1 All Droplets for .LB Image 509
A.3.2.1 Matched Only Droplets for .LA Image 510
A.3.2.1 Matched Only Droplets for .LB Image 511
A.3.2.1 Depth L 512
A.3.2.1 All Droplets for .LA Image 513
A.3.2.1 All Droplets for .LB Image 514

A.3.2.1 Matched Only Droplets for .LA Image 515
A.3.2.1 Matched Only Droplets for .LB Image 516
A.3.2.1 Depth M 517
A.3.2.1 All Droplets for .LA Image 518
A.3.2.1 All Droplets for .LB Image 519
A.3.2.1 Matched Only Droplets for .LA Image 520
A.3.2.1 Matched Only Droplets for .LB Image 521
A.3.2.1 Depth N 522
A.3.2.1 All Droplets for .LA Image 523
A.3.2.1 All Droplets for .LB Image 524
A.3.2.1 Matched Only Droplets for .LA Image 525
A.3.2.1 Matched Only Droplets for .LB Image 526
A.3.2.2 Lens 50mm Mag 0_13x 527
A.3.2.2 Depth J 527
A.3.2.2 All Droplets for .LA Image 528
A.3.2.2 All Droplets for .LB Image 529
A.3.2.2 Matched Only Droplets for .LA Image 530
A.3.2.2 Matched Only Droplets for .LB Image 531
A.3.2.2 Depth K 532
A.3.2.2 All Droplets for .LA Image 533
A.3.2.2 All Droplets for .LB Image 534
A.3.2.2 Matched Only Droplets for .LA Image 535
A.3.2.2 Matched Only Droplets for .LB Image 536
A.3.2.2 Depth L 537
A.3.2.2 All Droplets for .LA Image 538
A.3.2.2 All Droplets for .LB Image 539
A.3.2.2 Matched Only Droplets for .LA Image 540
A.3.2.2 Matched Only Droplets for .LB Image 541
A.3.2.2 Depth M 542

A.3.2.2 All Droplets for .LA Image 543
A.3.2.2 All Droplets for .LB Image 544
A.3.2.2 Matched Only Droplets for .LA Image 545
A.3.2.2 Matched Only Droplets for .LB Image 546
A.3.2.2 Depth N 547
A.3.2.2 All Droplets for .LA Image 548
A.3.2.2 All Droplets for .LB Image 549
A.3.2.2 Matched Only Droplets for .LA Image 550
A.3.2.2 Matched Only Droplets for .LB Image 551
A.3.3 Liquid Level 3 552
A.3.3.1 Lens 100mm Mag 0_29x 552
A.3.3.1 Depth J 552
A.3.3.1 All Droplets for .LA Image 553
A.3.3.1 All Droplets for .LB Image 554
A.3.3.1 Matched Only Droplets for .LA Image 555
A.3.3.1 Matched Only Droplets for .LB Image 556
A.3.3.1 Depth K 557
A.3.3.1 All Droplets for .LA Image 558
A.3.3.1 All Droplets for .LB Image 559
A.3.3.1 Matched Only Droplets for .LA Image 560
A.3.3.1 Matched Only Droplets for .LB Image 561
A.3.3.1 Depth L 562
A.3.3.1 All Droplets for .LA Image 563
A.3.3.1 All Droplets for .LB Image 564
A.3.3.1 Matched Only Droplets for .LA Image 565
A.3.3.1 Matched Only Droplets for .LB Image 566
A.3.3.1 Depth M 567
A.3.3.1 All Droplets for .LA Image 568
A.3.3.1 All Droplets for .LB Image 569

A.3.3.1 Matched Only Droplets for .LA Image 570
A.3.3.1 Matched Only Droplets for .LB Image 571
A.3.3.1 Depth N 572
A.3.3.1 All Droplets for .LA Image 573
A.3.3.1 All Droplets for .LB Image 574
A.3.3.1 Matched Only Droplets for .LA Image 575
A.3.3.1 Matched Only Droplets for .LB Image 576
A.3.3.2 Lens 50mm Mag 0_13x 577
A.3.3.2 Depth J 577
A.3.3.2 All Droplets for .LA Image 578
A.3.3.2 All Droplets for .LB Image 579
A.3.3.2 Matched Only Droplets for .LA Image 580
A.3.3.2 Matched Only Droplets for .LB Image 581
A.3.3.2 Depth K 582
A.3.3.2 All Droplets for .LA Image 583
A.3.3.2 All Droplets for .LB Image 584
A.3.3.2 Matched Only Droplets for .LA Image 585
A.3.3.2 Matched Only Droplets for .LB Image 586
A.3.3.2 Depth L 587
A.3.3.2 All Droplets for .LA Image 588
A.3.3.2 All Droplets for .LB Image 589
A.3.3.2 Matched Only Droplets for .LA Image 590
A.3.3.2 Matched Only Droplets for .LB Image 591
A.3.3.2 Depth M 592
A.3.3.2 All Droplets for .LA Image 593
A.3.3.2 All Droplets for .LB Image 594
A.3.3.2 Matched Only Droplets for .LA Image 595
A.3.3.2 Matched Only Droplets for .LB Image 596
A.3.3.2 Depth N 597

A.3.3.2 All Droplets for .LA Image 598
A.3.3.2 All Droplets for .LB Image 599
A.3.3.2 Matched Only Droplets for .LA Image 600
A.3.3.2 Matched Only Droplets for .LB Image 601
A.3.4 Liquid Level 4 602
A.3.4.1 Lens 100mm Mag 0_29x 602
A.3.4.1 Depth J 602
A.3.4.1 All Droplets for .LA Image 603
A.3.4.1 All Droplets for .LB Image 604
A.3.4.1 Matched Only Droplets for .LA Image 605
A.3.4.1 Matched Only Droplets for .LB Image 606
A.3.4.1 Depth K 607
A.3.4.1 All Droplets for .LA Image 608
A.3.4.1 All Droplets for .LB Image 609
A.3.4.1 Matched Only Droplets for .LA Image 610
A.3.4.1 Matched Only Droplets for .LB Image 611
A.3.4.1 Depth L 612
A.3.4.1 All Droplets for .LA Image 613
A.3.4.1 All Droplets for .LB Image 614
A.3.4.1 Matched Only Droplets for .LA Image 615
A.3.4.1 Matched Only Droplets for .LB Image 616
A.3.4.1 Depth M 617
A.3.4.1 All Droplets for .LA Image 618
A.3.4.1 All Droplets for .LB Image 619
A.3.4.1 Matched Only Droplets for .LA Image 620
A.3.4.1 Matched Only Droplets for .LB Image 621
A.3.4.1 Depth N 622
A.3.4.1 All Droplets for .LA Image 623
A.3.4.1 All Droplets for .LB Image 624

A.3.4.1 Matched Only Droplets for .LA Image 625
A.3.4.1 Matched Only Droplets for .LB Image 626
A.3.4.2 Lens 50mm Mag 0_13x 627
A.3.4.2 Depth J 627
A.3.4.2 All Droplets for .LA Image 628
A.3.4.2 All Droplets for .LB Image 629
A.3.4.2 Matched Only Droplets for .LA Image 630
A.3.4.2 Matched Only Droplets for .LB Image 631
A.3.4.2 Depth K 632
A.3.4.2 All Droplets for .LA Image 633
A.3.4.2 All Droplets for .LB Image 634
A.3.4.2 Matched Only Droplets for .LA Image 635
A.3.4.2 Matched Only Droplets for .LB Image 636
A.3.4.2 Depth L 637
A.3.4.2 All Droplets for .LA Image 638
A.3.4.2 All Droplets for .LB Image 639
A.3.4.2 Matched Only Droplets for .LA Image 640
A.3.4.2 Matched Only Droplets for .LB Image 641
A.3.4.2 Depth M 642
A.3.4.2 All Droplets for .LA Image 643
A.3.4.2 All Droplets for .LB Image 644
A.3.4.2 Matched Only Droplets for .LA Image 645
A.3.4.2 Matched Only Droplets for .LB Image 646
A.3.4.2 Depth N 647
A.3.4.2 All Droplets for .LA Image 648
A.3.4.2 All Droplets for .LB Image 649
A.3.4.2 Matched Only Droplets for .LA Image 650
A.3.4.2 Matched Only Droplets for .LB Image 651
A.4 - 1556 R-134a 40F 10000Btu 30000Lb Tri 652

A.4.1 Liquid Level 1 652
A.4.1.1 Lens 100mm Mag 0_29x 652
A.4.1.1 Depth J 652
A.4.1.1 All Droplets for .LA Image 653
A.4.1.1 All Droplets for .LB Image 654
A.4.1.1 Matched Only Droplets for .LA Image 655
A.4.1.1 Matched Only Droplets for .LB Image 656
A.4.1.1 Depth K 658
A.4.1.1 All Droplets for .LA Image 659
A.4.1.1 All Droplets for .LB Image 660
A.4.1.1 Matched Only Droplets for .LA Image 661
A.4.1.1 Matched Only Droplets for .LB Image 662
A.4.1.1 Depth L 663
A.4.1.1 All Droplets for .LA Image 664
A.4.1.1 All Droplets for .LB Image 665
A.4.1.1 Matched Only Droplets for .LA Image 666
A.4.1.1 Matched Only Droplets for .LB Image 667
A.4.1.1 Depth M 668
A.4.1.1 All Droplets for .LA Image 669
A.4.1.1 All Droplets for .LB Image 670
A.4.1.1 Matched Only Droplets for .LA Image 671
A.4.1.1 Matched Only Droplets for .LB Image 672
A.4.1.1 Depth N 673
A.4.1.1 All Droplets for .LA Image 674
A.4.1.1 All Droplets for .LB Image 675
A.4.1.1 Matched Only Droplets for .LA Image 676
A.4.1.1 Matched Only Droplets for .LB Image 677
A.4.1.2 Lens 50mm Mag 0_13x 678
A.4.1.2 Depth J 678

A.4.1.2 All Droplets for .LA Image 679
A.4.1.2 All Droplets for .LB Image 680
A.4.1.2 Matched Only Droplets for .LA Image 681
A.4.1.2 Matched Only Droplets for .LB Image 682
A.4.1.2 Depth K 683
A.4.1.2 All Droplets for .LA Image 684
A.4.1.2 All Droplets for .LB Image 685
A.4.1.2 Matched Only Droplets for .LA Image 686
A.4.1.2 Matched Only Droplets for .LB Image 687
A.4.1.2 Depth L 688
A.4.1.2 All Droplets for .LA Image 689
A.4.1.2 All Droplets for .LB Image 690
A.4.1.2 Matched Only Droplets for .LA Image 691
A.4.1.2 Matched Only Droplets for .LB Image 692
A.4.1.2 Depth M 693
A.4.1.2 All Droplets for .LA Image 694
A.4.1.2 All Droplets for .LB Image 695
A.4.1.2 Matched Only Droplets for .LA Image 696
A.4.1.2 Matched Only Droplets for .LB Image 697
A.4.1.2 Depth N 698
A.4.1.2 All Droplets for .LA Image 699
A.4.1.2 All Droplets for .LB Image 700
A.4.1.2 Matched Only Droplets for .LA Image 701
A.4.1.2 Matched Only Droplets for .LB Image 702
A.4.2 Liquid Level 2 703
A.4.2.1 Lens 100mm Mag 0_29x 703
A.4.2.1 Depth J 703
A.4.2.1 All Droplets for .LA Image 704
A.4.2.1 All Droplets for .LB Image 705

A.4.2.1 Matched Only Droplets for .LA Image 706
A.4.2.1 Matched Only Droplets for .LB Image 707
A.4.2.1 Depth K 708
A.4.2.1 All Droplets for .LA Image 709
A.4.2.1 All Droplets for .LB Image 710
A.4.2.1 Matched Only Droplets for .LA Image 711
A.4.2.1 Matched Only Droplets for .LB Image 712
A.4.2.1 Depth L 713
A.4.2.1 All Droplets for .LA Image 714
A.4.2.1 All Droplets for .LB Image 715
A.4.2.1 Matched Only Droplets for .LA Image 716
A.4.2.1 Matched Only Droplets for .LB Image 717
A.4.2.1 Depth M 718
A.4.2.1 All Droplets for .LA Image 719
A.4.2.1 All Droplets for .LB Image 720
A.4.2.1 Matched Only Droplets for .LA Image 721
A.4.2.1 Matched Only Droplets for .LB Image 722
A.4.2.1 Depth N 723
A.4.2.1 All Droplets for .LA Image 724
A.4.2.1 All Droplets for .LB Image 725
A.4.2.1 Matched Only Droplets for .LA Image 726
A.4.2.1 Matched Only Droplets for .LB Image 727
A.4.2.2 Lens 50mm Mag 0_13x 728
A.4.2.2 Depth J 728
A.4.2.2 All Droplets for .LA Image 729
A.4.2.2 All Droplets for .LB Image 730
A.4.2.2 Matched Only Droplets for .LA Image 731
A.4.2.2 Matched Only Droplets for .LB Image 732
A.4.2.2 Depth K 733

A.4.2.2 All Droplets for .LA Image 734
A.4.2.2 All Droplets for .LB Image 735
A.4.2.2 Matched Only Droplets for .LA Image 736
A.4.2.2 Matched Only Droplets for .LB Image 737
A.4.2.2 Depth L 738
A.4.2.2 All Droplets for .LA Image 739
A.4.2.2 All Droplets for .LB Image 740
A.4.2.2 Matched Only Droplets for .LA Image 741
A.4.2.2 Matched Only Droplets for .LB Image 742
A.4.2.2 Depth M 743
A.4.2.2 All Droplets for .LA Image 744
A.4.2.2 All Droplets for .LB Image 745
A.4.2.2 Matched Only Droplets for .LA Image 746
A.4.2.2 Matched Only Droplets for .LB Image 747
A.4.2.2 Depth N 748
A.4.2.2 All Droplets for .LA Image 749
A.4.2.2 All Droplets for .LB Image 750
A.4.2.2 Matched Only Droplets for .LA Image 751
A.4.2.2 Matched Only Droplets for .LB Image 752
A.4.3 Liquid Level 3 753
A.4.3.1 Lens 100mm Mag 0_29x 753
A.4.3.1 Depth J 753
A.4.3.1 All Droplets for .LA Image 754
A.4.3.1 All Droplets for .LB Image 755
A.4.3.1 Matched Only Droplets for .LA Image 756
A.4.3.1 Matched Only Droplets for .LB Image 757
A.4.3.1 Depth K 758
A.4.3.1 All Droplets for .LA Image 759
A.4.3.1 All Droplets for .LB Image 760

A.4.3.1 Matched Only Droplets for .LA Image 761
A.4.3.1 Matched Only Droplets for .LB Image 762
A.4.3.1 Depth L 763
A.4.3.1 All Droplets for .LA Image 764
A.4.3.1 All Droplets for .LB Image 765
A.4.3.1 Matched Only Droplets for .LA Image 766
A.4.3.1 Matched Only Droplets for .LB Image 767
A.4.3.1 Depth M 768
A.4.3.1 All Droplets for .LA Image 769
A.4.3.1 All Droplets for .LB Image 770
A.4.3.1 Matched Only Droplets for .LA Image 771
A.4.3.1 Matched Only Droplets for .LB Image 772
A.4.3.1 Depth N 773
A.4.3.1 All Droplets for .LA Image 774
A.4.3.1 All Droplets for .LB Image 775
A.4.3.1 Matched Only Droplets for .LA Image 776
A.4.3.1 Matched Only Droplets for .LB Image 777
A.4.3.2 Lens 50mm Mag 0_13x 778
A.4.3.2 Depth J 778
A.4.3.2 All Droplets for .LA Image 779
A.4.3.2 All Droplets for .LB Image 780
A.4.3.2 Matched Only Droplets for .LA Image 781
A.4.3.2 Matched Only Droplets for .LB Image 782
A.4.3.2 Depth K 783
A.4.3.2 All Droplets for .LA Image 784
A.4.3.2 All Droplets for .LB Image 785
A.4.3.2 Matched Only Droplets for .LA Image 786
A.4.3.2 Matched Only Droplets for .LB Image 787
A.4.3.2 Depth L 788

A.4.3.2 All Droplets for .LA Image 789
A.4.3.2 All Droplets for .LB Image 790
A.4.3.2 Matched Only Droplets for .LA Image 791
A.4.3.2 Matched Only Droplets for .LB Image 792
A.4.3.2 Depth M 793
A.4.3.2 All Droplets for .LA Image 794
A.4.3.2 All Droplets for .LB Image 795
A.4.3.2 Matched Only Droplets for .LA Image 796
A.4.3.2 Matched Only Droplets for .LB Image 797
A.4.3.2 Depth N 798
A.4.3.2 All Droplets for .LA Image 799
A.4.3.2 All Droplets for .LB Image 800
A.4.3.2 Matched Only Droplets for .LA Image 801
A.4.3.2 Matched Only Droplets for .LB Image 802
A.4.4 Liquid Level 4 803
A.4.4.1 Lens 100mm Mag 0_29x 803
A.4.4.1 Depth J 803
A.4.4.1 All Droplets for .LA Image 804
A.4.4.1 All Droplets for .LB Image 805
A.4.4.1 Matched Only Droplets for .LA Image 806
A.4.4.1 Matched Only Droplets for .LB Image 807
A.4.4.1 Depth K 808
A.4.4.1 All Droplets for .LA Image 809
A.4.4.1 All Droplets for .LB Image 810
A.4.4.1 Matched Only Droplets for .LA Image 811
A.4.4.1 Matched Only Droplets for .LB Image 812
A.4.4.1 Depth L 813
A.4.4.1 All Droplets for .LA Image 814
A.4.4.1 All Droplets for .LB Image 815

A.4.4.1 Matched Only Droplets for .LA Image 816
A.4.4.1 Matched Only Droplets for .LB Image 817
A.4.4.1 Depth M 818
A.4.4.1 All Droplets for .LA Image 819
A.4.4.1 All Droplets for .LB Image 820
A.4.4.1 Matched Only Droplets for .LA Image 821
A.4.4.1 Matched Only Droplets for .LB Image 822
A.4.4.1 Depth N 823
A.4.4.1 All Droplets for .LA Image 824
A.4.4.1 All Droplets for .LB Image 825
A.4.4.1 Matched Only Droplets for .LA Image 826
A.4.4.1 Matched Only Droplets for .LB Image 827
A.4.4.2 Lens 50mm Mag 0_13x 828
A.4.4.2 Depth J 828
A.4.4.2 All Droplets for .LA Image 829
A.4.4.2 All Droplets for .LB Image 830
A.4.4.2 Matched Only Droplets for .LA Image 831
A.4.4.2 Matched Only Droplets for .LB Image 832
A.4.4.2 Depth K 833
A.4.4.2 All Droplets for .LA Image 834
A.4.4.2 All Droplets for .LB Image 835
A.4.4.2 Matched Only Droplets for .LA Image 836
A.4.4.2 Matched Only Droplets for .LB Image 837
A.4.4.2 Depth L 838
A.4.4.2 All Droplets for .LA Image 839
A.4.4.2 All Droplets for .LB Image 840
A.4.4.2 Matched Only Droplets for .LA Image 841
A.4.4.2 Matched Only Droplets for .LB Image 842
A.4.4.2 Depth M 843

A.4.4.2 All Droplets for .LA Image 844
A.4.4.2 All Droplets for .LB Image 845
A.4.4.2 Matched Only Droplets for .LA Image 846
A.4.4.2 Matched Only Droplets for .LB Image 847
A.4.4.2 Depth N 848
A.4.4.2 All Droplets for .LA Image 849
A.4.4.2 All Droplets for .LB Image 850
A.4.4.2 Matched Only Droplets for .LA Image 851
A.4.4.2 Matched Only Droplets for .LB Image 852

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A.1.1 Liquid Level 1

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	15746 / 1.984
Ref Mass Flow (lb/hr) / (kg/s)	1645 / 0.207
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15282 / 20.726
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4985 / 15.72
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	40.0 / 4.46
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.2 / 4.57
Total Bundle Q (Btu/hr) / (kW)	110637 / 32.42
Total Bundle & Preboiler Q (Btu/hr) / (kW)	144902 / 42.47
Top Two Rows HTC Ratio	1.103
Bundle Inlet Quality	0.18
Bundle Exit Quality	0.98

Table A. 1: Thermal Conditions

A.1.1.1 Lens 100mm Mag 0_29x

A.1.1.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	62.51	68.3	56.9	3024	440.2	477.1	56.9	3027	422.7	458.7
40-60mm	134.39	144.27	56.9	3014	373.6	427.1	56.9	3021	354.7	421.7
60-80mm	44.45	46.47	56.9	2995	346.2	380.4	56.9	2951	332.3	373.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	242.43	260.32	56.9	3024	385.8	433.9	56.9	3027	368.6	425.1
			Height A (mm)				Height B (mm)			
Highest Particle			75.7909				75.7909			
Lowest Particle			27.8287				27.8287			

Table A. 2: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	28.06	56.9	3024	548.1	544.0	56.9	2993	540.9	540.7	-1.260	1.260	-0.050	0.320	-1.260	1.260	-0.040	0.450
40-60mm	82.0	56.9	3010	470.7	467.0	56.9	3019	465.9	464.1	-1.260	1.260	-0.060	0.250	-1.260	1.260	-0.020	0.360
60-80mm	30.07	56.9	2995	435.1	407.0	56.9	2936	432.0	404.5	-1.250	1.220	-0.050	0.200	-1.230	1.220	-0.010	0.290
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	140.13	56.9	3024	478.6	473.1	56.9	3019	473.7	470.2	-1.260	1.260	-0.050	0.250	-1.260	1.260	-0.020	0.370

Table A. 3: Matched Droplet Info

A.1.1.1 All Droplets for .LA Image

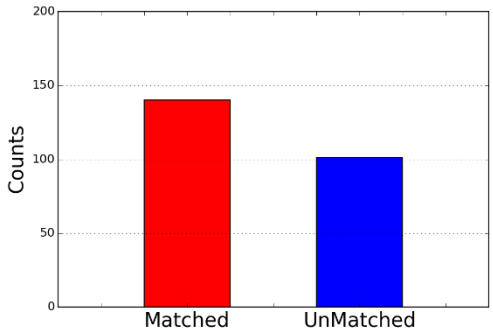


Figure A. 1: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

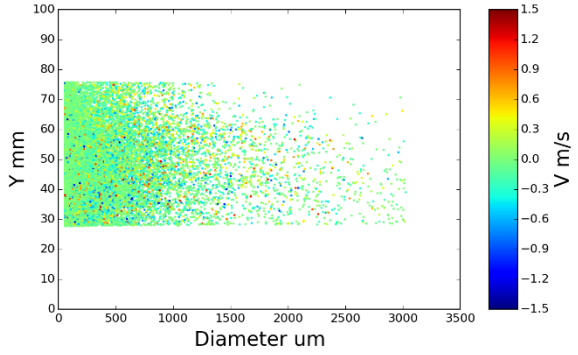


Figure A. 4: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

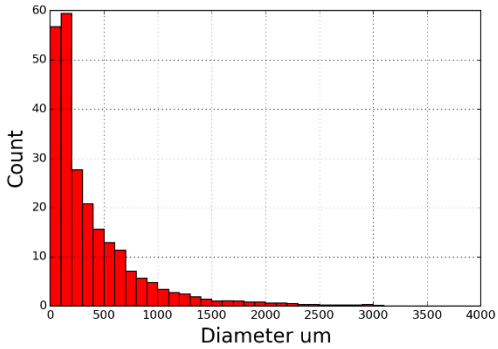


Figure A. 2: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

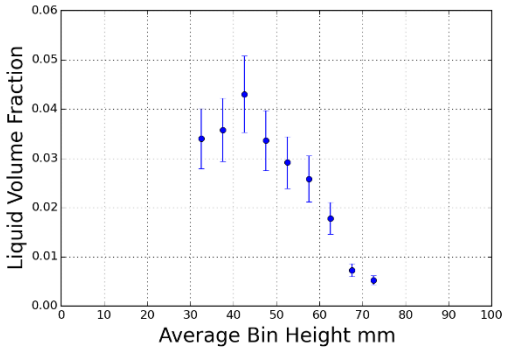


Figure A. 5: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

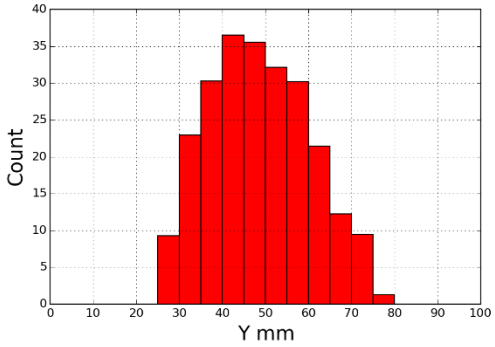


Figure A. 3: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 All Droplets for .LB Image

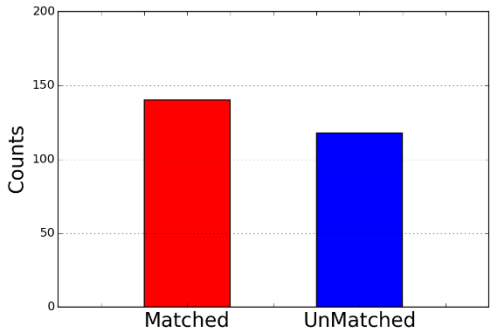


Figure A. 6: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

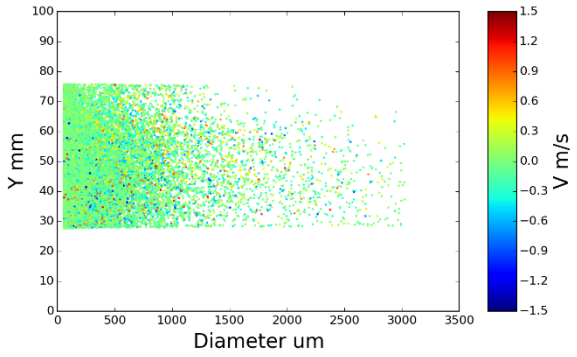


Figure A. 9: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

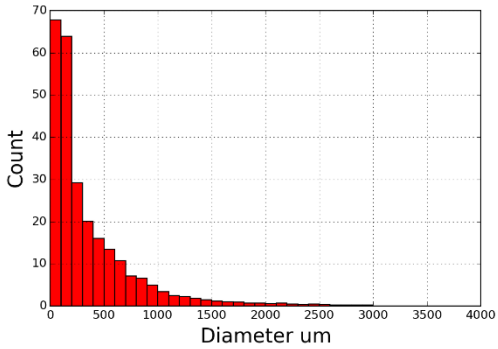


Figure A. 7: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

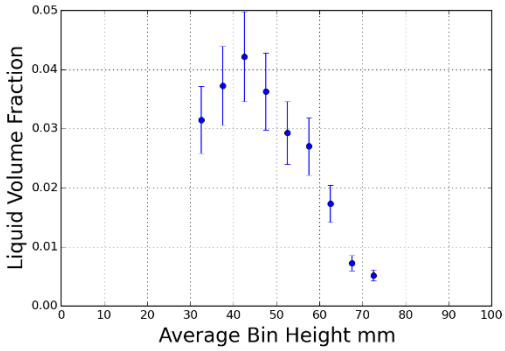


Figure A. 10: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

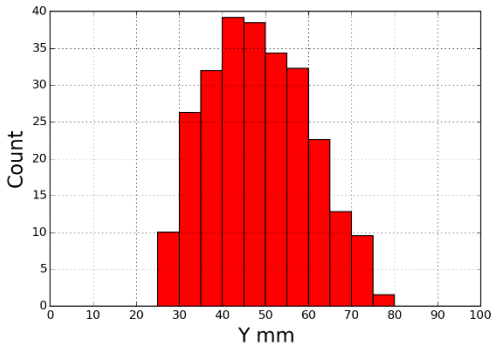


Figure A. 8: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 Matched Only Droplets for .LA Image

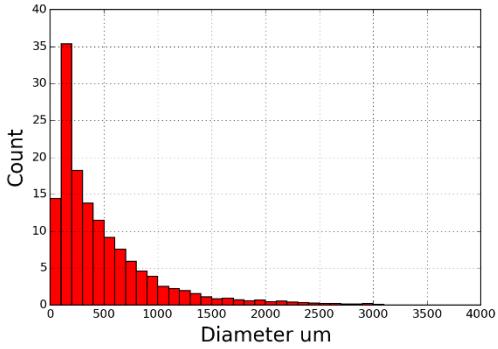


Figure A. 11: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

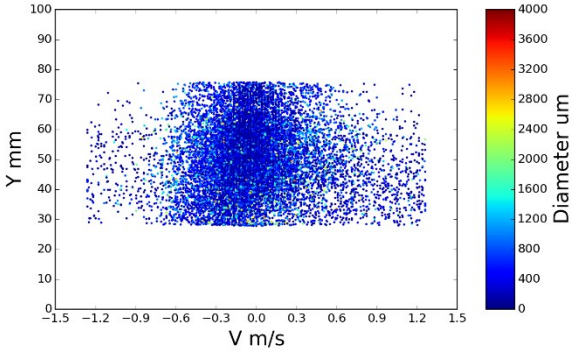


Figure A. 14: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

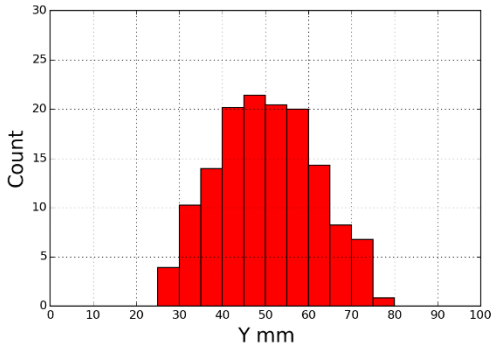


Figure A. 12: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

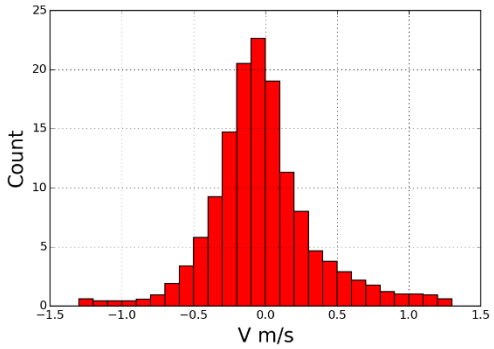


Figure A. 15: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

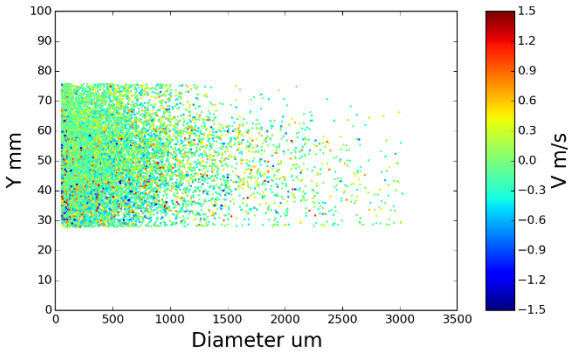


Figure A. 13: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 Matched Only Droplets for .LB Image

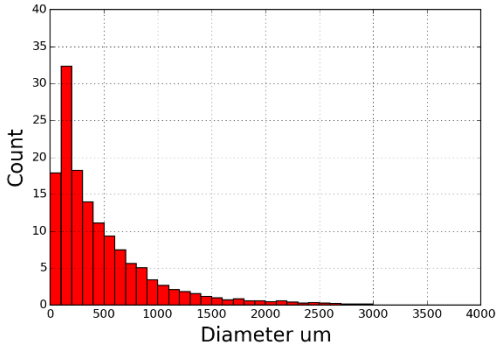


Figure A. 16: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

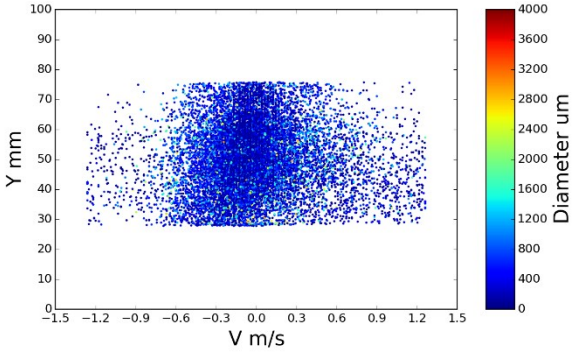


Figure A. 19: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

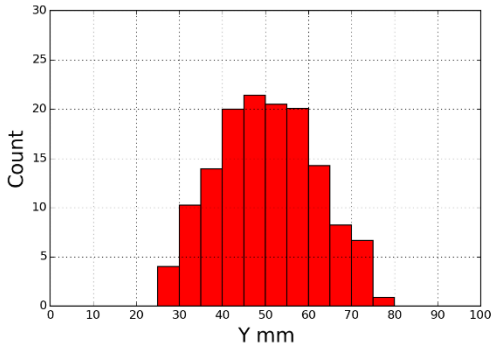


Figure A. 17: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

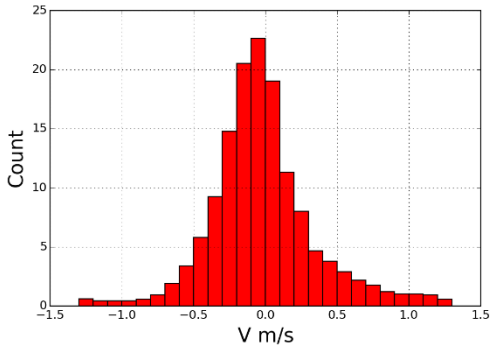


Figure A. 20: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

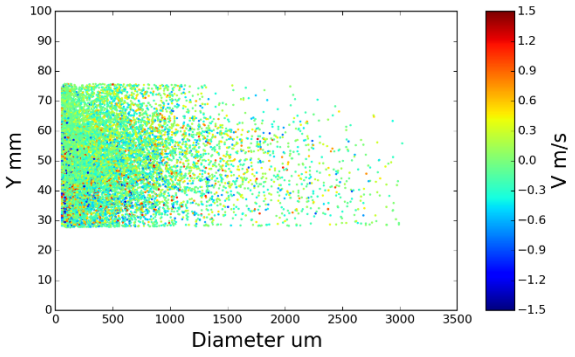


Figure A. 18: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	77.78	78.9	56.9	3012	499.8	521.9	56.9	3027	479.3	507.5
40-60mm	133.31	145.01	56.9	3027	427.2	468.0	56.9	3013	406.6	459.3
60-80mm	48.12	50.2	56.9	2934	394.5	413.5	56.9	2932	383.3	410.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	260.68	275.84	56.9	3027	442.9	477.1	56.9	3027	423.2	466.9
			Height A (mm)				Height B (mm)			
Highest Particle			75.7909				75.7909			
Lowest Particle			27.8287				27.8287			

Table A. 4: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	36.33	56.9	3000	627.4	583.0	56.9	3002	619.3	576.9	-1.250	1.260	-0.050	0.270	-1.260	1.260	-0.040	0.400
40-60mm	82.65	56.9	2999	535.9	504.7	56.9	3013	532.0	505.3	-1.260	1.230	-0.050	0.230	-1.260	1.260	-0.000	0.370
60-80mm	31.27	56.9	2934	504.7	440.6	56.9	2932	504.8	444.5	-1.240	1.180	-0.040	0.200	-1.260	1.260	0.020	0.340
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	150.25	56.9	3000	551.5	514.5	56.9	3013	547.4	513.6	-1.260	1.260	-0.050	0.230	-1.260	1.260	-0.010	0.370

Table A. 5: Matched Droplet Info

A.1.1.1 All Droplets for .LA Image

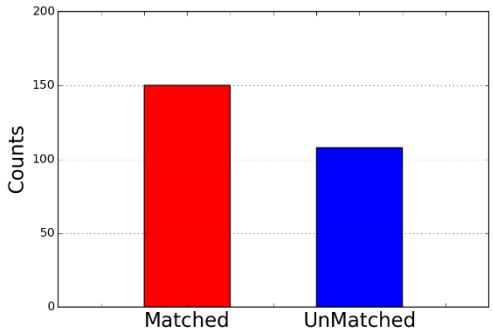


Figure A. 21: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

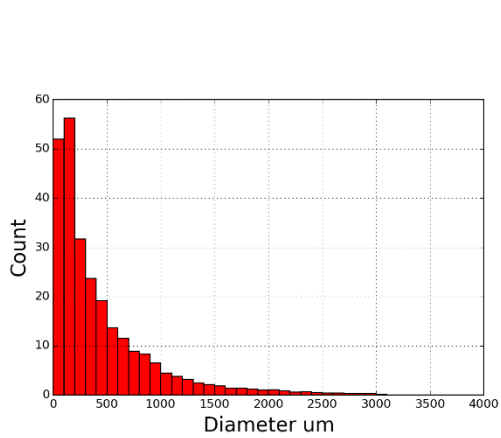


Figure A. 22: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

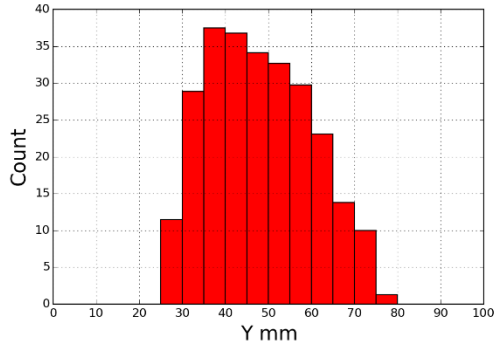


Figure A. 23: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

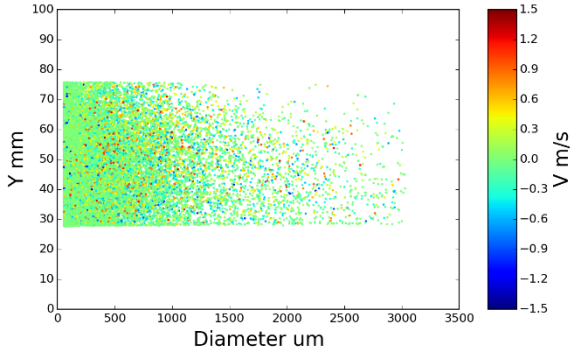


Figure A. 24: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

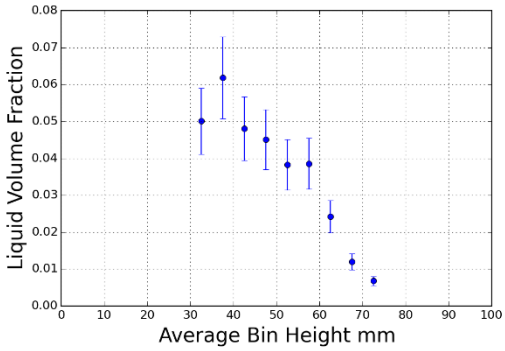


Figure A. 25: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 All Droplets for .LB Image

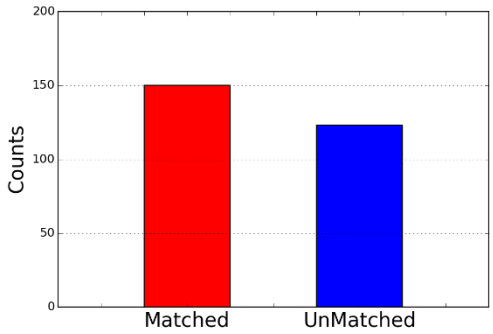


Figure A. 26: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

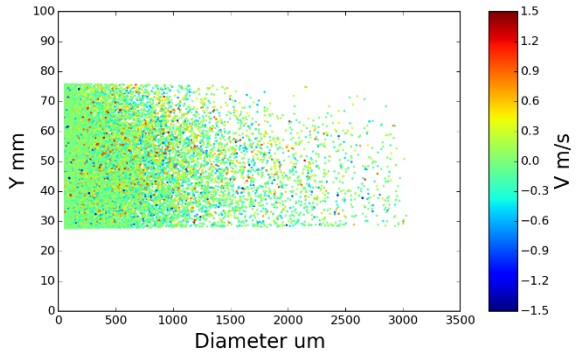


Figure A. 29: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

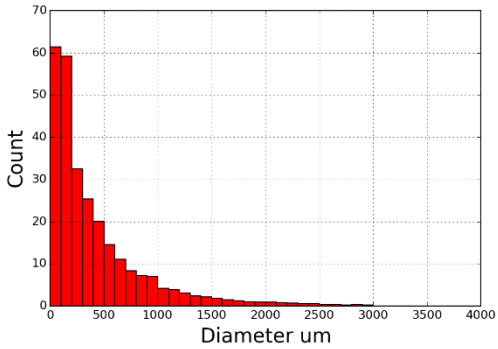


Figure A. 27: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

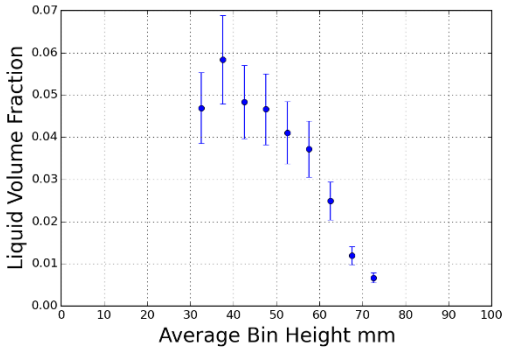


Figure A. 30: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

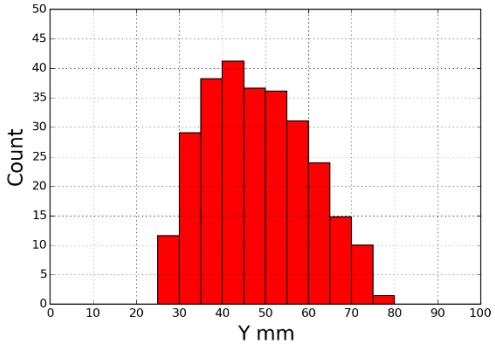


Figure A. 28: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 Matched Only Droplets for .LA Image

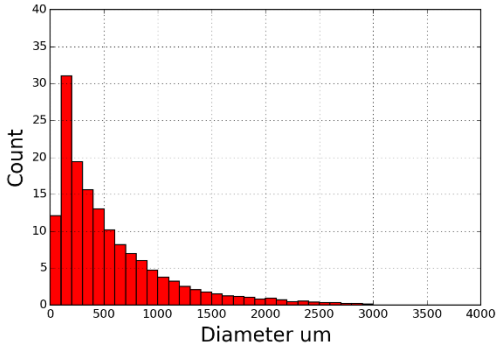


Figure A. 31: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

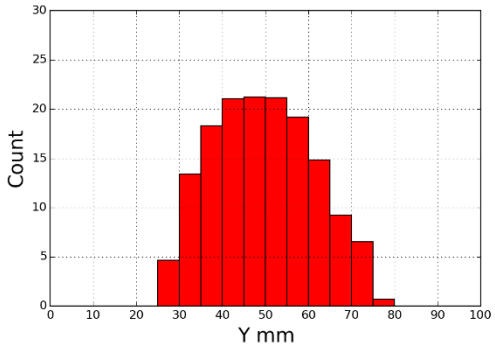


Figure A. 32: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

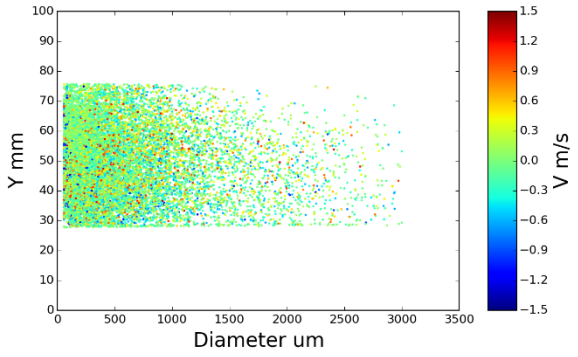


Figure A. 33: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

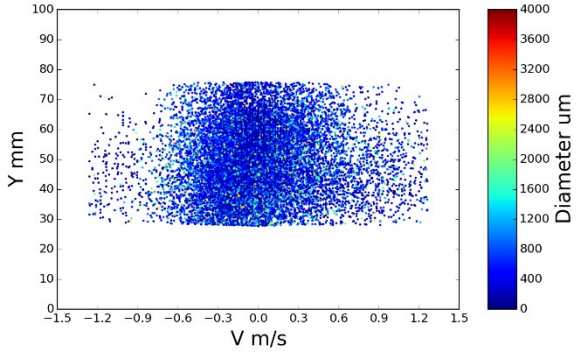


Figure A. 34: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

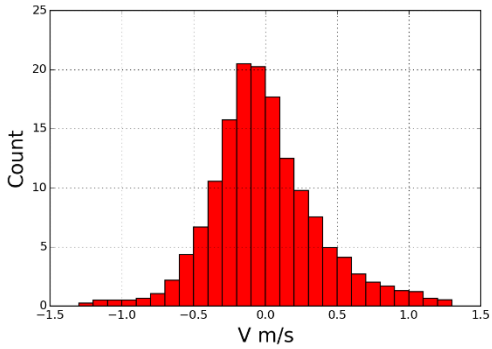


Figure A. 35: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 Matched Only Droplets for .LB Image

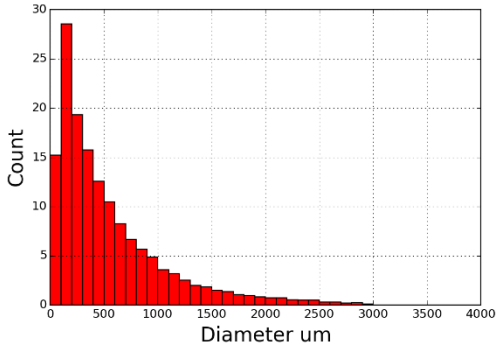


Figure A. 36: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

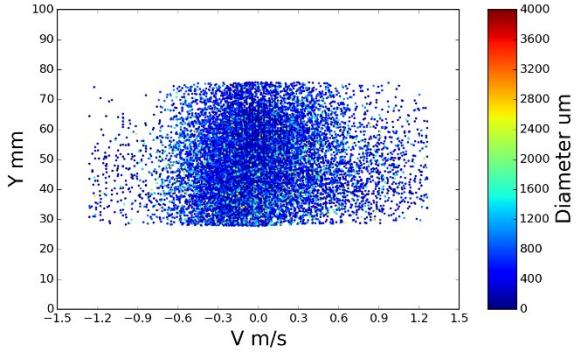


Figure A. 39: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

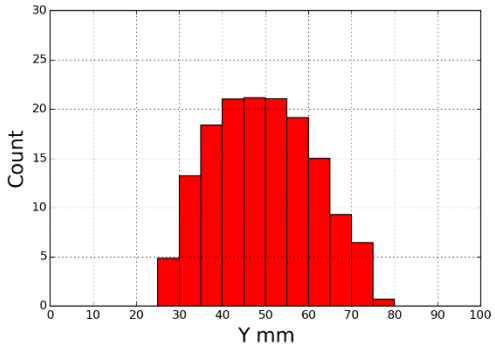


Figure A. 37: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

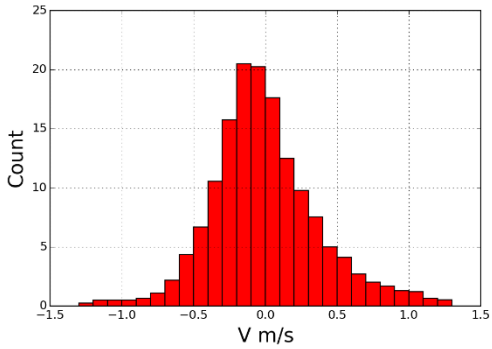


Figure A. 40: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

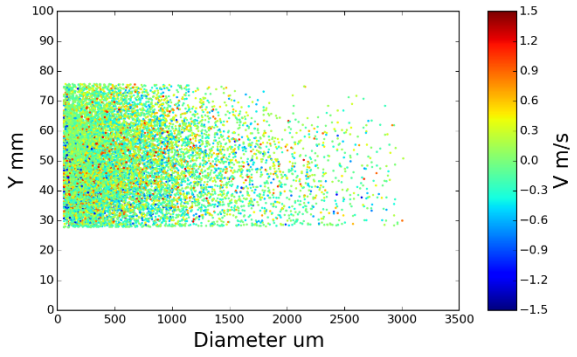


Figure A. 38: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	67.38	72.25	56.9	3021	513.2	528.3	56.9	3006	482.5	519.2
40-60mm	123.14	133.27	56.9	2996	415.6	461.9	56.9	3027	391.9	452.4
60-80mm	40.43	44.61	56.9	2790	382.3	397.5	56.9	2881	359.6	385.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	231.88	251.18	56.9	3021	438.2	474.6	56.9	3027	412.3	464.4
			Height A (mm)				Height B (mm)			
Highest Particle			75.7789				75.7783			
Lowest Particle			27.8287				27.8287			

Table A. 6: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	32.33	56.9	2978	675.7	598.9	56.9	3006	666.6	597.1	-1.260	1.240	-0.030	0.280	-1.260	1.260	-0.020	0.410
40-60mm	74.9	56.9	2996	531.4	501.0	56.9	3027	529.0	500.8	-1.260	1.260	-0.040	0.250	-1.260	1.260	-0.010	0.370
60-80mm	26.08	56.9	2790	494.8	424.8	56.9	2881	492.6	419.1	-1.250	1.260	-0.030	0.220	-1.260	1.250	-0.010	0.360
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	133.31	56.9	2996	559.2	517.5	56.9	3027	555.4	515.8	-1.260	1.260	-0.040	0.250	-1.260	1.260	-0.010	0.380

Table A. 7: Matched Droplet Info

A.1.1.1 All Droplets for .LA Image

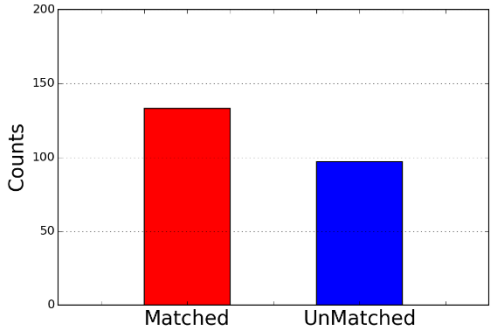


Figure A. 41: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

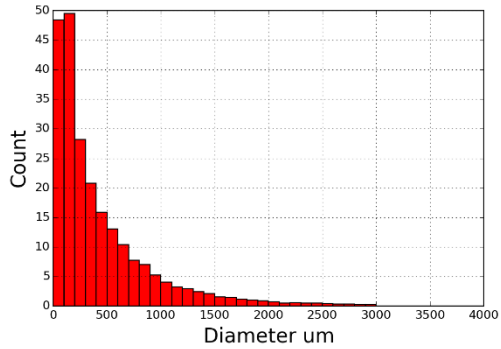


Figure A. 42: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

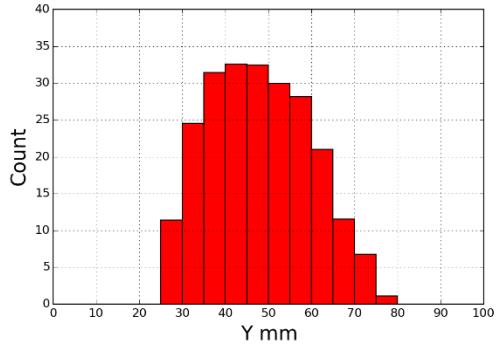


Figure A. 43: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

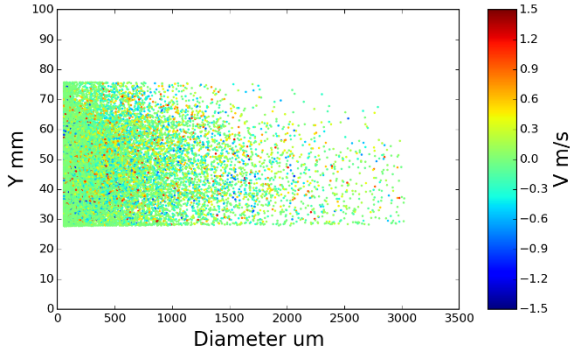


Figure A. 44: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

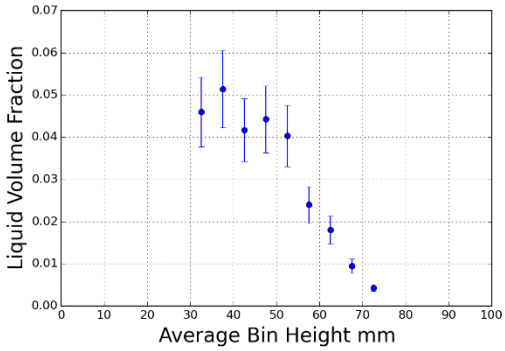


Figure A. 45: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 All Droplets for .LB Image

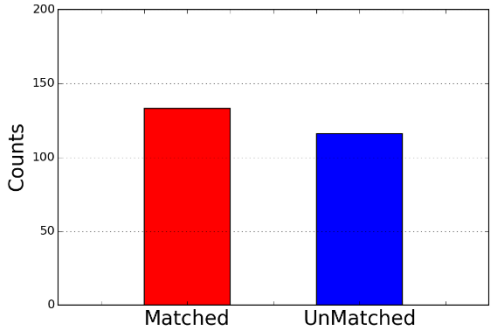


Figure A. 46: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

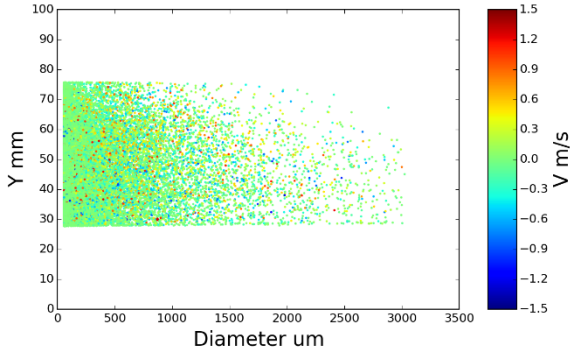


Figure A. 49: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

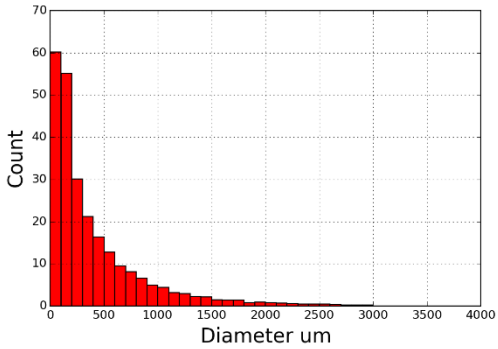


Figure A. 47: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

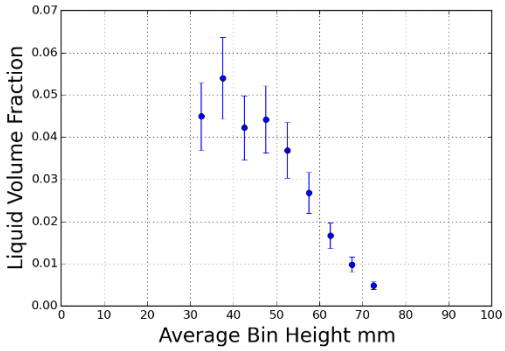


Figure A. 50: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

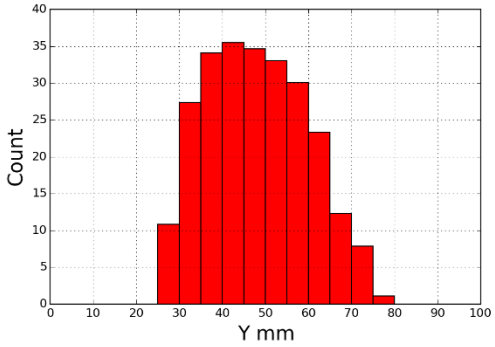


Figure A. 48: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 Matched Only Droplets for .LA Image

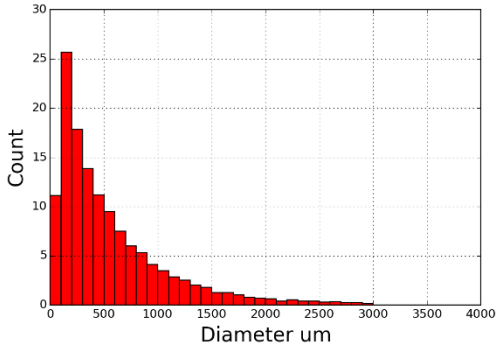


Figure A. 51: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

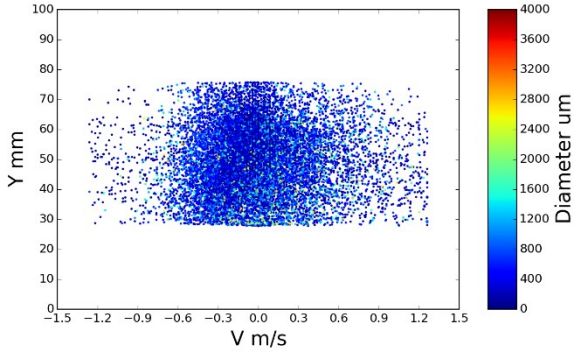


Figure A. 54: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

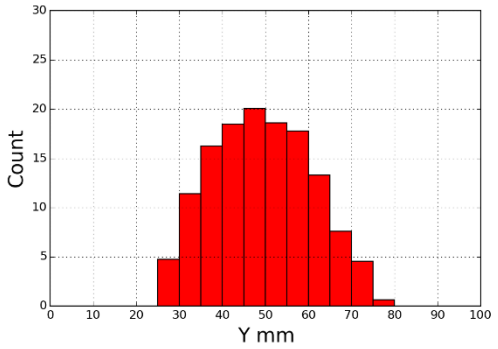


Figure A. 52: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

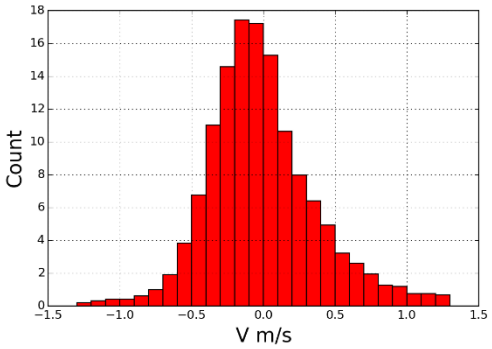


Figure A. 55: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

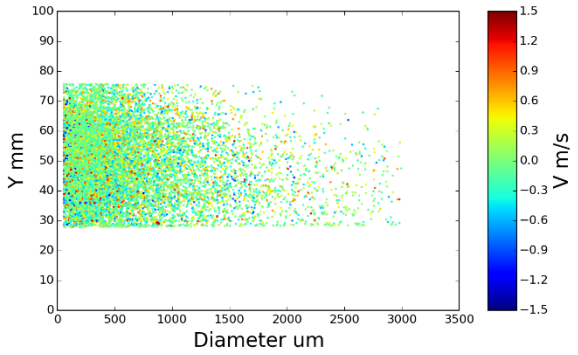


Figure A. 53: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 Matched Only Droplets for .LB Image

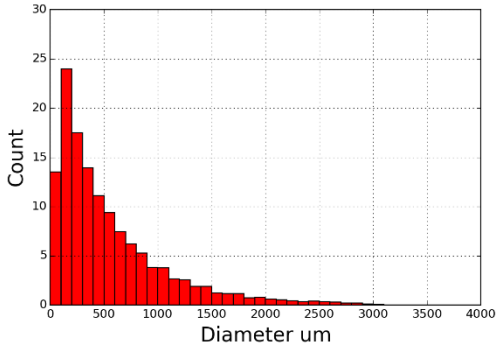


Figure A. 56: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

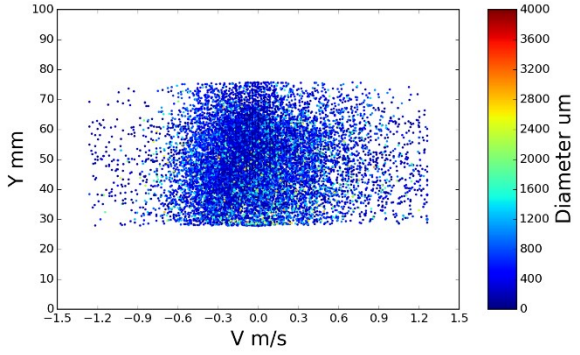


Figure A. 59: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

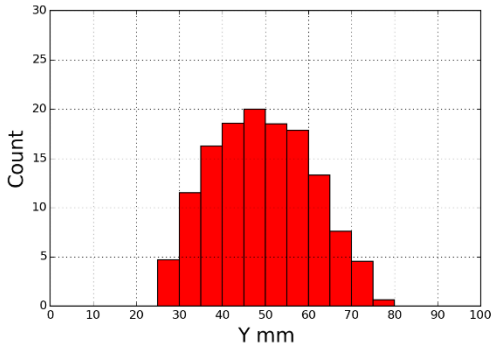


Figure A. 57: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

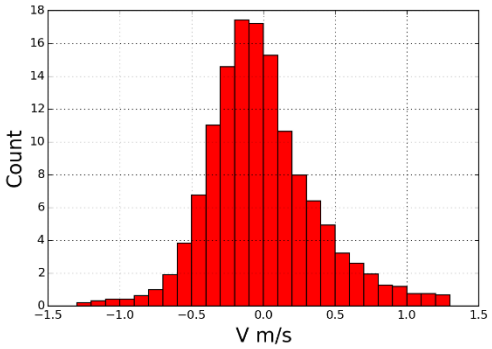


Figure A. 60: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

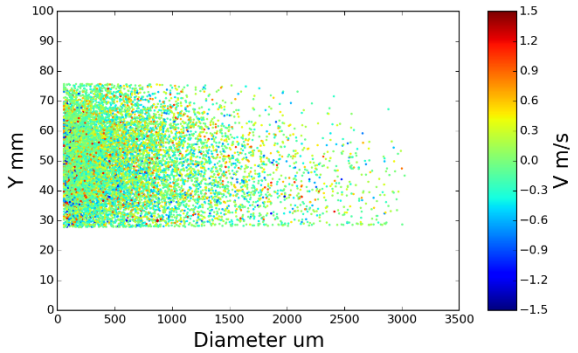


Figure A. 58: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	62.26	68.56	56.9	3022	545.1	549.8	56.9	3027	505.7	536.9
40-60mm	113.33	127.66	56.9	3026	420.1	467.7	56.9	3019	385.1	450.5
60-80mm	39.45	45.87	56.9	3021	392.5	414.0	56.9	2984	354.3	396.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	216.97	243.47	56.9	3026	451.3	487.8	56.9	3027	413.4	471.1
			Height A (mm)				Height B (mm)			
Highest Particle			75.7783				75.7783			
Lowest Particle			27.8287				27.8287			

Table A. 8: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	25.01	56.9	3022	724.2	646.5	56.9	3027	714.7	643.4	-1.250	1.260	-0.030	0.330	-1.260	1.260	-0.010	0.430
40-60mm	64.85	56.9	3001	545.6	508.6	56.9	2968	540.0	506.9	-1.260	1.260	-0.030	0.270	-1.260	1.260	0.010	0.410
60-80mm	24.98	56.9	3006	502.8	438.2	56.9	2984	500.4	438.8	-1.260	1.260	-0.040	0.230	-1.260	1.250	0.010	0.360
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	114.84	56.9	3022	575.2	534.2	56.9	3027	569.5	532.2	-1.260	1.260	-0.030	0.280	-1.260	1.260	0.010	0.400

Table A. 9: Matched Droplet Info

A.1.1.1 All Droplets for .LA Image

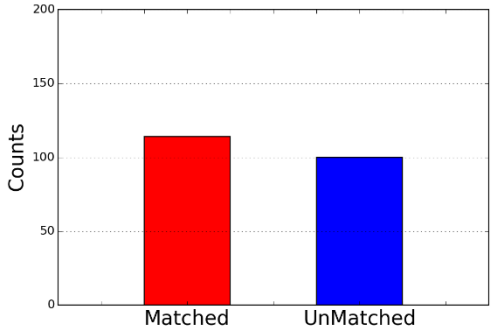


Figure A. 61: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

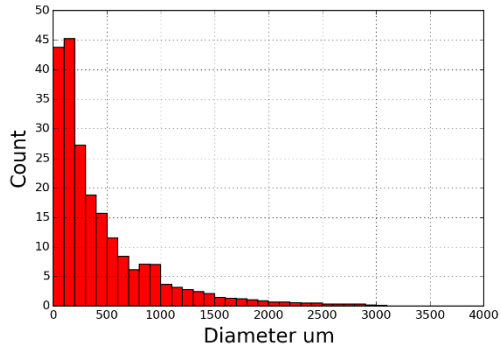


Figure A. 62: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

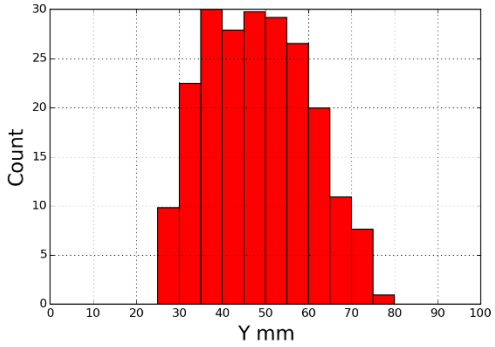


Figure A. 63: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

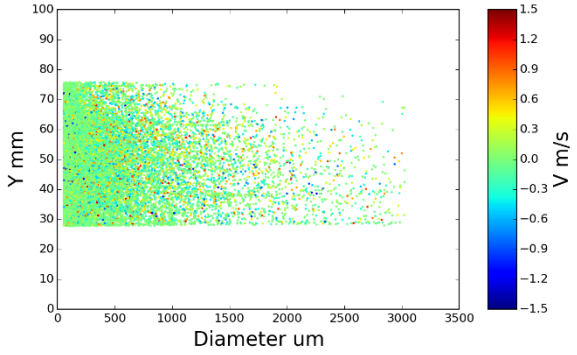


Figure A. 64: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

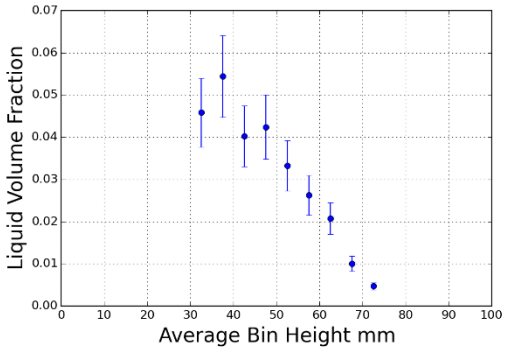


Figure A. 65: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 All Droplets for .LB Image

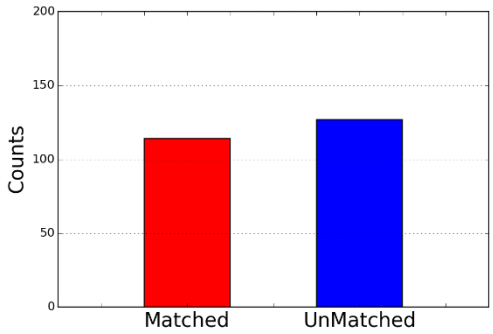


Figure A. 66: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

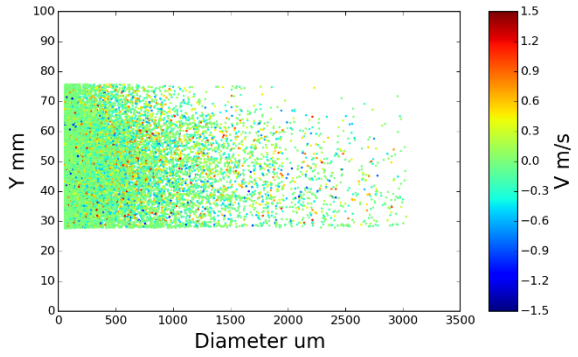


Figure A. 69: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

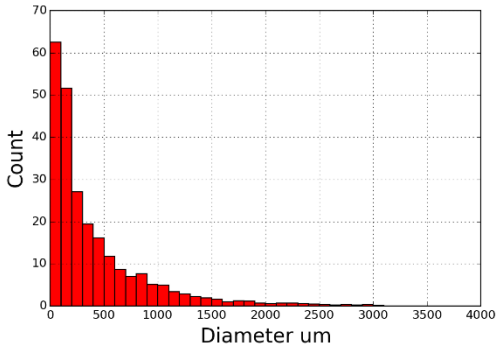


Figure A. 67: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

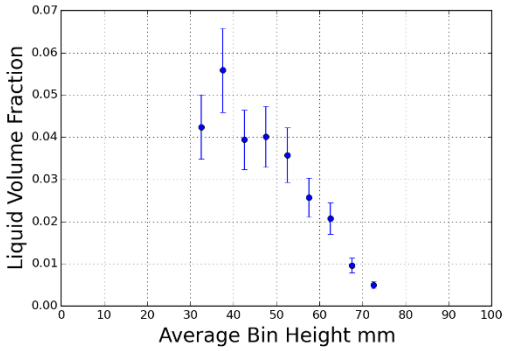


Figure A. 70: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

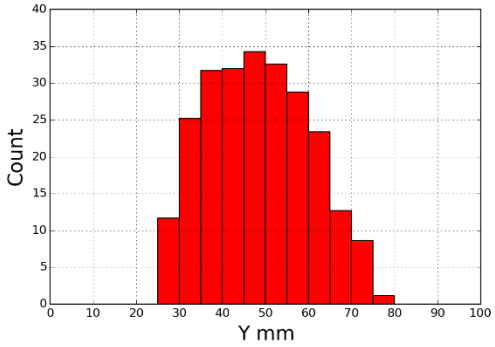


Figure A. 68: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 Matched Only Droplets for .LA Image

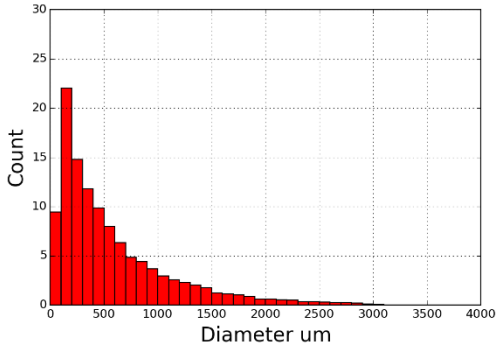


Figure A. 71: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

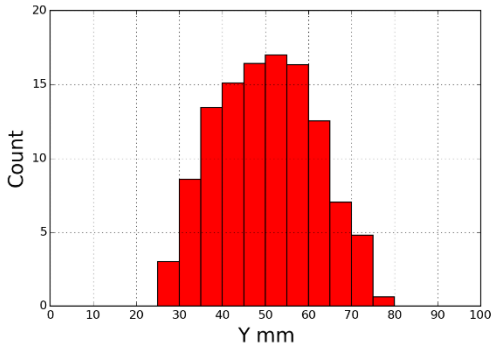


Figure A. 72: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

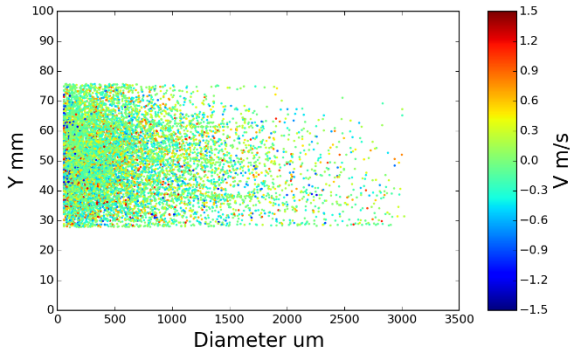


Figure A. 73: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

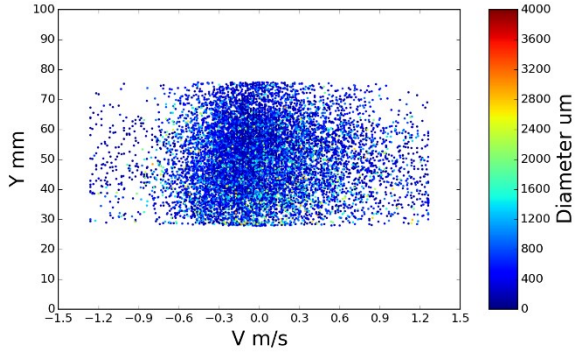


Figure A. 74: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

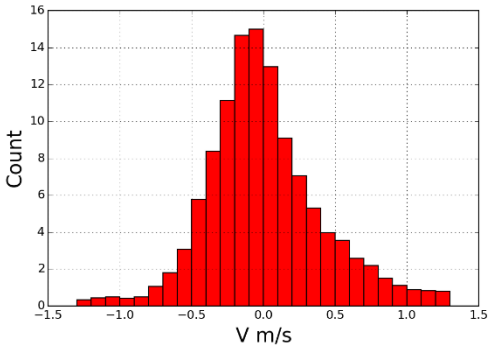


Figure A. 75: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 Matched Only Droplets for .LB Image

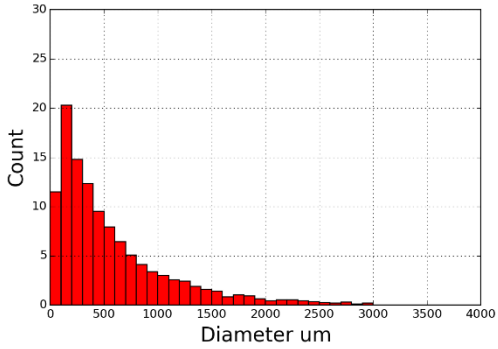


Figure A. 76: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

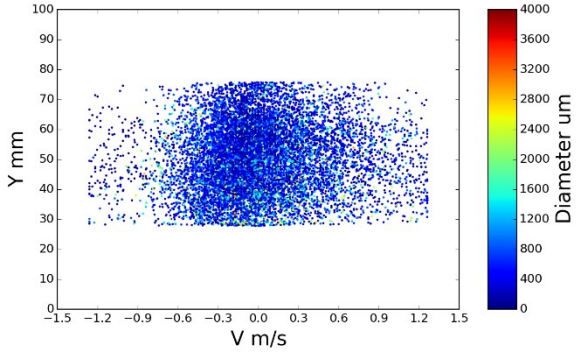


Figure A. 79: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

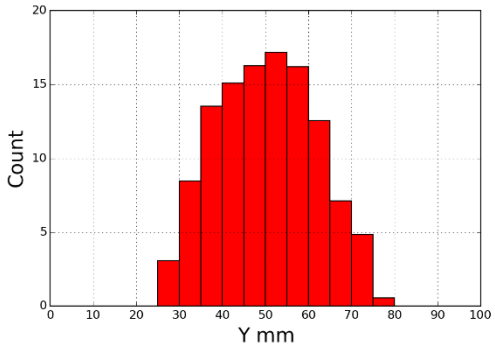


Figure A. 77: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

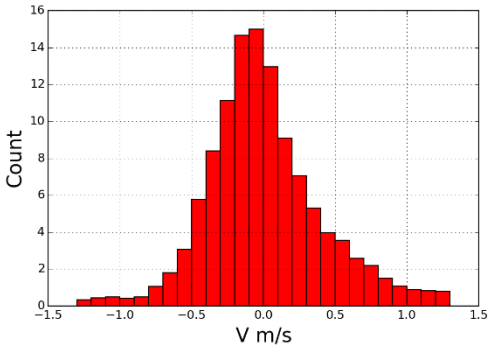


Figure A. 80: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

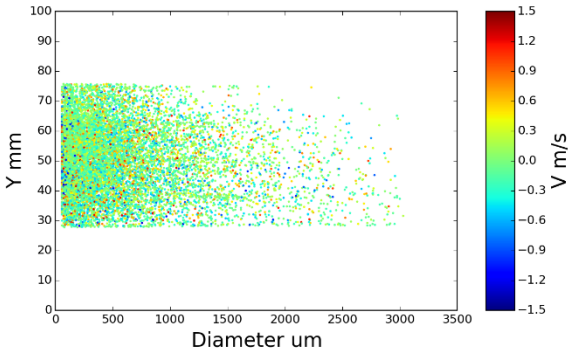


Figure A. 78: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	61.35	63.43	56.9	3012	497.5	518.9	56.9	3013	476.8	523.6
40-60mm	116.59	129.86	56.9	3022	415.6	475.3	56.9	3025	379.1	461.8
60-80mm	45.32	48.8	56.9	2886	362.5	396.8	56.9	2996	344.1	390.7
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	224.45	242.91	56.9	3022	427.3	475.6	56.9	3025	397.6	468.4
			Height A (mm)				Height B (mm)			
Highest Particle			75.7909				75.7819			
Lowest Particle			27.8287				27.8287			

Table A. 10: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	22.21	56.9	3012	700.3	627.3	56.9	3013	685.9	618.5	-1.260	1.260	-0.030	0.360	-1.260	1.260	0.020	0.460
40-60mm	63.22	56.9	3022	558.9	534.4	56.9	2985	549.3	528.9	-1.260	1.260	-0.020	0.290	-1.260	1.260	0.020	0.410
60-80mm	26.17	56.9	2886	482.1	433.6	56.9	2776	478.4	435.9	-1.260	1.260	-0.030	0.260	-1.260	1.260	0.040	0.380
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	111.6	56.9	3022	569.0	538.0	56.9	3013	559.9	532.9	-1.260	1.260	-0.030	0.300	-1.260	1.260	0.030	0.410

Table A. 11: Matched Droplet Info

A.1.1.1 All Droplets for .LA Image

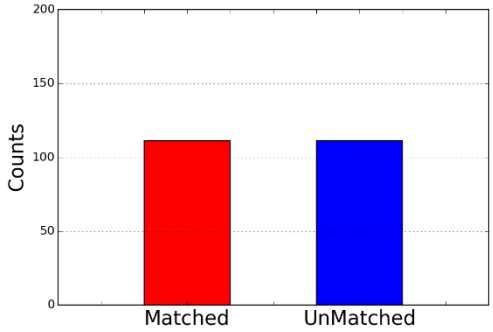


Figure A. 81: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

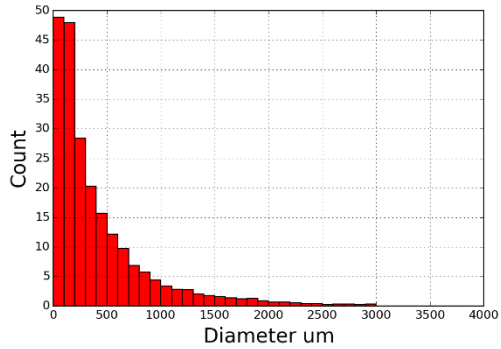


Figure A. 82: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

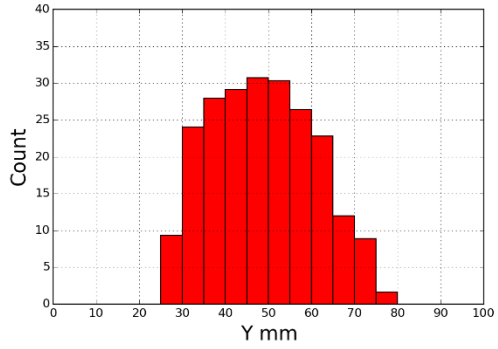


Figure A. 83: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

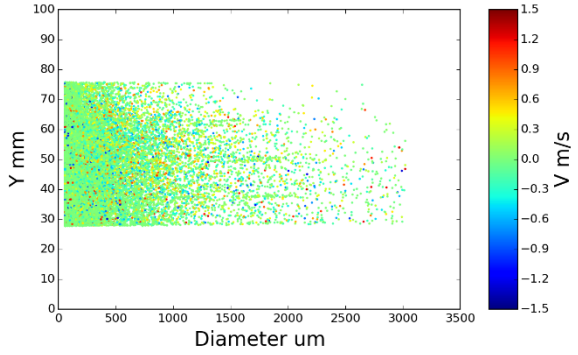


Figure A. 84: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

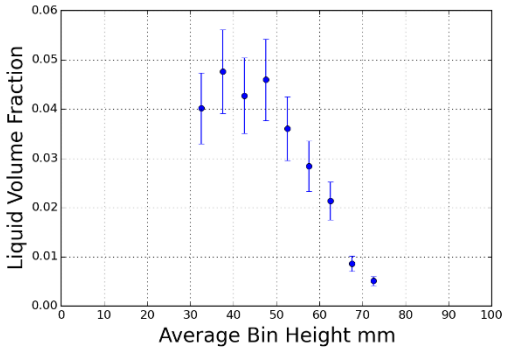


Figure A. 85: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 All Droplets for .LB Image

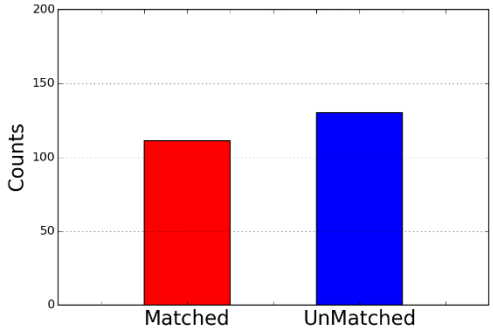


Figure A. 86: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

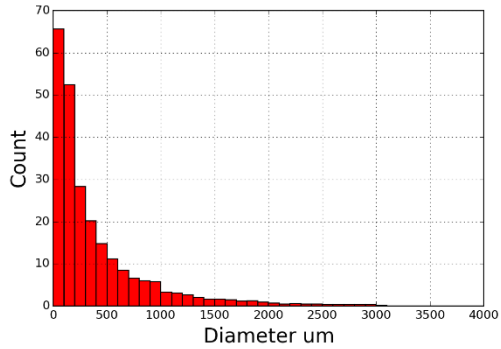


Figure A. 87: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

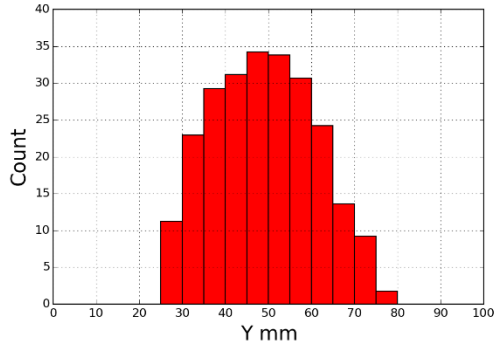


Figure A. 88: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

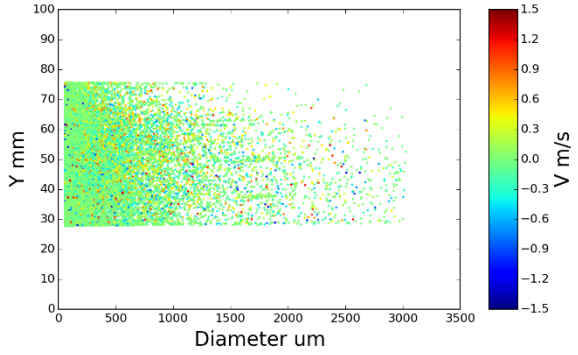


Figure A. 89: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

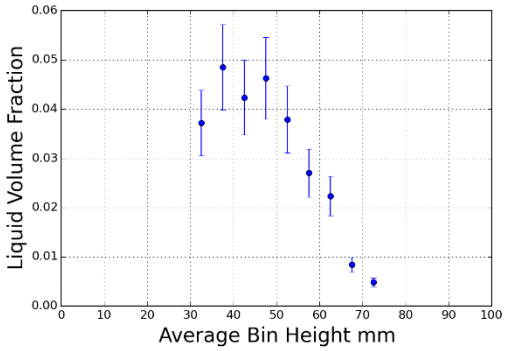


Figure A. 90: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 Matched Only Droplets for .LA Image

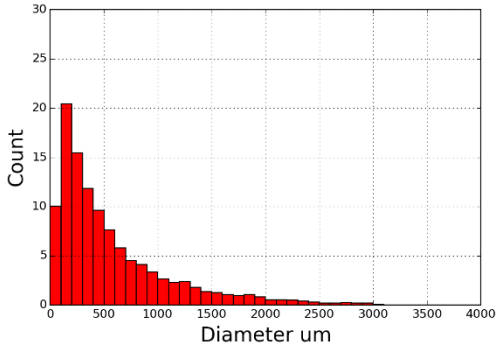


Figure A. 91: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

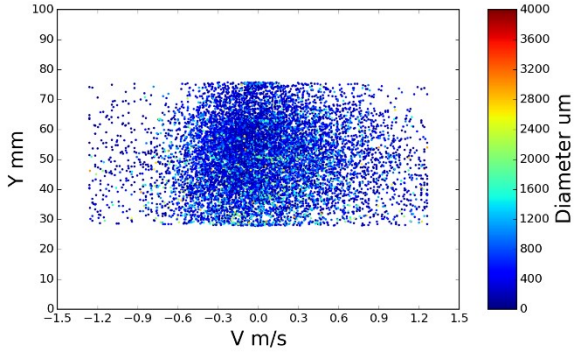


Figure A. 94: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

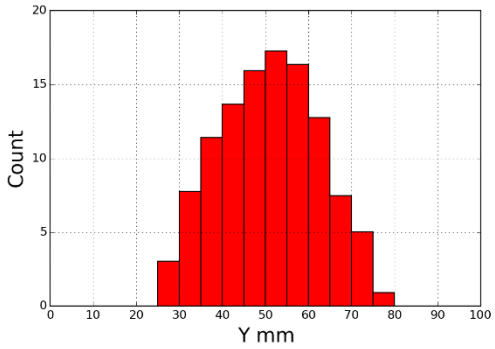


Figure A. 92: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

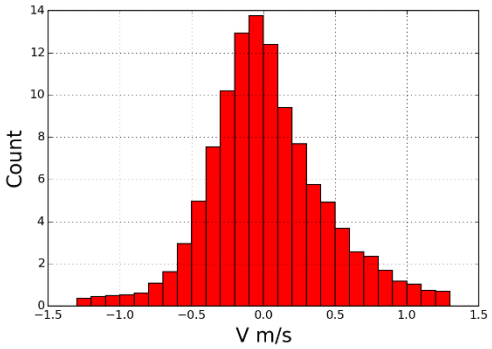


Figure A. 95: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

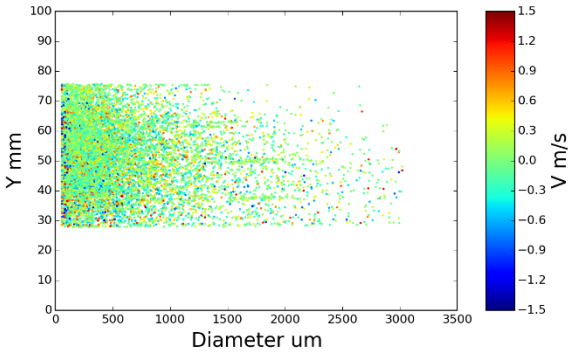


Figure A. 93: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.1.1 Matched Only Droplets for .LB Image

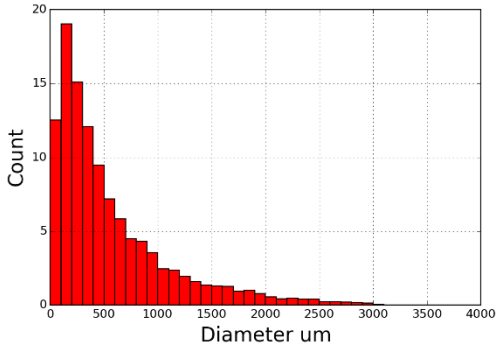


Figure A. 96: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

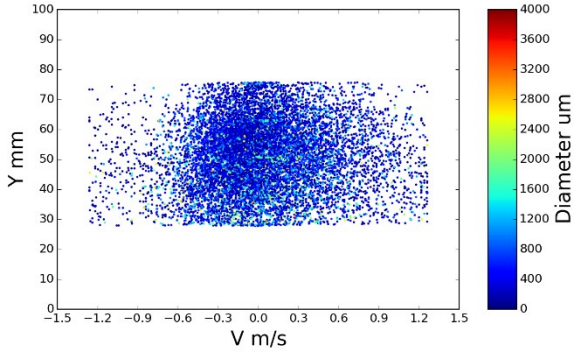


Figure A. 99: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

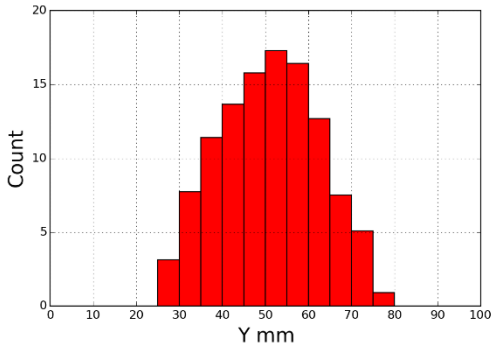


Figure A. 97: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

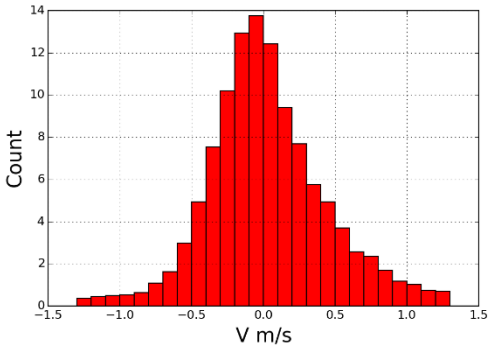


Figure A. 100: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

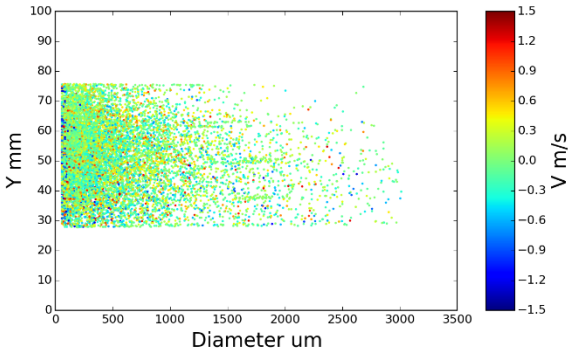


Figure A. 98: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 Lens 50mm Mag 0_13x

A.1.1.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	38.72	38.5	128.4	3406	677.8	595.0	128.4	3398	681.5	592.8
40-60mm	77.36	76.2	128.4	3401	626.6	515.7	128.4	3391	626.7	513.8
60-80mm	29.08	28.85	128.4	3070	552.4	380.7	128.4	3191	547.5	371.9
80-100mm	8.28	8.07	128.4	2314	497.6	291.1	128.4	2132	502.4	287.4
All	153.44	151.62	128.4	3406	618.5	507.9	128.4	3398	618.9	505.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.8092				99.7808			
Lowest Particle			29.9399				29.9399			

Table A. 12: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	20.69	128.4	3391	798.9	628.4	128.4	3398	781.2	615.3	-1.220	1.200	-0.050	0.340	-1.210	1.220	-0.060	0.440
40-60mm	49.5	128.4	3375	713.4	527.4	128.4	3327	700.8	517.7	-1.220	1.220	-0.050	0.300	-1.220	1.220	-0.010	0.420
60-80mm	20.55	128.4	3070	625.0	382.2	128.4	2746	613.2	370.1	-1.210	1.220	-0.040	0.210	-1.210	1.220	0.020	0.380
80-100mm	6.06	128.4	2314	561.0	289.7	128.4	2132	553.0	282.8	-1.090	1.080	-0.040	0.160	-1.180	0.910	0.080	0.330
All	96.8	128.4	3391	703.3	517.2	128.4	3398	690.2	506.5	-1.220	1.220	-0.050	0.290	-1.220	1.220	-0.010	0.410

Table A. 13: Matched Droplet Info

A.1.1.2 All Droplets for .LA Image

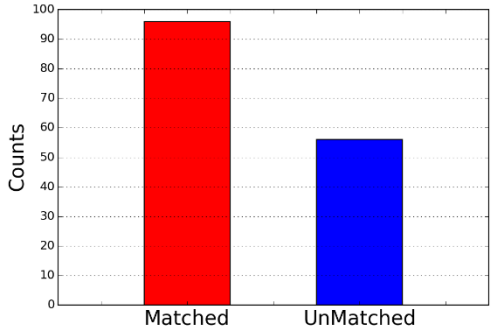


Figure A. 101: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

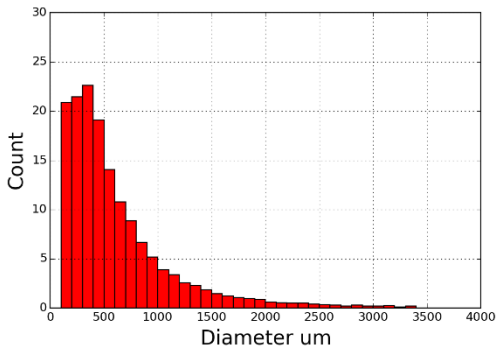


Figure A. 102: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

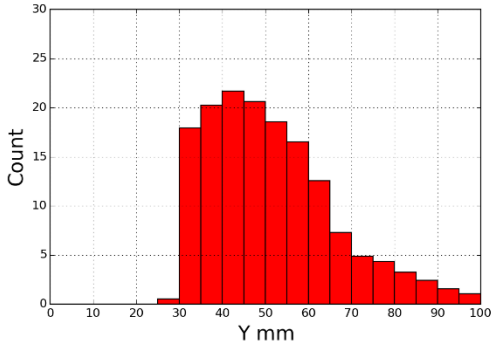


Figure A. 103: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

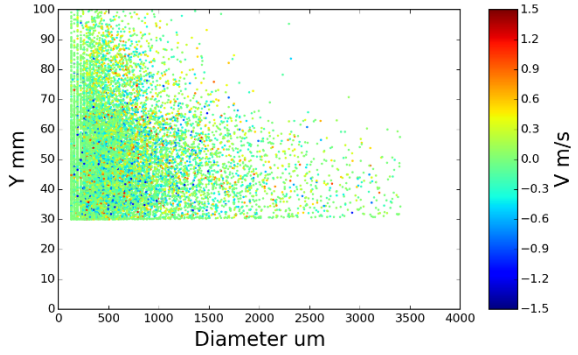


Figure A. 104: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

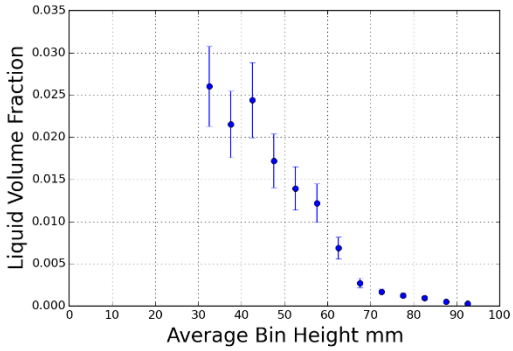


Figure A. 105: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 All Droplets for .LB Image

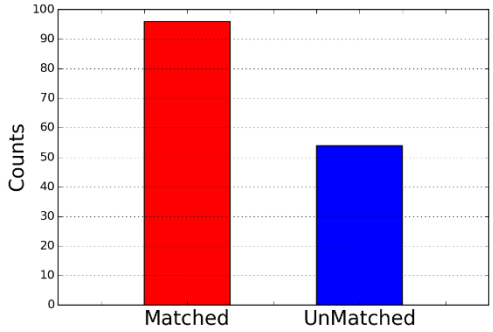


Figure A. 106: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

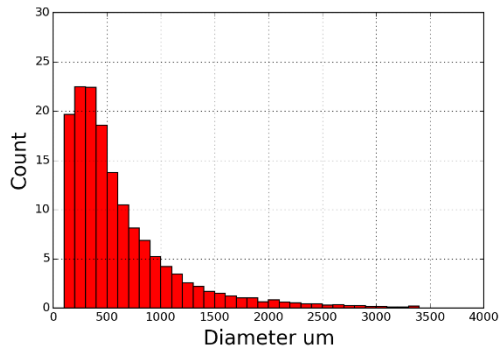


Figure A. 107: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

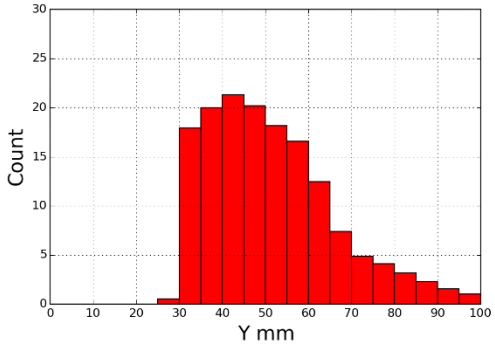


Figure A. 108: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

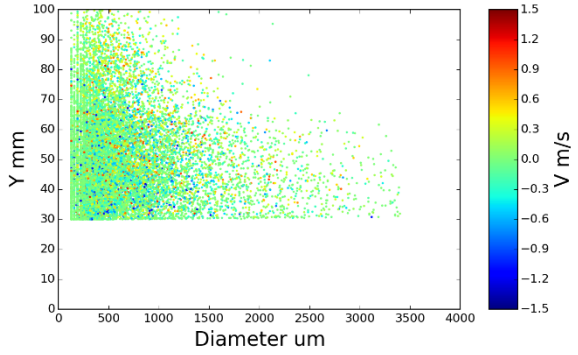


Figure A. 109: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

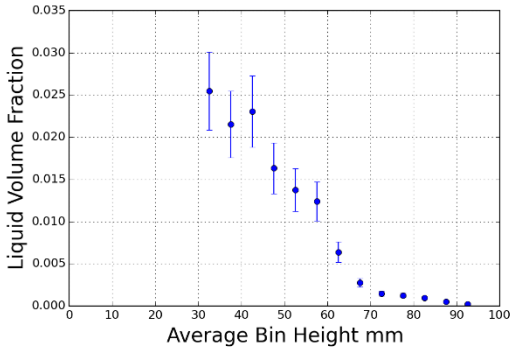


Figure A. 110: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 Matched Only Droplets for .LA Image

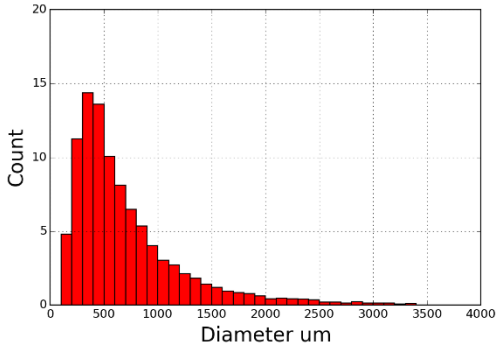


Figure A. 111: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

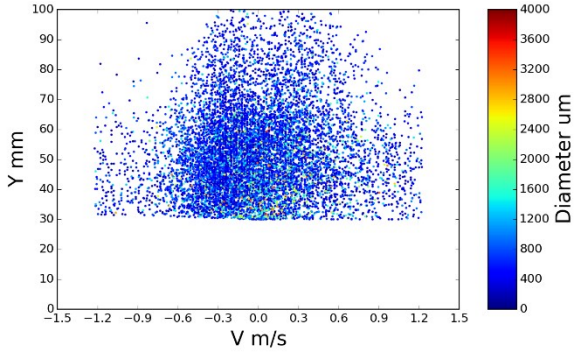


Figure A. 114: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

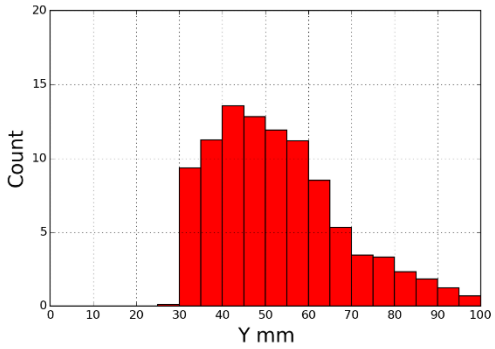


Figure A. 112: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

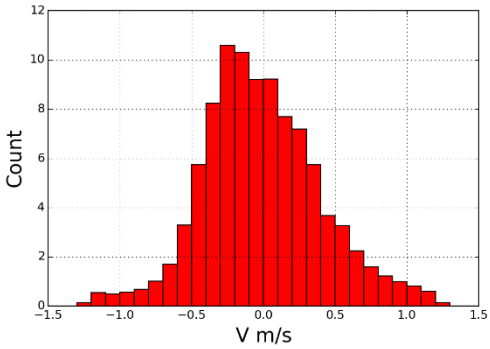


Figure A. 115: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

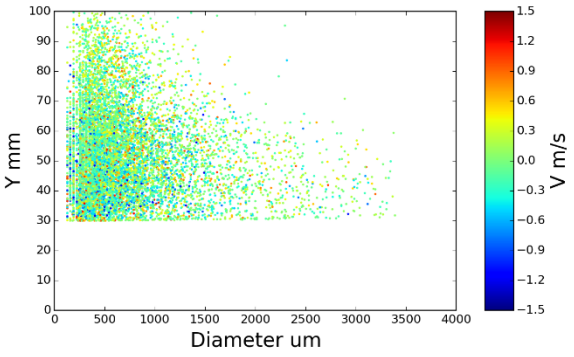


Figure A. 113: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 Matched Only Droplets for .LB Image

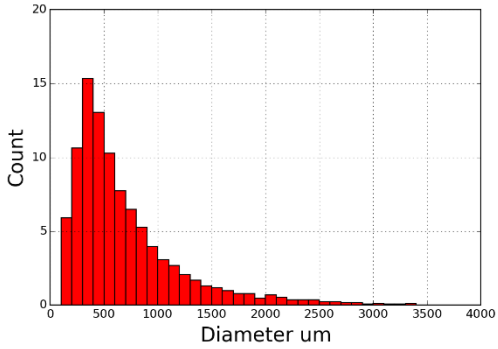


Figure A. 116: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

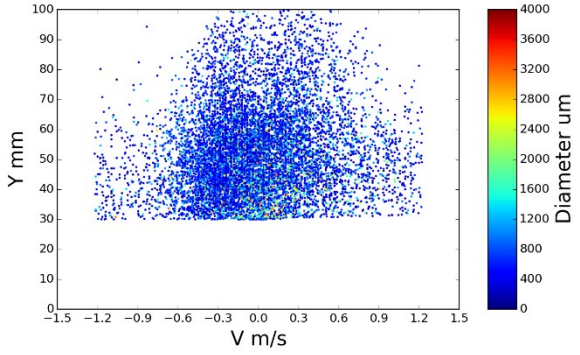


Figure A. 119: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

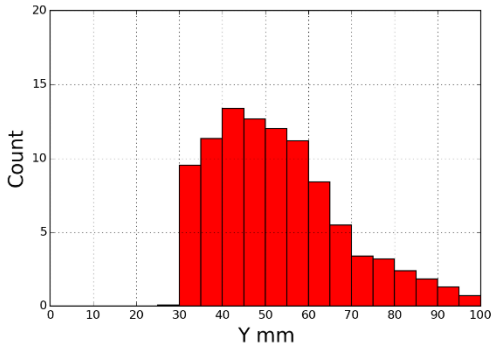


Figure A. 117: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

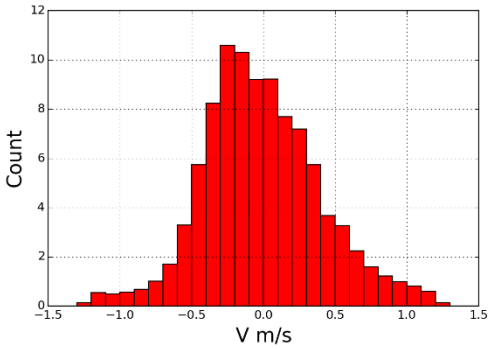


Figure A. 120: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

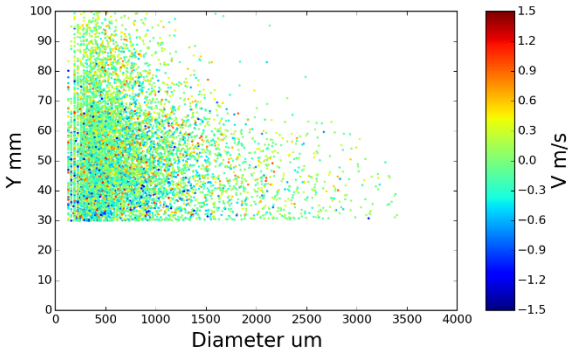


Figure A. 118: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	40.65	40.04	128.4	3406	736.3	623.1	128.4	3398	736.9	613.8
40-60mm	83.77	84.53	128.4	3394	651.2	517.6	128.4	3403	647.1	514.7
60-80mm	32.75	33.1	128.4	3375	575.5	373.0	128.4	3170	569.1	371.2
80-100mm	7.1	7.03	128.4	2282	535.1	275.6	128.4	2362	536.9	283.3
All	164.27	164.7	128.4	3406	652.1	517.0	128.4	3403	648.5	512.2
			Height A (mm)				Height B (mm)			
Highest Particle			99.7340				99.7567			
Lowest Particle			29.9399				29.9399			

Table A. 14: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	21.86	128.4	3406	882.2	659.2	128.4	3355	861.0	642.3	-1.220	1.220	-0.040	0.340	-1.220	1.210	-0.050	0.400
40-60mm	53.66	128.4	3384	744.0	532.0	128.4	3384	732.1	525.1	-1.220	1.220	-0.040	0.290	-1.220	1.220	-0.000	0.420
60-80mm	24.06	128.4	2592	637.2	364.0	128.4	2902	631.8	366.2	-1.220	1.160	-0.020	0.200	-1.210	1.220	0.020	0.370
80-100mm	5.82	157.3	2282	583.1	273.8	128.4	2362	579.8	278.1	-0.400	0.980	-0.020	0.130	-0.700	1.100	-0.010	0.290
All	105.4	128.4	3406	739.4	525.9	128.4	3384	727.8	517.9	-1.220	1.220	-0.030	0.280	-1.220	1.220	-0.010	0.400

Table A. 15: Matched Droplet Info

A.1.1.2 All Droplets for .LA Image

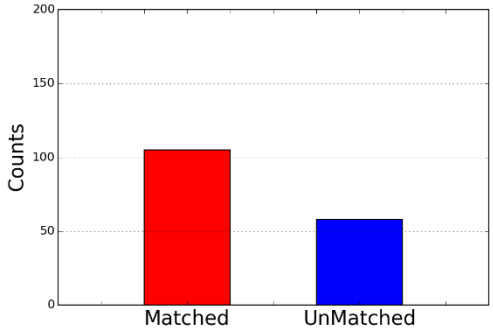


Figure A. 121: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

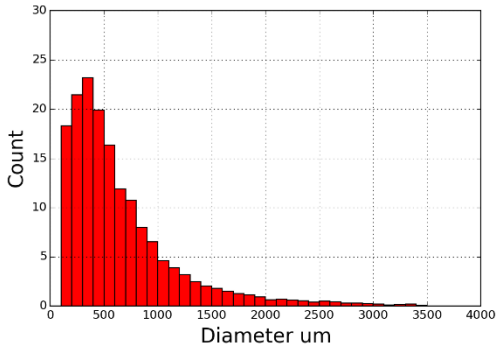


Figure A. 122: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

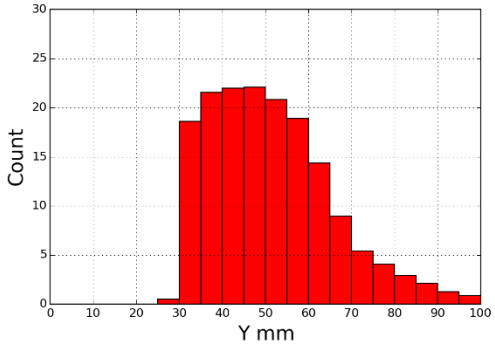


Figure A. 123: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

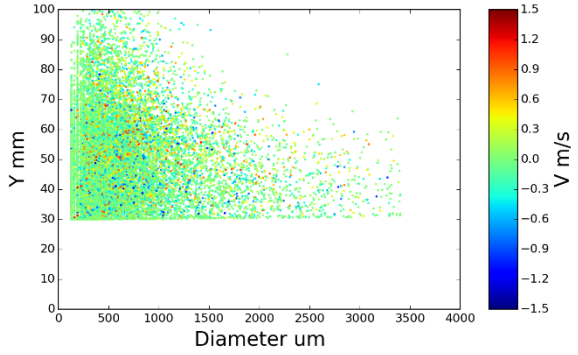


Figure A. 124: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

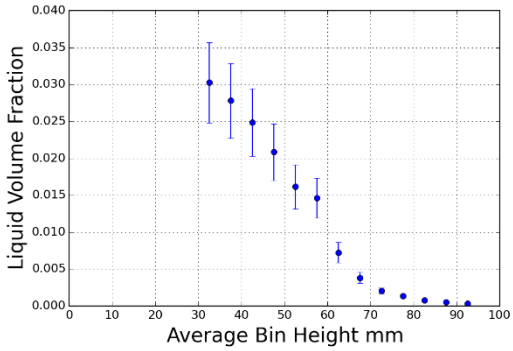


Figure A. 125: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 All Droplets for .LB Image

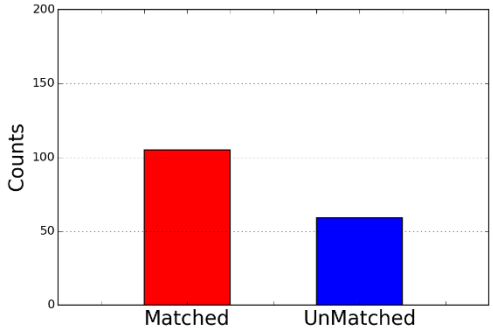


Figure A. 126: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

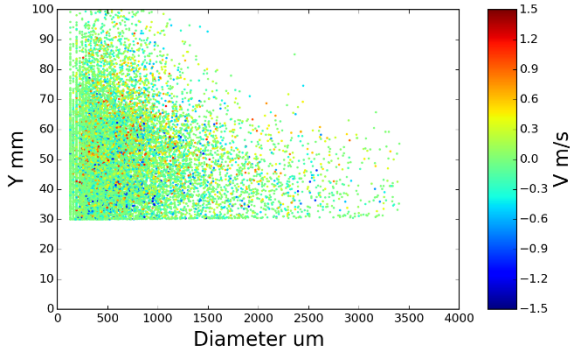


Figure A. 129: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

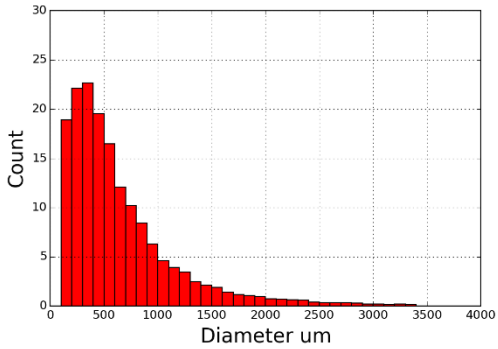


Figure A. 127: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

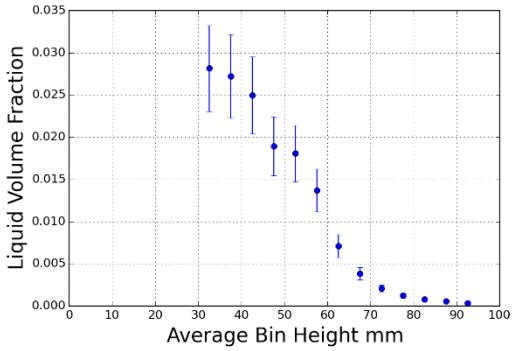


Figure A. 130: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

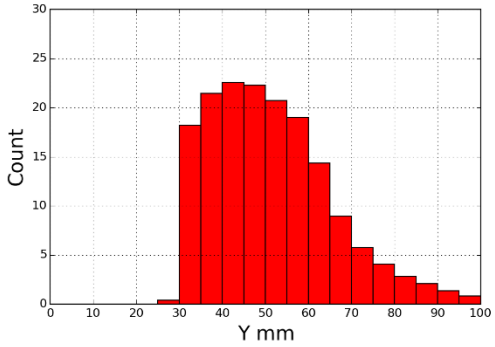


Figure A. 128: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 Matched Only Droplets for .LA Image

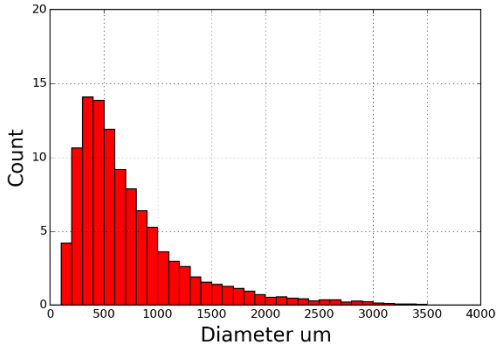


Figure A. 131: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

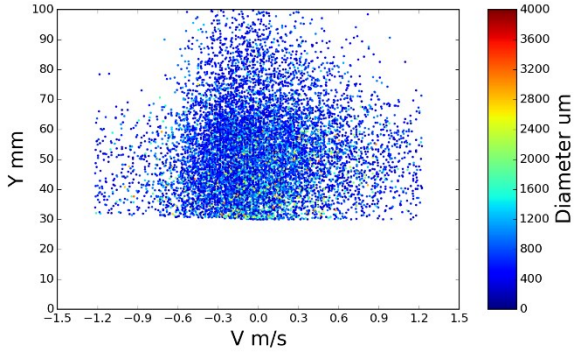


Figure A. 134: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

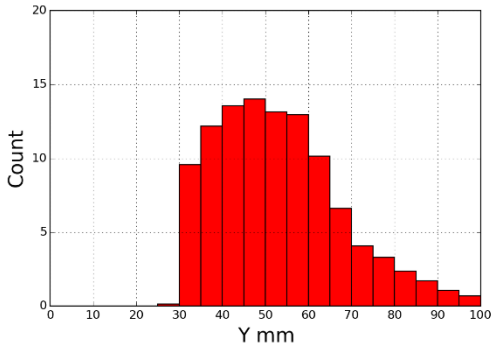


Figure A. 132: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

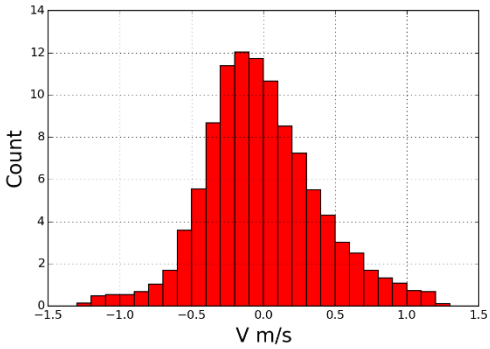


Figure A. 135: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

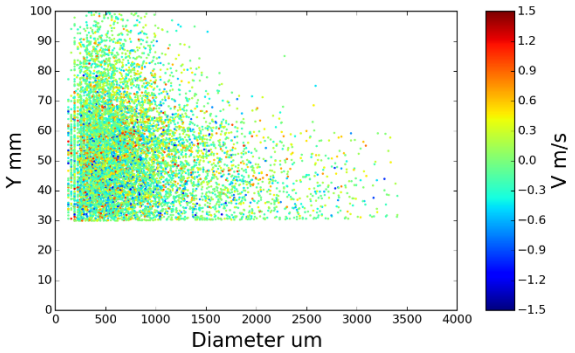


Figure A. 133: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 Matched Only Droplets for .LB Image

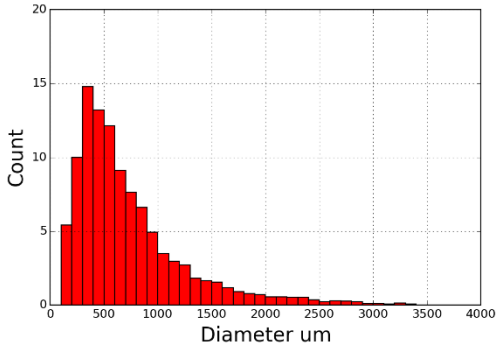


Figure A. 136: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

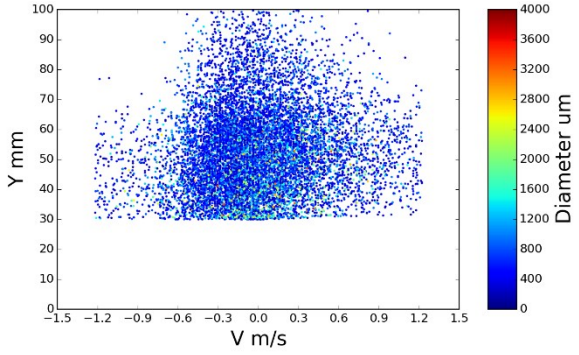


Figure A. 139: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

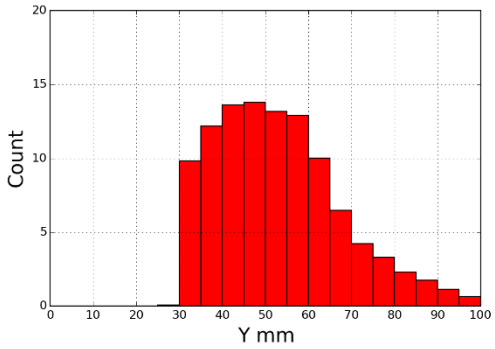


Figure A. 137: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

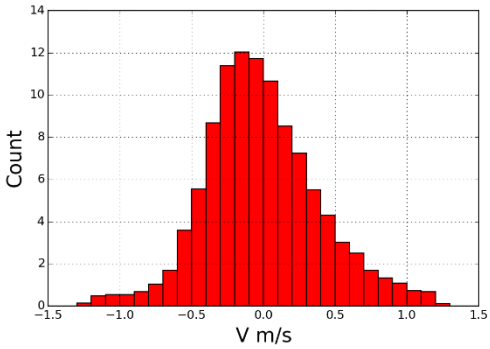


Figure A. 140: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

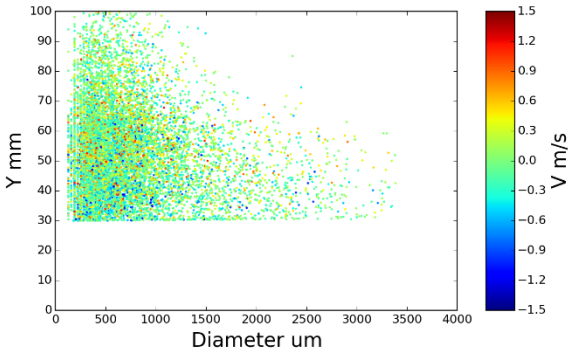


Figure A. 138: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	37.89	37.7	128.4	3391	770.8	639.2	128.4	3412	770.6	648.8
40-60mm	82.99	83.09	128.4	3408	679.5	541.4	128.4	3403	674.3	535.8
60-80mm	33.88	34.24	128.4	3176	587.6	397.3	128.4	2920	586.2	396.3
80-100mm	7.43	7.42	128.4	2013	530.8	284.0	128.4	2098	536.2	282.7
All	162.19	162.45	128.4	3408	674.8	535.5	128.4	3412	671.8	534.7
			Height A (mm)				Height B (mm)			
Highest Particle			99.7291				99.8377			
Lowest Particle			29.9399				29.9399			

Table A. 16: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	19.48	128.4	3391	923.1	667.9	128.4	3406	905.4	658.3	-1.220	1.220	-0.040	0.360	-1.220	1.210	-0.010	0.430
40-60mm	52.34	128.4	3408	781.8	554.6	128.4	3399	772.3	551.9	-1.220	1.220	-0.050	0.300	-1.220	1.220	0.000	0.420
60-80mm	23.3	128.4	2943	673.2	410.1	128.4	2920	665.6	403.9	-1.220	1.200	-0.050	0.230	-1.210	1.200	-0.000	0.360
80-100mm	5.78	128.4	2013	586.2	269.7	128.4	2098	584.8	273.8	-1.020	0.840	-0.060	0.170	-1.220	1.170	0.030	0.330
All	100.9	128.4	3408	772.8	545.3	128.4	3406	762.6	540.0	-1.220	1.220	-0.050	0.290	-1.220	1.220	0.000	0.410

Table A. 17: Matched Droplet Info

A.1.1.2 All Droplets for .LA Image

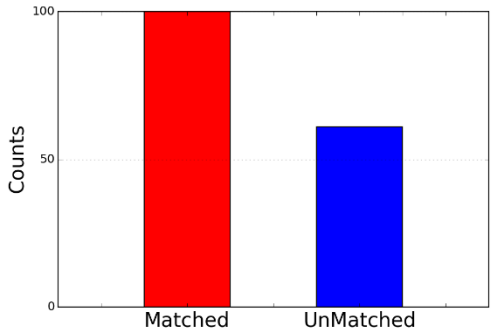


Figure A. 141: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

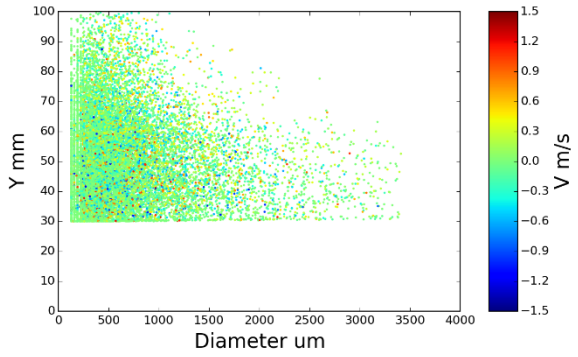


Figure A. 144: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

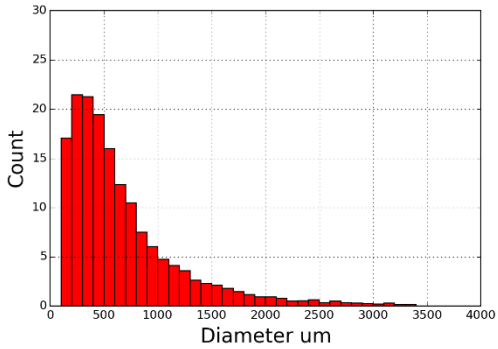


Figure A. 142: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

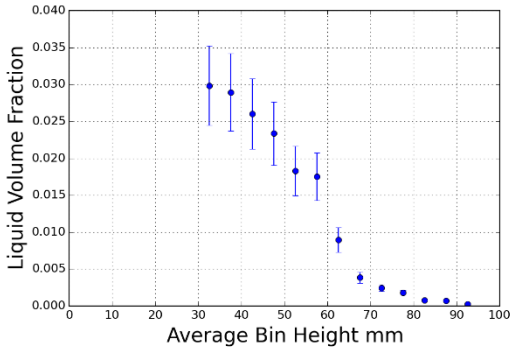


Figure A. 145: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

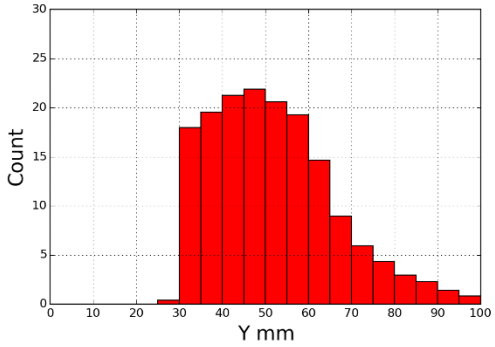


Figure A. 143: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 All Droplets for .LB Image

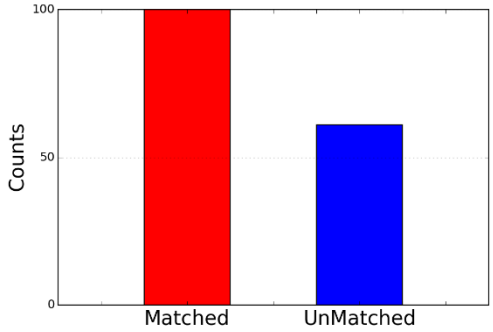


Figure A. 146: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

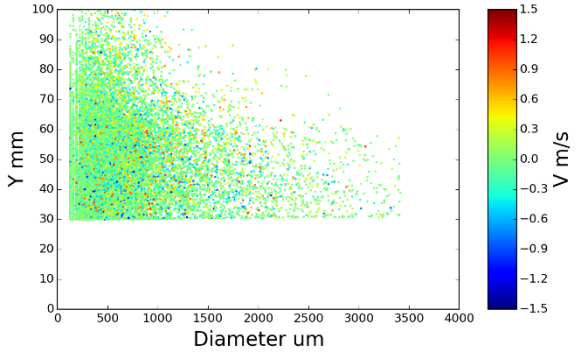


Figure A. 149: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

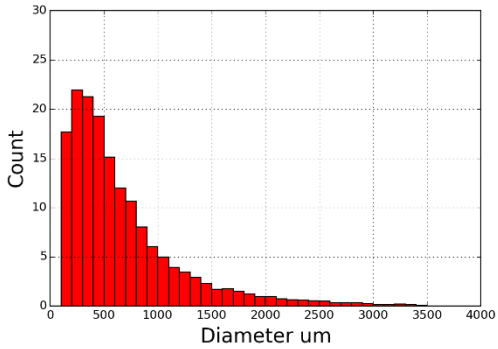


Figure A. 147: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

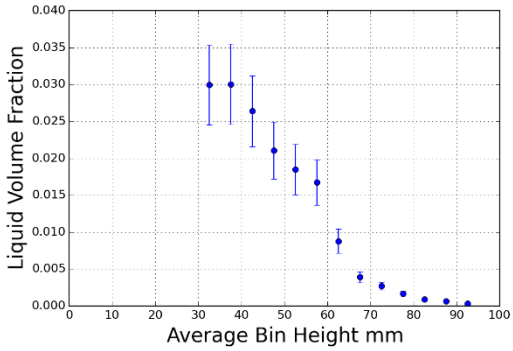


Figure A. 150: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

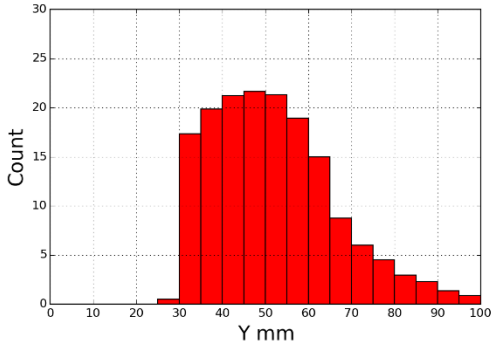


Figure A. 148: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 Matched Only Droplets for .LA Image

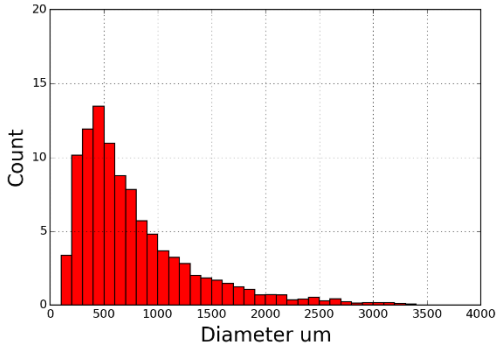


Figure A. 151: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

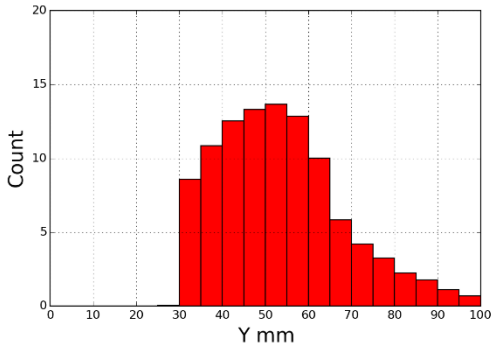


Figure A. 152: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

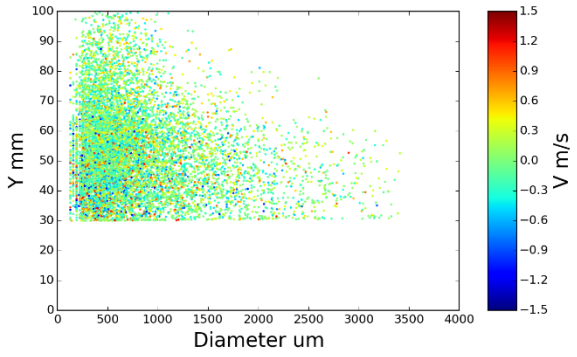


Figure A. 153: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

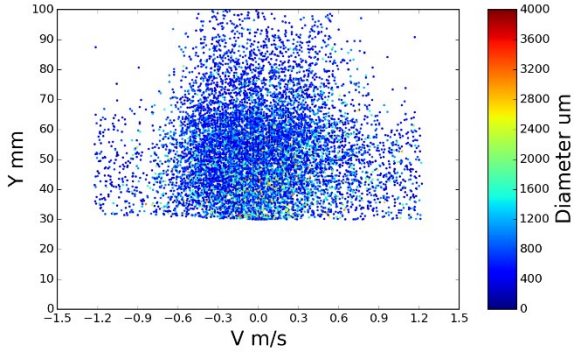


Figure A. 154: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

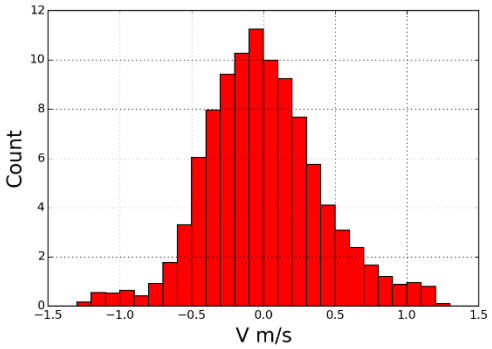


Figure A. 155: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 Matched Only Droplets for .LB Image

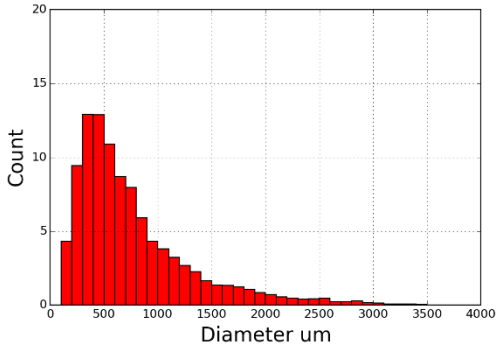


Figure A. 156: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

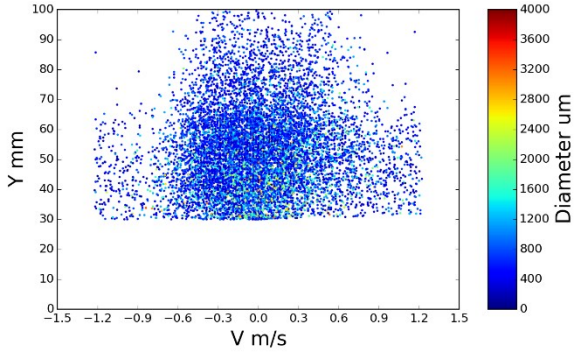


Figure A. 159: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

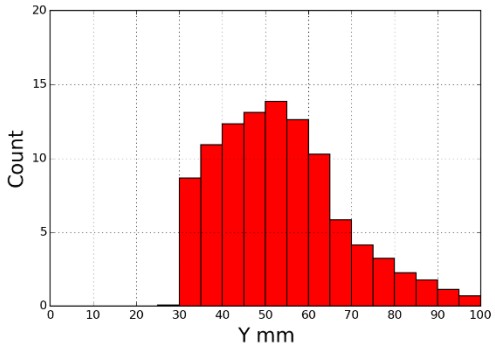


Figure A. 157: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

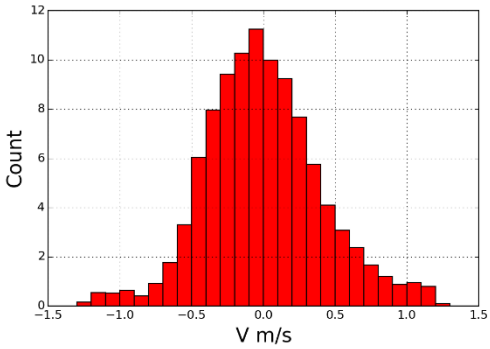


Figure A. 160: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

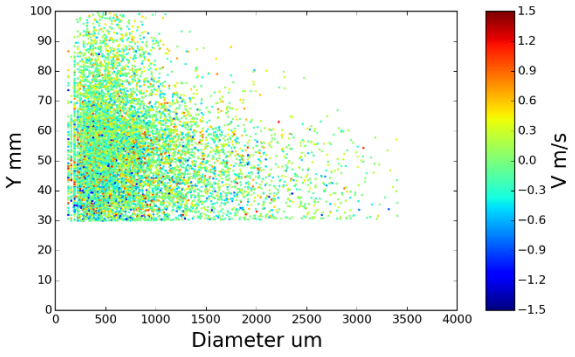


Figure A. 158: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	34.91	35.74	128.4	3393	791.0	645.2	128.4	3406	778.8	637.3
40-60mm	76.15	77.05	128.4	3384	690.3	556.0	128.4	3400	682.4	551.9
60-80mm	33.18	33.34	128.4	3396	602.1	437.6	128.4	3405	597.5	429.3
80-100mm	8.9	8.89	128.4	1848	538.0	315.2	128.4	1841	541.8	314.6
All	153.14	155.02	128.4	3396	685.3	548.8	128.4	3406	678.3	543.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.7457				99.8092			
Lowest Particle			29.9399				29.9399			

Table A. 18: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	17.28	128.4	3393	974.6	681.1	128.4	3403	950.6	664.5	-1.210	1.220	-0.040	0.360	-1.220	1.220	-0.010	0.430
40-60mm	46.4	128.4	3365	806.1	585.7	128.4	3400	794.3	583.0	-1.220	1.220	-0.040	0.300	-1.220	1.220	-0.020	0.420
60-80mm	21.44	128.4	3396	709.2	446.7	128.4	3203	702.8	442.1	-1.220	1.200	-0.040	0.250	-1.180	1.220	-0.020	0.360
80-100mm	6.61	128.4	1848	613.3	314.6	128.4	1841	608.3	314.1	-0.590	1.060	-0.040	0.170	-1.070	1.220	-0.020	0.310
All	91.73	128.4	3396	801.3	570.0	128.4	3403	789.1	563.2	-1.220	1.220	-0.040	0.300	-1.220	1.220	-0.020	0.400

Table A. 19: Matched Droplet Info

A.1.1.2 All Droplets for .LA Image

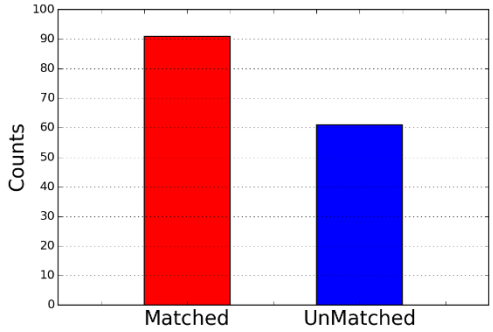


Figure A. 161: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

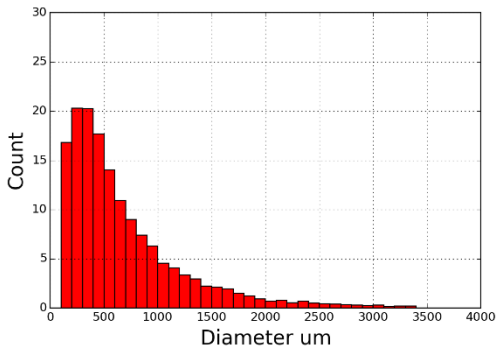


Figure A. 162: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

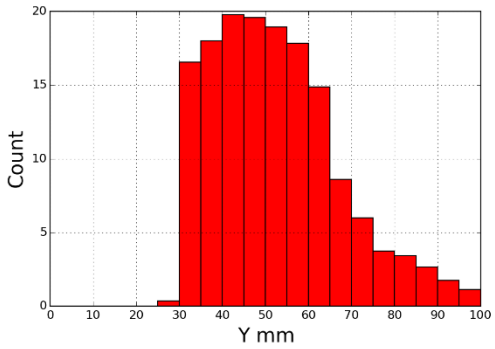


Figure A. 163: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

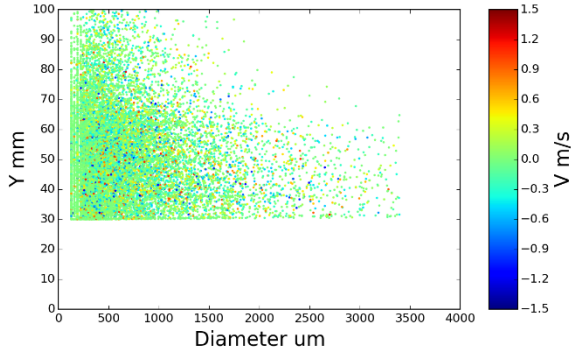


Figure A. 164: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

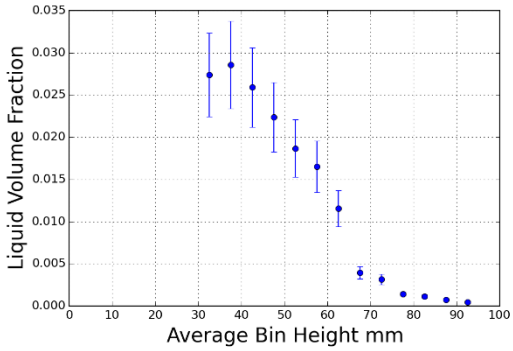


Figure A. 165: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 All Droplets for .LB Image

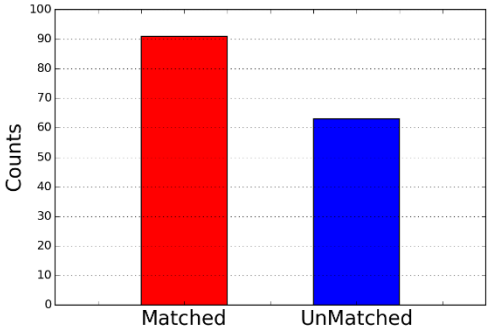


Figure A. 166: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

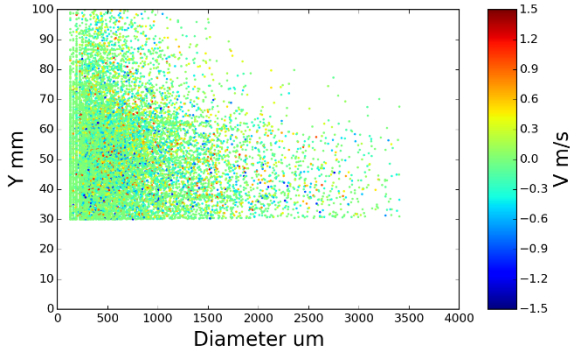


Figure A. 169: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

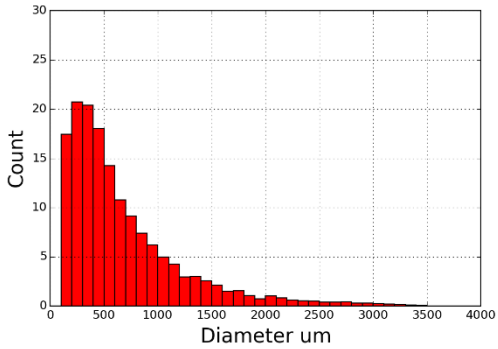


Figure A. 167: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

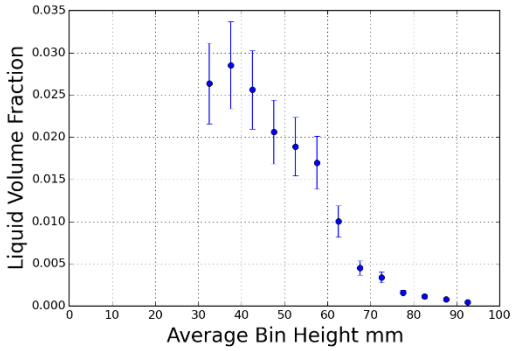


Figure A. 170: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

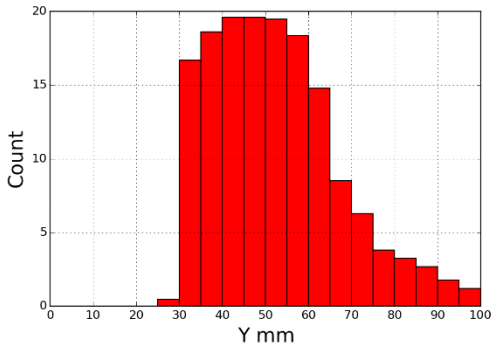


Figure A. 168: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 Matched Only Droplets for .LA Image

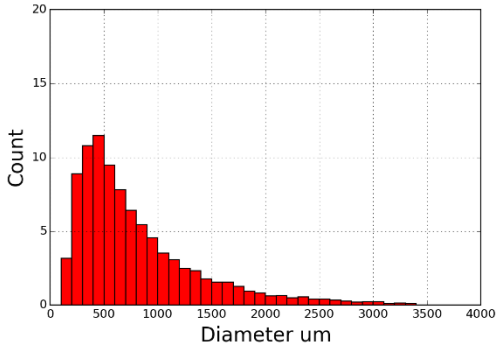


Figure A. 171: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

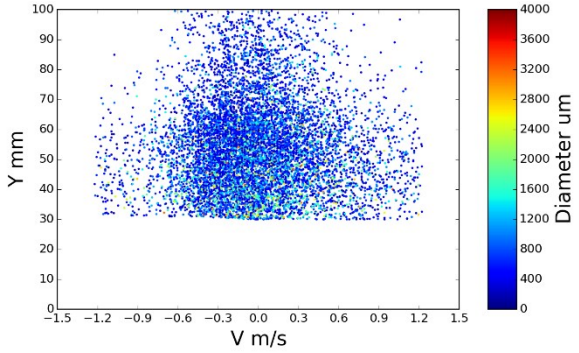


Figure A. 174: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

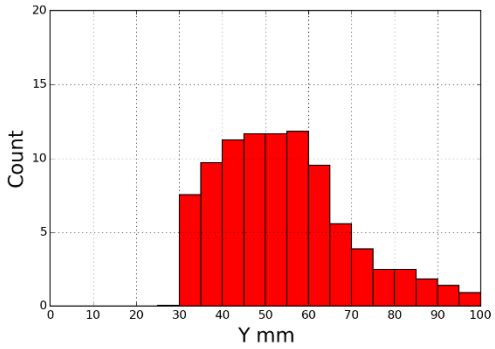


Figure A. 172: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

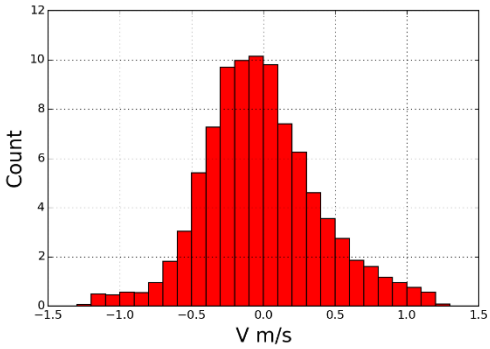


Figure A. 175: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

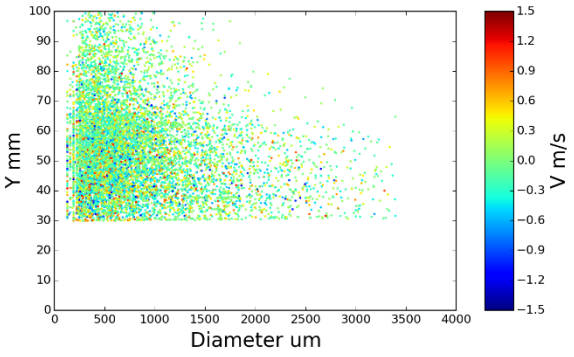


Figure A. 173: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 Matched Only Droplets for .LB Image

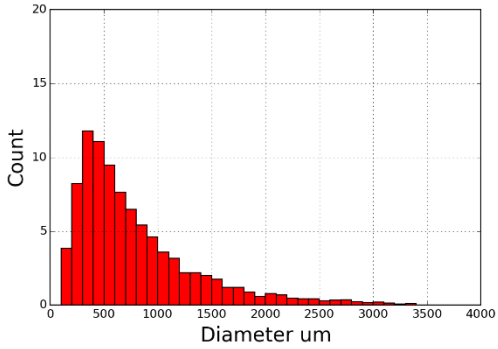


Figure A. 176: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

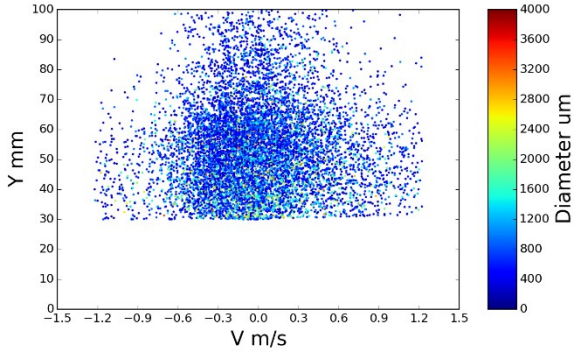


Figure A. 179: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

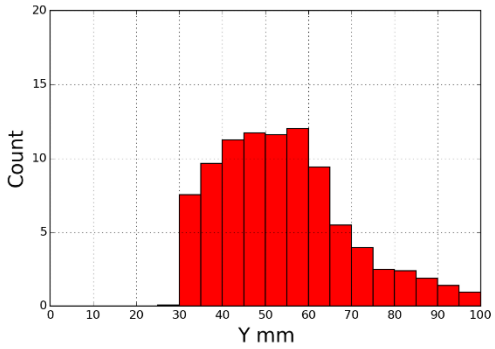


Figure A. 177: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

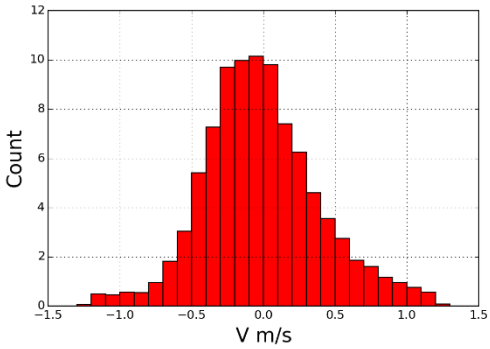


Figure A. 180: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

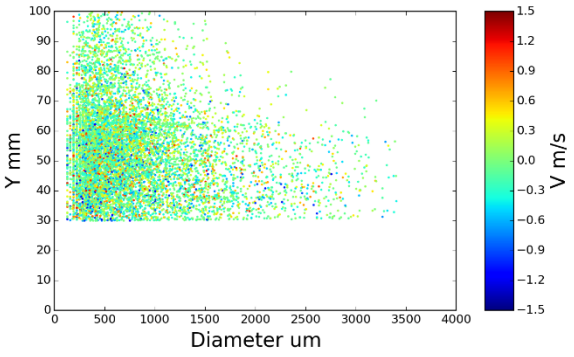


Figure A. 178: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	32.18	32.55	128.4	3405	778.5	646.6	128.4	3413	791.1	666.0
40-60mm	67.8	69.28	128.4	3404	686.6	560.4	128.4	3369	677.2	566.7
60-80mm	25.75	26.59	128.4	3019	580.8	415.9	128.4	3375	582.3	421.7
80-100mm	5.96	6.05	128.4	1953	489.0	285.0	128.4	1949	482.2	289.9
All	131.69	134.47	128.4	3405	679.4	554.4	128.4	3413	677.3	564.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.8092				99.8377			
Lowest Particle			29.9399				29.9399			

Table A. 20: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	14.55	128.4	3405	991.2	696.1	128.4	3385	968.6	689.6	-1.210	1.220	-0.030	0.370	-1.200	1.220	-0.020	0.430
40-60mm	39.45	128.4	3380	820.0	593.4	128.4	3369	809.9	595.7	-1.220	1.210	-0.030	0.310	-1.220	1.220	0.000	0.440
60-80mm	15.59	128.4	3019	702.5	434.4	128.4	3227	691.3	427.1	-1.170	1.160	-0.050	0.250	-1.210	1.220	0.000	0.390
80-100mm	3.83	157.3	1953	569.2	290.6	128.4	1949	553.6	291.4	-1.180	0.350	-0.050	0.150	-0.810	1.180	-0.030	0.310
All	73.42	128.4	3405	815.9	584.5	128.4	3385	802.8	582.6	-1.220	1.220	-0.040	0.310	-1.220	1.220	-0.000	0.420

Table A. 21: Matched Droplet Info

A.1.1.2 All Droplets for .LA Image

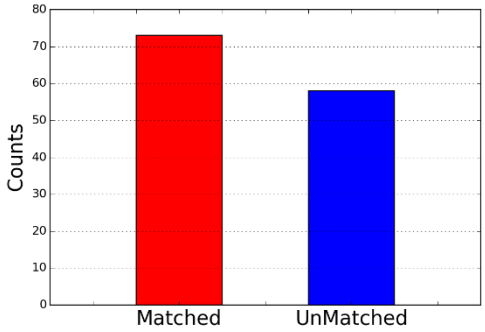


Figure A. 181: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

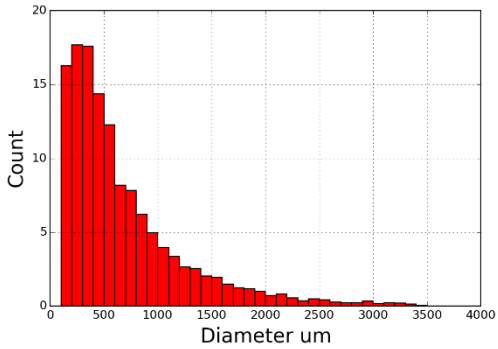


Figure A. 182: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

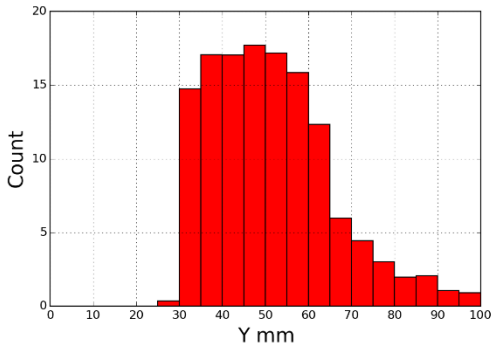


Figure A. 183: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

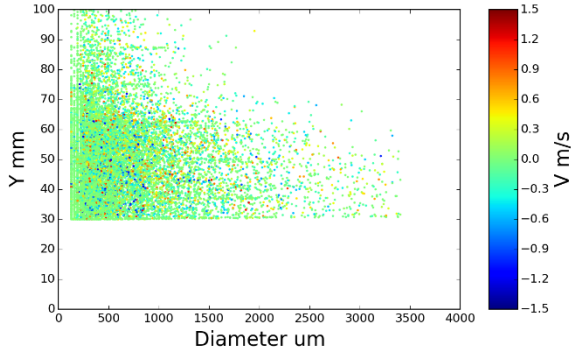


Figure A. 184: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

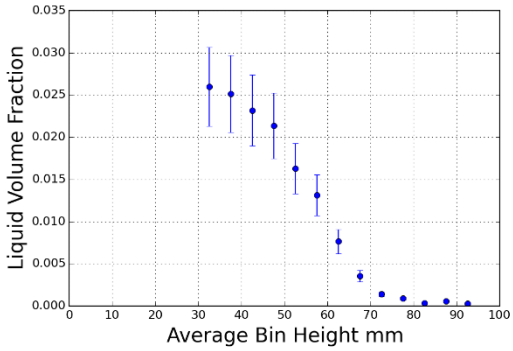


Figure A. 185: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 All Droplets for .LB Image

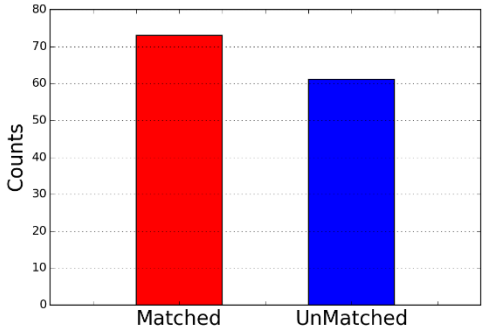


Figure A. 186: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

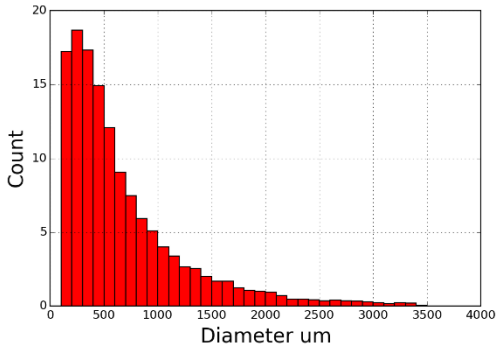


Figure A. 187: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

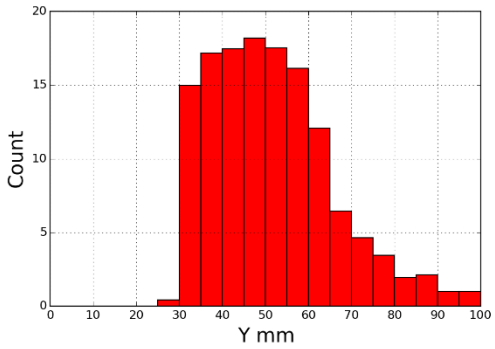


Figure A. 188: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

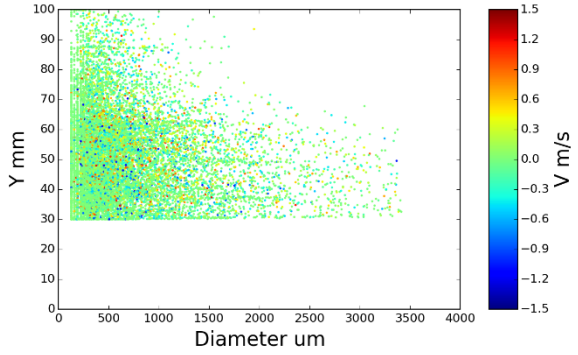


Figure A. 189: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

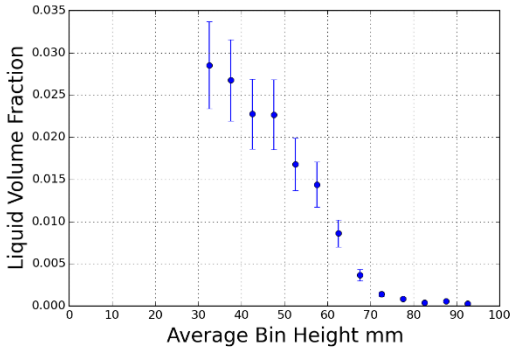


Figure A. 190: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 Matched Only Droplets for .LA Image

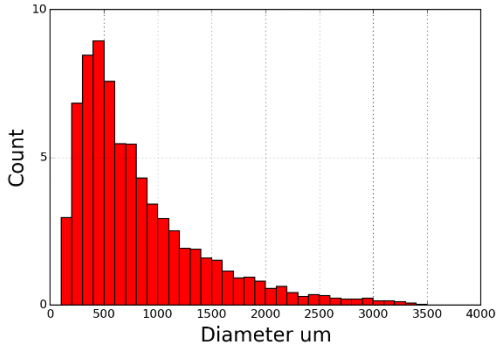


Figure A. 191: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

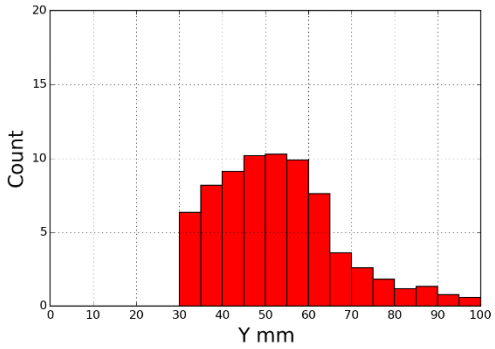


Figure A. 192: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

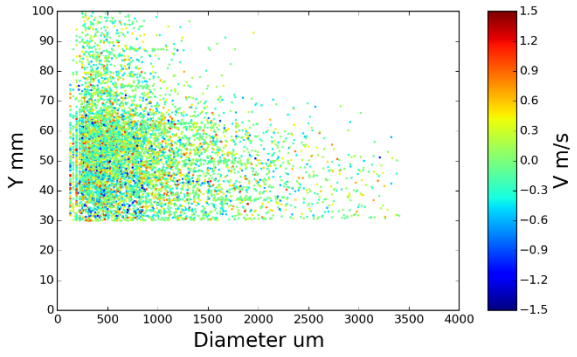


Figure A. 193: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

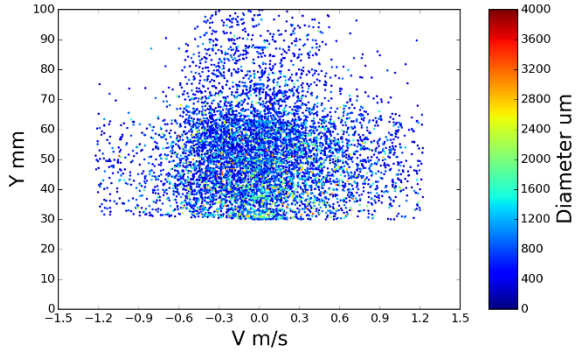


Figure A. 194: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

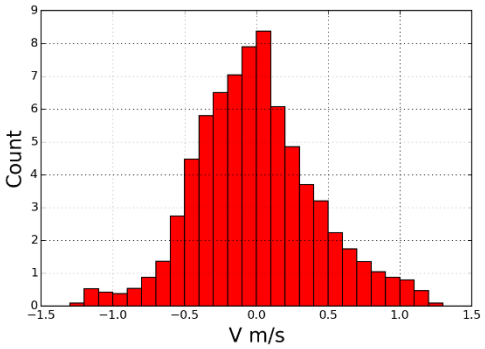


Figure A. 195: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.1.2 Matched Only Droplets for .LB Image

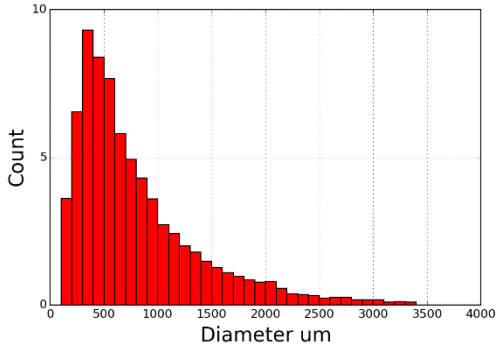


Figure A. 196: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

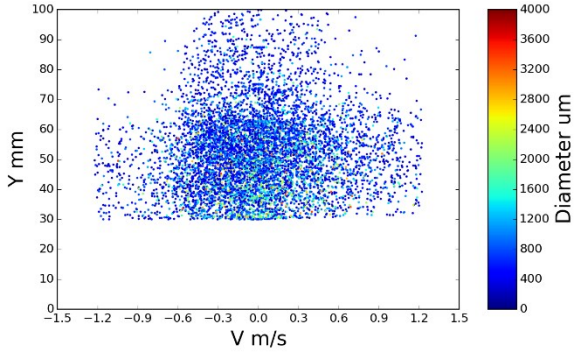


Figure A. 199: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

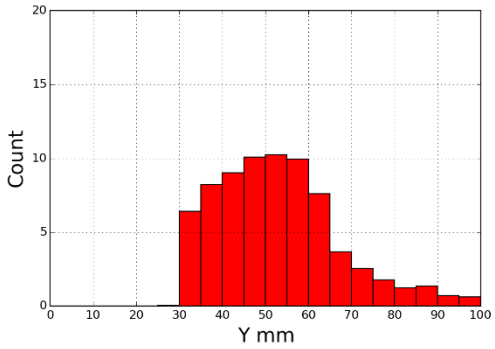


Figure A. 197: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

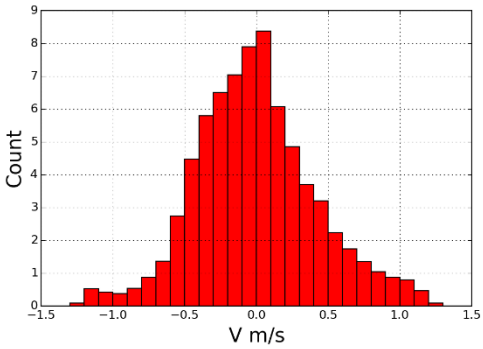


Figure A. 200: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

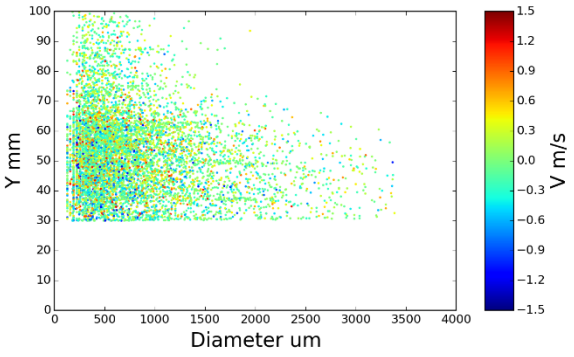


Figure A. 198: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2 Liquid Level 2

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	15867 / 1.999
Ref Mass Flow (lb/hr) / (kg/s)	1650 / 0.208
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15326 / 20.785
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4974 / 15.69
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	39.9 / 4.39
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.1 / 4.51
Total Bundle Q (Btu/hr) / (kW)	111016 / 32.54
Total Bundle & Preboiler Q (Btu/hr) / (kW)	145435 / 42.62
Top Two Rows HTC Ratio	1.089
Bundle Inlet Quality	0.18
Bundle Exit Quality	0.99

Table A. 22: Thermal Conditions

A.1.2.1 Lens 100mm Mag 0_29x

A.1.2.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	115.97	119.88	56.9	3018	421.2	459.0	56.9	3010	417.2	459.2
40-60mm	162.05	166.49	56.9	3026	379.9	413.0	56.9	3027	368.1	409.3
60-80mm	50.67	52.33	56.9	2863	336.7	338.6	56.9	2926	329.3	333.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	329.3	339.27	56.9	3026	387.8	420.6	56.9	3027	379.5	418.5
			Height A (mm)				Height B (mm)			
Highest Particle			75.7909				75.7909			
Lowest Particle			27.8287				27.8287			

Table A. 23: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	64.61	56.9	2972	530.2	500.4	56.9	2969	525.6	497.1	-1.260	1.260	-0.040	0.300	-1.260	1.260	-0.010	0.420
40-60mm	102.19	56.9	3005	476.1	444.5	56.9	3027	471.6	440.9	-1.260	1.260	-0.050	0.250	-1.260	1.260	0.000	0.350
60-80mm	33.92	56.9	2863	431.0	364.8	56.9	2926	427.3	362.2	-1.260	1.260	-0.050	0.200	-1.260	1.220	0.000	0.320
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	200.72	56.9	3005	485.9	452.7	56.9	3027	481.4	449.2	-1.260	1.260	-0.050	0.260	-1.260	1.260	-0.000	0.370

Table A. 24: Matched Droplet Info

A.1.2.1 All Droplets for .LA Image

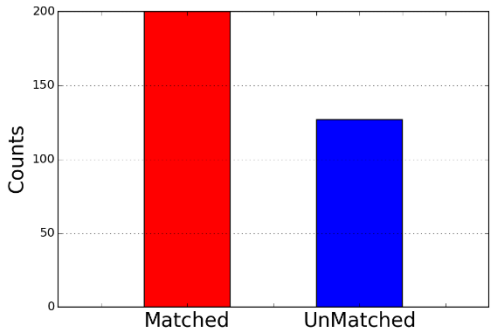


Figure A. 201: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

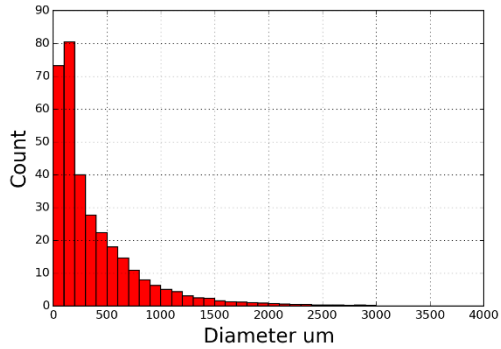


Figure A. 202: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

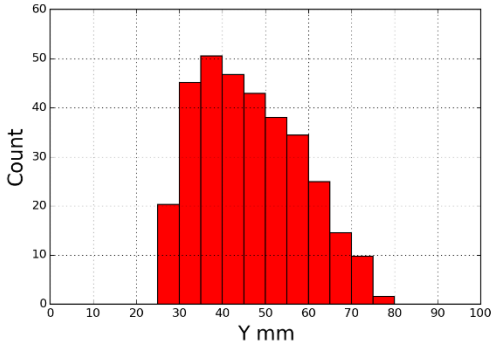


Figure A. 203: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

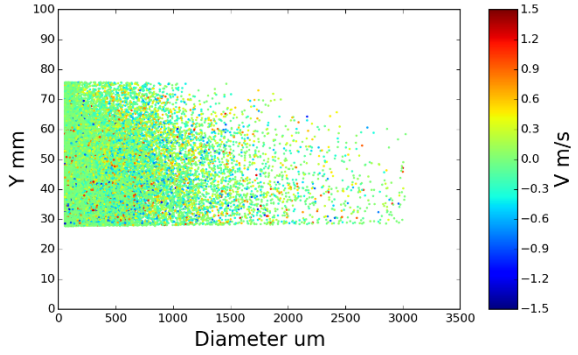


Figure A. 204: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

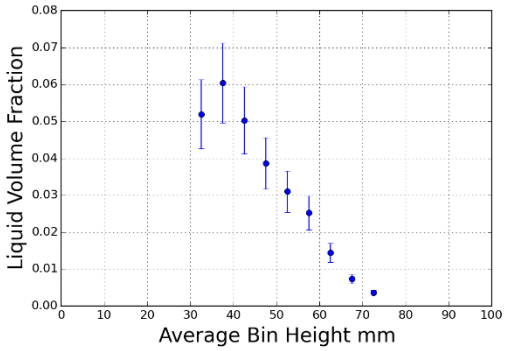


Figure A. 205: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 All Droplets for .LB Image

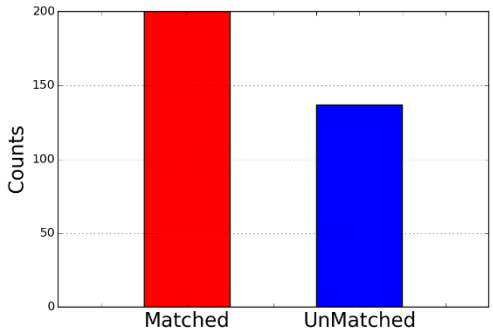


Figure A. 206: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

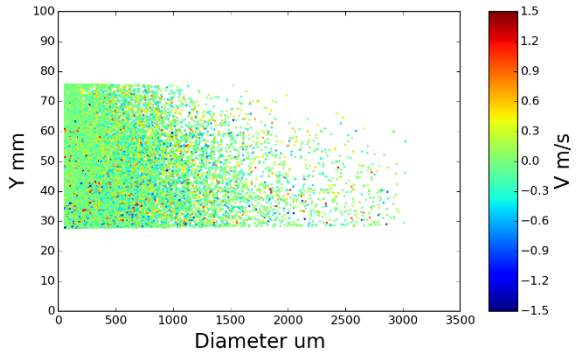


Figure A. 209: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

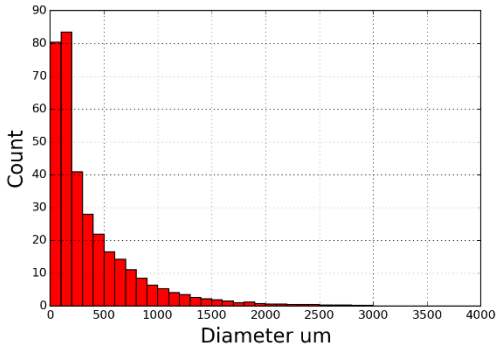


Figure A. 207: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

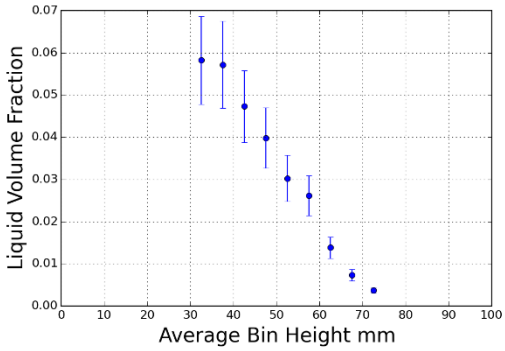


Figure A. 210: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

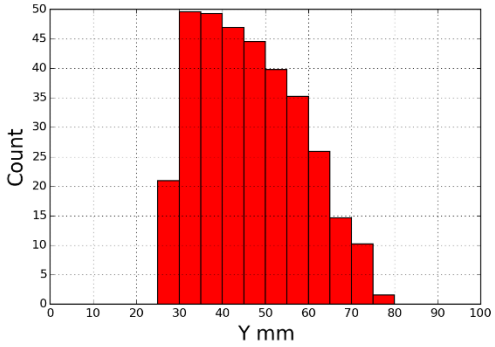


Figure A. 208: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 Matched Only Droplets for .LA Image

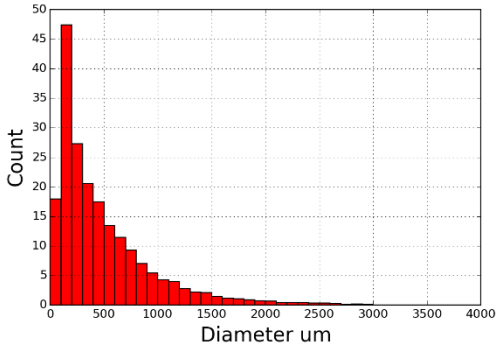


Figure A. 211: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

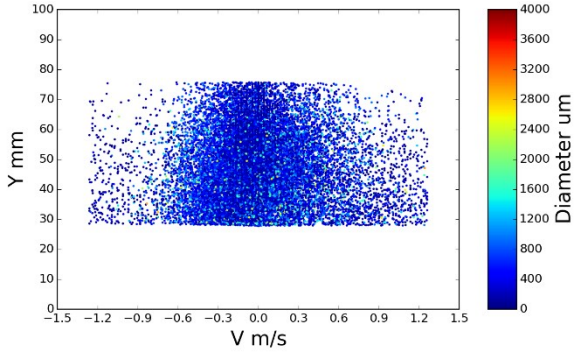


Figure A. 214: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

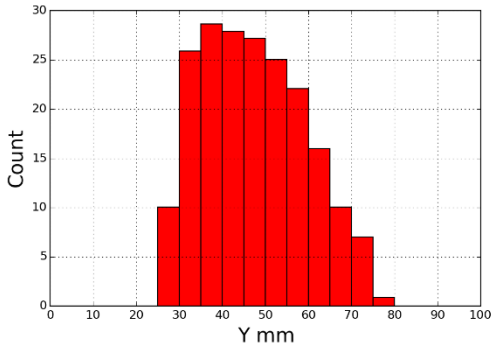


Figure A. 212: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

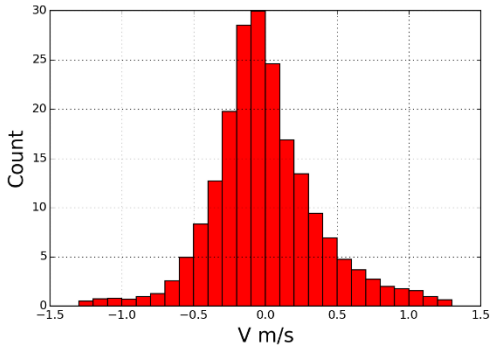


Figure A. 215: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

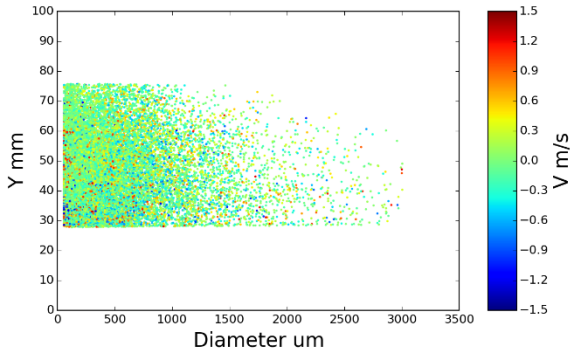


Figure A. 213: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 Matched Only Droplets for .LB Image

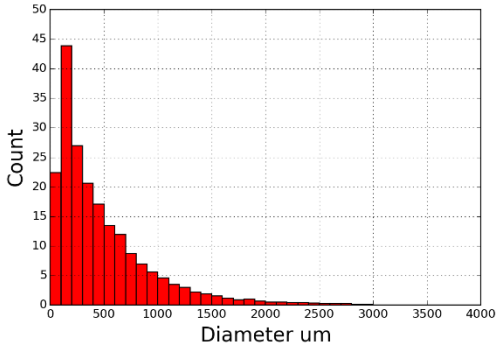


Figure A. 216: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

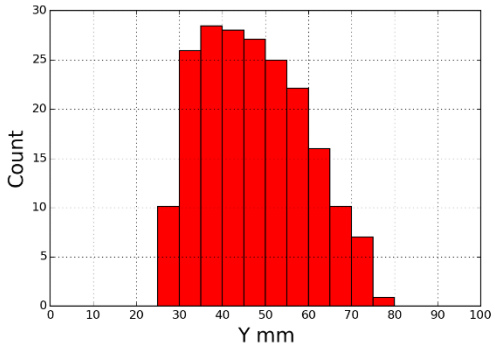


Figure A. 217: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

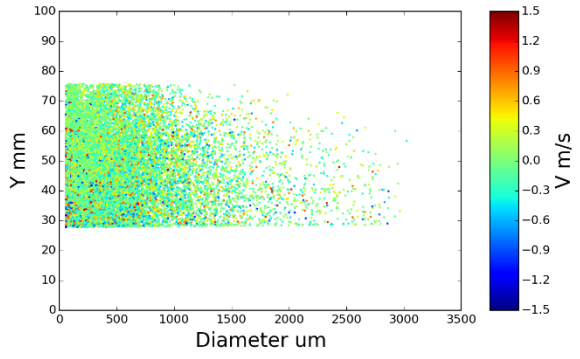


Figure A. 218: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

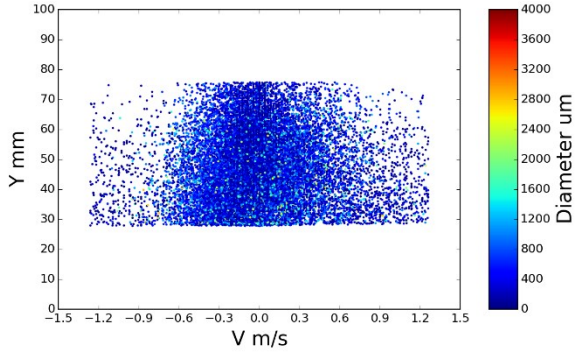


Figure A. 219: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

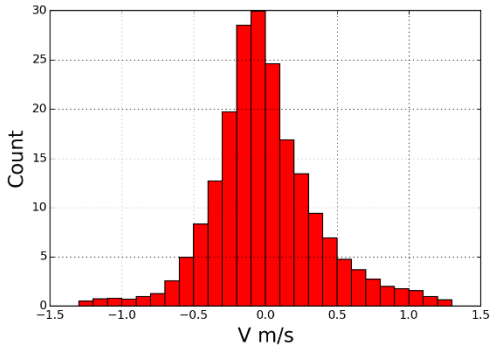


Figure A. 220: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	96.2	98.5	56.9	2997	470.6	502.3	56.9	3026	462.7	504.7
40-60mm	155.76	160.26	56.9	3026	429.6	456.9	56.9	3014	419.4	452.2
60-80mm	52.19	55.23	56.9	2620	389.3	379.2	56.9	2703	374.4	376.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	304.21	314.06	56.9	3026	435.7	460.6	56.9	3026	425.0	458.4
			Height A (mm)				Height B (mm)			
Highest Particle			75.7909				75.7799			
Lowest Particle			27.8287				27.8287			

Table A. 25: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	53.3	56.9	2997	606.5	544.7	56.9	3014	601.5	546.0	-1.260	1.250	-0.050	0.270	-1.260	1.260	-0.010	0.400
40-60mm	98.61	56.9	3002	543.8	486.9	56.9	3014	536.0	480.1	-1.260	1.260	-0.040	0.240	-1.260	1.260	0.010	0.360
60-80mm	34.22	56.9	2620	495.1	398.6	56.9	2703	492.8	395.9	-1.240	1.250	-0.050	0.200	-1.260	1.240	0.000	0.320
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	186.13	56.9	3002	552.8	491.2	56.9	3014	546.8	487.6	-1.260	1.260	-0.040	0.240	-1.260	1.260	0.000	0.370

Table A. 26: Matched Droplet Info

A.1.2.1 All Droplets for .LA Image

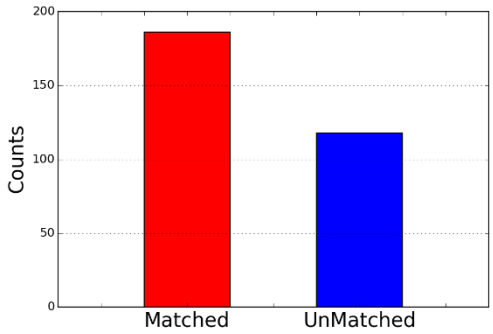


Figure A. 221: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

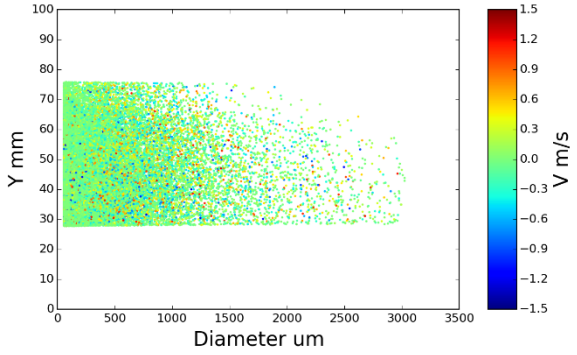


Figure A. 224: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

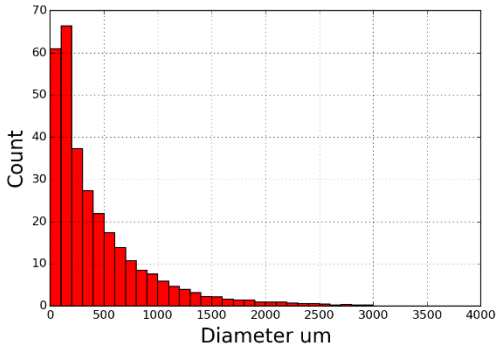


Figure A. 222: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

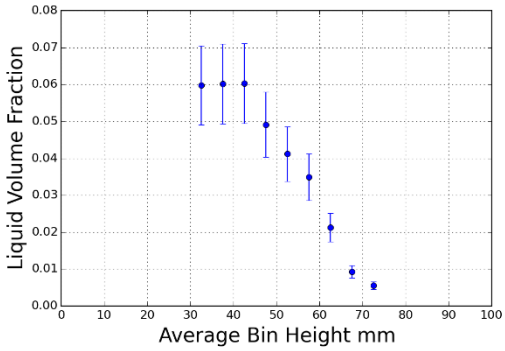


Figure A. 225: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

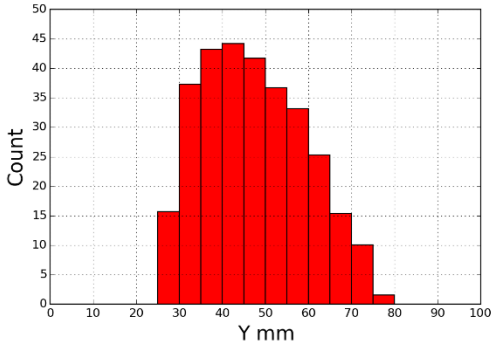


Figure A. 223: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 All Droplets for .LB Image

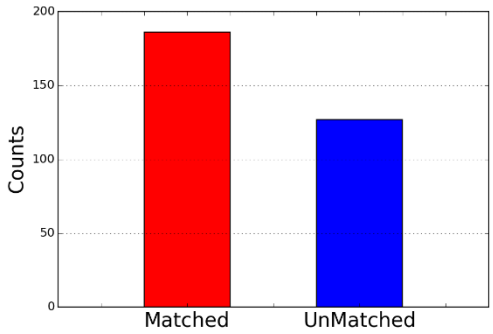


Figure A. 226: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

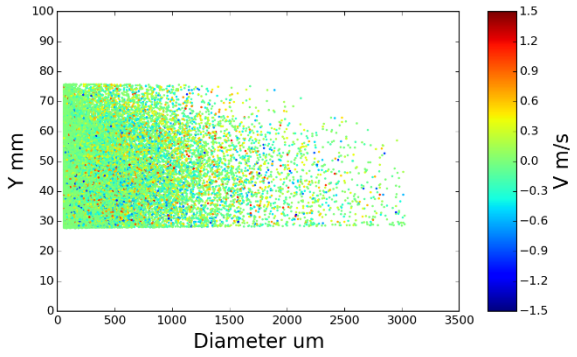


Figure A. 229: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

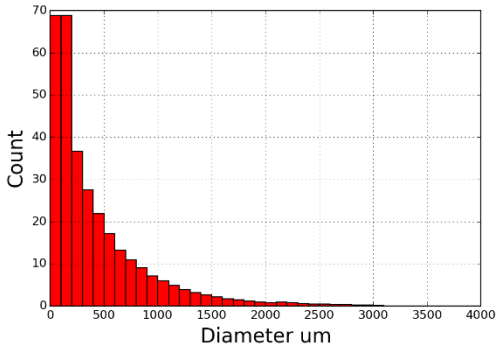


Figure A. 227: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

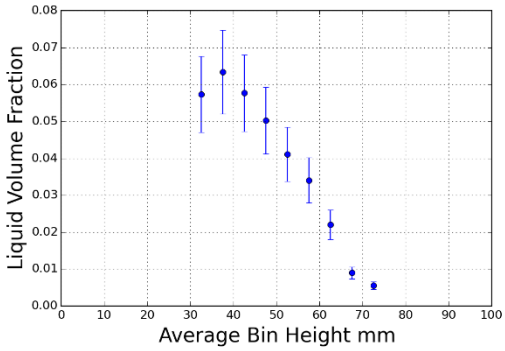


Figure A. 230: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

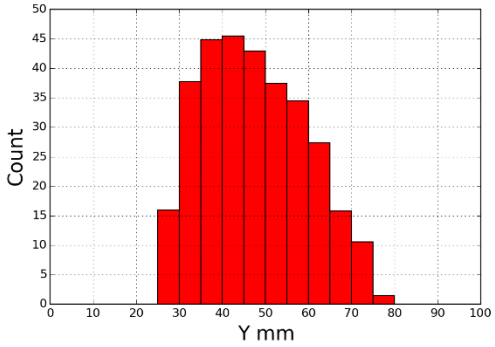


Figure A. 228: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 Matched Only Droplets for .LA Image

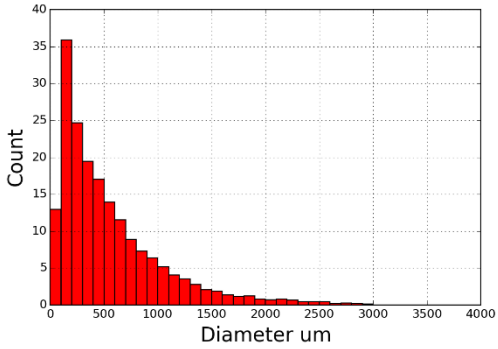


Figure A. 231: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

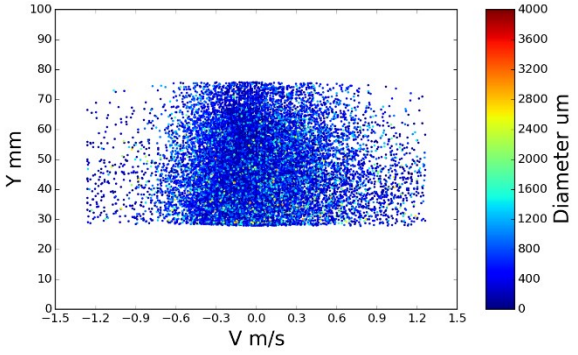


Figure A. 234: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

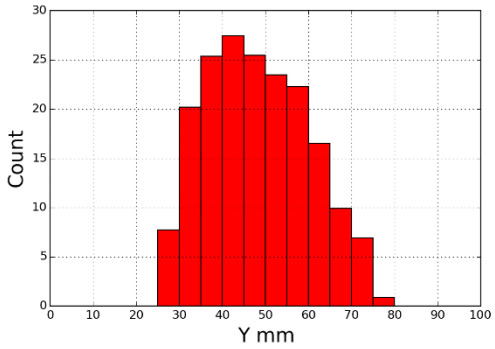


Figure A. 232: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

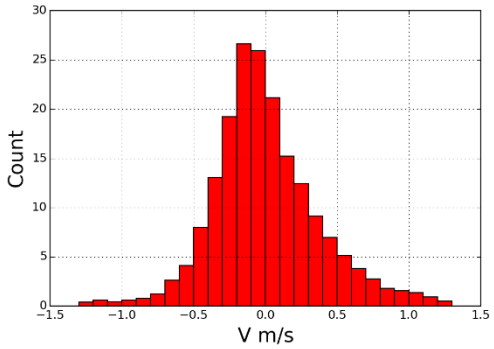


Figure A. 235: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

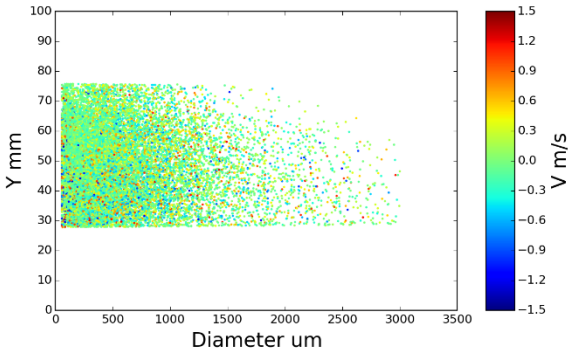


Figure A. 233: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 Matched Only Droplets for .LB Image

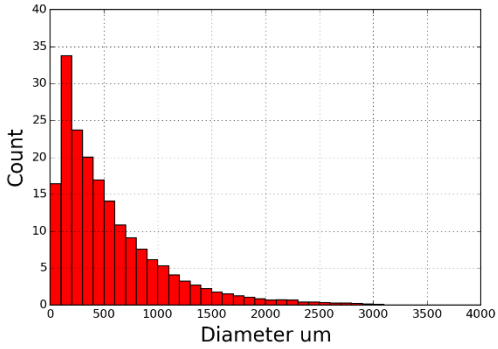


Figure A. 236: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

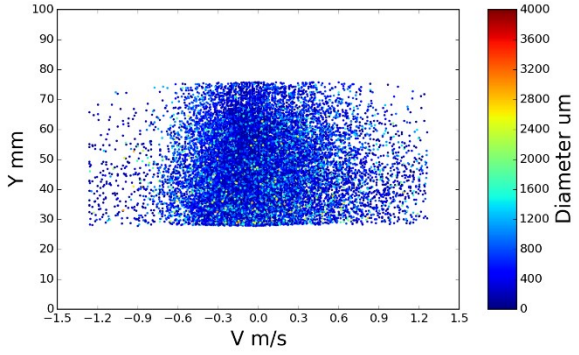


Figure A. 239: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

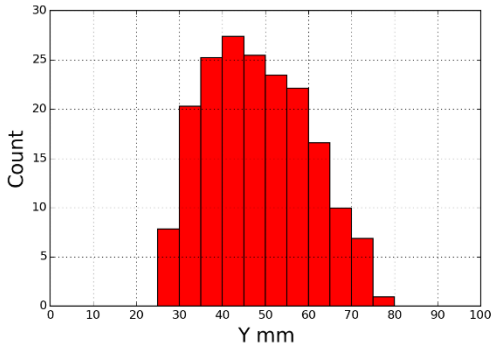


Figure A. 237: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

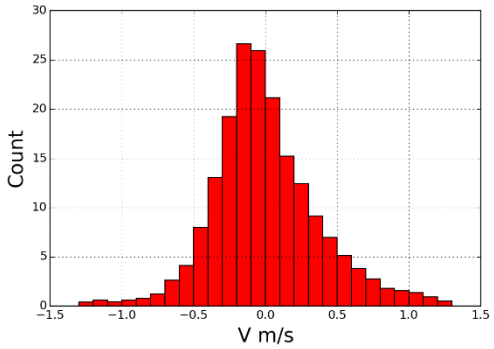


Figure A. 240: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

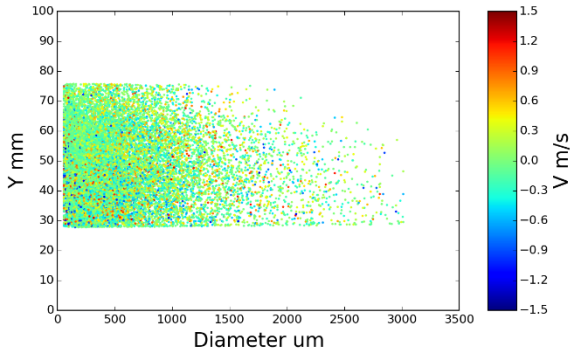


Figure A. 238: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	92.32	95.43	56.9	3022	482.0	517.3	56.9	3024	463.0	516.4
40-60mm	142.89	151.59	56.9	3020	428.2	459.7	56.9	3014	410.2	453.5
60-80mm	46.05	49.63	56.9	2813	373.3	386.7	56.9	3011	360.3	387.7
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	281.65	296.88	56.9	3022	436.9	470.1	56.9	3024	418.8	466.1
			Height A (mm)				Height B (mm)			
Highest Particle			75.7909				75.7783			
Lowest Particle			27.8287				27.8287			

Table A. 27: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	47.51	56.9	3021	639.1	570.1	56.9	3024	632.6	568.9	-1.260	1.260	-0.050	0.280	-1.260	1.260	-0.010	0.400
40-60mm	87.66	56.9	3015	550.7	493.3	56.9	3014	544.7	492.4	-1.260	1.260	-0.050	0.240	-1.260	1.260	-0.000	0.370
60-80mm	29.16	56.9	2813	491.6	418.2	56.9	3011	490.3	421.9	-1.260	1.260	-0.060	0.230	-1.260	1.240	-0.000	0.330
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	164.33	56.9	3021	565.8	507.4	56.9	3024	560.4	506.9	-1.260	1.260	-0.050	0.250	-1.260	1.260	-0.010	0.370

Table A. 28: Matched Droplet Info

A.1.2.1 All Droplets for .LA Image

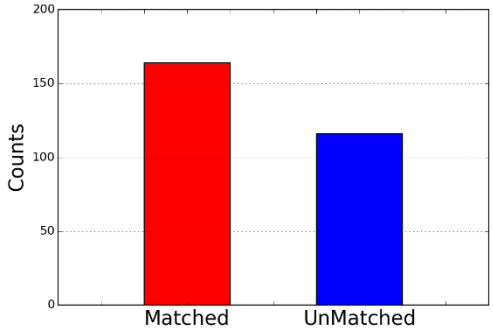


Figure A. 241: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

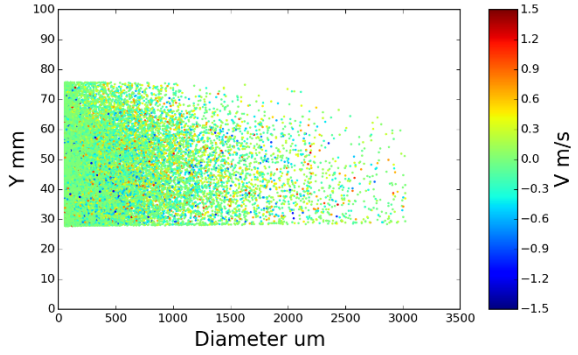


Figure A. 244: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

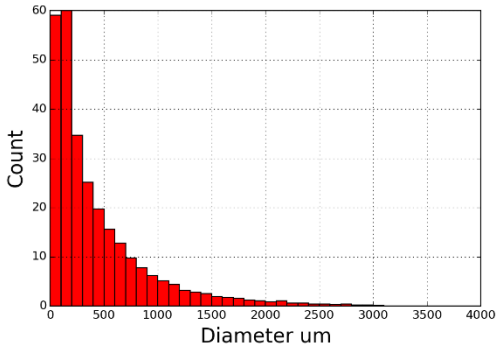


Figure A. 242: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

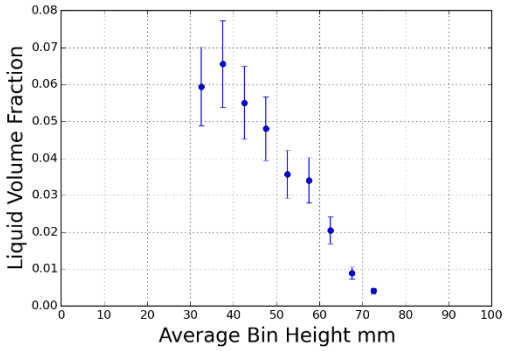


Figure A. 245: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

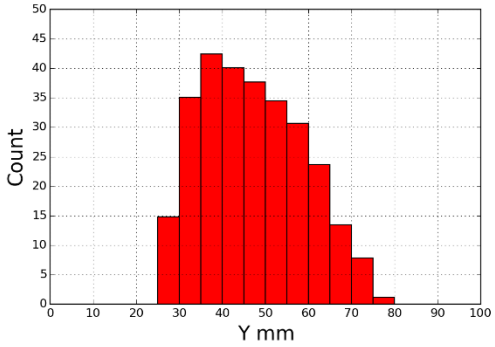


Figure A. 243: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 All Droplets for .LB Image

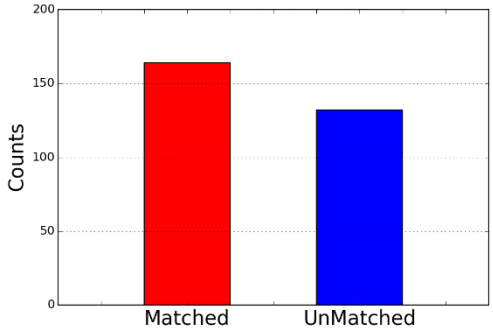


Figure A. 246: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

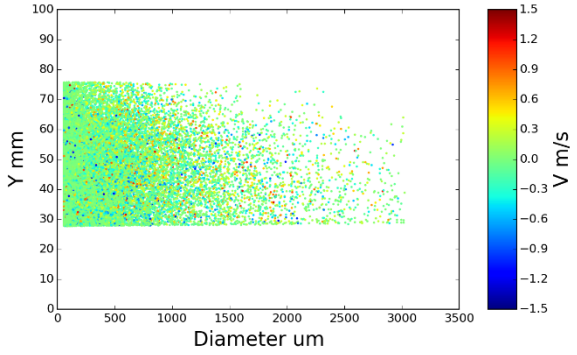


Figure A. 249: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

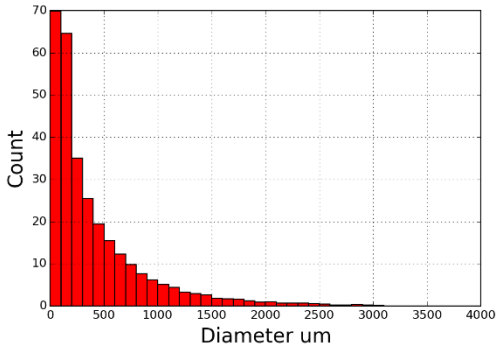


Figure A. 247: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

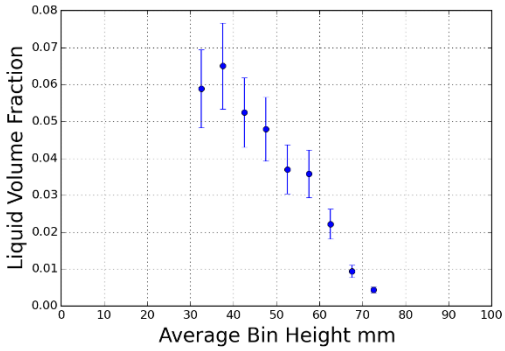


Figure A. 250: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

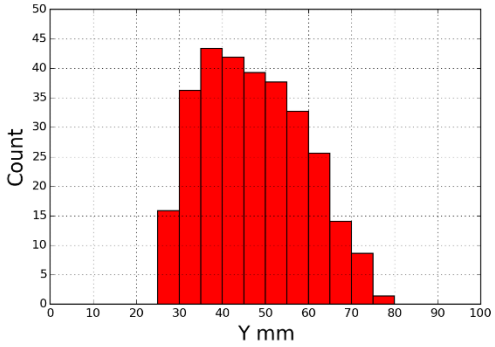


Figure A. 248: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 Matched Only Droplets for .LA Image

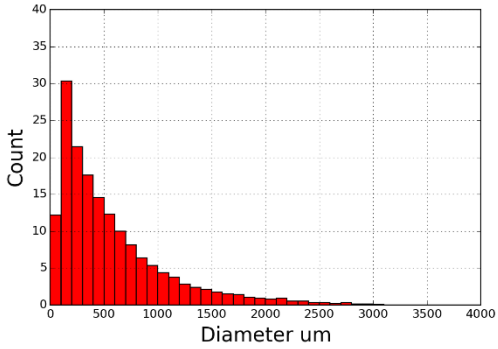


Figure A. 251: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

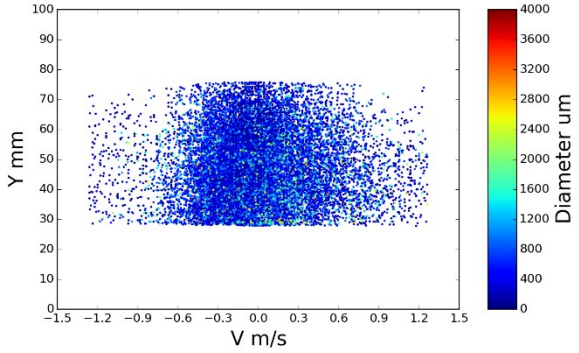


Figure A. 254: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

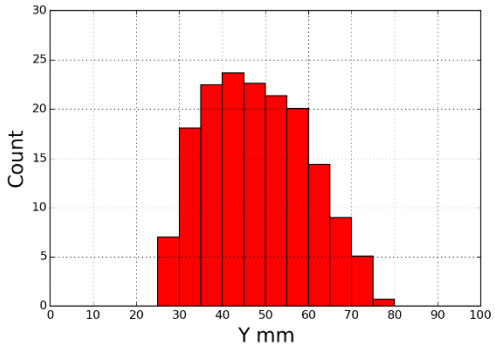


Figure A. 252: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

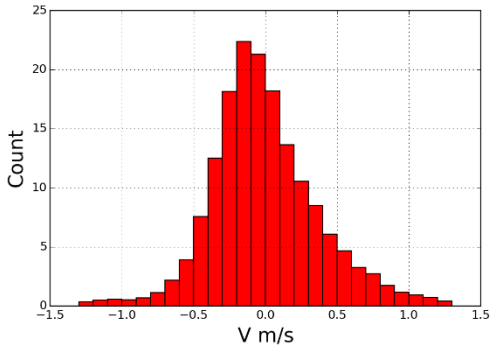


Figure A. 255: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

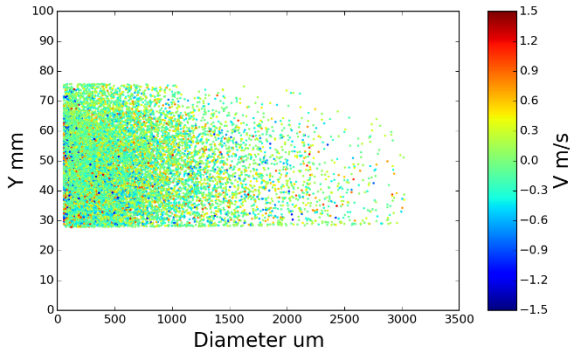


Figure A. 253: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 Matched Only Droplets for .LB Image

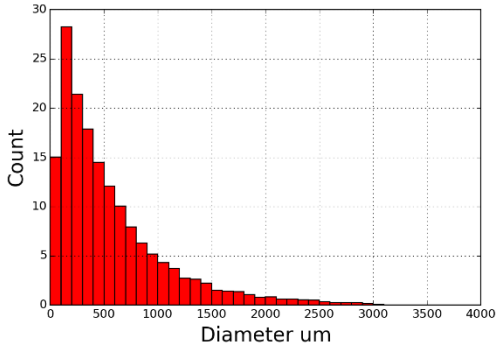


Figure A. 256: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

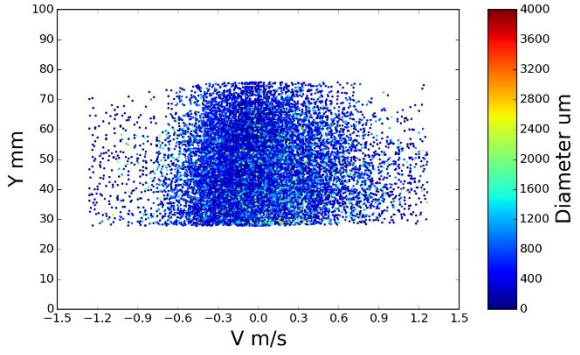


Figure A. 259: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

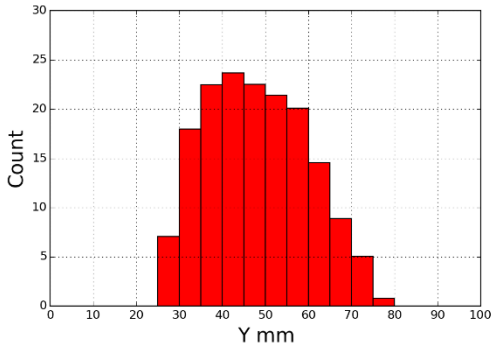


Figure A. 257: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

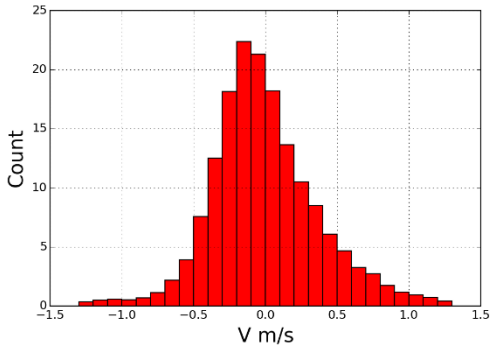


Figure A. 260: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

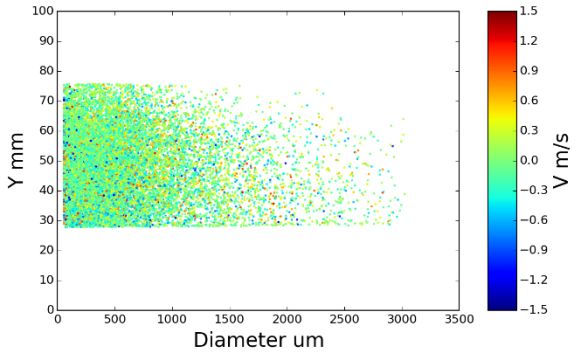


Figure A. 258: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	73.54	78.12	56.9	3006	525.0	541.2	56.9	2973	509.3	533.8
40-60mm	132.46	143.91	56.9	3026	411.1	456.6	56.9	3026	397.0	449.0
60-80mm	51.23	54.51	56.9	2938	374.0	398.7	56.9	2947	356.3	390.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	258.7	279.04	56.9	3026	436.2	475.5	56.9	3026	420.7	467.8
			Height A (mm)				Height B (mm)			
Highest Particle			75.7909				75.7909			
Lowest Particle			27.8287				27.8287			

Table A. 29: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	31.03	56.9	3006	703.1	619.6	56.9	2947	692.4	614.4	-1.260	1.260	-0.030	0.300	-1.260	1.260	-0.020	0.410
40-60mm	73.24	56.9	2984	545.9	504.7	56.9	3007	539.6	502.9	-1.260	1.260	-0.030	0.270	-1.260	1.260	0.010	0.410
60-80mm	31.32	56.9	2938	476.9	424.9	56.9	2947	476.7	428.8	-1.260	1.250	-0.030	0.230	-1.240	1.260	0.010	0.380
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	135.59	56.9	3006	565.9	523.0	56.9	3007	560.0	520.9	-1.260	1.260	-0.030	0.270	-1.260	1.260	0.000	0.400

Table A. 30: Matched Droplet Info

A.1.2.1 All Droplets for .LA Image

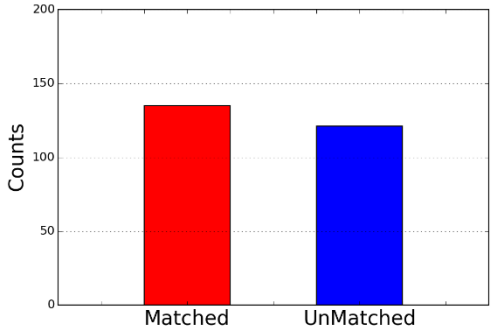


Figure A. 261: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

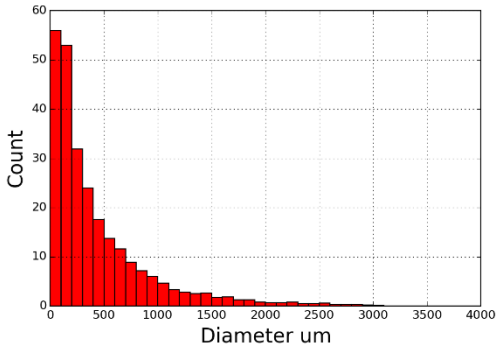


Figure A. 262: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

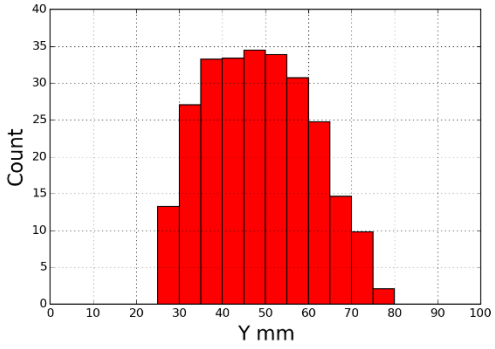


Figure A. 263: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

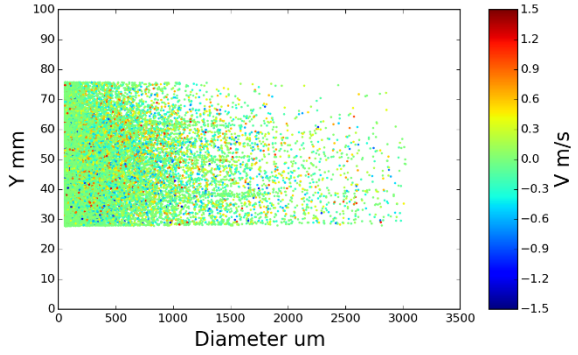


Figure A. 264: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

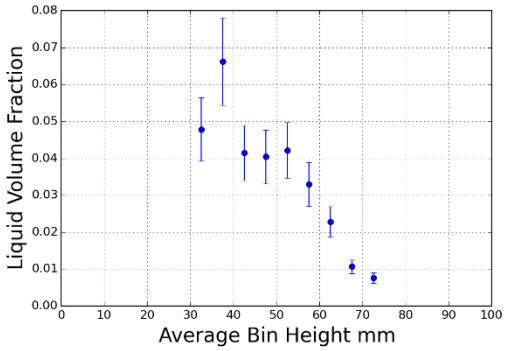


Figure A. 265: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 All Droplets for .LB Image

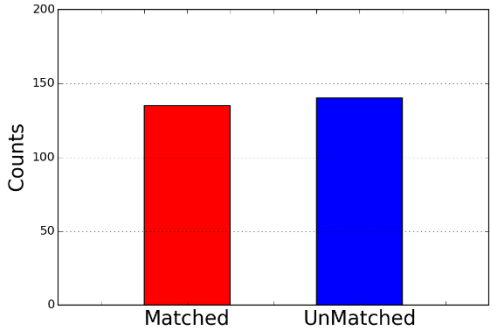


Figure A. 266: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

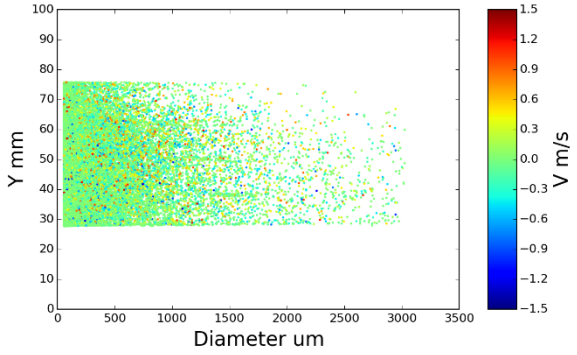


Figure A. 269: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

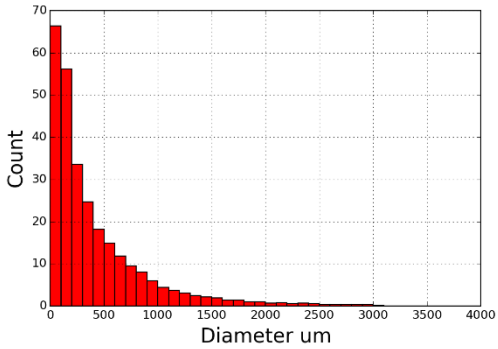


Figure A. 267: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

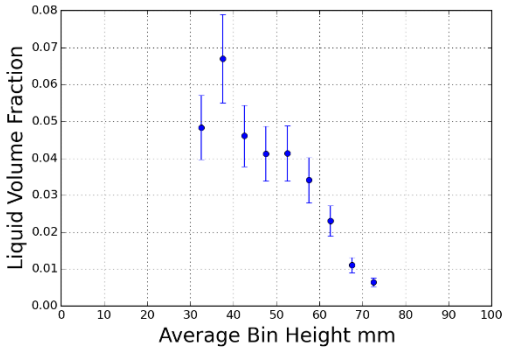


Figure A. 270: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

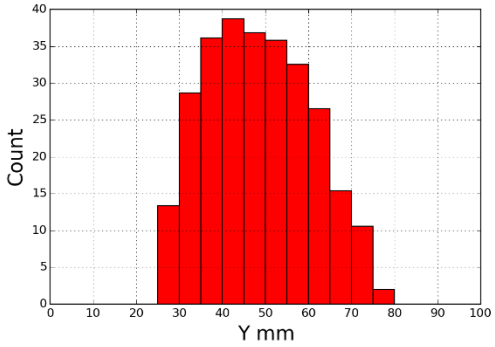


Figure A. 268: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 Matched Only Droplets for .LA Image

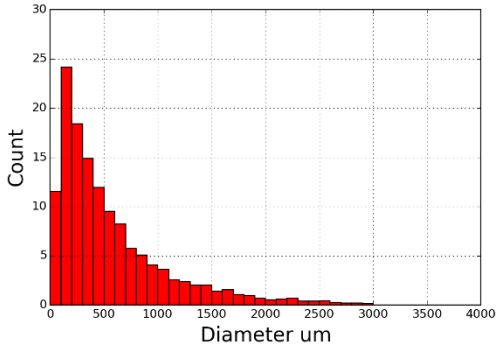


Figure A. 271: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

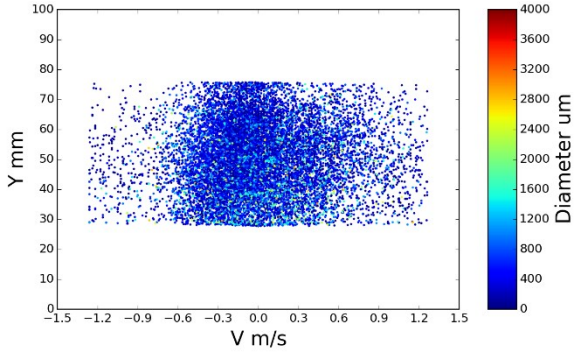


Figure A. 274: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

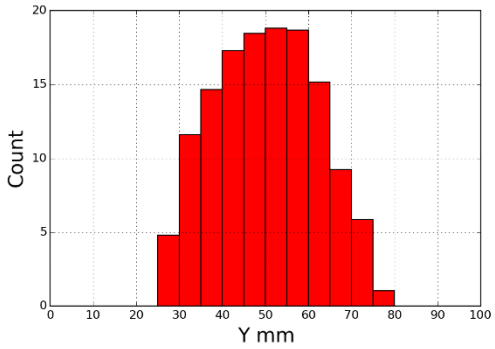


Figure A. 272: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

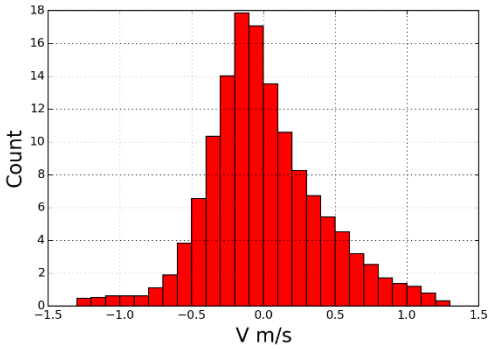


Figure A. 275: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

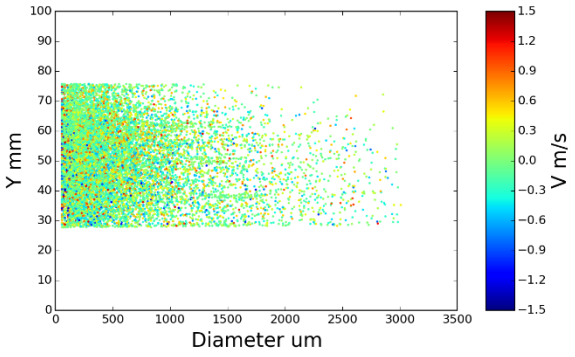


Figure A. 273: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 Matched Only Droplets for .LB Image

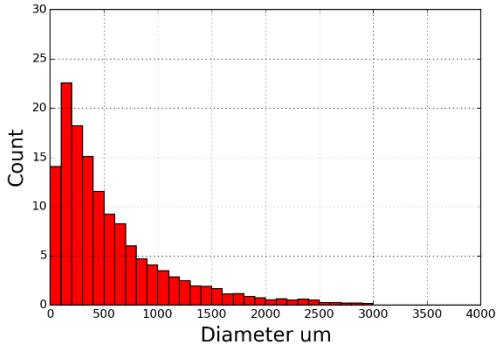


Figure A. 276: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

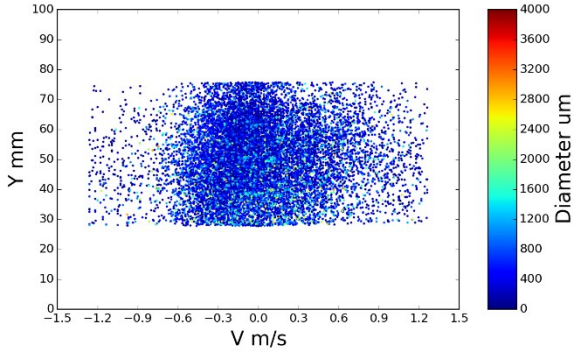


Figure A. 279: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

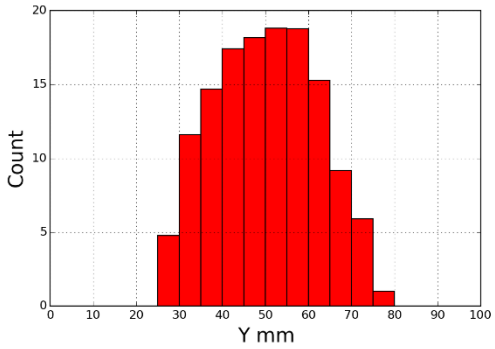


Figure A. 277: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

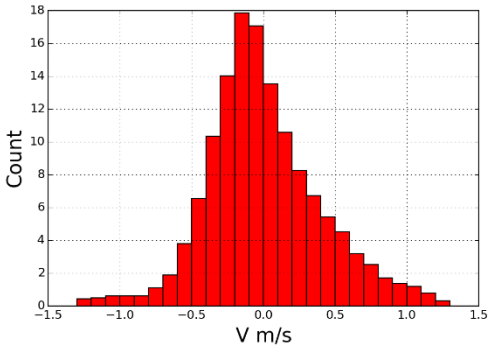


Figure A. 280: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

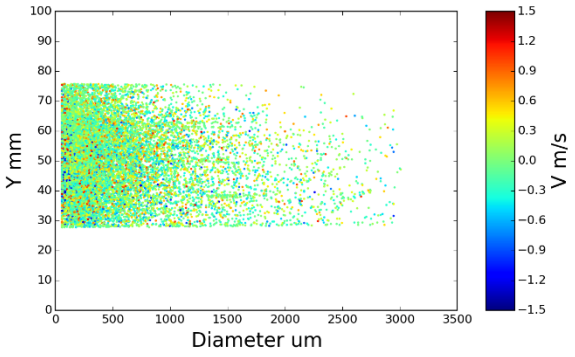


Figure A. 278: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	63.2	74.51	56.9	3020	471.9	527.3	56.9	3022	429.8	501.1
40-60mm	121.86	132.17	56.9	3024	387.3	449.3	56.9	3015	367.1	440.2
60-80mm	46.29	50.94	56.9	3027	348.4	381.9	56.9	2972	325.0	363.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	232.12	258.97	56.9	3027	402.6	462.1	56.9	3022	376.9	446.7
			Height A (mm)				Height B (mm)			
Highest Particle			75.7909				75.7909			
Lowest Particle			27.8287				27.8287			

Table A. 31: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	25.44	56.9	2988	691.5	618.5	56.9	2982	678.5	610.8	-1.260	1.260	-0.040	0.360	-1.260	1.260	-0.040	0.460
40-60mm	63.11	56.9	3024	539.0	511.4	56.9	3015	527.3	504.1	-1.260	1.260	-0.030	0.300	-1.260	1.260	-0.000	0.410
60-80mm	26.5	56.9	3027	467.6	423.0	56.9	2972	459.6	413.8	-1.260	1.260	-0.040	0.250	-1.230	1.260	0.000	0.360
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	115.05	56.9	3027	556.3	524.7	56.9	3015	545.5	517.1	-1.260	1.260	-0.040	0.300	-1.260	1.260	-0.010	0.410

Table A. 32: Matched Droplet Info

A.1.2.1 All Droplets for .LA Image

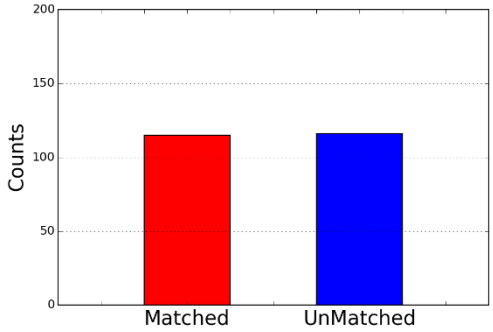


Figure A. 281: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

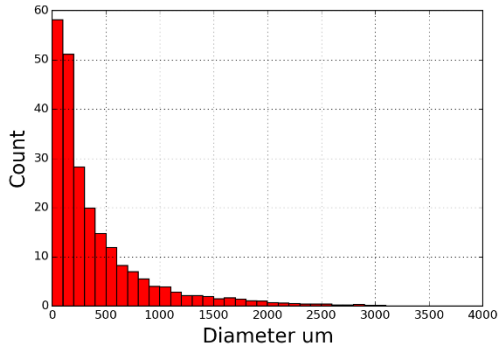


Figure A. 282: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

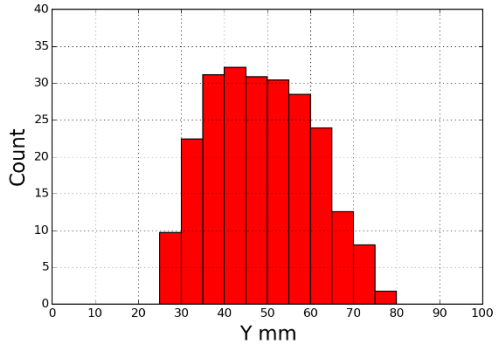


Figure A. 283: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

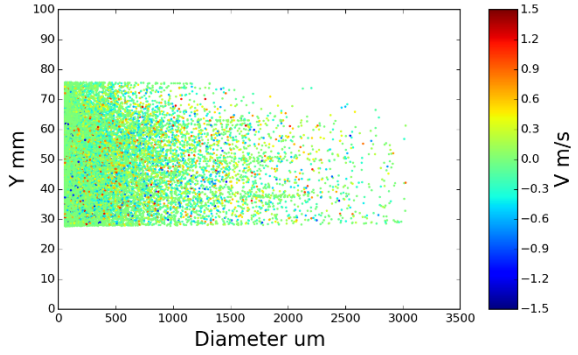


Figure A. 284: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

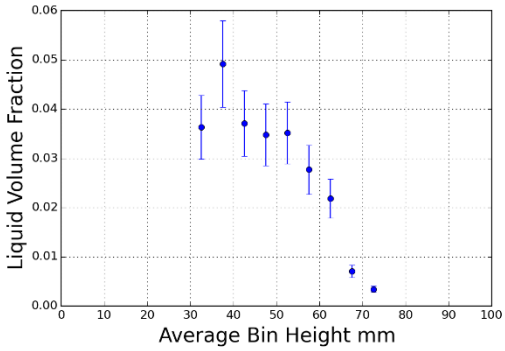


Figure A. 285: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 All Droplets for .LB Image

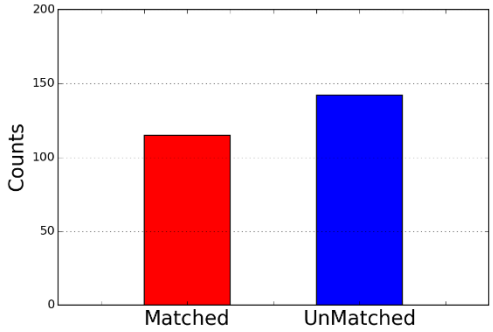


Figure A. 286: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

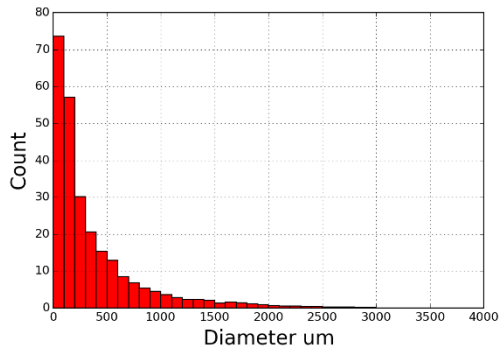


Figure A. 287: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

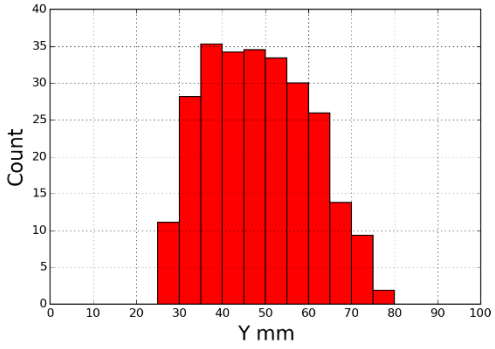


Figure A. 288: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

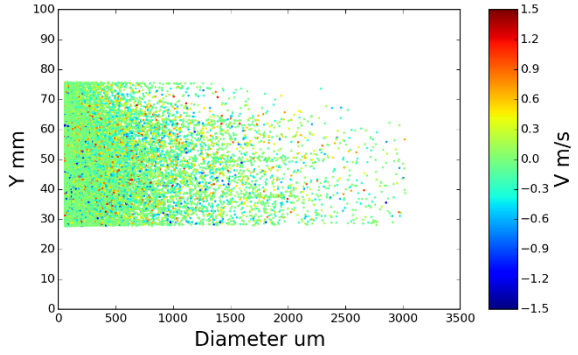


Figure A. 289: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

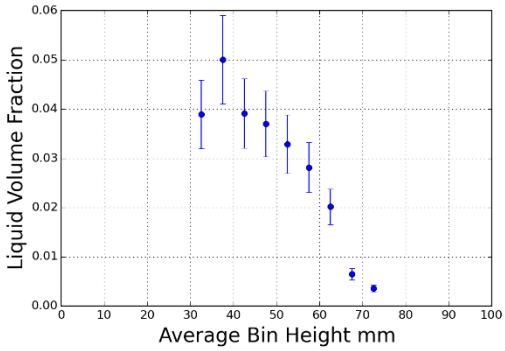


Figure A. 290: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 Matched Only Droplets for .LA Image

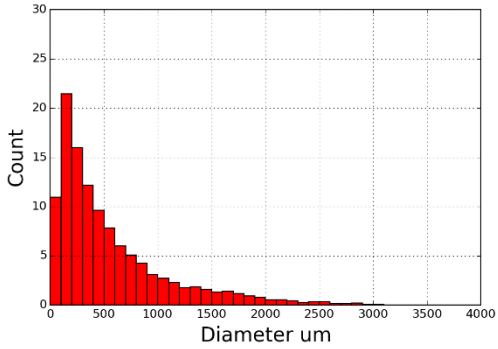


Figure A. 291: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

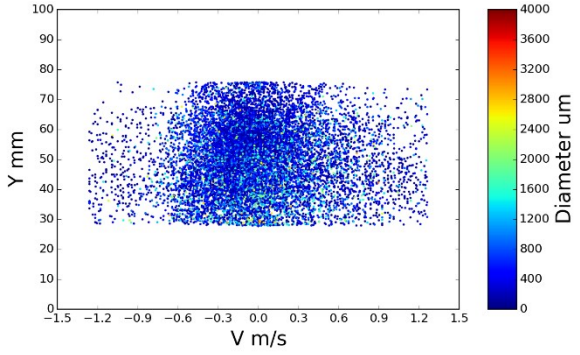


Figure A. 294: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

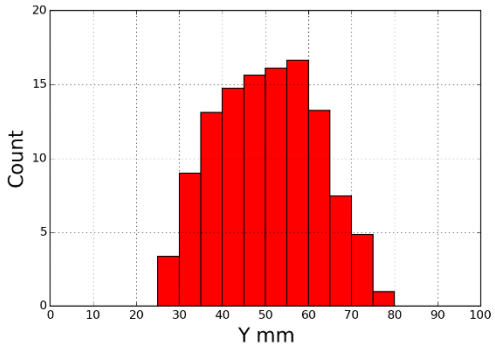


Figure A. 292: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

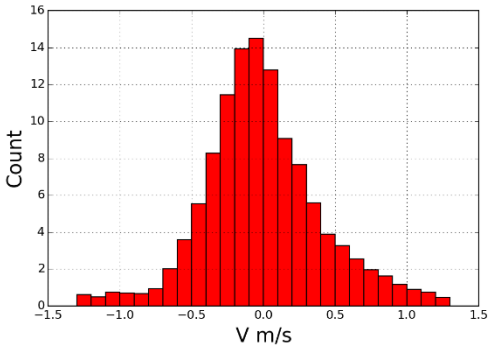


Figure A. 295: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

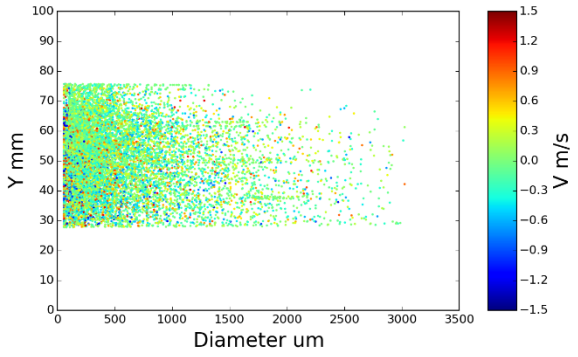


Figure A. 293: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.1 Matched Only Droplets for .LB Image

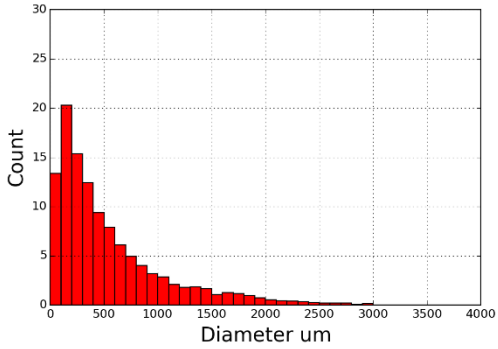


Figure A. 296: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

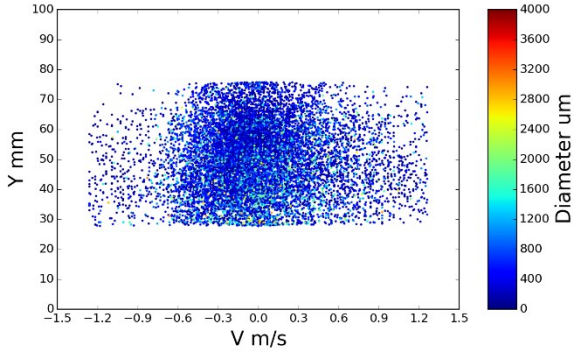


Figure A. 299: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

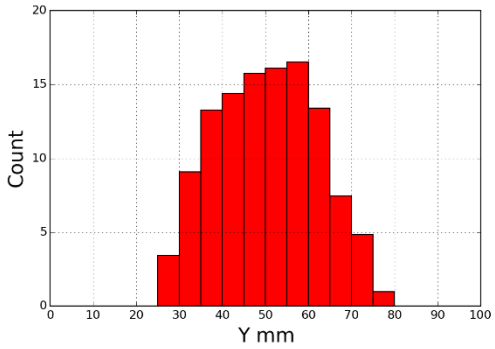


Figure A. 297: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

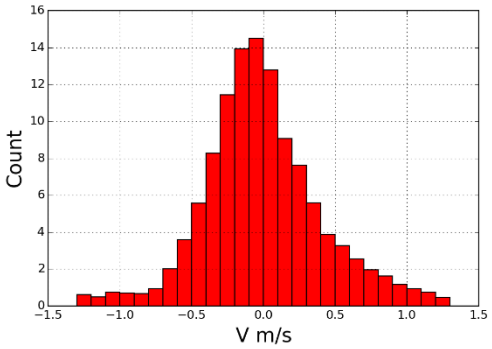


Figure A. 300: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

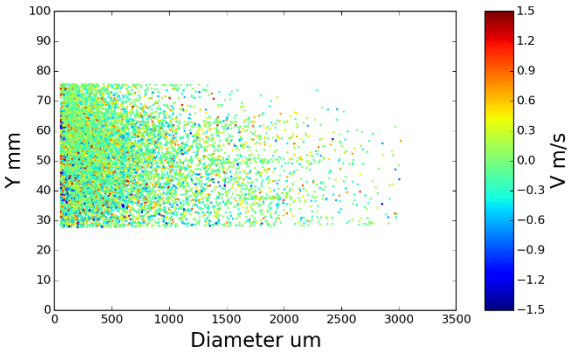


Figure A. 298: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 Lens 50mm Mag 0_13x

A.1.2.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.41	0.51	128.4	545.0	272.0	105.9	128.4	548.8	273.3	95.0
20-40mm	90.9	91.85	128.4	3410	669.1	574.3	128.4	3394	666.1	573.0
40-60mm	93.39	92.74	128.4	3407	601.6	460.7	128.4	3354	598.1	460.1
60-80mm	29.84	29.57	128.4	2654	540.7	337.7	128.4	3314	544.5	337.8
80-100mm	4.72	4.82	128.4	1735	515.7	240.3	128.4	1996	513.3	248.8
All	219.27	219.49	128.4	3410	618.8	496.4	128.4	3394	616.7	496.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.8105				99.8377			
Lowest Particle			19.9220				19.9220			

Table A. 33: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.08	203.1	497.5	323.8	95.5	181.7	426.0	320.0	80.3	-1.200	0.400	-0.140	0.480	-0.000	0.870	0.260	0.320
20-40mm	46.88	128.4	3410	781.6	602.2	128.4	3381	762.0	586.6	-1.220	1.220	-0.050	0.360	-1.220	1.220	-0.060	0.460
40-60mm	59.11	128.4	3396	685.3	470.7	128.4	3354	675.9	465.0	-1.220	1.220	-0.050	0.300	-1.220	1.220	-0.030	0.420
60-80mm	21.59	128.4	2654	607.4	336.6	128.4	2801	600.9	331.6	-1.210	1.220	-0.030	0.190	-1.190	1.150	-0.020	0.340
80-100mm	3.94	128.4	1735	554.8	226.4	157.3	1996	552.9	236.2	-0.950	0.800	-0.050	0.170	-1.080	1.160	-0.010	0.270
All	131.6	128.4	3410	702.7	503.4	128.4	3381	690.4	493.5	-1.220	1.220	-0.050	0.310	-1.220	1.220	-0.040	0.420

Table A. 34: Matched Droplet Info

A.1.2.2 All Droplets for .LA Image

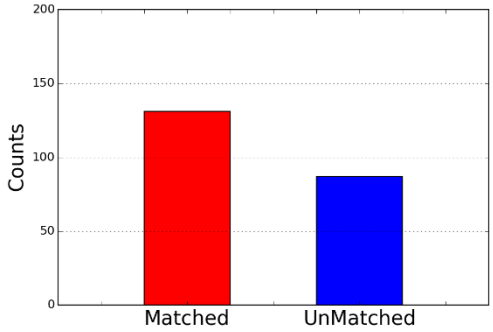


Figure A. 301: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

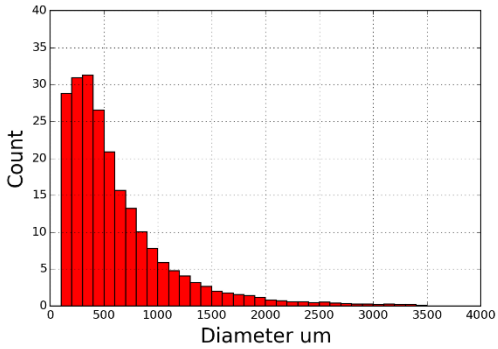


Figure A. 302: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

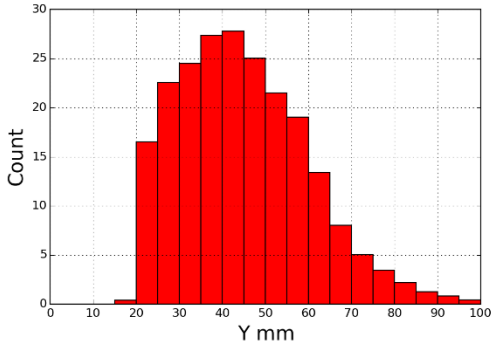


Figure A. 303: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

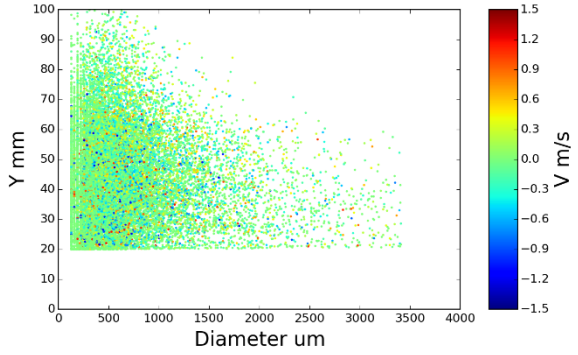


Figure A. 304: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

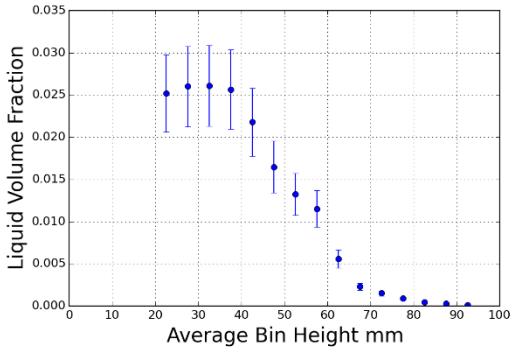


Figure A. 305: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 All Droplets for .LB Image

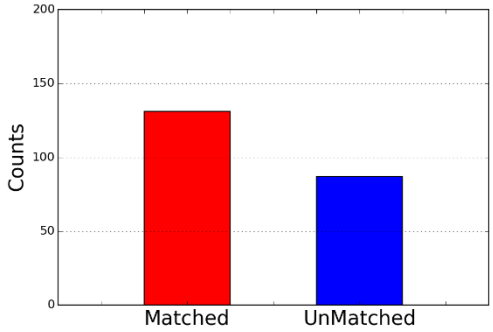


Figure A. 306: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

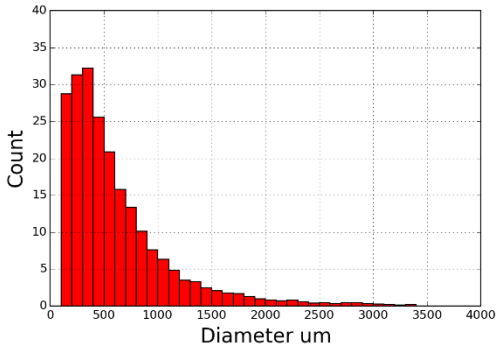


Figure A. 307: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

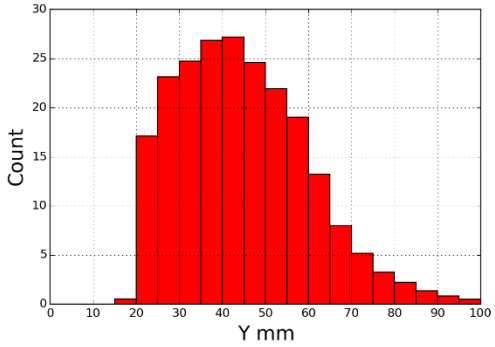


Figure A. 308: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

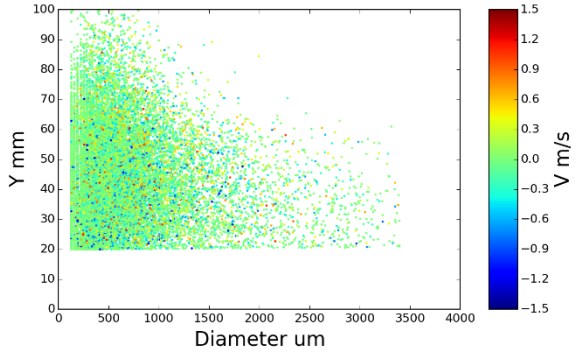


Figure A. 309: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

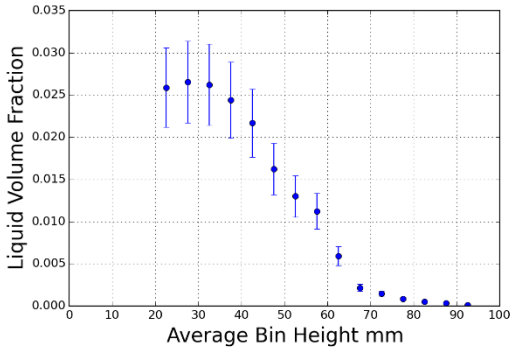


Figure A. 310: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 Matched Only Droplets for .LA Image

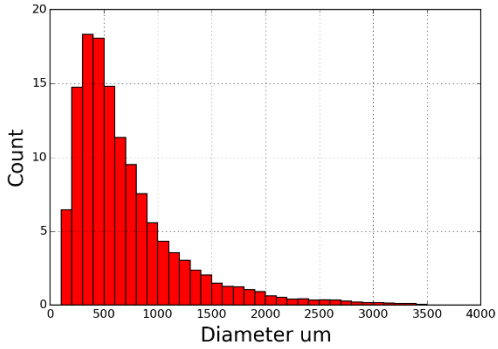


Figure A. 311: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

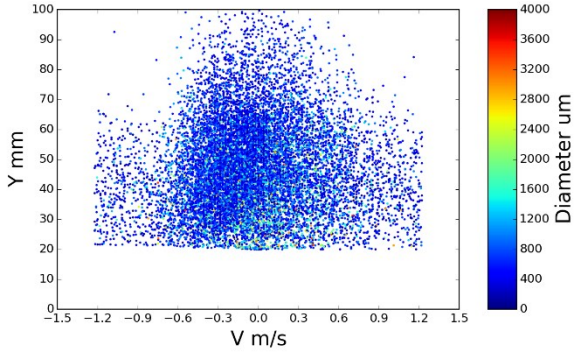


Figure A. 314: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

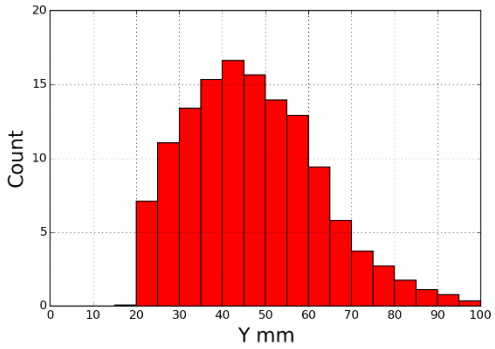


Figure A. 312: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

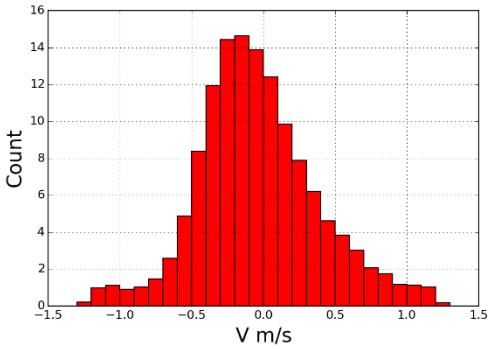


Figure A. 315: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

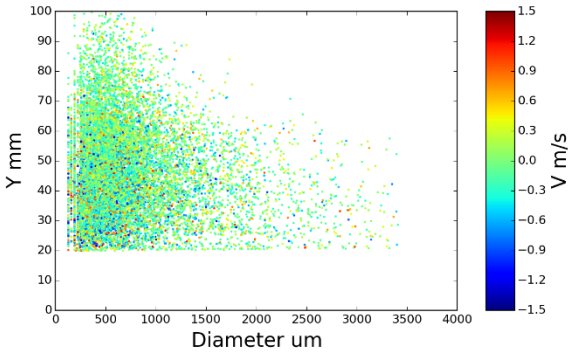


Figure A. 313: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 Matched Only Droplets for .LB Image

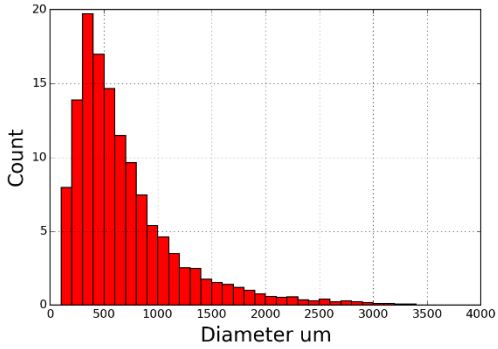


Figure A. 316: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

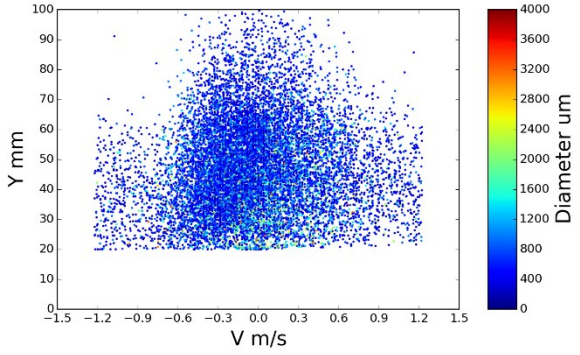


Figure A. 319: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

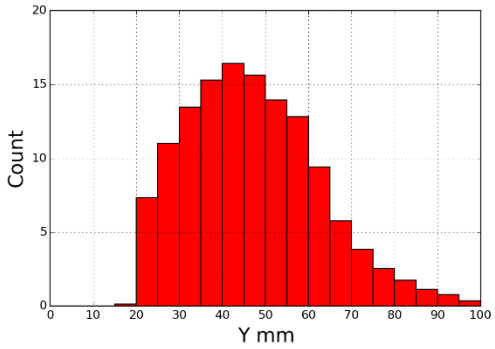


Figure A. 317: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

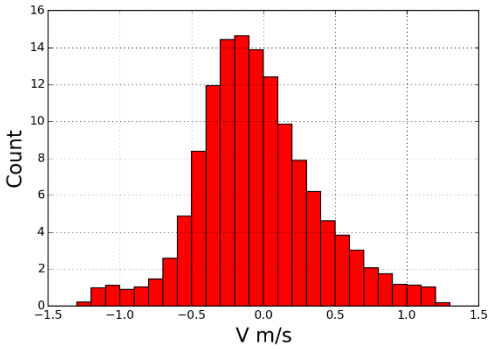


Figure A. 320: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

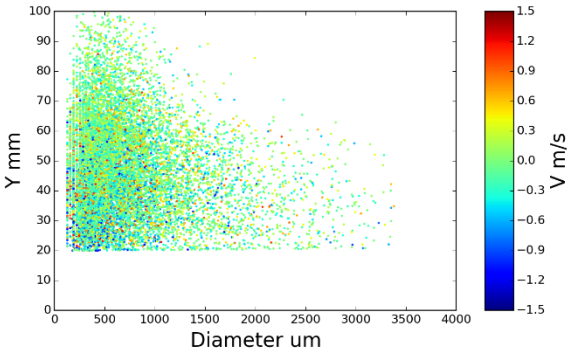


Figure A. 318: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.42	0.41	128.4	480.6	256.2	107.0	128.4	521.8	252.3	93.0
20-40mm	83.7	82.44	128.4	3414	699.6	583.0	128.4	3408	703.6	587.8
40-60mm	102.75	102.9	128.4	3407	641.2	484.8	128.4	3372	634.2	483.8
60-80mm	36.55	36.66	128.4	3018	559.4	345.0	128.4	2900	563.2	356.2
80-100mm	7.28	7.32	128.4	2001	546.4	268.3	128.4	1806	547.2	265.5
All	230.7	229.73	128.4	3414	645.8	502.0	128.4	3408	644.3	504.2
			Height A (mm)				Height B (mm)			
Highest Particle			99.7832				99.8092			
Lowest Particle			19.9220				19.9220			

Table A. 35: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.08	157.3	480.6	300.1	116.4	128.4	395.9	224.5	98.6	-0.830	1.140	0.350	0.600	-0.010	1.100	0.460	0.470
20-40mm	41.71	128.4	3355	840.6	615.6	128.4	3408	821.1	608.0	-1.220	1.220	-0.050	0.370	-1.220	1.220	-0.040	0.470
40-60mm	64.82	128.4	3407	725.6	495.1	128.4	3372	715.9	492.2	-1.220	1.220	-0.060	0.310	-1.220	1.220	0.000	0.430
60-80mm	26.4	128.4	3018	624.5	351.5	128.4	2900	626.1	355.6	-1.200	1.210	-0.050	0.220	-1.220	1.210	0.010	0.370
80-100mm	6.1	128.4	1780	581.1	251.5	157.3	1806	582.8	255.4	-1.190	0.530	-0.050	0.150	-1.220	1.200	0.040	0.330
All	139.11	128.4	3407	734.3	510.8	128.4	3408	724.4	506.4	-1.220	1.220	-0.050	0.310	-1.220	1.220	-0.010	0.430

Table A. 36: Matched Droplet Info

A.1.2.2 All Droplets for .LA Image

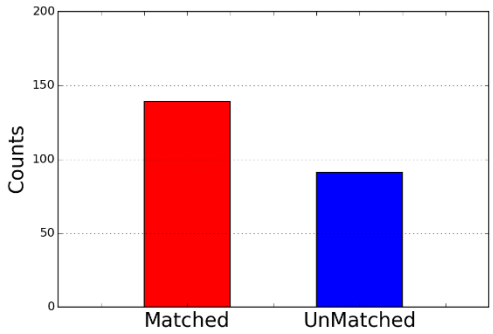


Figure A. 321: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

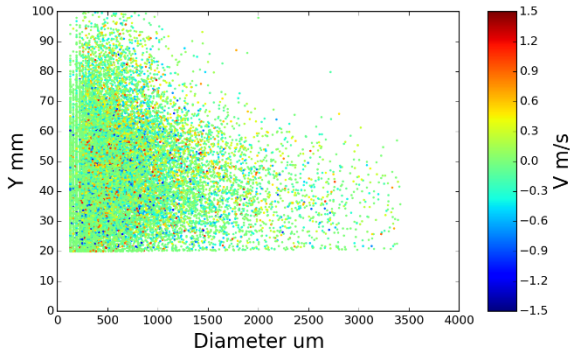


Figure A. 324: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

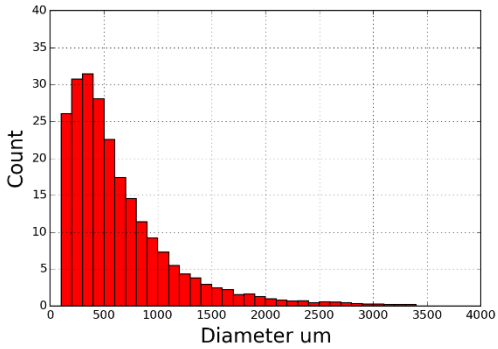


Figure A. 322: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

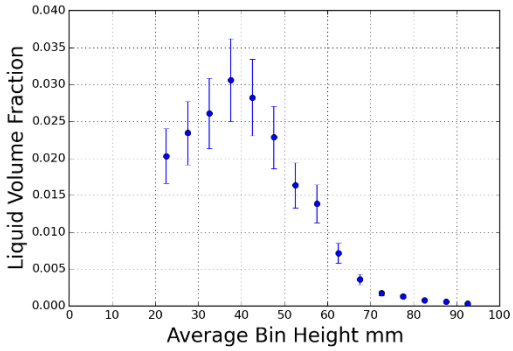


Figure A. 325: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

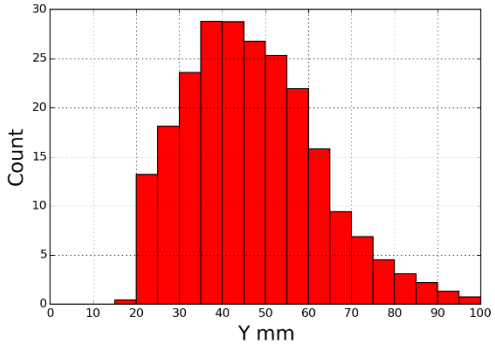


Figure A. 323: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 All Droplets for .LB Image

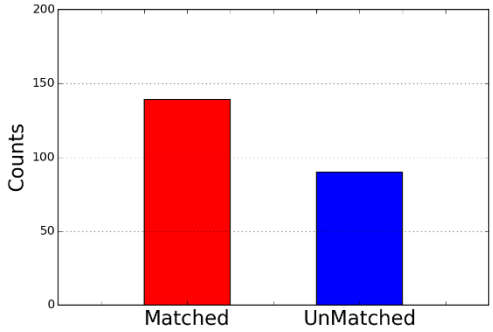


Figure A. 326: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

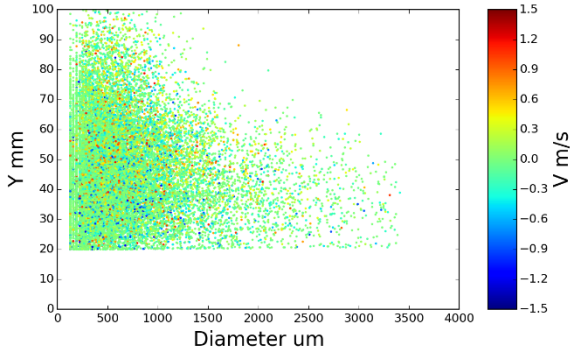


Figure A. 329: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

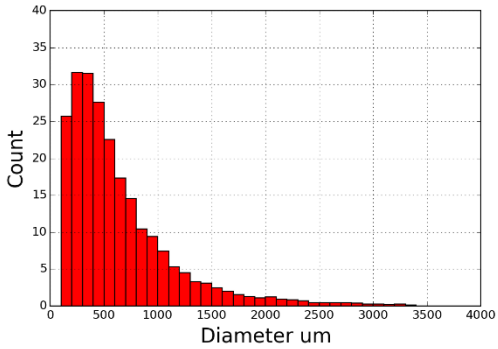


Figure A. 327: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

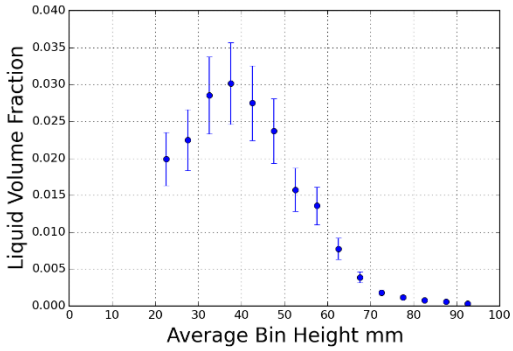


Figure A. 330: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

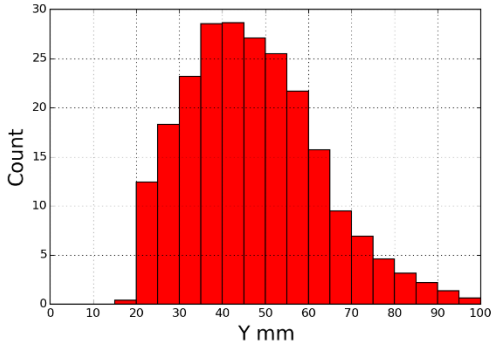


Figure A. 328: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 Matched Only Droplets for .LA Image

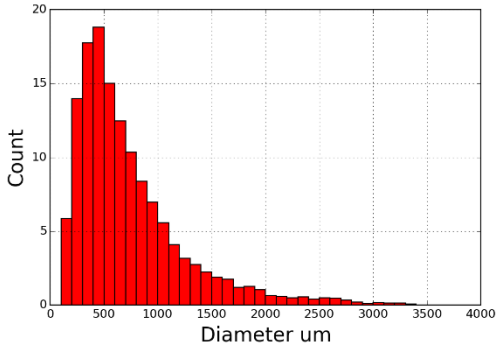


Figure A. 331: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

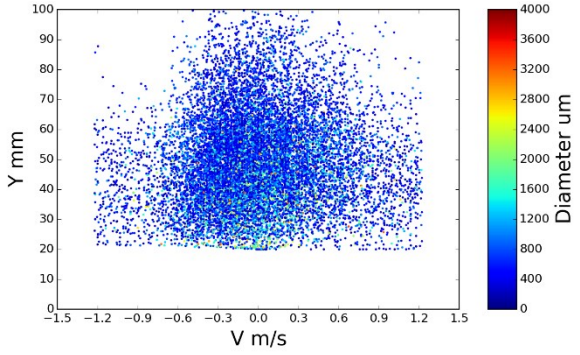


Figure A. 334: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

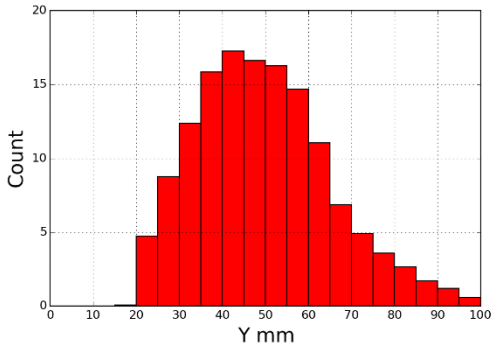


Figure A. 332: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

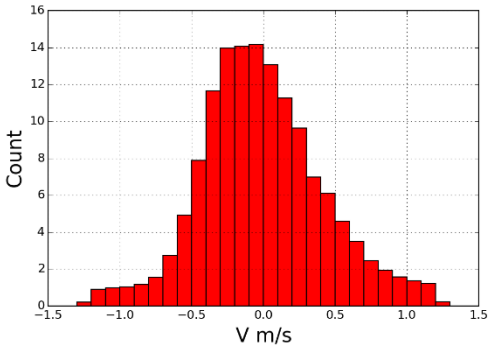


Figure A. 335: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

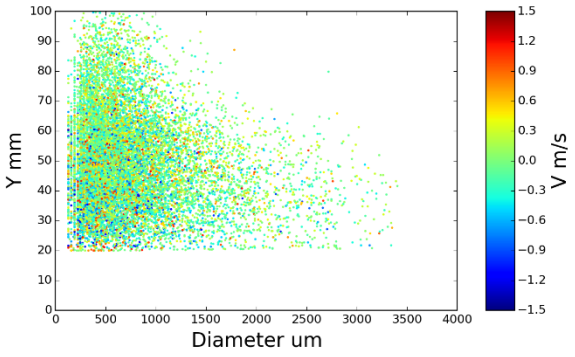


Figure A. 333: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 Matched Only Droplets for .LB Image

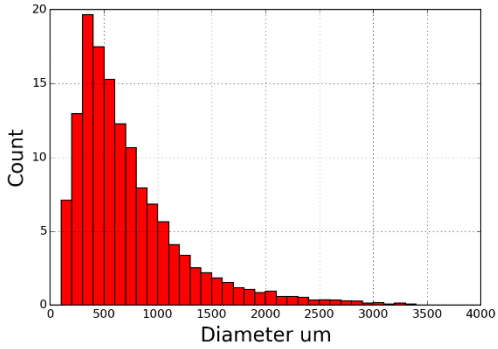


Figure A. 336: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

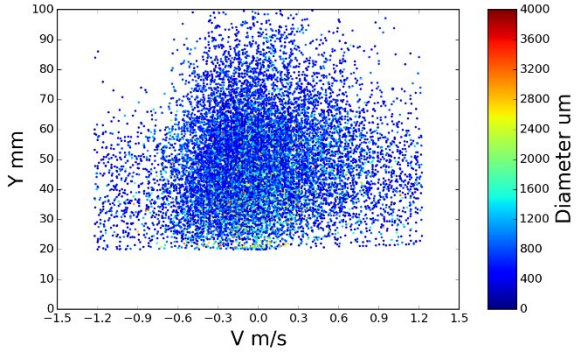


Figure A. 339: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

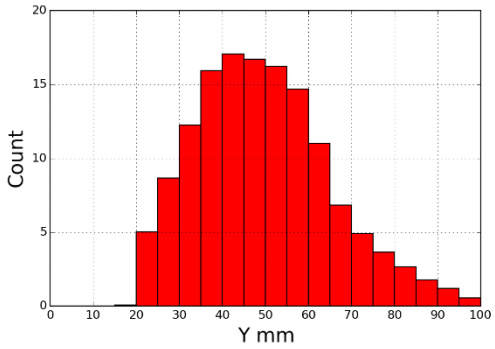


Figure A. 337: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

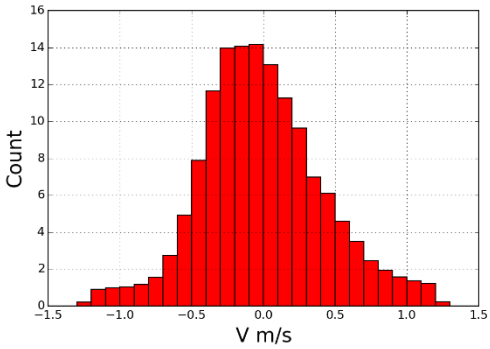


Figure A. 340: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

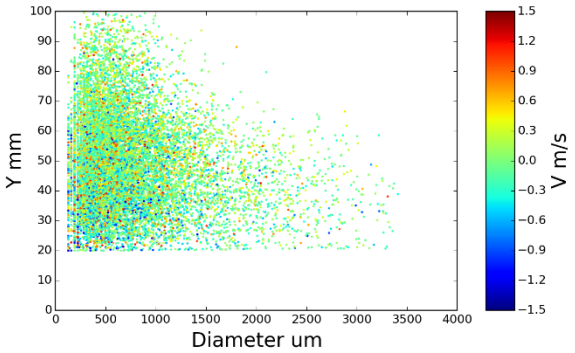


Figure A. 338: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.46	0.48	128.4	632.6	268.9	126.3	128.4	706.5	263.5	114.6
20-40mm	88.79	88.65	128.4	3410	733.0	609.5	128.4	3414	733.8	609.5
40-60mm	98.51	97.71	128.4	3390	639.5	479.3	128.4	3412	642.5	489.5
60-80mm	35.8	35.78	128.4	2842	570.6	377.4	128.4	2960	566.8	371.7
80-100mm	7.27	7.22	128.4	2117	528.0	274.7	128.4	2094	529.5	268.0
All	230.83	229.84	128.4	3410	660.5	519.4	128.4	3414	661.6	522.9
			Height A (mm)				Height B (mm)			
Highest Particle			99.8377				99.8092			
Lowest Particle			19.9220				19.9220			

Table A. 37: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.09	157.3	632.6	315.3	145.4	181.7	706.5	403.9	197.4	-0.520	0.530	-0.100	0.360	-0.020	0.930	0.320	0.320
20-40mm	43.31	128.4	3399	879.5	642.5	128.4	3408	857.0	628.7	-1.220	1.220	-0.060	0.380	-1.220	1.220	-0.030	0.460
40-60mm	62.07	128.4	3390	736.5	498.9	128.4	3412	727.7	500.2	-1.220	1.220	-0.060	0.310	-1.220	1.220	-0.010	0.420
60-80mm	24.9	128.4	2842	646.8	383.6	128.4	2960	640.7	380.2	-1.210	1.210	-0.060	0.230	-1.220	1.220	0.010	0.360
80-100mm	5.67	128.4	2117	587.7	264.7	128.4	2094	576.9	265.2	-0.920	0.810	-0.040	0.150	-1.200	0.810	0.020	0.330
All	136.04	128.4	3399	759.1	532.4	128.4	3412	746.5	526.1	-1.220	1.220	-0.060	0.320	-1.220	1.220	-0.010	0.420

Table A. 38: Matched Droplet Info

A.1.2.2 All Droplets for .LA Image

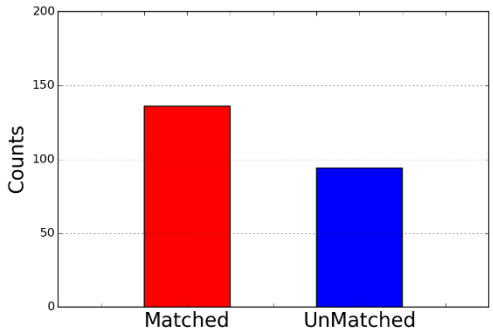


Figure A. 341: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

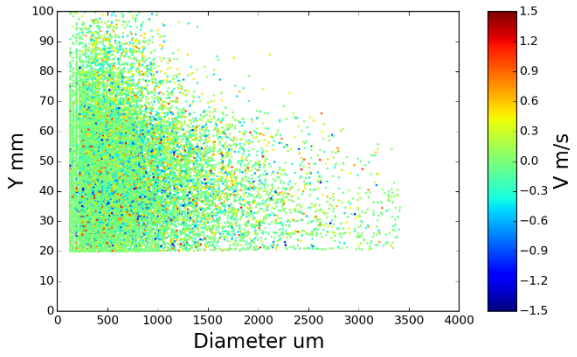


Figure A. 344: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

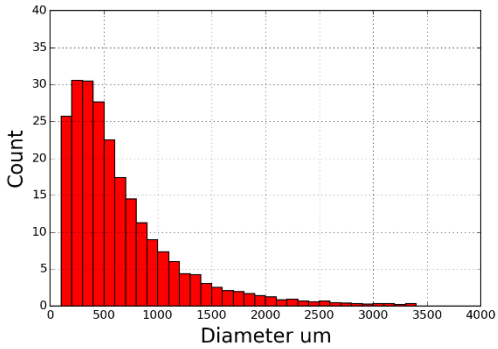


Figure A. 342: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

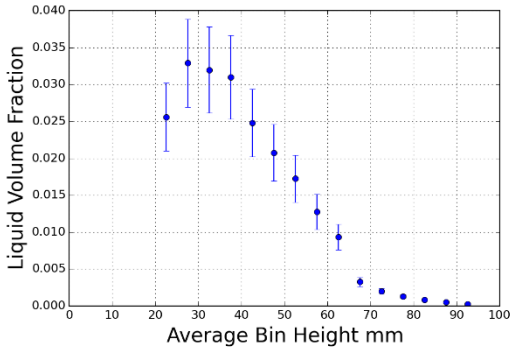


Figure A. 345: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

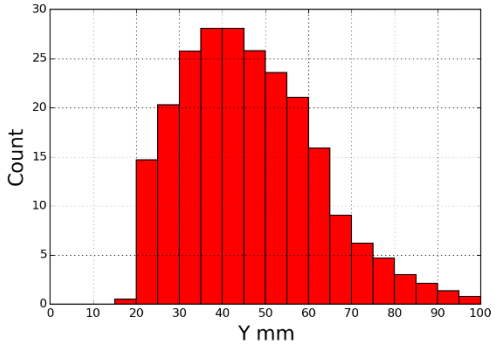


Figure A. 343: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 All Droplets for .LB Image

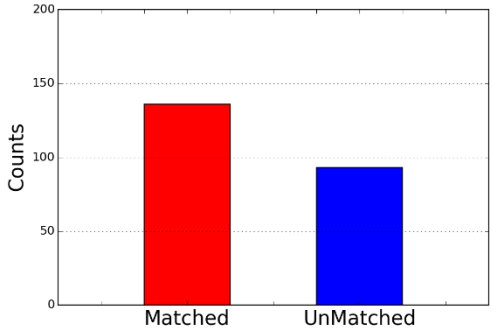


Figure A. 346: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

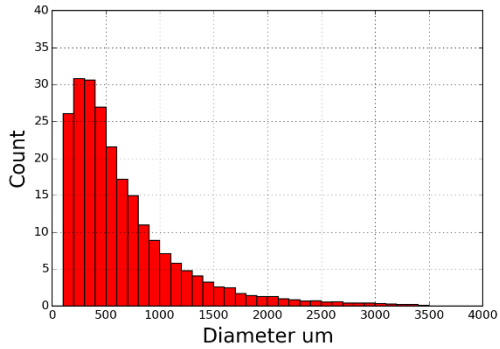


Figure A. 347: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

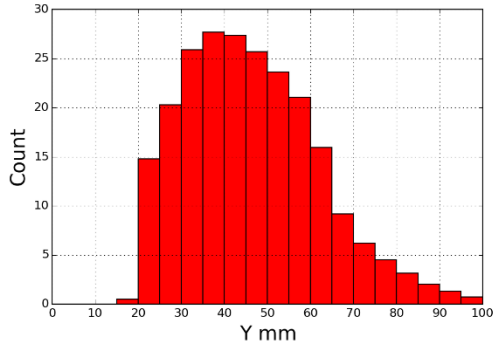


Figure A. 348: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

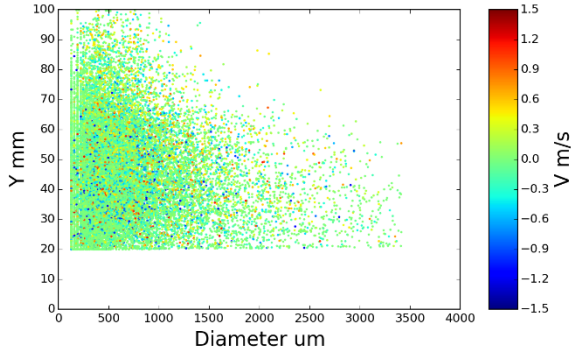


Figure A. 349: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

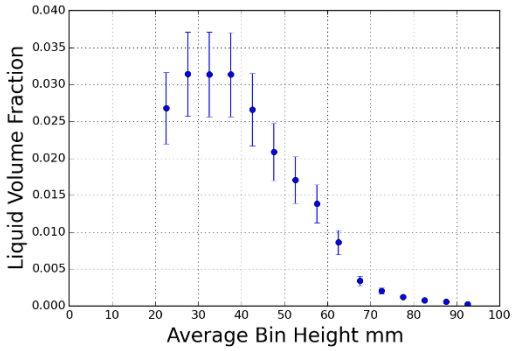


Figure A. 350: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 Matched Only Droplets for .LA Image

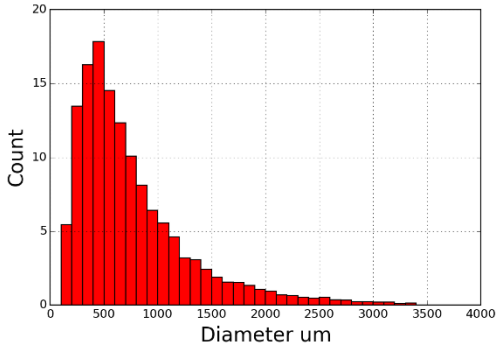


Figure A. 351: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

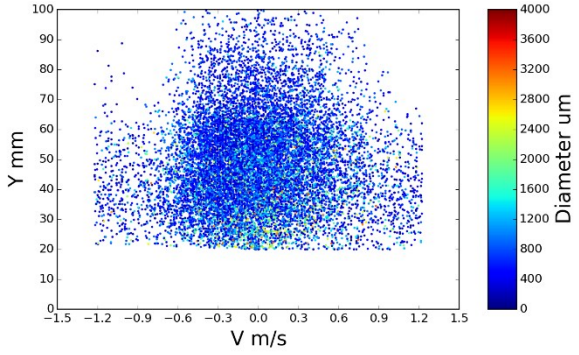


Figure A. 354: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

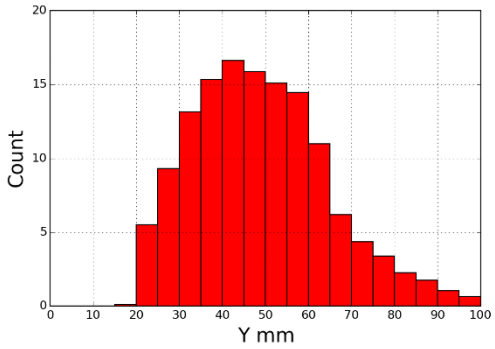


Figure A. 352: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

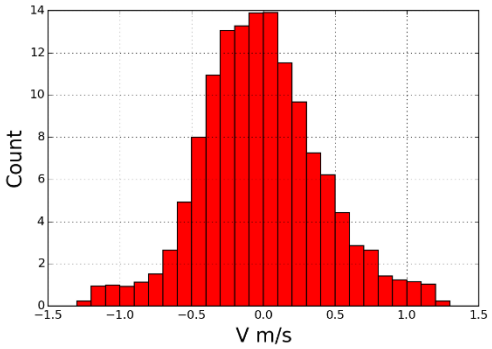


Figure A. 355: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

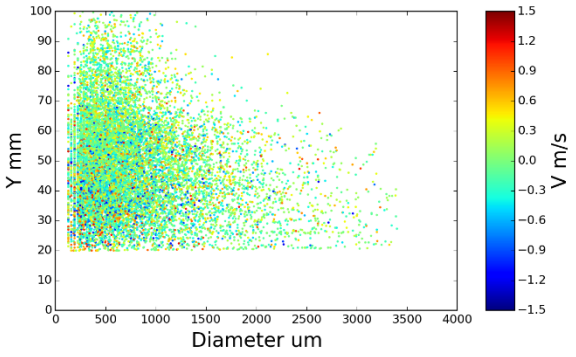


Figure A. 353: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 Matched Only Droplets for .LB Image

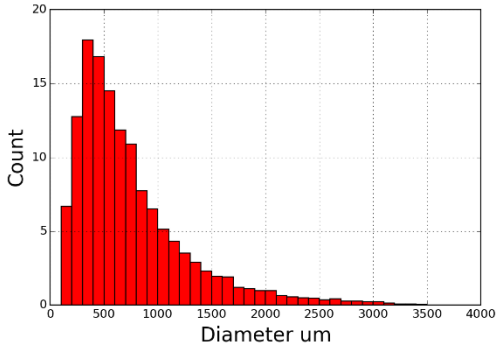


Figure A. 356: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

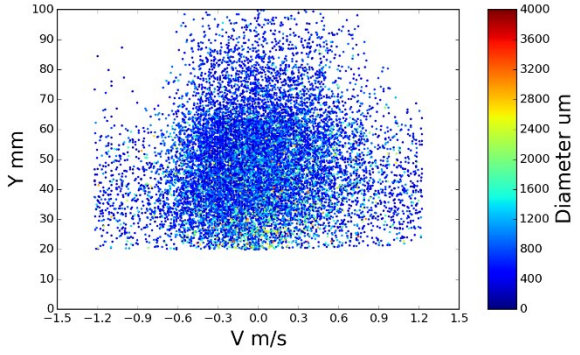


Figure A. 359: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

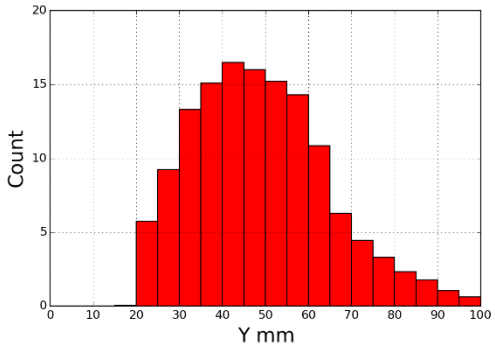


Figure A. 357: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

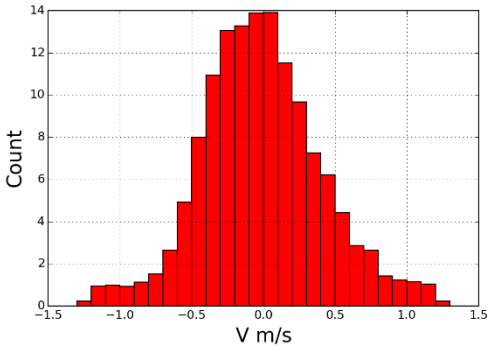


Figure A. 360: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

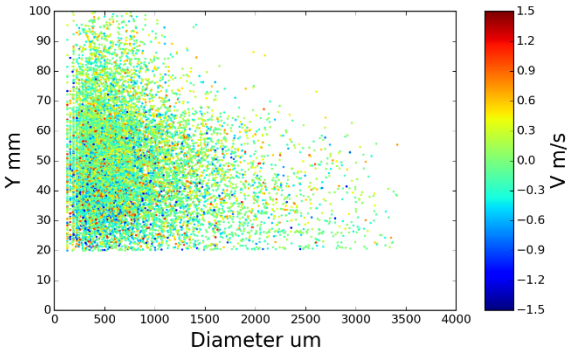


Figure A. 358: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.58	0.43	128.4	670.5	248.2	108.5	128.4	435.6	270.5	90.5
20-40mm	76.54	77.43	128.4	3410	754.7	622.8	128.4	3403	749.3	622.6
40-60mm	86.65	85.86	128.4	3409	661.3	513.2	128.4	3388	665.1	516.5
60-80mm	30.45	30.65	128.4	3127	566.5	379.9	128.4	3234	568.1	388.0
80-100mm	6.72	7.05	128.4	2262	533.0	288.4	128.4	2538	536.1	294.6
All	200.95	201.42	128.4	3410	677.0	539.9	128.4	3403	677.4	541.9
			Height A (mm)				Height B (mm)			
Highest Particle			99.8377				99.7071			
Lowest Particle			19.9220				19.9220			

Table A. 39: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.06	213.0	670.5	384.8	145.2	128.4	357.6	249.3	89.3	-0.800	0.510	-0.230	0.410	0.020	0.990	0.530	0.380
20-40mm	35.2	128.4	3410	928.9	665.9	128.4	3400	900.9	649.2	-1.220	1.210	-0.050	0.380	-1.220	1.220	-0.030	0.460
40-60mm	52.49	128.4	3328	767.3	531.5	128.4	3369	756.2	528.0	-1.220	1.220	-0.030	0.320	-1.220	1.220	-0.000	0.430
60-80mm	20.09	128.4	3127	658.6	388.4	128.4	3234	650.9	390.9	-1.200	1.180	-0.030	0.230	-1.170	1.220	-0.000	0.360
80-100mm	5.08	128.4	2262	598.3	279.5	128.4	2538	601.9	289.3	-1.190	0.790	-0.030	0.180	-0.790	0.990	-0.030	0.280
All	112.92	128.4	3410	790.5	557.7	128.4	3400	775.7	549.1	-1.220	1.220	-0.040	0.320	-1.220	1.220	-0.010	0.420

Table A. 40: Matched Droplet Info

A.1.2.2 All Droplets for .LA Image

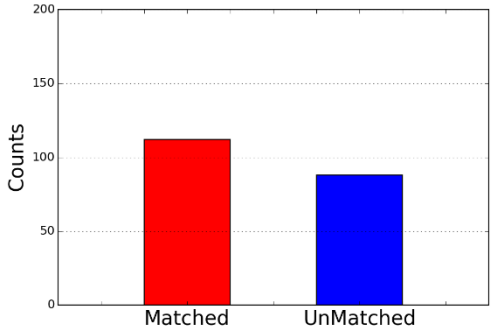


Figure A. 361: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

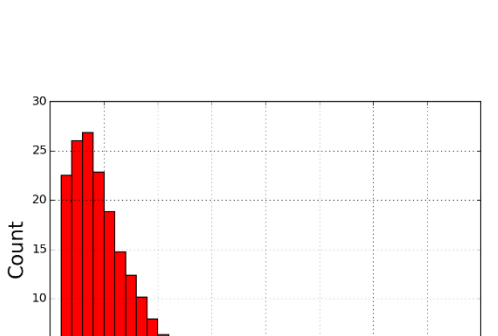


Figure A. 362: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

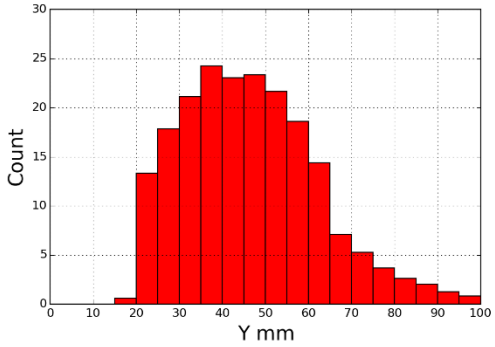


Figure A. 363: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

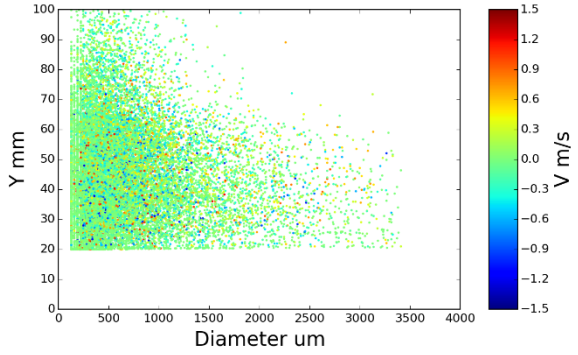


Figure A. 364: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

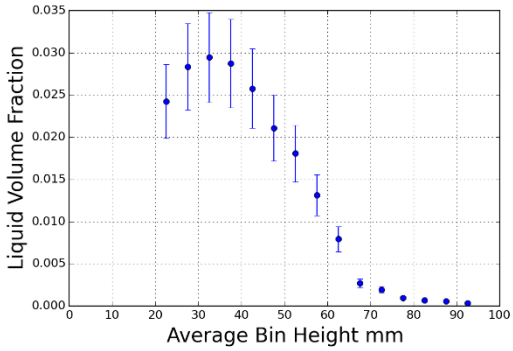


Figure A. 365: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 All Droplets for .LB Image

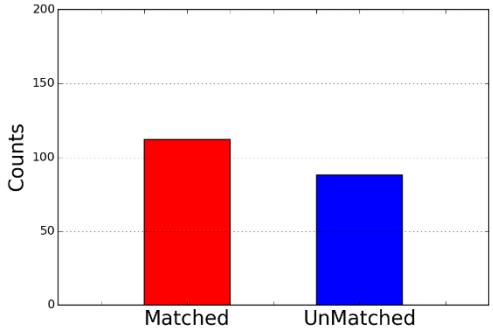


Figure A. 366: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

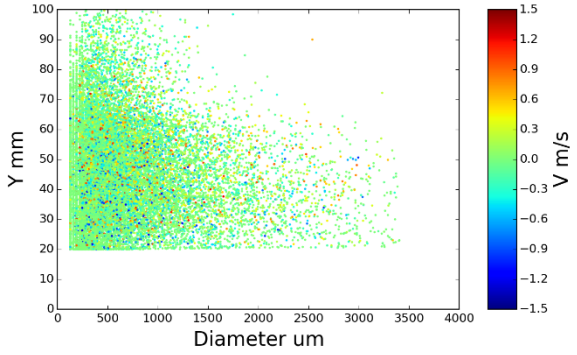


Figure A. 369: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

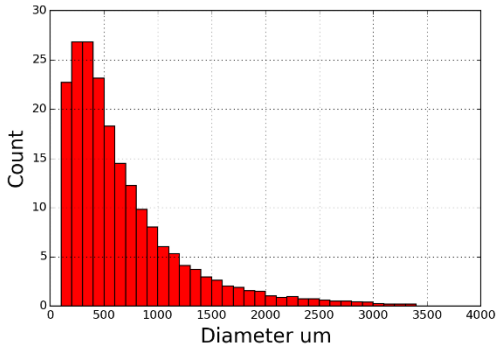


Figure A. 367: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

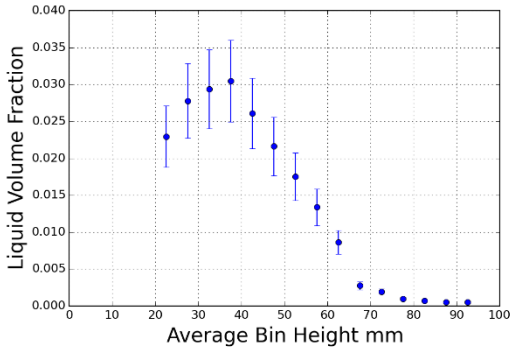


Figure A. 370: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

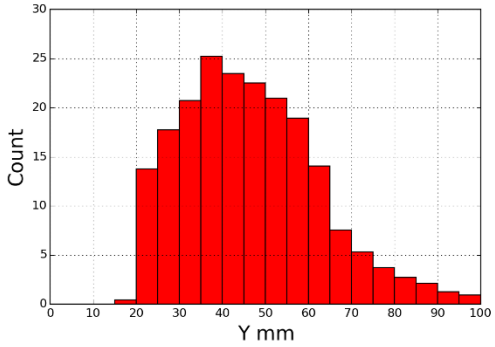


Figure A. 368: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 Matched Only Droplets for .LA Image

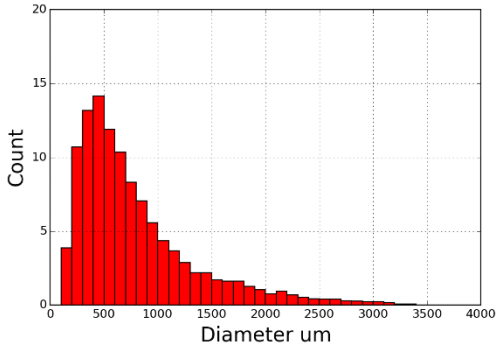


Figure A. 371: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

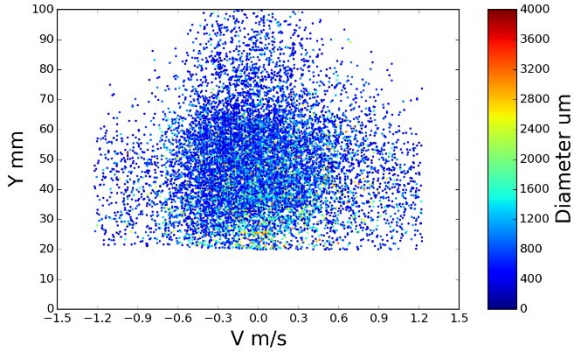


Figure A. 374: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

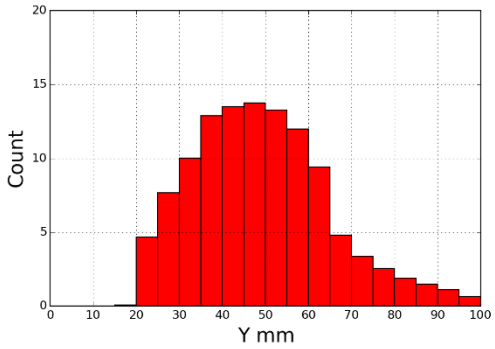


Figure A. 372: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

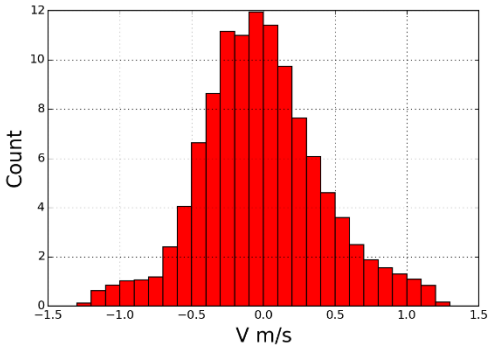


Figure A. 375: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

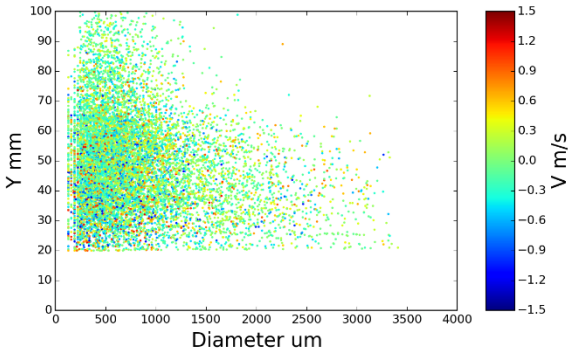


Figure A. 373: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 Matched Only Droplets for .LB Image

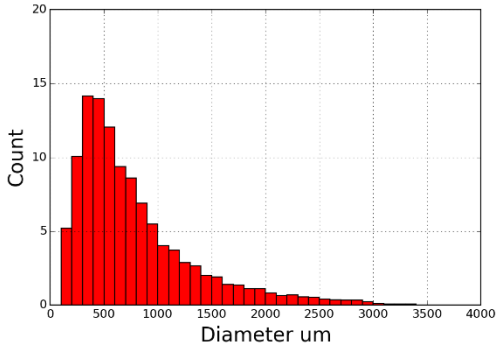


Figure A. 376: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

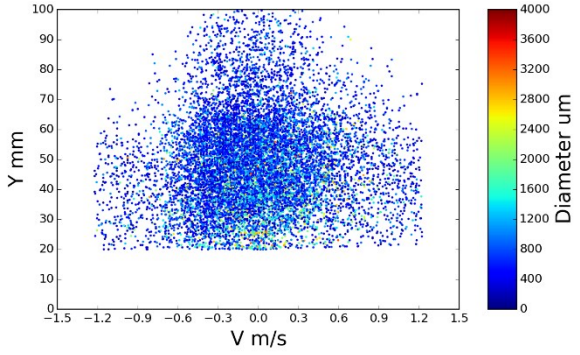


Figure A. 379: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

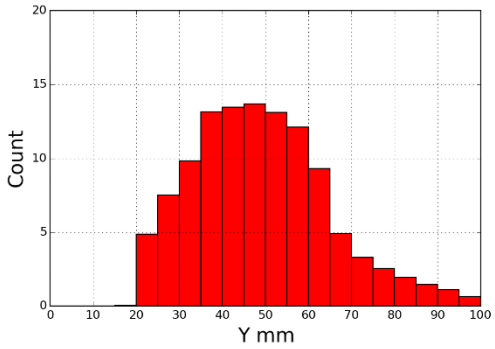


Figure A. 377: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

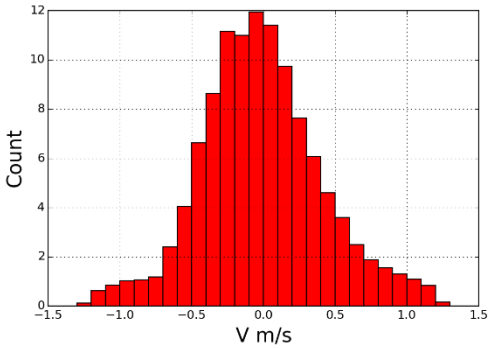


Figure A. 380: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

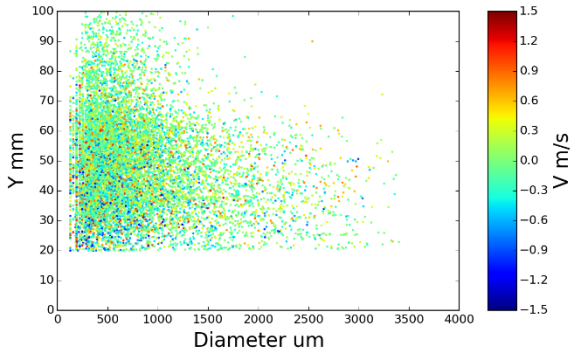


Figure A. 378: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.44	0.47	128.4	484.9	240.0	93.6	128.4	545.0	242.4	84.1
20-40mm	61.69	61.88	128.4	3406	769.2	669.4	128.4	3409	762.8	658.1
40-60mm	77.51	77.33	128.4	3374	641.8	522.9	128.4	3410	642.7	514.8
60-80mm	28.89	29.99	128.4	3257	574.6	418.6	128.4	3287	563.0	411.5
80-100mm	8.12	8.31	128.4	3408	493.1	305.5	128.4	3335	503.8	318.7
All	176.65	178.0	128.4	3408	667.5	562.6	128.4	3410	663.5	553.1
			Height A (mm)				Height B (mm)			
Highest Particle			99.8263				99.8377			
Lowest Particle			19.9220				19.9220			

Table A. 41: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.06	157.3	421.2	297.4	95.9	157.3	294.3	222.6	58.3	-0.910	1.120	-0.230	0.750	-0.020	0.740	0.360	0.280
20-40mm	26.79	128.4	3405	969.6	730.4	128.4	3396	938.0	708.8	-1.220	1.220	-0.030	0.400	-1.220	1.210	-0.010	0.470
40-60mm	44.21	128.4	3374	768.4	542.4	128.4	3410	752.8	537.2	-1.220	1.220	-0.040	0.320	-1.220	1.220	-0.010	0.420
60-80mm	17.05	128.4	2847	685.9	439.9	128.4	3066	674.4	425.0	-1.220	1.210	-0.030	0.270	-1.210	1.180	0.020	0.380
80-100mm	5.0	128.4	3408	587.3	324.8	128.4	3335	590.6	336.0	-1.180	1.120	-0.050	0.180	-1.010	1.170	0.060	0.340
All	93.11	128.4	3408	801.2	590.0	128.4	3410	782.8	576.7	-1.220	1.220	-0.040	0.330	-1.220	1.220	0.000	0.430

Table A. 42: Matched Droplet Info

A.1.2.2 All Droplets for .LA Image

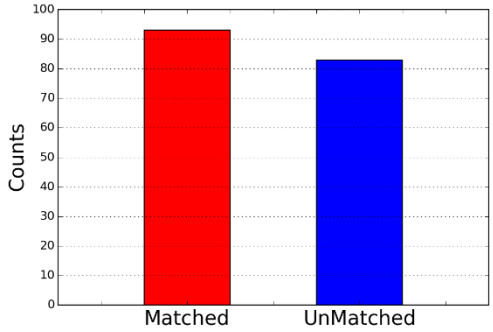


Figure A. 381: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

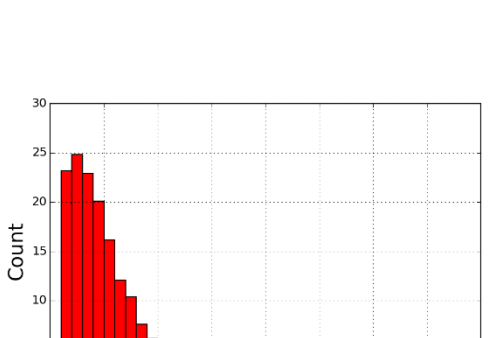


Figure A. 382: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

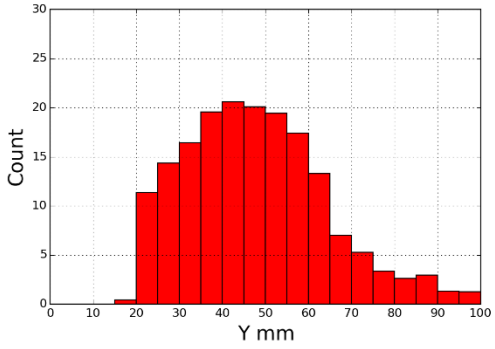


Figure A. 383: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

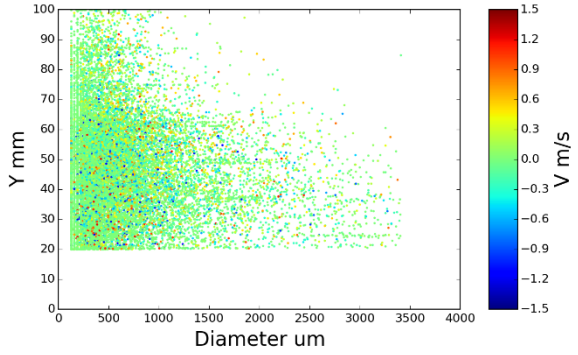


Figure A. 384: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

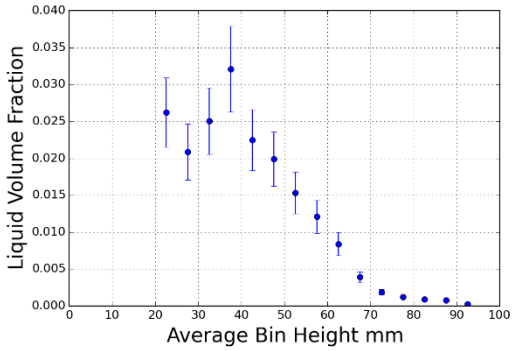


Figure A. 385: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 All Droplets for .LB Image

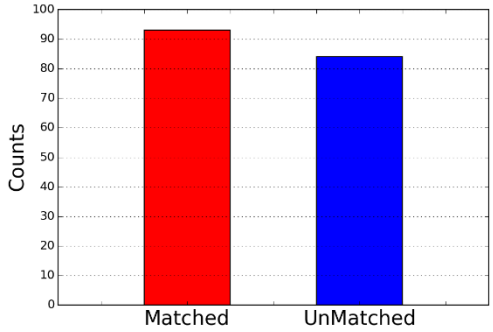


Figure A. 386: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

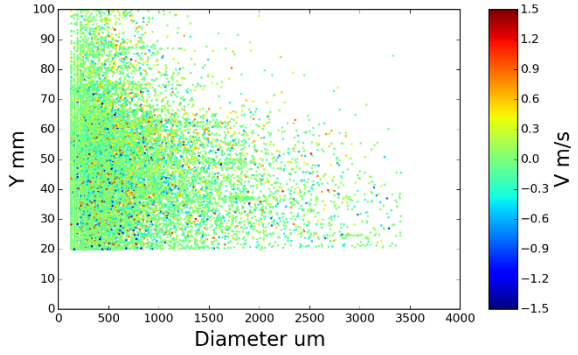


Figure A. 389: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

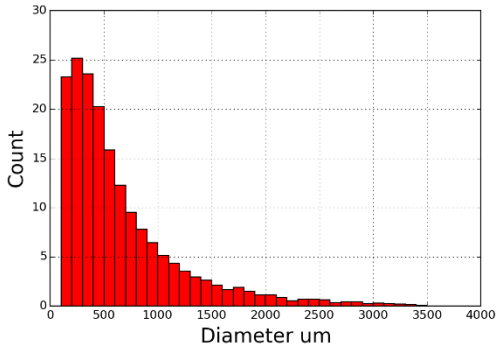


Figure A. 387: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

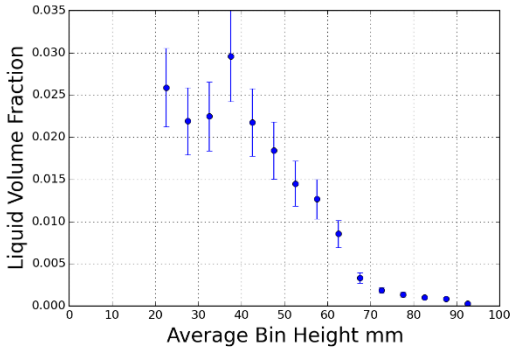


Figure A. 390: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

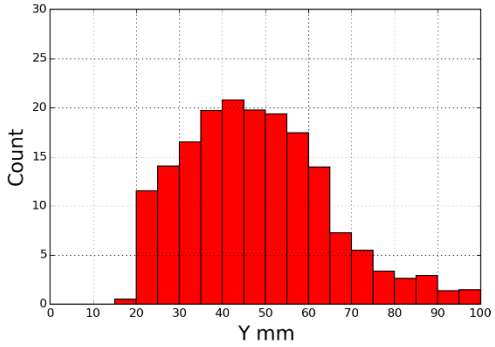


Figure A. 388: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 Matched Only Droplets for .LA Image

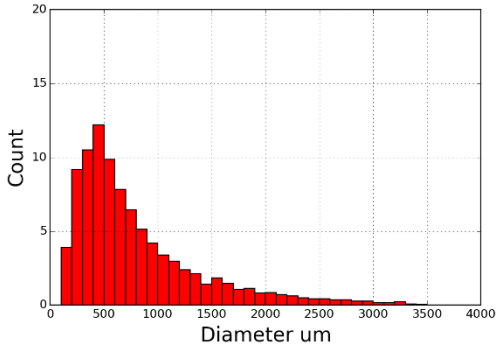


Figure A. 391: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

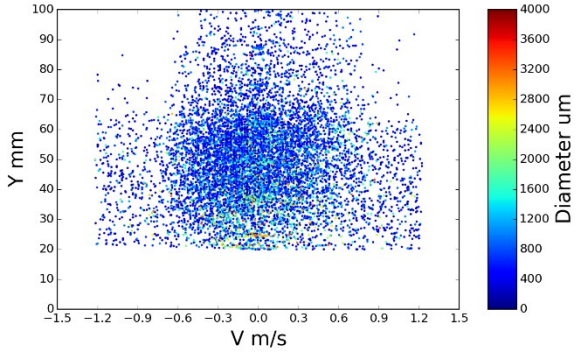


Figure A. 394: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

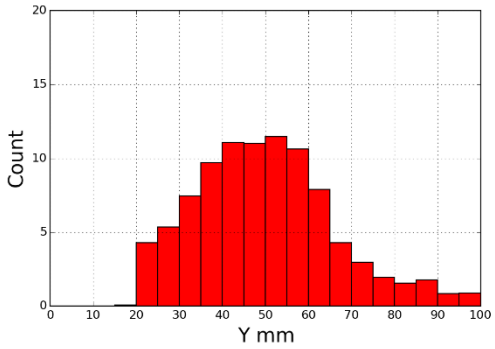


Figure A. 392: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

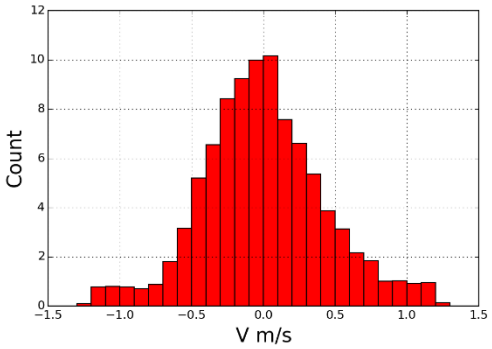


Figure A. 395: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

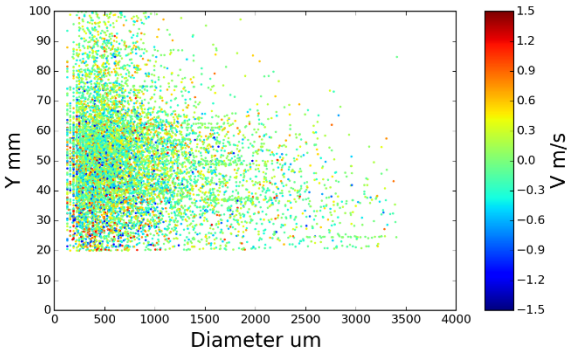


Figure A. 393: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.2.2 Matched Only Droplets for .LB Image

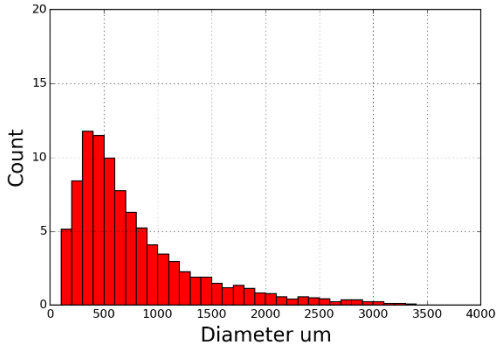


Figure A. 396: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

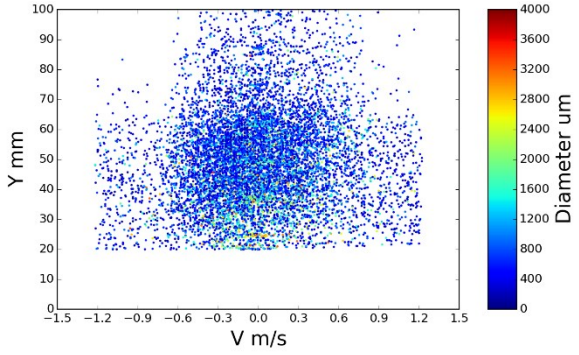


Figure A. 399: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

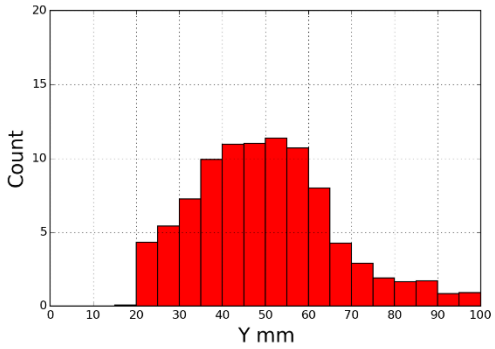


Figure A. 397: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

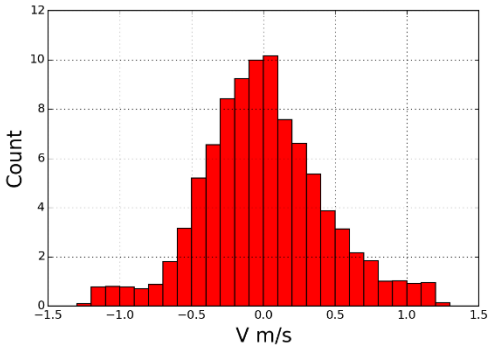


Figure A. 400: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

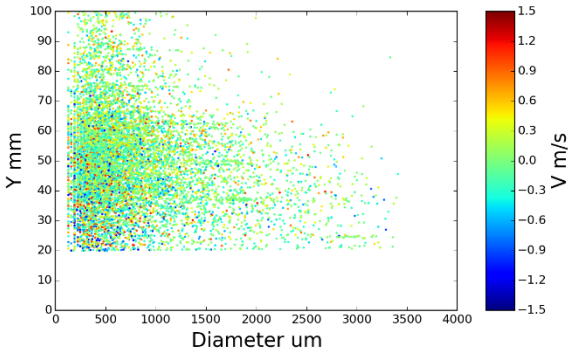


Figure A. 398: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3 Liquid Level 3

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	16224 / 2.044
Ref Mass Flow (lb/hr) / (kg/s)	1653 / 0.208
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15357 / 20.828
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4953 / 15.63
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	40.2 / 4.54
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.4 / 4.64
Total Bundle Q (Btu/hr) / (kW)	111337 / 32.63
Total Bundle & Preboiler Q (Btu/hr) / (kW)	145598 / 42.67
Top Two Rows HTC Ratio	1.072
Bundle Inlet Quality	0.18
Bundle Exit Quality	0.99

Table A. 43: Thermal Conditions

A.1.3.1 Lens 100mm Mag 0_29x

A.1.3.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	60.79	61.77	56.9	3011	359.0	356.5	56.9	2998	357.5	360.8
40-60mm	47.94	49.61	56.9	2298	289.6	295.0	56.9	2354	283.6	293.7
60-80mm	11.41	11.08	56.9	1632	228.3	235.3	56.9	1593	229.4	235.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	120.14	122.48	56.9	3011	318.9	325.9	56.9	2998	316.0	328.0
			Height A (mm)				Height B (mm)			
Highest Particle			75.7663				75.7657			
Lowest Particle			27.8287				27.8287			

Table A. 44: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	41.0	56.9	3011	436.7	375.2	56.9	2967	436.0	375.9	-1.260	1.260	-0.020	0.200	-1.240	1.260	0.060	0.330
40-60mm	33.76	56.9	2298	354.9	319.4	56.9	2354	352.4	317.6	-1.230	1.240	-0.020	0.170	-1.260	1.260	0.030	0.270
60-80mm	7.55	56.9	1632	287.2	260.7	56.9	1552	281.7	254.4	-1.020	0.800	-0.020	0.120	-1.220	0.930	-0.010	0.230
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	82.31	56.9	3011	389.5	347.5	56.9	2967	387.4	346.9	-1.260	1.260	-0.020	0.180	-1.260	1.260	0.040	0.300

Table A. 45: Matched Droplet Info

A.1.3.1 All Droplets for .LA Image

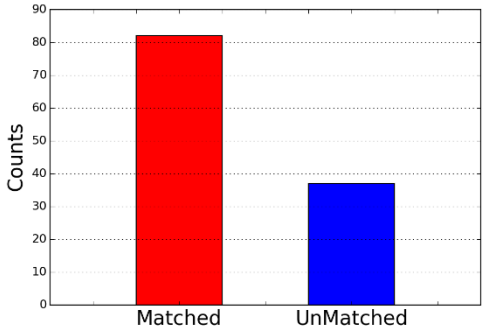


Figure A. 401: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

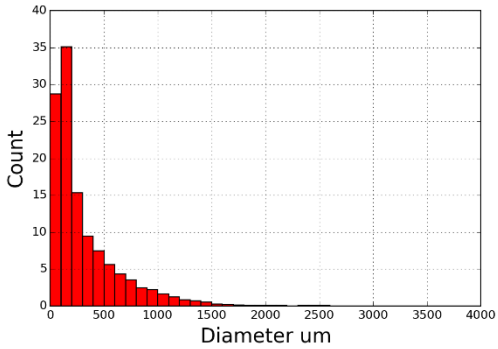


Figure A. 402: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

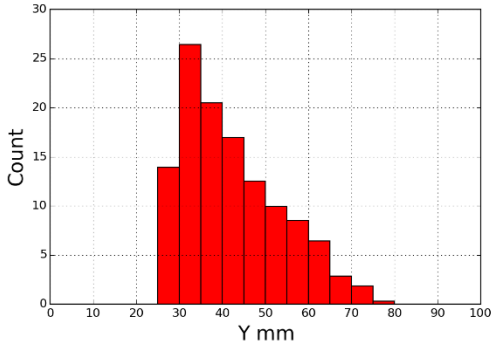


Figure A. 403: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

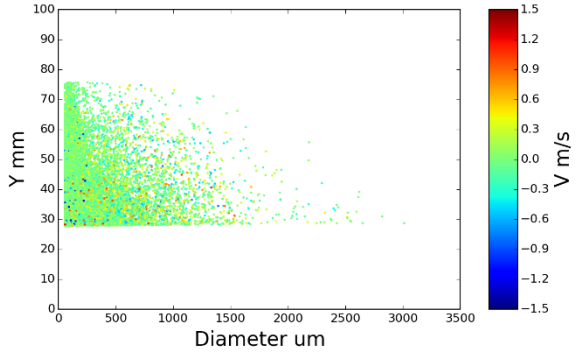


Figure A. 404: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

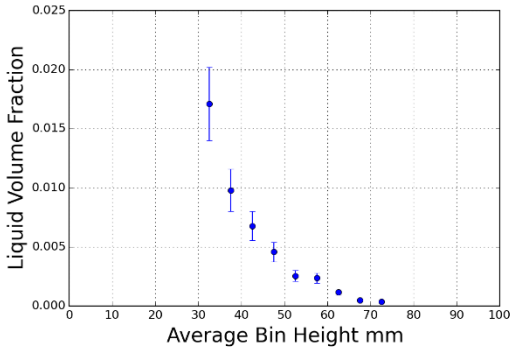


Figure A. 405: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 All Droplets for .LB Image

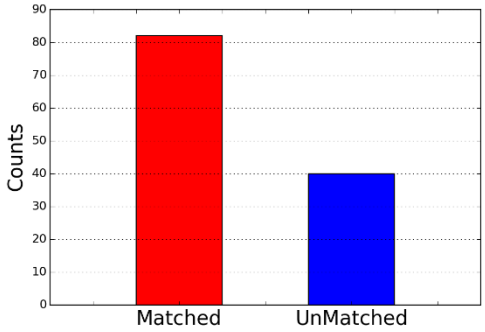


Figure A. 406: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

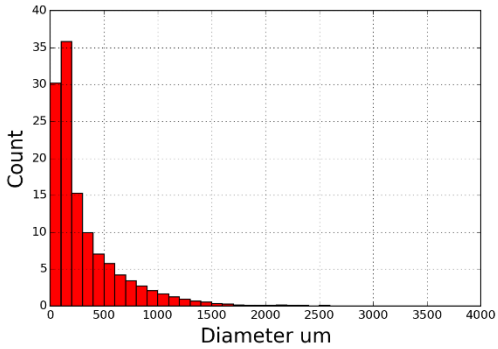


Figure A. 407: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

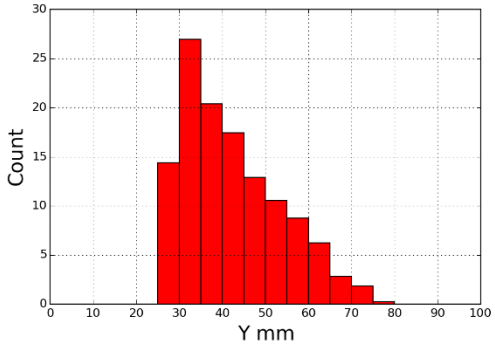


Figure A. 408: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

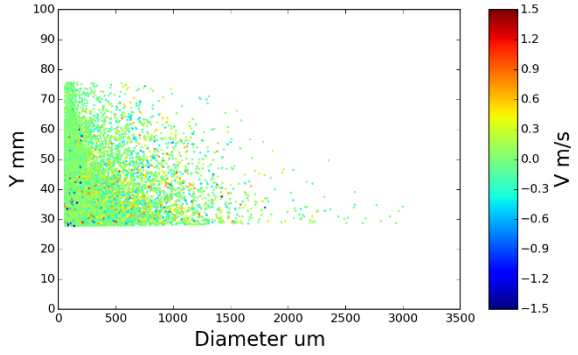


Figure A. 409: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

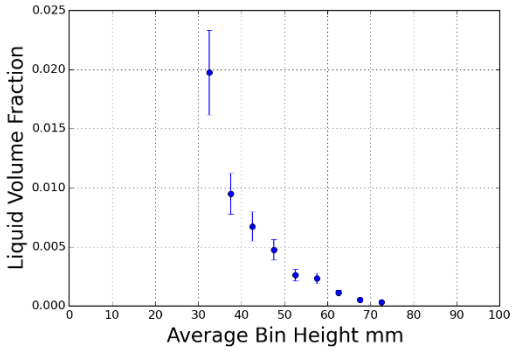


Figure A. 410: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 Matched Only Droplets for .LA Image

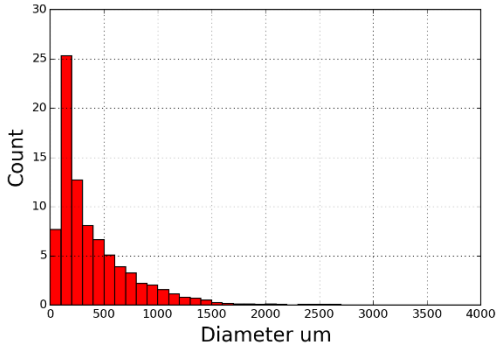


Figure A. 411: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

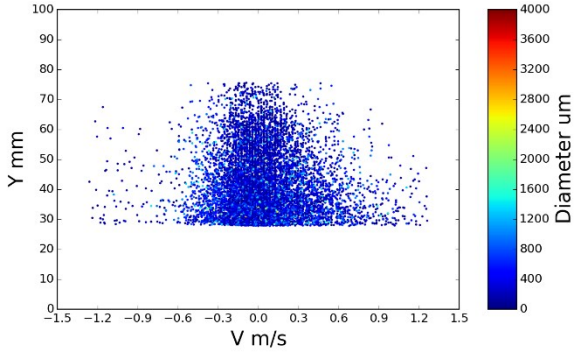


Figure A. 414: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

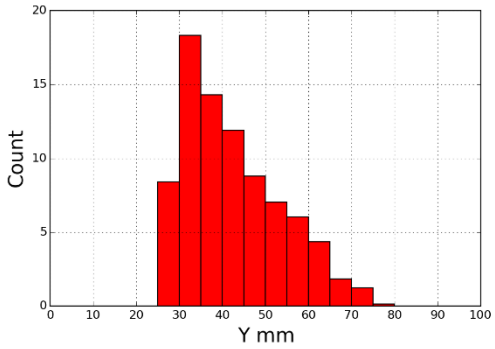


Figure A. 412: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

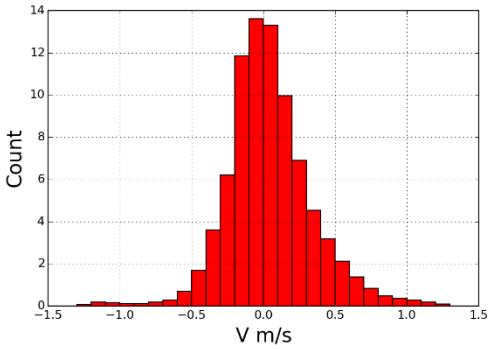


Figure A. 415: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

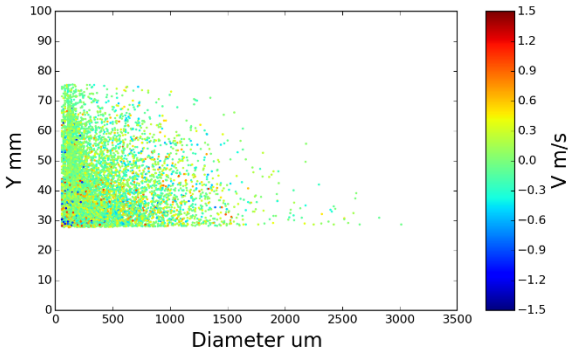


Figure A. 413: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 Matched Only Droplets for .LB Image

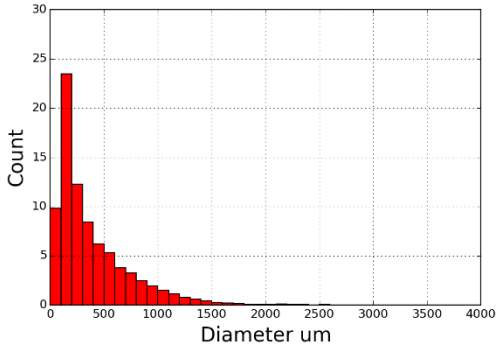


Figure A. 416: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

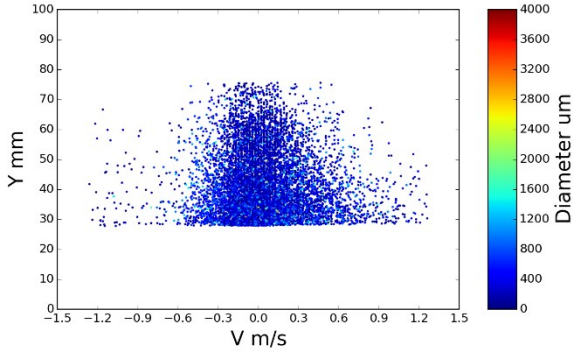


Figure A. 419: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

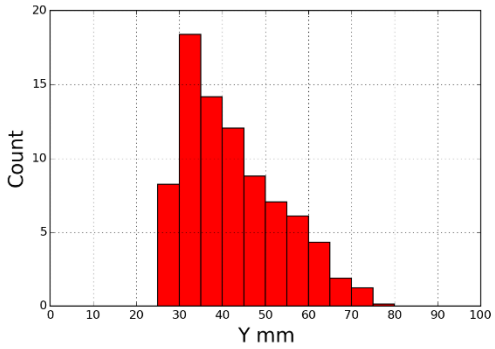


Figure A. 417: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

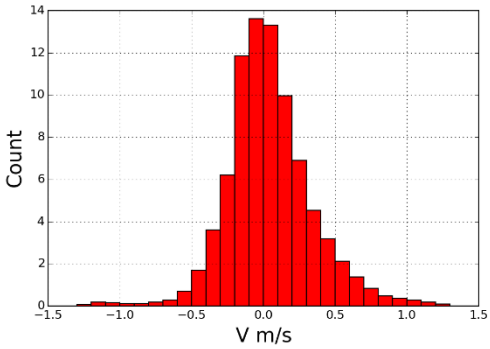


Figure A. 420: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

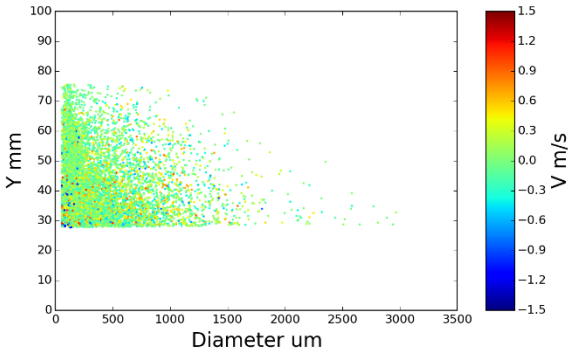


Figure A. 418: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	76.23	79.11	56.9	3014	409.2	419.7	56.9	2986	399.3	418.4
40-60mm	68.58	72.93	56.9	2868	344.1	365.1	56.9	2856	329.5	361.8
60-80mm	14.67	15.56	56.9	2059	260.4	297.3	56.9	2075	254.8	294.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	159.5	167.6	56.9	3014	367.5	389.6	56.9	2986	355.5	387.1
			Height A (mm)				Height B (mm)			
Highest Particle			75.7680				75.7812			
Lowest Particle			27.8287				27.8287			

Table A. 46: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	48.02	56.9	2909	512.4	439.5	56.9	2956	507.0	437.5	-1.260	1.240	-0.030	0.230	-1.260	1.260	0.000	0.350
40-60mm	44.79	56.9	2868	437.9	393.1	56.9	2856	433.8	393.0	-1.260	1.240	-0.030	0.200	-1.260	1.250	-0.030	0.310
60-80mm	8.98	56.9	2059	346.7	332.8	56.9	2075	344.1	336.1	-1.240	0.800	-0.040	0.150	-1.090	0.840	-0.070	0.220
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	101.79	56.9	2909	465.0	414.2	56.9	2956	460.4	413.2	-1.260	1.240	-0.030	0.210	-1.260	1.260	-0.020	0.330

Table A. 47: Matched Droplet Info

A.1.3.1 All Droplets for .LA Image

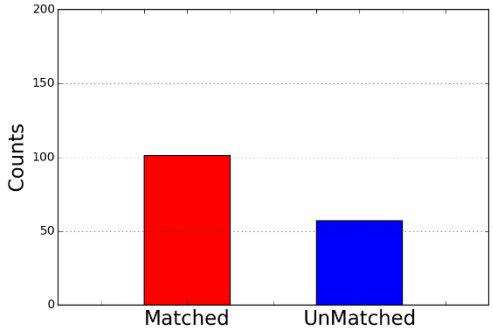


Figure A. 421: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

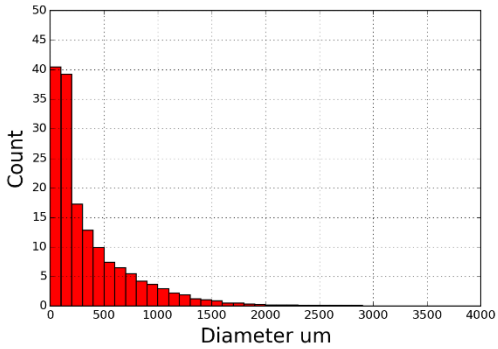


Figure A. 422: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

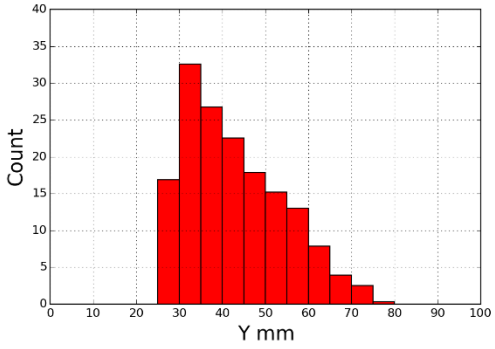


Figure A. 423: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

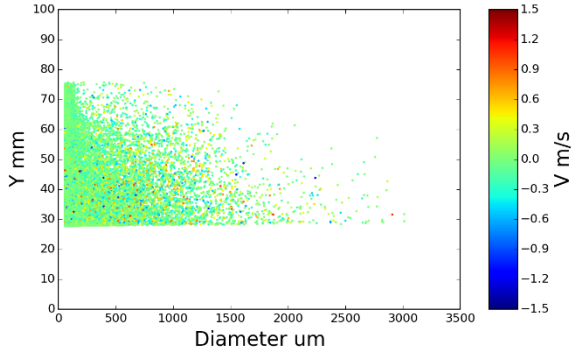


Figure A. 424: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

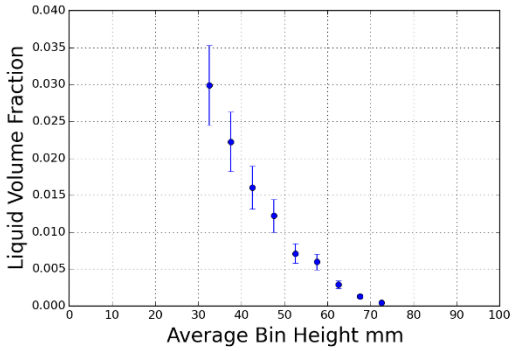


Figure A. 425: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 All Droplets for .LB Image

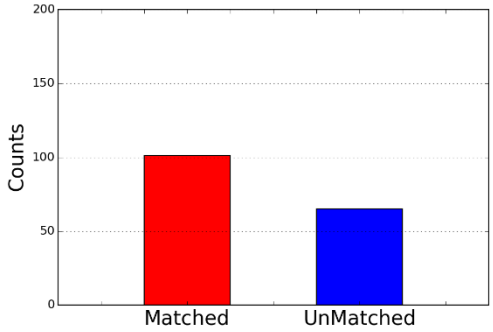


Figure A. 426: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

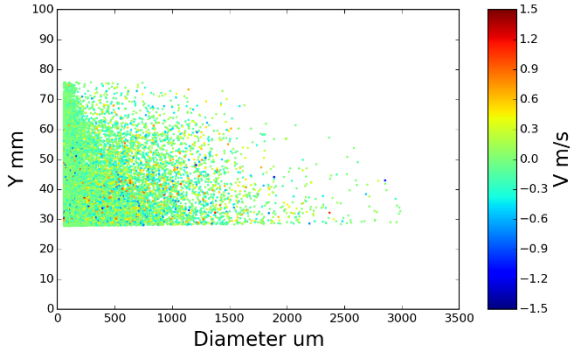


Figure A. 429: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

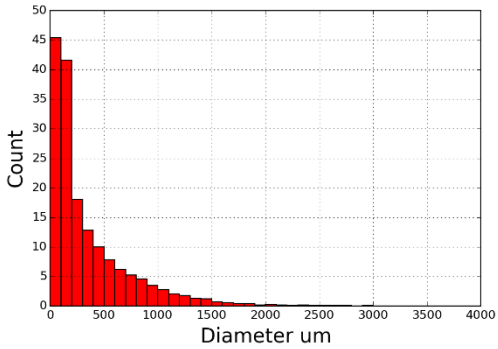


Figure A. 427: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

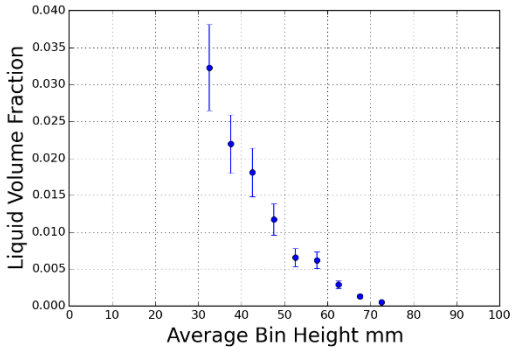


Figure A. 430: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

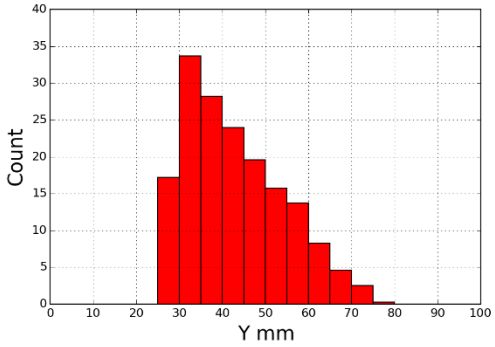


Figure A. 428: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 Matched Only Droplets for .LA Image

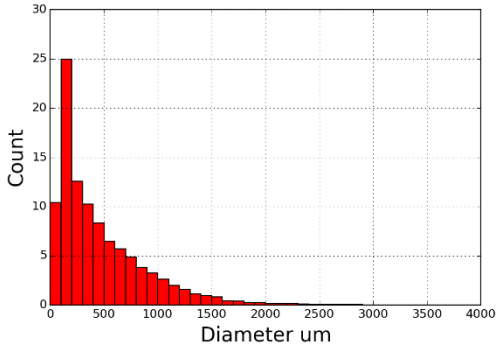


Figure A. 431: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

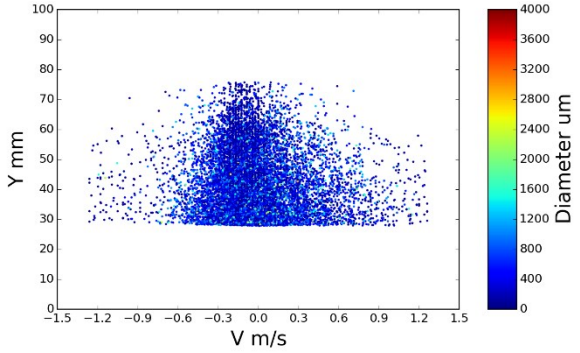


Figure A. 434: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

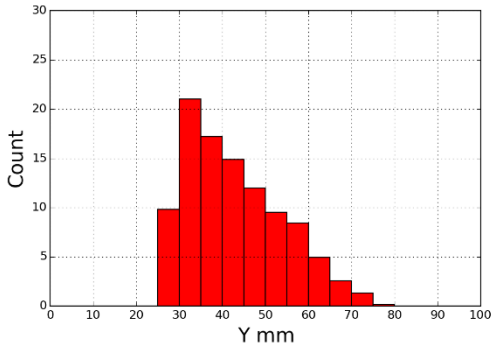


Figure A. 432: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

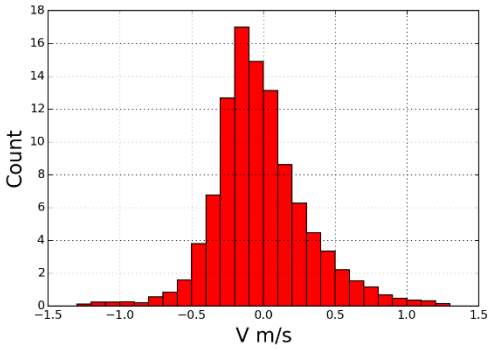


Figure A. 435: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

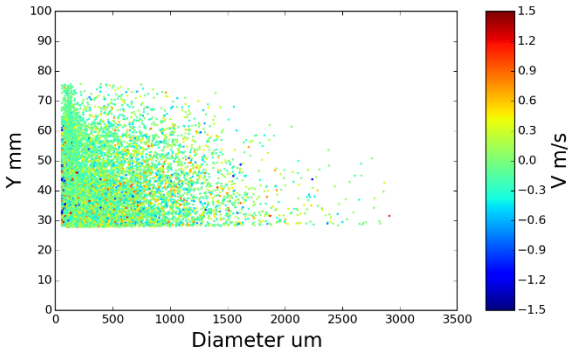


Figure A. 433: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 Matched Only Droplets for .LB Image

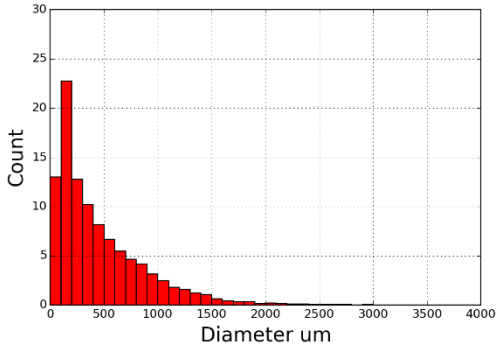


Figure A. 436: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

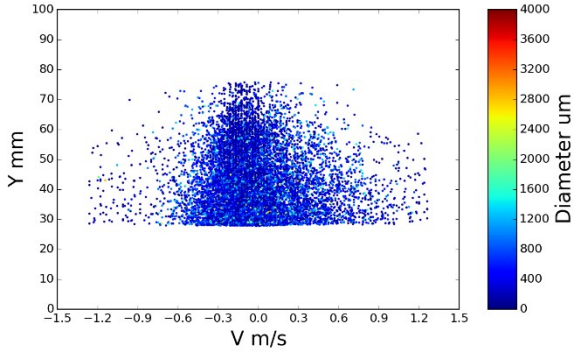


Figure A. 439: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

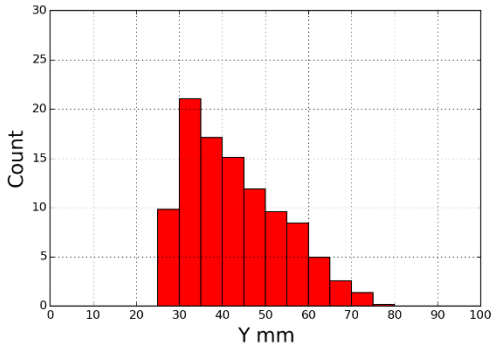


Figure A. 437: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

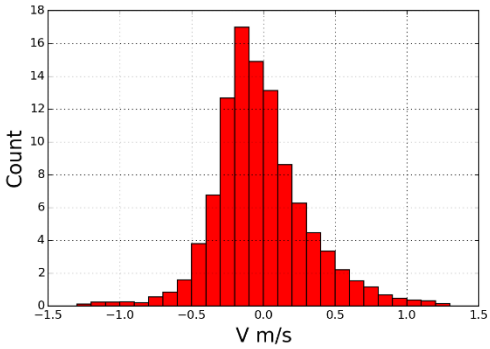


Figure A. 440: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

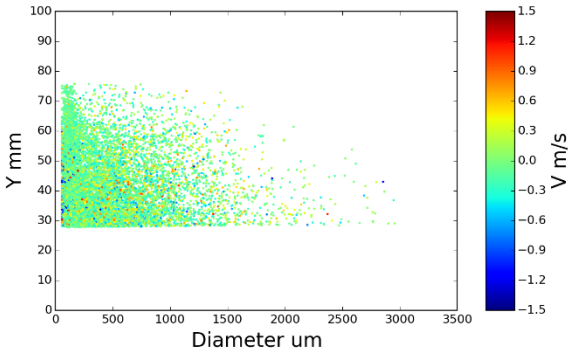


Figure A. 438: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	61.76	63.9	56.9	3027	364.9	394.2	56.9	2940	353.3	387.1
40-60mm	51.44	54.91	56.9	2955	307.2	345.3	56.9	2999	294.1	334.9
60-80mm	10.99	11.47	56.9	1614	208.8	242.4	56.9	1442	201.8	229.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	124.2	130.3	56.9	3027	327.2	366.0	56.9	2999	315.0	356.9
			Height A (mm)				Height B (mm)			
Highest Particle			75.7783				75.6774			
Lowest Particle			27.8287				27.8287			

Table A. 48: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	37.43	56.9	2989	466.5	425.5	56.9	2769	460.0	419.0	-1.240	1.260	-0.040	0.240	-1.260	1.260	-0.030	0.340
40-60mm	31.35	56.9	2955	410.0	385.0	56.9	2999	403.9	380.4	-1.260	1.260	-0.050	0.220	-1.240	1.260	-0.060	0.300
60-80mm	6.22	56.9	1614	278.6	285.2	56.9	1442	272.0	276.4	-1.220	1.080	-0.070	0.150	-0.800	1.220	-0.070	0.230
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	75.0	56.9	2989	427.3	402.2	56.9	2999	421.1	396.5	-1.260	1.260	-0.050	0.220	-1.260	1.260	-0.050	0.310

Table A. 49: Matched Droplet Info

A.1.3.1 All Droplets for .LA Image

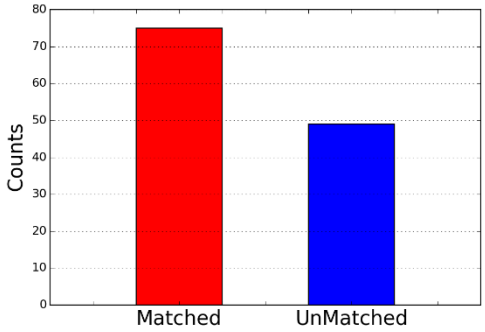


Figure A. 441: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

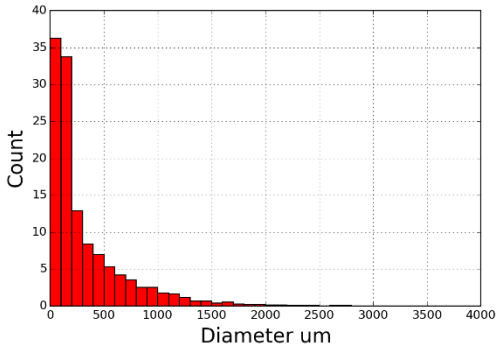


Figure A. 442: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

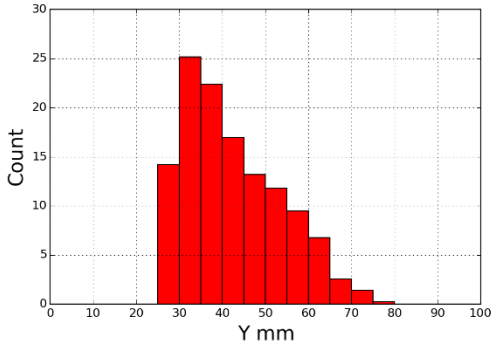


Figure A. 443: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

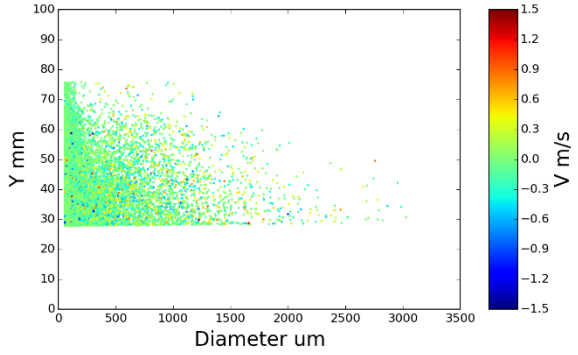


Figure A. 444: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

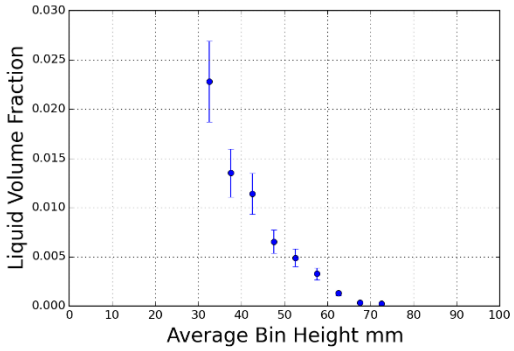


Figure A. 445: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 All Droplets for .LB Image

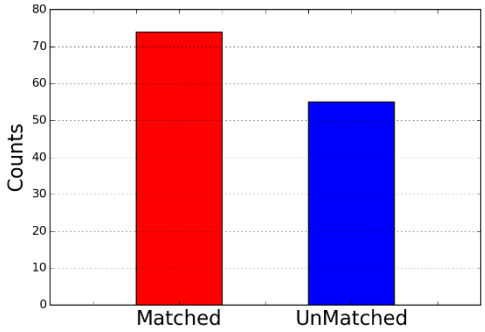


Figure A. 446: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

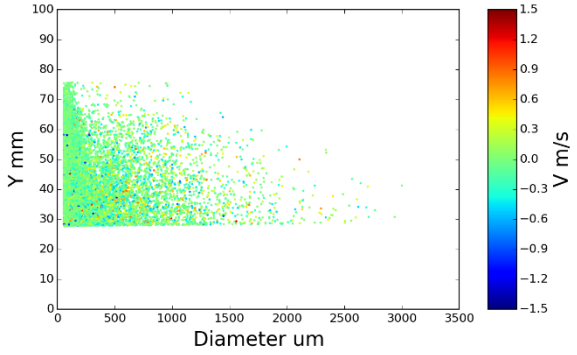


Figure A. 449: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

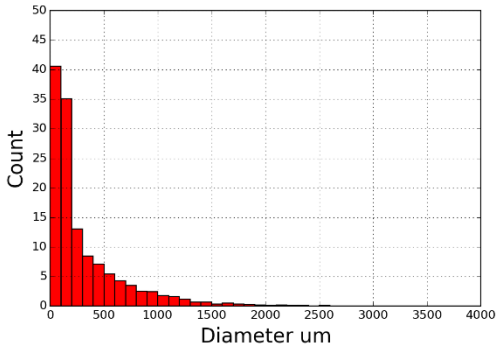


Figure A. 447: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

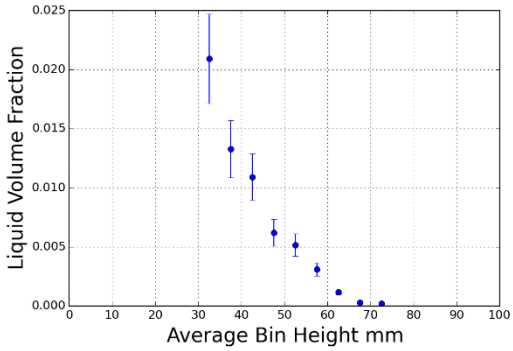


Figure A. 450: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

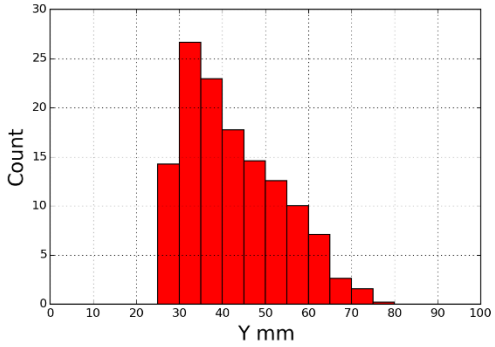


Figure A. 448: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 Matched Only Droplets for .LA Image

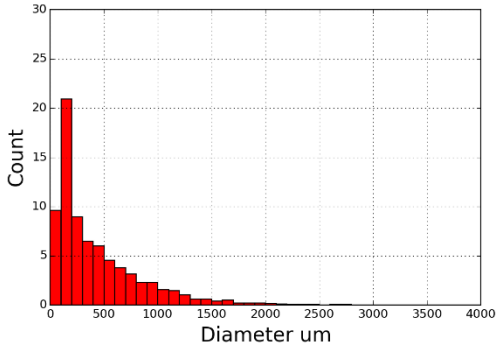


Figure A. 451: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

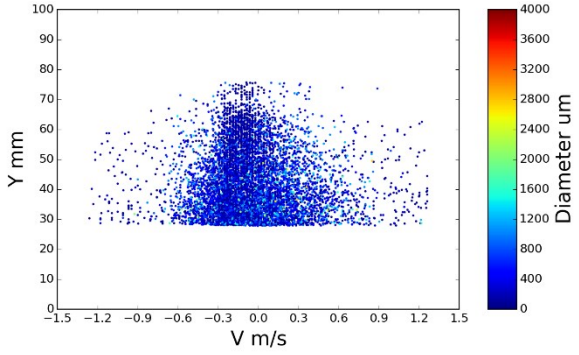


Figure A. 454: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

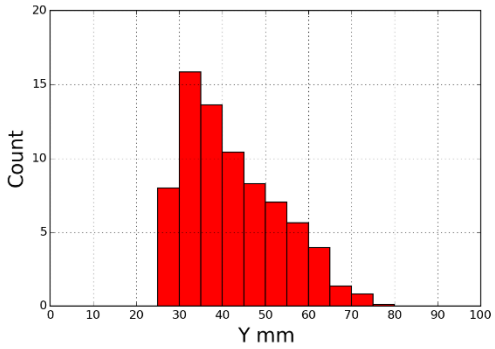


Figure A. 452: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

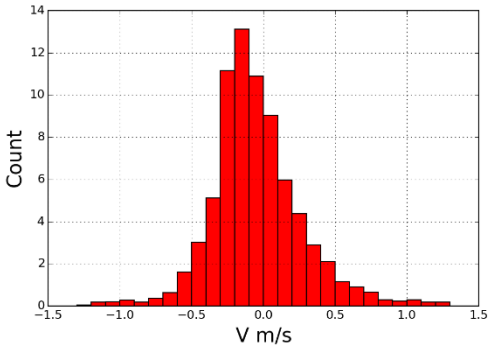


Figure A. 455: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

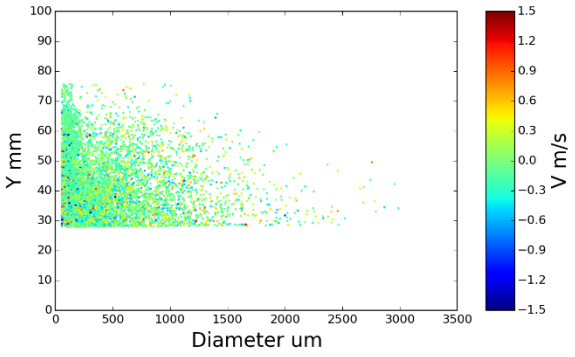


Figure A. 453: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 Matched Only Droplets for .LB Image

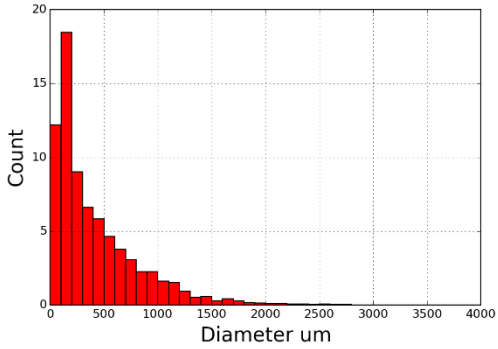


Figure A. 456: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

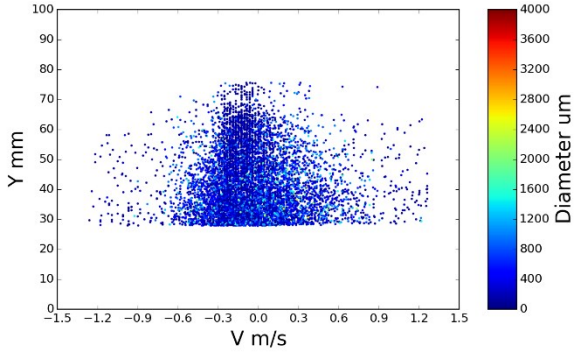


Figure A. 459: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

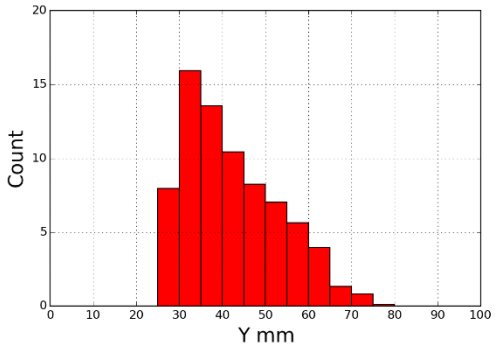


Figure A. 457: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

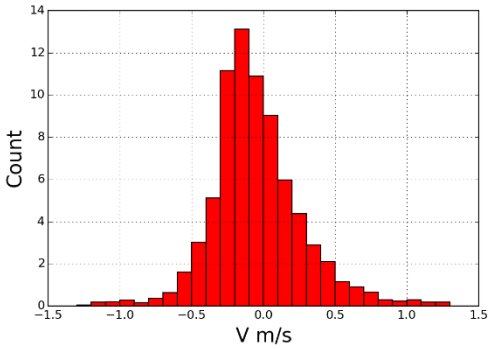


Figure A. 460: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

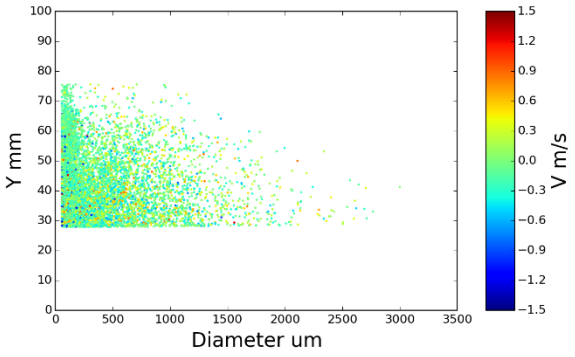


Figure A. 458: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	71.22	72.72	56.9	3011	395.0	404.3	56.9	2970	390.6	405.3
40-60mm	70.8	72.89	56.9	2930	318.4	334.6	56.9	3013	310.4	337.0
60-80mm	16.64	17.63	56.9	1974	252.6	271.5	56.9	1811	248.7	273.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	158.68	163.24	56.9	3011	345.9	365.2	56.9	3013	339.4	366.6
			Height A (mm)				Height B (mm)			
Highest Particle			75.7675				75.7909			
Lowest Particle			27.8287				27.8413			

Table A. 50: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	43.08	56.9	2988	511.4	440.4	56.9	2970	506.1	434.1	-1.260	1.250	-0.050	0.230	-1.260	1.240	-0.010	0.350
40-60mm	43.89	56.9	2870	411.6	365.2	56.9	2838	406.3	364.6	-1.260	1.260	-0.050	0.200	-1.220	1.240	-0.020	0.310
60-80mm	9.75	56.9	1974	337.1	311.0	56.9	1811	337.5	315.5	-1.230	1.210	-0.060	0.200	-1.200	1.250	-0.030	0.280
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	96.72	56.9	2988	448.6	400.4	56.9	2970	443.8	397.2	-1.260	1.260	-0.050	0.220	-1.260	1.250	-0.020	0.330

Table A. 51: Matched Droplet Info

A.1.3.1 All Droplets for .LA Image

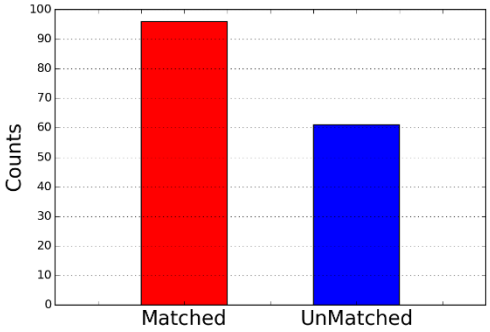


Figure A. 461: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

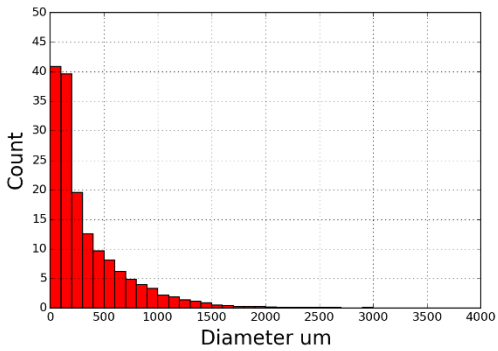


Figure A. 462: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

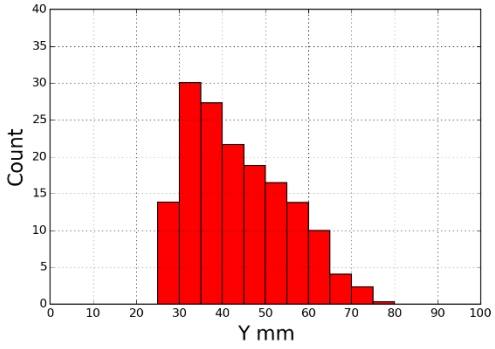


Figure A. 463: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

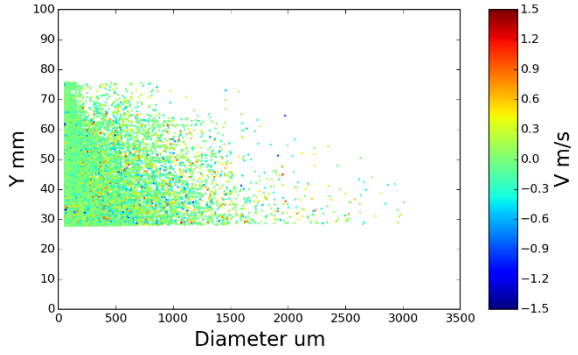


Figure A. 464: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

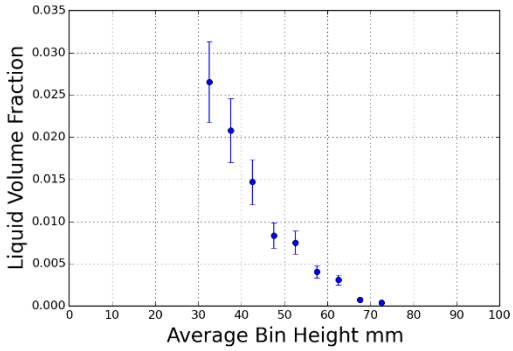


Figure A. 465: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 All Droplets for .LB Image

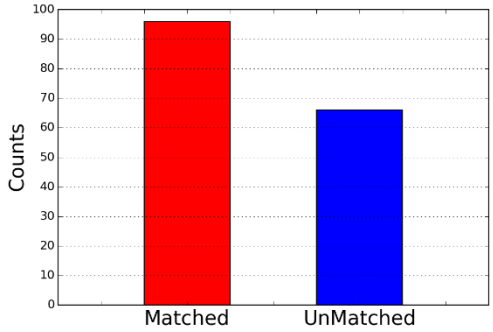


Figure A. 466: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

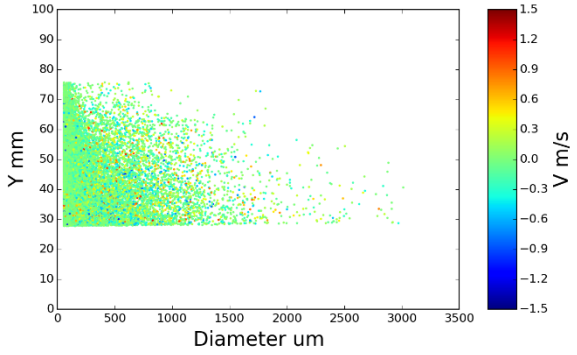


Figure A. 469: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

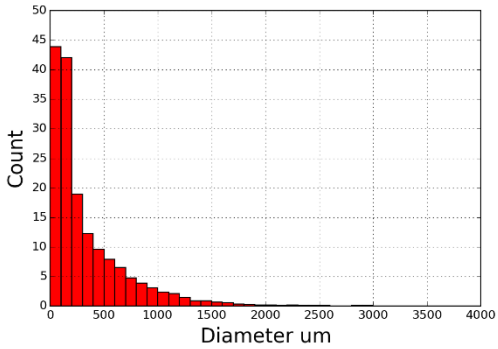


Figure A. 467: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

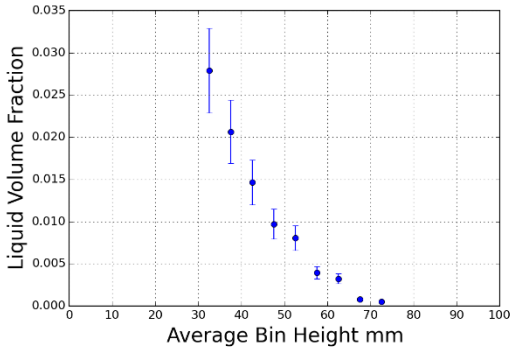


Figure A. 470: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

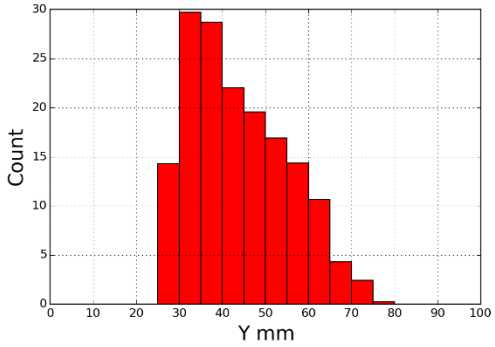


Figure A. 468: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 Matched Only Droplets for .LA Image

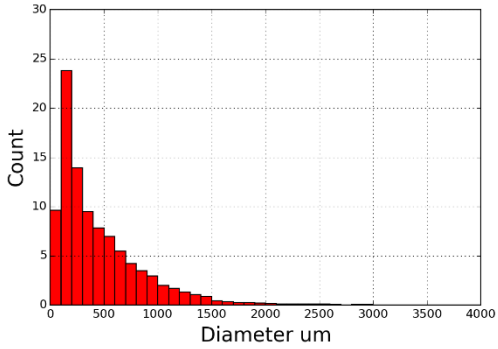


Figure A. 471: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

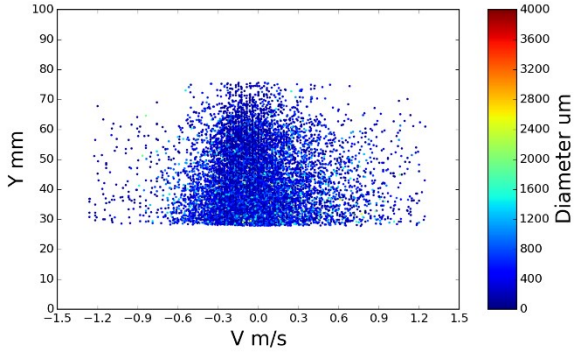


Figure A. 474: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

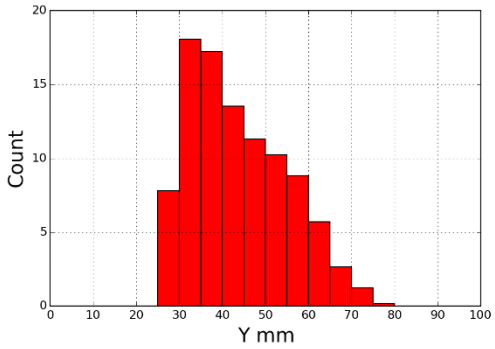


Figure A. 472: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

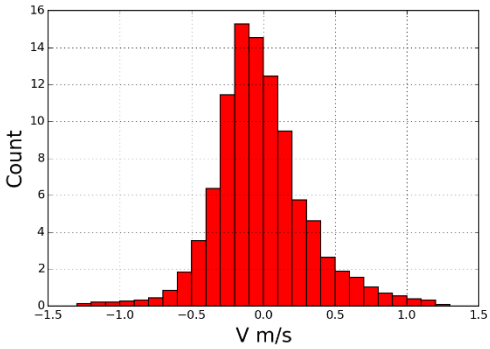


Figure A. 475: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

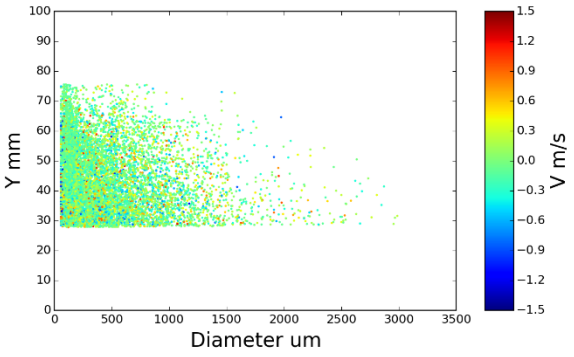


Figure A. 473: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 Matched Only Droplets for .LB Image

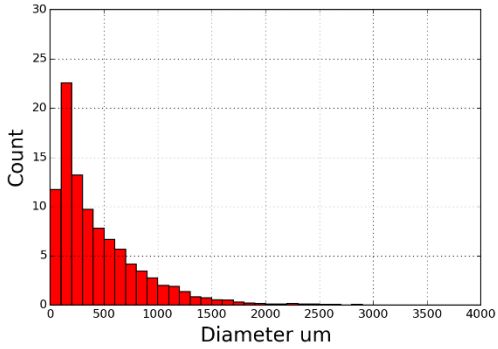


Figure A. 476: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

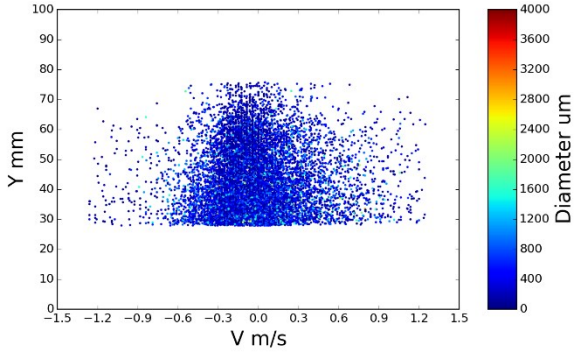


Figure A. 479: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

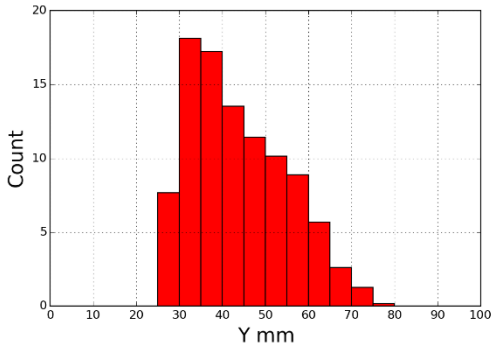


Figure A. 477: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

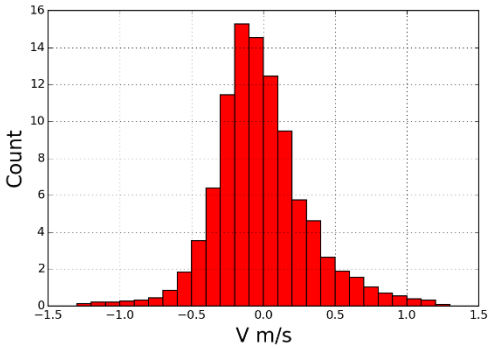


Figure A. 480: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

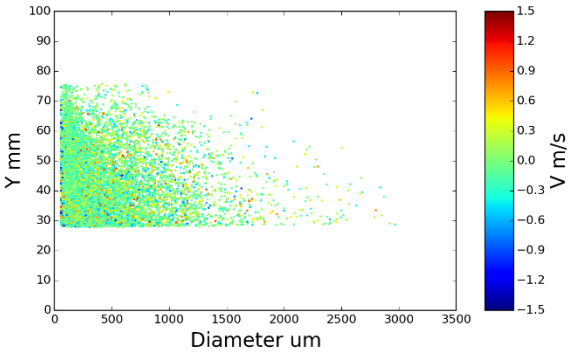


Figure A. 478: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	48.7	51.45	56.9	3013	382.9	385.5	56.9	3002	370.5	385.1
40-60mm	49.69	52.37	56.9	2881	293.5	316.4	56.9	2763	287.5	316.6
60-80mm	13.37	13.4	56.9	1517	235.4	262.6	56.9	1462	235.8	263.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	111.76	117.23	56.9	3013	325.5	347.0	56.9	3002	318.0	346.8
			Height A (mm)				Height B (mm)			
Highest Particle			75.6799				75.7570			
Lowest Particle			27.8391				27.8365			

Table A. 52: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	30.94	56.9	3013	475.0	412.0	56.9	3002	472.8	413.3	-1.260	1.250	-0.060	0.230	-1.260	1.260	0.060	0.360
40-60mm	30.47	56.9	2881	384.4	356.9	56.9	2763	381.8	356.0	-1.240	1.260	-0.060	0.200	-1.240	1.240	0.020	0.310
60-80mm	7.54	56.9	1517	312.6	307.8	56.9	1462	311.6	308.5	-1.080	0.980	-0.060	0.170	-1.260	1.220	-0.010	0.230
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	68.95	56.9	3013	417.2	382.1	56.9	3002	414.9	382.3	-1.260	1.260	-0.060	0.210	-1.260	1.260	0.040	0.330

Table A. 53: Matched Droplet Info

A.1.3.1 All Droplets for .LA Image

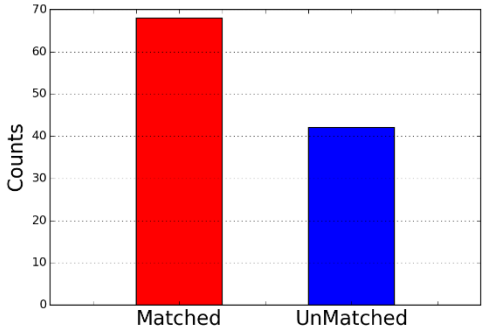


Figure A. 481: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

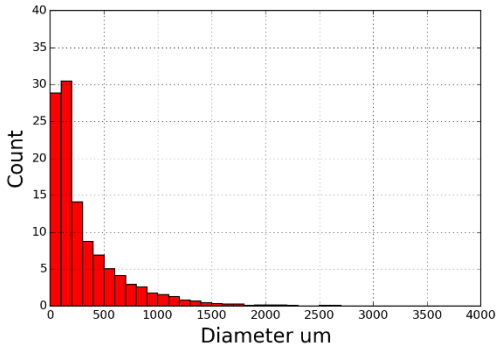


Figure A. 482: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

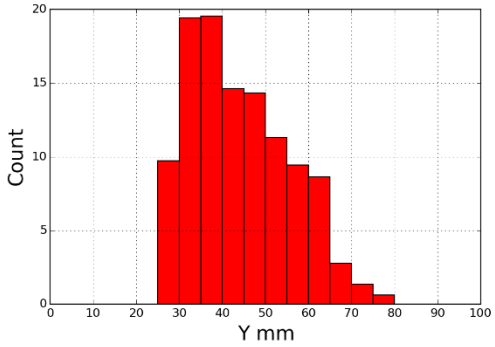


Figure A. 483: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

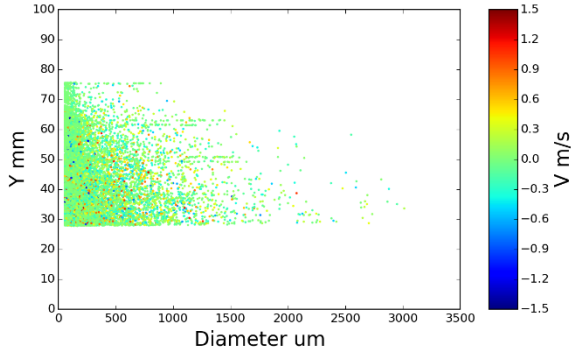


Figure A. 484: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

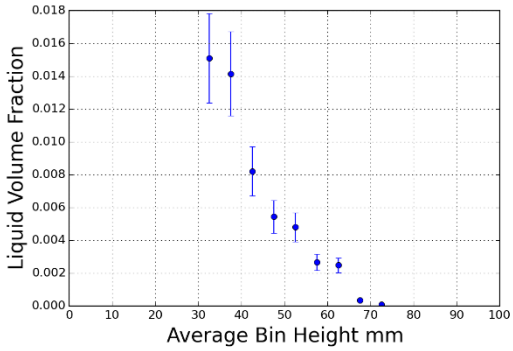


Figure A. 485: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 All Droplets for .LB Image

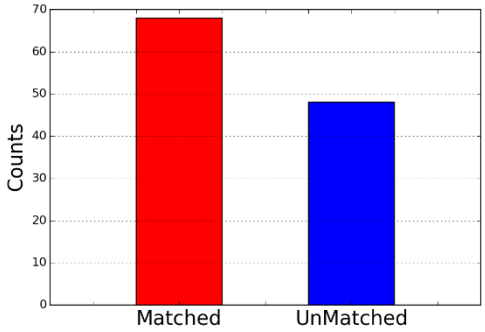


Figure A. 486: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

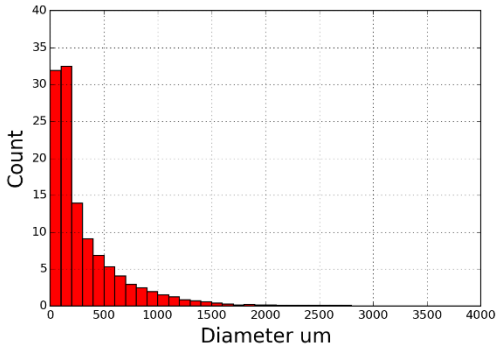


Figure A. 487: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

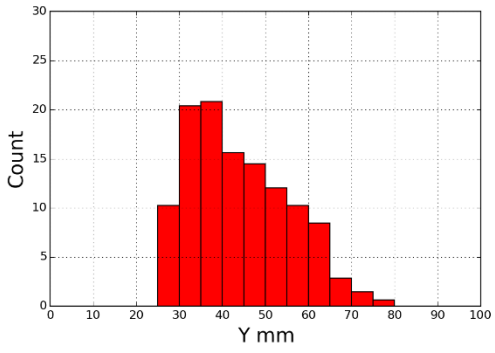


Figure A. 488: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

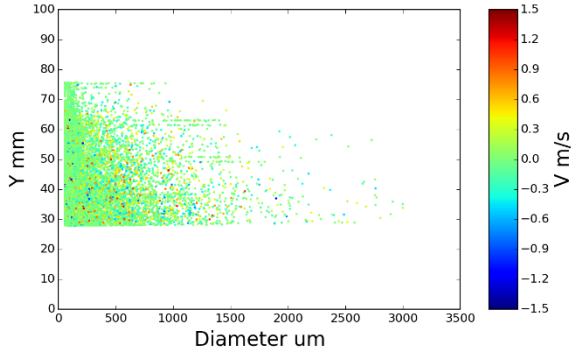


Figure A. 489: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

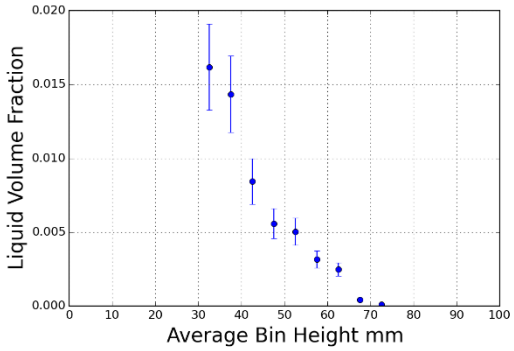


Figure A. 490: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 Matched Only Droplets for .LA Image

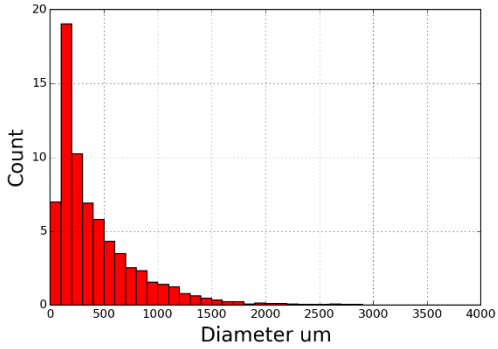


Figure A. 491: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

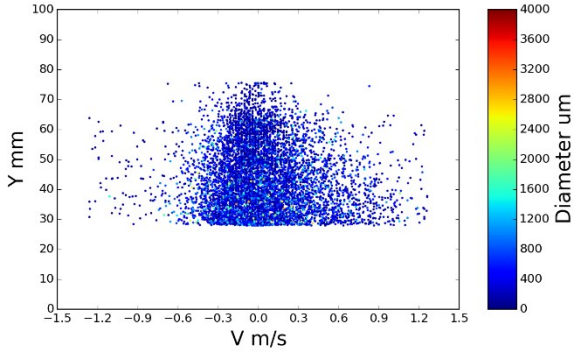


Figure A. 494: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

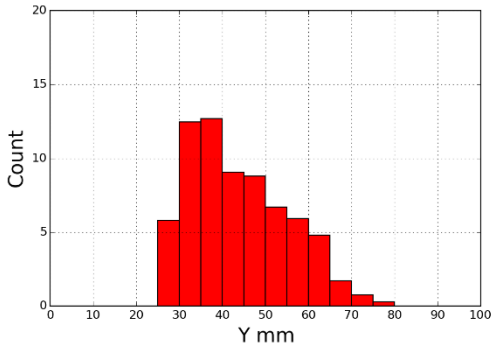


Figure A. 492: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

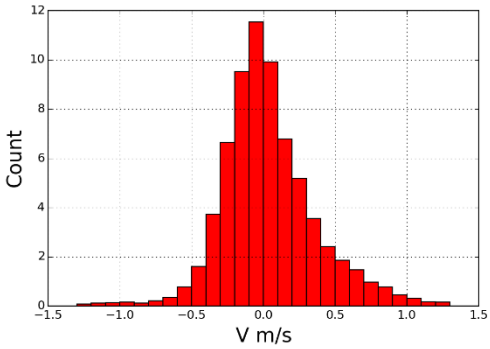


Figure A. 495: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

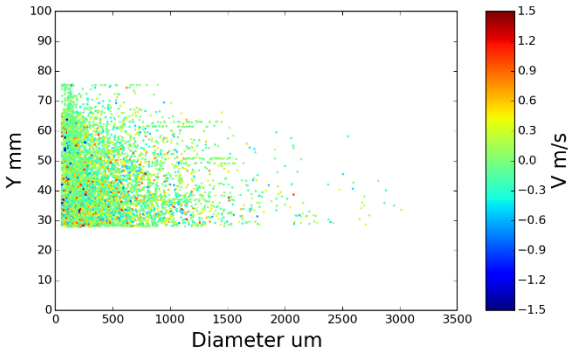


Figure A. 493: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.1 Matched Only Droplets for .LB Image

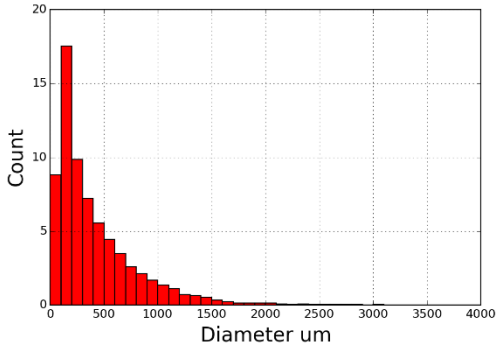


Figure A. 496: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

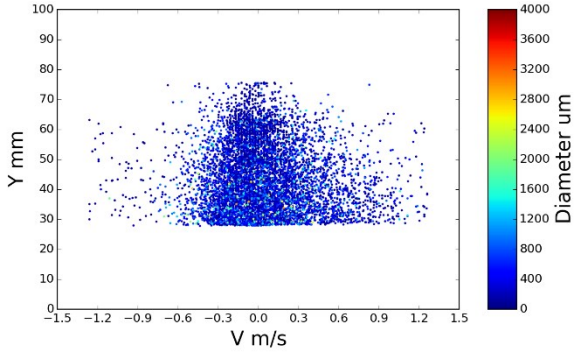


Figure A. 499: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

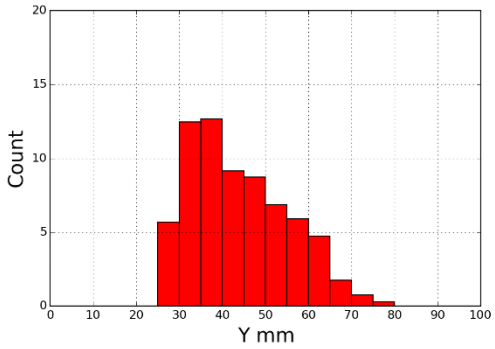


Figure A. 497: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

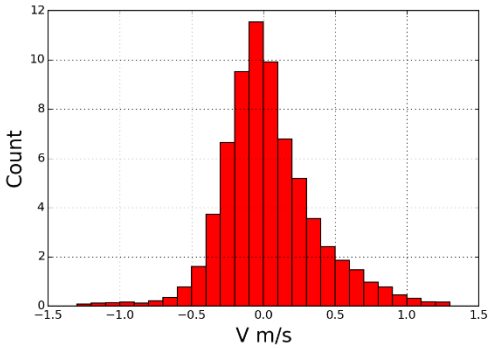


Figure A. 500: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

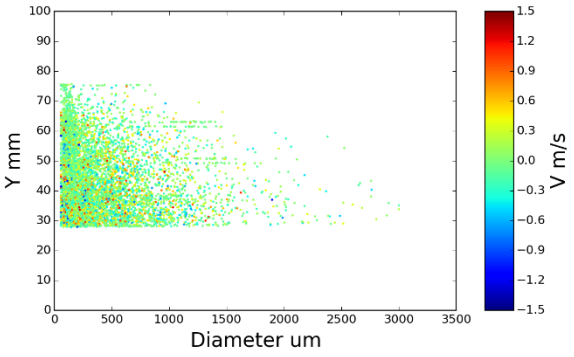


Figure A. 498: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 Lens 50mm Mag 0_13x

A.1.3.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	49.11	49.98	128.4	3409	715.1	591.1	128.4	3411	713.0	592.3
20-40mm	100.5	101.62	128.4	3408	634.6	496.8	128.4	3392	628.8	492.5
40-60mm	51.94	52.39	128.4	3144	548.6	373.3	128.4	2995	539.3	369.1
60-80mm	12.18	12.1	128.4	1841	489.9	271.5	128.4	1781	491.6	274.6
80-100mm	1.9	1.81	128.4	1088	422.7	219.4	128.4	1286	441.0	224.8
All	215.63	217.91	128.4	3409	622.2	487.3	128.4	3411	617.4	485.5
			Height A (mm)				Height B (mm)			
Highest Particle			99.4293				99.4013			
Lowest Particle			9.9041				9.9041			

Table A. 54: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	23.39	128.4	3401	853.3	616.6	128.4	3411	837.2	607.0	-1.220	1.220	-0.060	0.420	-1.220	1.220	0.010	0.460
20-40mm	59.78	128.4	3408	715.8	501.5	128.4	3371	701.4	490.0	-1.220	1.220	-0.050	0.330	-1.220	1.220	-0.010	0.430
40-60mm	36.22	128.4	3144	615.2	372.4	128.4	2995	607.0	369.9	-1.220	1.220	-0.030	0.240	-1.220	1.210	0.000	0.350
60-80mm	9.33	128.4	1841	551.1	266.5	128.4	1781	547.8	271.6	-1.050	0.410	-0.020	0.140	-1.200	1.040	0.000	0.290
80-100mm	1.44	128.4	1088	467.7	208.3	128.4	1286	467.5	215.0	-0.370	0.200	-0.030	0.110	-0.480	1.010	-0.010	0.230
All	130.16	128.4	3408	698.0	486.4	128.4	3411	685.8	477.6	-1.220	1.220	-0.040	0.320	-1.220	1.220	-0.000	0.400

Table A. 55: Matched Droplet Info

A.1.3.2 All Droplets for .LA Image

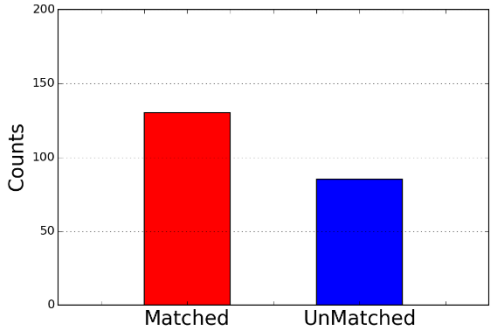


Figure A. 501: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

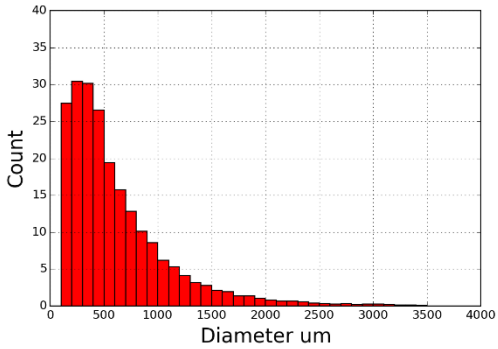


Figure A. 502: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

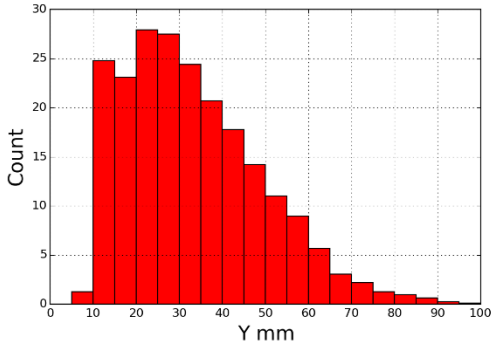


Figure A. 503: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

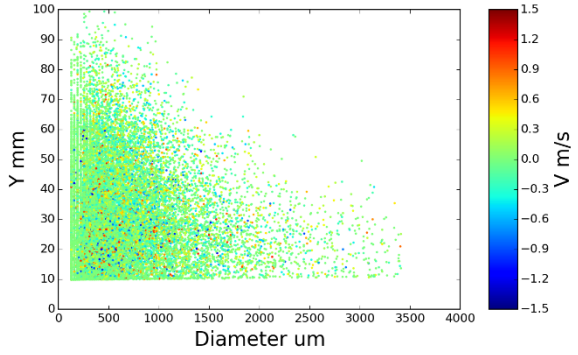


Figure A. 504: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

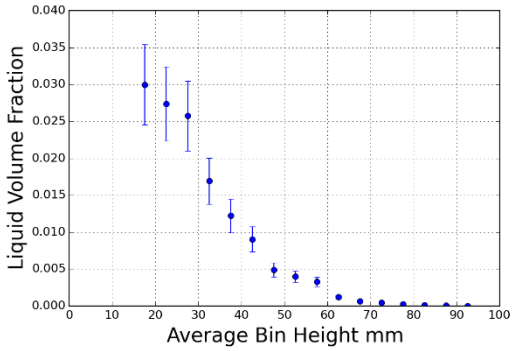


Figure A. 505: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 All Droplets for .LB Image

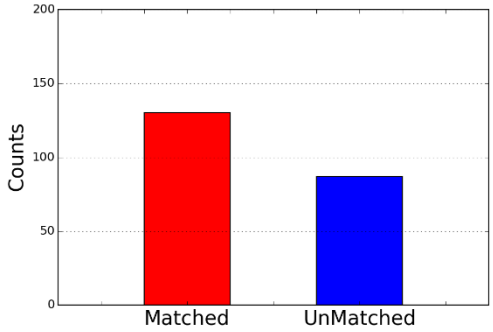


Figure A. 506: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

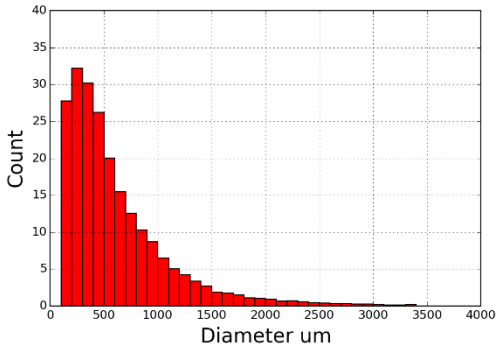


Figure A. 507: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

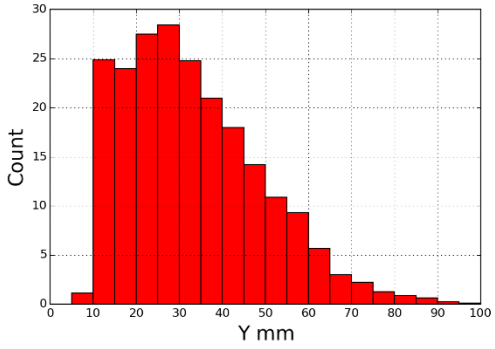


Figure A. 508: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

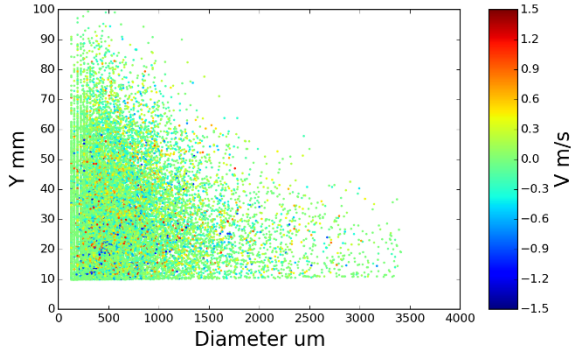


Figure A. 509: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

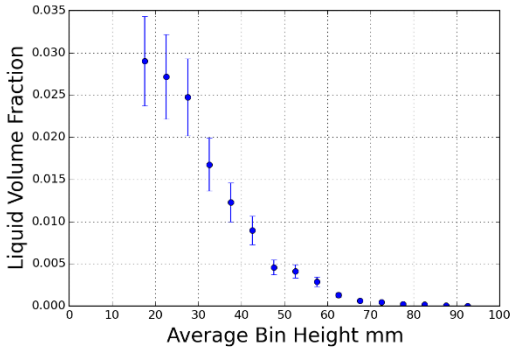


Figure A. 510: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 Matched Only Droplets for .LA Image

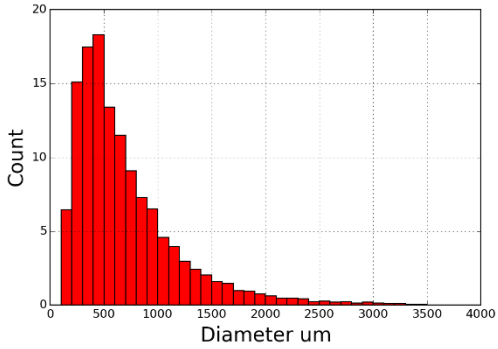


Figure A. 511: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

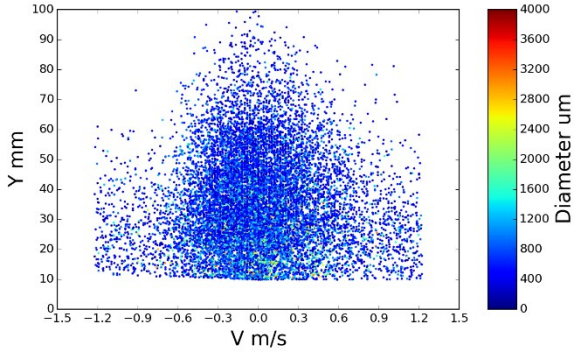


Figure A. 514: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

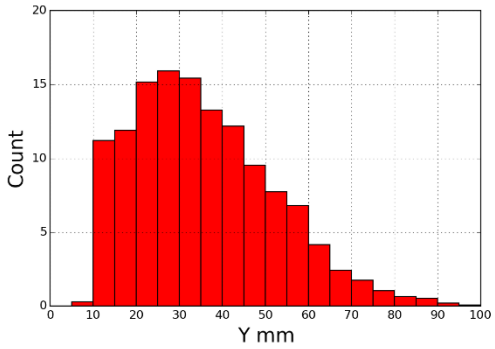


Figure A. 512: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

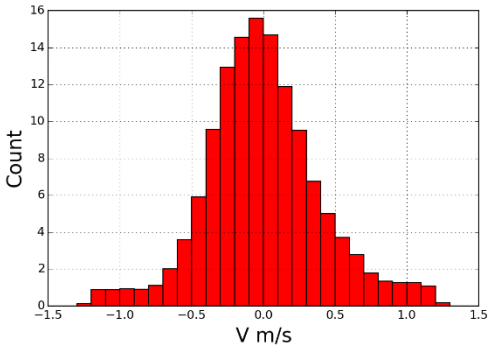


Figure A. 515: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

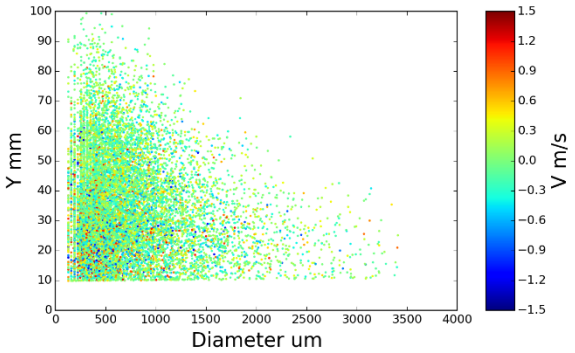


Figure A. 513: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 Matched Only Droplets for .LB Image

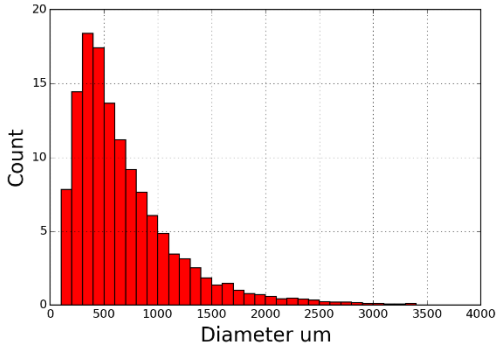


Figure A. 516: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

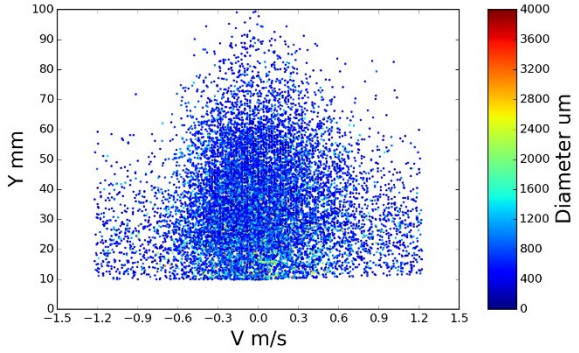


Figure A. 519: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

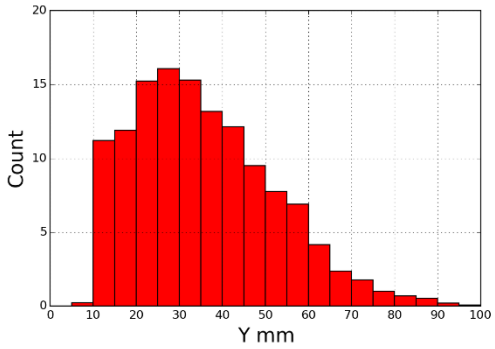


Figure A. 517: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

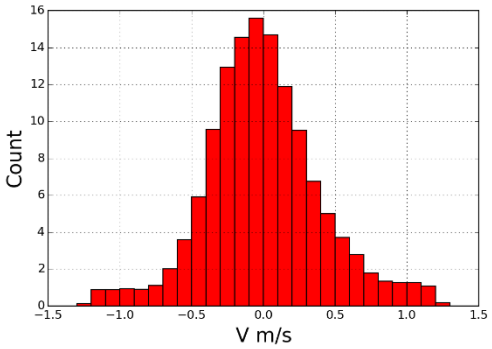


Figure A. 520: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

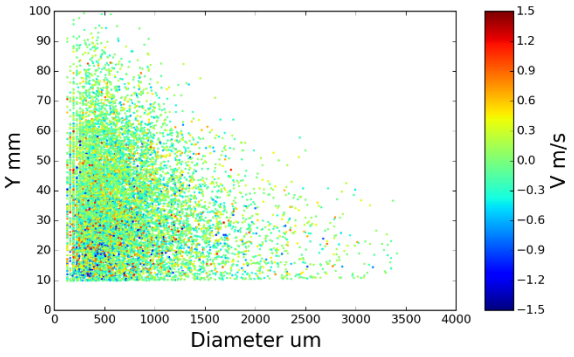


Figure A. 518: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	52.59	52.62	128.4	3414	728.3	594.2	128.4	3376	733.9	600.3
20-40mm	100.11	100.17	128.4	3410	636.0	470.8	128.4	3374	636.1	472.8
40-60mm	43.04	42.08	128.4	3385	579.2	376.9	128.4	2980	578.9	363.7
60-80mm	7.68	7.36	128.4	1857	529.6	290.5	128.4	1547	530.4	291.9
80-100mm	0.64	0.63	157.3	1046	517.4	246.1	128.4	1046	503.0	240.3
All	204.07	202.86	128.4	3414	643.4	486.2	128.4	3376	645.4	487.9
			Height A (mm)				Height B (mm)			
Highest Particle			98.5001				98.5001			
Lowest Particle			9.9041				9.9041			

Table A. 56: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	24.72	128.4	3410	881.2	626.4	128.4	3371	857.3	612.1	-1.220	1.220	-0.040	0.420	-1.220	1.220	-0.030	0.460
20-40mm	59.98	128.4	3410	723.2	474.4	128.4	3374	708.7	466.4	-1.220	1.220	-0.050	0.330	-1.220	1.220	-0.030	0.410
40-60mm	30.45	128.4	3385	649.5	366.9	128.4	2980	638.0	356.6	-1.200	1.220	-0.040	0.210	-1.210	1.220	-0.030	0.340
60-80mm	5.53	128.4	1857	610.8	279.7	128.4	1547	602.1	281.8	-1.180	0.850	-0.040	0.160	-0.880	0.960	-0.040	0.270
80-100mm	0.51	157.3	1046	572.4	237.1	157.3	1046	550.6	227.1	-0.320	0.410	-0.010	0.130	-0.470	0.310	-0.040	0.200
All	121.19	128.4	3410	731.2	485.9	128.4	3374	715.9	475.8	-1.220	1.220	-0.040	0.320	-1.220	1.220	-0.030	0.400

Table A. 57: Matched Droplet Info

A.1.3.2 All Droplets for .LA Image

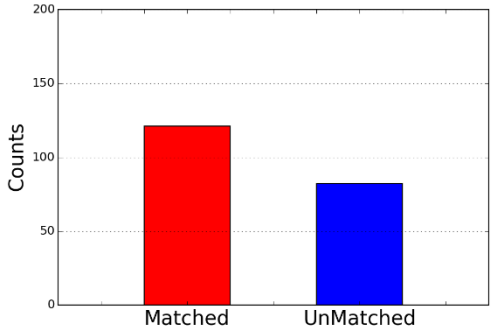


Figure A. 521: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

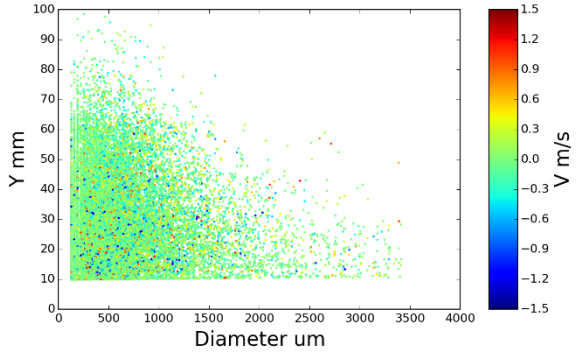


Figure A. 524: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

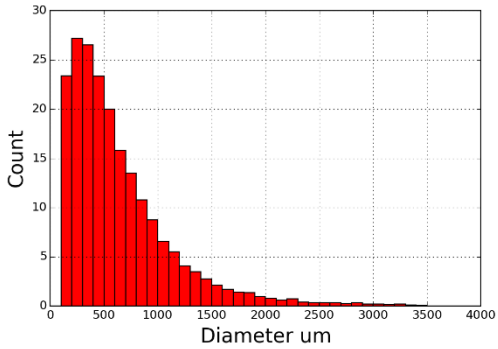


Figure A. 522: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

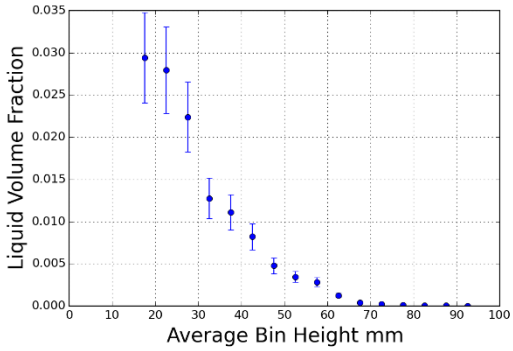


Figure A. 525: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

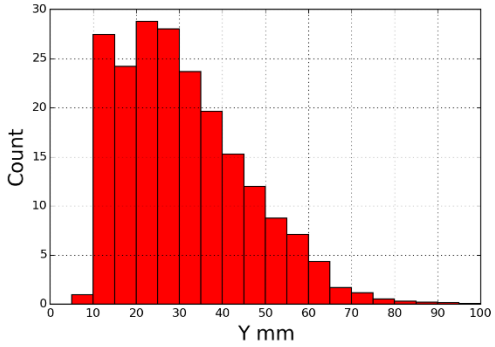


Figure A. 523: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 All Droplets for .LB Image

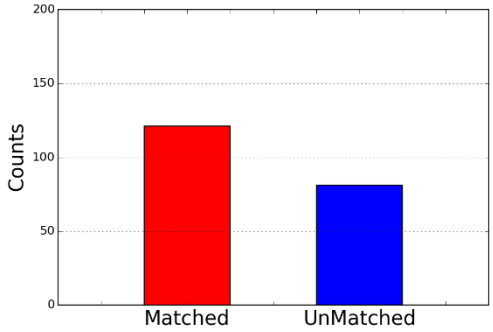


Figure A. 526: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

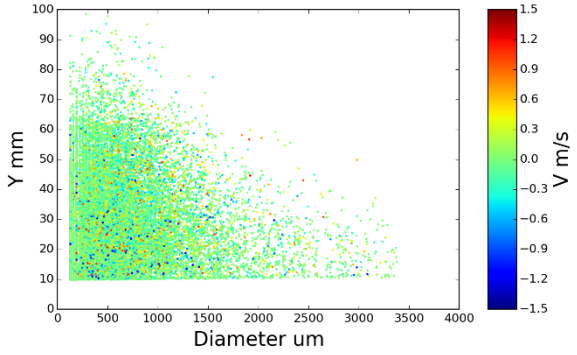


Figure A. 529: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

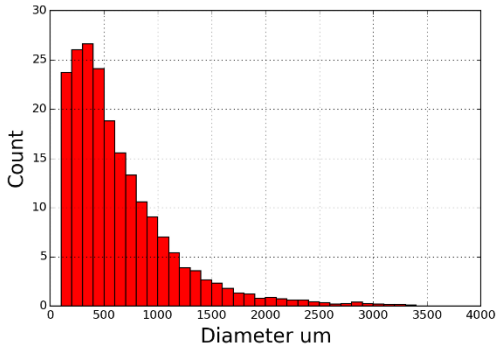


Figure A. 527: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

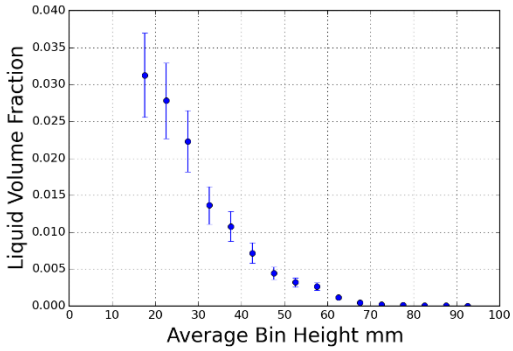


Figure A. 530: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

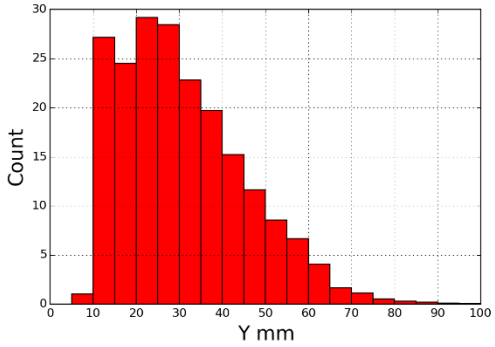


Figure A. 528: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 Matched Only Droplets for .LA Image

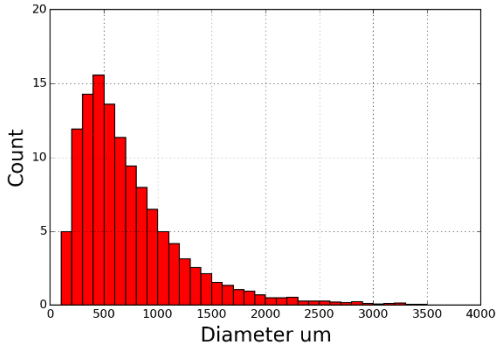


Figure A. 531: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

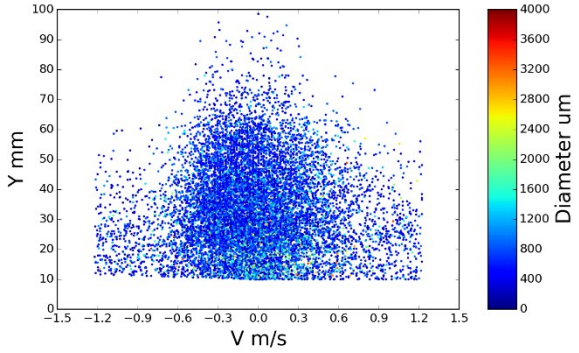


Figure A. 534: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

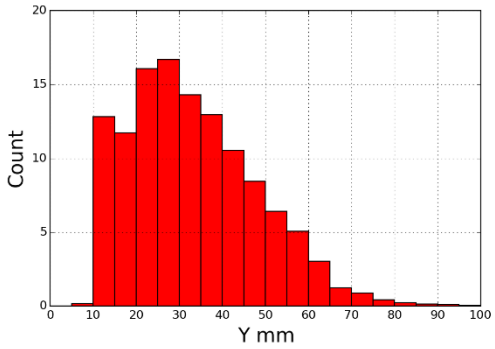


Figure A. 532: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

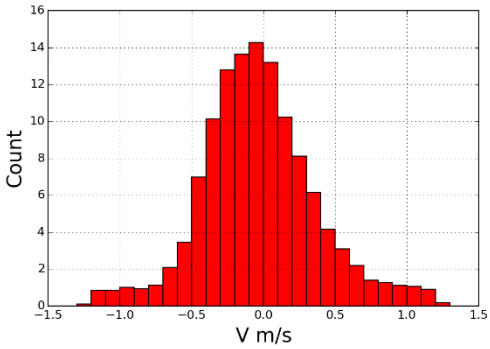


Figure A. 535: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

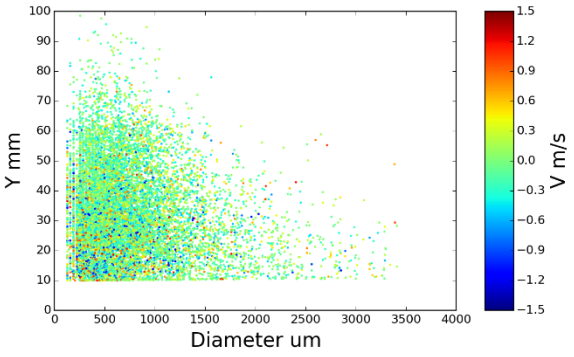


Figure A. 533: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 Matched Only Droplets for .LB Image

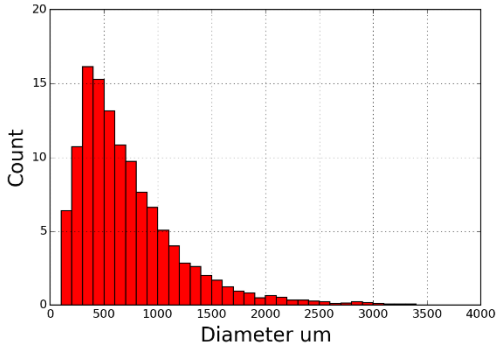


Figure A. 536: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

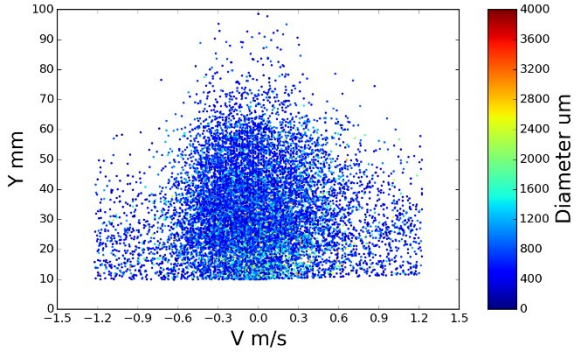


Figure A. 539: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

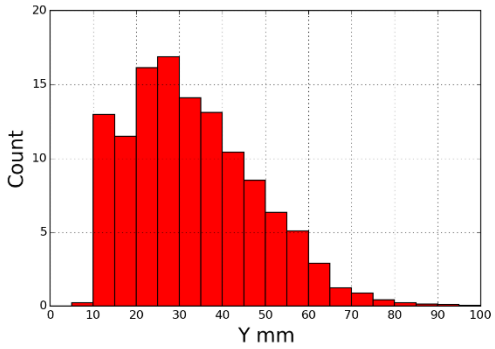


Figure A. 537: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

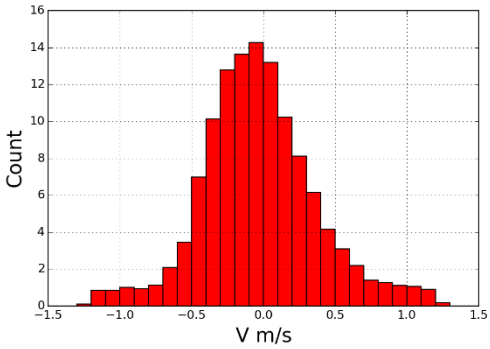


Figure A. 540: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

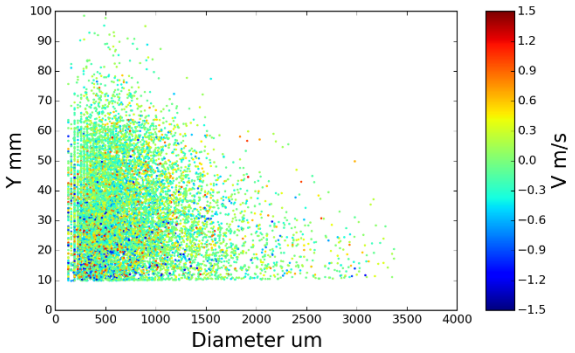


Figure A. 538: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	45.88	45.67	128.4	3410	765.0	626.7	128.4	3410	771.8	626.0
20-40mm	100.59	100.1	128.4	3408	679.7	524.1	128.4	3414	678.3	521.6
40-60mm	51.72	51.28	128.4	3377	599.7	399.8	128.4	3355	594.1	393.0
60-80mm	10.49	10.55	128.4	2224	567.6	327.7	128.4	2035	561.8	321.5
80-100mm	0.97	0.94	128.4	1452	481.7	265.1	128.4	1288	516.1	254.9
All	209.65	208.54	128.4	3410	672.1	516.5	128.4	3414	671.5	514.2
			Height A (mm)				Height B (mm)			
Highest Particle			99.7523				98.7562			
Lowest Particle			9.9041				9.9041			

Table A. 58: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	18.87	128.4	3378	953.9	664.5	128.4	3377	928.7	658.4	-1.220	1.220	-0.060	0.420	-1.220	1.220	-0.020	0.460
20-40mm	56.43	128.4	3357	794.2	541.9	128.4	3383	774.6	527.8	-1.220	1.220	-0.060	0.350	-1.220	1.220	-0.040	0.430
40-60mm	33.55	128.4	3306	687.7	402.3	128.4	3355	675.3	395.5	-1.220	1.220	-0.050	0.250	-1.220	1.220	-0.050	0.360
60-80mm	7.14	128.4	2224	653.0	322.0	128.4	2035	641.8	314.9	-1.190	1.150	-0.050	0.220	-1.170	1.110	-0.030	0.310
80-100mm	0.79	128.4	1452	535.4	261.0	128.4	1288	537.5	259.1	-0.340	0.230	-0.070	0.150	-0.440	0.550	0.020	0.240
All	116.78	128.4	3378	779.0	524.8	128.4	3383	761.8	514.5	-1.220	1.220	-0.060	0.330	-1.220	1.220	-0.040	0.410

Table A. 59: Matched Droplet Info

A.1.3.2 All Droplets for .LA Image

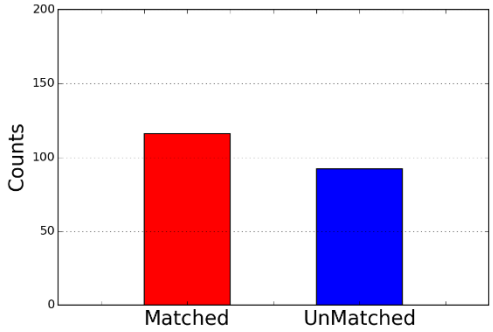


Figure A. 541: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

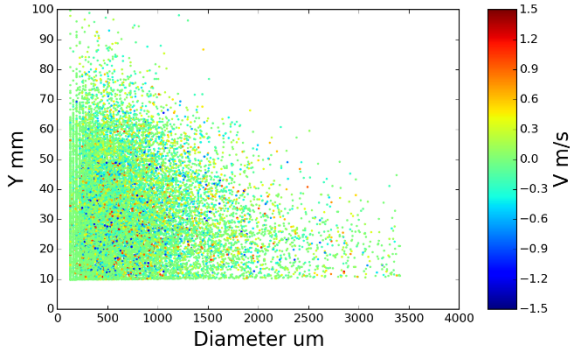


Figure A. 544: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

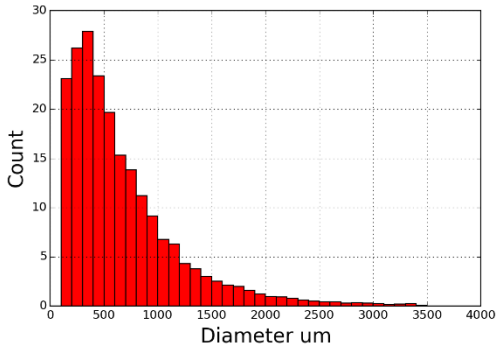


Figure A. 542: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

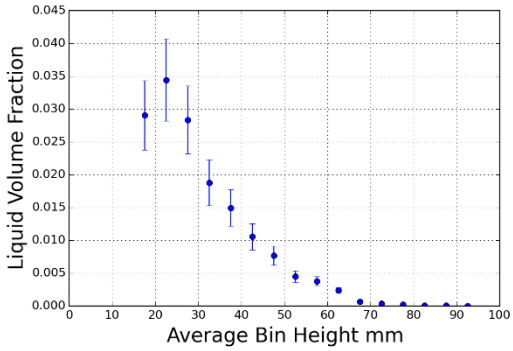


Figure A. 545: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

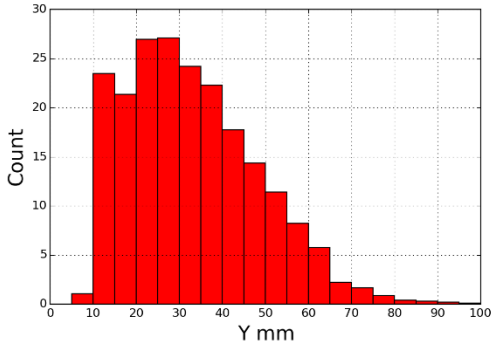


Figure A. 543: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 All Droplets for .LB Image

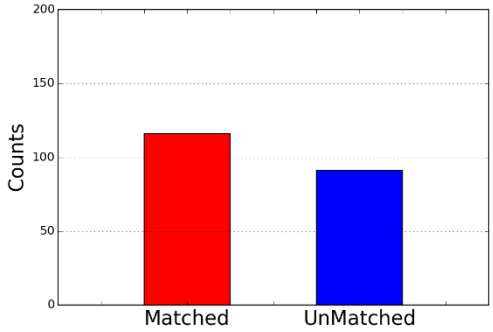


Figure A. 546: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

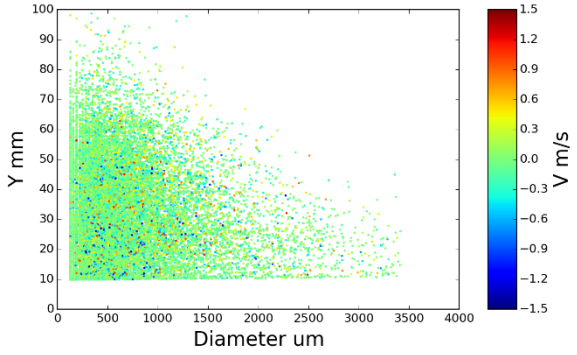


Figure A. 549: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

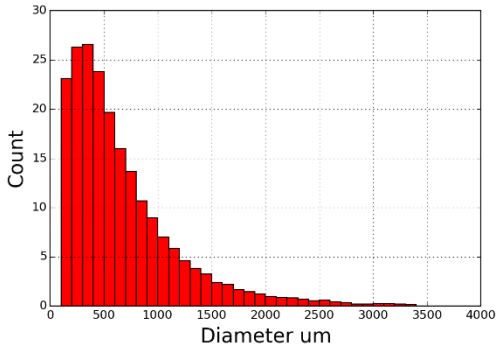


Figure A. 547: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

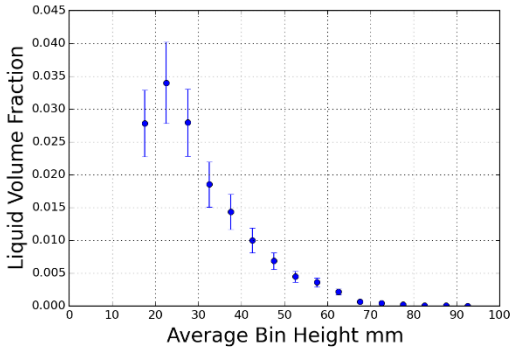


Figure A. 550: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

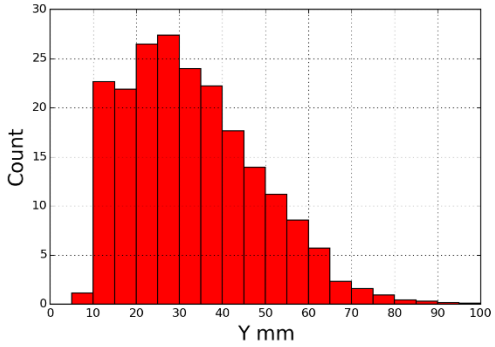


Figure A. 548: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 Matched Only Droplets for .LA Image

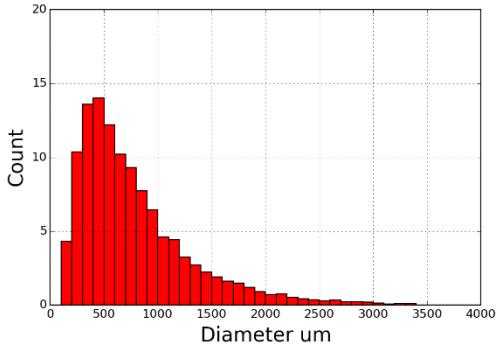


Figure A. 551: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

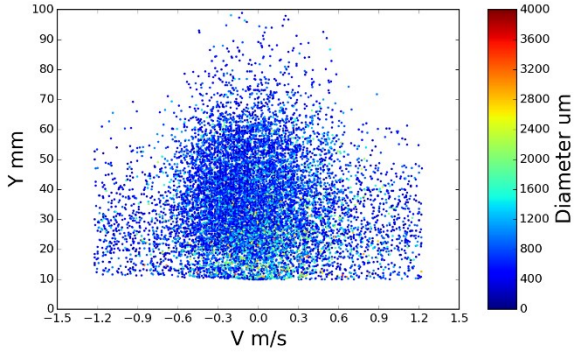


Figure A. 554: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

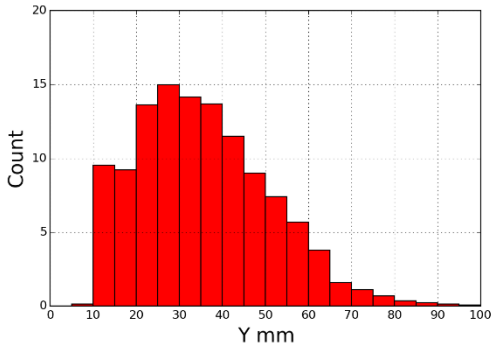


Figure A. 552: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

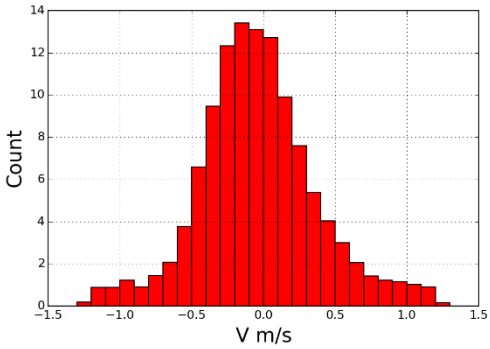


Figure A. 555: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

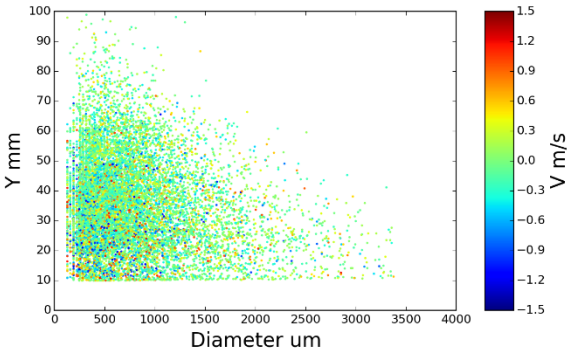


Figure A. 553: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 Matched Only Droplets for .LB Image

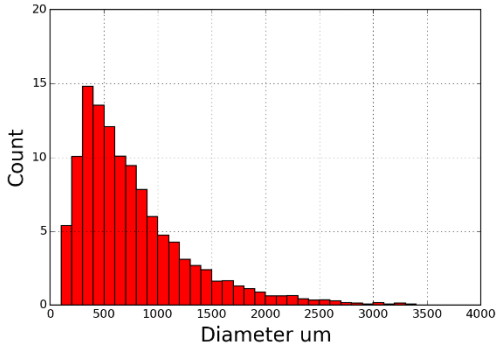


Figure A. 556: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

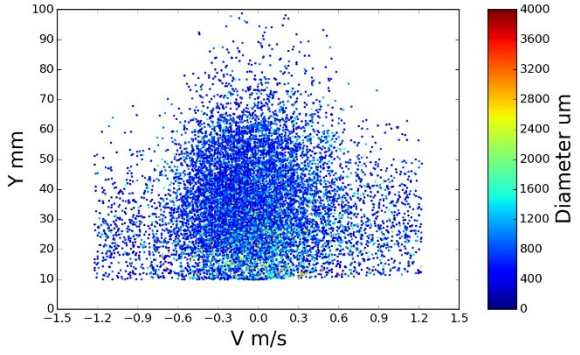


Figure A. 559: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

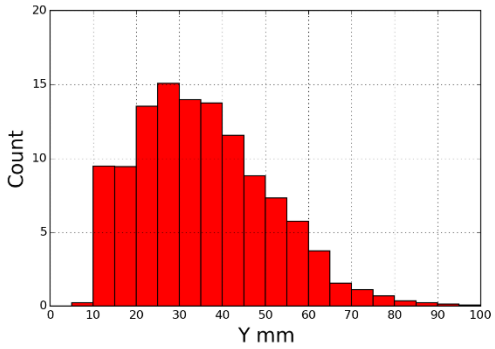


Figure A. 557: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

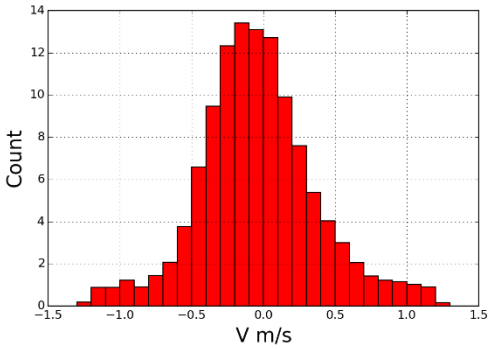


Figure A. 560: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

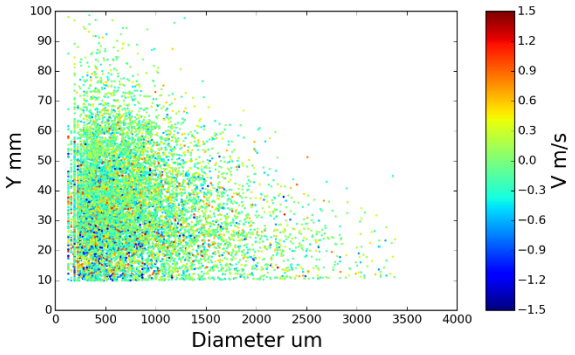


Figure A. 558: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	43.71	43.69	128.4	3398	767.0	642.4	128.4	3414	775.1	655.3
20-40mm	91.25	90.93	128.4	3414	681.0	533.7	128.4	3385	678.7	535.6
40-60mm	48.49	48.26	128.4	3326	575.5	399.1	128.4	3368	578.4	404.7
60-80mm	10.21	10.22	128.4	2867	558.0	375.6	128.4	3336	562.6	373.9
80-100mm	1.68	1.62	128.4	1312	467.5	234.0	128.4	1297	475.3	236.3
All	195.34	194.73	128.4	3414	665.8	527.4	128.4	3414	667.7	533.1
			Height A (mm)				Height B (mm)			
Highest Particle			99.6166				99.7547			
Lowest Particle			9.9041				9.9041			

Table A. 60: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	17.19	128.4	3382	982.1	709.2	128.4	3342	950.2	697.0	-1.220	1.220	-0.040	0.440	-1.210	1.220	-0.010	0.490
20-40mm	51.27	128.4	3404	795.8	557.8	128.4	3372	777.5	543.8	-1.220	1.220	-0.050	0.340	-1.220	1.220	-0.020	0.430
40-60mm	31.21	128.4	3326	670.5	409.0	128.4	3282	663.2	405.9	-1.220	1.220	-0.050	0.240	-1.220	1.220	-0.000	0.360
60-80mm	6.91	128.4	2867	654.7	384.4	128.4	3336	646.8	386.1	-1.130	0.750	-0.050	0.170	-0.740	1.020	-0.020	0.280
80-100mm	1.03	143.6	1312	553.4	226.5	128.4	1297	550.4	221.9	-0.540	0.900	-0.020	0.160	-0.920	0.810	-0.010	0.290
All	107.61	128.4	3404	777.8	546.6	128.4	3372	761.8	535.4	-1.220	1.220	-0.050	0.330	-1.220	1.220	-0.010	0.410

Table A. 61: Matched Droplet Info

A.1.3.2 All Droplets for .LA Image

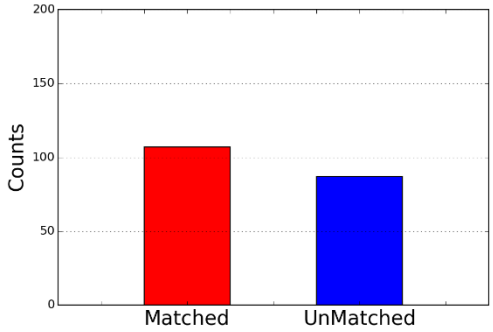


Figure A. 561: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

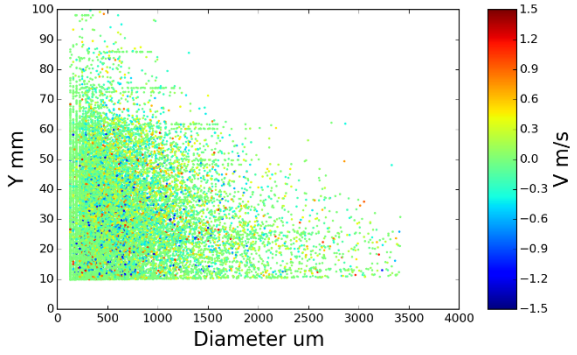


Figure A. 564: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

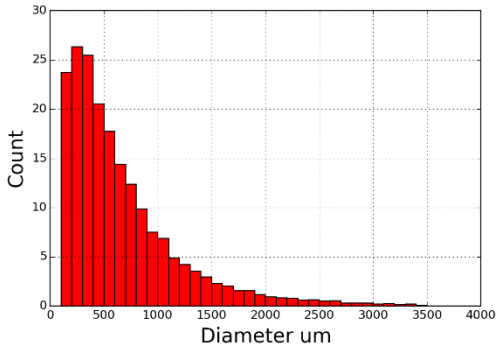


Figure A. 562: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

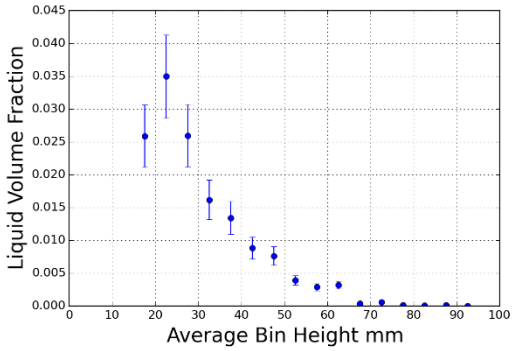


Figure A. 565: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

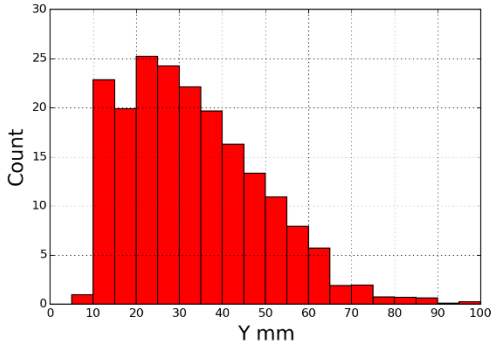


Figure A. 563: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 All Droplets for .LB Image

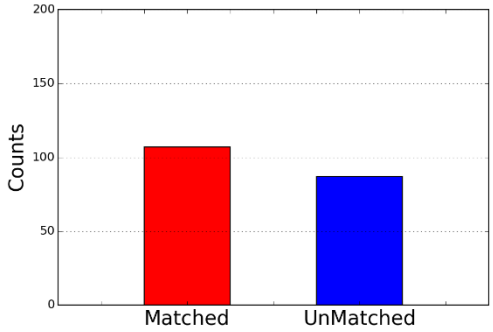


Figure A. 566: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

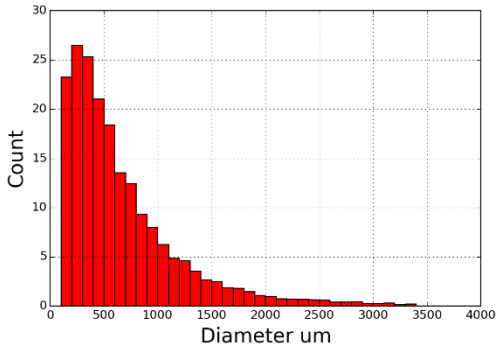


Figure A. 567: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

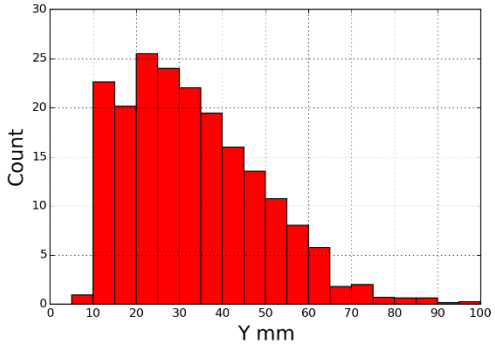


Figure A. 568: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

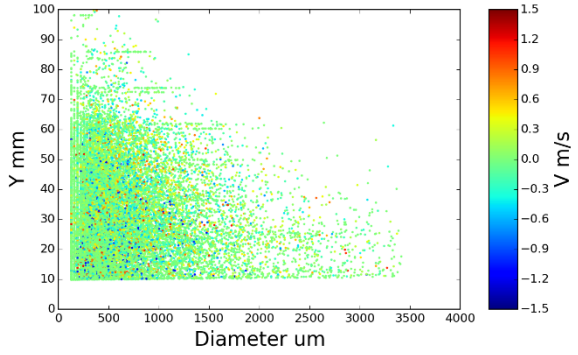


Figure A. 569: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

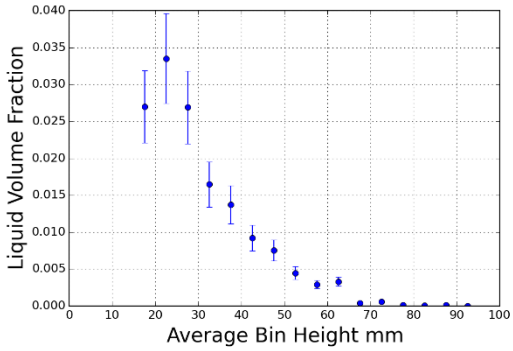


Figure A. 570: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 Matched Only Droplets for .LA Image

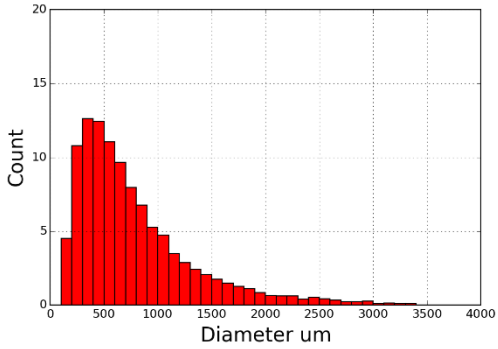


Figure A. 571: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

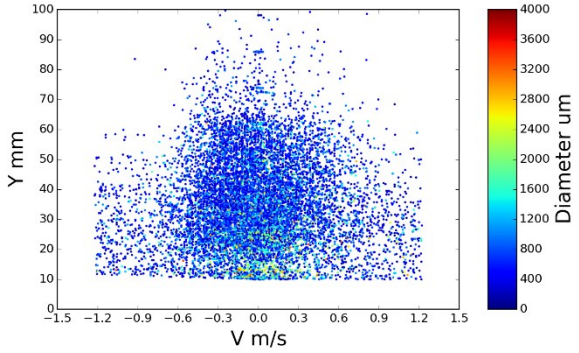


Figure A. 574: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

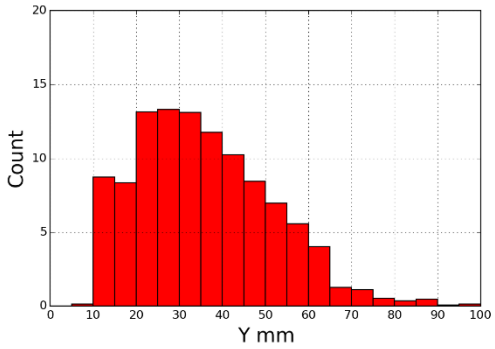


Figure A. 572: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

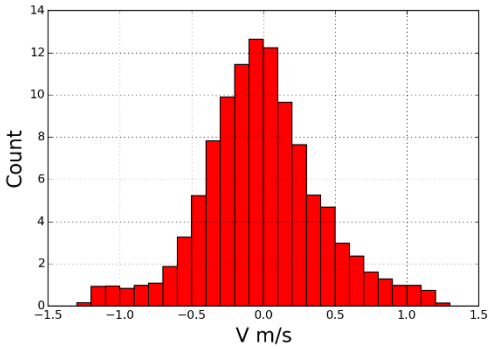


Figure A. 575: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

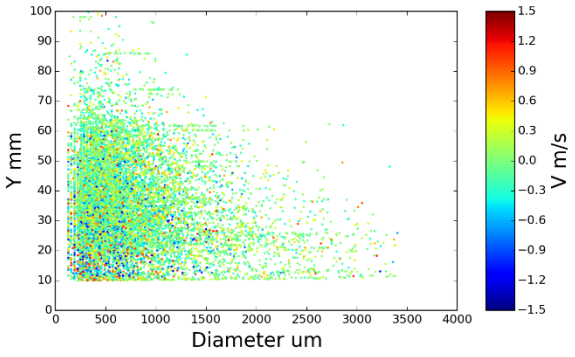


Figure A. 573: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 Matched Only Droplets for .LB Image

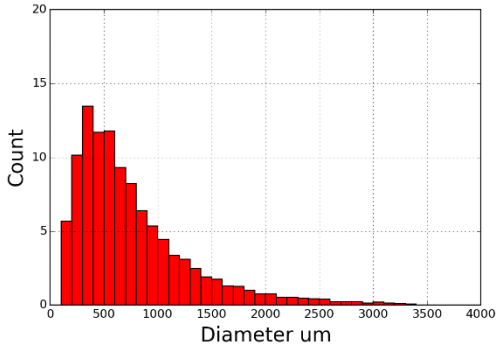


Figure A. 576: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

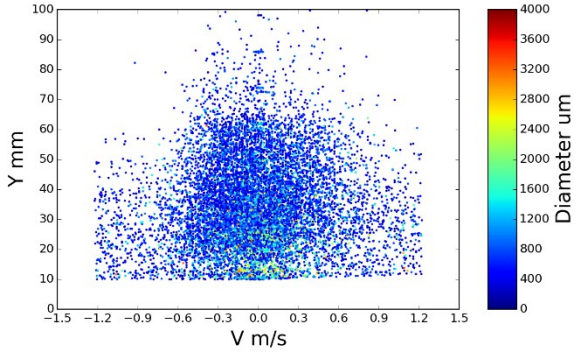


Figure A. 579: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

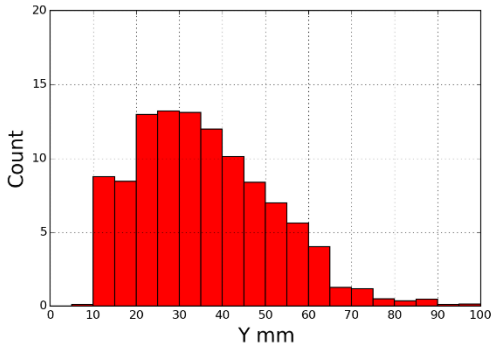


Figure A. 577: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

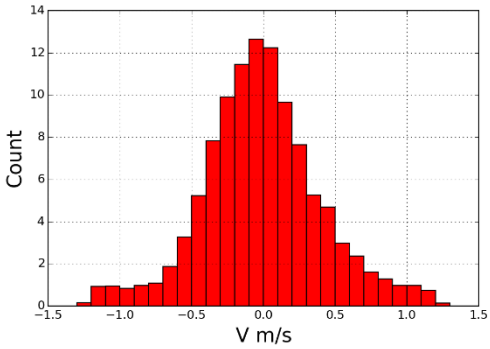


Figure A. 580: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

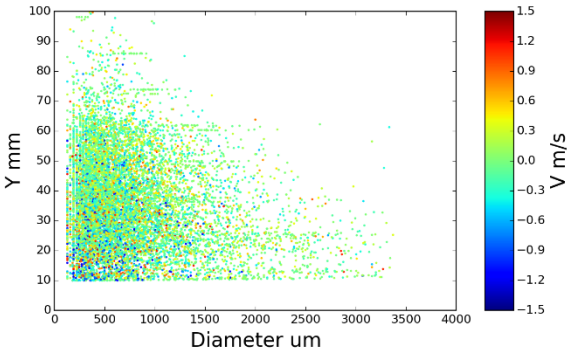


Figure A. 578: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	40.9	40.99	128.4	3400	743.9	635.7	128.4	3372	737.4	631.2
20-40mm	79.02	78.6	128.4	3402	660.7	530.0	128.4	3353	658.6	530.3
40-60mm	40.07	40.2	128.4	2948	556.0	397.7	128.4	3200	554.3	398.2
60-80mm	9.3	9.44	128.4	2606	605.0	438.7	128.4	2591	601.3	437.8
80-100mm	2.63	2.68	128.4	1436	631.3	332.2	128.4	1469	635.4	336.0
All	171.92	171.91	128.4	3402	652.6	527.7	128.4	3372	649.5	526.4
			Height A (mm)				Height B (mm)			
Highest Particle			99.2969				99.7173			
Lowest Particle			9.9041				9.9041			

Table A. 62: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	16.03	128.4	3400	958.7	699.1	128.4	3338	934.0	700.5	-1.220	1.220	-0.050	0.450	-1.220	1.220	0.030	0.490
20-40mm	43.07	128.4	3402	789.5	560.4	128.4	3353	776.0	555.3	-1.220	1.220	-0.050	0.350	-1.220	1.220	0.010	0.430
40-60mm	25.81	128.4	2847	656.4	413.4	128.4	3150	646.8	409.7	-1.210	1.210	-0.060	0.240	-1.200	1.200	0.030	0.360
60-80mm	5.86	128.4	2606	725.1	462.6	128.4	2591	716.4	455.2	-1.170	1.000	-0.060	0.170	-0.980	1.180	0.030	0.280
80-100mm	1.42	128.4	1436	776.5	321.7	128.4	1385	747.3	308.4	-0.460	0.650	-0.020	0.100	-0.650	1.070	0.000	0.210
All	92.19	128.4	3402	777.4	552.1	128.4	3353	762.8	547.5	-1.220	1.220	-0.050	0.330	-1.220	1.220	0.020	0.410

Table A. 63: Matched Droplet Info

A.1.3.2 All Droplets for .LA Image

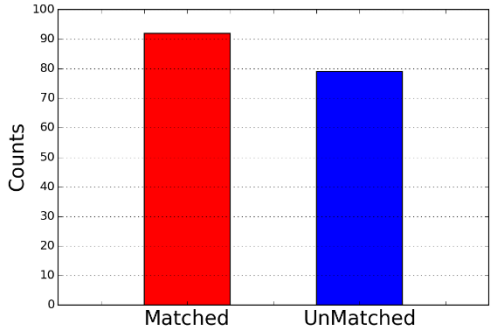


Figure A. 581: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

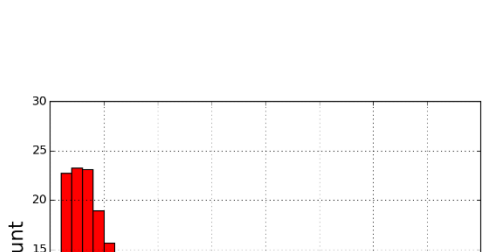


Figure A. 582: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

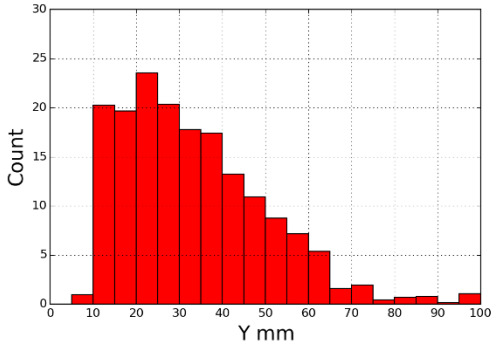


Figure A. 583: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

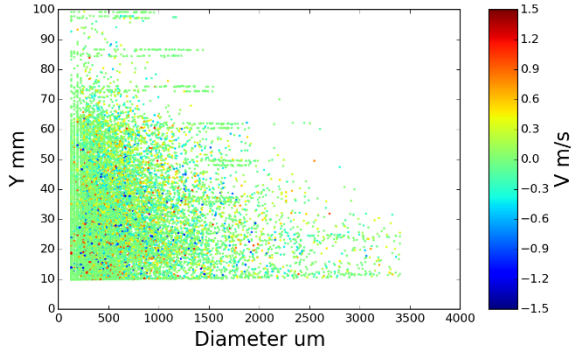


Figure A. 584: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

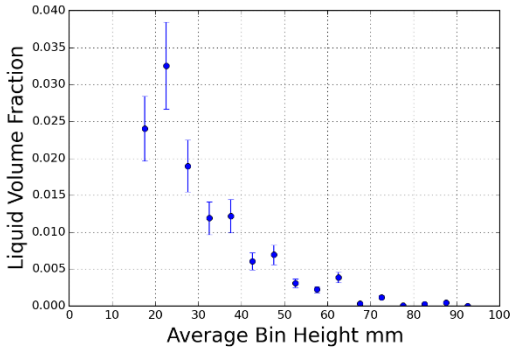


Figure A. 585: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 All Droplets for .LB Image

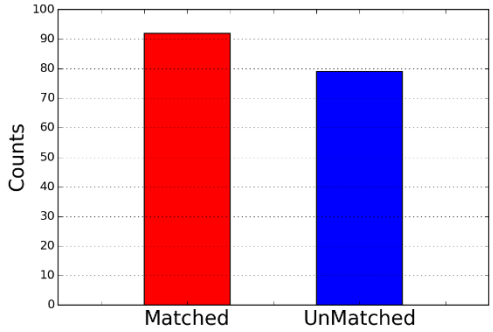


Figure A. 586: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

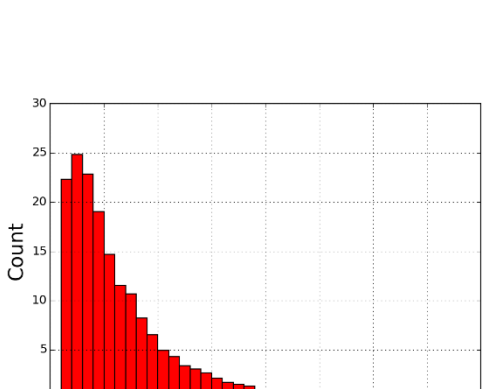


Figure A. 587: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

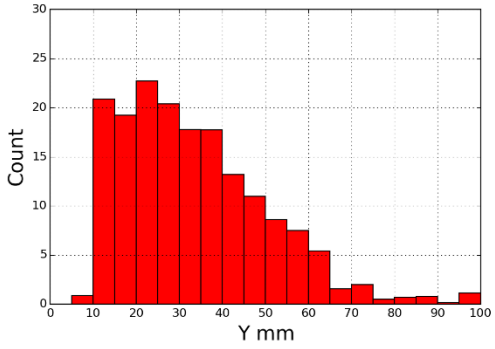


Figure A. 588: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

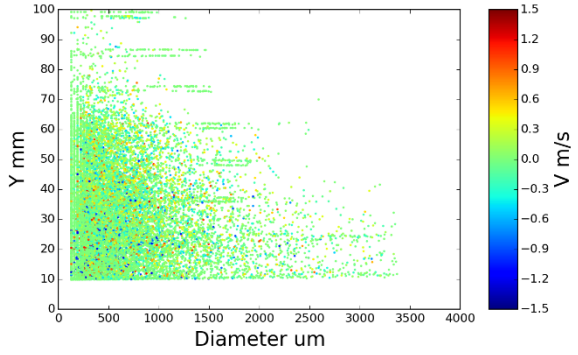


Figure A. 589: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

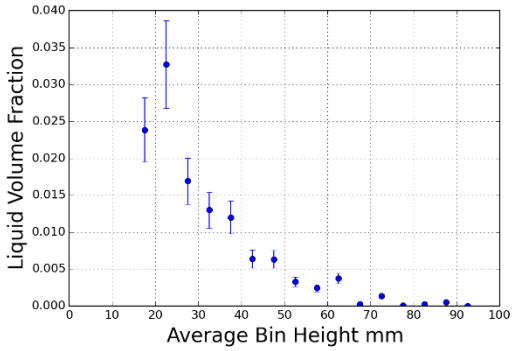


Figure A. 590: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 Matched Only Droplets for .LA Image

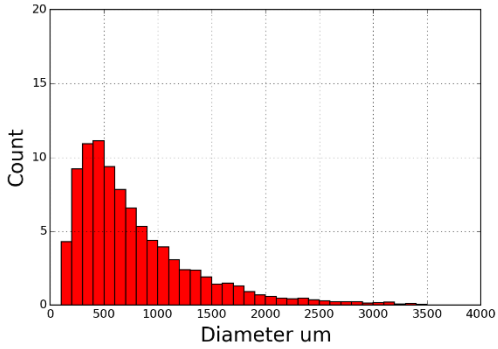


Figure A. 591: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

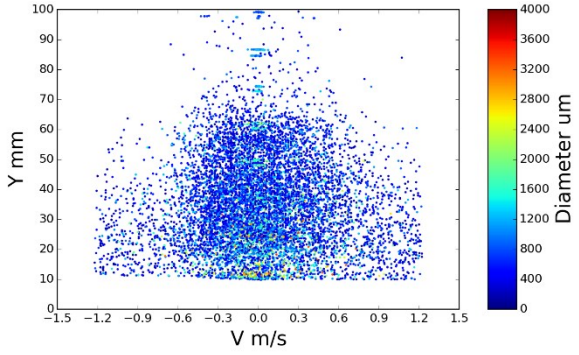


Figure A. 594: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

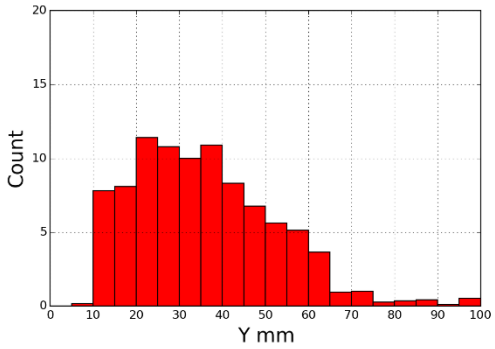


Figure A. 592: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

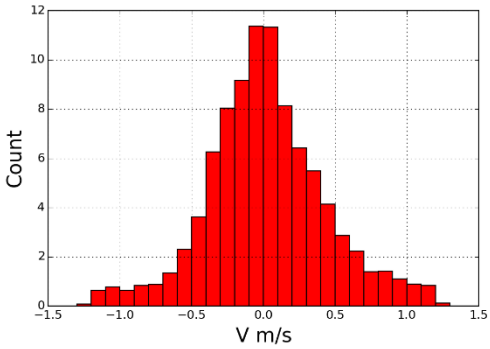


Figure A. 595: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

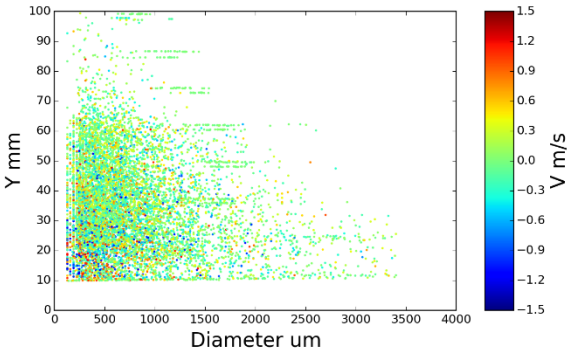


Figure A. 593: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.3.2 Matched Only Droplets for .LB Image

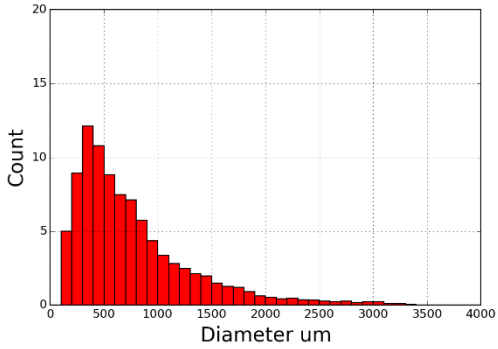


Figure A. 596: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

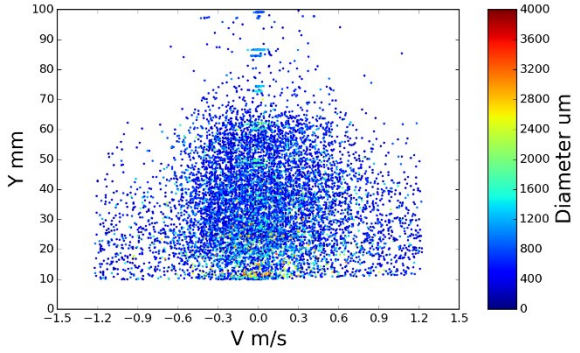


Figure A. 599: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

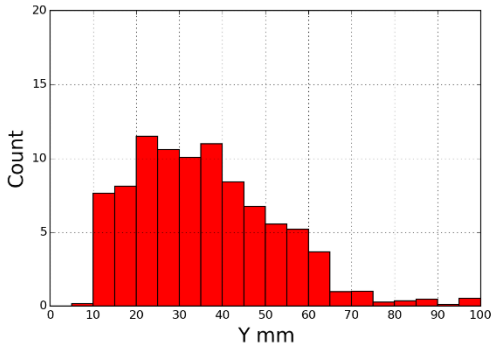


Figure A. 597: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

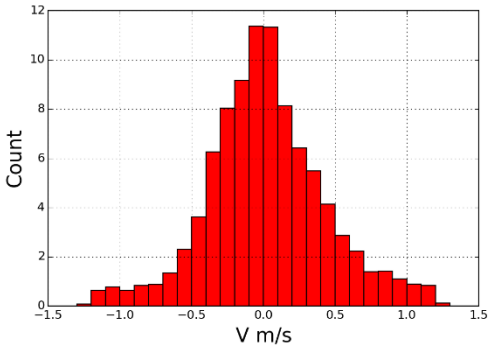


Figure A. 600: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

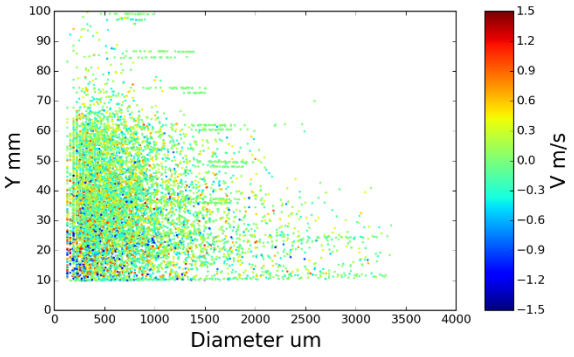


Figure A. 598: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4 Liquid Level 4

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	16220 / 2.044
Ref Mass Flow (lb/hr) / (kg/s)	1655 / 0.209
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15373 / 20.849
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4923 / 15.53
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	40.0 / 4.42
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.1 / 4.52
Total Bundle Q (Btu/hr) / (kW)	111525 / 32.68
Total Bundle & Preboiler Q (Btu/hr) / (kW)	145834 / 42.74
Top Two Rows HTC Ratio	1.055
Bundle Inlet Quality	0.18
Bundle Exit Quality	0.99

Table A. 64: Thermal Conditions

A.1.4.1 Lens 100mm Mag 0_29x

A.1.4.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	36.06	38.06	56.9	2664	332.4	340.0	56.9	2866	322.7	335.4
40-60mm	30.86	32.07	56.9	2733	249.6	269.6	56.9	2007	240.7	259.1
60-80mm	6.42	6.6	56.9	1348	183.2	197.5	56.9	1357	179.2	193.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	73.34	76.73	56.9	2733	284.5	305.6	56.9	2866	276.1	299.2
			Height A (mm)				Height B (mm)			
Highest Particle			75.7278				75.7783			
Lowest Particle			27.8388				27.8287			

Table A. 65: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	25.36	56.9	2664	400.0	360.9	56.9	2866	397.8	361.0	-1.250	1.260	-0.040	0.180	-1.250	1.260	0.060	0.310
40-60mm	20.78	56.9	1907	304.5	289.2	56.9	2007	300.6	286.2	-1.240	1.180	-0.040	0.160	-1.190	1.240	0.010	0.240
60-80mm	4.11	56.9	1348	230.2	227.3	56.9	1357	228.1	226.8	-0.410	0.540	-0.030	0.100	-0.900	0.670	-0.010	0.170
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	50.25	56.9	2664	346.6	328.4	56.9	2866	343.8	327.4	-1.250	1.260	-0.040	0.170	-1.250	1.260	0.030	0.270

Table A. 66: Matched Droplet Info

A.1.4.1 All Droplets for .LA Image

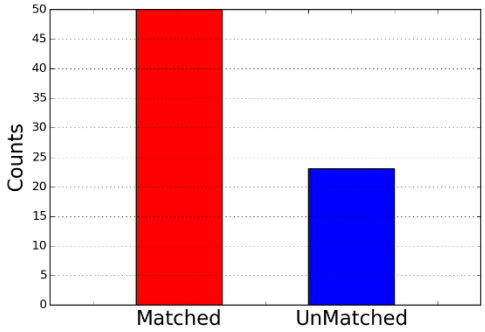


Figure A. 601: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

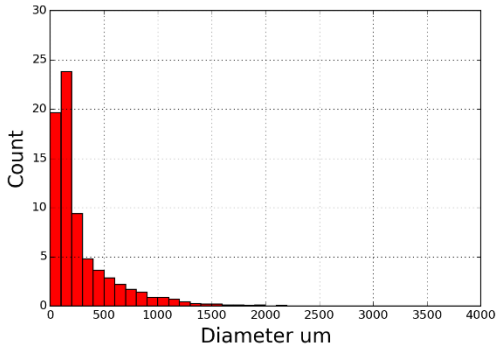


Figure A. 602: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

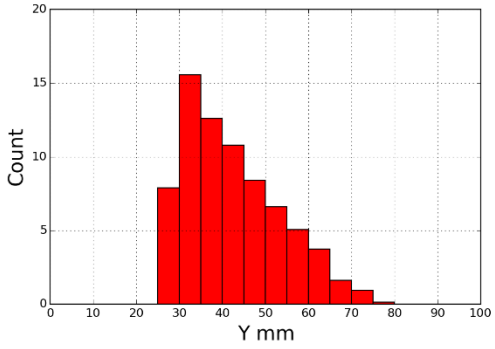


Figure A. 603: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

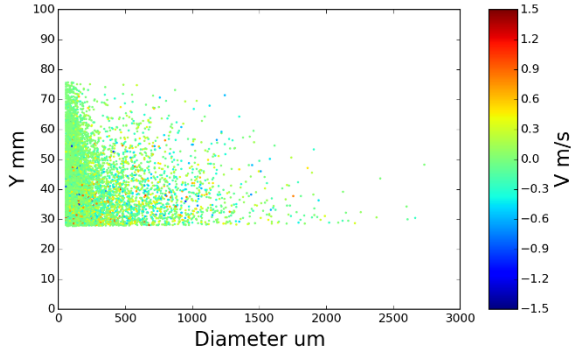


Figure A. 604: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

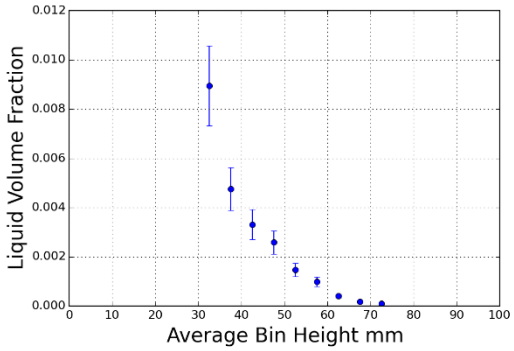


Figure A. 605: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 All Droplets for .LB Image

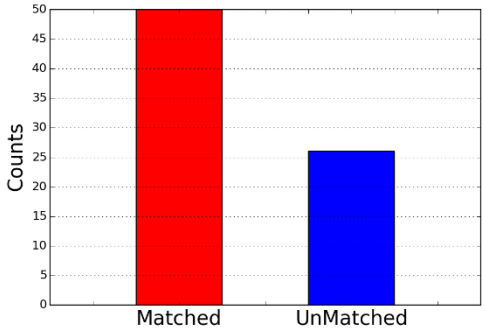


Figure A. 606: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

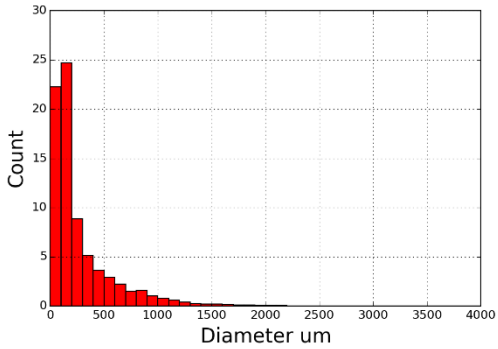


Figure A. 607: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

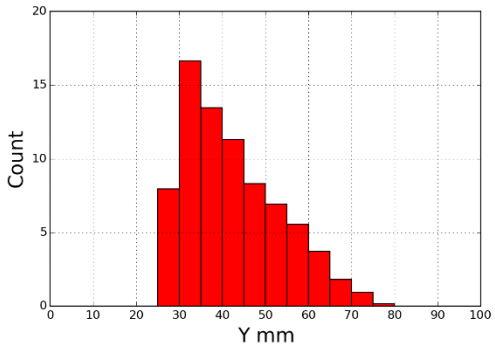


Figure A. 608: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

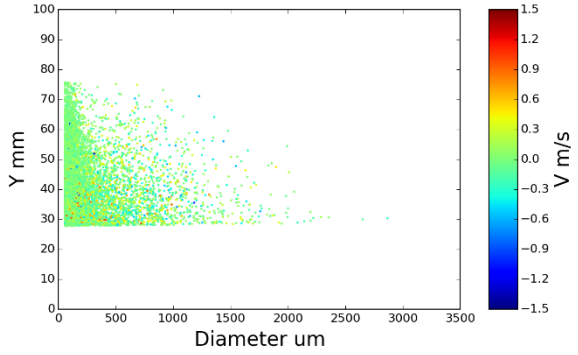


Figure A. 609: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

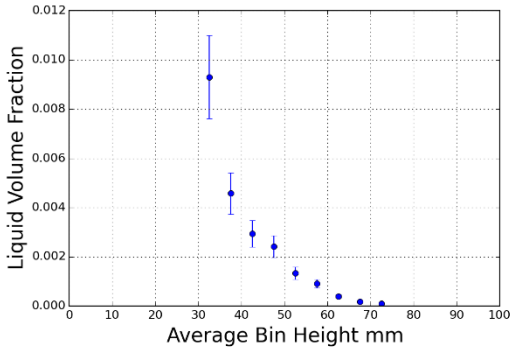


Figure A. 610: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 Matched Only Droplets for .LA Image

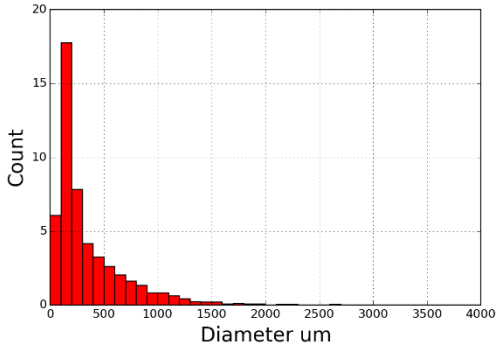


Figure A. 611: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

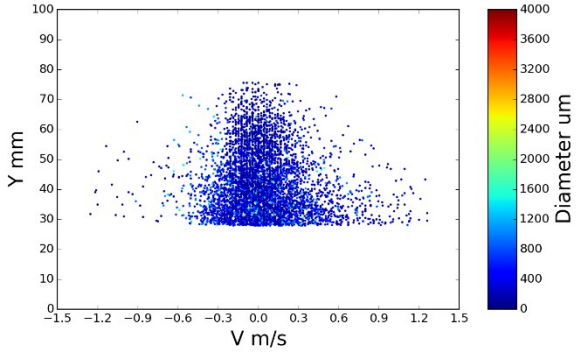


Figure A. 614: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

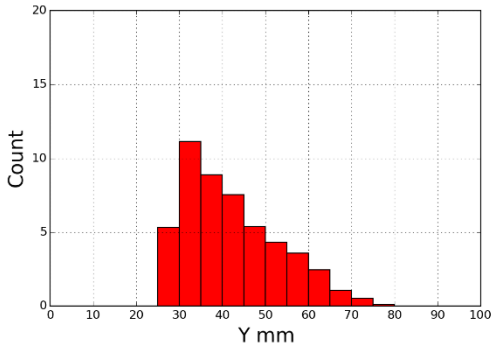


Figure A. 612: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

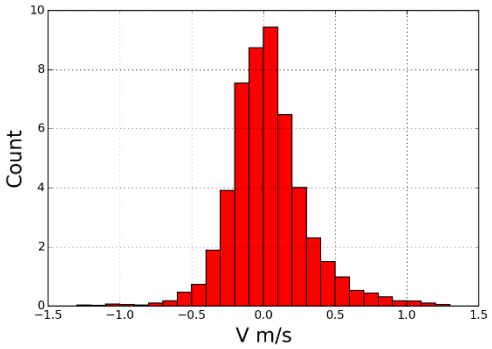


Figure A. 615: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

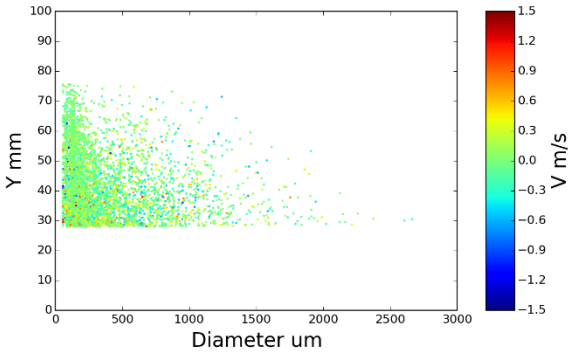


Figure A. 613: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 Matched Only Droplets for .LB Image

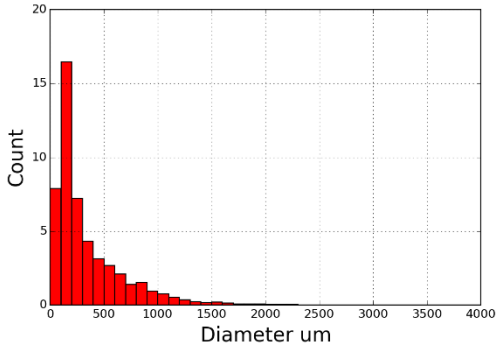


Figure A. 616: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

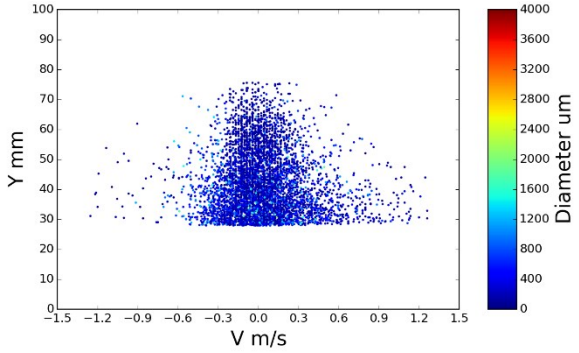


Figure A. 619: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

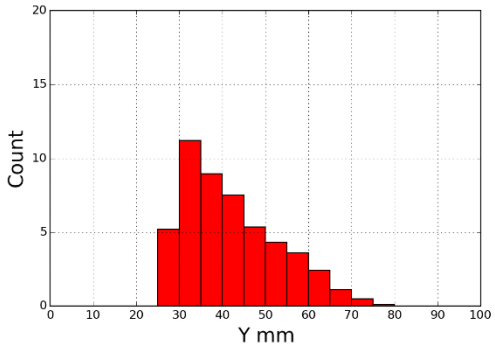


Figure A. 617: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

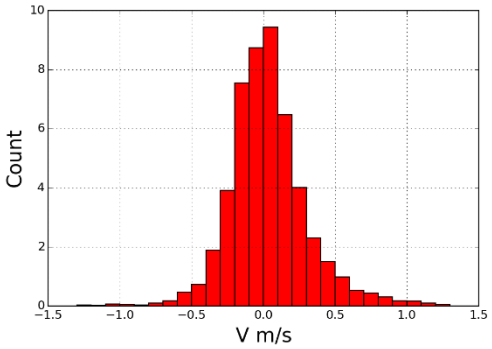


Figure A. 620: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

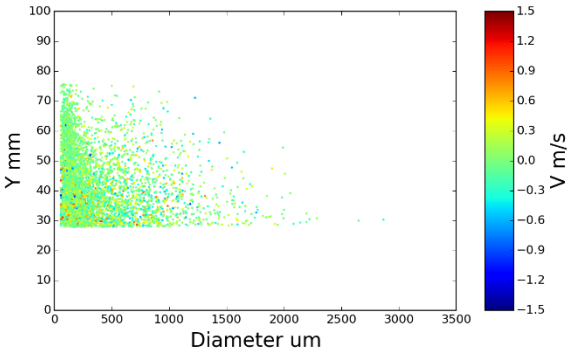


Figure A. 618: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	49.58	52.68	56.9	2996	390.5	402.1	56.9	2927	371.5	386.4
40-60mm	42.37	45.48	56.9	2992	304.5	330.0	56.9	2613	292.7	322.6
60-80mm	8.32	8.82	56.9	1793	203.1	242.0	56.9	1650	197.3	237.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	100.27	106.99	56.9	2996	338.6	366.3	56.9	2927	323.6	353.9
			Height A (mm)				Height B (mm)			
Highest Particle			75.7152				75.7783			
Lowest Particle			27.8287				27.8287			

Table A. 67: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	33.08	56.9	2996	477.9	423.3	56.9	2927	472.8	416.6	-1.260	1.240	-0.030	0.210	-1.260	1.250	-0.030	0.310
40-60mm	27.67	56.9	2442	388.0	358.7	56.9	2556	388.5	361.7	-1.240	1.250	-0.030	0.190	-1.260	1.240	-0.040	0.270
60-80mm	5.2	56.9	1793	263.2	282.8	56.9	1650	259.9	283.5	-1.140	0.800	-0.040	0.140	-1.140	1.030	-0.090	0.210
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	65.95	56.9	2996	423.3	392.7	56.9	2927	420.9	390.1	-1.260	1.250	-0.030	0.200	-1.260	1.250	-0.030	0.290

Table A. 68: Matched Droplet Info

A.1.4.1 All Droplets for .LA Image

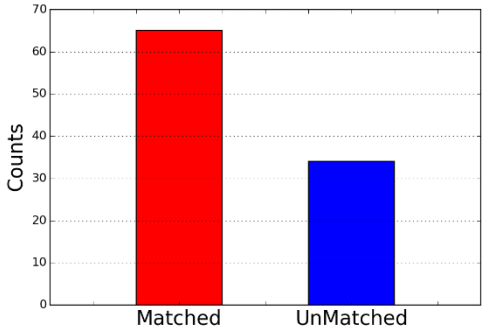


Figure A. 621: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

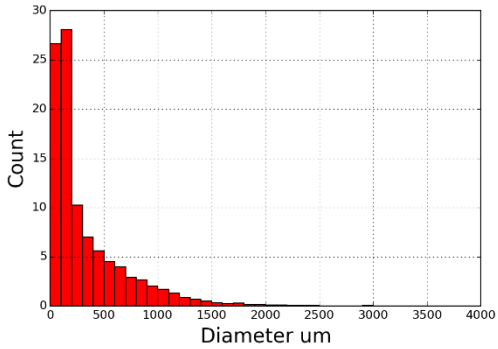


Figure A. 622: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

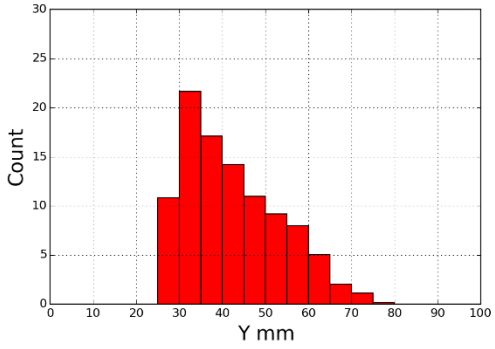


Figure A. 623: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

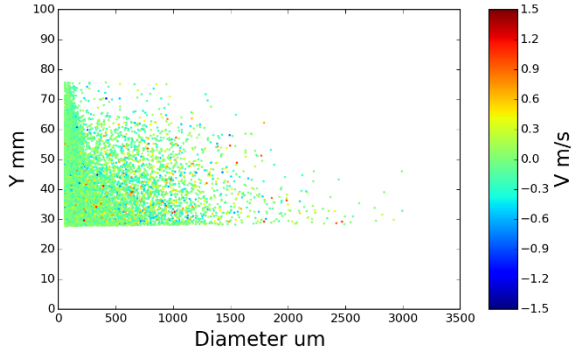


Figure A. 624: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

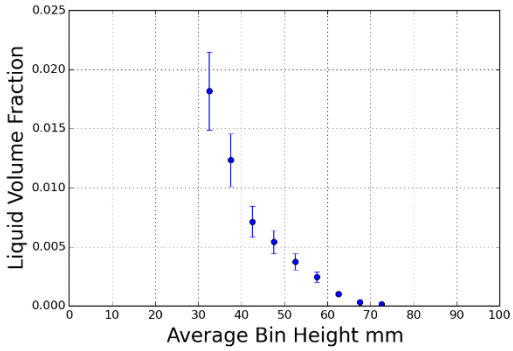


Figure A. 625: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 All Droplets for .LB Image

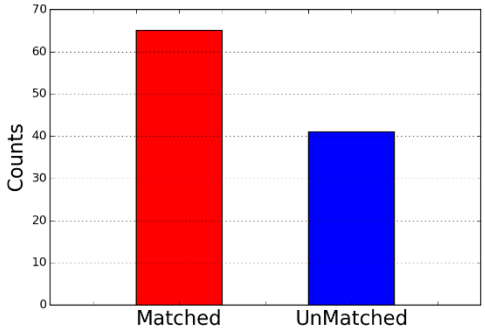


Figure A. 626: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

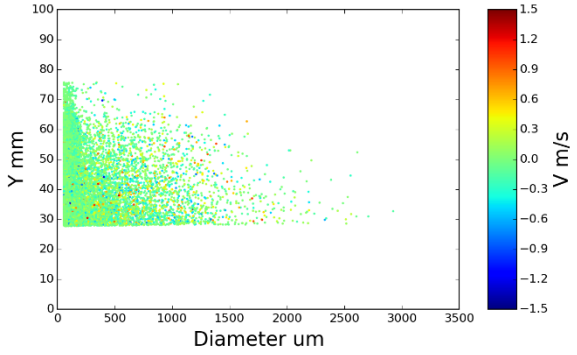


Figure A. 629: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

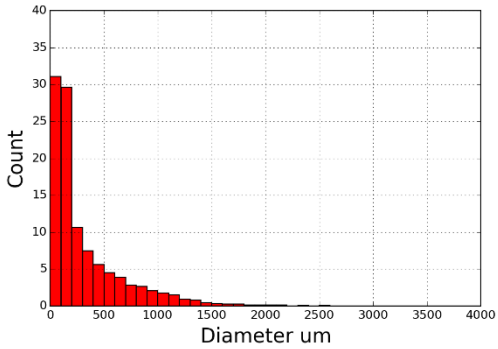


Figure A. 627: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

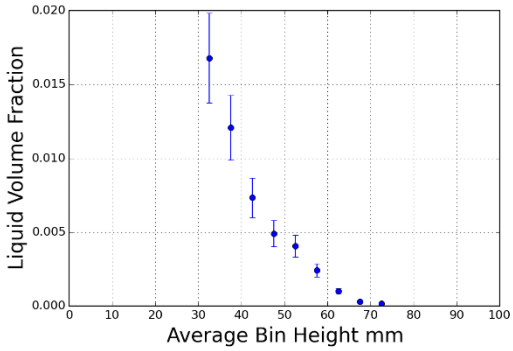


Figure A. 630: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

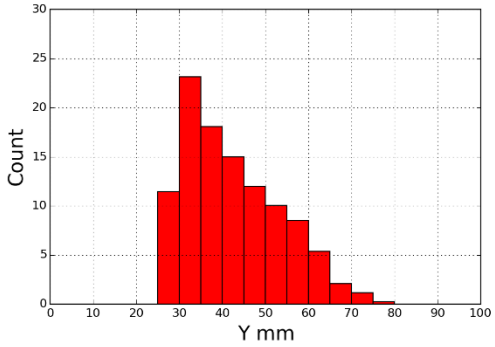


Figure A. 628: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 Matched Only Droplets for .LA Image

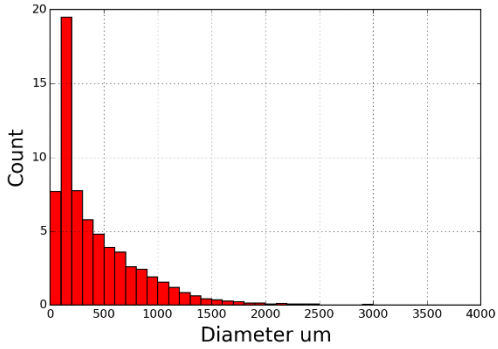


Figure A. 631: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

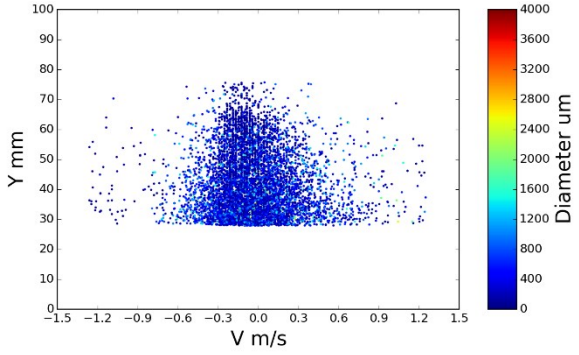


Figure A. 634: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

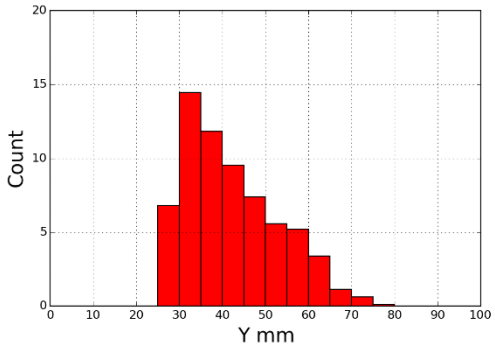


Figure A. 632: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

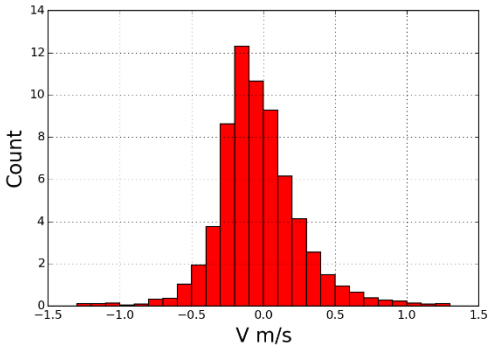


Figure A. 635: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

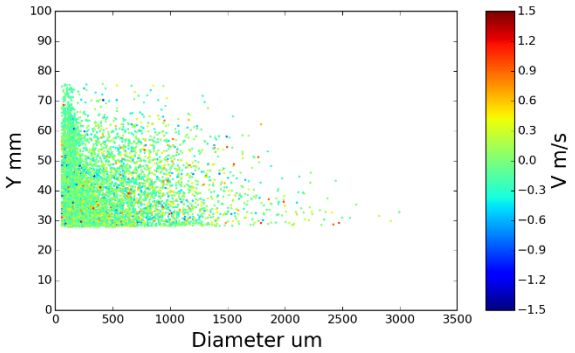


Figure A. 633: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 Matched Only Droplets for .LB Image

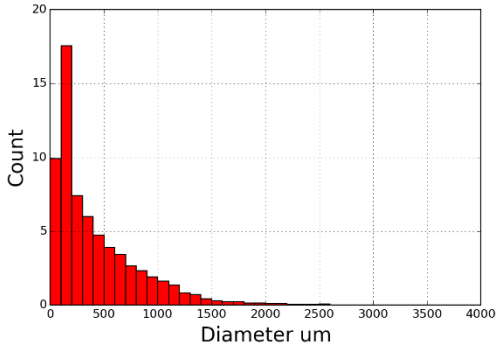


Figure A. 636: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

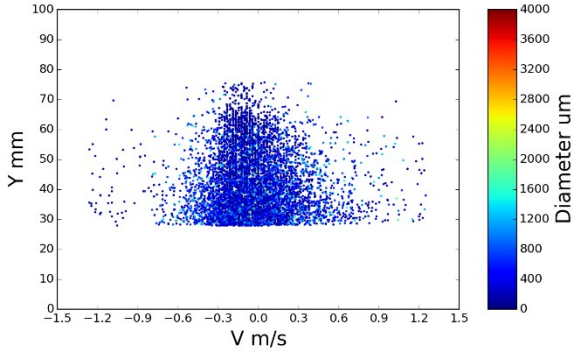


Figure A. 639: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

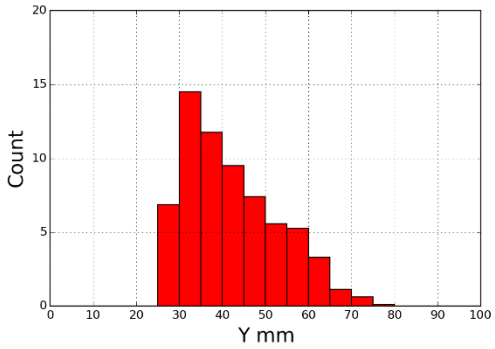


Figure A. 637: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

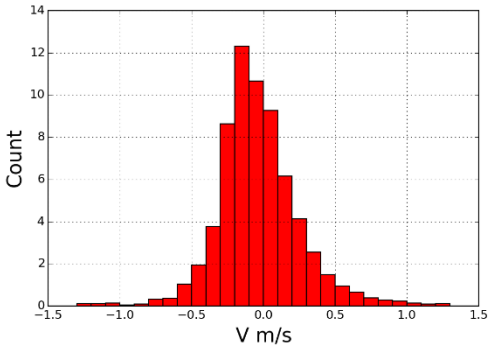


Figure A. 640: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

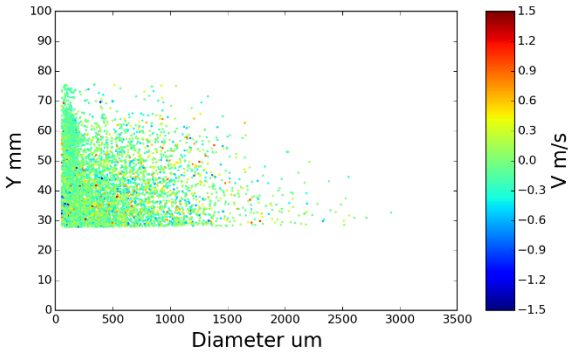


Figure A. 638: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	46.18	49.67	56.9	2940	378.0	378.6	56.9	2750	356.8	372.7
40-60mm	38.75	43.47	56.9	2214	310.0	339.5	56.9	2241	286.9	326.2
60-80mm	8.24	9.43	56.9	2589	206.8	258.5	56.9	2649	192.7	243.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	93.18	102.58	56.9	2940	334.6	357.1	56.9	2750	312.1	346.9
			Height A (mm)				Height B (mm)			
Highest Particle			75.7182				75.7675			
Lowest Particle			27.8413				27.8287			

Table A. 69: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	29.14	56.9	2514	477.0	399.3	56.9	2482	471.8	395.3	-1.260	1.220	-0.030	0.210	-1.260	1.260	-0.030	0.320
40-60mm	24.54	56.9	2214	401.5	372.8	56.9	2241	398.0	372.2	-1.260	1.260	-0.050	0.190	-1.220	1.260	-0.060	0.280
60-80mm	4.59	56.9	2589	278.6	316.0	56.9	2649	275.3	313.7	-1.110	1.100	-0.070	0.150	-1.130	1.250	-0.060	0.240
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	58.27	56.9	2589	429.6	386.5	56.9	2649	425.3	383.9	-1.260	1.260	-0.040	0.200	-1.260	1.260	-0.040	0.300

Table A. 70: Matched Droplet Info

A.1.4.1 All Droplets for .LA Image

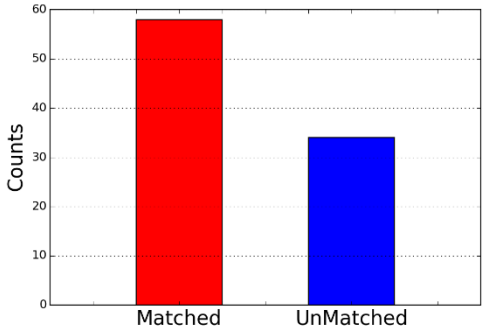


Figure A. 641: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

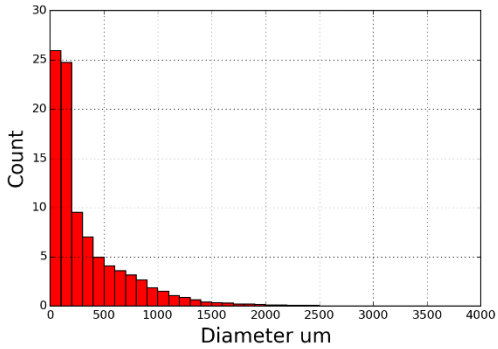


Figure A. 642: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

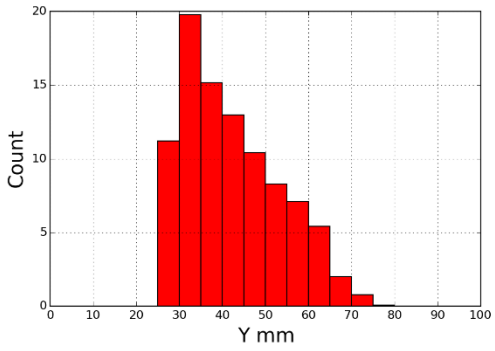


Figure A. 643: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

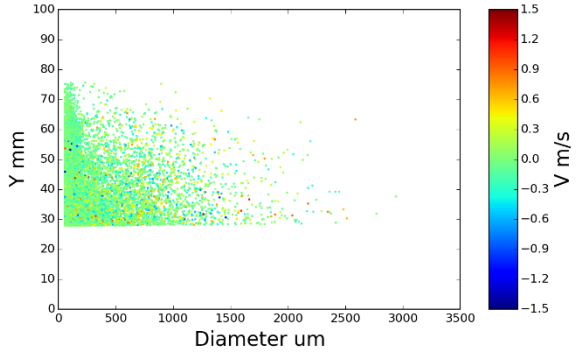


Figure A. 644: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

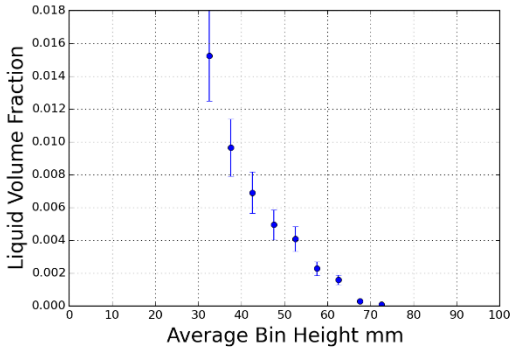


Figure A. 645: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 All Droplets for .LB Image

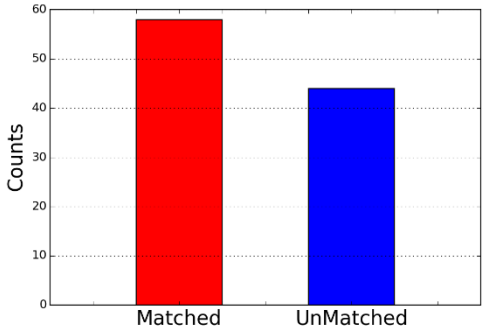


Figure A. 646: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

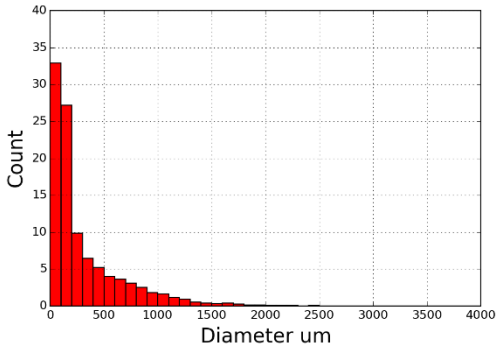


Figure A. 647: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

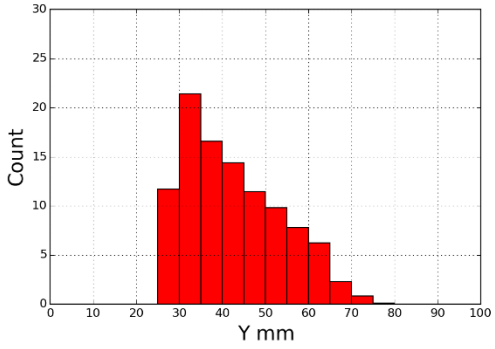


Figure A. 648: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

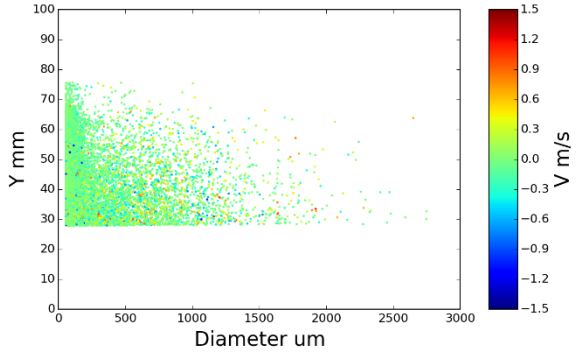


Figure A. 649: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

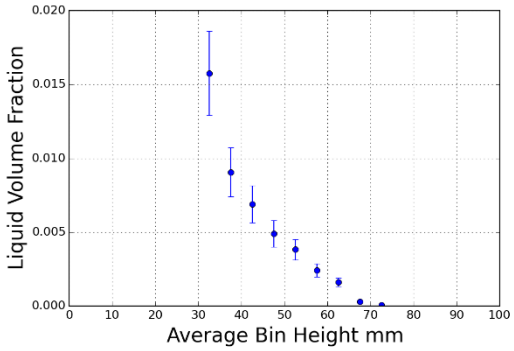


Figure A. 650: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 Matched Only Droplets for .LA Image

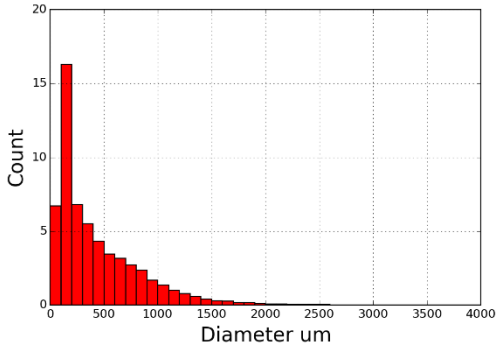


Figure A. 651: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

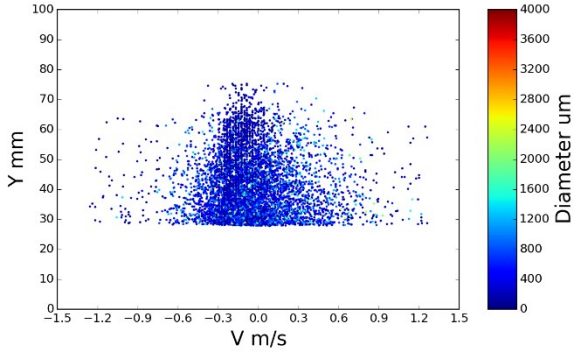


Figure A. 654: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

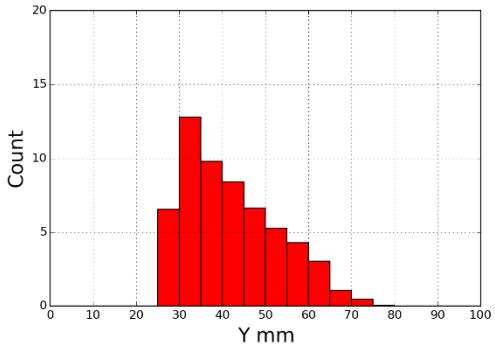


Figure A. 652: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

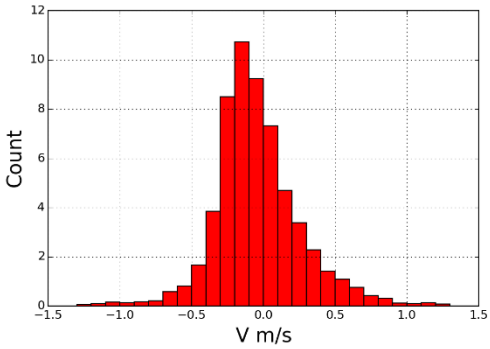


Figure A. 655: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

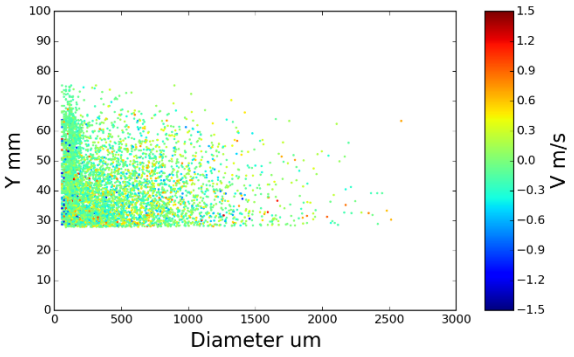


Figure A. 653: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 Matched Only Droplets for .LB Image

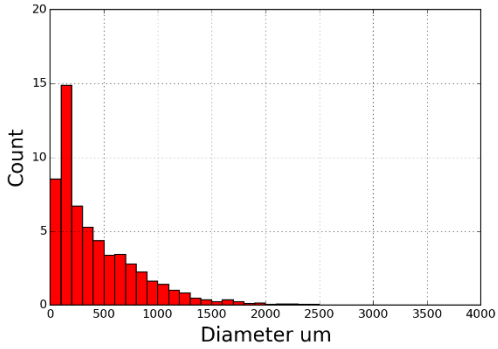


Figure A. 656: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

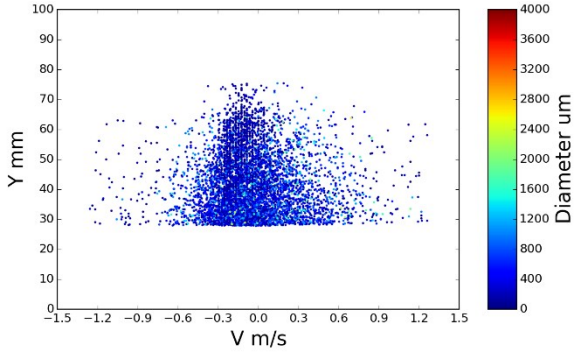


Figure A. 659: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

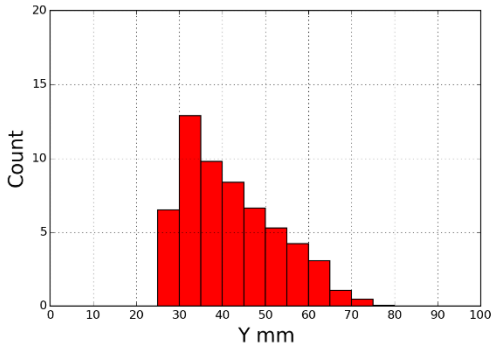


Figure A. 657: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

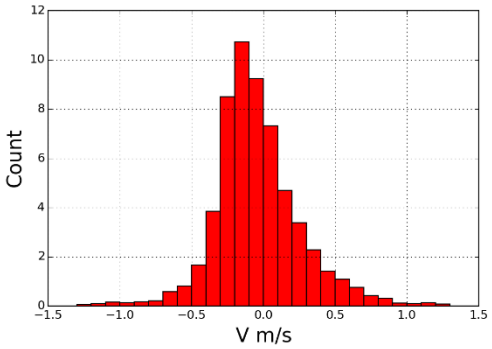


Figure A. 660: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

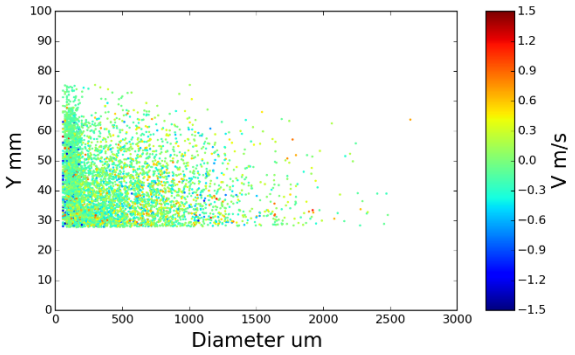


Figure A. 658: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	44.96	47.05	56.9	2893	345.6	345.3	56.9	3002	338.5	351.9
40-60mm	40.91	44.54	56.9	2631	281.8	301.9	56.9	2668	267.6	294.6
60-80mm	9.1	10.52	56.9	1892	190.3	212.2	56.9	1499	179.6	200.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	94.99	102.11	56.9	2893	303.2	319.8	56.9	3002	291.2	318.8
			Height A (mm)				Height B (mm)			
Highest Particle			75.6269				75.7046			
Lowest Particle			27.8287				27.8287			

Table A. 71: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	28.61	56.9	2893	434.5	371.9	56.9	2975	431.8	371.4	-1.260	1.260	-0.060	0.210	-1.260	1.260	-0.020	0.310
40-60mm	26.16	56.9	2631	361.6	336.5	56.9	2668	357.9	333.6	-1.260	1.260	-0.070	0.200	-1.260	1.260	-0.040	0.270
60-80mm	5.23	56.9	1487	241.2	239.1	56.9	1499	241.1	245.2	-1.200	1.140	-0.080	0.180	-1.160	1.210	-0.050	0.230
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	60.0	56.9	2893	385.9	351.4	56.9	2975	383.0	350.3	-1.260	1.260	-0.070	0.200	-1.260	1.260	-0.030	0.290

Table A. 72: Matched Droplet Info

A.1.4.1 All Droplets for .LA Image

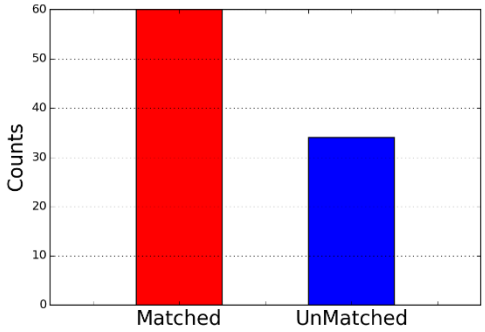


Figure A. 661: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

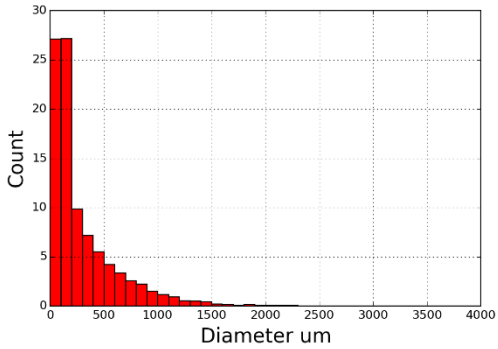


Figure A. 662: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

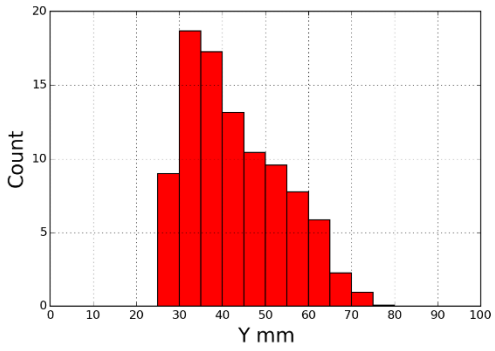


Figure A. 663: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

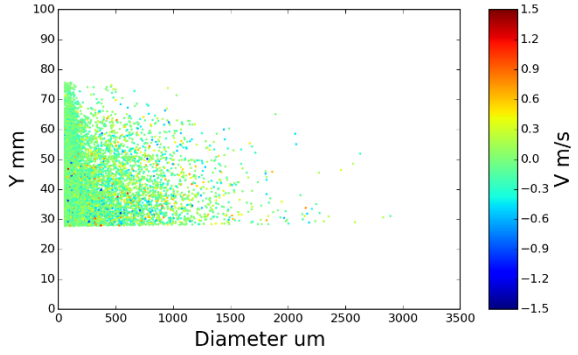


Figure A. 664: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

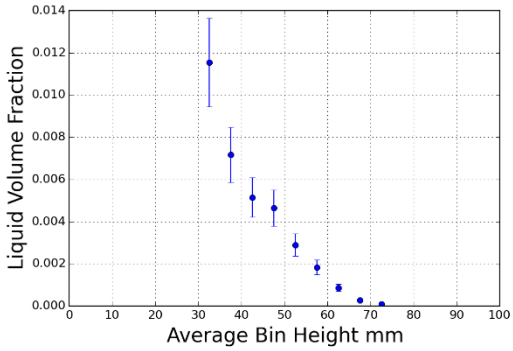


Figure A. 665: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 All Droplets for .LB Image

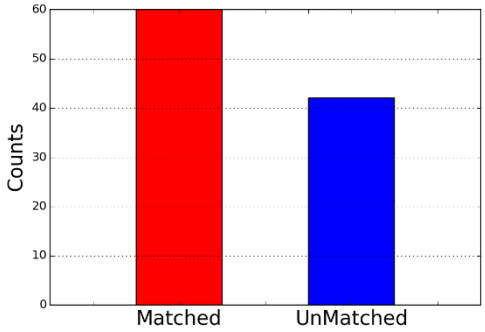


Figure A. 666: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

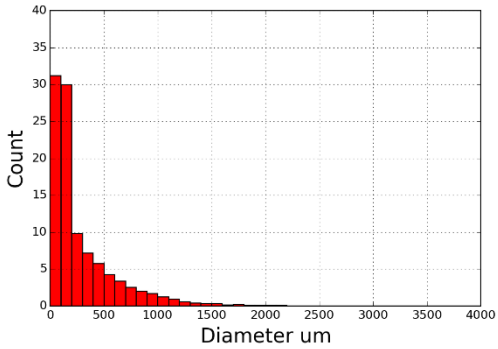


Figure A. 667: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

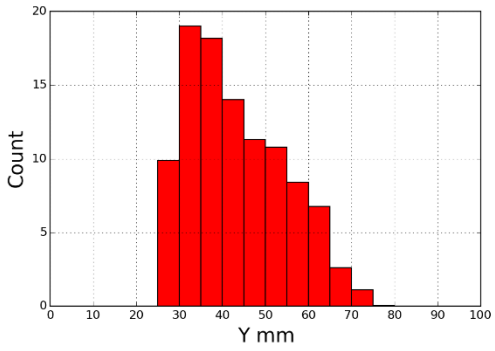


Figure A. 668: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

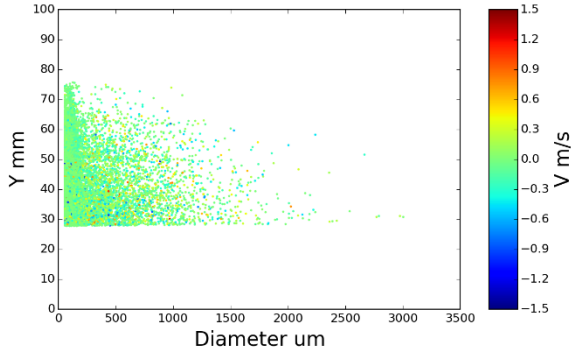


Figure A. 669: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

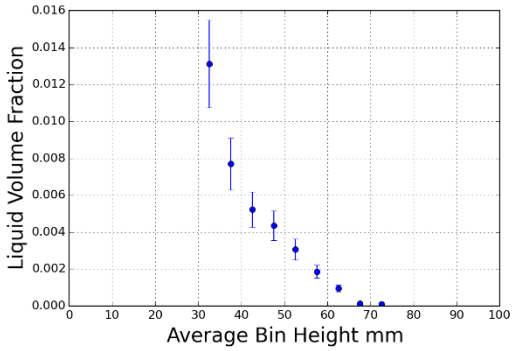


Figure A. 670: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 Matched Only Droplets for .LA Image

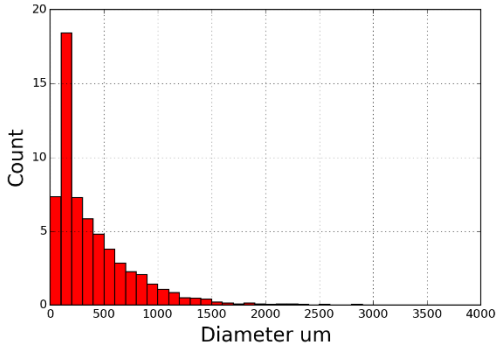


Figure A. 671: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

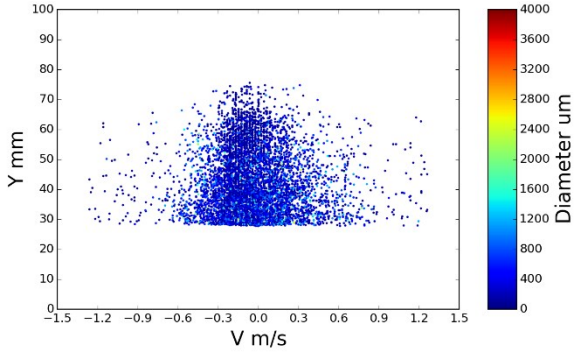


Figure A. 674: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

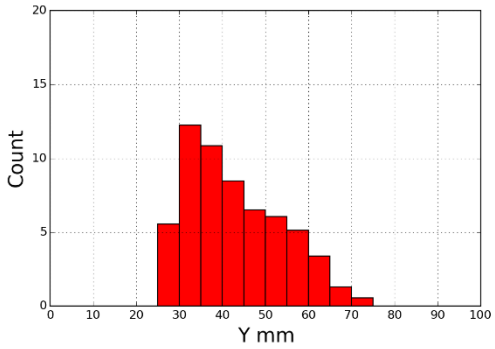


Figure A. 672: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

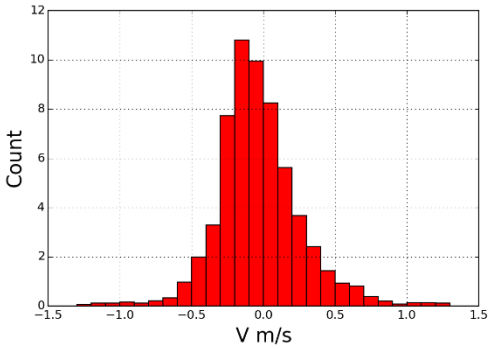


Figure A. 675: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

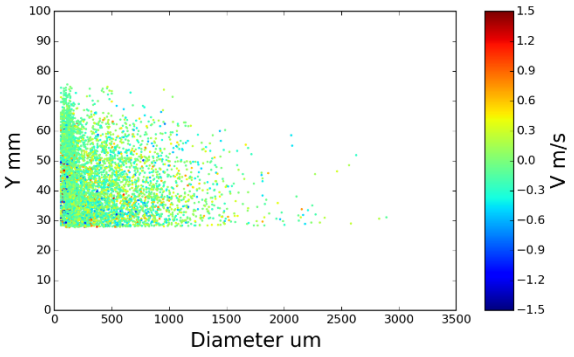


Figure A. 673: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 Matched Only Droplets for .LB Image

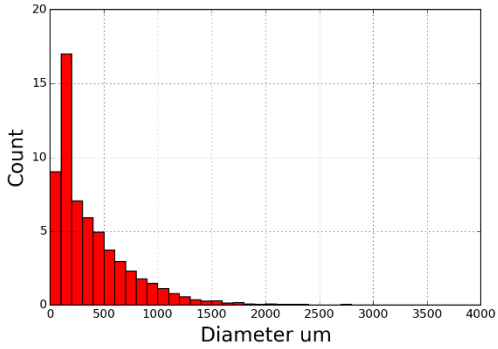


Figure A. 676: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

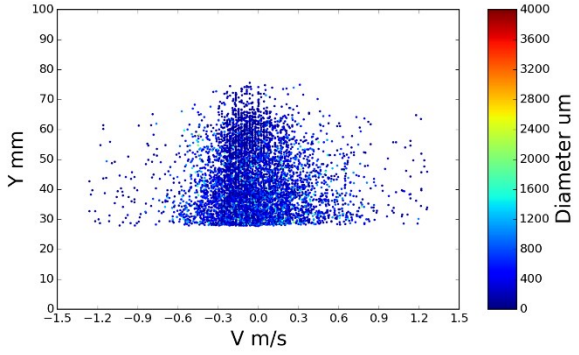


Figure A. 679: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

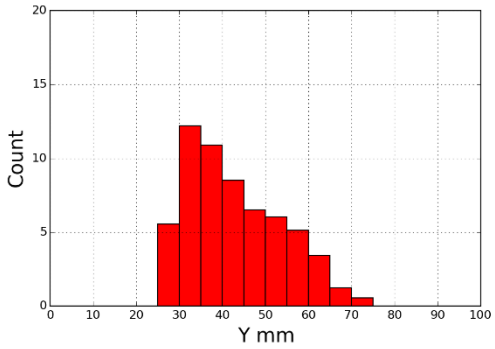


Figure A. 677: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

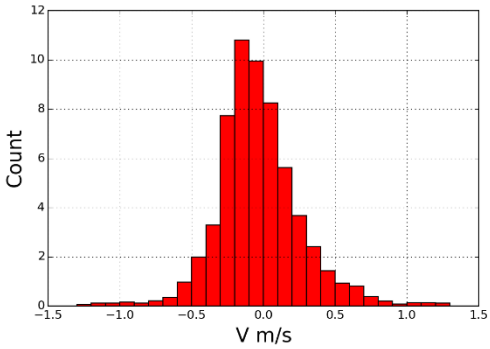


Figure A. 680: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

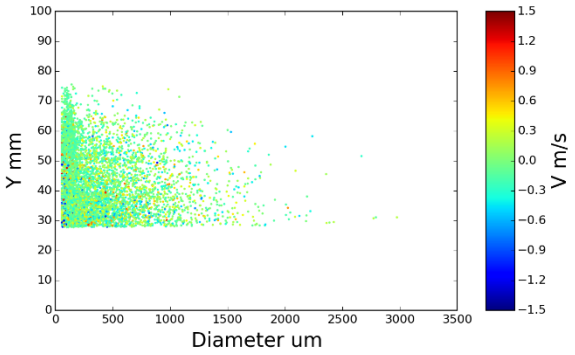


Figure A. 678: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	54.33	57.07	56.9	2960	378.6	381.6	56.9	2885	363.4	376.1
40-60mm	51.48	55.15	56.9	2861	305.9	334.2	56.9	2867	291.2	322.8
60-80mm	12.31	13.68	56.9	2406	267.8	292.4	56.9	2535	252.1	277.7
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	118.13	125.9	56.9	2960	335.4	355.4	56.9	2885	319.7	346.2
			Height A (mm)				Height B (mm)			
Highest Particle			75.7909				75.7909			
Lowest Particle			27.8371				27.8287			

Table A. 73: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	33.18	56.9	2876	483.9	406.8	56.9	2839	477.2	402.8	-1.250	1.260	-0.070	0.240	-1.230	1.260	0.070	0.360
40-60mm	31.37	56.9	2686	397.6	370.4	56.9	2498	392.0	364.3	-1.260	1.230	-0.060	0.220	-1.240	1.260	0.020	0.310
60-80mm	7.29	56.9	2406	357.0	335.5	56.9	2535	351.7	329.9	-1.240	1.120	-0.040	0.190	-1.230	1.050	-0.010	0.250
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	71.84	56.9	2876	433.3	387.4	56.9	2839	427.1	382.3	-1.260	1.260	-0.060	0.220	-1.240	1.260	0.040	0.330

Table A. 74: Matched Droplet Info

A.1.4.1 All Droplets for .LA Image

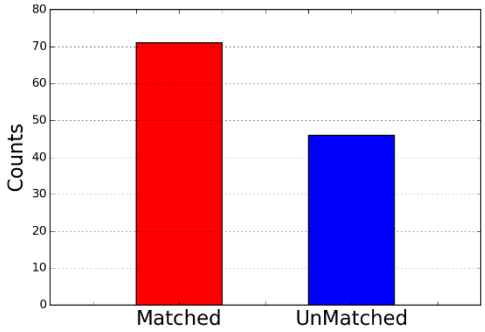


Figure A. 681: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

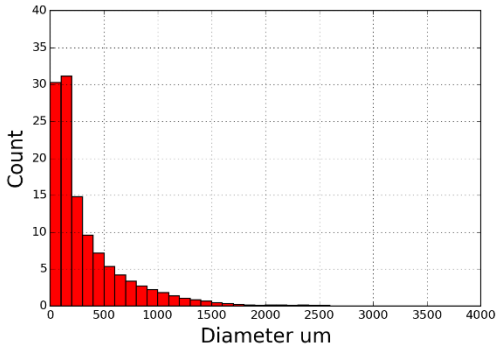


Figure A. 682: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

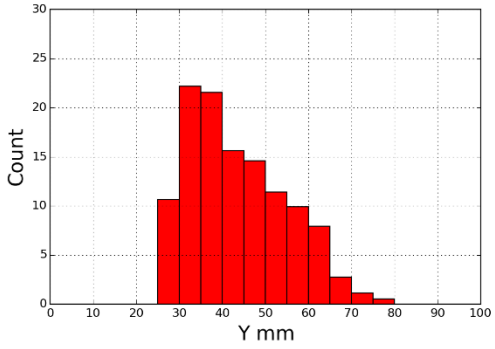


Figure A. 683: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

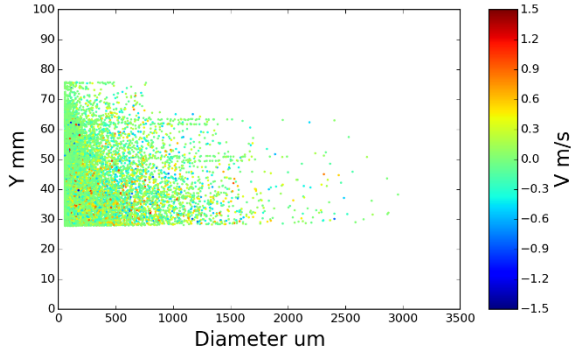


Figure A. 684: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

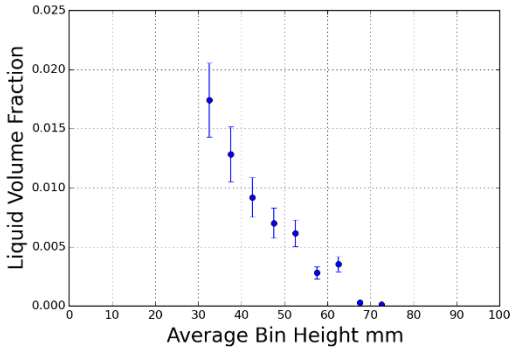


Figure A. 685: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 All Droplets for .LB Image

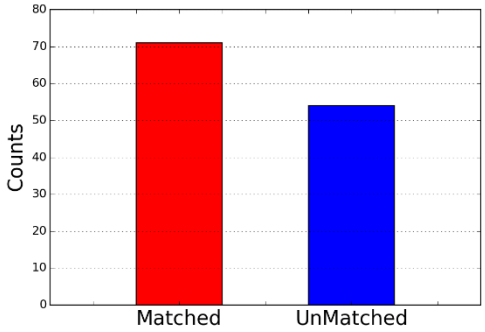


Figure A. 686: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

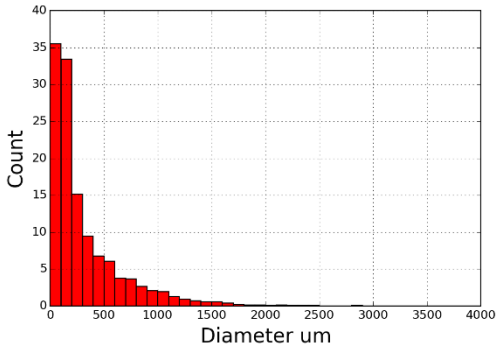


Figure A. 687: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

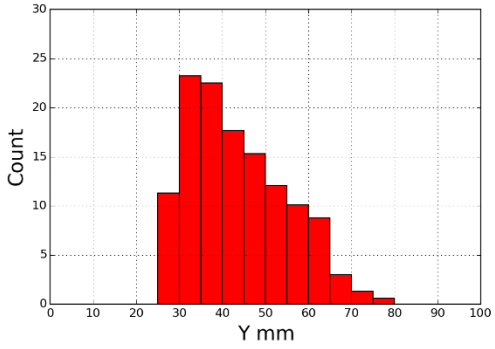


Figure A. 688: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

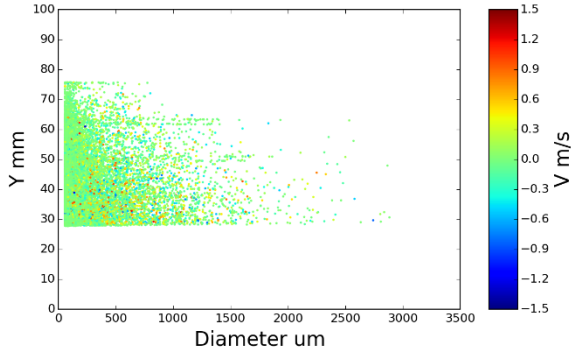


Figure A. 689: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

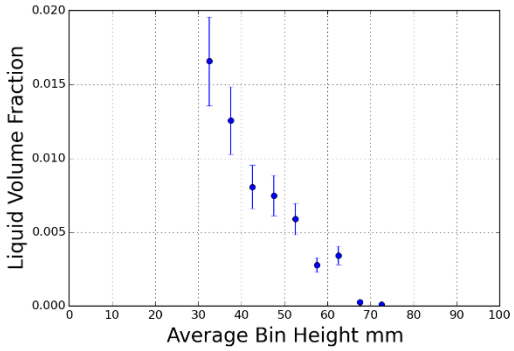


Figure A. 690: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 Matched Only Droplets for .LA Image

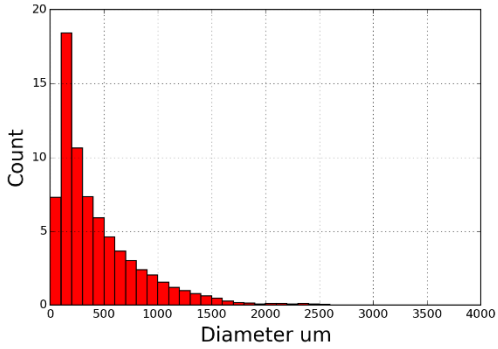


Figure A. 691: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

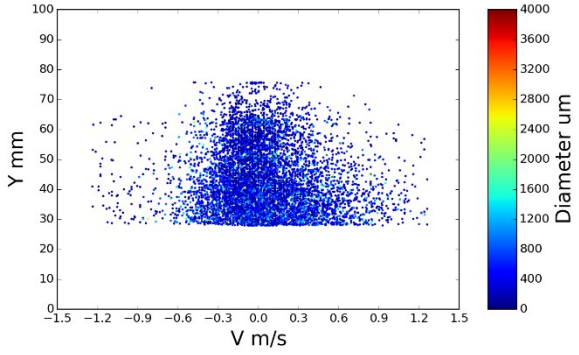


Figure A. 694: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

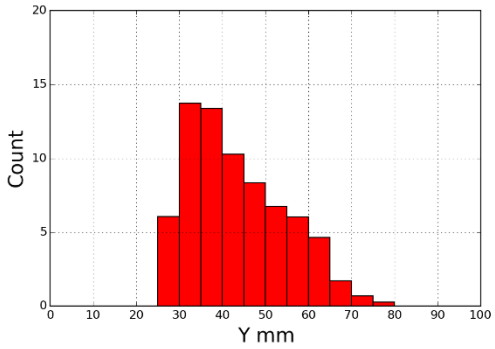


Figure A. 692: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

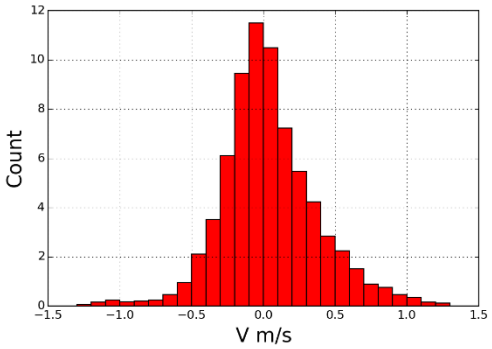


Figure A. 695: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

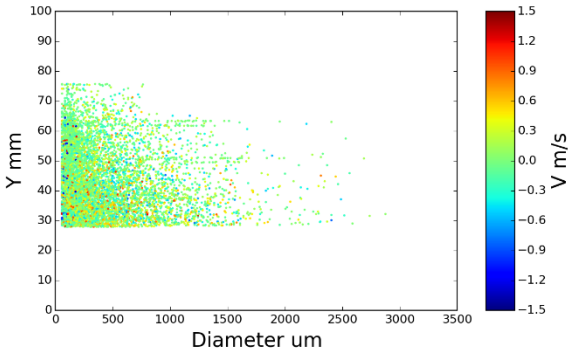


Figure A. 693: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.1 Matched Only Droplets for .LB Image

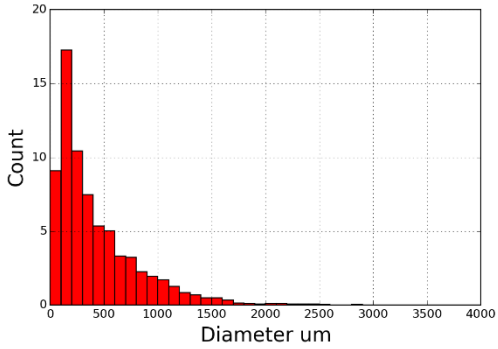


Figure A. 696: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

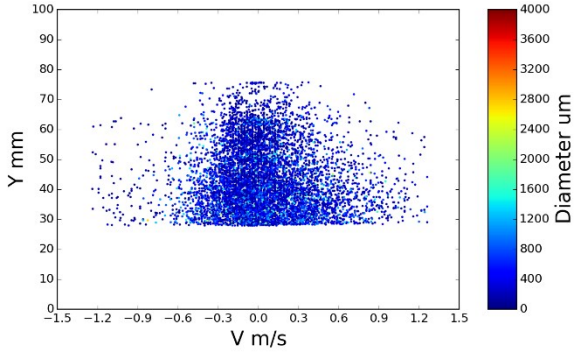


Figure A. 699: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

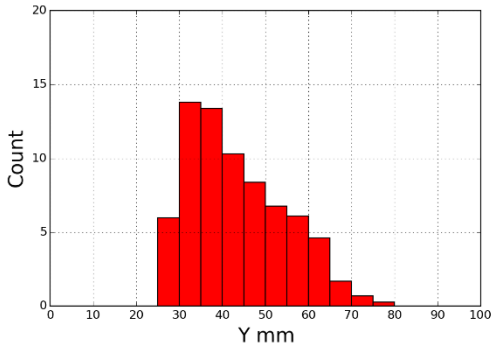


Figure A. 697: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

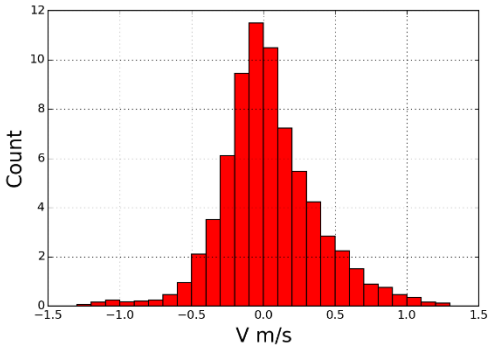


Figure A. 700: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

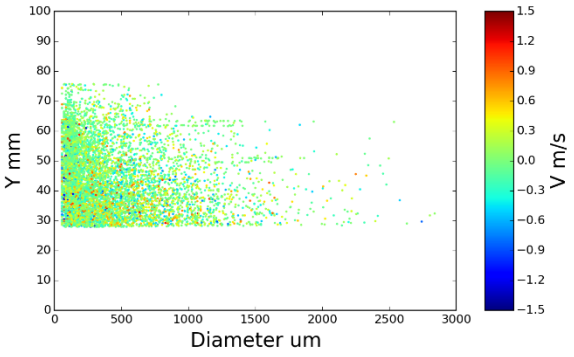


Figure A. 698: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 Lens 50mm Mag 0_13x

A.1.4.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	49.83	50.84	128.4	3413	704.0	562.0	128.4	3374	700.9	568.1
20-40mm	72.12	72.31	128.4	3386	608.5	470.2	128.4	3409	603.1	461.6
40-60mm	27.53	27.8	128.4	2909	494.7	321.9	128.4	2975	496.5	331.4
60-80mm	4.34	4.38	128.4	1356	464.9	261.4	128.4	1509	461.2	270.7
80-100mm	0.29	0.3	192.7	988.8	484.4	222.6	157.3	990.9	455.2	216.9
All	154.12	155.64	128.4	3413	614.8	481.6	128.4	3409	611.8	481.6
			Height A (mm)				Height B (mm)			
Highest Particle			93.8231				93.8087			
Lowest Particle			9.9041				9.9041			

Table A. 75: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	26.33	128.4	3400	814.8	572.5	128.4	3374	793.5	553.6	-1.220	1.210	-0.040	0.360	-1.220	1.220	0.020	0.420
20-40mm	45.45	128.4	3386	682.0	467.1	128.4	3327	670.3	454.3	-1.210	1.210	-0.040	0.290	-1.220	1.220	0.020	0.400
40-60mm	19.8	128.4	2909	559.4	323.4	128.4	2975	557.2	327.6	-1.220	1.140	-0.030	0.200	-1.200	1.180	0.020	0.340
60-80mm	3.29	128.4	1356	521.0	258.3	128.4	1509	521.4	269.7	-1.180	0.830	-0.020	0.170	-0.900	0.810	-0.030	0.260
80-100mm	0.26	192.7	988.8	517.3	211.6	222.5	990.9	503.1	206.0	-0.250	0.200	0.010	0.110	-0.320	0.300	-0.040	0.180
All	95.13	128.4	3400	687.2	477.6	128.4	3374	675.2	464.8	-1.220	1.210	-0.040	0.290	-1.220	1.220	0.020	0.390

Table A. 76: Matched Droplet Info

A.1.4.2 All Droplets for .LA Image

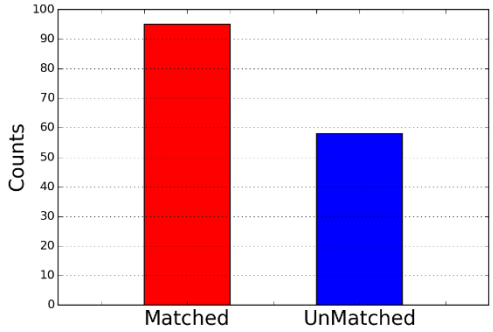


Figure A. 701: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

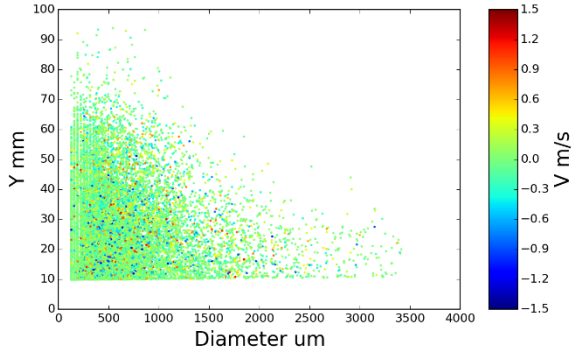


Figure A. 704: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

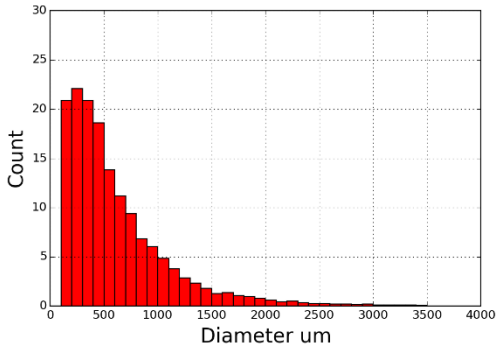


Figure A. 702: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

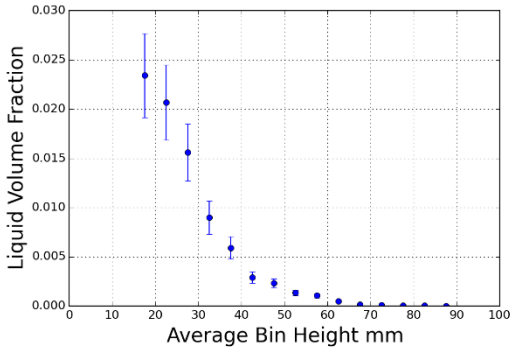


Figure A. 705: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

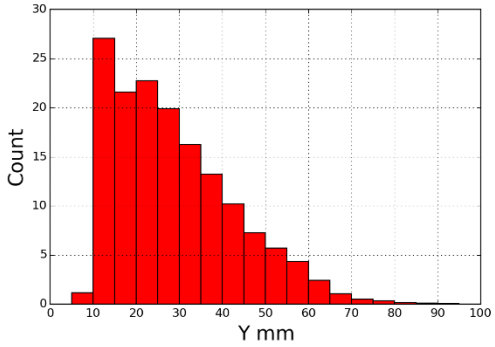


Figure A. 703: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 All Droplets for .LB Image

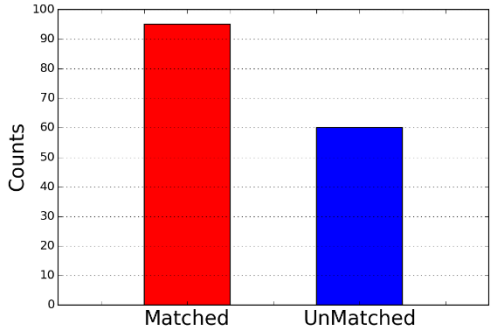


Figure A. 706: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

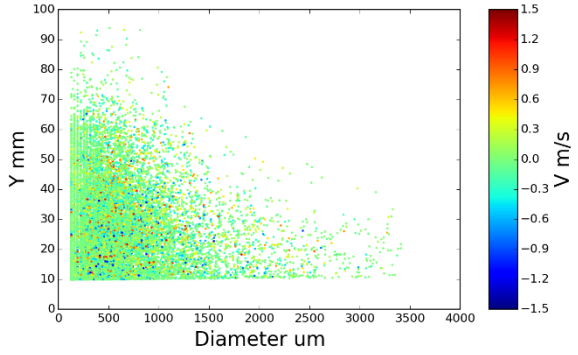


Figure A. 709: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

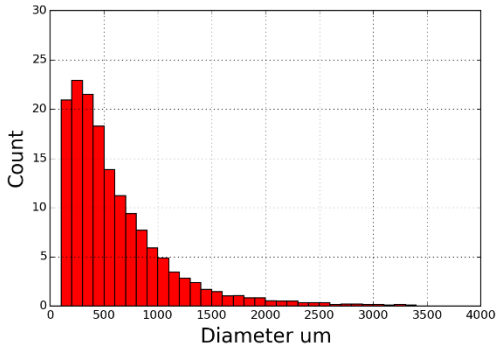


Figure A. 707: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

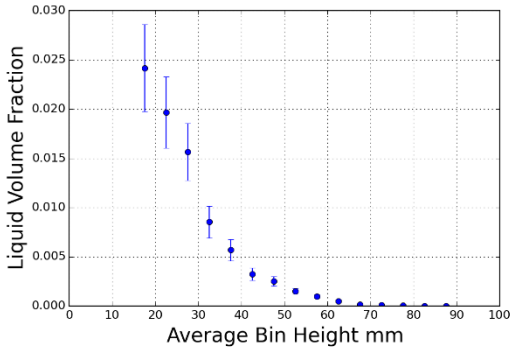


Figure A. 710: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

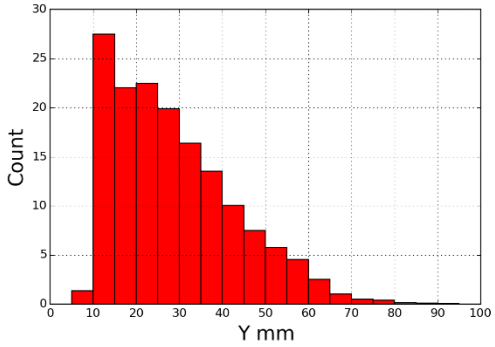


Figure A. 708: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 Matched Only Droplets for .LA Image

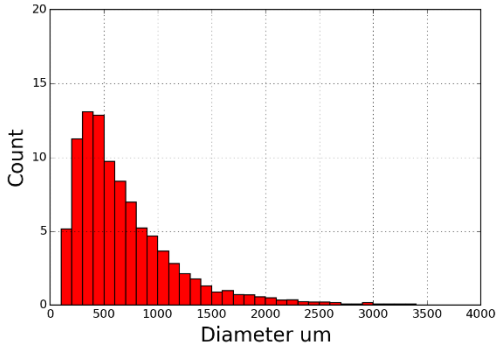


Figure A. 711: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

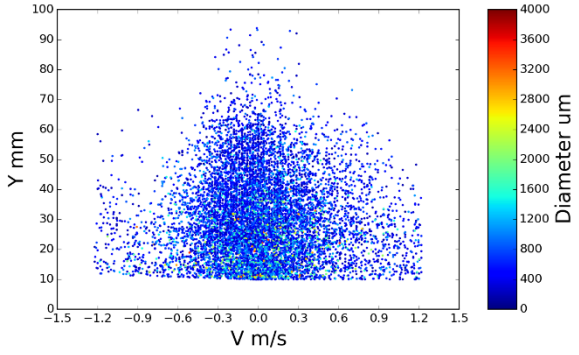


Figure A. 714: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

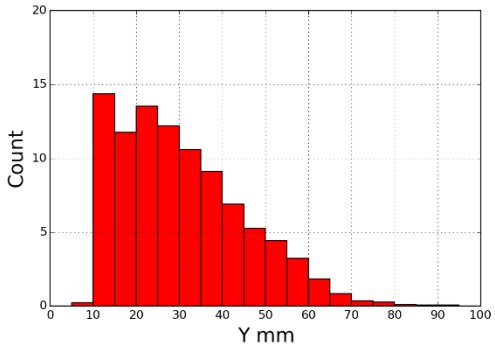


Figure A. 712: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

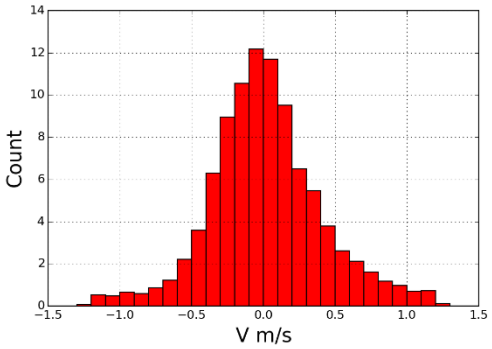


Figure A. 715: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

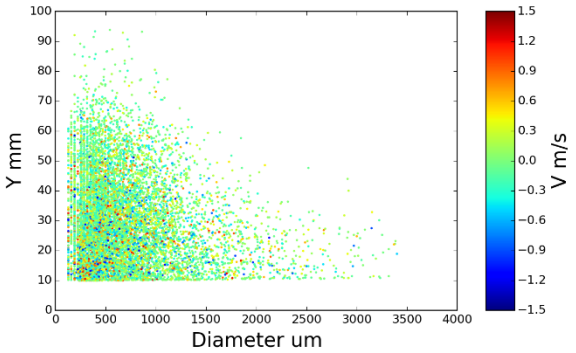


Figure A. 713: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 Matched Only Droplets for .LB Image

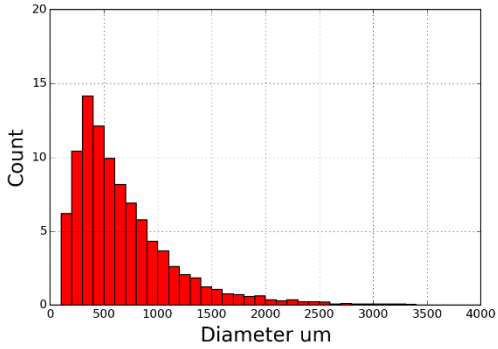


Figure A. 716: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

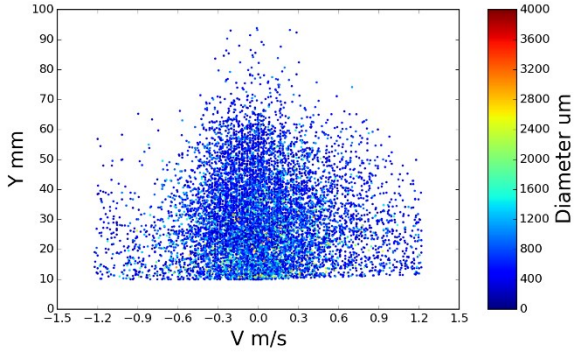


Figure A. 719: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

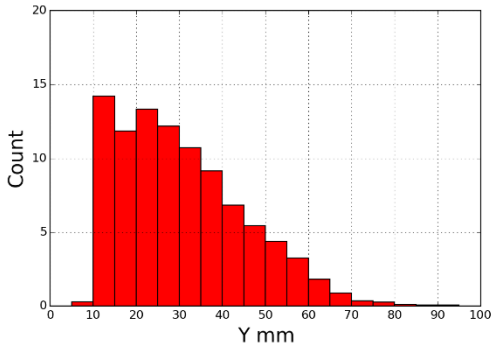


Figure A. 717: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

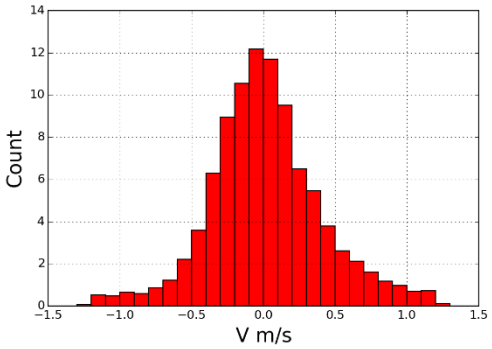


Figure A. 720: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

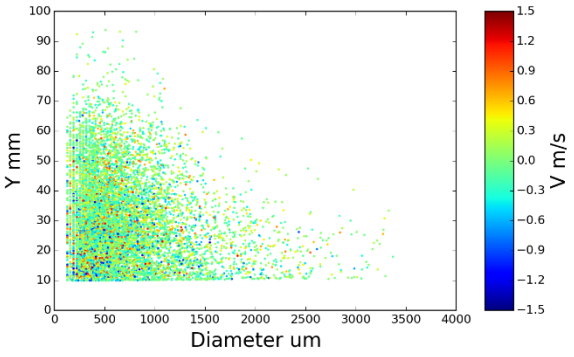


Figure A. 718: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	49.98	49.77	128.4	3398	690.1	535.0	128.4	3403	695.8	546.2
20-40mm	55.42	54.46	128.4	3376	577.3	394.0	128.4	3411	578.5	406.9
40-60mm	14.05	14.08	128.4	1995	524.3	309.5	128.4	1986	529.3	316.4
60-80mm	1.37	1.39	128.4	1560	464.5	266.3	128.4	1518	467.2	265.4
80-100mm	0.07	0.06	157.3	635.8	384.9	172.7	256.9	651.8	410.8	154.1
All	120.89	119.76	128.4	3398	616.4	453.5	128.4	3411	620.1	465.1
			Height A (mm)				Height B (mm)			
Highest Particle			90.4423				89.7809			
Lowest Particle			9.9041				9.9041			

Table A. 77: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	27.17	128.4	3398	801.4	560.1	128.4	3378	787.0	552.4	-1.220	1.220	-0.060	0.360	-1.220	1.220	0.010	0.420
20-40mm	36.66	128.4	3047	650.7	396.4	128.4	3123	644.0	401.8	-1.220	1.210	-0.040	0.250	-1.220	1.220	-0.010	0.360
40-60mm	10.49	128.4	1995	597.8	309.1	128.4	1986	589.1	308.3	-1.160	1.030	-0.040	0.160	-1.070	1.180	0.000	0.290
60-80mm	1.02	128.4	1560	532.2	262.5	128.4	1518	531.9	258.6	-0.570	0.220	-0.030	0.130	-0.580	0.780	-0.030	0.230
80-100mm	0.06	256.9	635.8	422.8	157.2	256.9	651.8	410.8	154.1	-0.100	0.060	-0.020	0.060	-0.470	0.050	-0.220	0.190
All	75.4	128.4	3398	695.9	458.7	128.4	3378	685.9	456.7	-1.220	1.220	-0.050	0.280	-1.220	1.220	-0.000	0.370

Table A. 78: Matched Droplet Info

A.1.4.2 All Droplets for .LA Image

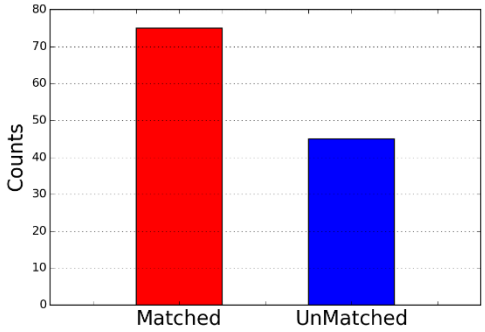


Figure A. 721: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

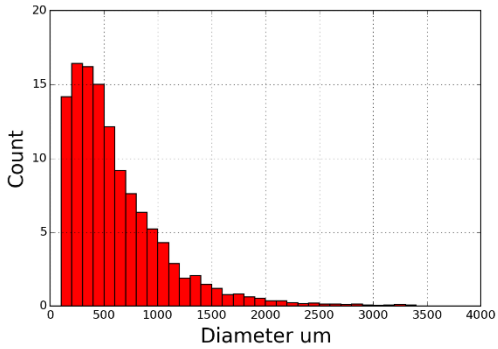


Figure A. 722: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

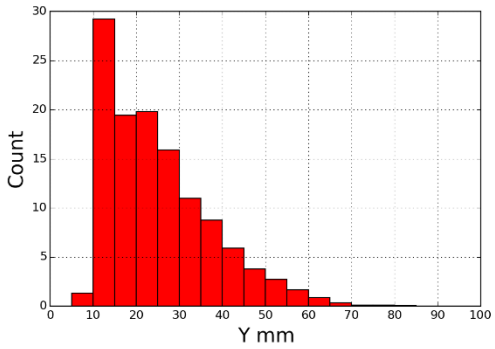


Figure A. 723: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

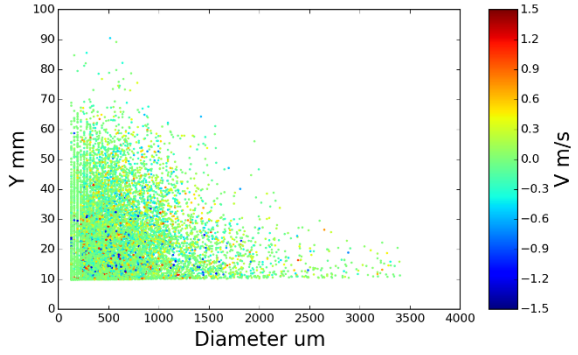


Figure A. 724: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

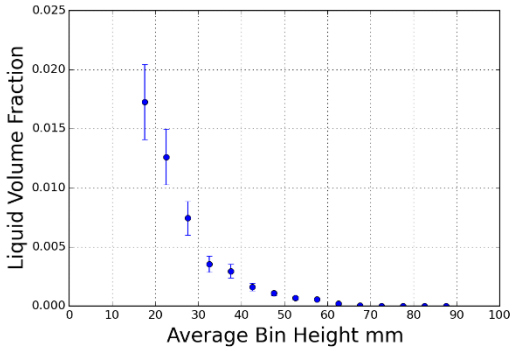


Figure A. 725: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 All Droplets for .LB Image

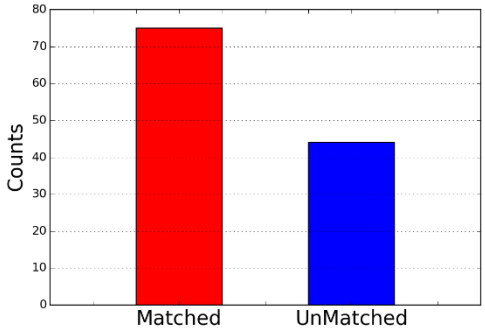


Figure A. 726: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

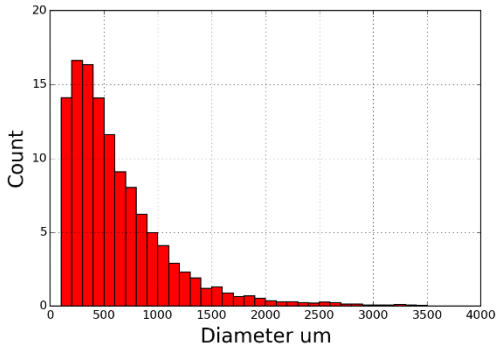


Figure A. 727: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

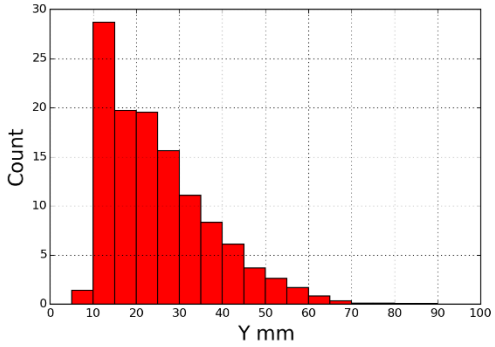


Figure A. 728: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

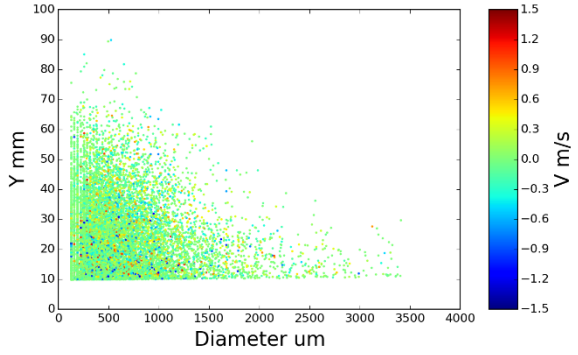


Figure A. 729: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

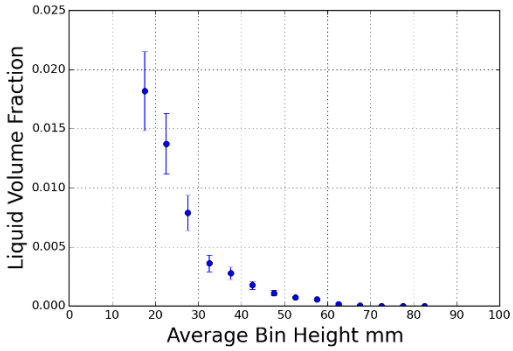


Figure A. 730: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 Matched Only Droplets for .LA Image

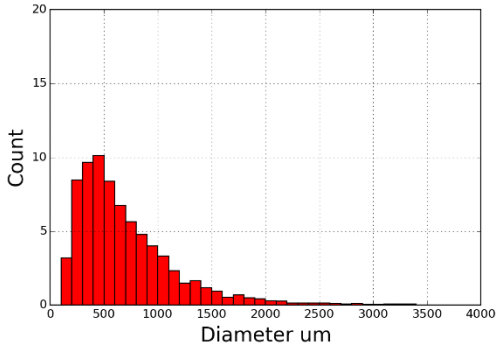


Figure A. 731: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

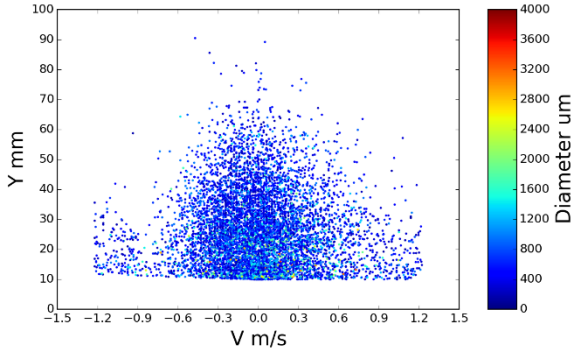


Figure A. 734: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

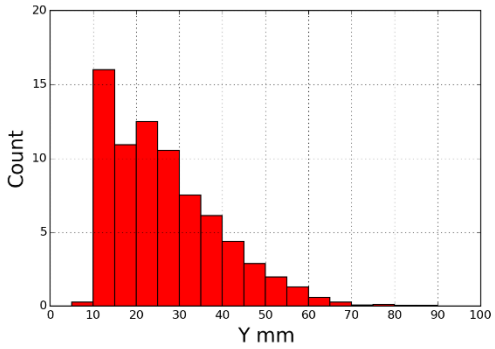


Figure A. 732: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

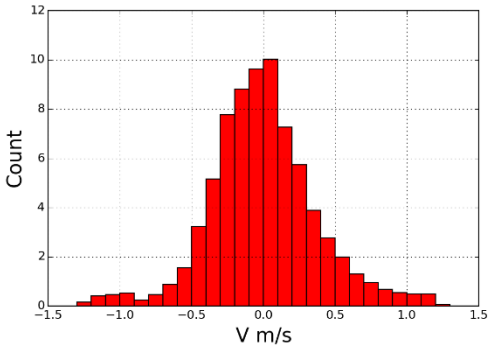


Figure A. 735: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

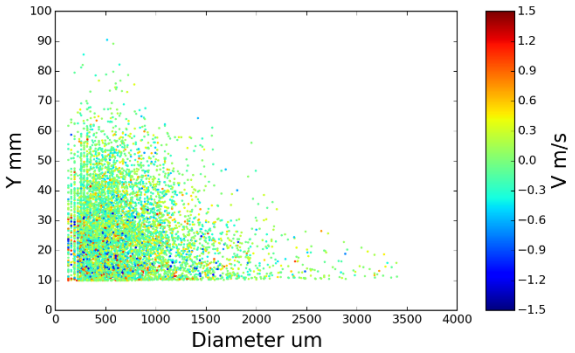


Figure A. 733: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 Matched Only Droplets for .LB Image

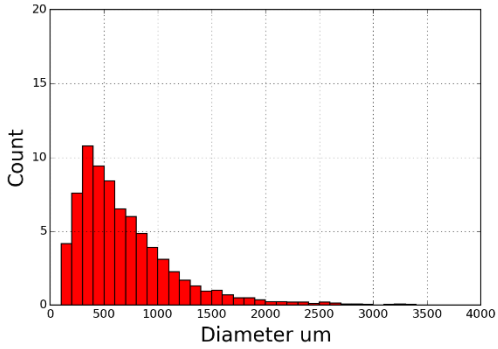


Figure A. 736: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

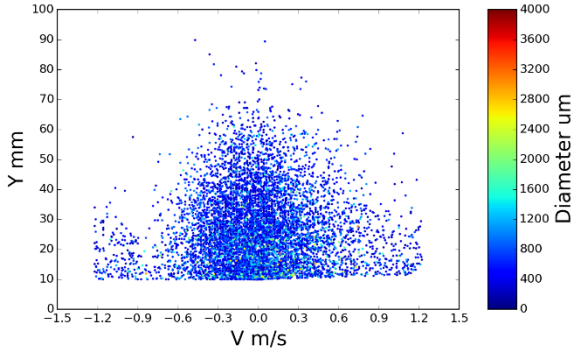


Figure A. 739: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

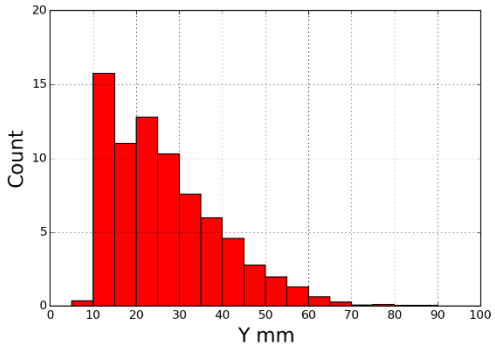


Figure A. 737: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

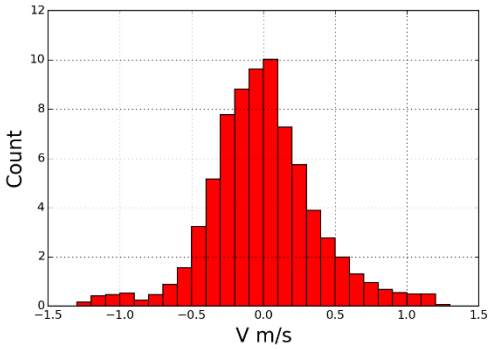


Figure A. 740: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

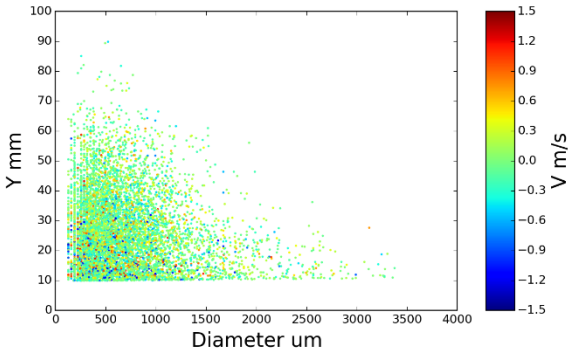


Figure A. 738: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	42.54	42.67	128.4	3400	754.2	589.5	128.4	3396	735.1	578.1
20-40mm	56.21	56.87	128.4	3403	632.8	466.4	128.4	3346	622.5	457.1
40-60mm	16.37	16.63	128.4	2393	571.3	362.4	128.4	2488	563.9	360.2
60-80mm	2.84	2.76	128.4	2092	560.7	323.4	128.4	1759	559.9	315.1
80-100mm	0.1	0.09	157.3	1147	523.8	290.1	192.7	959.1	485.8	235.7
All	118.06	119.02	128.4	3403	666.2	504.4	128.4	3396	653.1	494.3
			Height A (mm)				Height B (mm)			
Highest Particle			91.0467				91.3759			
Lowest Particle			9.9041				9.9041			

Table A. 79: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	21.53	128.4	3293	901.6	612.3	128.4	3396	884.1	607.3	-1.220	1.210	-0.050	0.360	-1.210	1.220	-0.020	0.430
20-40mm	36.2	128.4	3368	715.0	472.3	128.4	3274	701.4	462.5	-1.220	1.220	-0.050	0.270	-1.220	1.220	-0.030	0.380
40-60mm	11.45	128.4	2393	649.6	359.5	128.4	2488	646.5	360.5	-1.200	0.960	-0.040	0.160	-1.180	1.190	-0.040	0.310
60-80mm	1.8	128.4	2092	659.3	315.7	128.4	1759	651.6	301.0	-1.160	1.130	-0.060	0.200	-0.560	0.600	-0.010	0.220
80-100mm	0.05	314.6	1147	670.1	288.2	272.5	959.1	600.0	234.6	-0.120	0.040	-0.050	0.050	0.110	0.380	0.250	0.090
All	71.03	128.4	3368	759.6	510.0	128.4	3396	747.1	503.2	-1.220	1.220	-0.050	0.290	-1.220	1.220	-0.030	0.380

Table A. 80: Matched Droplet Info

A.1.4.2 All Droplets for .LA Image

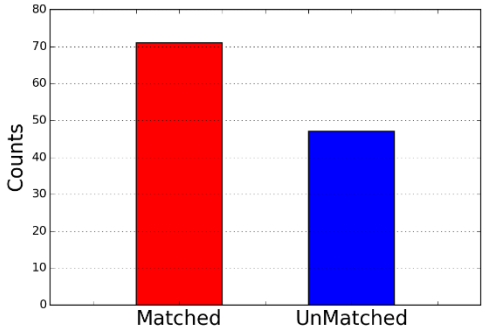


Figure A. 741: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

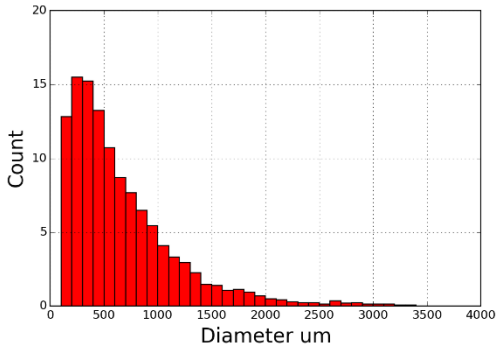


Figure A. 742: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

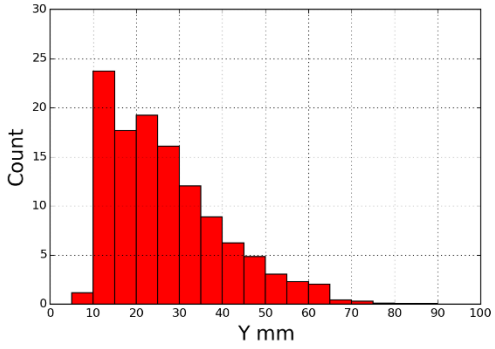


Figure A. 743: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

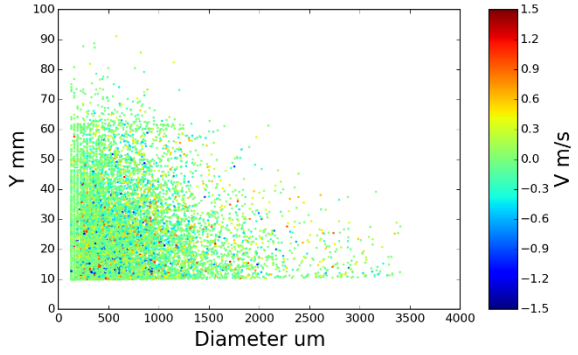


Figure A. 744: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

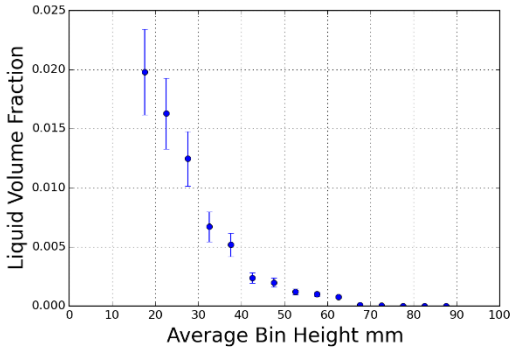


Figure A. 745: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 All Droplets for .LB Image

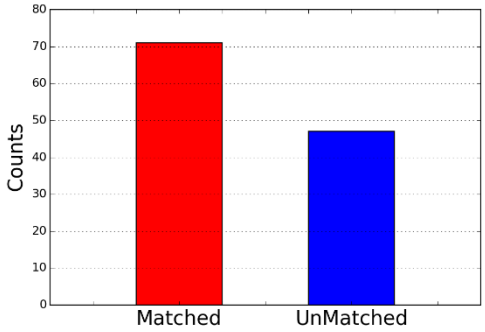


Figure A. 746: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

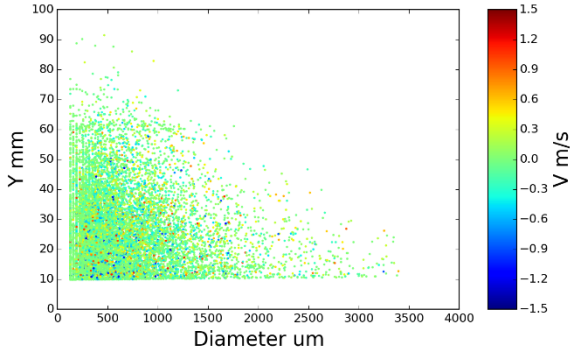


Figure A. 749: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

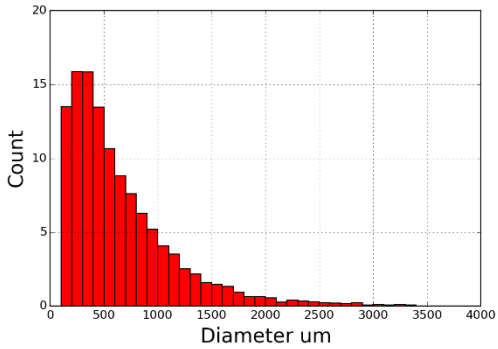


Figure A. 747: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

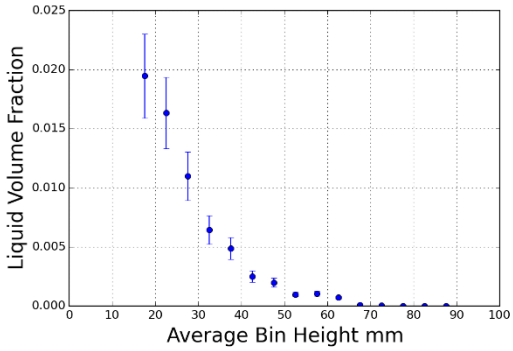


Figure A. 750: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

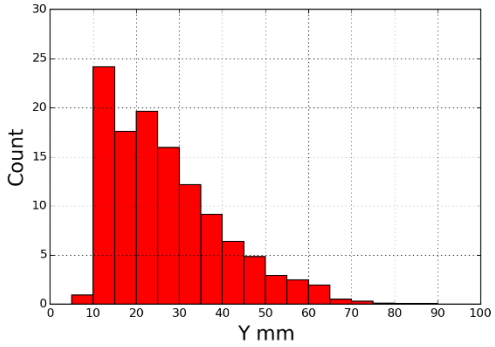


Figure A. 748: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 Matched Only Droplets for .LA Image

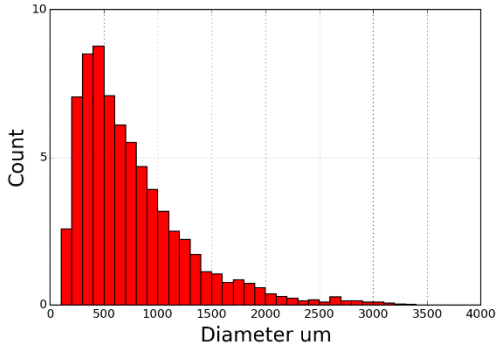


Figure A. 751: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

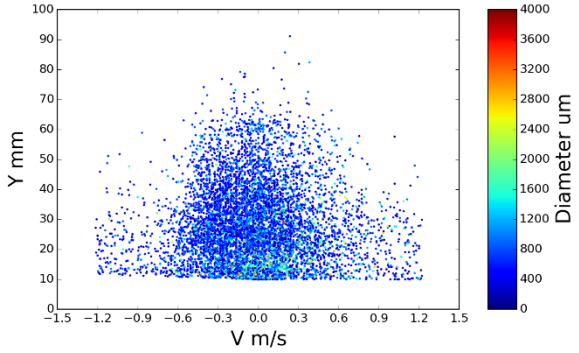


Figure A. 754: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

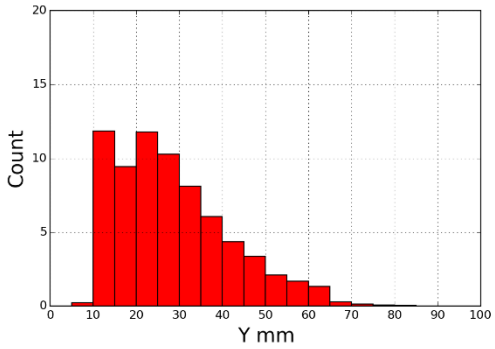


Figure A. 752: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

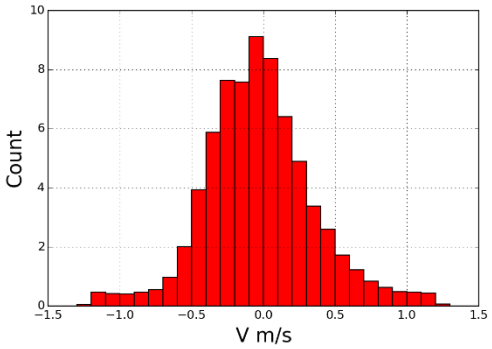


Figure A. 755: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

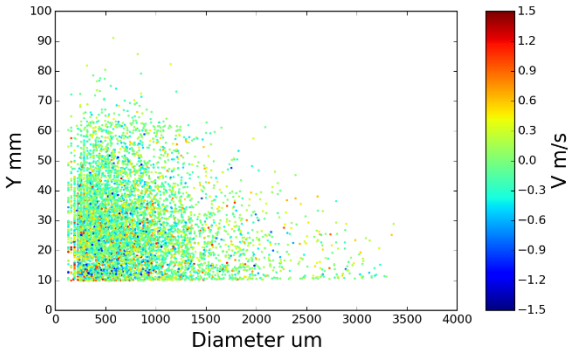


Figure A. 753: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 Matched Only Droplets for .LB Image

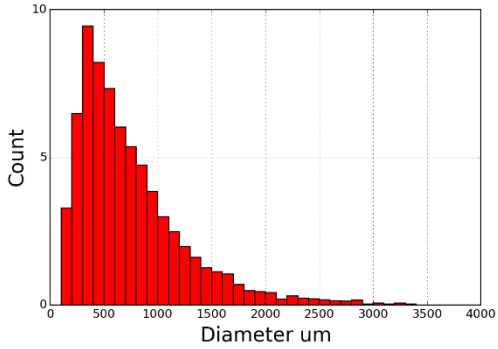


Figure A. 756: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

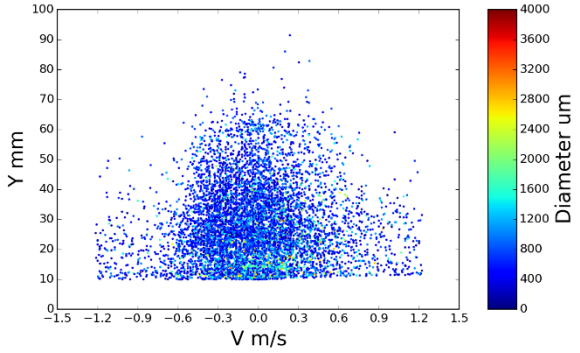


Figure A. 759: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

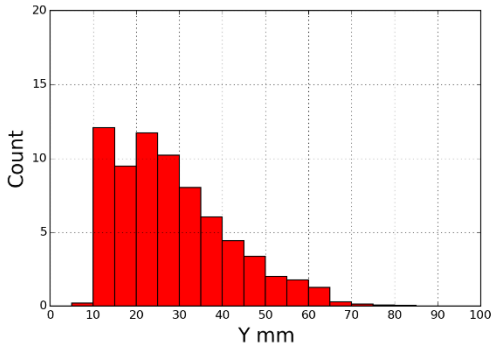


Figure A. 757: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

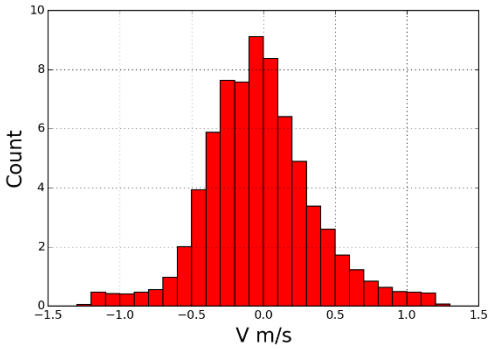


Figure A. 760: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

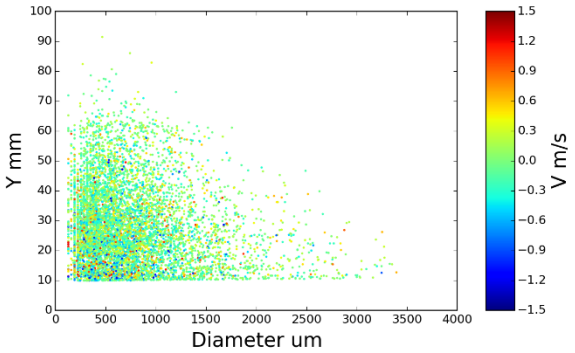


Figure A. 758: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	44.92	45.24	128.4	3393	743.4	575.4	128.4	3413	731.6	575.6
20-40mm	60.36	60.77	128.4	3212	605.6	437.9	128.4	3162	596.5	431.1
40-60mm	17.8	18.1	128.4	2999	553.5	384.9	128.4	3389	549.1	391.3
60-80mm	2.97	3.08	128.4	1982	639.9	428.8	128.4	2096	644.7	422.9
80-100mm	0.55	0.58	128.4	827.5	415.7	212.7	128.4	807.3	435.2	211.3
All	126.6	127.77	128.4	3393	647.1	489.7	128.4	3413	638.1	487.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.1857				98.8985			
Lowest Particle			9.9041				9.9041			

Table A. 81: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	20.82	128.4	3374	911.2	613.2	128.4	3281	877.2	596.1	-1.210	1.210	-0.080	0.390	-1.200	1.220	-0.020	0.440
20-40mm	37.53	128.4	3212	692.7	446.2	128.4	3044	681.1	438.0	-1.220	1.220	-0.070	0.280	-1.220	1.220	-0.020	0.380
40-60mm	12.47	128.4	2999	634.3	392.5	128.4	3389	630.8	395.9	-1.140	1.170	-0.060	0.180	-1.140	1.200	-0.000	0.300
60-80mm	1.89	143.6	1931	743.4	419.4	128.4	2096	742.2	425.5	-0.470	0.980	-0.050	0.150	-1.150	0.910	-0.020	0.230
80-100mm	0.27	128.4	827.5	528.0	218.2	128.4	802.2	525.7	214.6	-0.240	0.130	-0.000	0.060	-0.130	0.470	0.030	0.120
All	72.98	128.4	3374	745.8	502.3	128.4	3389	730.0	491.4	-1.220	1.220	-0.070	0.300	-1.220	1.220	-0.010	0.380

Table A. 82: Matched Droplet Info

A.1.4.2 All Droplets for .LA Image

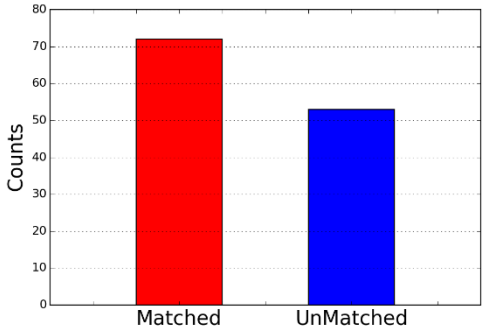


Figure A. 761: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

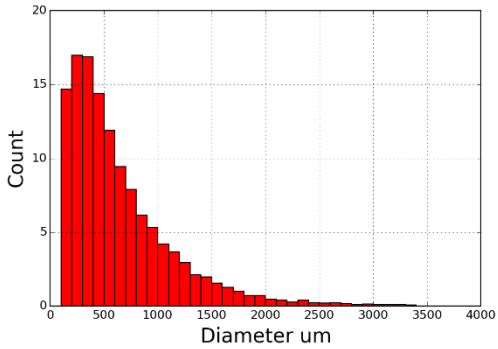


Figure A. 762: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

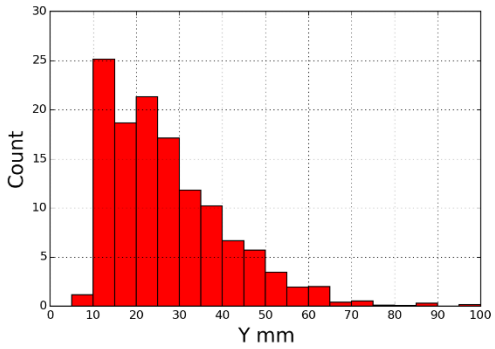


Figure A. 763: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

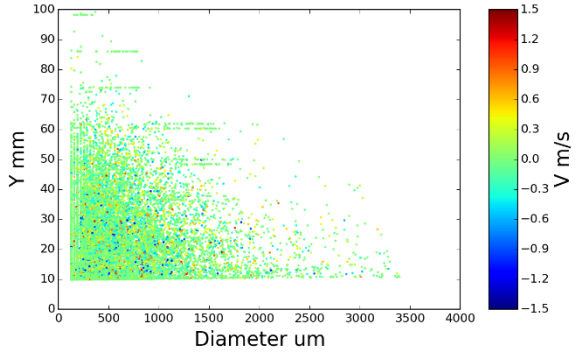


Figure A. 764: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

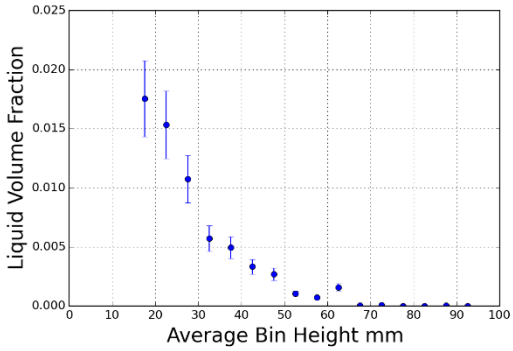


Figure A. 765: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 All Droplets for .LB Image

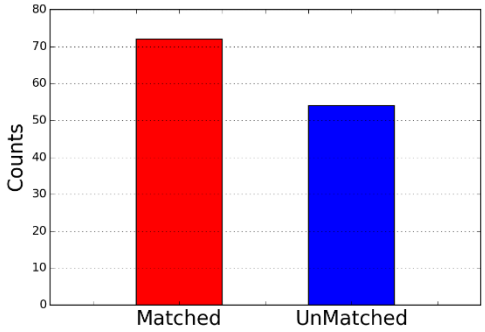


Figure A. 766: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

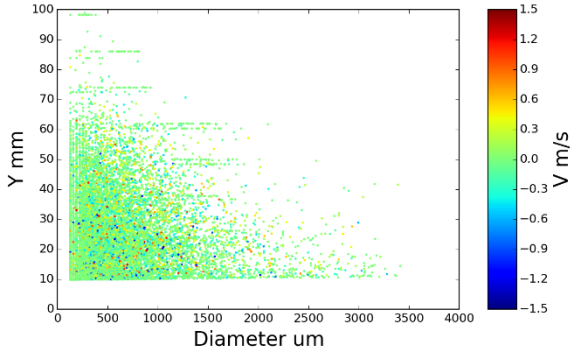


Figure A. 769: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

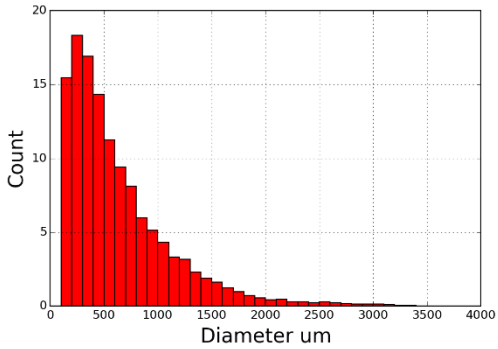


Figure A. 767: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

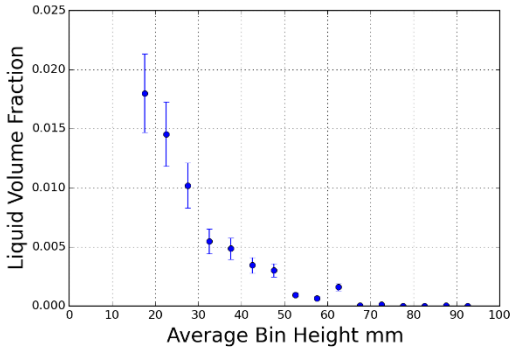


Figure A. 770: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

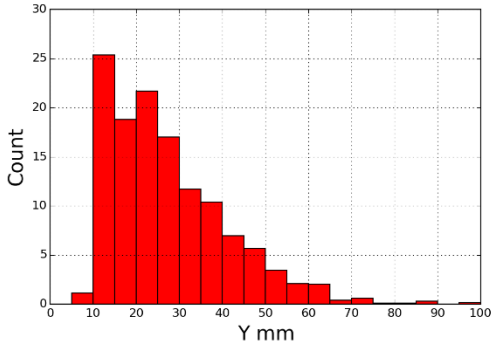


Figure A. 768: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 Matched Only Droplets for .LA Image

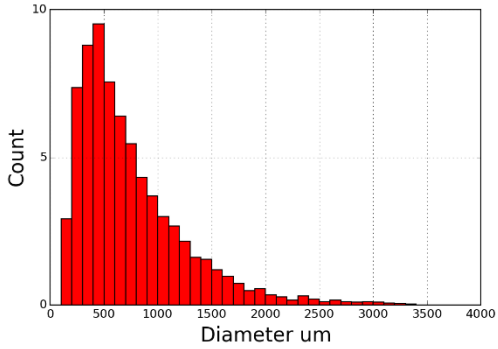


Figure A. 771: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

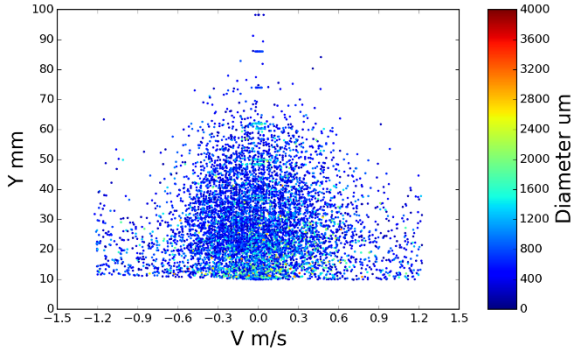


Figure A. 774: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

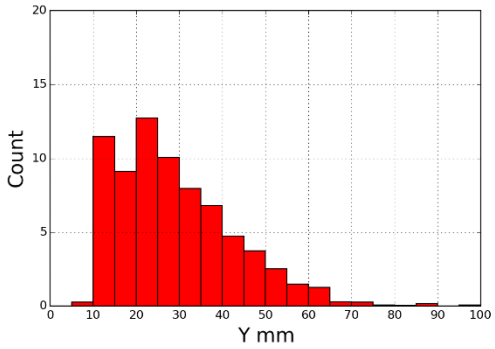


Figure A. 772: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

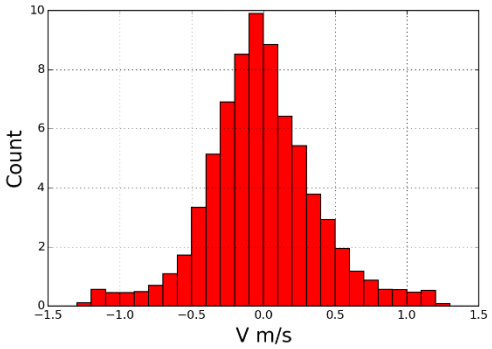


Figure A. 775: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

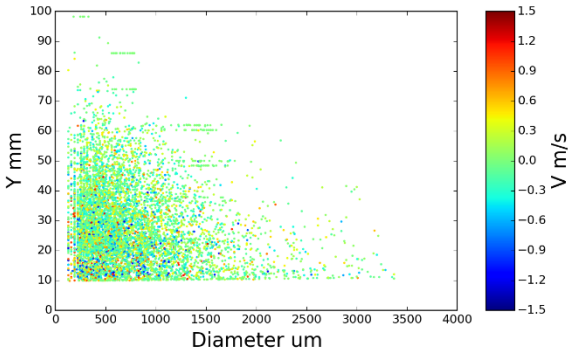


Figure A. 773: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 Matched Only Droplets for .LB Image

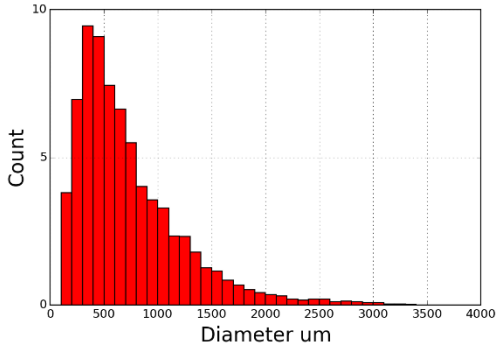


Figure A. 776: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

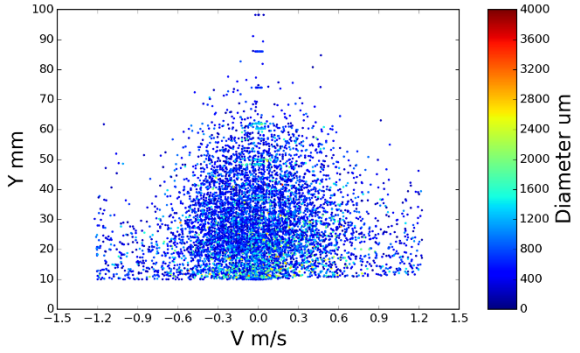


Figure A. 779: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

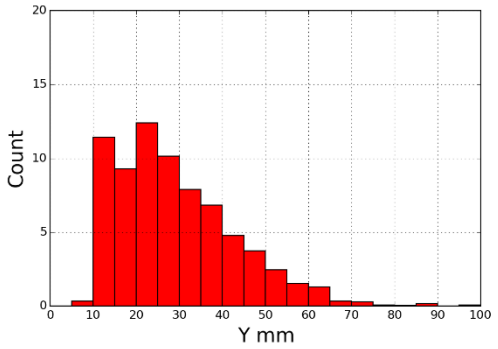


Figure A. 777: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

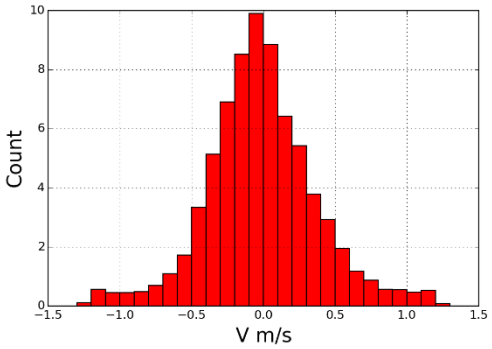


Figure A. 780: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

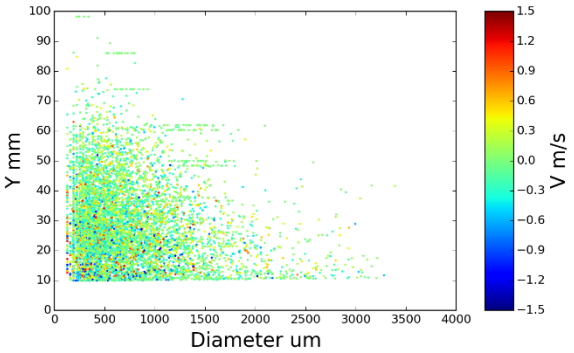


Figure A. 778: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	33.77	34.88	128.4	3355	721.5	573.0	128.4	3339	700.5	565.1
20-40mm	43.67	42.81	128.4	3143	611.3	451.9	128.4	3198	616.5	459.5
40-60mm	14.51	14.52	128.4	2649	540.4	409.7	128.4	3129	546.8	406.7
60-80mm	3.49	3.54	128.4	2505	769.4	499.2	128.4	2396	746.9	495.2
80-100mm	1.8	1.77	128.4	1356	619.5	292.6	128.4	1289	608.8	291.3
All	97.25	97.52	128.4	3355	644.8	496.1	128.4	3339	640.8	495.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.2969				99.3444			
Lowest Particle			9.9041				9.9041			

Table A. 83: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	15.75	128.4	3355	890.7	627.8	128.4	3339	864.9	613.5	-1.210	1.220	-0.060	0.390	-1.220	1.210	0.010	0.440
20-40mm	26.33	128.4	3143	713.0	465.0	128.4	3198	701.3	464.4	-1.220	1.200	-0.070	0.270	-1.220	1.220	0.010	0.360
40-60mm	9.67	128.4	2649	645.6	426.9	128.4	3129	641.5	422.6	-1.200	1.180	-0.070	0.200	-1.210	1.190	0.010	0.320
60-80mm	2.18	128.4	2505	922.5	512.9	128.4	2396	914.4	515.9	-1.160	0.760	-0.050	0.170	-0.690	0.530	-0.010	0.200
80-100mm	0.9	181.7	1356	789.3	248.0	192.7	1265	762.1	228.9	-0.370	0.570	-0.000	0.100	-0.430	0.420	0.020	0.090
All	54.83	128.4	3355	761.7	519.6	128.4	3339	747.2	512.5	-1.220	1.220	-0.060	0.290	-1.220	1.220	0.010	0.370

Table A. 84: Matched Droplet Info

A.1.4.2 All Droplets for .LA Image

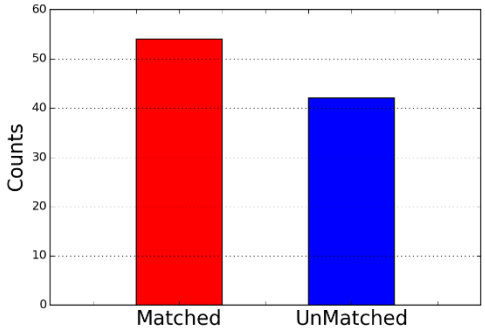


Figure A. 781: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

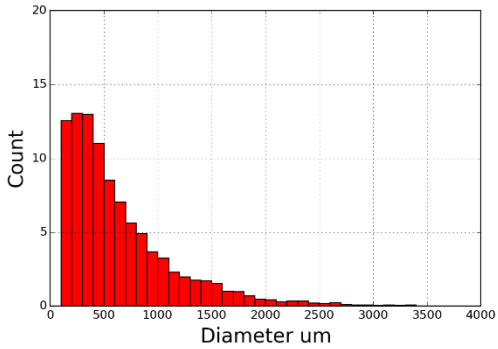


Figure A. 782: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

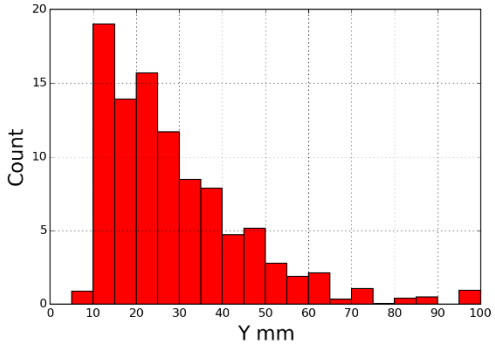


Figure A. 783: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

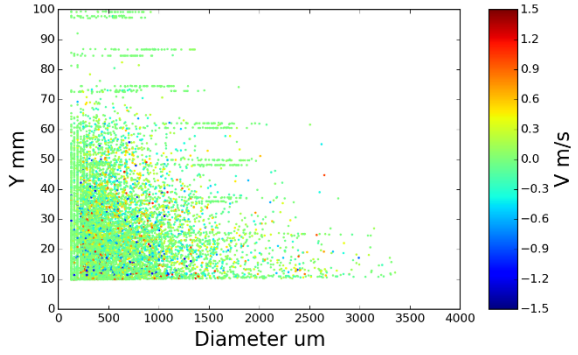


Figure A. 784: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

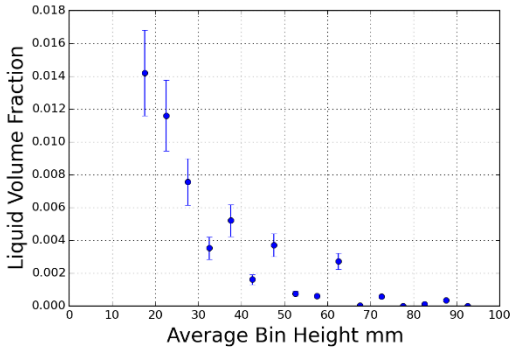


Figure A. 785: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 All Droplets for .LB Image

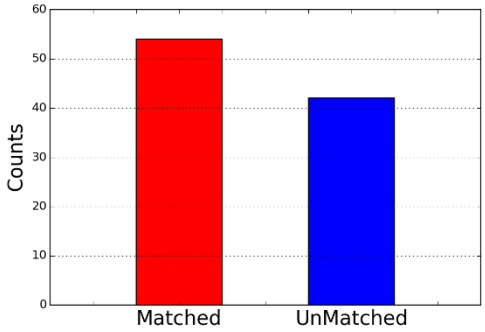


Figure A. 786: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

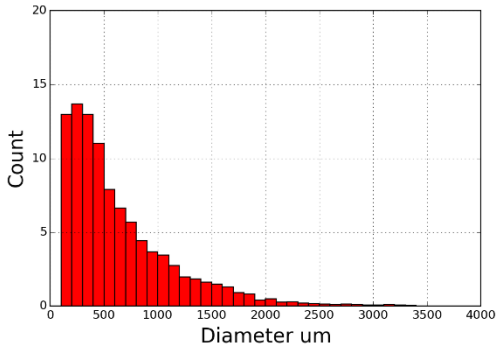


Figure A. 787: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

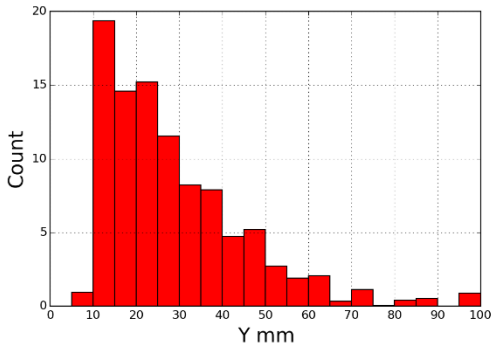


Figure A. 788: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

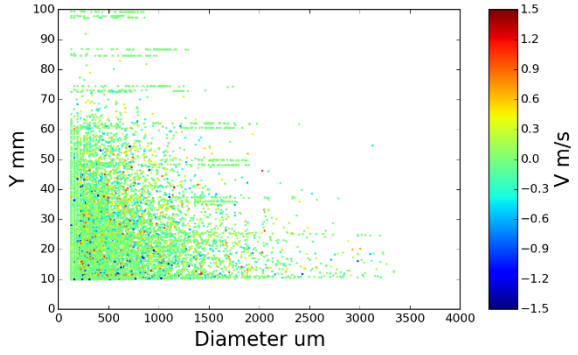


Figure A. 789: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

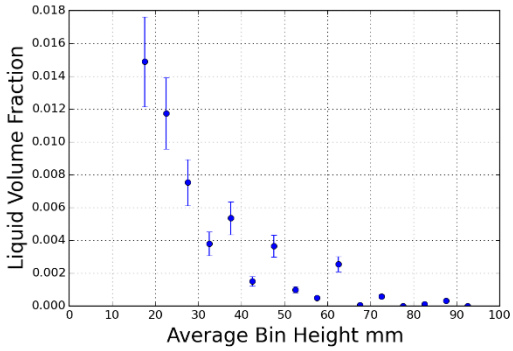


Figure A. 790: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 Matched Only Droplets for .LA Image

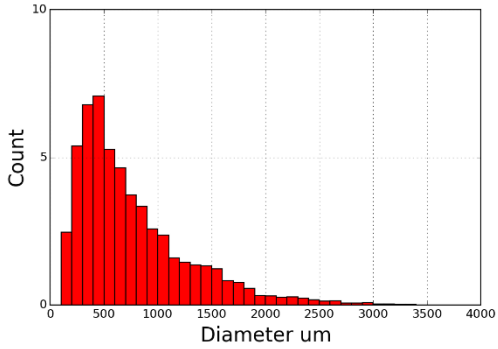


Figure A. 791: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

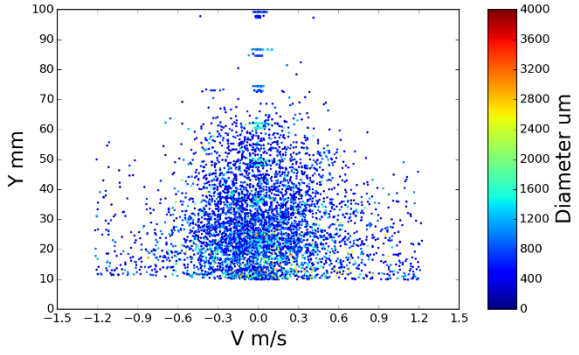


Figure A. 794: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

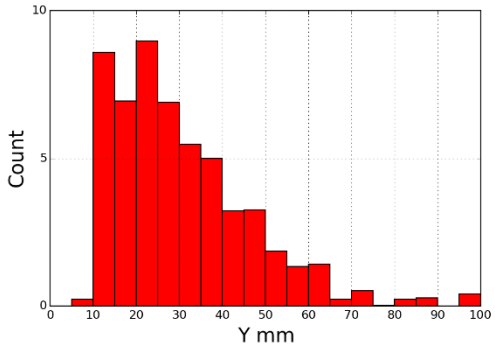


Figure A. 792: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

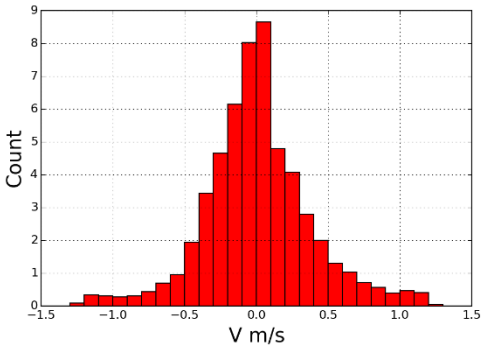


Figure A. 795: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

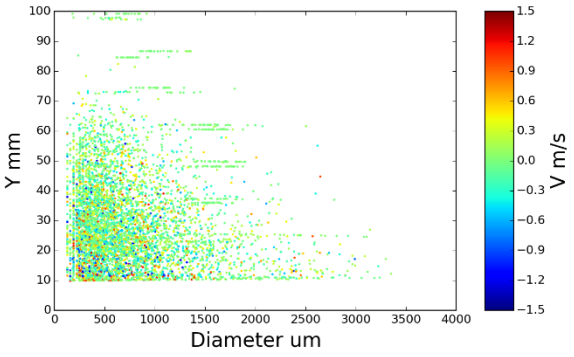


Figure A. 793: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.4.2 Matched Only Droplets for .LB Image

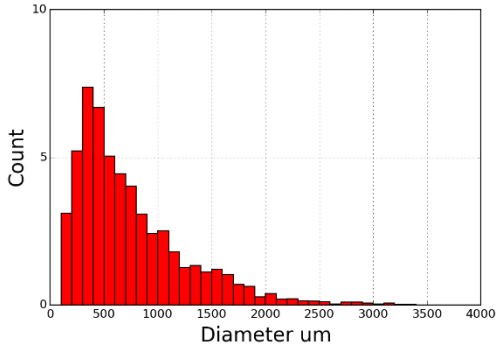


Figure A. 796: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

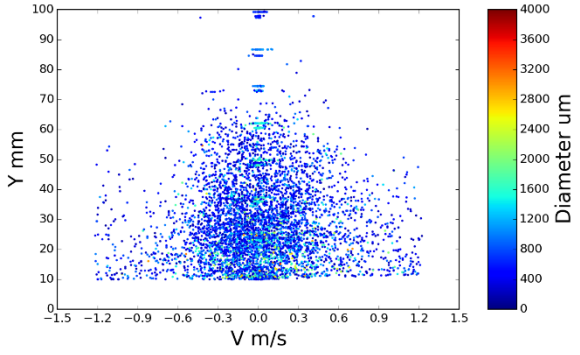


Figure A. 799: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

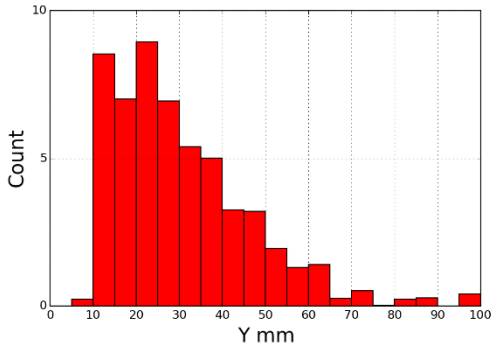


Figure A. 797: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

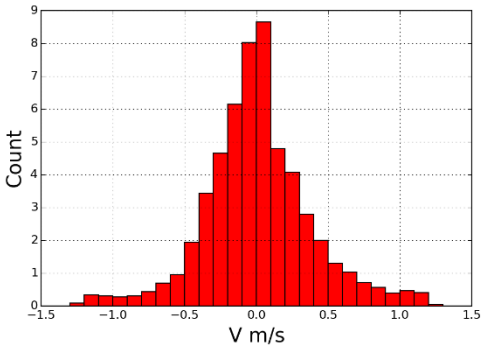


Figure A. 800: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

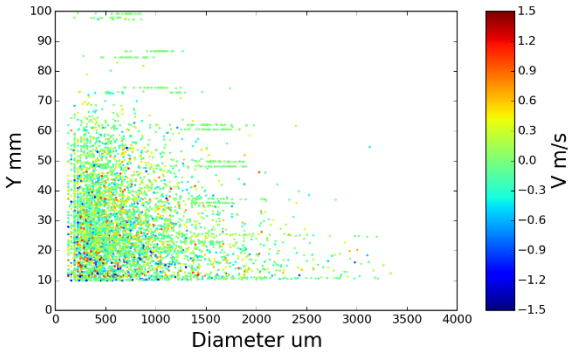


Figure A. 798: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5 Liquid Level 5

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	18257 / 2.300
Ref Mass Flow (lb/hr) / (kg/s)	1602 / 0.202
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	14880 / 20.181
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4894 / 15.44
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	40.0 / 4.45
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.2 / 4.56
Total Bundle Q (Btu/hr) / (kW)	107950 / 31.64
Total Bundle & Preboiler Q (Btu/hr) / (kW)	140396 / 41.15
Top Two Rows HTC Ratio	1.022
Bundle Inlet Quality	0.17
Bundle Exit Quality	0.98

Table A. 85: Thermal Conditions

A.1.5.1 Lens 100mm Mag 0_29x

A.1.5.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	20.49	19.72	56.9	2296	313.9	291.7	56.9	2386	316.7	291.7
40-60mm	25.59	13.82	56.9	2222	202.0	220.7	56.9	1696	260.7	252.5
60-80mm	6.37	2.33	56.9	1211	141.1	152.5	56.9	1192	216.3	222.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	52.45	35.87	56.9	2296	238.3	252.7	56.9	2386	288.6	275.0
			Height A (mm)				Height B (mm)			
Highest Particle			75.8540				75.5008			
Lowest Particle			28.3711				28.3711			

Table A. 86: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	10.86	56.9	2296	415.8	316.4	56.9	2386	407.3	314.0	-1.190	1.180	-0.040	0.180	-1.230	1.200	0.060	0.310
40-60mm	6.85	56.9	1574	363.5	278.6	56.9	1696	350.7	277.5	-1.180	1.020	-0.040	0.160	-1.220	1.110	0.000	0.270
60-80mm	1.27	56.9	1211	306.4	254.6	56.9	1192	295.5	252.2	-0.280	1.160	0.000	0.130	-0.870	0.800	0.010	0.220
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	18.98	56.9	2296	389.6	301.2	56.9	2386	379.5	299.5	-1.190	1.180	-0.030	0.170	-1.230	1.200	0.040	0.290

Table A. 87: Matched Droplet Info

A.1.5.1 All Droplets for .LA Image

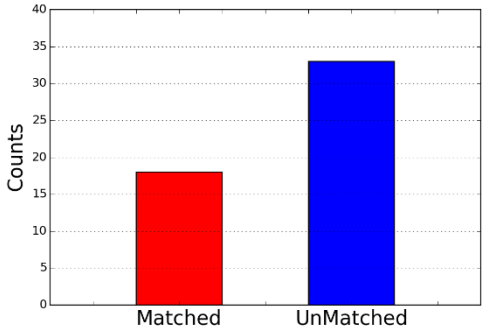


Figure A. 801: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

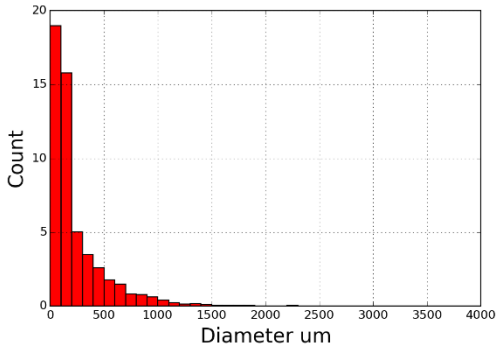


Figure A. 802: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

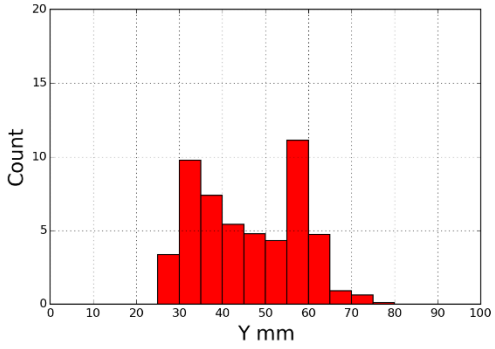


Figure A. 803: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

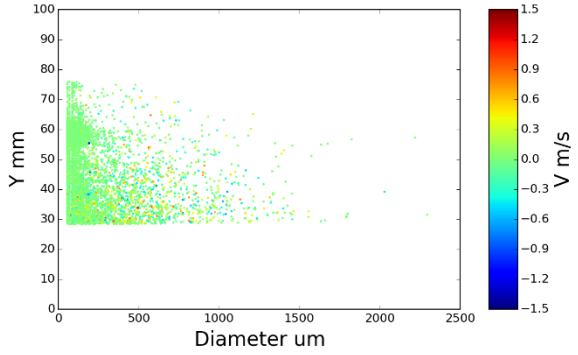


Figure A. 804: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

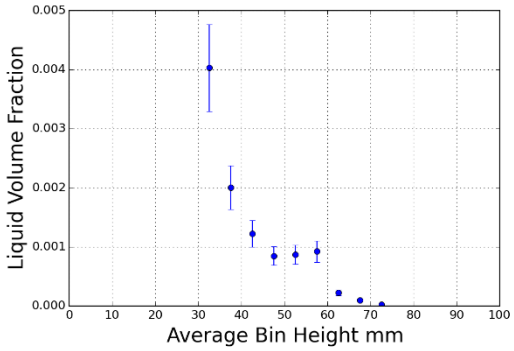


Figure A. 805: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 All Droplets for .LB Image

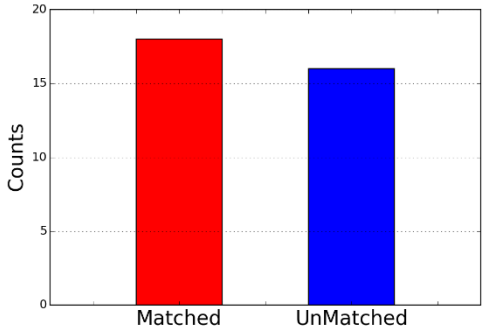


Figure A. 806: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

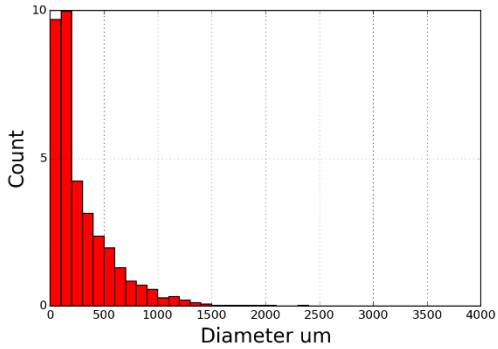


Figure A. 807: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

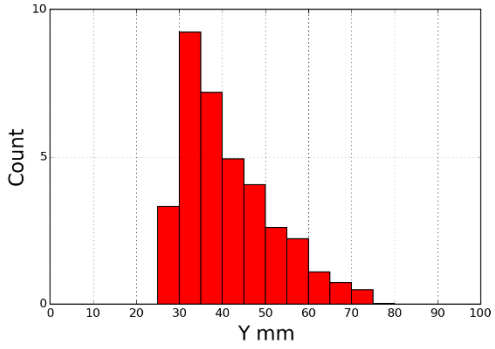


Figure A. 808: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

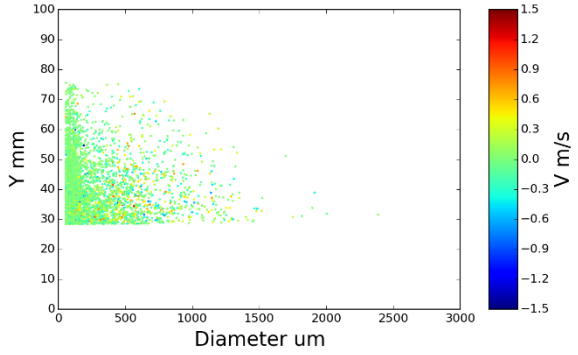


Figure A. 809: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

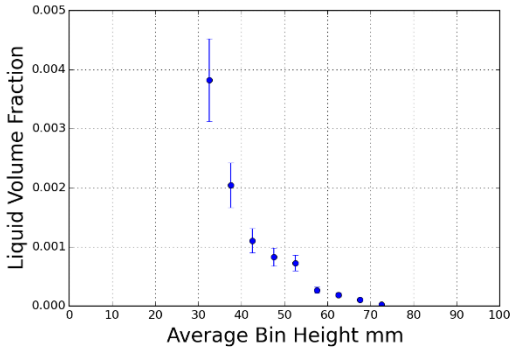


Figure A. 810: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 Matched Only Droplets for .LA Image

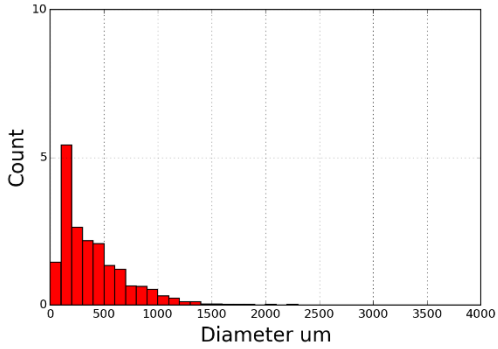


Figure A. 811: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

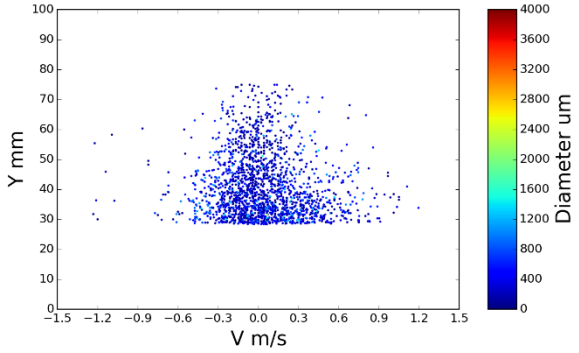


Figure A. 814: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

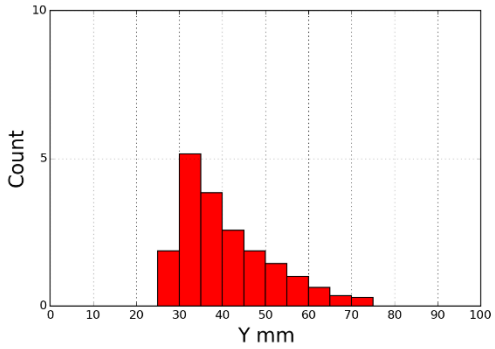


Figure A. 812: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

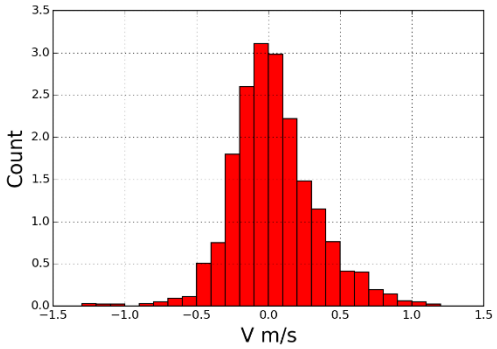


Figure A. 815: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

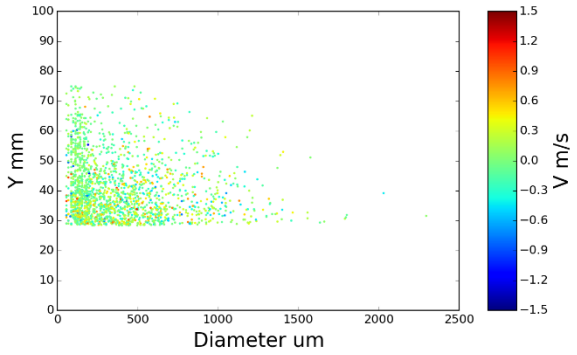


Figure A. 813: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 Matched Only Droplets for .LB Image

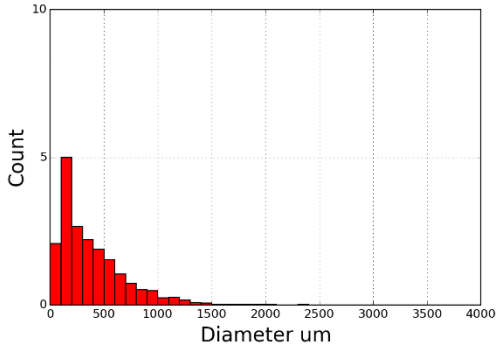


Figure A. 816: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

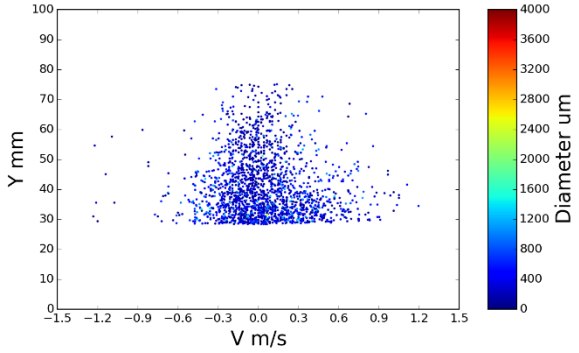


Figure A. 819: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

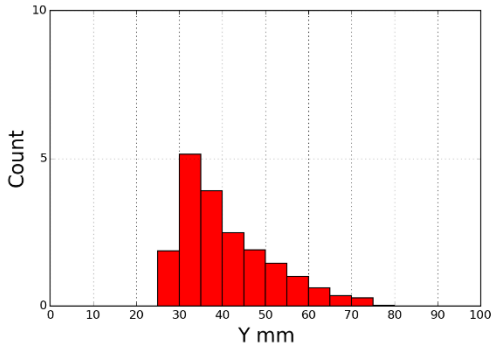


Figure A. 817: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

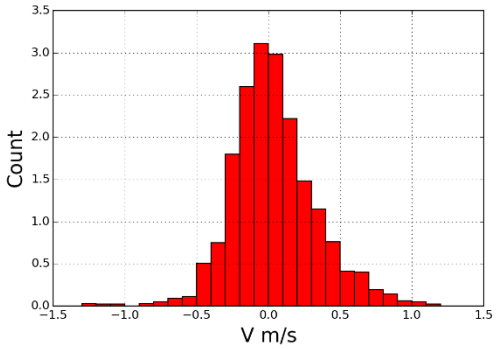


Figure A. 820: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

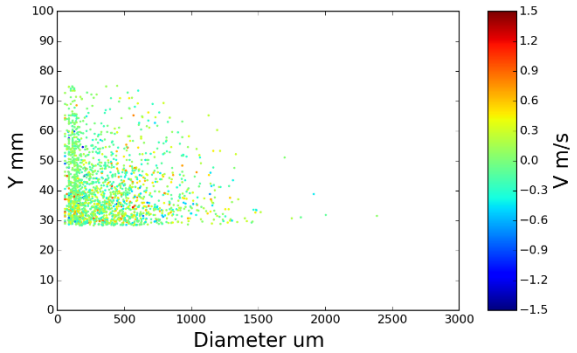


Figure A. 818: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	35.45	34.95	56.9	2874	369.4	385.5	56.9	2941	363.6	375.9
40-60mm	48.67	29.34	56.9	2394	234.9	285.3	56.9	1990	305.8	314.8
60-80mm	12.86	5.91	56.9	2292	178.0	229.8	56.9	1852	265.9	315.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	96.99	70.2	56.9	2874	276.5	327.9	56.9	2941	331.2	348.3
			Height A (mm)				Height B (mm)			
Highest Particle			76.2955				76.2809			
Lowest Particle			28.3711				28.3711			

Table A. 88: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	15.11	56.9	2852	507.9	413.6	56.9	2941	494.3	399.7	-1.240	1.240	-0.030	0.230	-1.260	1.240	-0.030	0.350
40-60mm	11.08	56.9	1964	452.3	351.0	56.9	1902	441.3	341.3	-1.240	1.210	-0.030	0.240	-1.240	1.260	-0.040	0.330
60-80mm	1.93	56.9	1846	459.8	373.4	56.9	1746	452.4	363.7	-1.260	0.420	-0.080	0.190	-1.090	0.800	-0.060	0.250
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	28.12	56.9	2852	482.7	388.3	56.9	2941	470.6	376.2	-1.260	1.240	-0.030	0.230	-1.260	1.260	-0.030	0.340

Table A. 89: Matched Droplet Info

A.1.5.1 All Droplets for .LA Image

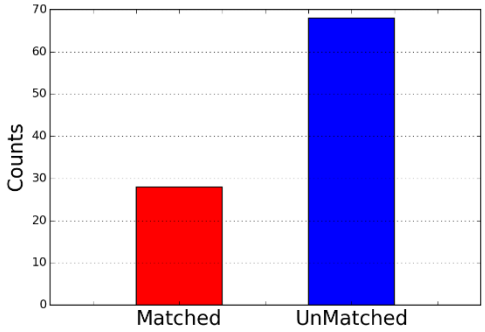


Figure A. 821: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

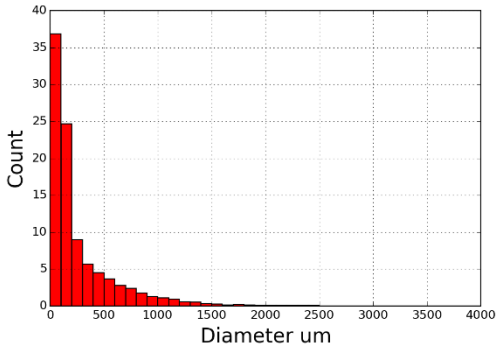


Figure A. 822: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

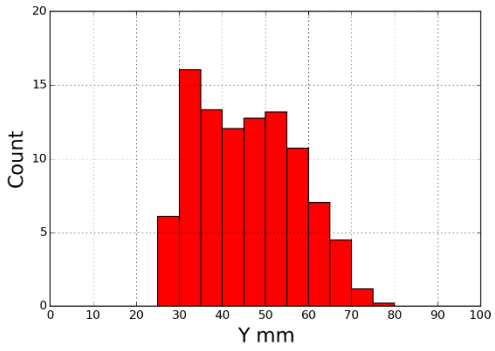


Figure A. 823: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

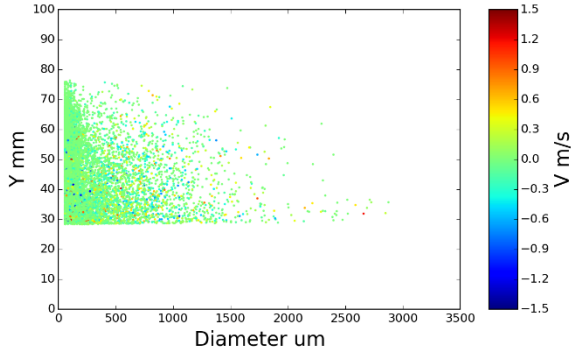


Figure A. 824: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

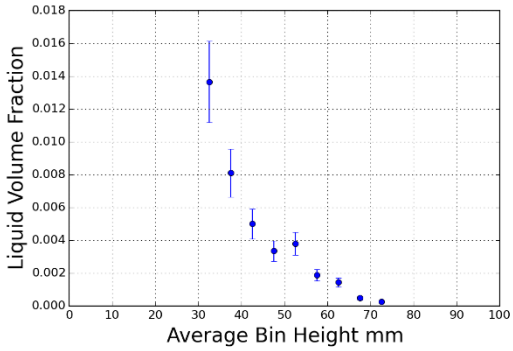


Figure A. 825: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 All Droplets for .LB Image

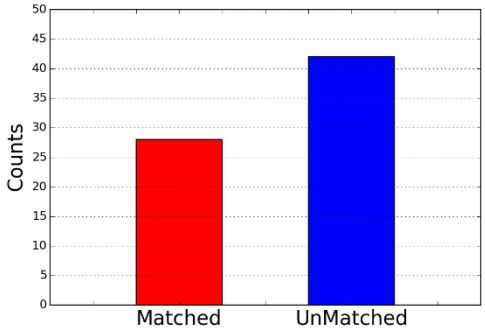


Figure A. 826: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

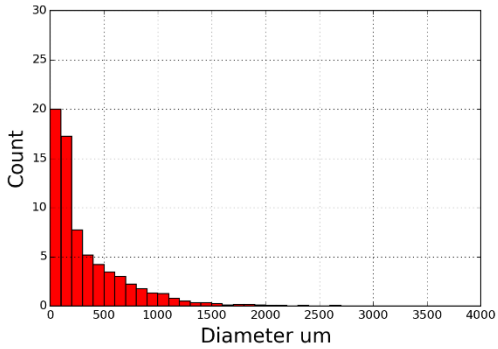


Figure A. 827: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

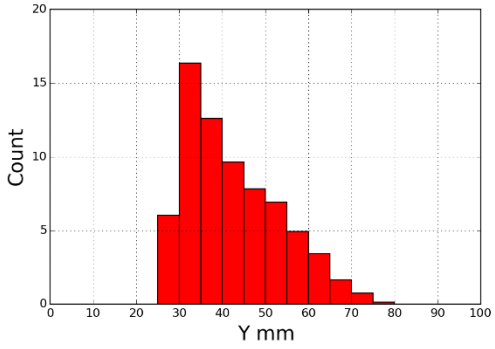


Figure A. 828: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

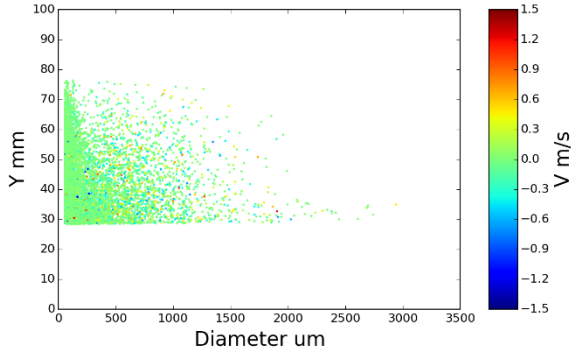


Figure A. 829: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

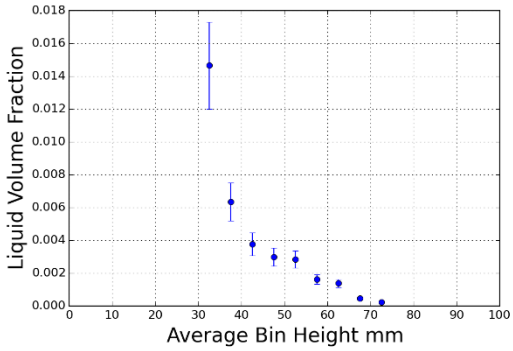


Figure A. 830: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 Matched Only Droplets for .LA Image

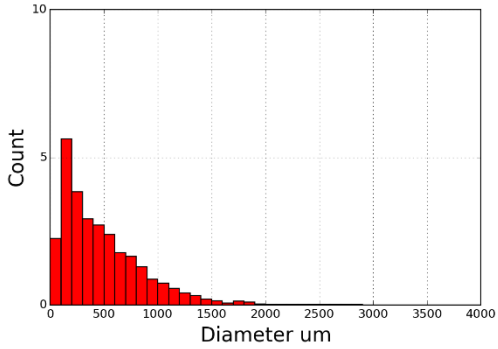


Figure A. 831: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

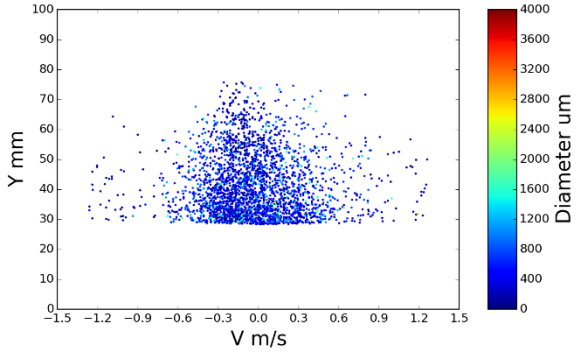


Figure A. 834: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

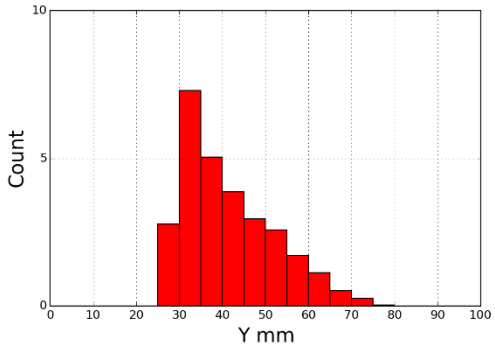


Figure A. 832: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

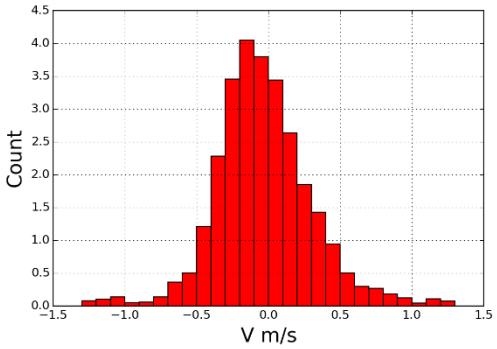


Figure A. 835: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

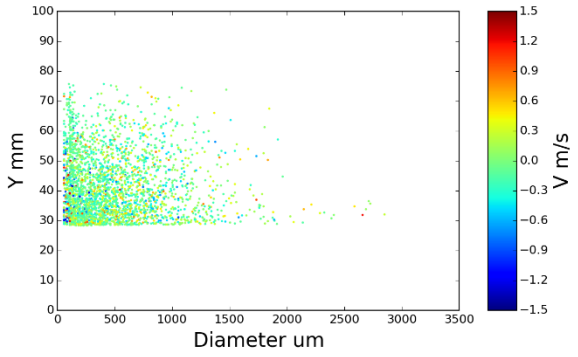


Figure A. 833: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 Matched Only Droplets for .LB Image

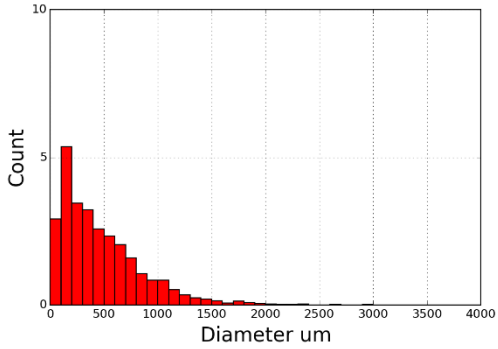


Figure A. 836: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

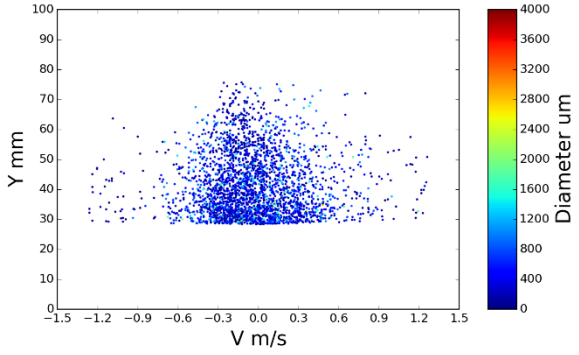


Figure A. 839: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

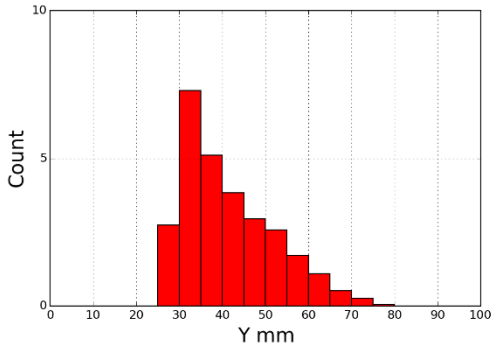


Figure A. 837: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

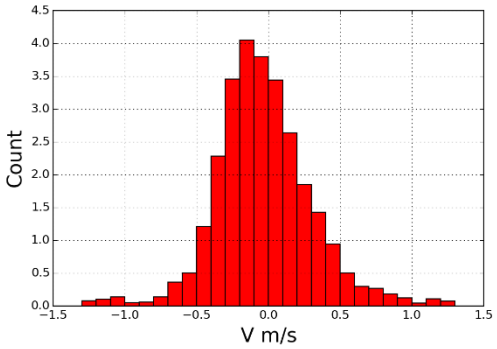


Figure A. 840: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

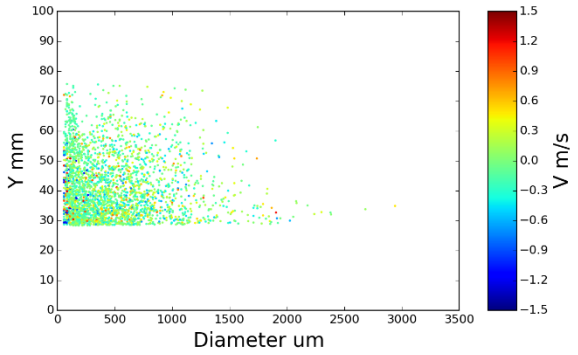


Figure A. 838: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	22.88	24.74	56.9	2501	345.8	338.7	56.9	2808	324.3	331.5
40-60mm	17.07	19.16	56.9	2271	275.0	294.8	56.9	2060	259.8	289.0
60-80mm	3.52	3.57	56.9	2173	177.1	235.8	56.9	1943	173.8	223.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	43.47	47.49	56.9	2501	304.3	318.7	56.9	2808	287.0	311.1
			Height A (mm)				Height B (mm)			
Highest Particle			76.2324				76.2577			
Lowest Particle			28.3815				28.3657			

Table A. 90: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	13.76	56.9	2501	445.9	363.7	56.9	2516	439.9	363.6	-1.200	1.230	-0.050	0.210	-1.260	1.240	-0.030	0.320
40-60mm	10.07	56.9	2271	368.3	331.7	56.9	2050	362.0	328.1	-1.160	0.930	-0.070	0.190	-1.160	1.130	-0.060	0.270
60-80mm	1.6	56.9	2173	258.9	299.2	56.9	1943	253.6	291.6	-1.120	0.600	-0.080	0.160	-1.200	0.930	-0.110	0.220
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	25.43	56.9	2501	403.4	351.5	56.9	2516	397.3	349.7	-1.200	1.230	-0.060	0.200	-1.260	1.240	-0.050	0.300

Table A. 91: Matched Droplet Info

A.1.5.1 All Droplets for .LA Image

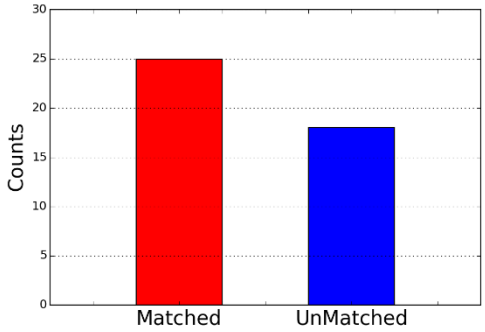


Figure A. 841: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

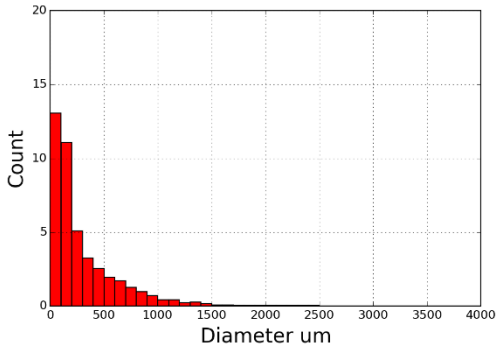


Figure A. 842: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

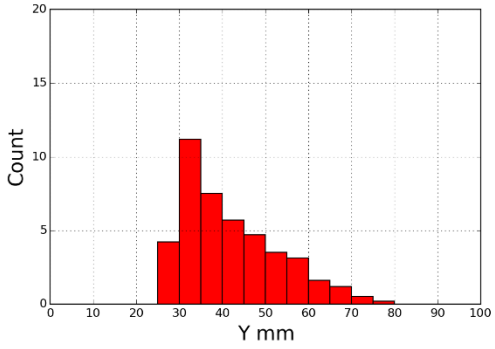


Figure A. 843: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

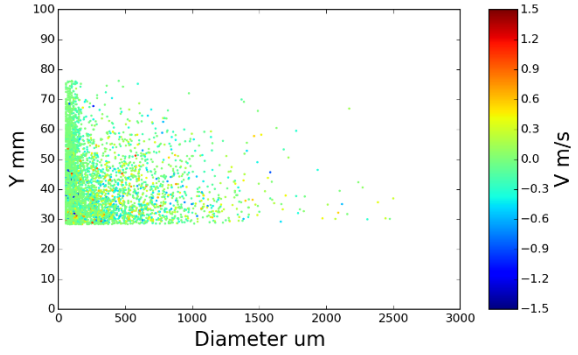


Figure A. 844: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

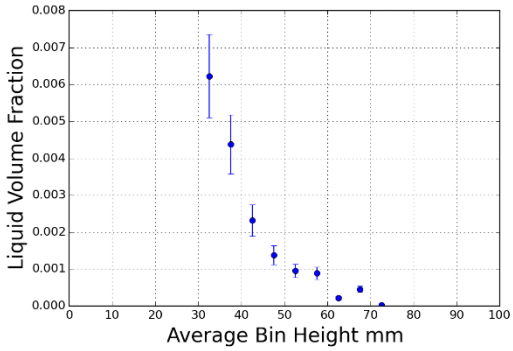


Figure A. 845: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 All Droplets for .LB Image

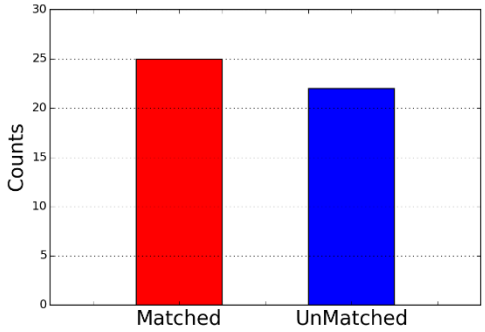


Figure A. 846: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

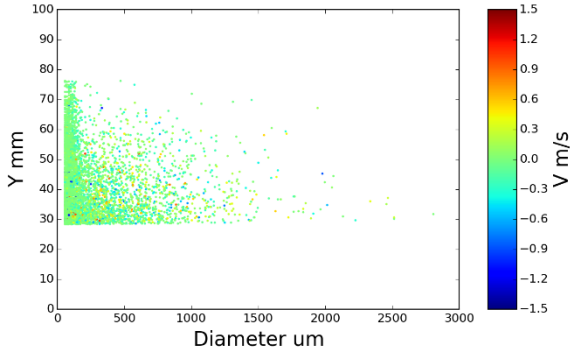


Figure A. 849: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

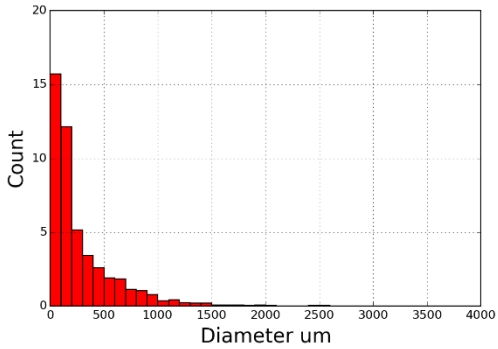


Figure A. 847: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

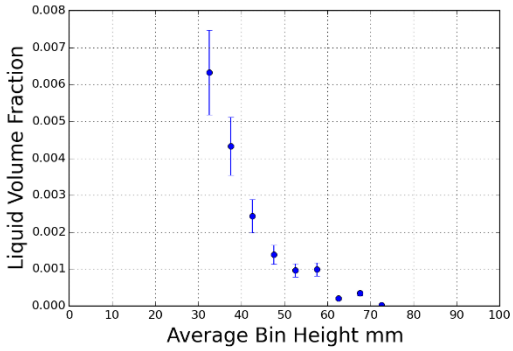


Figure A. 850: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

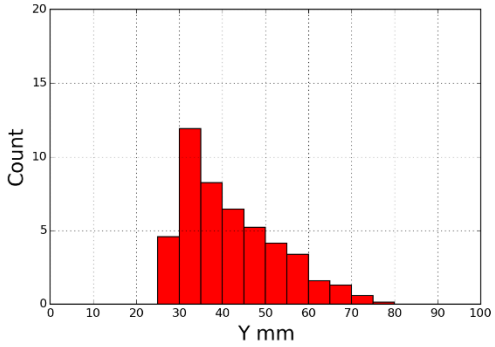


Figure A. 848: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 Matched Only Droplets for .LA Image

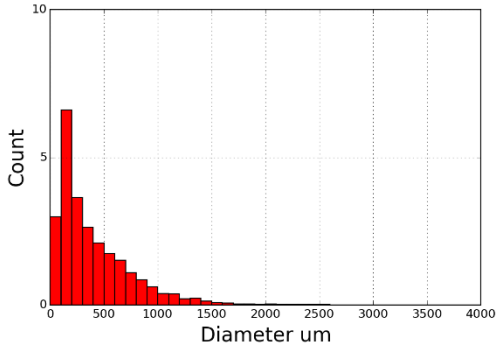


Figure A. 851: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

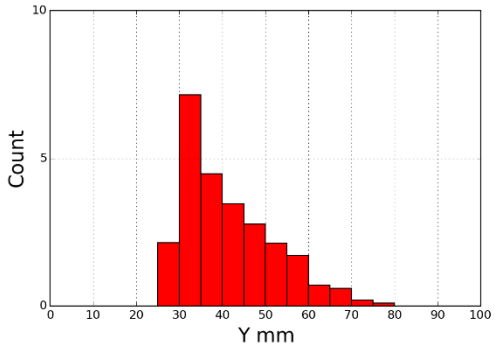


Figure A. 852: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

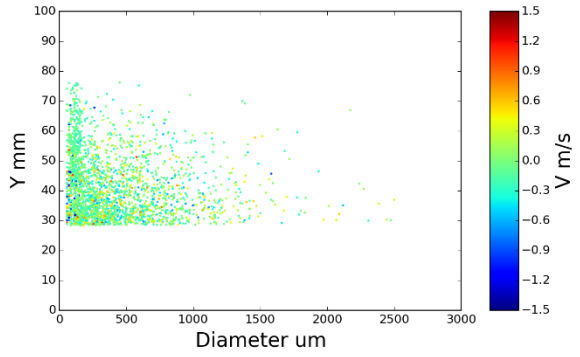


Figure A. 853: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

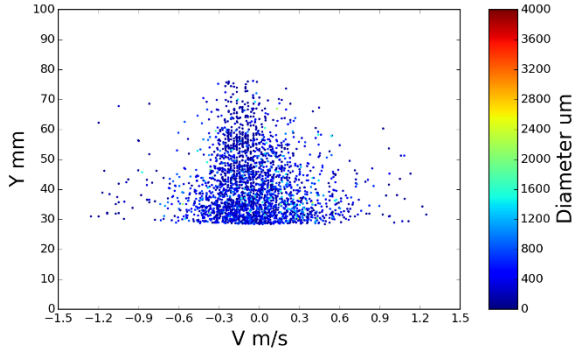


Figure A. 854: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

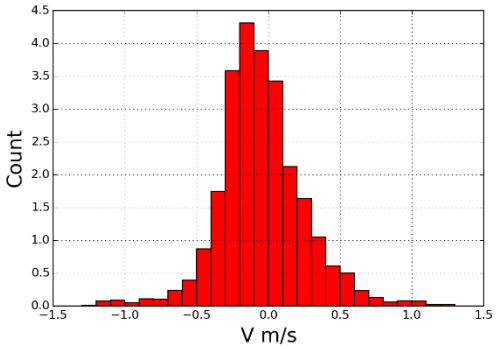


Figure A. 855: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 Matched Only Droplets for .LB Image

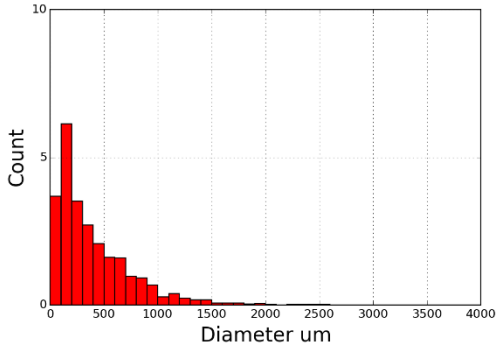


Figure A. 856: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

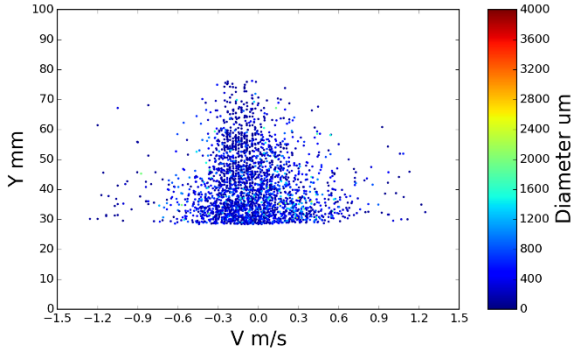


Figure A. 859: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

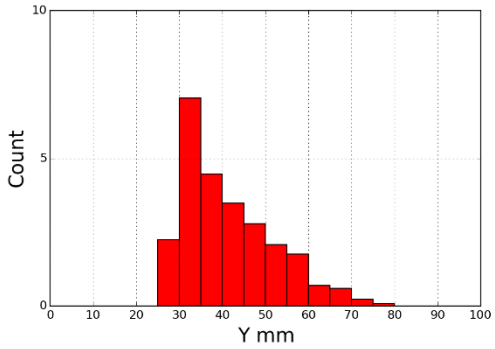


Figure A. 857: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

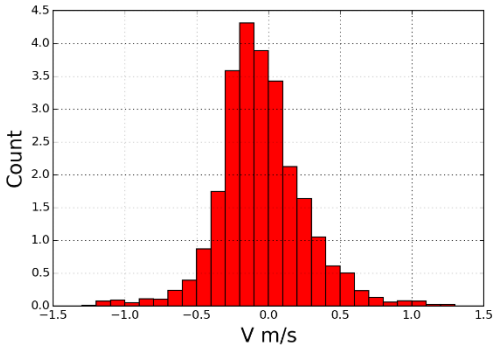


Figure A. 860: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

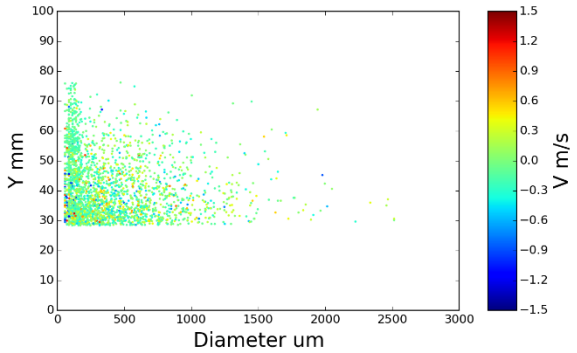


Figure A. 858: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	27.42	30.96	56.9	2019	338.0	318.1	56.9	2395	309.0	314.0
40-60mm	23.61	28.95	56.9	2076	271.5	280.0	56.9	2406	239.6	264.7
60-80mm	4.27	4.84	56.9	1567	185.3	209.5	56.9	1483	169.2	188.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	55.31	64.75	56.9	2076	297.8	298.5	56.9	2406	267.5	288.1
			Height A (mm)				Height B (mm)			
Highest Particle			76.3081				76.2955			
Lowest Particle			28.3828				28.3912			

Table A. 92: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	15.82	56.9	2010	446.8	341.5	56.9	2395	436.4	339.4	-1.240	1.180	-0.080	0.210	-1.240	1.240	-0.010	0.320
40-60mm	13.12	56.9	2076	366.8	317.9	56.9	2076	353.7	309.6	-1.250	1.260	-0.060	0.220	-1.190	1.220	-0.020	0.300
60-80mm	2.05	56.9	1467	262.0	243.1	56.9	1483	252.4	236.1	-0.590	1.050	-0.080	0.150	-1.260	0.620	-0.060	0.200
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	30.99	56.9	2076	400.7	330.2	56.9	2395	389.4	325.6	-1.250	1.260	-0.070	0.210	-1.260	1.240	-0.020	0.310

Table A. 93: Matched Droplet Info

A.1.5.1 All Droplets for .LA Image

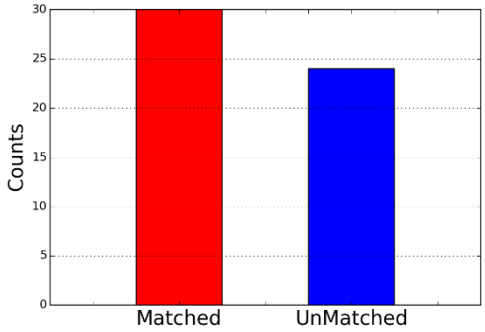


Figure A. 861: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

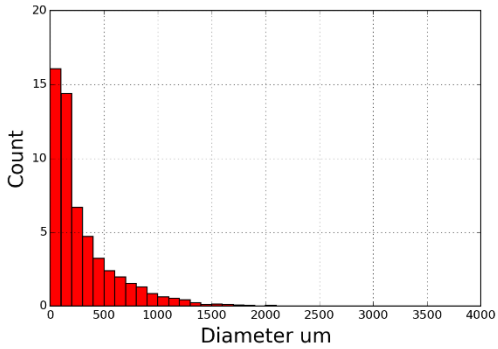


Figure A. 862: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

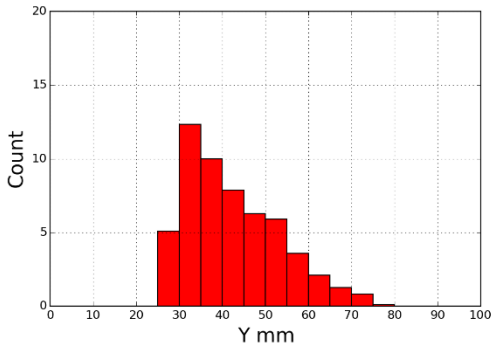


Figure A. 863: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

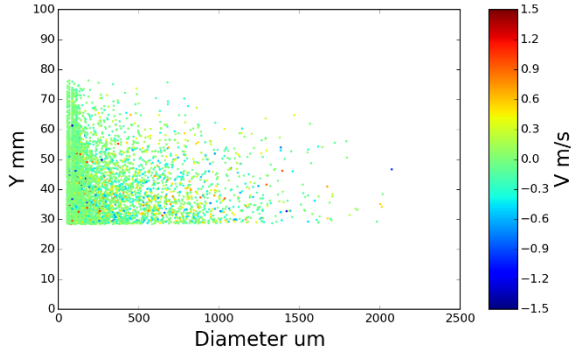


Figure A. 864: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

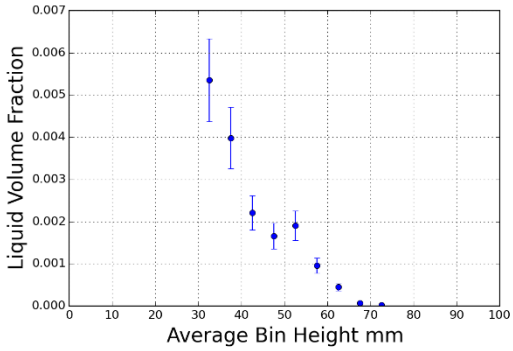


Figure A. 865: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 All Droplets for .LB Image

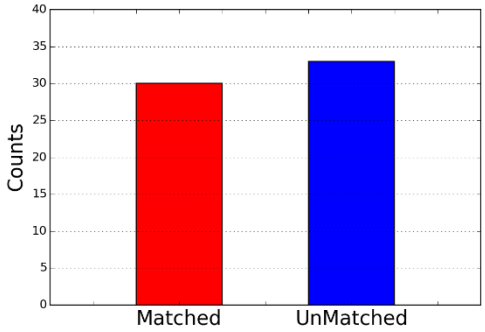


Figure A. 866: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

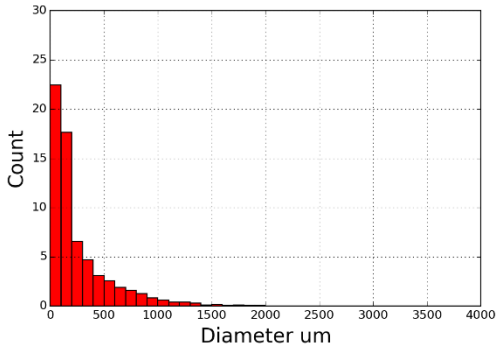


Figure A. 867: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

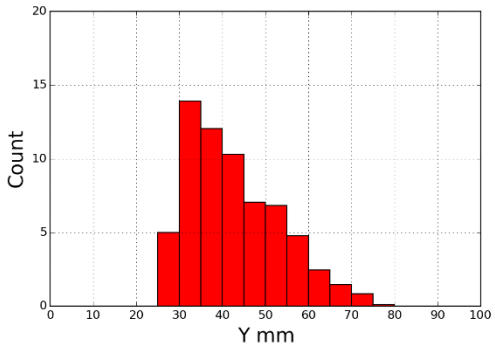


Figure A. 868: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

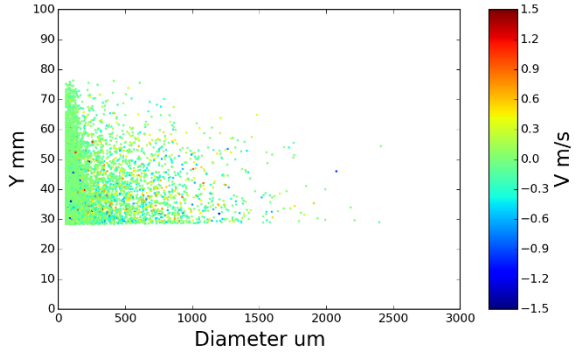


Figure A. 869: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

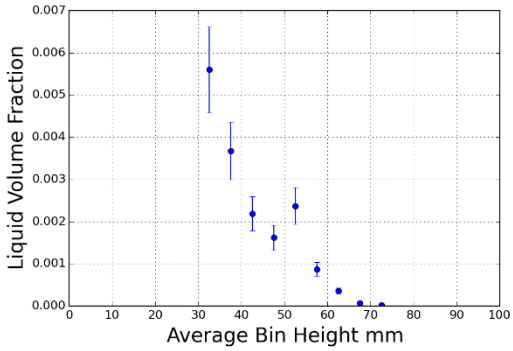


Figure A. 870: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 Matched Only Droplets for .LA Image

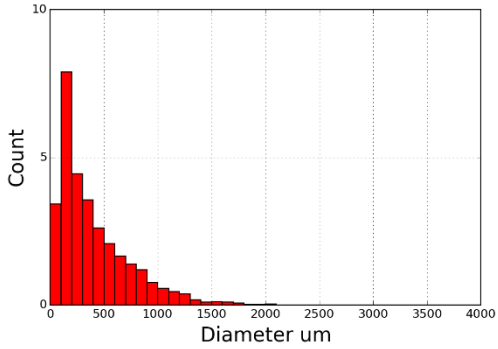


Figure A. 871: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

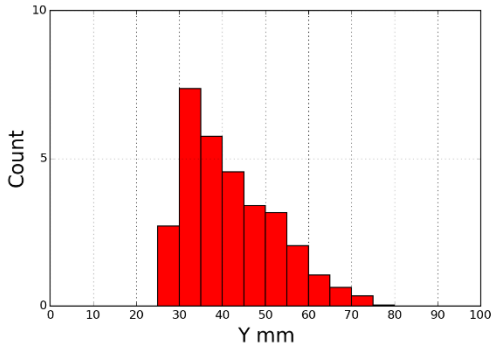


Figure A. 872: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

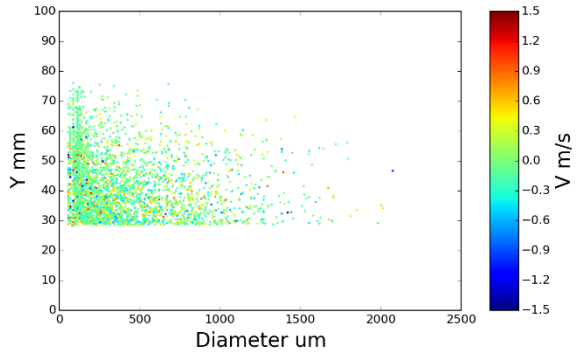


Figure A. 873: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

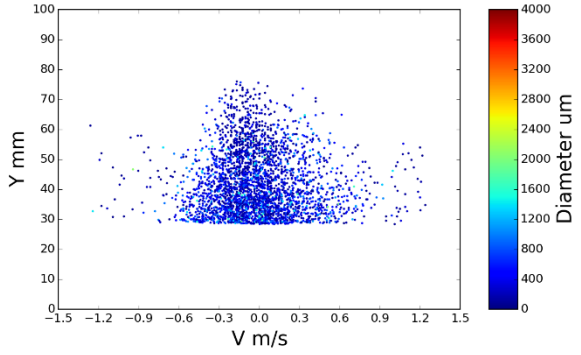


Figure A. 874: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

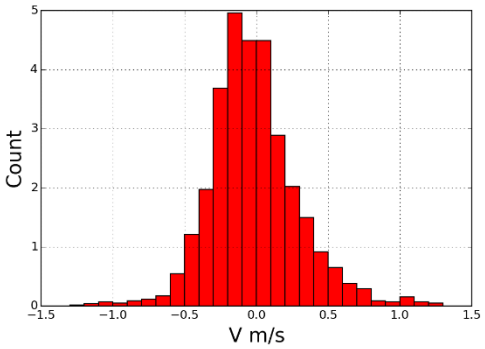


Figure A. 875: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 Matched Only Droplets for .LB Image

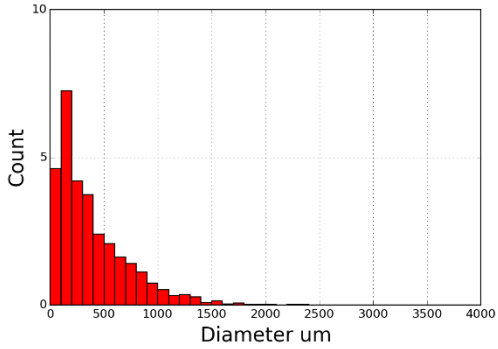


Figure A. 876: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

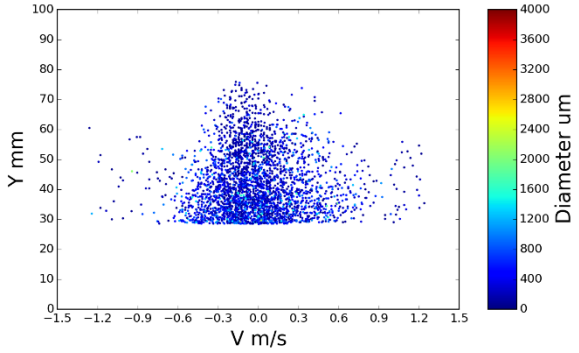


Figure A. 879: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

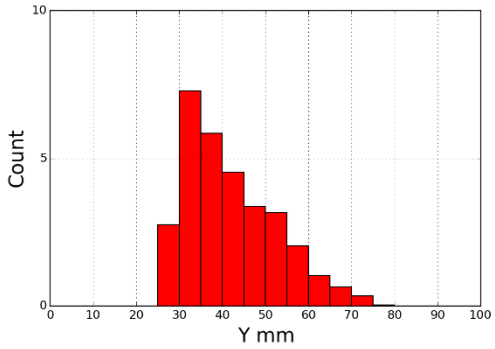


Figure A. 877: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

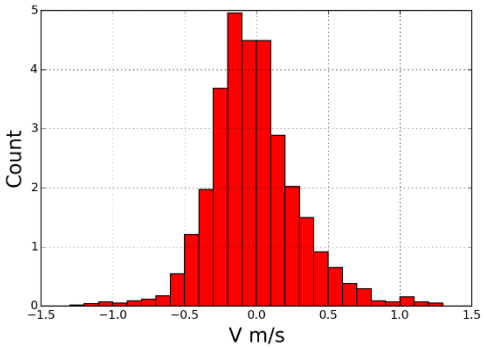


Figure A. 880: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

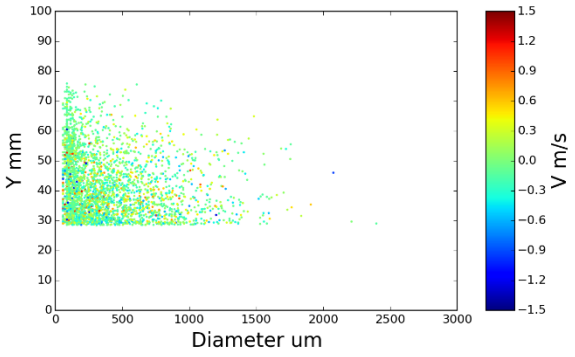


Figure A. 878: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	23.39	26.72	56.9	2435	340.3	309.2	56.9	2232	314.9	304.3
40-60mm	24.0	25.35	56.9	2429	270.3	260.2	56.9	2291	262.6	261.3
60-80mm	4.75	5.18	56.9	1086	202.1	191.5	56.9	1066	187.5	173.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	52.14	57.25	56.9	2435	295.5	281.7	56.9	2291	280.2	278.7
			Height A (mm)				Height B (mm)			
Highest Particle			76.1568				76.0180			
Lowest Particle			28.3824				28.3711			

Table A. 94: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	13.92	56.9	2435	443.9	336.7	56.9	2232	442.7	335.8	-1.240	1.240	-0.070	0.210	-1.260	1.250	0.030	0.340
40-60mm	14.4	56.9	2429	357.4	283.5	56.9	2291	358.5	288.5	-1.090	1.260	-0.060	0.190	-1.240	1.240	0.010	0.290
60-80mm	2.41	56.9	1055	269.6	209.0	56.9	1066	264.2	209.1	-1.220	1.260	-0.070	0.200	-0.710	0.760	0.020	0.220
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	30.73	56.9	2435	389.7	308.9	56.9	2291	389.2	310.6	-1.240	1.260	-0.070	0.200	-1.260	1.250	0.020	0.310

Table A. 95: Matched Droplet Info

A.1.5.1 All Droplets for .LA Image

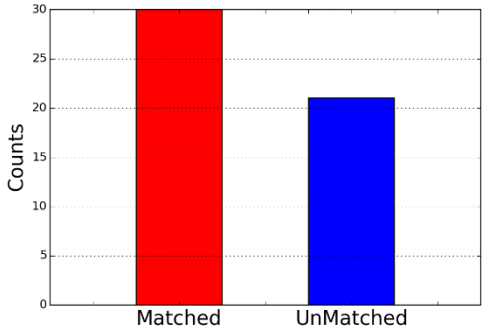


Figure A. 881: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

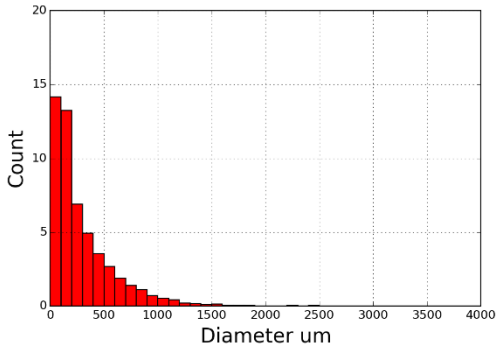


Figure A. 882: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

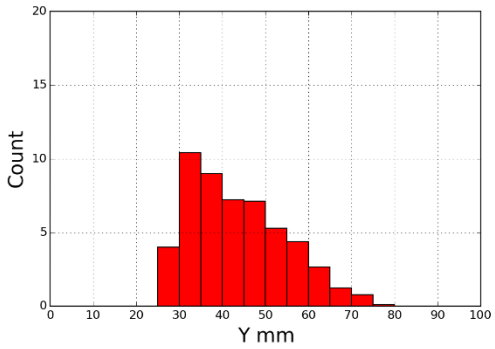


Figure A. 883: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

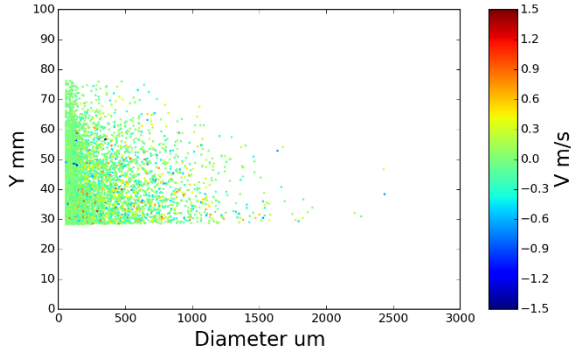


Figure A. 884: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

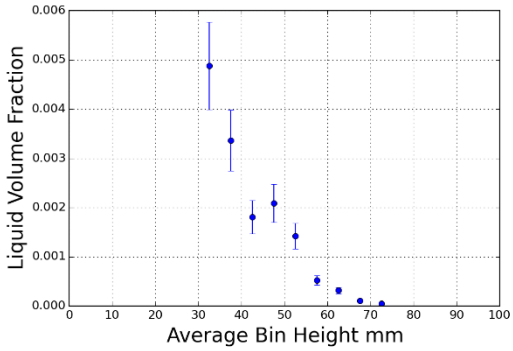


Figure A. 885: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 All Droplets for .LB Image

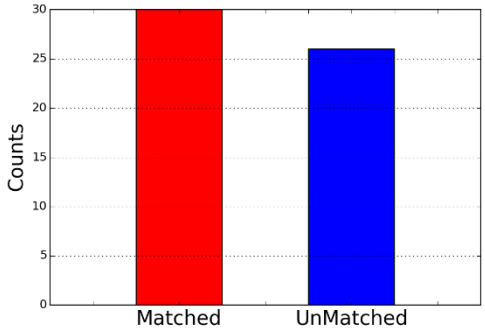


Figure A. 886: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

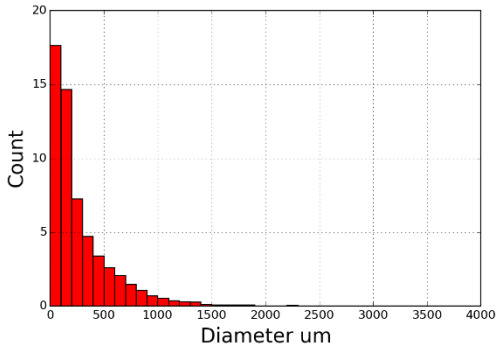


Figure A. 887: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

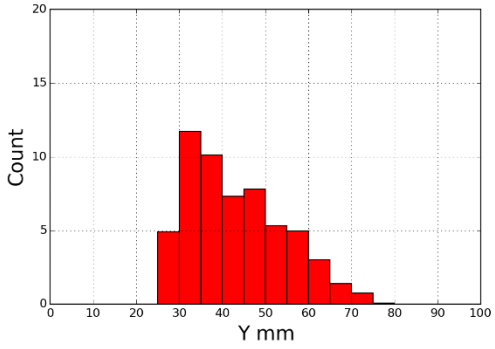


Figure A. 888: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

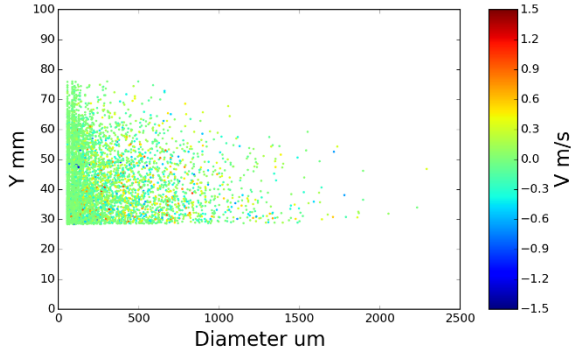


Figure A. 889: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

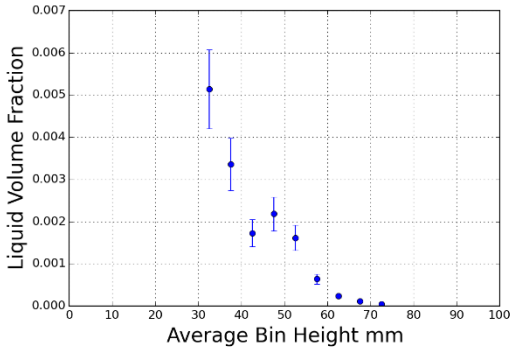


Figure A. 890: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 Matched Only Droplets for .LA Image

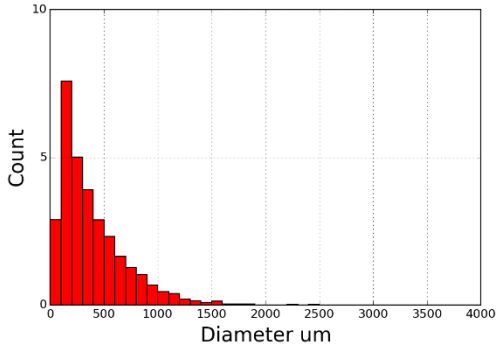


Figure A. 891: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

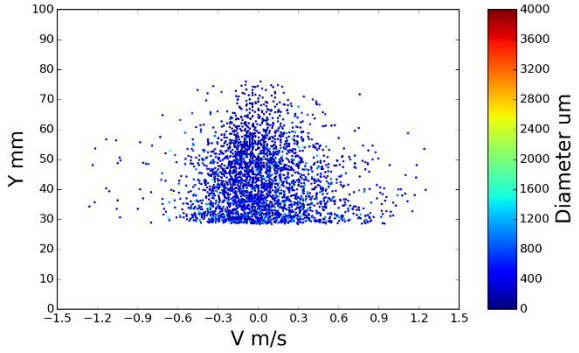


Figure A. 894: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

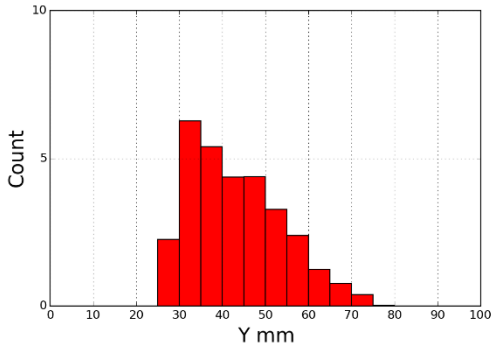


Figure A. 892: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

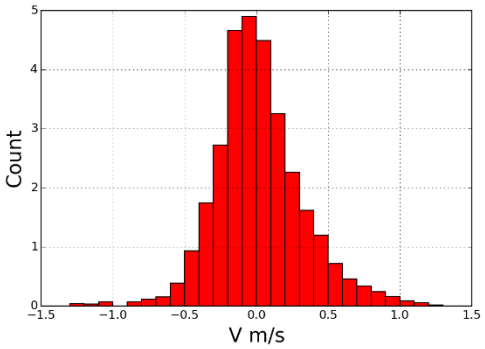


Figure A. 895: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

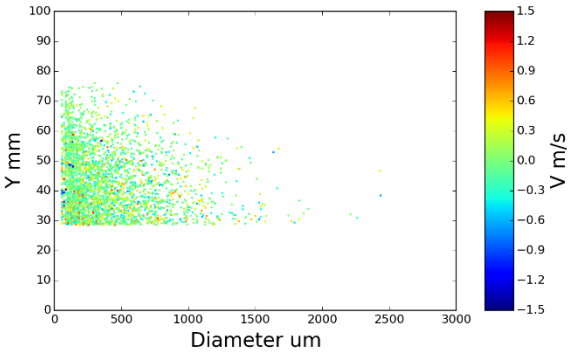


Figure A. 893: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.1 Matched Only Droplets for .LB Image

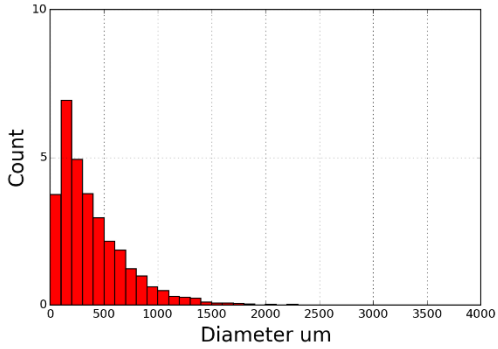


Figure A. 896: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

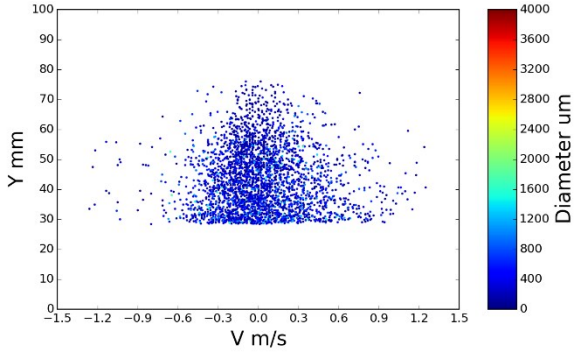


Figure A. 899: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

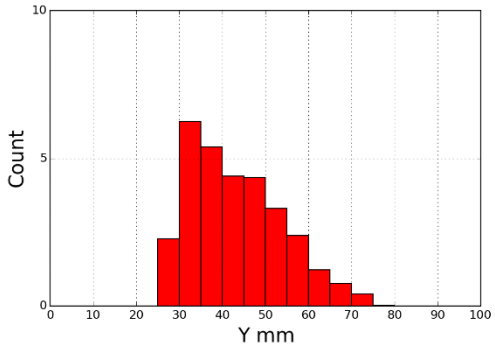


Figure A. 897: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

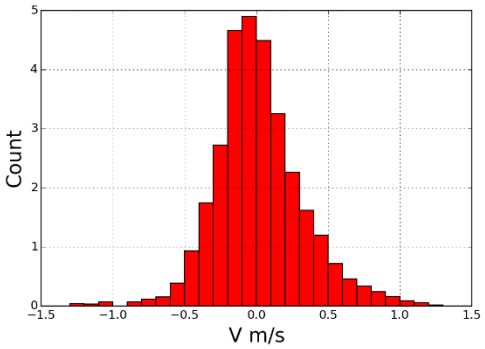


Figure A. 900: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

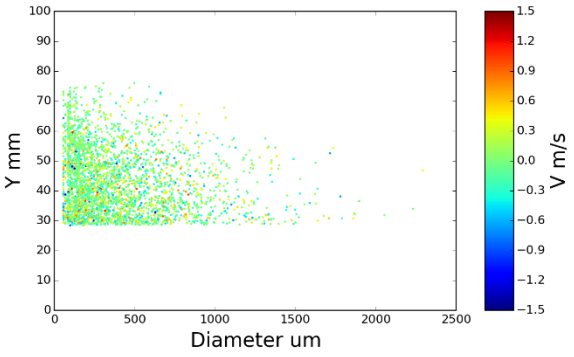


Figure A. 898: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 Lens 50mm Mag 0_13x

A.1.5.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	30.87	31.17	128.4	3357	669.7	523.3	128.4	3415	654.7	514.7
20-40mm	21.18	20.19	128.4	3286	525.1	376.4	128.4	3213	529.4	384.1
40-60mm	4.1	4.01	128.4	1928	461.0	293.9	128.4	1528	462.8	270.1
60-80mm	0.44	0.45	157.3	1133	455.7	240.4	157.3	1122	444.4	221.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	56.59	55.82	128.4	3357	598.8	464.1	128.4	3415	593.9	460.4
			Height A (mm)				Height B (mm)			
Highest Particle			78.9592				79.0994			
Lowest Particle			5.0659				5.0659			

Table A. 96: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	17.68	128.4	3357	759.3	523.0	128.4	3356	748.2	519.3	-1.220	1.220	-0.060	0.300	-1.210	1.210	0.010	0.380
20-40mm	13.92	128.4	3227	604.3	381.7	128.4	3086	588.2	371.5	-1.180	1.200	-0.040	0.220	-1.170	1.200	0.010	0.340
40-60mm	2.75	128.4	1524	535.3	272.0	128.4	1528	521.0	259.2	-0.330	1.200	-0.010	0.140	-0.590	0.790	-0.010	0.240
60-80mm	0.35	222.5	1133	513.6	233.9	192.7	1122	485.8	227.1	-0.200	0.220	-0.010	0.100	-0.520	0.350	-0.030	0.210
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	34.7	128.4	3357	676.9	460.1	128.4	3356	663.4	454.4	-1.220	1.220	-0.050	0.260	-1.210	1.210	0.010	0.350

Table A. 97: Matched Droplet Info

A.1.5.2 All Droplets for .LA Image

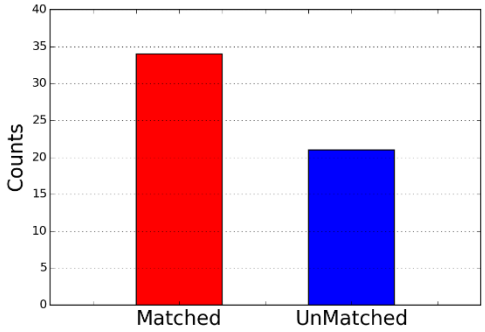


Figure A. 901: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

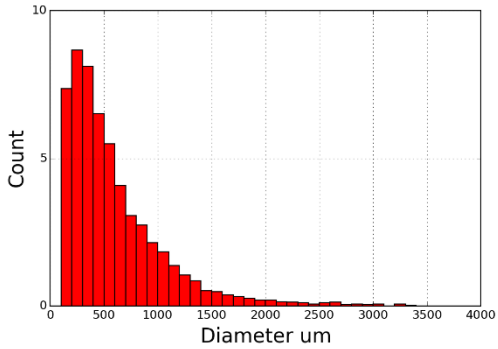


Figure A. 902: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

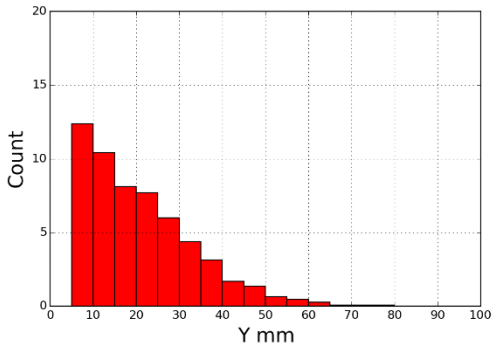


Figure A. 903: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

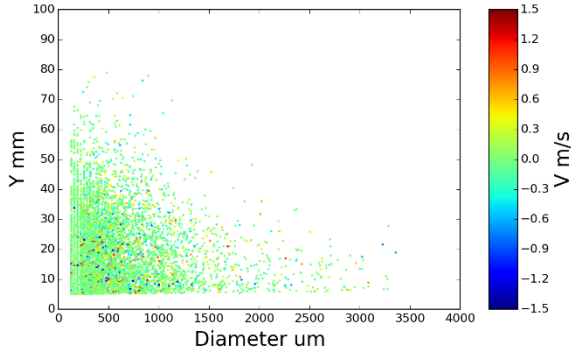


Figure A. 904: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

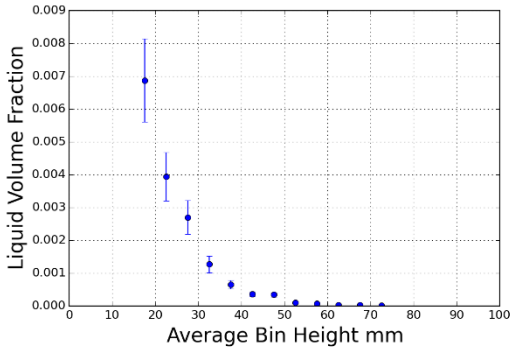


Figure A. 905: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 All Droplets for .LB Image

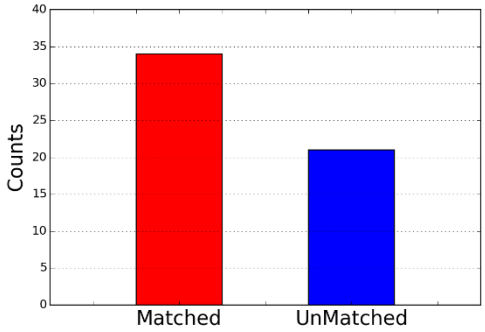


Figure A. 906: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

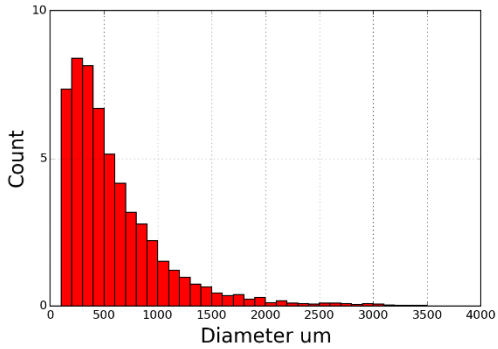


Figure A. 907: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

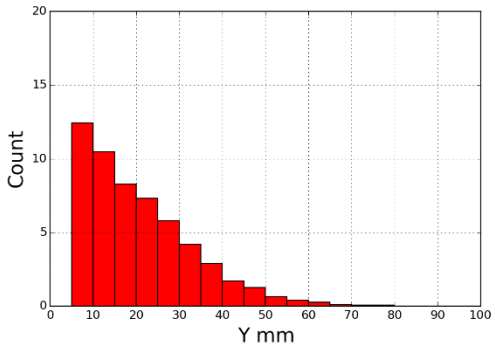


Figure A. 908: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

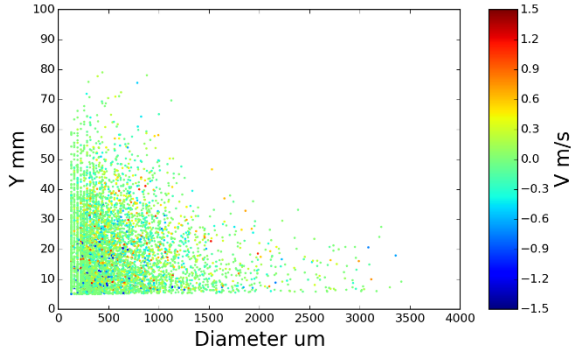


Figure A. 909: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

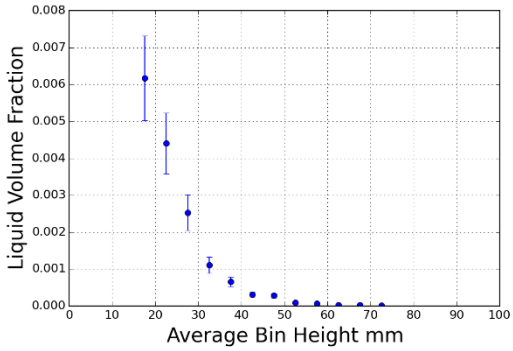


Figure A. 910: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 Matched Only Droplets for .LA Image

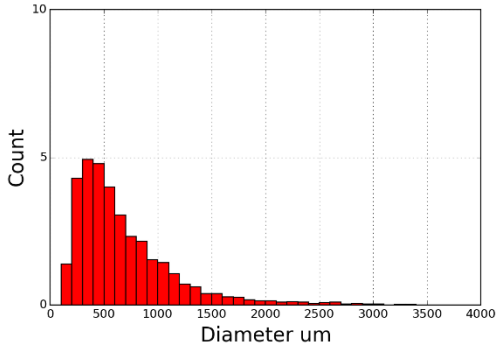


Figure A. 911: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

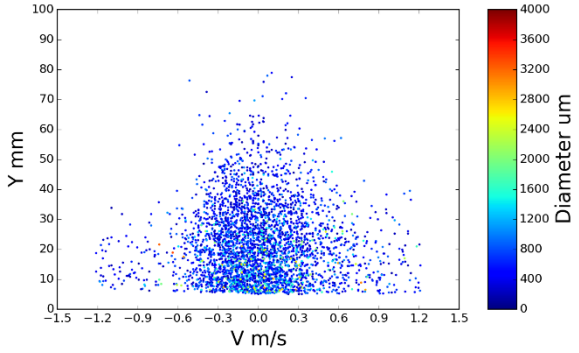


Figure A. 914: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

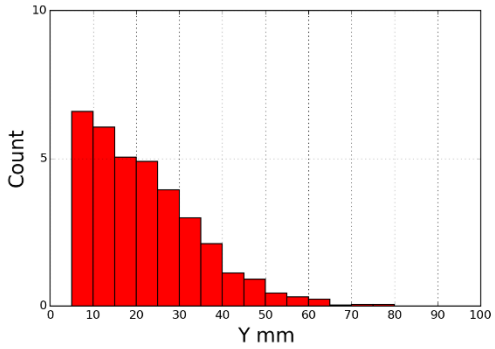


Figure A. 912: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

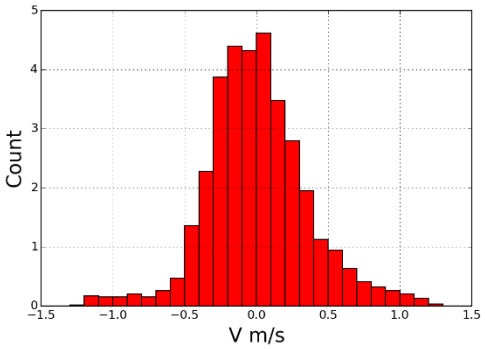


Figure A. 915: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

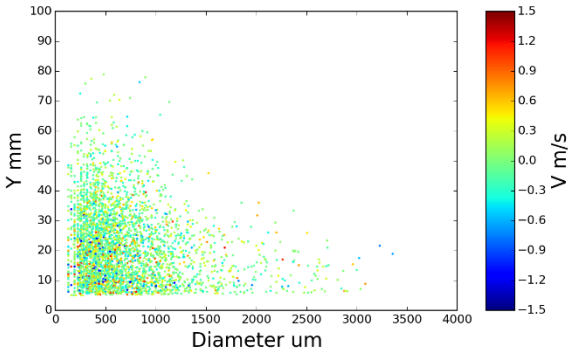


Figure A. 913: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 Matched Only Droplets for .LB Image

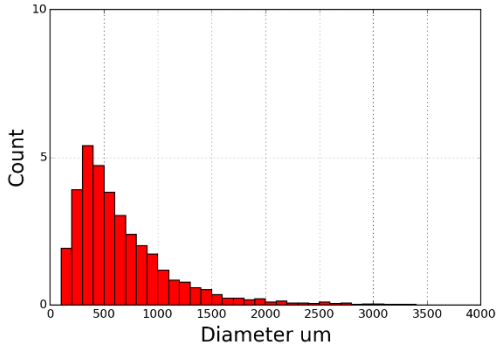


Figure A. 916: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

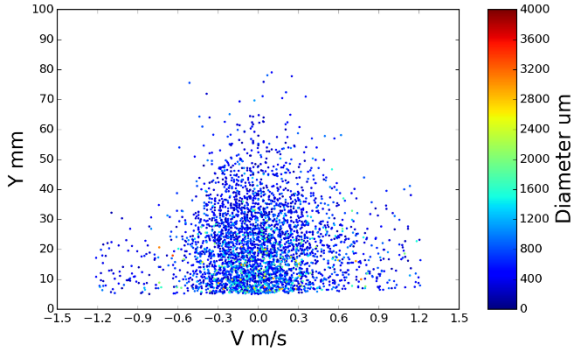


Figure A. 919: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

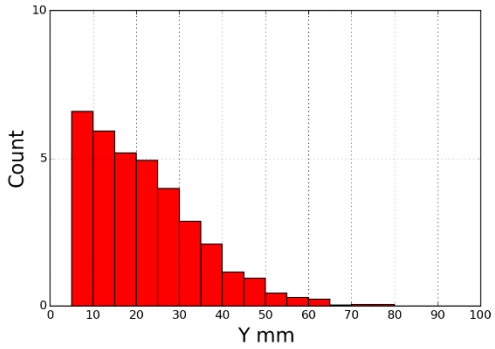


Figure A. 917: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

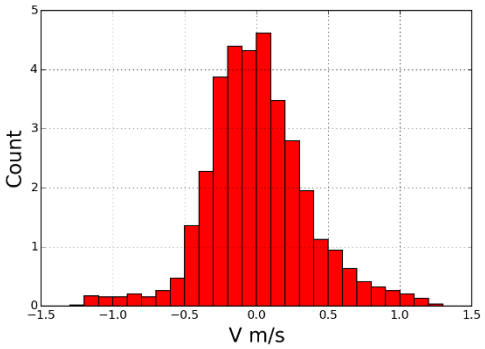


Figure A. 920: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

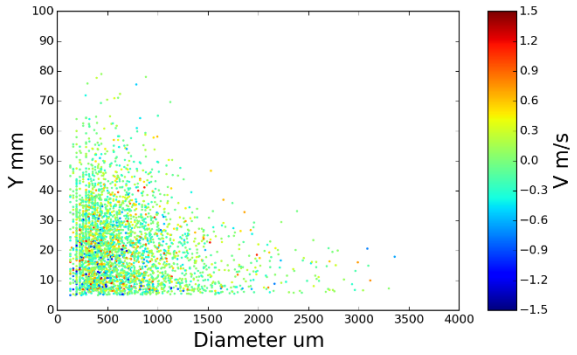


Figure A. 918: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	39.89	40.35	128.4	3368	701.6	549.5	128.4	3390	707.0	552.4
20-40mm	23.27	22.89	128.4	3069	523.8	347.5	128.4	2792	523.0	351.4
40-60mm	3.96	3.96	128.4	1483	502.3	280.8	128.4	1516	492.1	273.1
60-80mm	0.58	0.63	128.4	1576	523.4	322.4	128.4	1546	502.5	281.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	67.7	67.83	128.4	3368	627.3	482.6	128.4	3390	630.4	486.7
			Height A (mm)				Height B (mm)			
Highest Particle			78.2791				78.1458			
Lowest Particle			5.0659				5.0659			

Table A. 98: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	22.24	128.4	3368	833.2	572.9	128.4	3383	821.6	574.6	-1.220	1.210	-0.060	0.310	-1.200	1.220	0.000	0.370
20-40mm	15.72	128.4	2982	597.0	353.5	128.4	2792	588.4	350.7	-1.210	1.220	-0.040	0.220	-1.220	1.200	0.000	0.350
40-60mm	2.93	128.4	1483	574.7	275.3	128.4	1516	555.5	263.0	-0.510	0.300	-0.030	0.120	-1.010	0.790	-0.000	0.280
60-80mm	0.41	222.5	1576	618.4	305.2	192.7	1546	598.7	290.0	-0.280	0.700	0.000	0.140	-0.300	0.460	-0.020	0.160
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	41.3	128.4	3368	722.8	494.8	128.4	3383	711.6	494.3	-1.220	1.220	-0.050	0.270	-1.220	1.220	0.000	0.360

Table A. 99: Matched Droplet Info

A.1.5.2 All Droplets for .LA Image

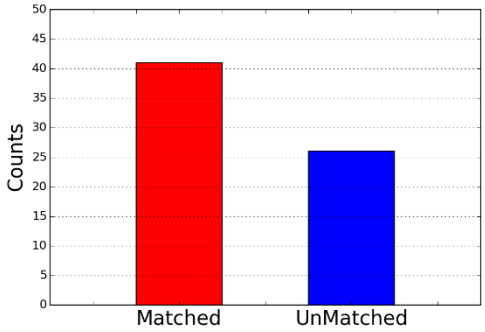


Figure A. 921: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

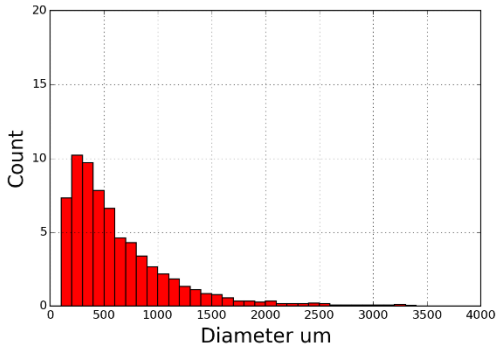


Figure A. 922: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

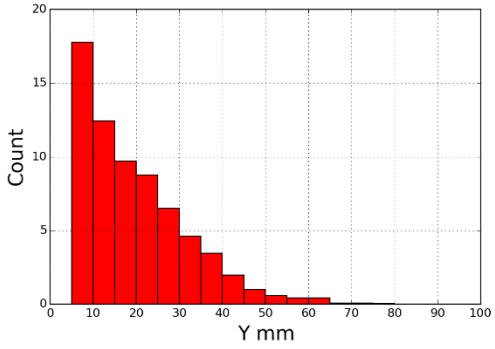


Figure A. 923: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

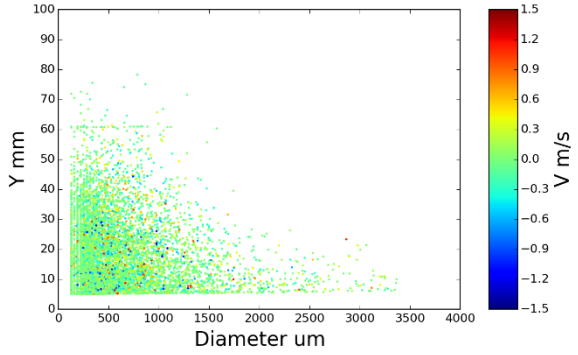


Figure A. 924: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

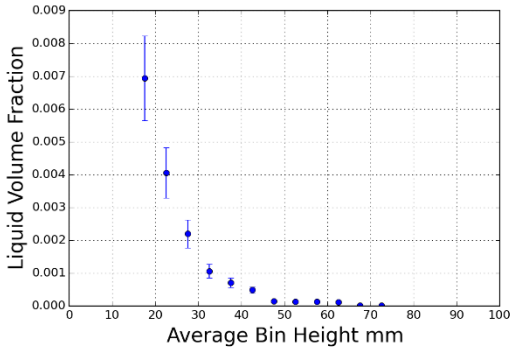


Figure A. 925: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 All Droplets for .LB Image

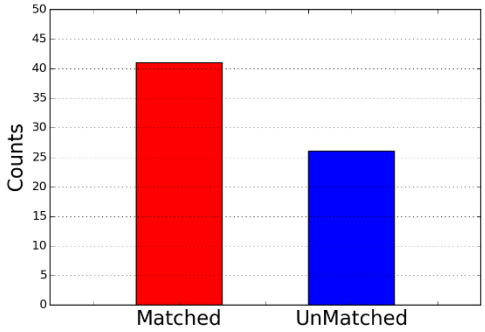


Figure A. 926: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

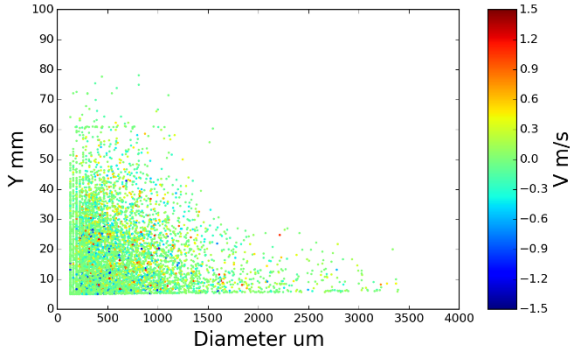


Figure A. 929: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

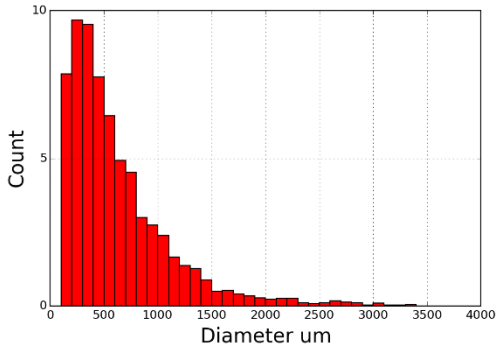


Figure A. 927: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

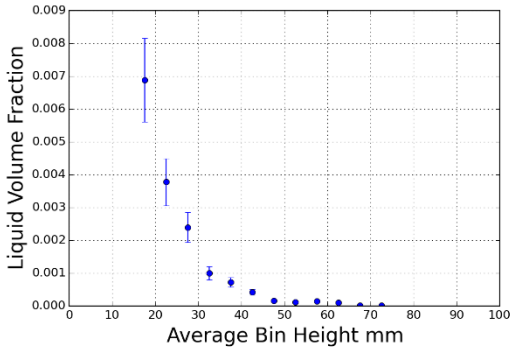


Figure A. 930: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

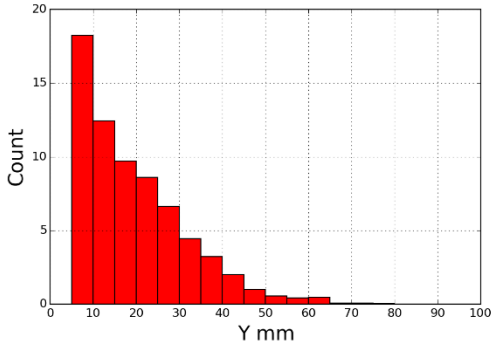


Figure A. 928: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 Matched Only Droplets for .LA Image

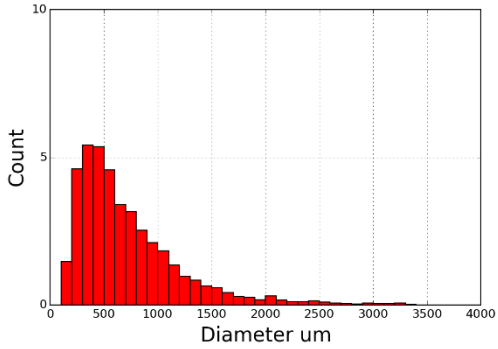


Figure A. 931: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

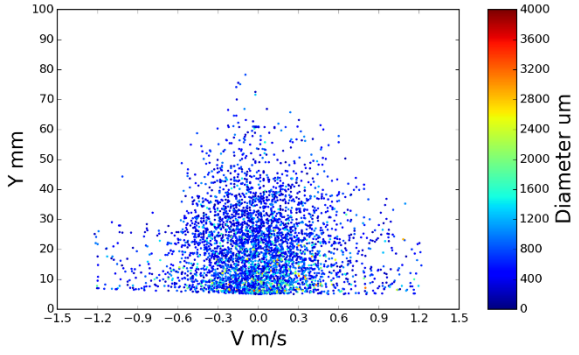


Figure A. 934: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

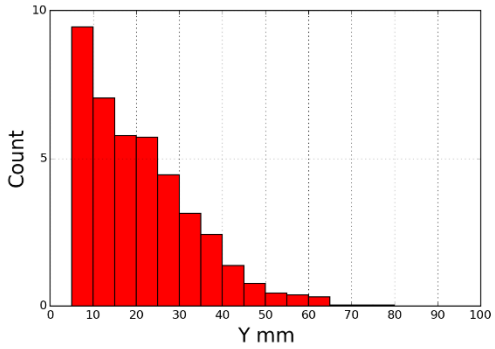


Figure A. 932: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

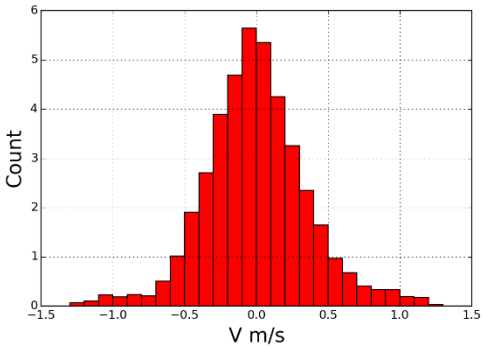


Figure A. 935: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

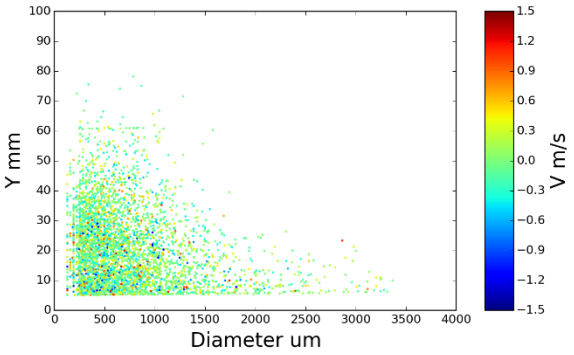


Figure A. 933: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 Matched Only Droplets for .LB Image

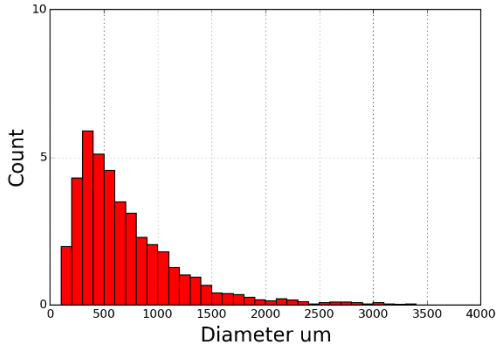


Figure A. 936: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

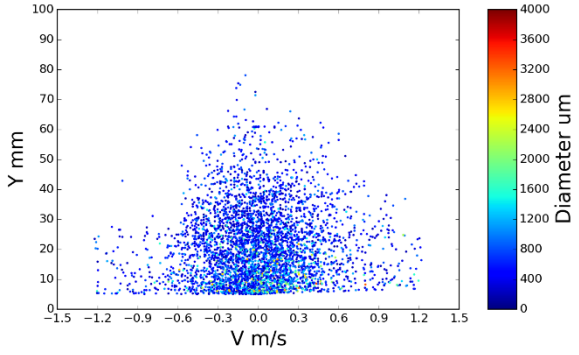


Figure A. 939: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

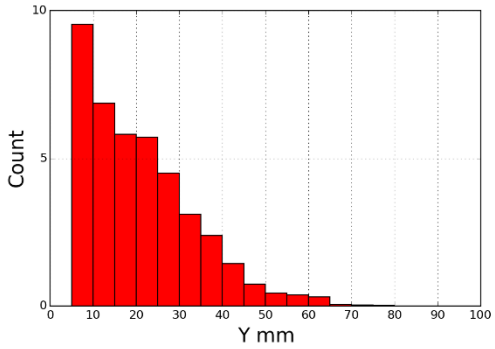


Figure A. 937: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

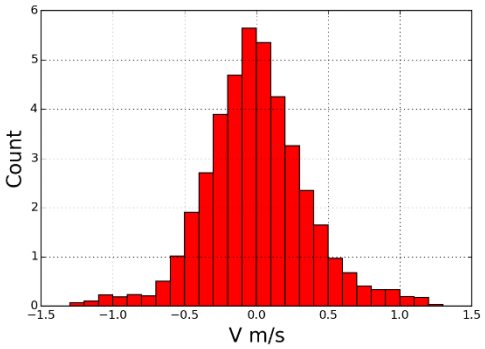


Figure A. 940: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

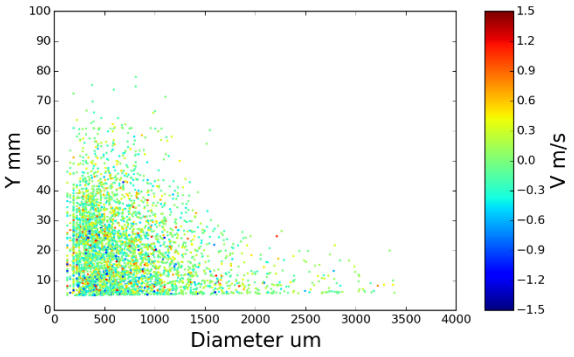


Figure A. 938: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	35.76	35.38	128.4	3411	667.2	524.7	128.4	3387	668.9	525.6
20-40mm	23.31	23.5	128.4	3324	547.9	380.0	128.4	2746	535.8	366.1
40-60mm	4.91	4.61	128.4	2111	512.5	312.0	128.4	2120	512.9	325.9
60-80mm	0.45	0.37	128.4	1057	362.2	197.8	157.3	721.0	349.5	154.5
80-100mm	0.01	0.02	301.2	301.2	301.2	0.0	333.7	679.7	506.7	173.0
All	64.44	63.88	128.4	3411	610.0	465.9	128.4	3387	606.8	463.8
			Height A (mm)				Height B (mm)			
Highest Particle			87.6361				88.1438			
Lowest Particle			5.0659				5.0659			

Table A. 100: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	17.34	128.4	3377	806.6	551.9	128.4	3381	789.4	548.9	-1.220	1.210	-0.060	0.350	-1.220	1.210	-0.020	0.390
20-40mm	14.39	128.4	3324	635.0	385.7	128.4	2746	624.5	379.6	-1.220	1.200	-0.060	0.240	-1.210	1.220	-0.000	0.340
40-60mm	3.27	128.4	2111	596.4	311.2	128.4	2120	580.9	309.8	-1.140	1.020	-0.060	0.190	-1.010	0.940	-0.010	0.280
60-80mm	0.28	128.4	1057	442.7	197.9	157.3	721.0	394.6	151.5	-0.410	0.060	-0.050	0.100	-0.510	0.550	-0.050	0.260
80-100mm	0.01	301.2	301.2	301.2	0.0	333.7	679.7	506.7	173.0	0.060	0.060	0.060	0.000	0.360	0.360	0.360	0.000
All	35.29	128.4	3377	714.1	477.8	128.4	3381	699.6	473.4	-1.220	1.210	-0.060	0.290	-1.220	1.220	-0.010	0.360

Table A. 101: Matched Droplet Info

A.1.5.2 All Droplets for .LA Image

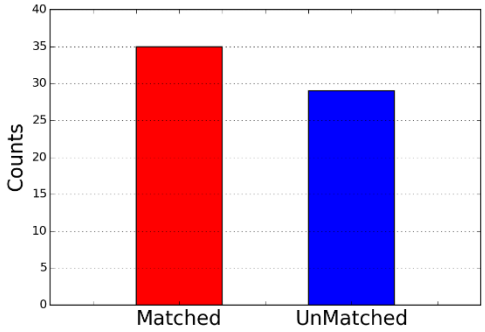


Figure A. 941: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

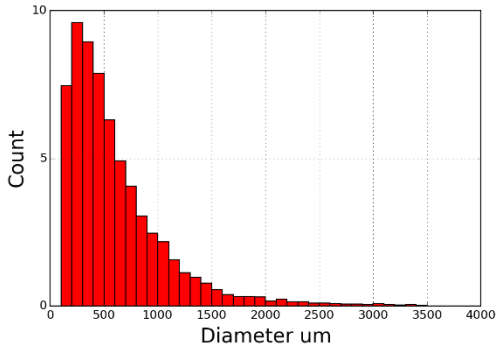


Figure A. 942: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

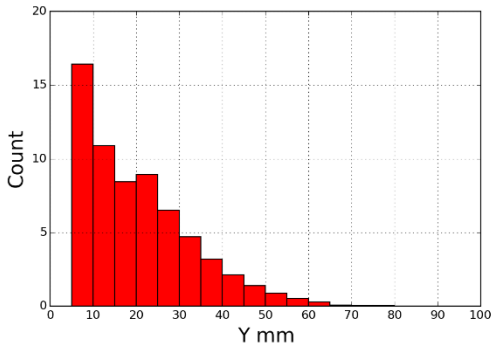


Figure A. 943: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

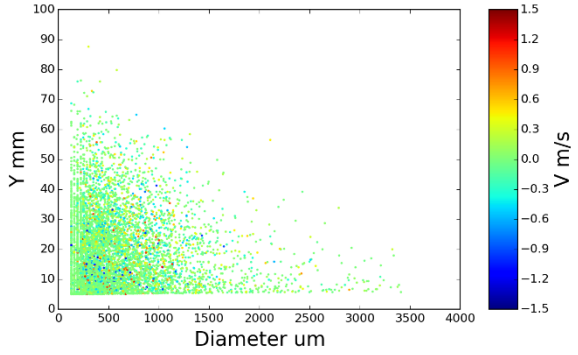


Figure A. 944: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

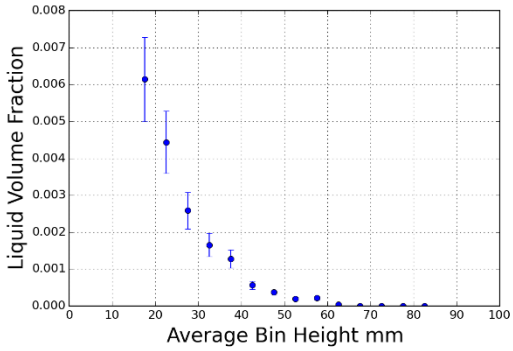


Figure A. 945: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 All Droplets for .LB Image

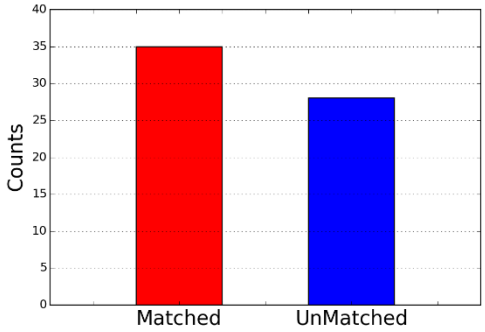


Figure A. 946: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

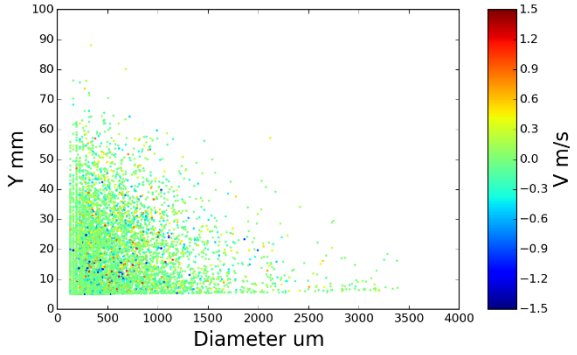


Figure A. 949: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

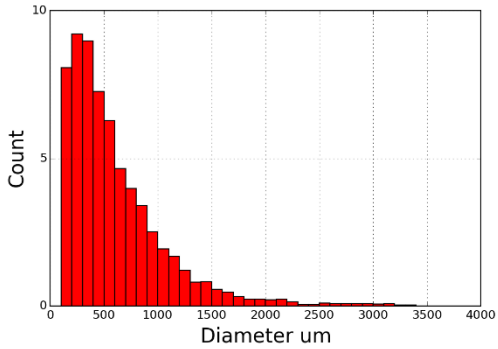


Figure A. 947: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

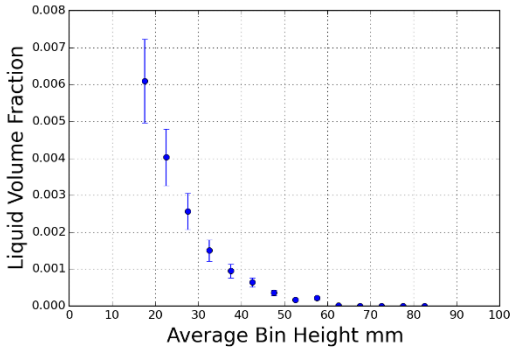


Figure A. 950: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

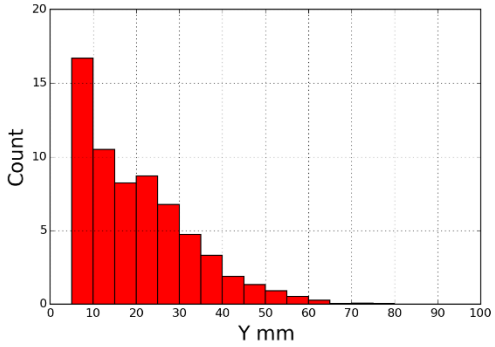


Figure A. 948: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 Matched Only Droplets for .LA Image

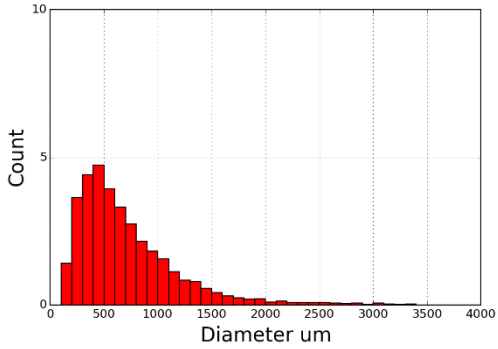


Figure A. 951: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

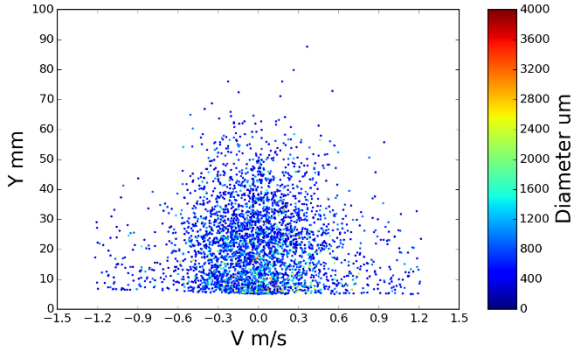


Figure A. 954: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

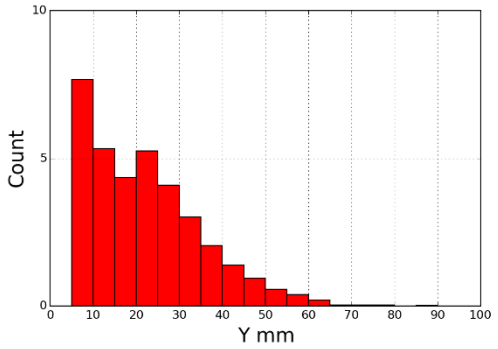


Figure A. 952: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

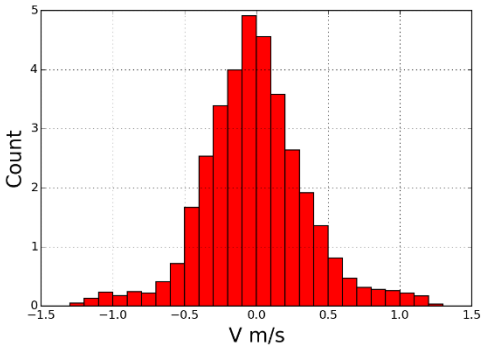


Figure A. 955: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

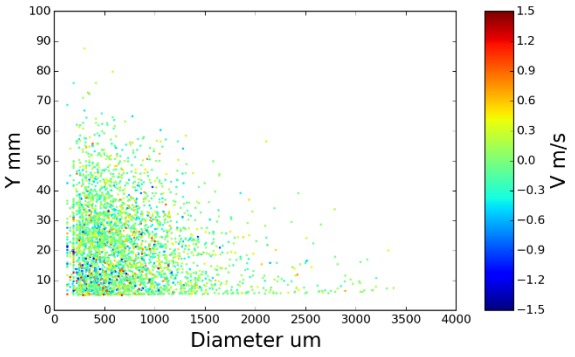


Figure A. 953: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 Matched Only Droplets for .LB Image

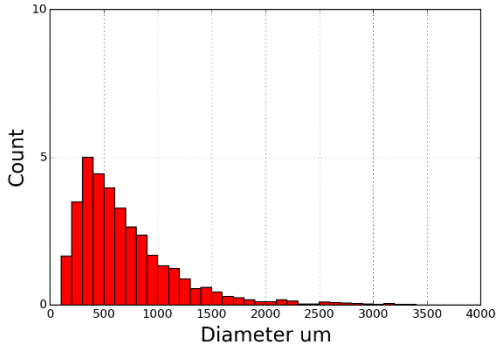


Figure A. 956: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

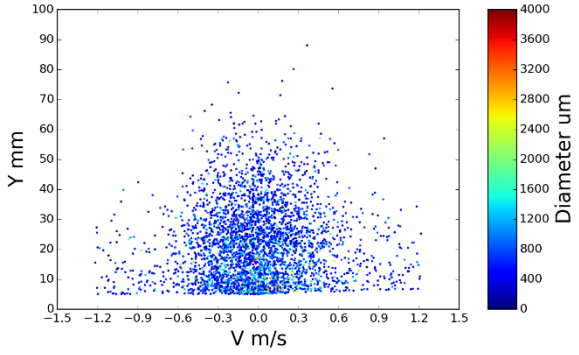


Figure A. 959: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

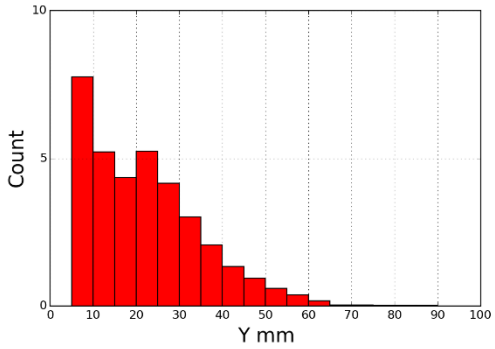


Figure A. 957: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

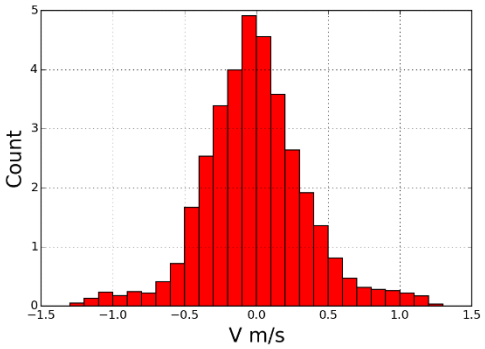


Figure A. 960: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

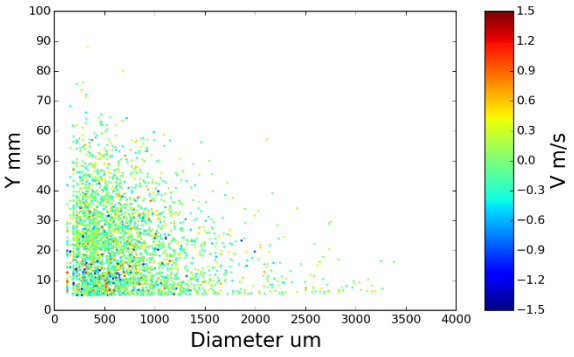


Figure A. 958: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	32.02	32.88	128.4	3390	678.2	550.3	128.4	3402	671.1	552.1
20-40mm	22.09	21.71	128.4	3035	548.6	391.0	128.4	2986	535.5	380.4
40-60mm	5.11	5.68	128.4	2660	504.5	324.5	128.4	2155	452.7	307.8
60-80mm	0.35	0.54	128.4	1122	453.3	243.6	128.4	1142	347.6	255.4
80-100mm	0.01	0.02	648.7	648.7	648.7	0.0	622.7	709.4	666.1	43.4
All	59.58	60.83	128.4	3390	613.9	483.5	128.4	3402	599.4	482.3
			Height A (mm)				Height B (mm)			
Highest Particle			85.5675				85.2062			
Lowest Particle			5.0659				5.0659			

Table A. 102: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	13.19	128.4	3303	877.8	617.5	128.4	3402	846.4	607.1	-1.220	1.220	-0.070	0.370	-1.210	1.220	-0.010	0.420
20-40mm	11.7	128.4	3035	672.5	412.1	128.4	2986	648.2	400.6	-1.210	1.220	-0.080	0.260	-1.220	1.200	-0.000	0.350
40-60mm	2.89	192.7	1914	612.3	313.4	192.7	2155	591.1	314.5	-0.980	1.090	-0.070	0.160	-0.910	1.170	0.040	0.290
60-80mm	0.19	256.9	1122	525.5	243.5	222.5	1142	509.7	256.2	-0.420	0.130	-0.050	0.140	-0.610	0.500	0.050	0.280
80-100mm	0.01	648.7	648.7	648.7	0.0	622.7	709.4	666.1	43.4	-0.040	-0.040	-0.040	0.000	-0.260	-0.260	-0.260	0.000
All	27.98	128.4	3303	762.1	523.1	128.4	3402	735.1	513.1	-1.220	1.220	-0.070	0.310	-1.220	1.220	-0.000	0.380

Table A. 103: Matched Droplet Info

A.1.5.2 All Droplets for .LA Image

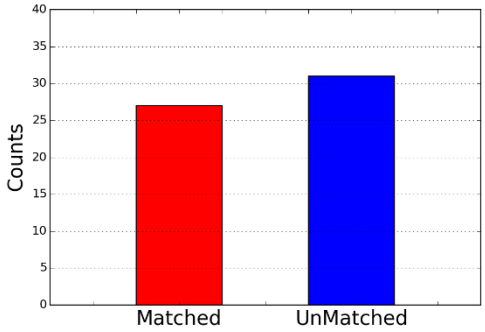


Figure A. 961: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

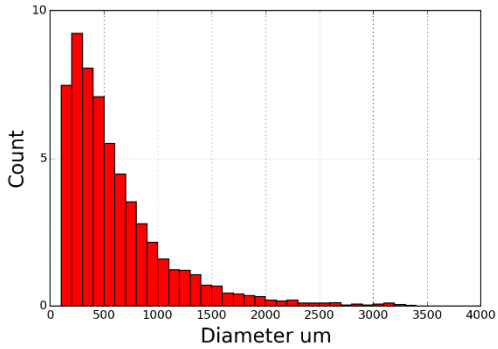


Figure A. 962: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

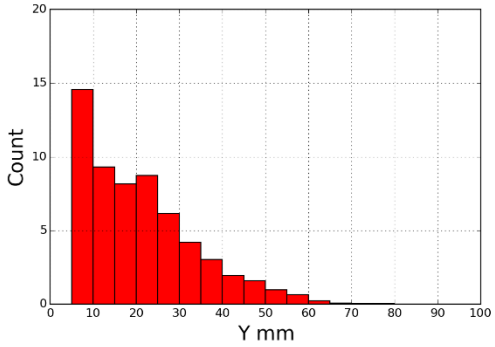


Figure A. 963: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

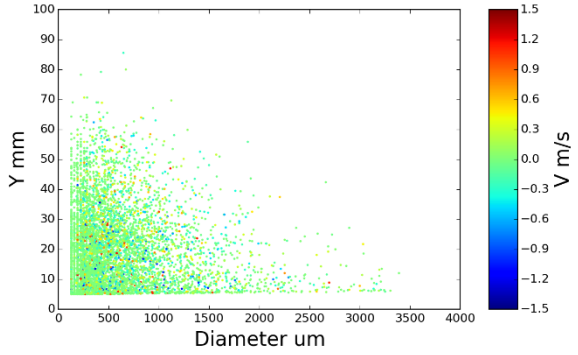


Figure A. 964: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

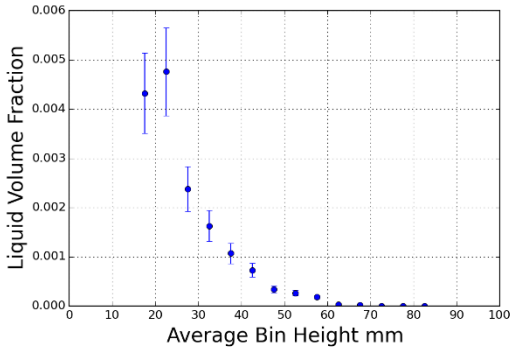


Figure A. 965: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 All Droplets for .LB Image

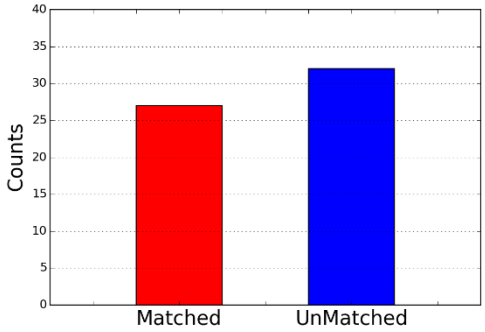


Figure A. 966: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

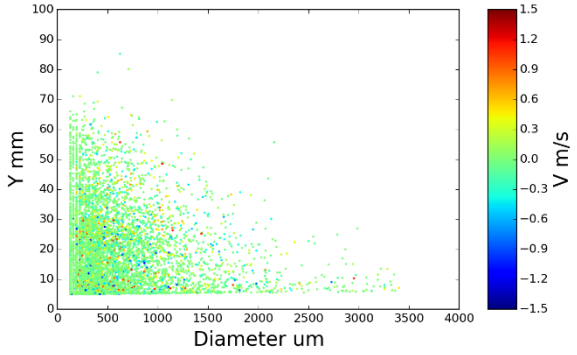


Figure A. 969: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

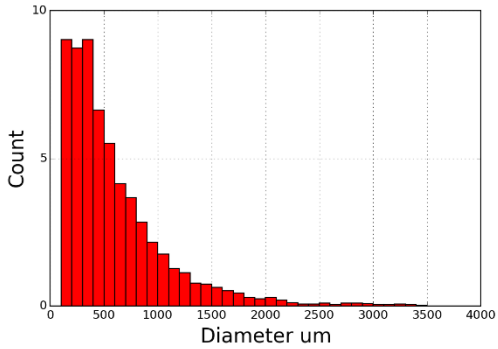


Figure A. 967: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

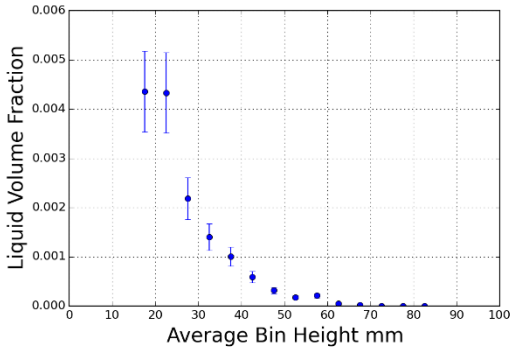


Figure A. 970: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

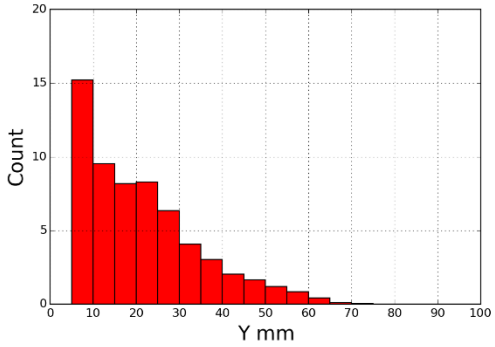


Figure A. 968: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 Matched Only Droplets for .LA Image

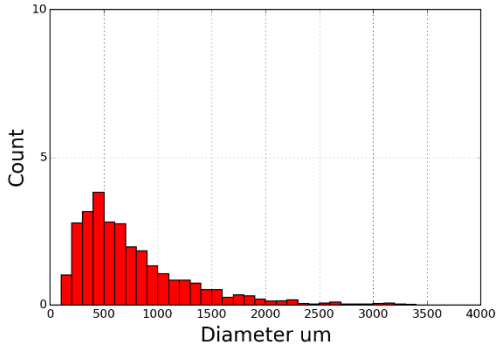


Figure A. 971: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

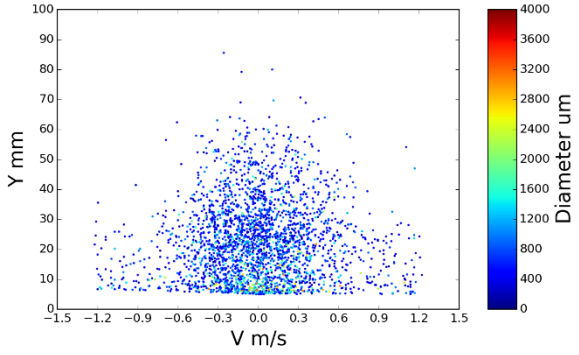


Figure A. 974: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

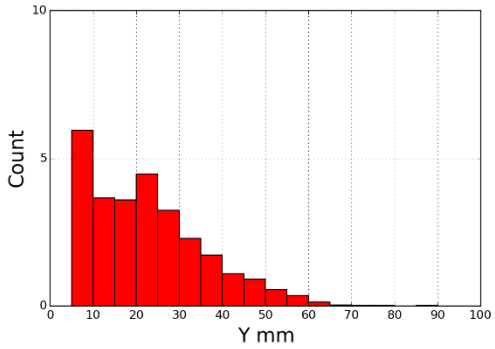


Figure A. 972: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

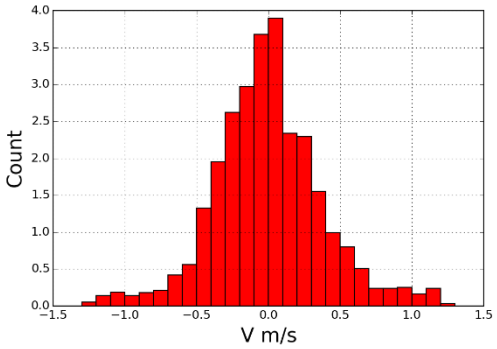


Figure A. 975: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

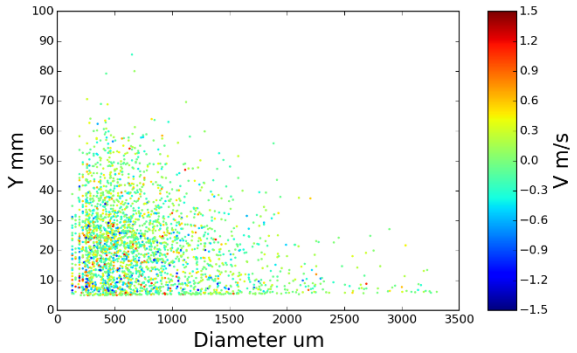


Figure A. 973: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 Matched Only Droplets for .LB Image

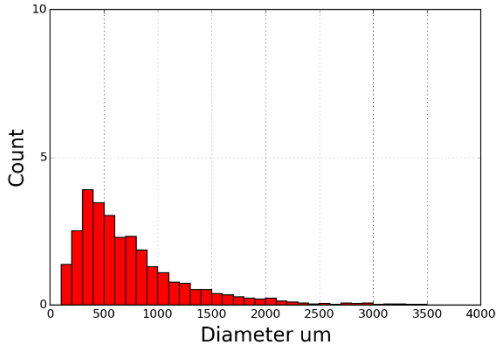


Figure A. 976: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

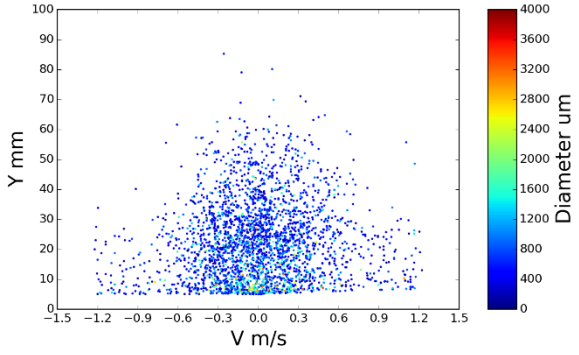


Figure A. 979: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

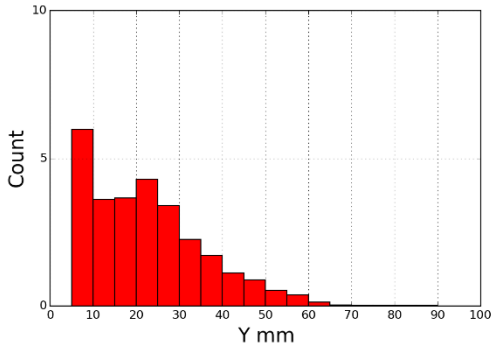


Figure A. 977: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

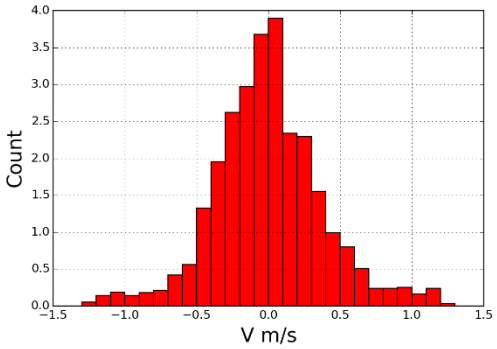


Figure A. 980: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

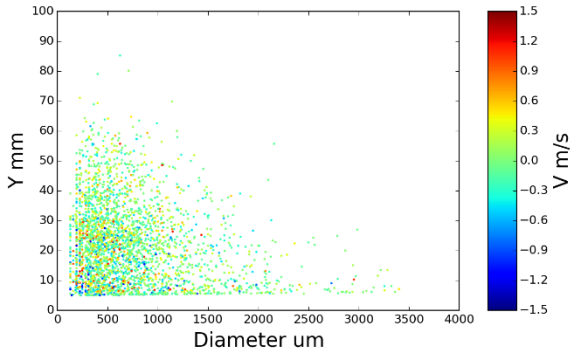


Figure A. 978: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	29.62	30.33	128.4	3391	676.6	556.0	128.4	3342	653.1	541.6
20-40mm	20.65	21.13	128.4	3120	552.6	403.5	128.4	2887	540.3	396.7
40-60mm	6.1	6.37	128.4	2979	465.2	319.6	128.4	3112	476.3	334.1
60-80mm	0.54	0.72	128.4	2525	440.9	371.2	128.4	1951	440.9	365.9
80-100mm	0.06	0.04	128.4	703.6	359.7	201.1	192.7	825.0	472.6	239.2
All	56.97	58.59	128.4	3391	606.5	487.9	128.4	3342	590.5	476.5
			Height A (mm)				Height B (mm)			
Highest Particle			93.4365				93.2384			
Lowest Particle			5.0659				5.0659			

Table A. 104: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	11.13	128.4	3387	855.4	621.9	128.4	3342	831.2	608.6	-1.220	1.220	-0.060	0.410	-1.220	1.210	0.030	0.460
20-40mm	9.9	128.4	2782	692.1	432.9	128.4	2887	669.4	428.1	-1.220	1.190	-0.080	0.270	-1.210	1.220	0.010	0.380
40-60mm	3.15	128.4	2979	582.3	351.4	128.4	3112	590.7	368.2	-1.180	1.010	-0.070	0.210	-1.040	1.210	0.030	0.330
60-80mm	0.24	128.4	2525	586.1	468.6	157.3	1944	574.5	388.1	-0.450	0.210	-0.120	0.150	-0.890	0.560	-0.020	0.360
80-100mm	0.03	385.4	703.6	524.6	132.9	327.5	825.0	565.8	203.7	-0.230	-0.130	-0.180	0.040	-0.140	-0.120	-0.130	0.010
All	24.45	128.4	3387	751.0	529.5	128.4	3342	731.0	519.3	-1.220	1.220	-0.070	0.330	-1.220	1.220	0.020	0.410

Table A. 105: Matched Droplet Info

A.1.5.2 All Droplets for .LA Image

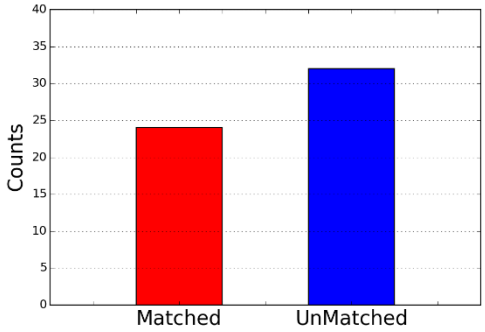


Figure A. 981: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

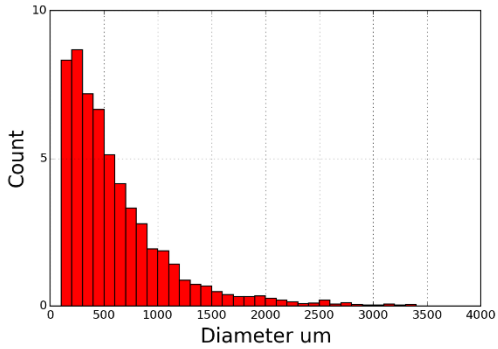


Figure A. 982: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

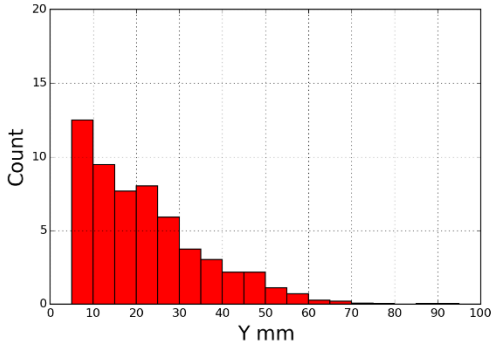


Figure A. 983: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

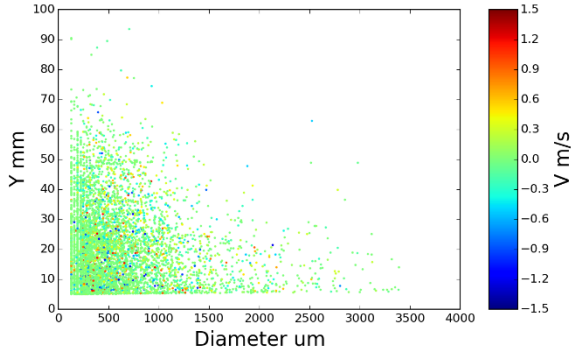


Figure A. 984: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

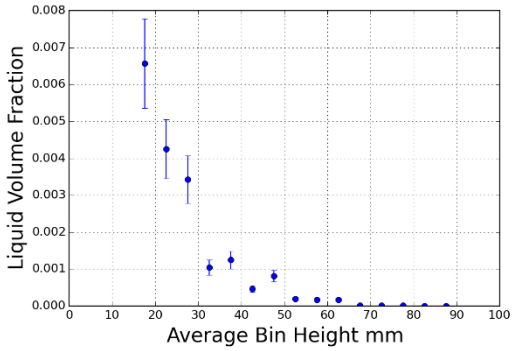


Figure A. 985: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 All Droplets for .LB Image

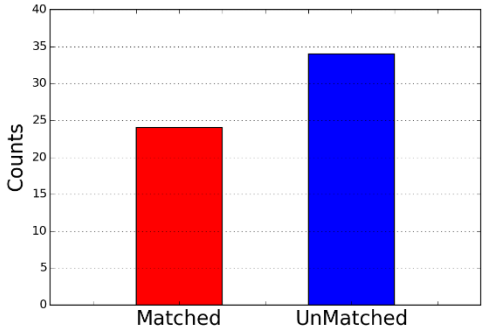


Figure A. 986: CHC Count Comparison R-134a 40F 5000Btu 15000Lb Tri

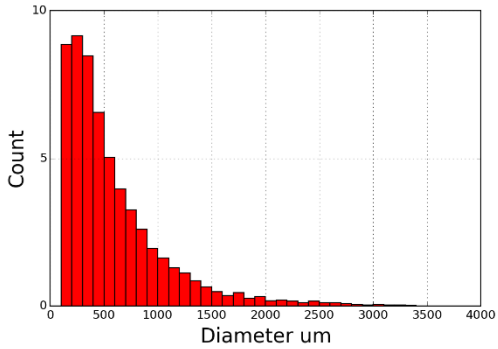


Figure A. 987: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

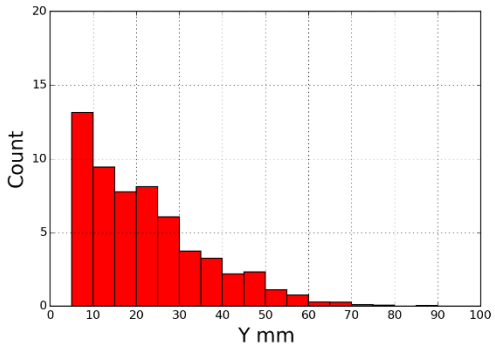


Figure A. 988: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

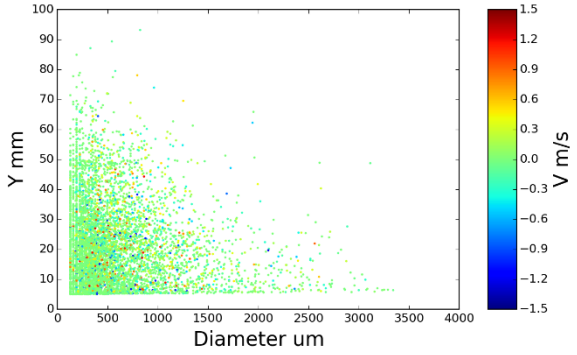


Figure A. 989: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

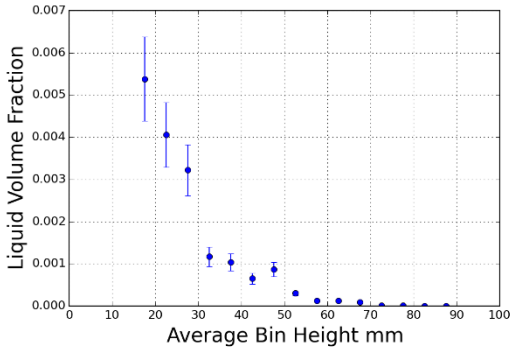


Figure A. 990: Void Fraction R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 Matched Only Droplets for .LA Image

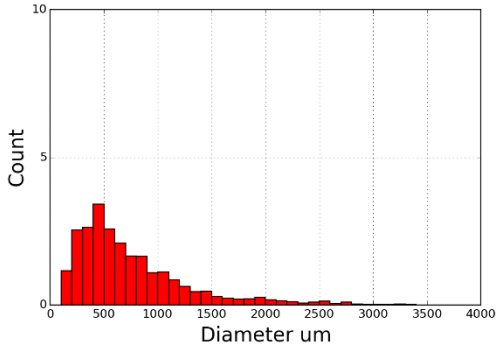


Figure A. 991: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

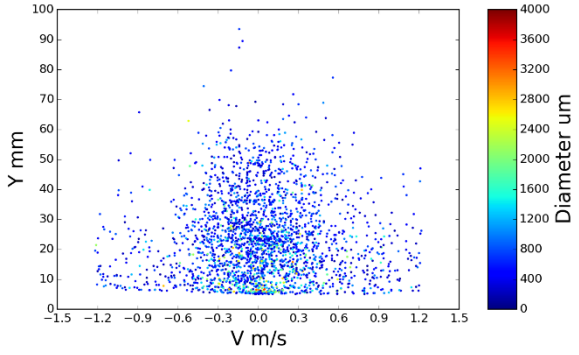


Figure A. 994: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

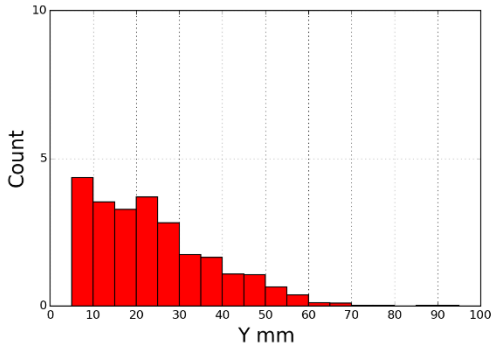


Figure A. 992: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

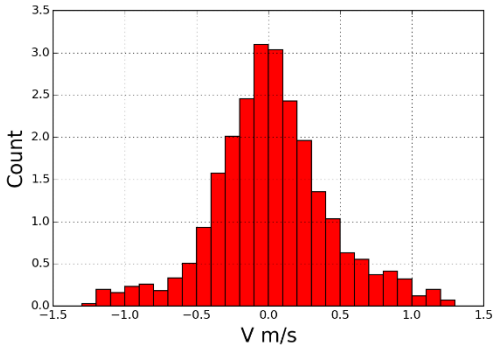


Figure A. 995: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

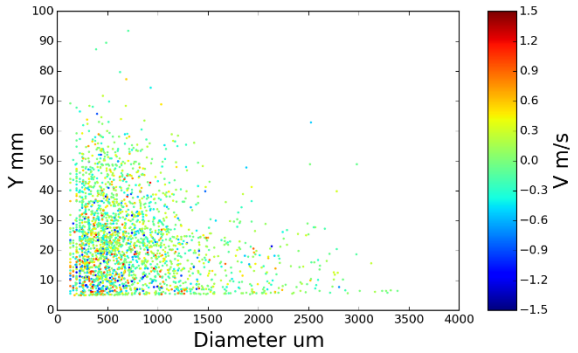


Figure A. 993: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.1.5.2 Matched Only Droplets for .LB Image

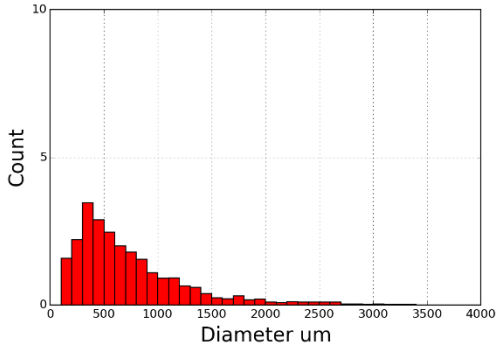


Figure A. 996: Droplet Diameter Histogram R-134a 40F 5000Btu 15000Lb Tri

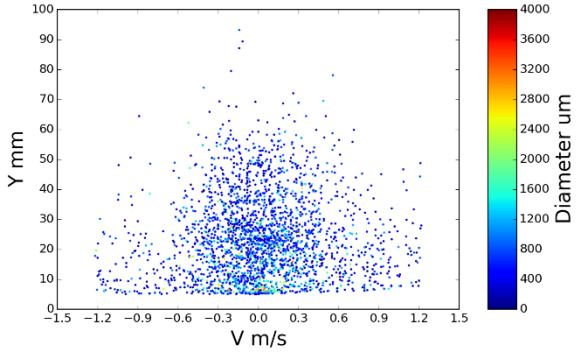


Figure A. 999: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 15000Lb Tri

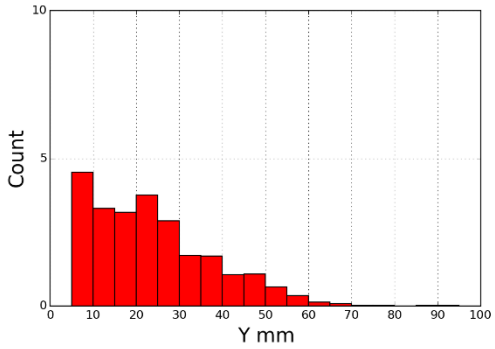


Figure A. 997: Droplet Height Histogram R-134a 40F 5000Btu 15000Lb Tri

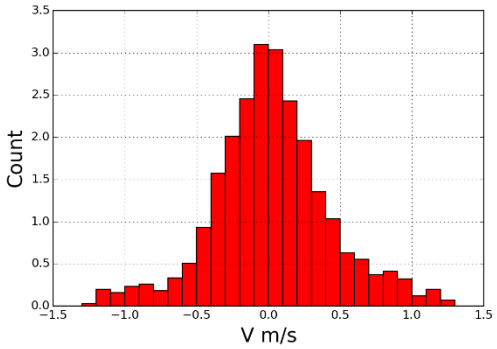


Figure A. 1000: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 15000Lb Tri

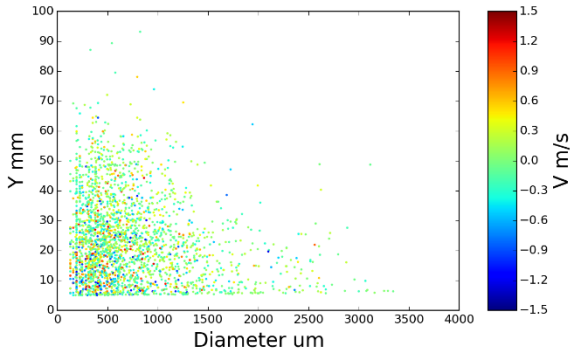


Figure A. 998: Droplet Height vs Diameter R-134a 40F 5000Btu 15000Lb Tri

A.2 - 1556 R-134a 40F 7500Btu 15000Lb Tri

A.2.1 Liquid Level 1

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	23586 / 2.972
Ref Mass Flow (lb/hr) / (kg/s)	1619 / 0.204
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15038 / 20.395
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	7395 / 23.33
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	40.2 / 4.54
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.4 / 4.66
Total Bundle Q (Btu/hr) / (kW)	152290 / 44.63
Total Bundle & Preboiler Q (Btu/hr) / (kW)	152290 / 44.63
Top Two Rows HTC Ratio	1.075
Bundle Inlet Quality	0.00
Bundle Exit Quality	0.08

Table A. 106: Thermal Conditions

A.2.1.1 Lens 100mm Mag 0_29x

A.2.1.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	88.61	90.52	57.2	3020	457.5	491.4	57.2	3030	442.2	489.1
40-60mm	144.33	149.33	57.2	3033	392.7	431.3	57.2	3040	377.9	426.5
60-80mm	54.25	55.46	57.2	2898	342.9	369.0	57.2	2959	333.9	365.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	288.26	295.85	57.2	3033	403.3	442.0	57.2	3040	389.4	438.0
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 107: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	47.56	57.2	3000	567.3	544.8	57.2	3010	560.1	541.0	-1.270	1.260	-0.080	0.270	-1.270	1.270	-0.060	0.360
40-60mm	93.84	57.2	3005	482.1	464.6	57.2	3010	478.1	462.7	-1.270	1.270	-0.070	0.220	-1.270	1.270	-0.010	0.340
60-80mm	37.54	57.2	2898	427.3	396.1	57.2	2848	422.7	394.8	-1.270	1.250	-0.080	0.180	-1.270	1.270	0.010	0.300
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	178.94	57.2	3005	493.3	476.9	57.2	3010	488.4	474.5	-1.270	1.270	-0.070	0.230	-1.270	1.270	-0.020	0.340

Table A. 108: Matched Droplet Info

A.2.1.1 All Droplets for .LA Image

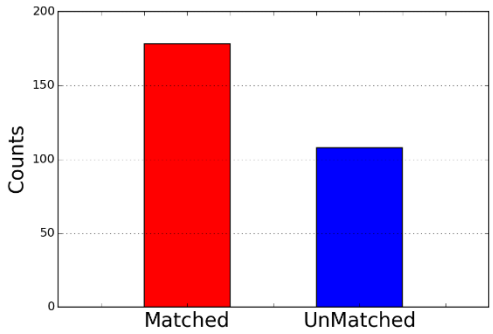


Figure A. 1001: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

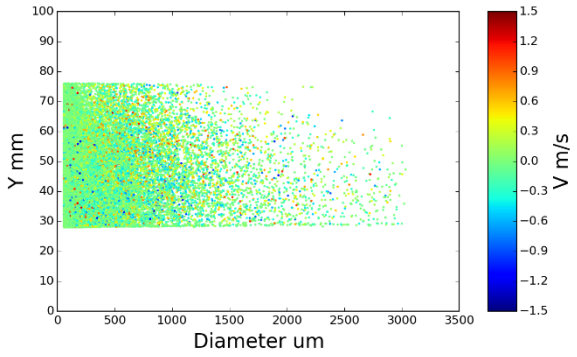


Figure A. 1004: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

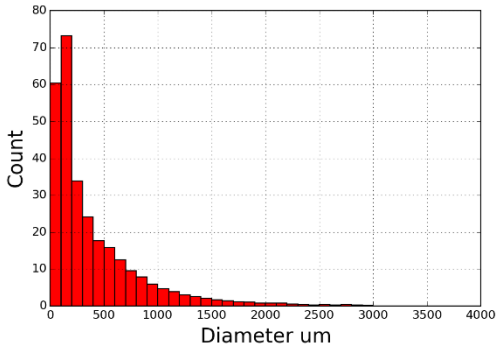


Figure A. 1002: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

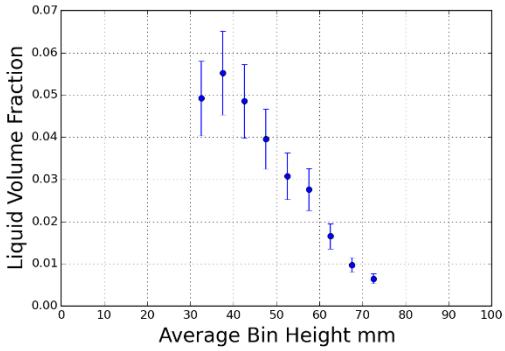


Figure A. 1005: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

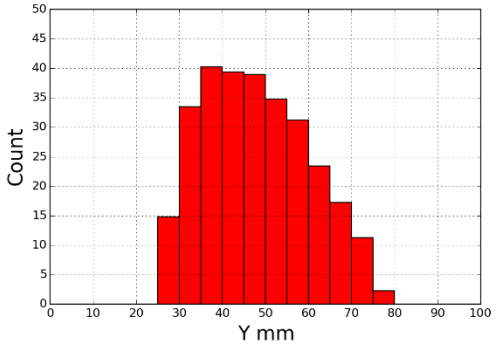


Figure A. 1003: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 All Droplets for .LB Image

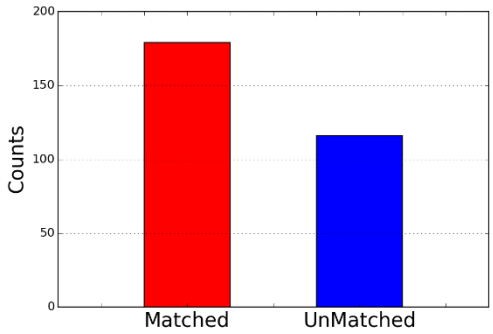


Figure A. 1006: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

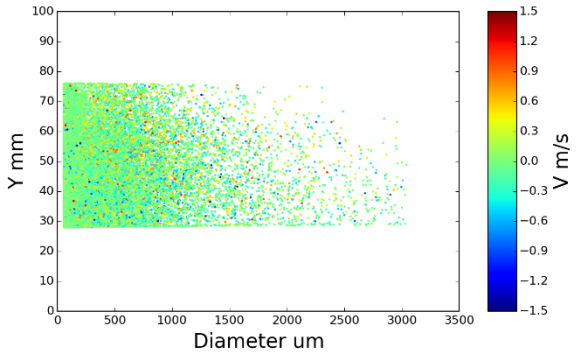


Figure A. 1009: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

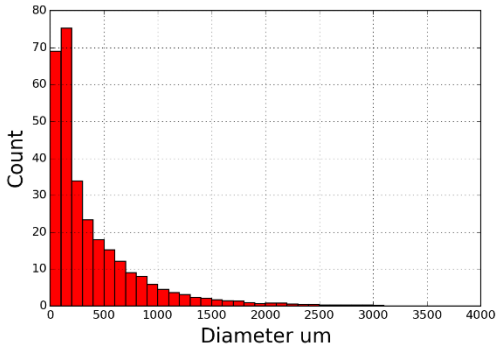


Figure A. 1007: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

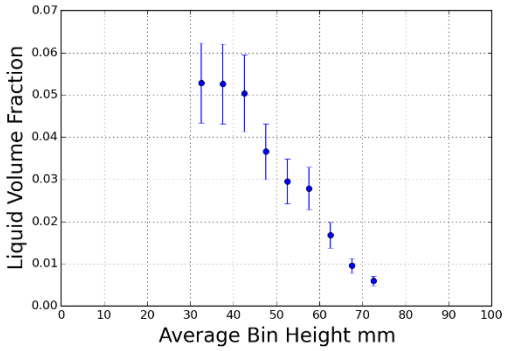


Figure A. 1010: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

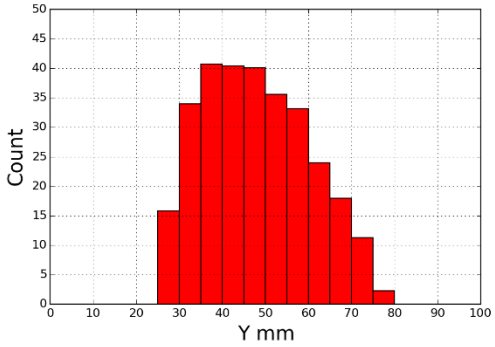


Figure A. 1008: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 Matched Only Droplets for .LA Image

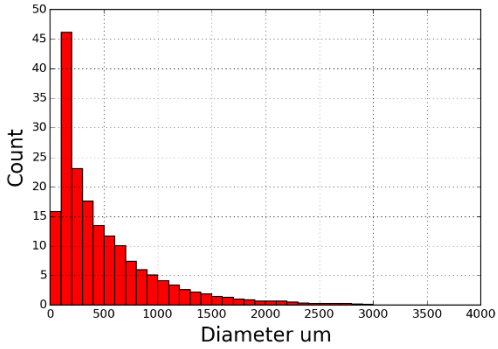


Figure A. 1011: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

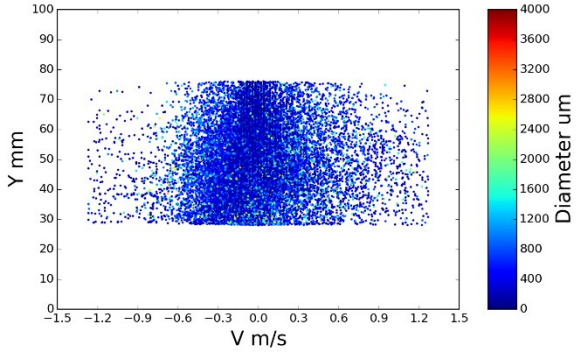


Figure A. 1014: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

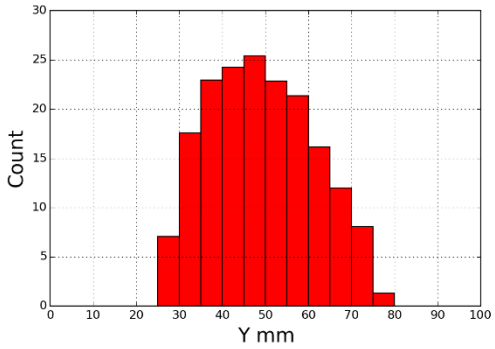


Figure A. 1012: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

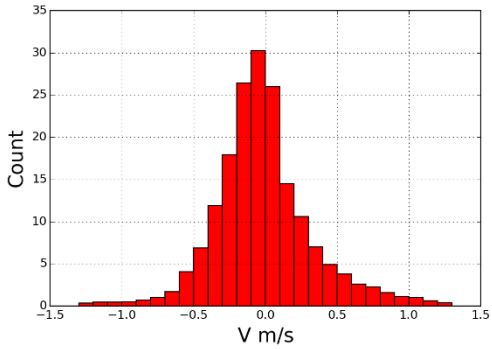


Figure A. 1015: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

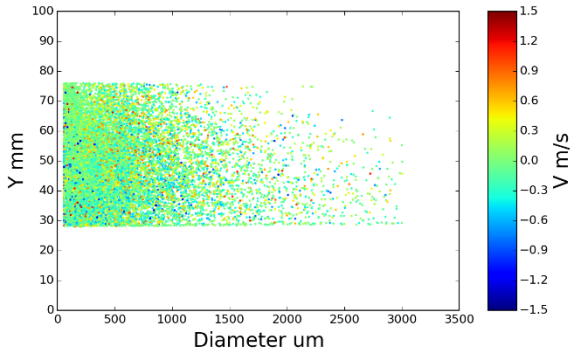


Figure A. 1013: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 Matched Only Droplets for .LB Image

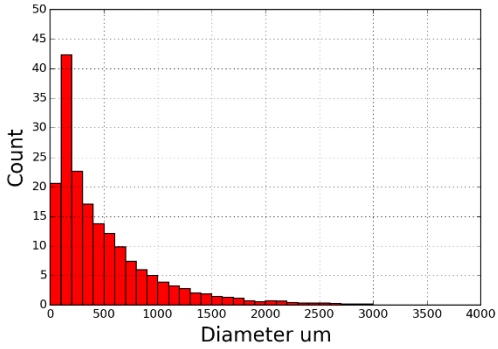


Figure A. 1016: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

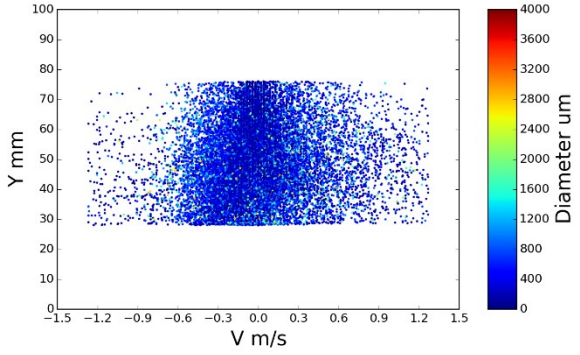


Figure A. 1019: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

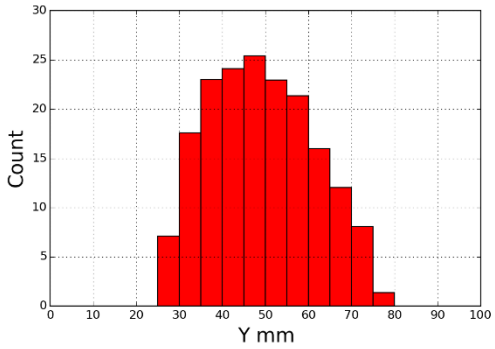


Figure A. 1017: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

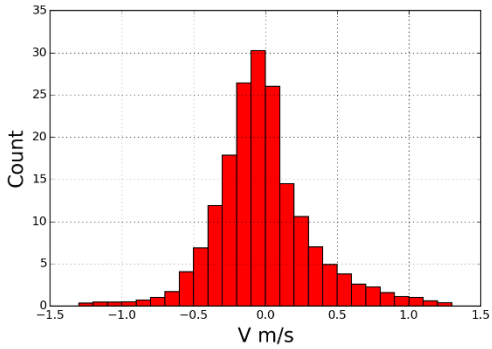


Figure A. 1020: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

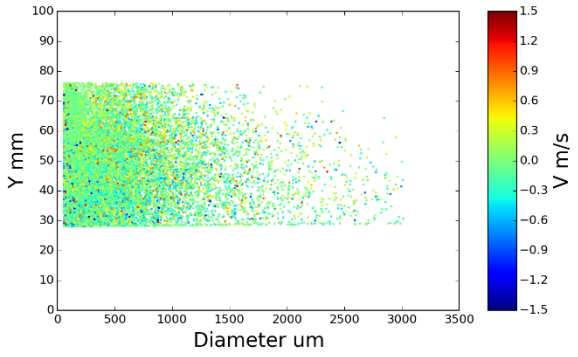


Figure A. 1018: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	80.56	82.13	57.2	3032	502.1	534.1	57.2	3044	500.0	539.6
40-60mm	139.86	143.22	57.2	3012	442.8	477.1	57.2	3044	435.9	469.9
60-80mm	50.36	51.12	57.2	2926	398.1	410.9	57.2	2920	390.6	405.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	271.17	276.66	57.2	3032	452.1	484.9	57.2	3044	446.6	482.5
			Height A (mm)				Height B (mm)			
Highest Particle			76.0479				76.0470			
Lowest Particle			28.0846				28.0846			

Table A. 109: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	44.98	57.2	3032	651.6	591.0	57.2	3023	643.3	586.4	-1.270	1.270	-0.050	0.260	-1.270	1.270	-0.030	0.370
40-60mm	91.65	57.2	3010	548.4	500.2	57.2	3022	542.6	494.9	-1.270	1.270	-0.060	0.220	-1.270	1.270	0.020	0.350
60-80mm	33.09	57.2	2926	515.5	436.0	57.2	2920	508.3	432.5	-1.270	1.270	-0.060	0.180	-1.270	1.250	0.010	0.320
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	169.72	57.2	3032	569.3	517.1	57.2	3023	562.6	512.3	-1.270	1.270	-0.060	0.230	-1.270	1.270	0.000	0.350

Table A. 110: Matched Droplet Info

A.2.1.1 All Droplets for .LA Image

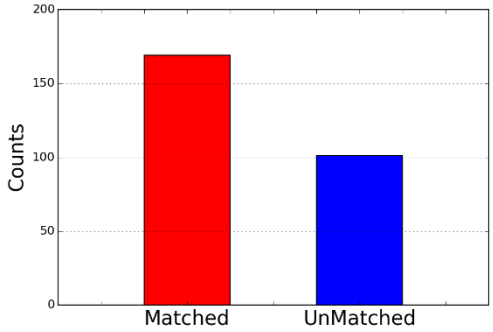


Figure A. 1021: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

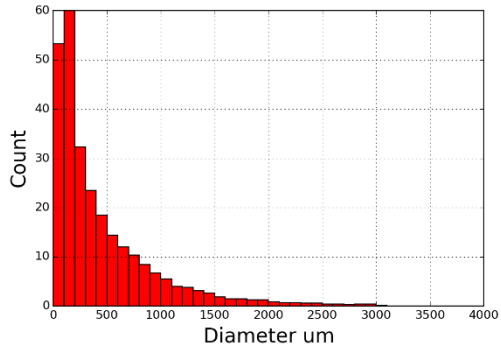


Figure A. 1022: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

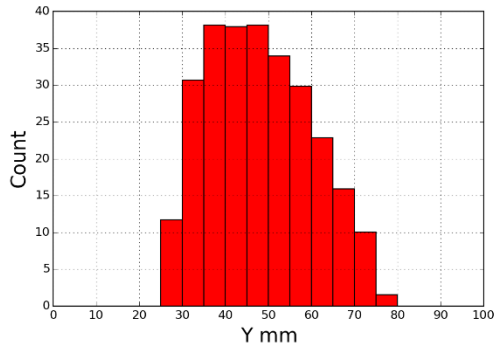


Figure A. 1023: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

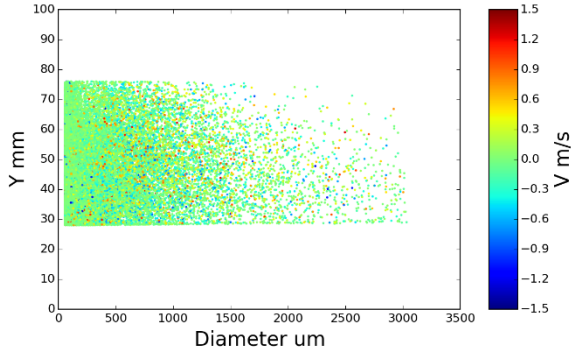


Figure A. 1024: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

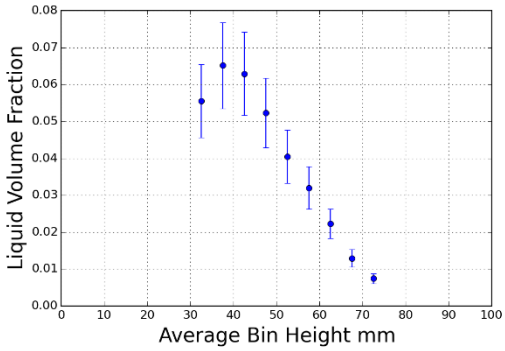


Figure A. 1025: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 All Droplets for .LB Image

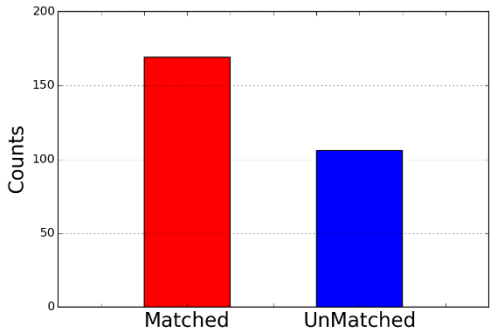


Figure A. 1026: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

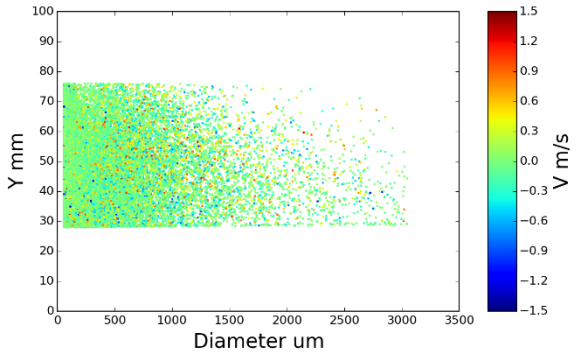


Figure A. 1029: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

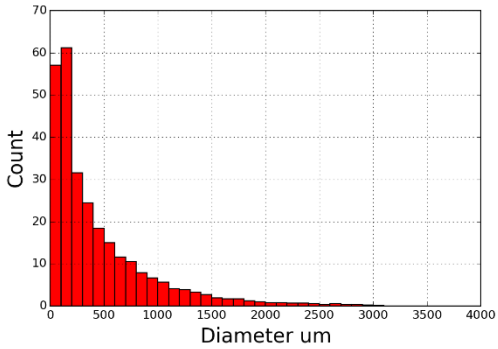


Figure A. 1027: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

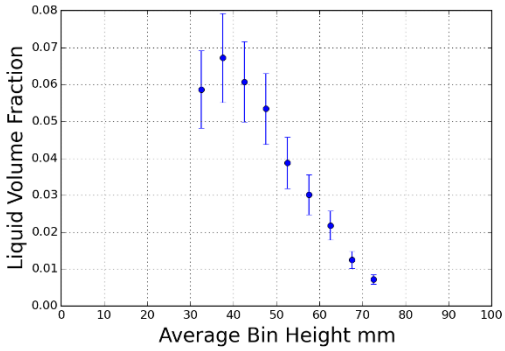


Figure A. 1030: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

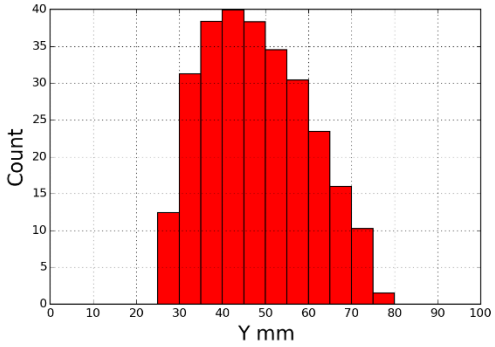


Figure A. 1028: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 Matched Only Droplets for .LA Image

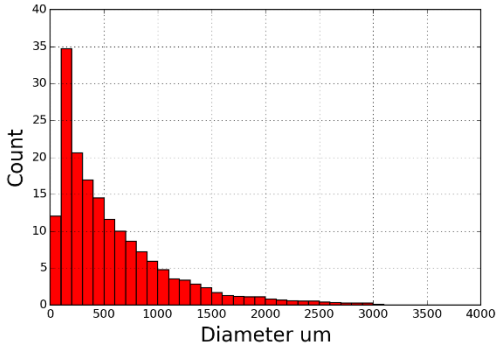


Figure A. 1031: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

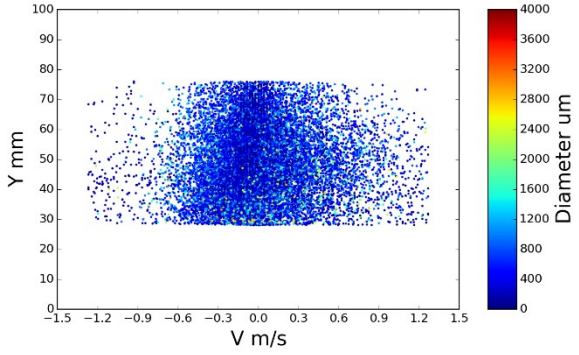


Figure A. 1034: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

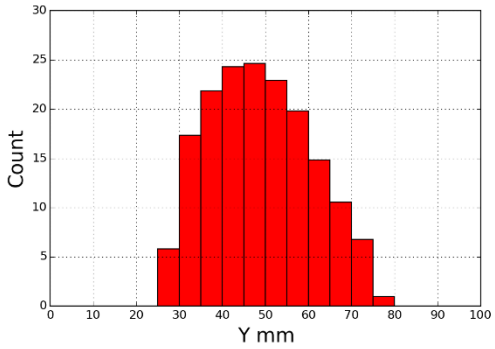


Figure A. 1032: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

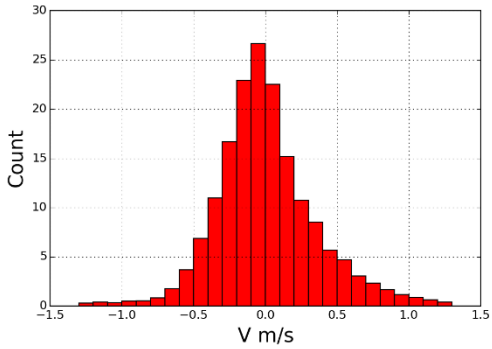


Figure A. 1035: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

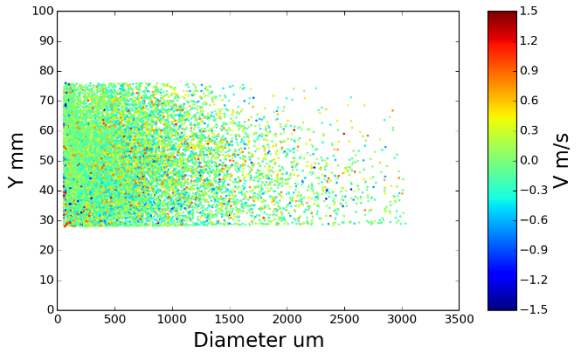


Figure A. 1033: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 Matched Only Droplets for .LB Image

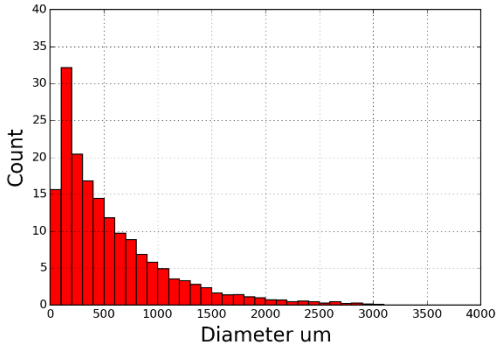


Figure A. 1036: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

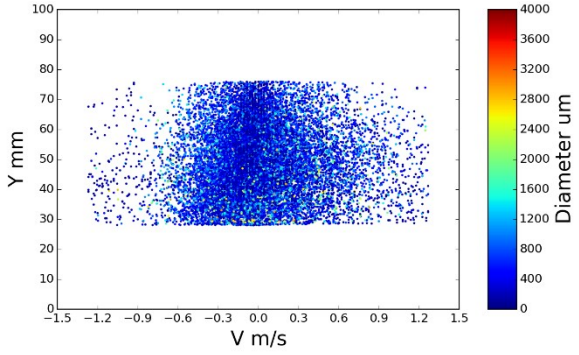


Figure A. 1039: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

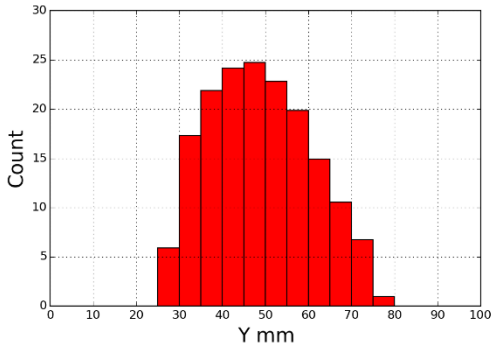


Figure A. 1037: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

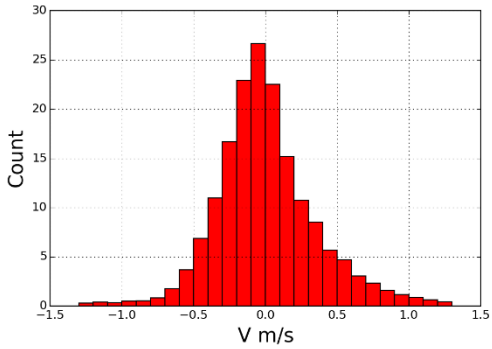


Figure A. 1040: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

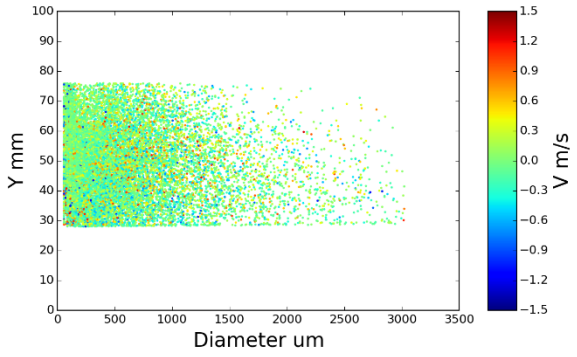


Figure A. 1038: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	68.42	73.31	57.2	3044	520.2	542.5	57.2	3027	520.0	537.1
40-60mm	129.19	130.44	57.2	3033	446.4	480.2	57.2	3035	444.3	480.3
60-80mm	49.46	49.71	57.2	2772	411.3	426.4	57.2	2976	408.8	428.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	247.19	253.78	57.2	3044	459.8	490.0	57.2	3035	459.2	489.7
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 111: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	37.85	57.2	3044	669.9	583.2	57.2	3010	660.3	577.9	-1.260	1.250	-0.070	0.260	-1.260	1.270	-0.030	0.360
40-60mm	83.42	57.2	3022	562.9	510.0	57.2	3035	559.9	512.4	-1.270	1.260	-0.070	0.220	-1.270	1.270	-0.010	0.340
60-80mm	32.9	57.2	2772	526.3	450.8	57.2	2976	525.2	453.5	-1.150	1.230	-0.070	0.190	-1.250	1.250	0.010	0.310
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	154.17	57.2	3044	581.4	520.0	57.2	3035	577.2	520.0	-1.270	1.260	-0.070	0.220	-1.270	1.270	-0.010	0.340

Table A. 112: Matched Droplet Info

A.2.1.1 All Droplets for .LA Image

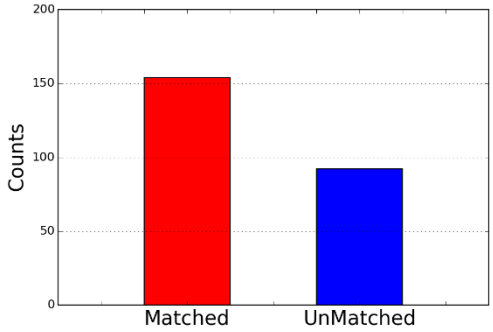


Figure A. 1041: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

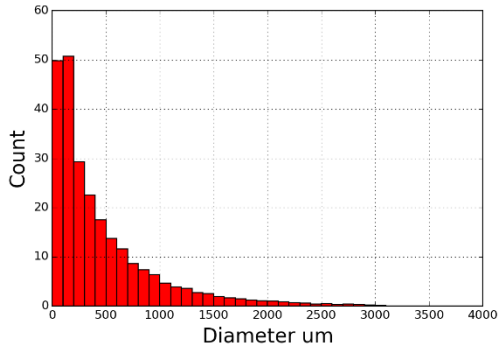


Figure A. 1042: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

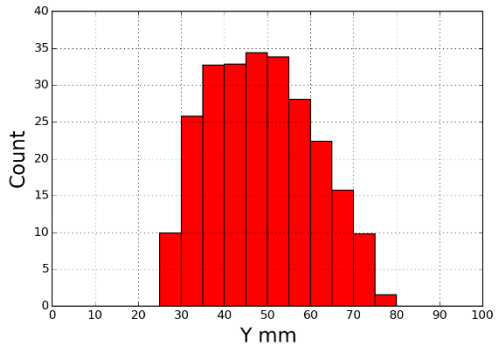


Figure A. 1043: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

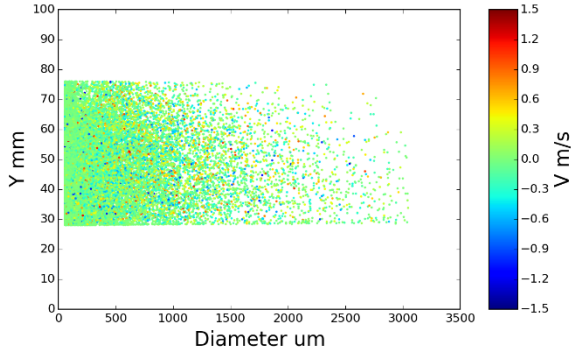


Figure A. 1044: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

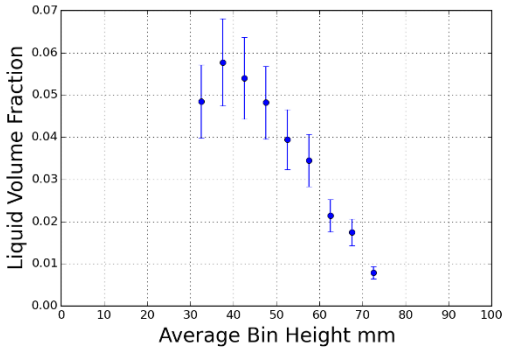


Figure A. 1045: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 All Droplets for .LB Image

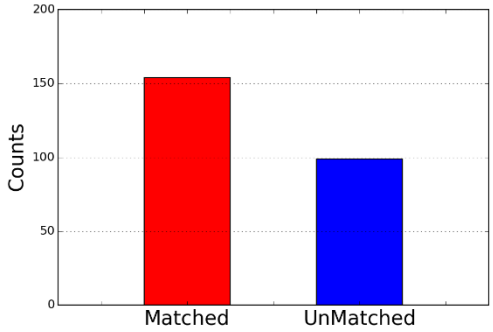


Figure A. 1046: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

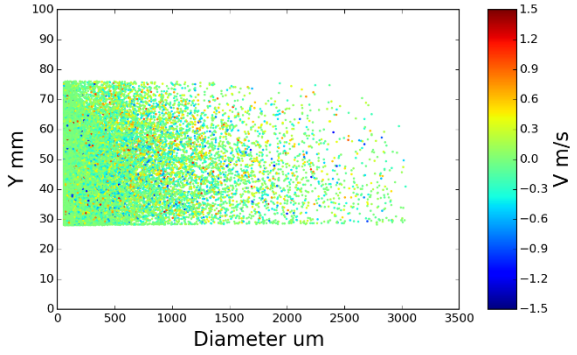


Figure A. 1049: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

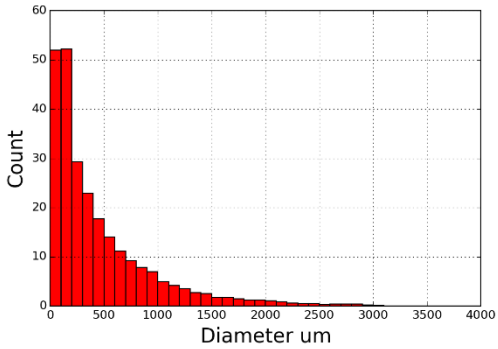


Figure A. 1047: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

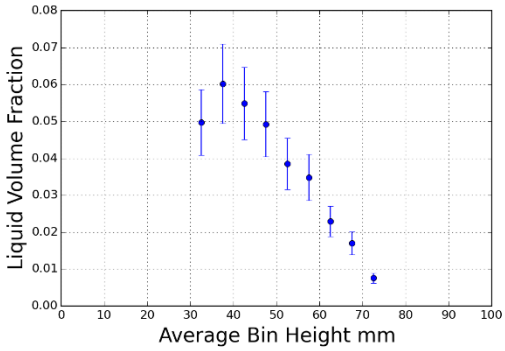


Figure A. 1050: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

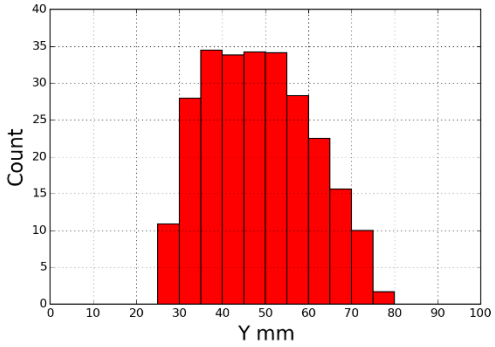


Figure A. 1048: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 Matched Only Droplets for .LA Image

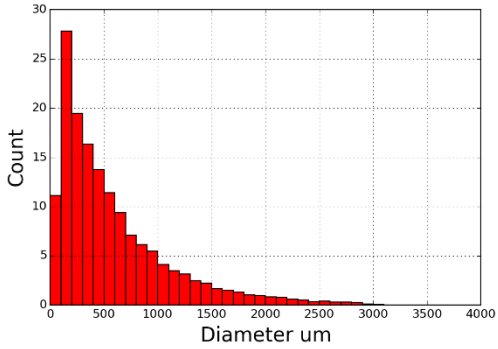


Figure A. 1051: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

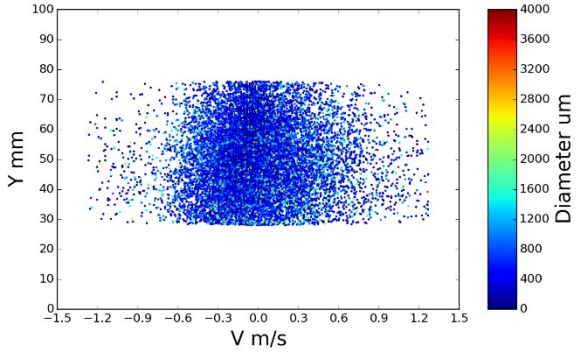


Figure A. 1054: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

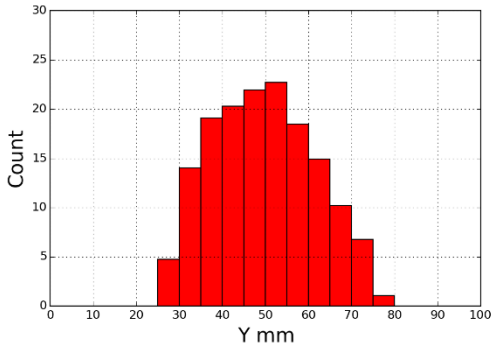


Figure A. 1052: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

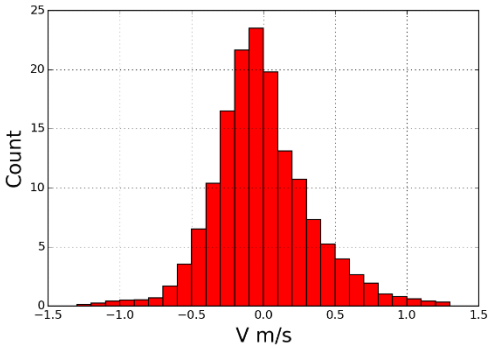


Figure A. 1055: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

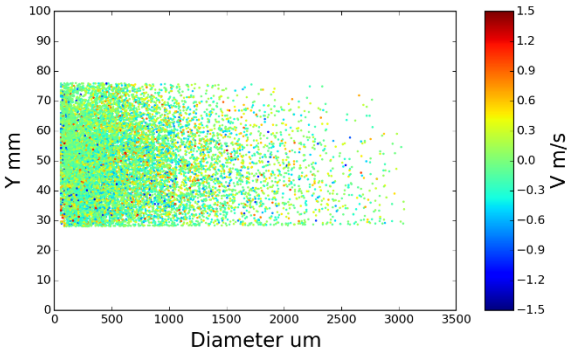


Figure A. 1053: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 Matched Only Droplets for .LB Image

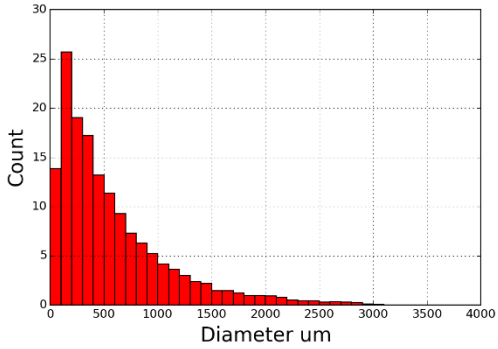


Figure A. 1056: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

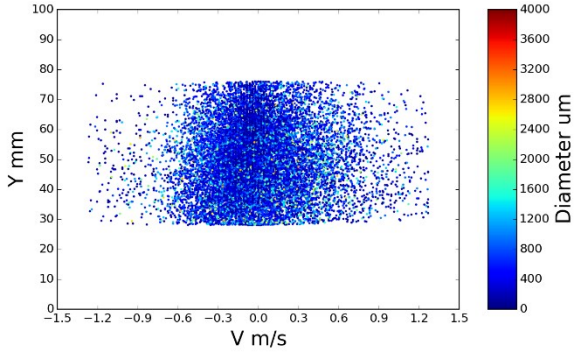


Figure A. 1059: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

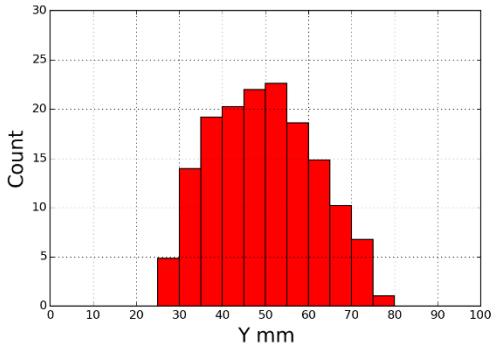


Figure A. 1057: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

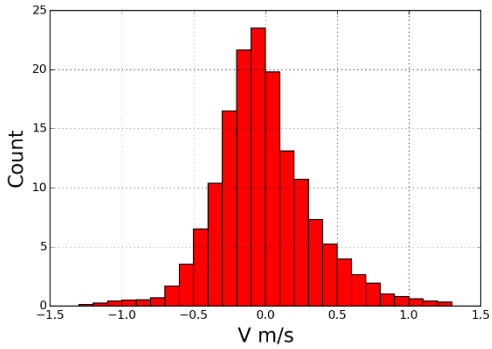


Figure A. 1060: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

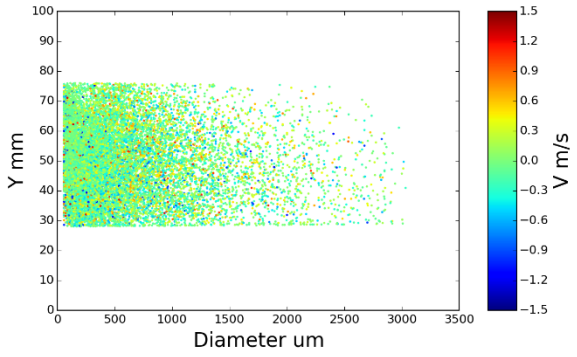


Figure A. 1058: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	68.09	68.93	57.2	3041	516.8	549.9	57.2	3038	517.9	543.1
40-60mm	125.54	125.25	57.2	3036	442.5	482.9	57.2	3044	444.2	484.4
60-80mm	48.2	48.93	57.2	2977	381.9	413.8	57.2	2955	374.5	403.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	242.12	243.5	57.2	3041	451.4	492.4	57.2	3044	451.1	489.7
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0487			
Lowest Particle			28.0846				28.0846			

Table A. 113: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	33.6	57.2	3032	698.8	606.6	57.2	3037	691.2	601.7	-1.270	1.260	-0.050	0.290	-1.230	1.270	-0.000	0.400
40-60mm	77.45	57.2	3036	571.0	518.3	57.2	3044	566.2	516.7	-1.270	1.270	-0.060	0.230	-1.250	1.270	0.010	0.360
60-80mm	30.06	57.2	2906	504.9	445.5	57.2	2955	501.9	444.8	-1.250	1.240	-0.060	0.220	-1.270	1.260	0.030	0.340
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	141.11	57.2	3036	587.3	530.9	57.2	3044	582.2	528.4	-1.270	1.270	-0.050	0.240	-1.270	1.270	0.010	0.370

Table A. 114: Matched Droplet Info

A.2.1.1 All Droplets for .LA Image

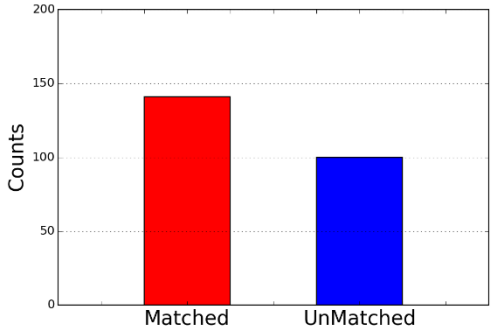


Figure A. 1061: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

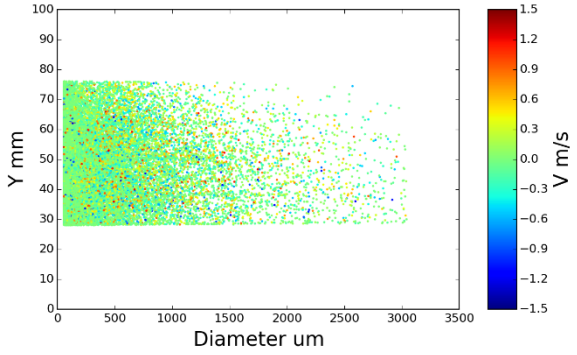


Figure A. 1064: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

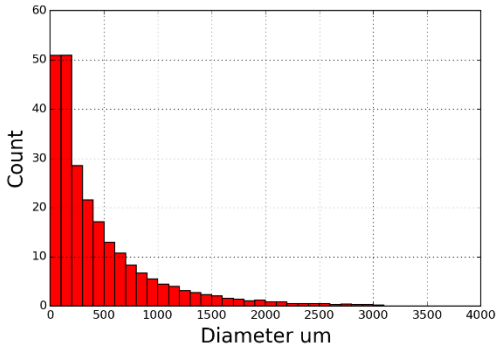


Figure A. 1062: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

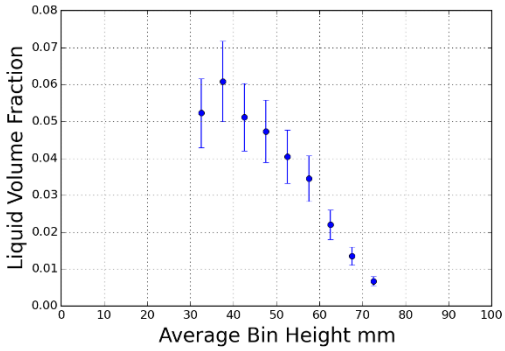


Figure A. 1065: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

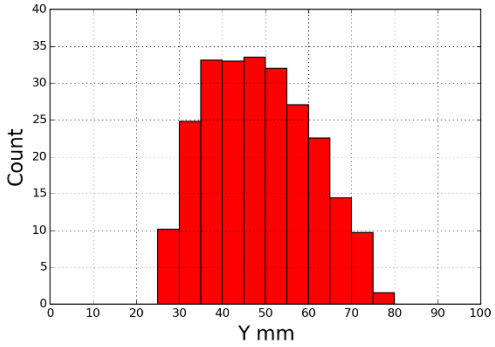


Figure A. 1063: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 All Droplets for .LB Image

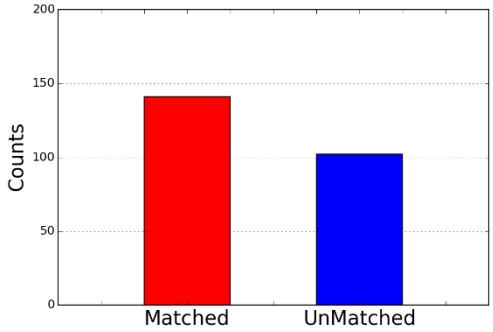


Figure A. 1066: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

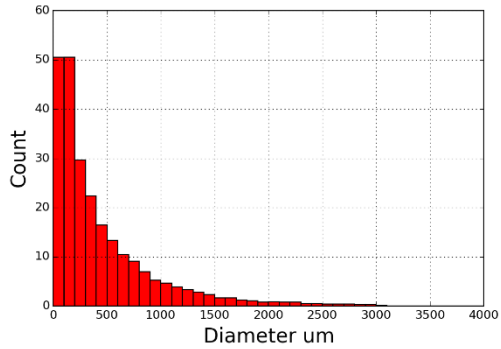


Figure A. 1067: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

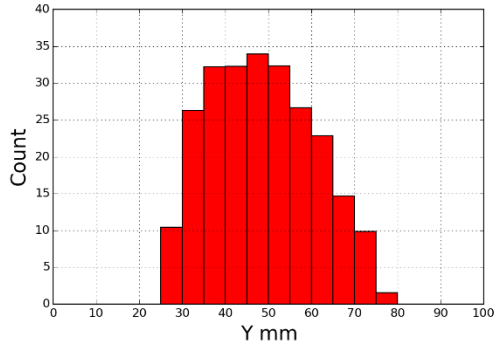


Figure A. 1068: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

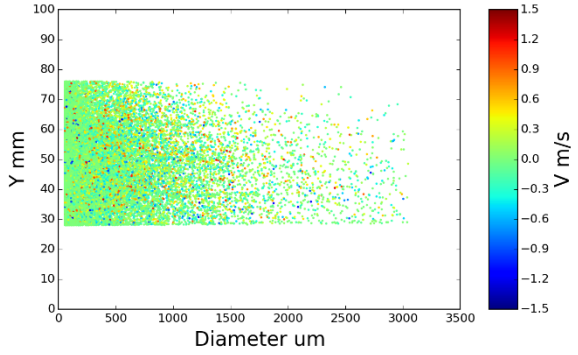


Figure A. 1069: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

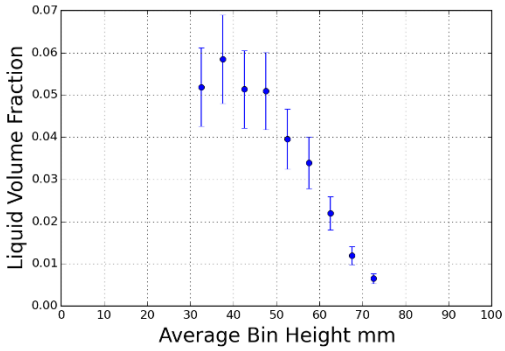


Figure A. 1070: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 Matched Only Droplets for .LA Image

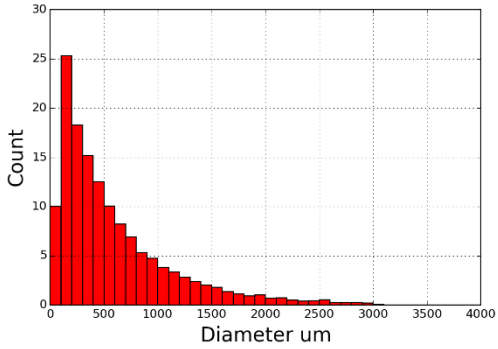


Figure A. 1071: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

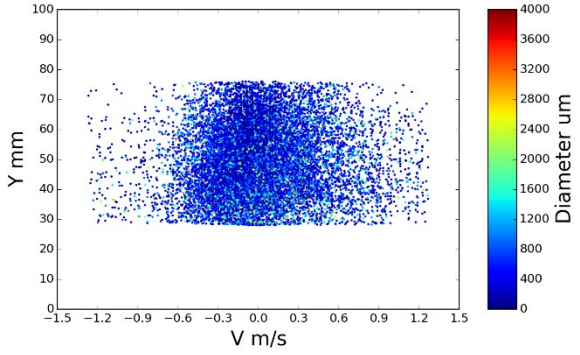


Figure A. 1074: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

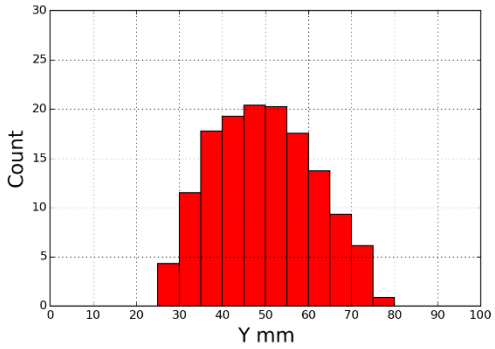


Figure A. 1072: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

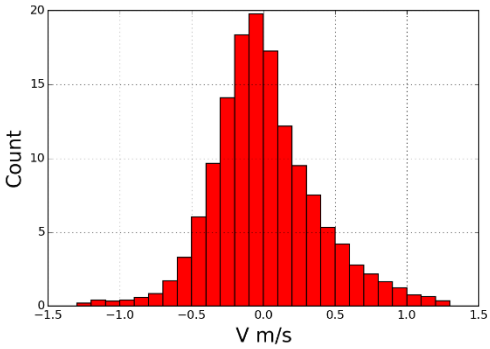


Figure A. 1075: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

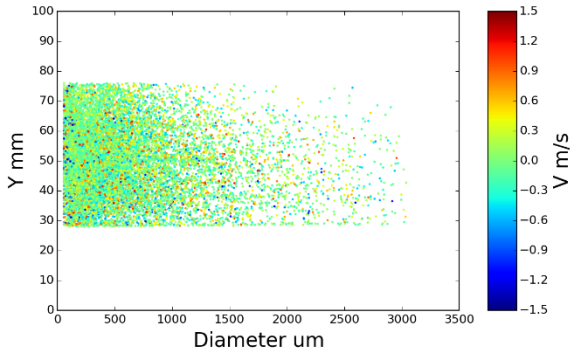


Figure A. 1073: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 Matched Only Droplets for .LB Image

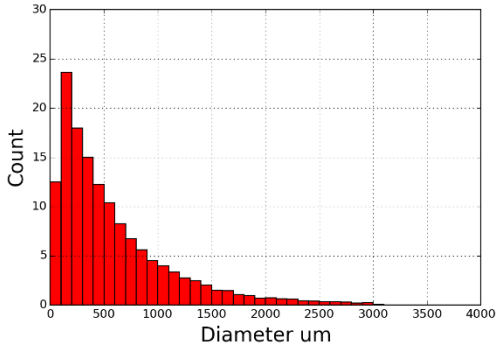


Figure A. 1076: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

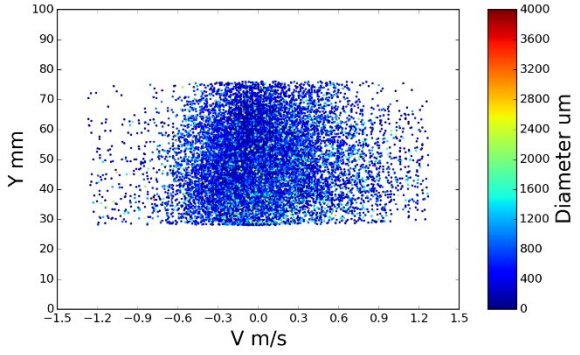


Figure A. 1079: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

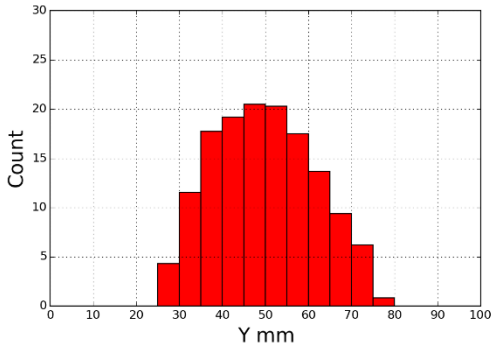


Figure A. 1077: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

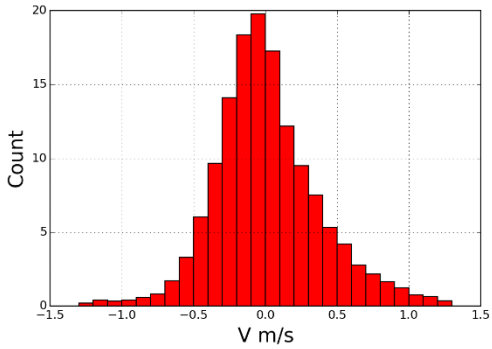


Figure A. 1080: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

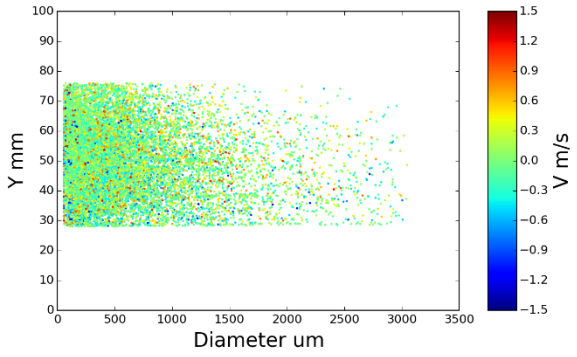


Figure A. 1078: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	59.67	59.65	57.2	3033	492.8	537.4	57.2	3044	474.3	529.1
40-60mm	110.7	111.25	57.2	3010	394.3	454.0	57.2	3040	393.6	452.1
60-80mm	41.6	40.93	57.2	2724	341.3	374.6	57.2	3042	352.0	388.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	212.67	212.37	57.2	3033	411.6	468.4	57.2	3044	408.3	466.1
			Height A (mm)				Height B (mm)			
Highest Particle			76.0466				76.0466			
Lowest Particle			28.0846				28.0846			

Table A. 115: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	24.53	57.2	3033	713.8	625.4	57.2	3044	704.6	619.5	-1.250	1.270	-0.050	0.340	-1.270	1.270	0.010	0.430
40-60mm	61.17	57.2	2946	540.3	506.0	57.2	3027	537.2	503.2	-1.270	1.270	-0.060	0.290	-1.270	1.270	0.010	0.410
60-80mm	24.03	57.2	2724	471.8	419.7	57.2	2743	469.9	419.0	-1.270	1.270	-0.060	0.240	-1.250	1.230	-0.000	0.340
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	109.73	57.2	3033	564.1	525.3	57.2	3044	559.8	521.6	-1.270	1.270	-0.060	0.300	-1.270	1.270	0.010	0.400

Table A. 116: Matched Droplet Info

A.2.1.1 All Droplets for .LA Image

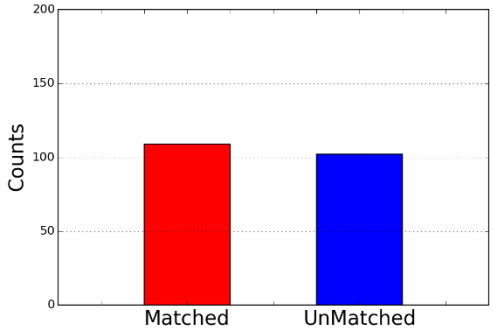


Figure A. 1081: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

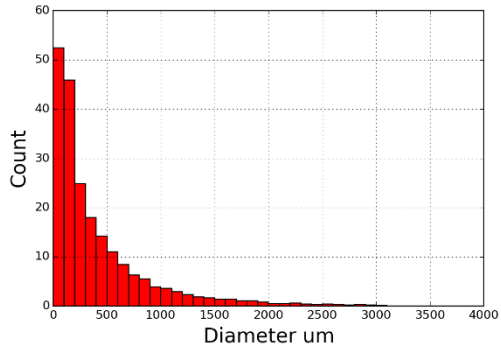


Figure A. 1082: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

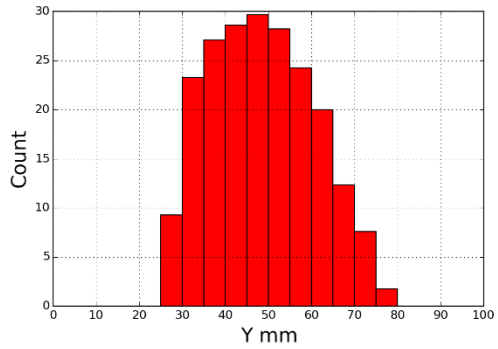


Figure A. 1083: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

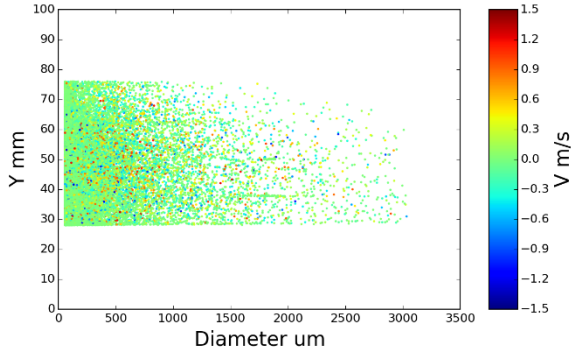


Figure A. 1084: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

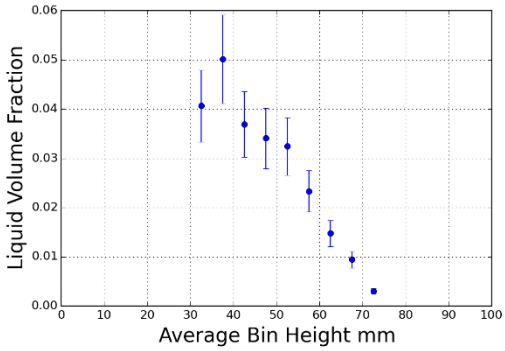


Figure A. 1085: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 All Droplets for .LB Image

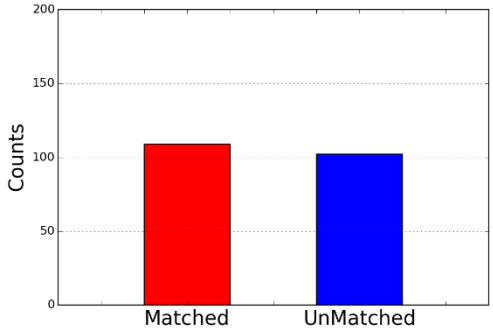


Figure A. 1086: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

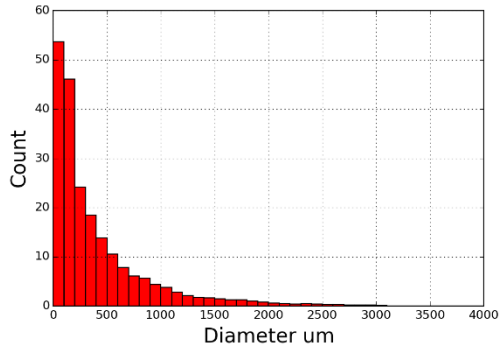


Figure A. 1087: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

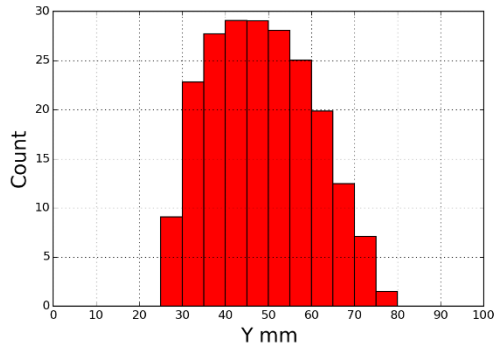


Figure A. 1088: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

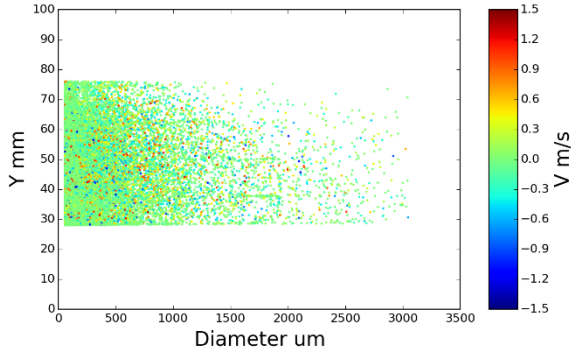


Figure A. 1089: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

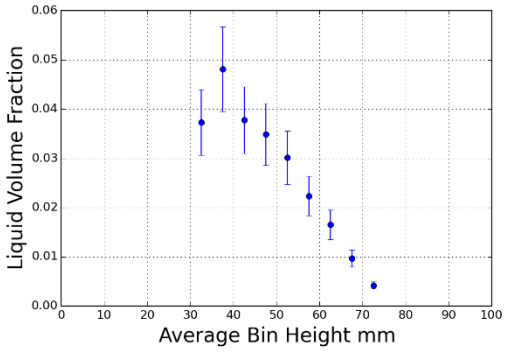


Figure A. 1090: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 Matched Only Droplets for .LA Image

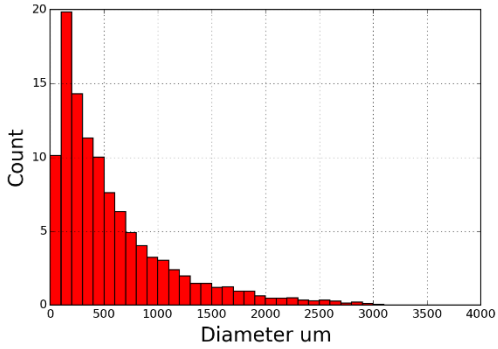


Figure A. 1091: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

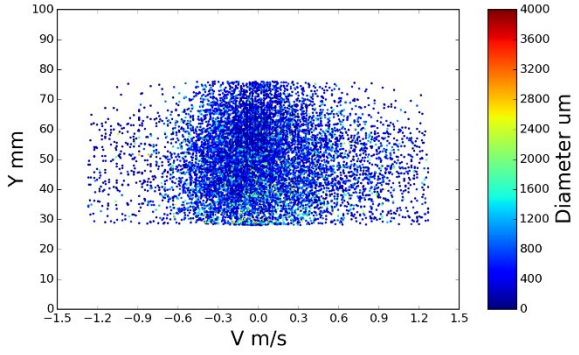


Figure A. 1094: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

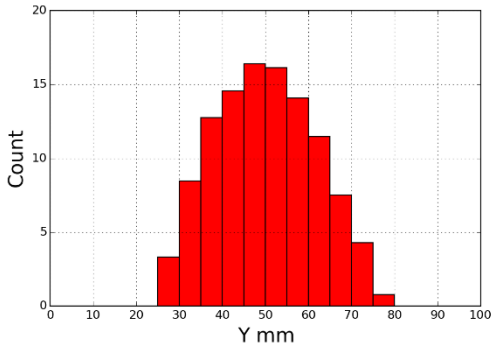


Figure A. 1092: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

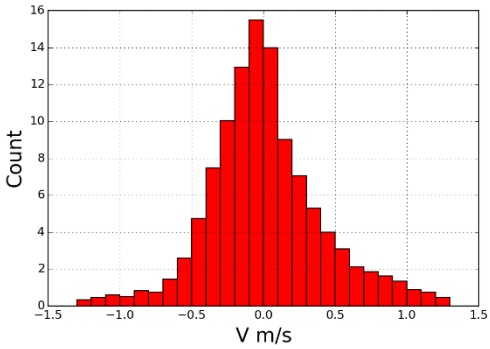


Figure A. 1095: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

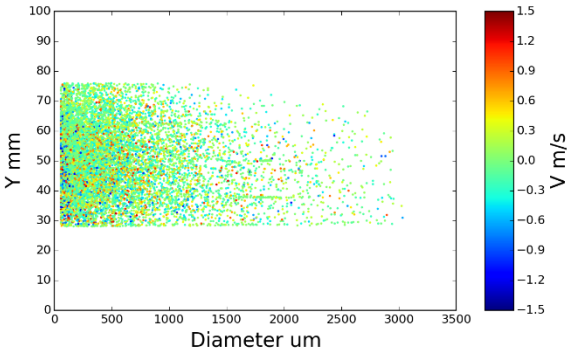


Figure A. 1093: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.1 Matched Only Droplets for .LB Image

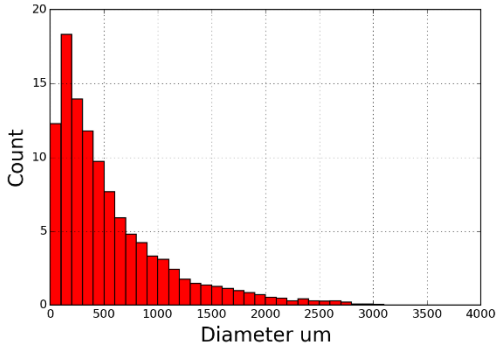


Figure A. 1096: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

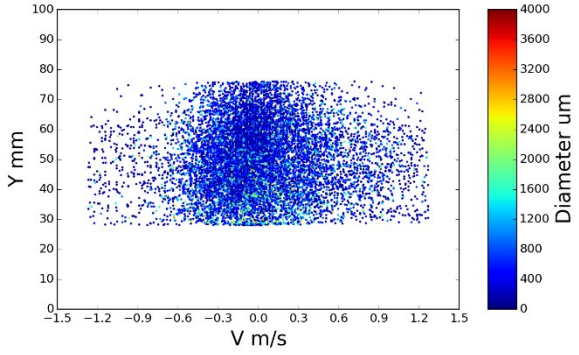


Figure A. 1099: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

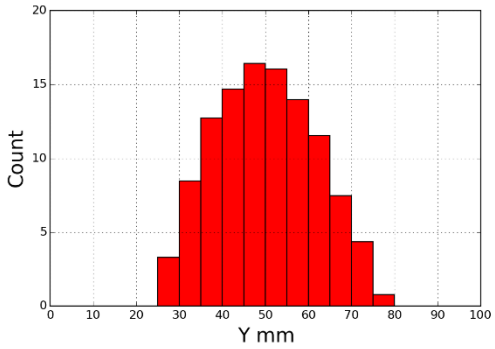


Figure A. 1097: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

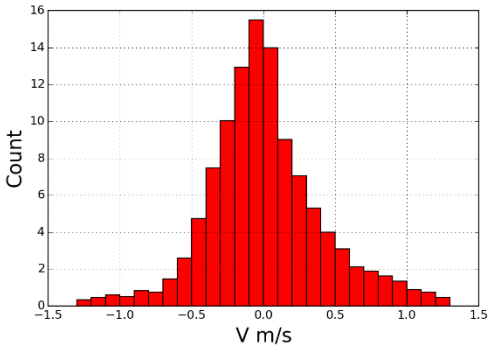


Figure A. 1100: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

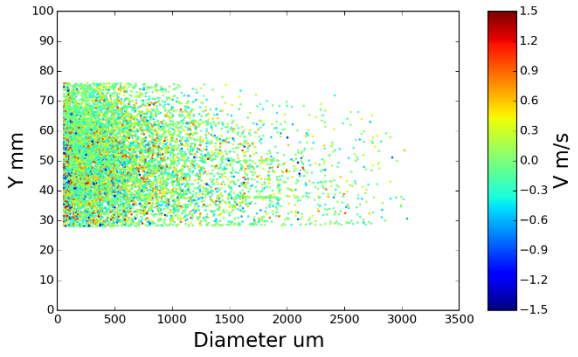


Figure A. 1098: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 Lens 50mm Mag 0_13x

A.2.1.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	50.03	49.69	128.6	3412	666.3	586.2	128.6	3406	666.6	583.4
40-60mm	85.87	84.95	128.6	3408	620.1	498.2	128.6	3396	619.5	496.6
60-80mm	30.09	29.86	128.6	3325	577.5	378.0	128.6	3238	576.3	376.2
80-100mm	6.05	5.86	128.6	1892	556.3	291.1	128.6	2041	567.9	284.5
All	172.04	170.37	128.6	3412	623.9	502.8	128.6	3406	623.9	500.9
			Height A (mm)				Height B (mm)			
Highest Particle			99.9210				99.9780			
Lowest Particle			30.0390				30.0390			

Table A. 117: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	27.53	128.6	3412	782.6	625.2	128.6	3374	766.8	612.9	-1.220	1.220	-0.080	0.350	-1.220	1.220	-0.020	0.440
40-60mm	55.86	128.6	3322	710.0	515.9	128.6	3350	702.8	513.1	-1.220	1.220	-0.080	0.280	-1.220	1.220	-0.010	0.390
60-80mm	22.54	128.6	3325	639.2	378.2	128.6	3238	634.1	381.2	-1.220	1.170	-0.080	0.190	-1.150	1.210	0.000	0.310
80-100mm	5.08	128.6	1892	598.0	278.7	128.6	1911	591.9	276.4	-0.890	0.940	-0.070	0.140	-0.690	0.740	0.020	0.270
All	111.01	128.6	3412	708.5	516.1	128.6	3374	699.7	511.1	-1.220	1.220	-0.080	0.280	-1.220	1.220	-0.010	0.390

Table A. 118: Matched Droplet Info

A.2.1.2 All Droplets for .LA Image

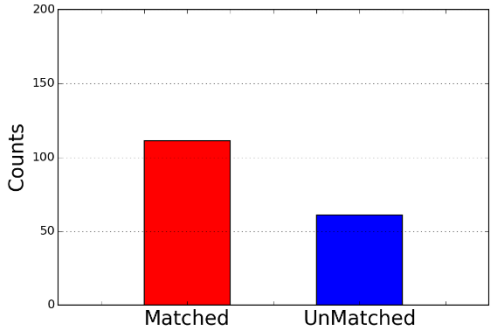


Figure A. 1101: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

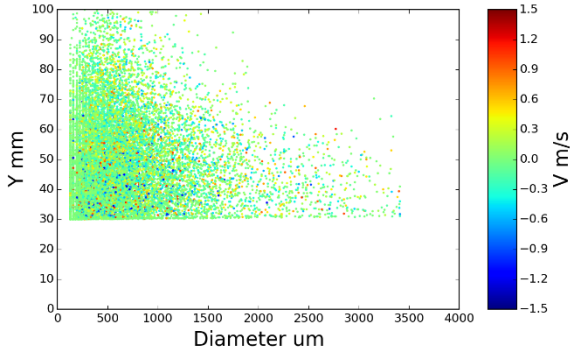


Figure A. 1104: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

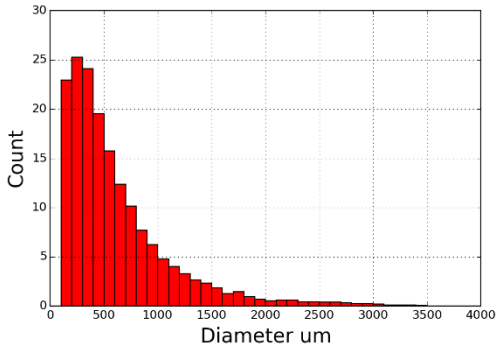


Figure A. 1102: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

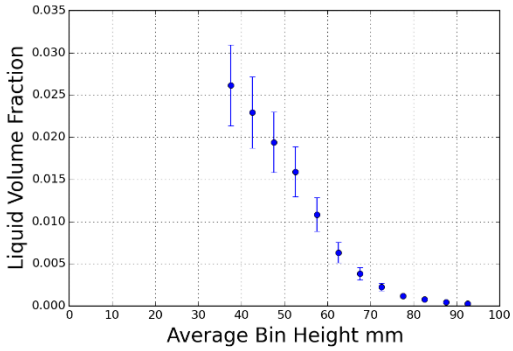


Figure A. 1105: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

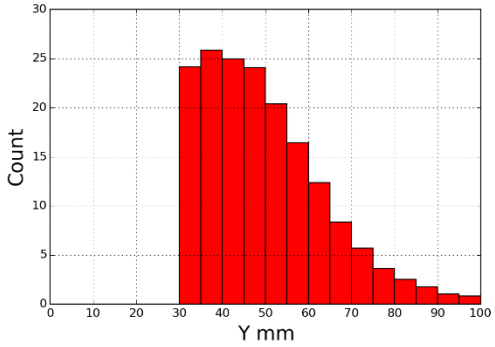


Figure A. 1103: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 All Droplets for .LB Image

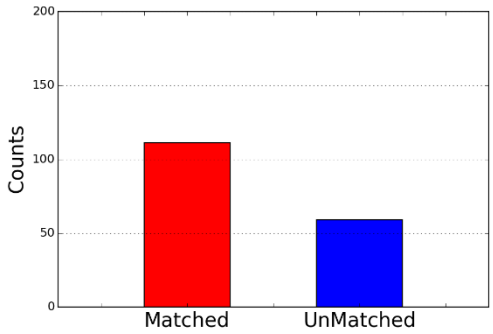


Figure A. 1106: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

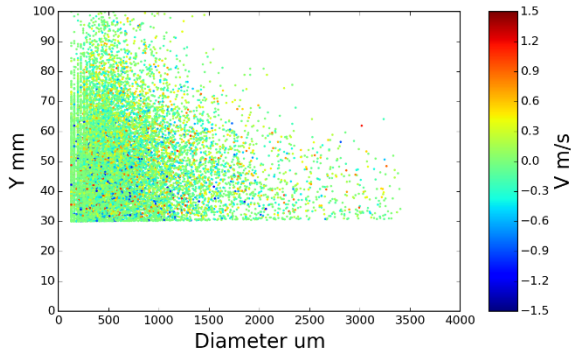


Figure A. 1109: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

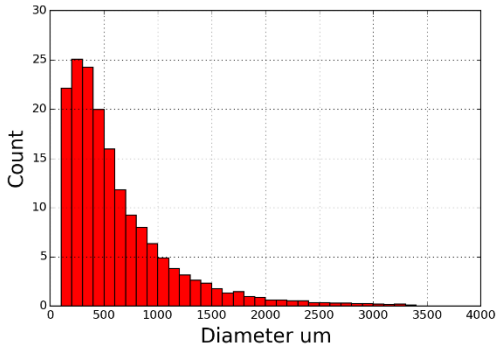


Figure A. 1107: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

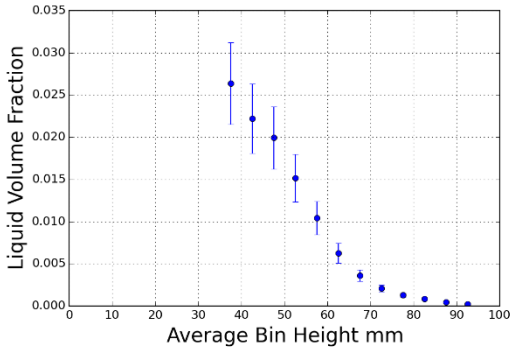


Figure A. 1110: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

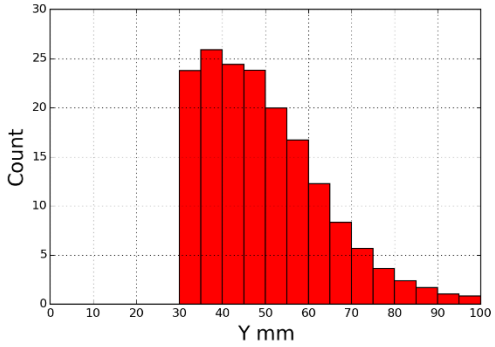


Figure A. 1108: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 Matched Only Droplets for .LA Image

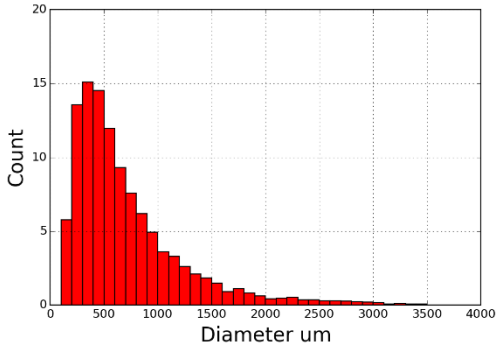


Figure A. 1111: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

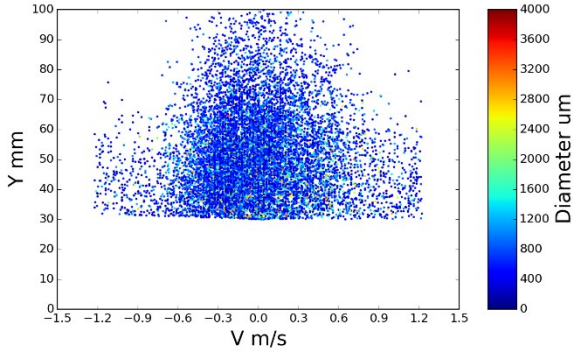


Figure A. 1114: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

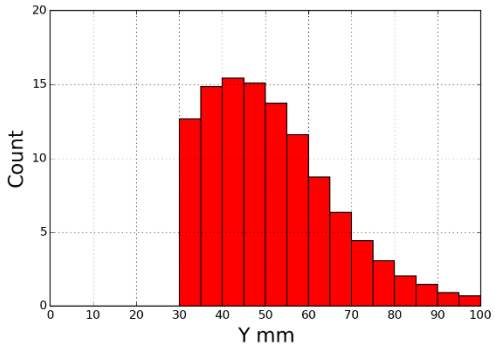


Figure A. 1112: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

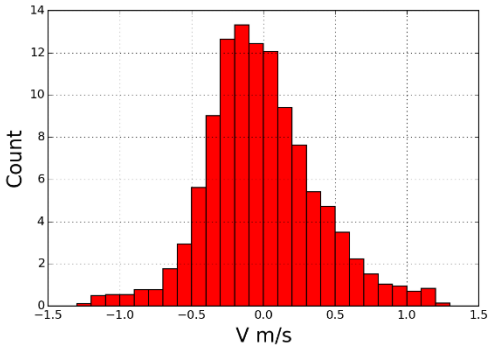


Figure A. 1115: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

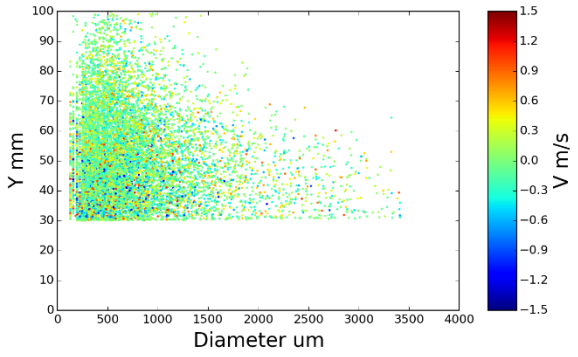


Figure A. 1113: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 Matched Only Droplets for .LB Image

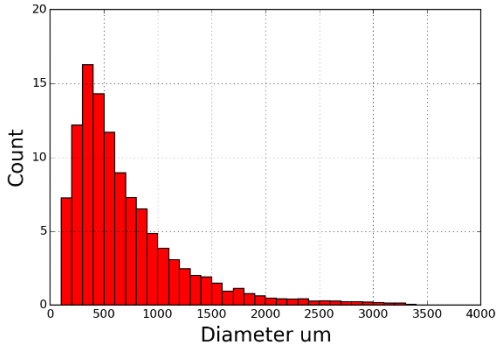


Figure A. 1116: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

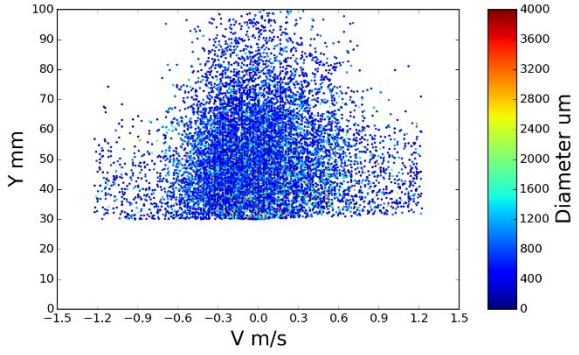


Figure A. 1119: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

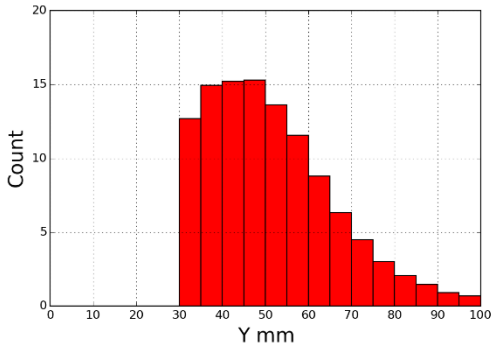


Figure A. 1117: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

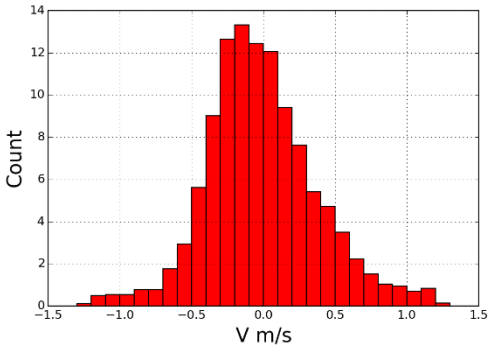


Figure A. 1120: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

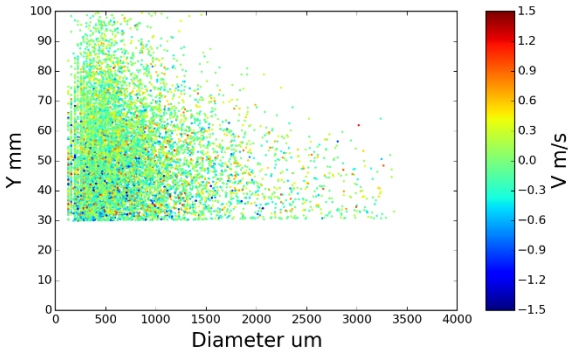


Figure A. 1118: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	51.04	50.81	128.6	3417	704.6	593.7	128.6	3416	696.5	586.4
40-60mm	97.92	96.91	128.6	3400	639.4	483.4	128.6	3414	640.6	490.4
60-80mm	35.63	35.62	128.6	2976	591.5	364.9	128.6	3052	591.4	363.9
80-100mm	7.93	7.77	128.6	2669	589.4	284.1	128.6	2526	589.7	288.3
All	192.52	191.12	128.6	3417	645.8	491.8	128.6	3416	644.2	492.7
			Height A (mm)				Height B (mm)			
Highest Particle			99.9780				99.9495			
Lowest Particle			30.0390				30.0390			

Table A. 119: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	28.36	128.6	3417	818.1	626.2	128.6	3399	798.0	610.1	-1.220	1.220	-0.080	0.350	-1.220	1.220	-0.010	0.450
40-60mm	62.8	128.6	3356	723.2	496.8	128.6	3380	715.5	493.9	-1.220	1.220	-0.070	0.300	-1.220	1.220	0.010	0.430
60-80mm	26.5	128.6	2954	650.4	360.3	128.6	3052	643.2	359.8	-1.210	1.200	-0.060	0.210	-1.220	1.220	-0.020	0.350
80-100mm	6.79	192.9	2669	619.4	277.2	181.9	2515	614.6	274.5	-1.100	1.080	-0.080	0.160	-0.920	0.880	-0.030	0.280
All	124.45	128.6	3417	723.7	499.5	128.6	3399	713.2	492.4	-1.220	1.220	-0.070	0.290	-1.220	1.220	-0.000	0.410

Table A. 120: Matched Droplet Info

A.2.1.2 All Droplets for .LA Image

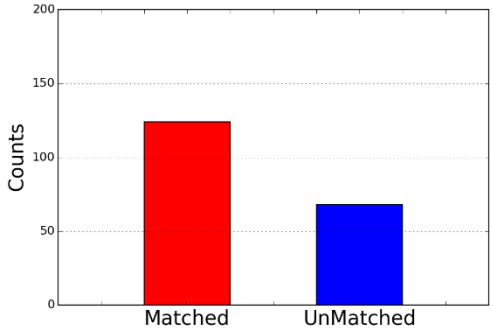


Figure A. 1121: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

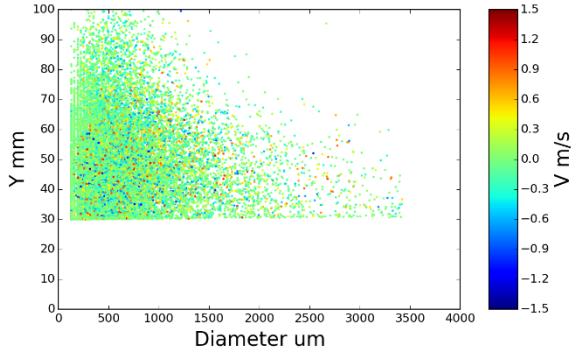


Figure A. 1124: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

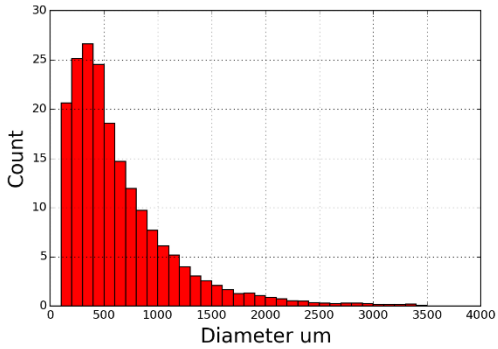


Figure A. 1122: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

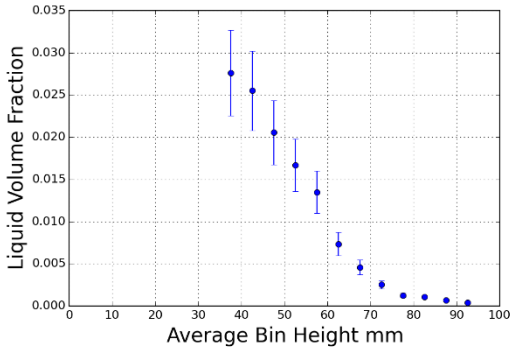


Figure A. 1125: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

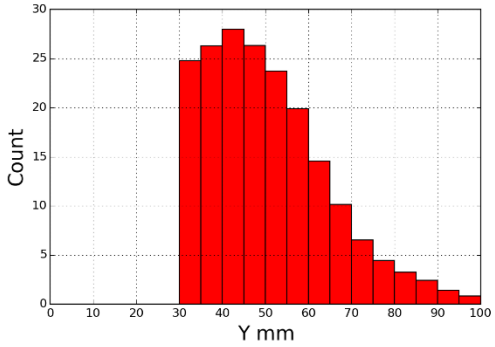


Figure A. 1123: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 All Droplets for .LB Image

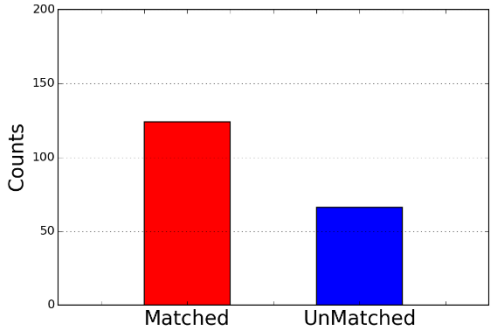


Figure A. 1126: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

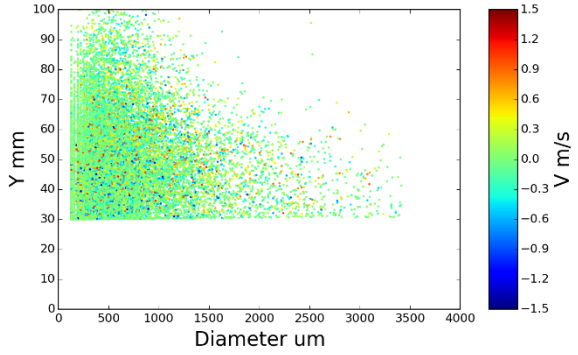


Figure A. 1129: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

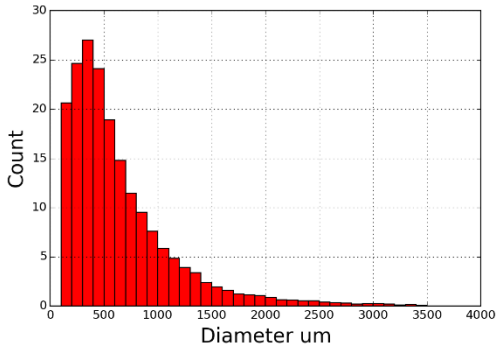


Figure A. 1127: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

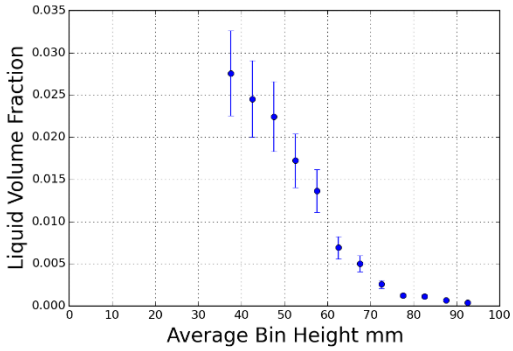


Figure A. 1130: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

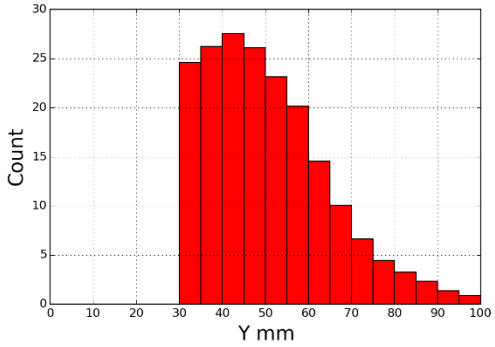


Figure A. 1128: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 Matched Only Droplets for .LA Image

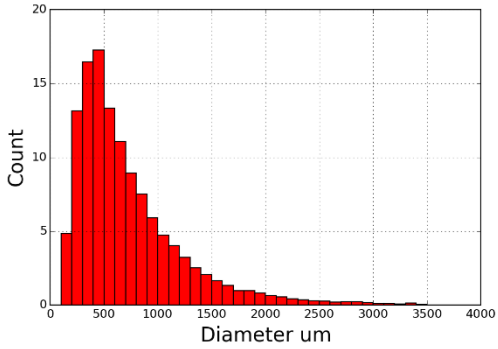


Figure A. 1131: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

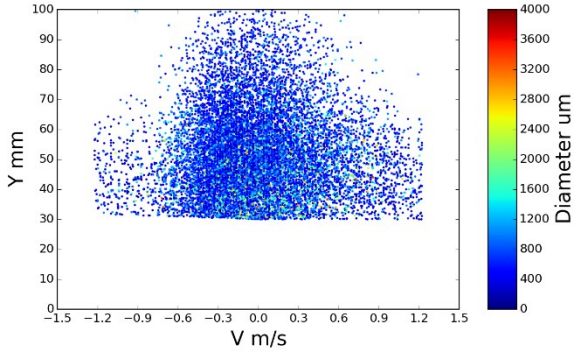


Figure A. 1134: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

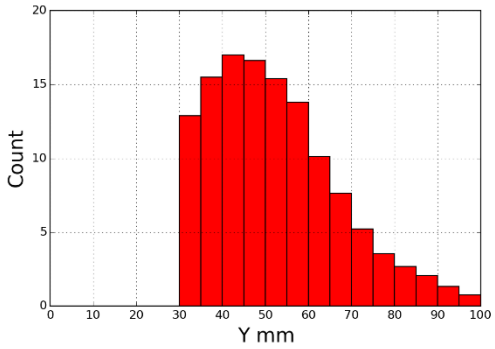


Figure A. 1132: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

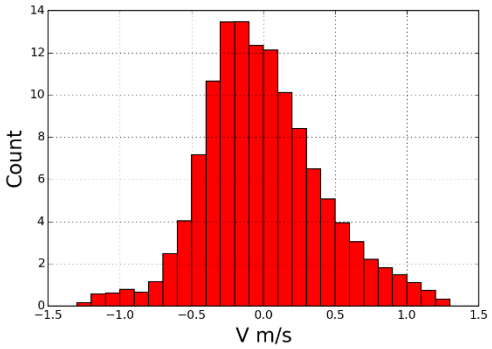


Figure A. 1135: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

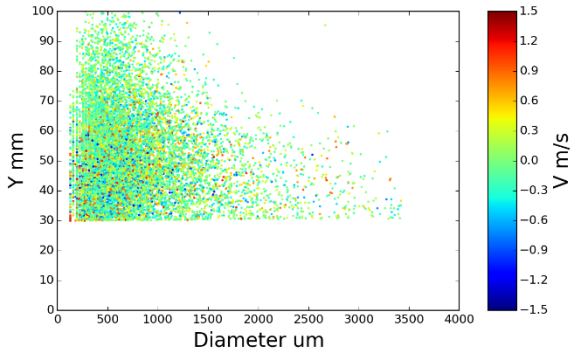


Figure A. 1133: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 Matched Only Droplets for .LB Image

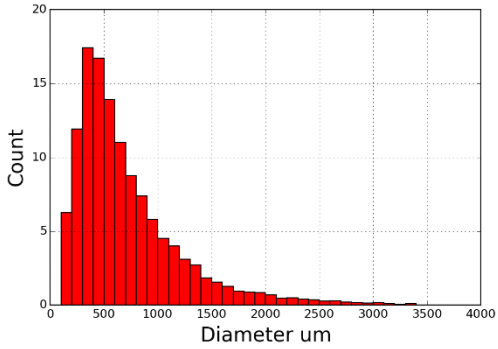


Figure A. 1136: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

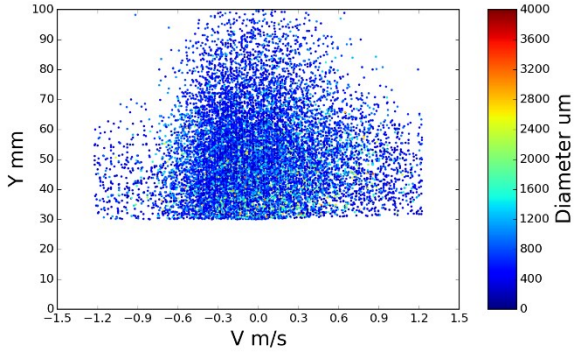


Figure A. 1139: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

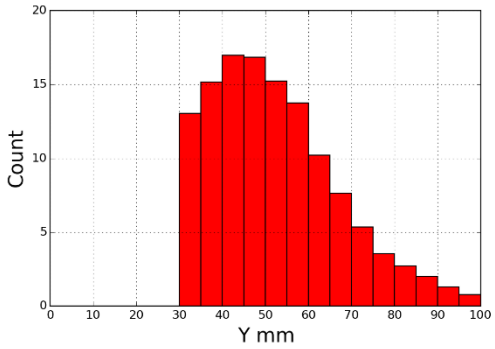


Figure A. 1137: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

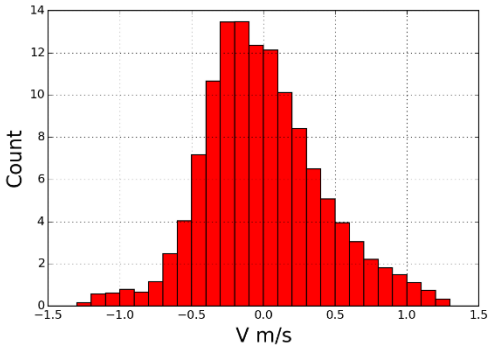


Figure A. 1140: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

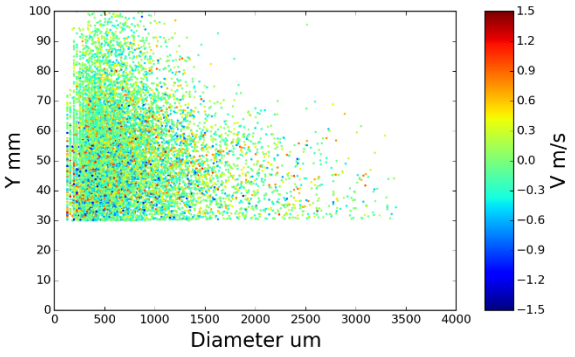


Figure A. 1138: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	45.37	45.45	128.6	3420	735.9	604.0	128.6	3414	740.8	609.4
40-60mm	93.25	93.2	128.6	3389	674.4	526.6	128.6	3400	673.8	533.7
60-80mm	40.7	40.86	128.6	3341	602.2	408.8	128.6	3127	599.5	398.8
80-100mm	8.15	8.16	128.6	2054	586.1	299.7	128.6	2114	590.1	300.5
All	187.47	187.67	128.6	3420	669.7	518.4	128.6	3414	670.2	522.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.9517				99.9256			
Lowest Particle			30.0390				30.0390			

Table A. 121: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	24.18	128.6	3405	870.9	625.5	128.6	3371	849.6	617.1	-1.220	1.220	-0.060	0.370	-1.210	1.220	-0.040	0.440
40-60mm	59.69	128.6	3389	776.7	547.5	128.6	3400	765.8	543.9	-1.220	1.220	-0.070	0.290	-1.220	1.220	-0.010	0.420
60-80mm	29.72	128.6	3341	674.6	412.2	128.6	3127	666.9	412.0	-1.220	1.170	-0.060	0.220	-1.200	1.220	-0.000	0.360
80-100mm	6.74	192.9	2054	637.3	294.1	192.9	2114	634.9	296.4	-0.580	0.900	-0.060	0.140	-0.720	1.030	-0.010	0.270
All	120.33	128.6	3405	762.6	528.5	128.6	3400	750.9	524.0	-1.220	1.220	-0.070	0.290	-1.220	1.220	-0.010	0.400

Table A. 122: Matched Droplet Info

A.2.1.2 All Droplets for .LA Image

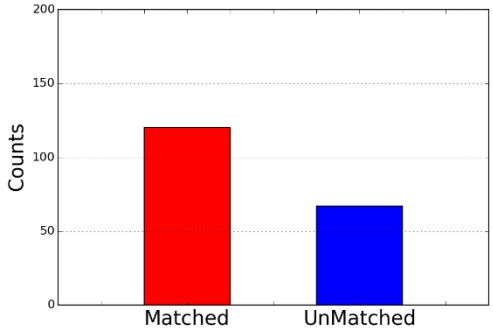


Figure A. 1141: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

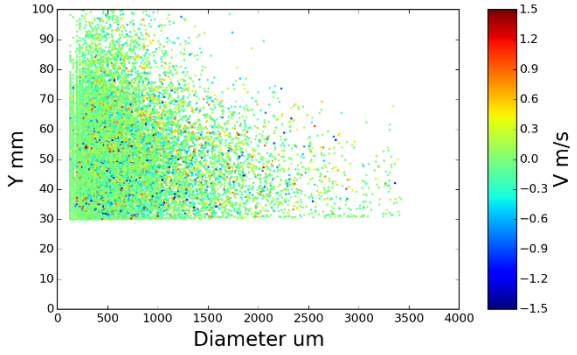


Figure A. 1144: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

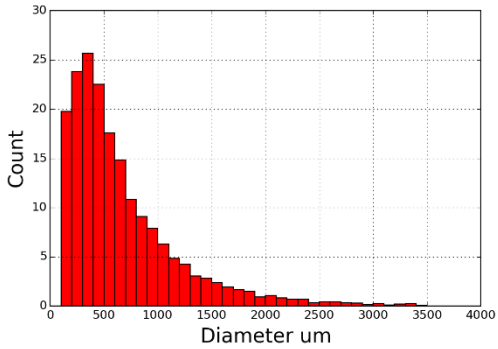


Figure A. 1142: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

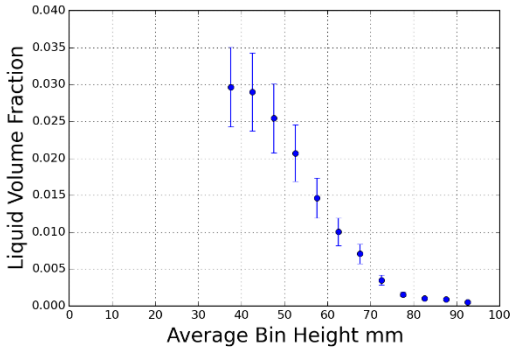


Figure A. 1145: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

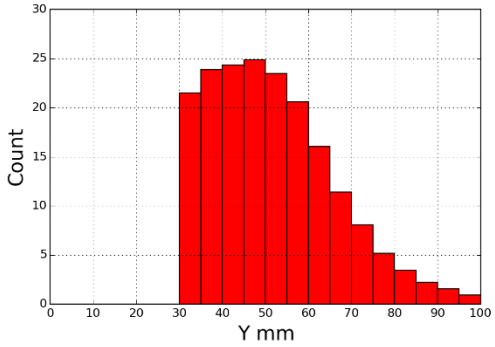


Figure A. 1143: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 All Droplets for .LB Image

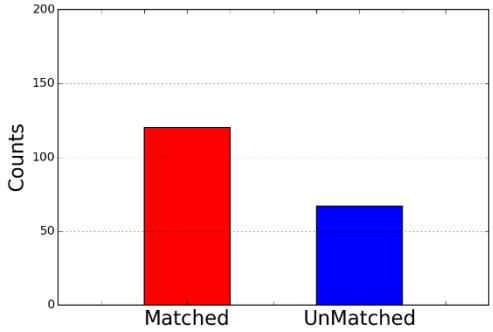


Figure A. 1146: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

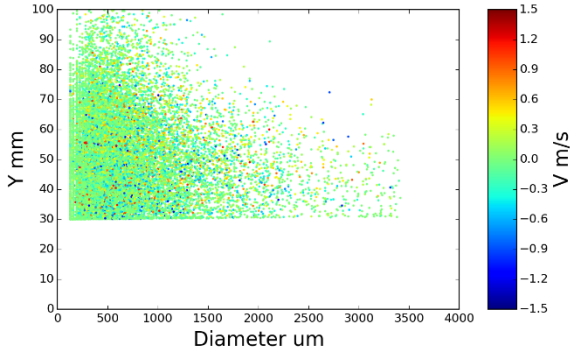


Figure A. 1149: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

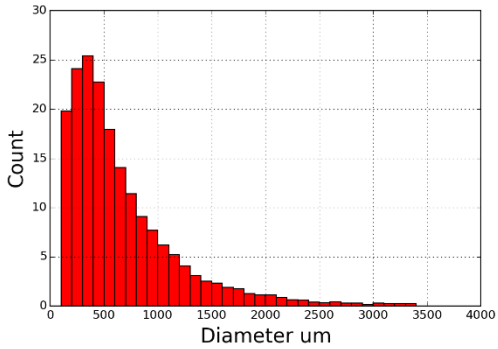


Figure A. 1147: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

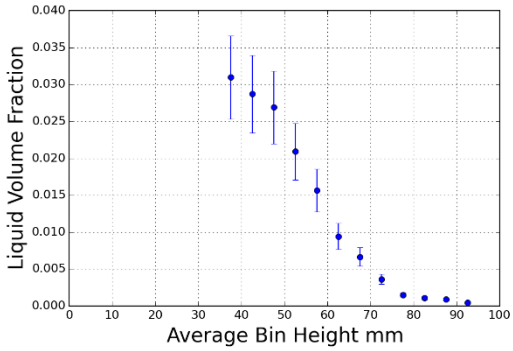


Figure A. 1150: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

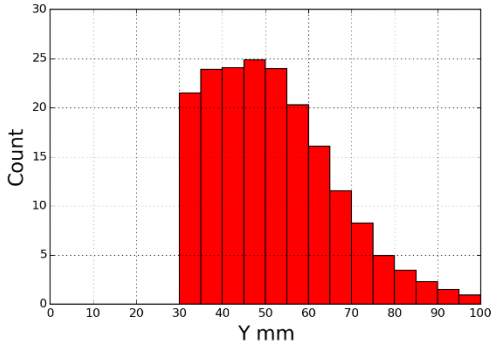


Figure A. 1148: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 Matched Only Droplets for .LA Image

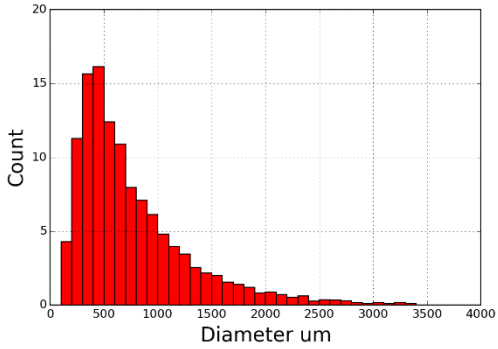


Figure A. 1151: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

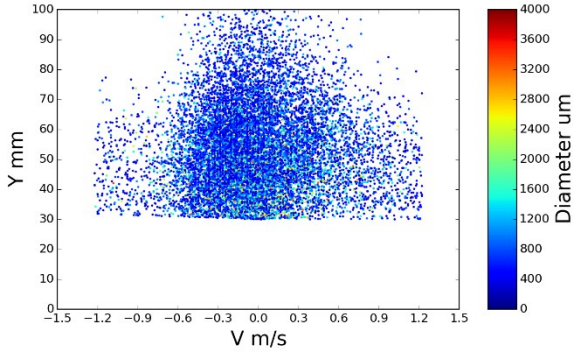


Figure A. 1154: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

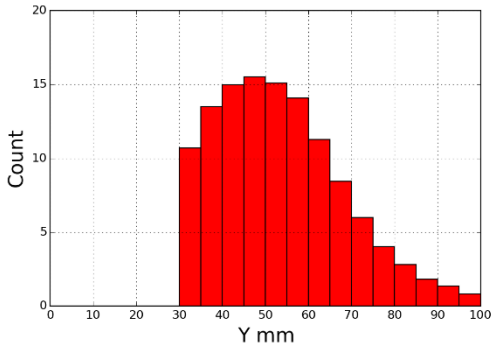


Figure A. 1152: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

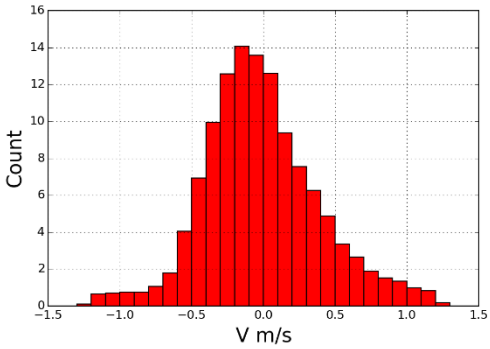


Figure A. 1155: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

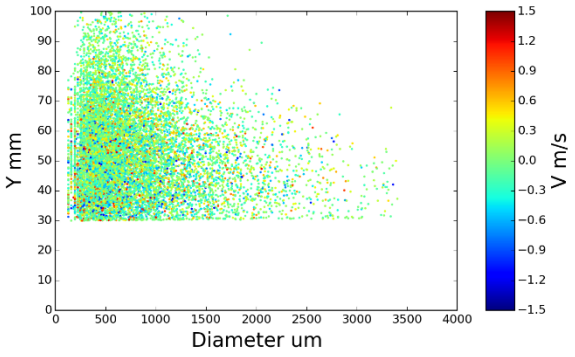


Figure A. 1153: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 Matched Only Droplets for .LB Image

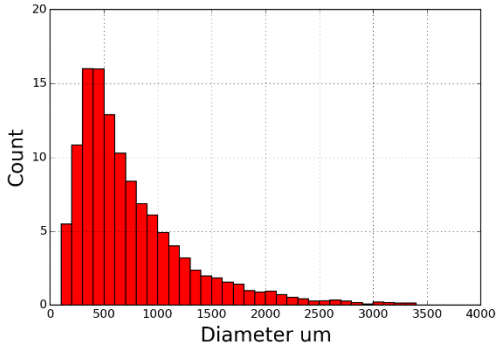


Figure A. 1156: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

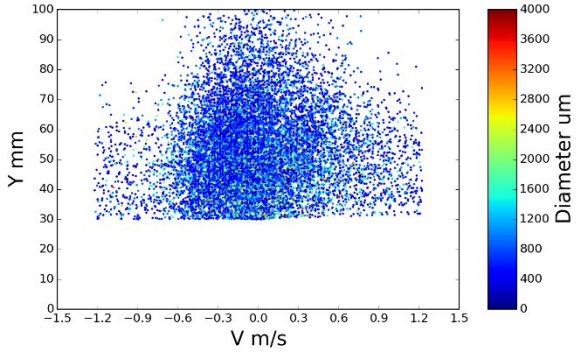


Figure A. 1159: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

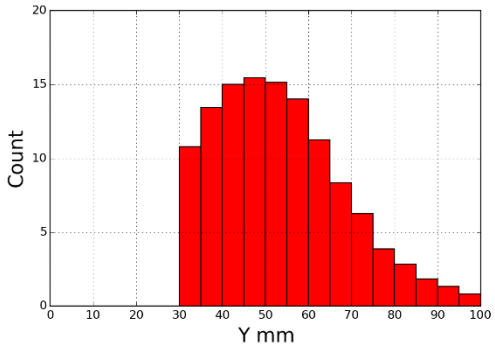


Figure A. 1157: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

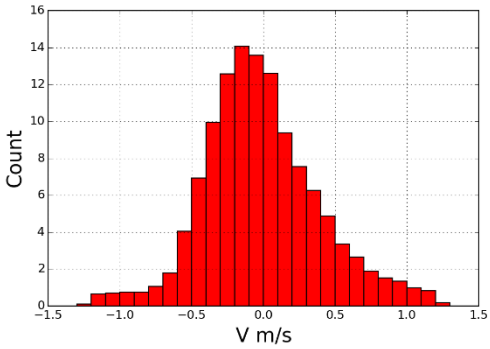


Figure A. 1160: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

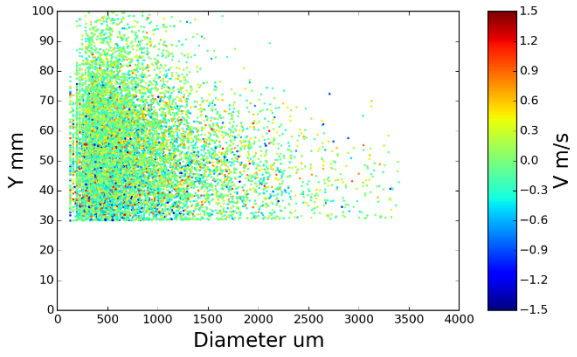


Figure A. 1158: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	39.33	39.31	128.6	3400	790.7	638.9	128.6	3402	795.4	657.0
40-60mm	79.88	80.45	128.6	3417	694.7	545.4	128.6	3388	694.6	546.2
60-80mm	38.81	38.59	128.6	3306	618.4	438.3	128.6	3081	608.9	428.4
80-100mm	9.38	9.28	128.6	2428	568.5	336.6	128.6	2986	562.7	338.1
All	167.4	167.63	128.6	3417	692.5	541.4	128.6	3402	691.2	545.9
			Height A (mm)				Height B (mm)			
Highest Particle			99.9780				99.9780			
Lowest Particle			30.0390				30.0390			

Table A. 123: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	20.51	128.6	3385	966.6	689.8	128.6	3390	956.4	692.0	-1.220	1.200	-0.060	0.330	-1.220	1.220	-0.020	0.420
40-60mm	50.13	128.6	3373	806.4	568.3	128.6	3356	794.3	561.1	-1.220	1.220	-0.060	0.300	-1.220	1.220	0.000	0.420
60-80mm	27.17	128.6	3306	706.0	456.4	128.6	3081	689.0	444.4	-1.220	1.210	-0.070	0.230	-1.200	1.180	0.000	0.370
80-100mm	7.13	128.6	2325	628.9	331.0	128.6	2239	622.6	326.4	-1.040	0.790	-0.060	0.150	-0.770	1.050	0.000	0.300
All	104.94	128.6	3385	799.6	564.3	128.6	3390	787.5	559.3	-1.220	1.220	-0.060	0.280	-1.220	1.220	-0.000	0.400

Table A. 124: Matched Droplet Info

A.2.1.2 All Droplets for .LA Image

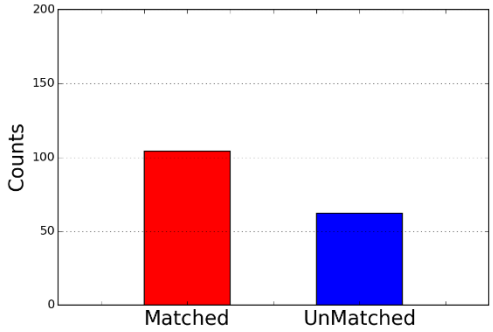


Figure A. 1161: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

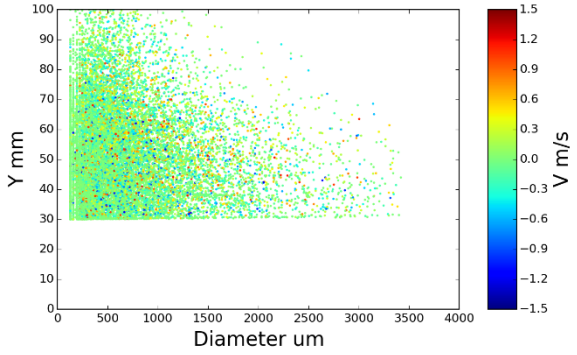


Figure A. 1164: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

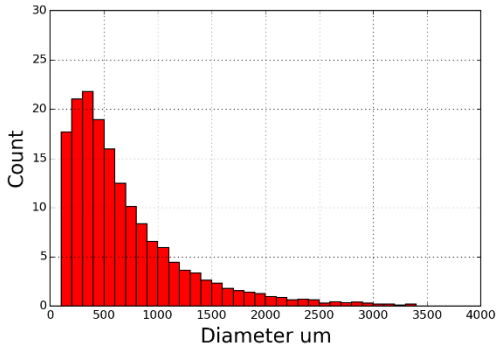


Figure A. 1162: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

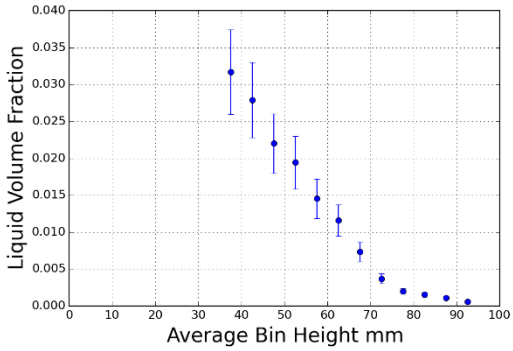


Figure A. 1165: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

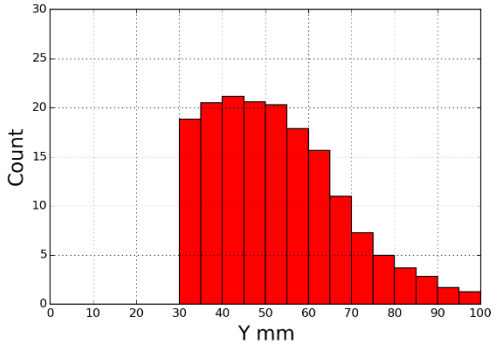


Figure A. 1163: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 All Droplets for .LB Image

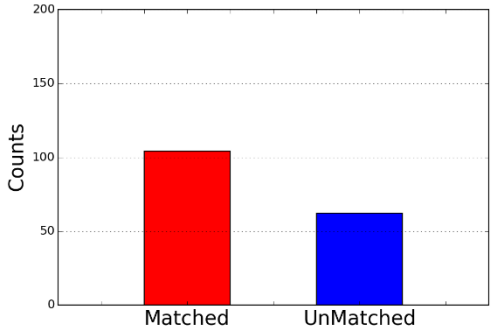


Figure A. 1166: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

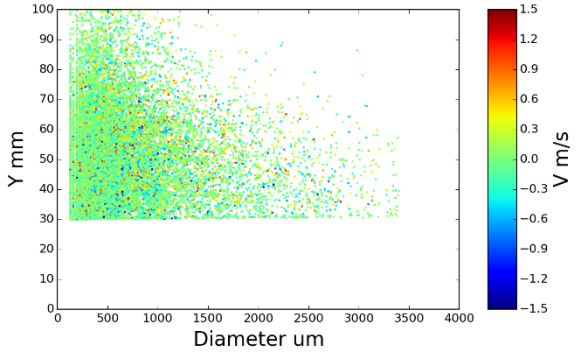


Figure A. 1169: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

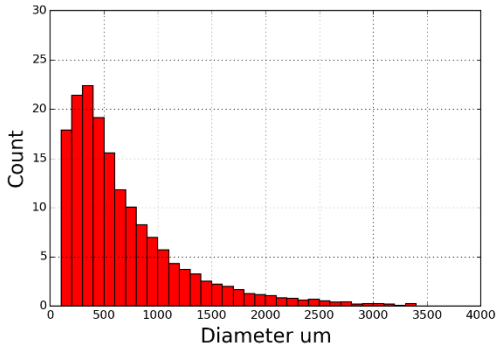


Figure A. 1167: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

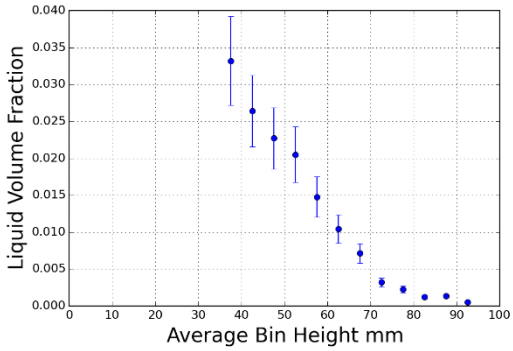


Figure A. 1170: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

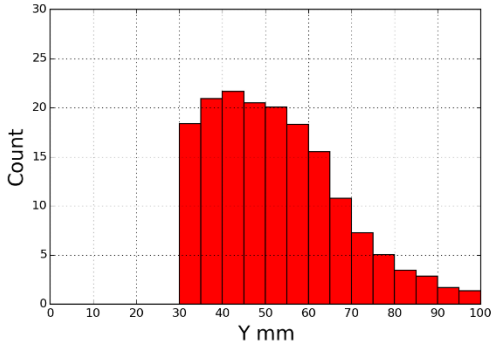


Figure A. 1168: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 Matched Only Droplets for .LA Image

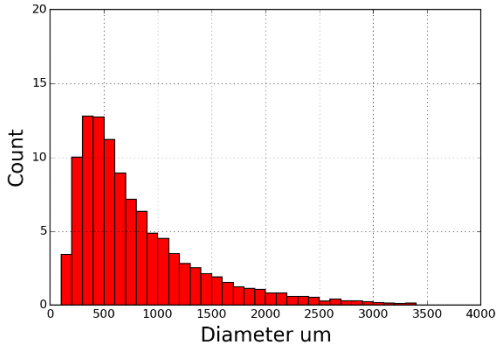


Figure A. 1171: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

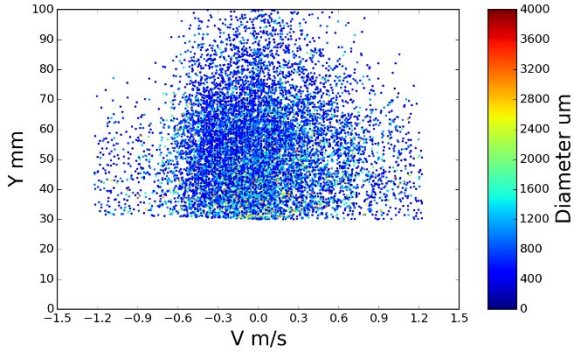


Figure A. 1174: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

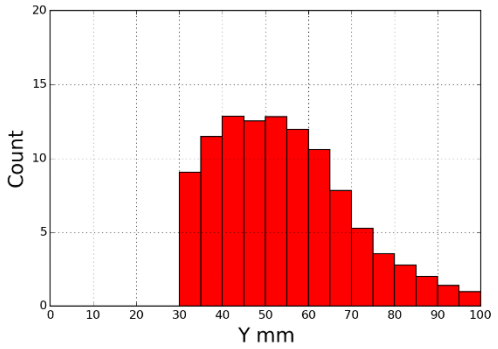


Figure A. 1172: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

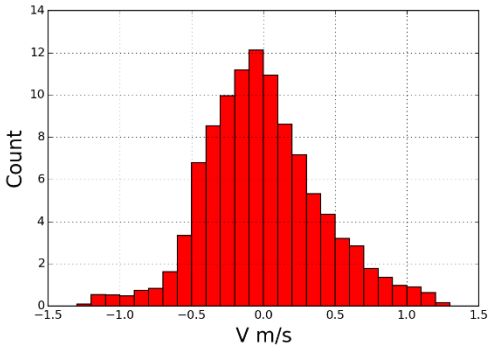


Figure A. 1175: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

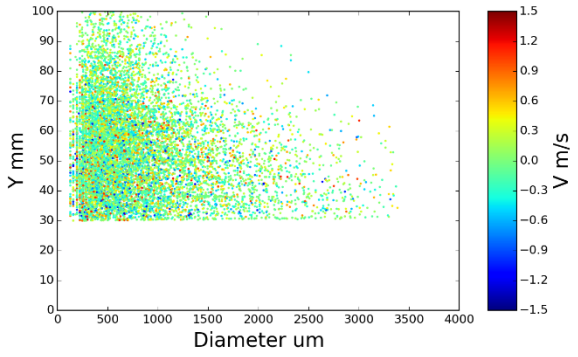


Figure A. 1173: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 Matched Only Droplets for .LB Image

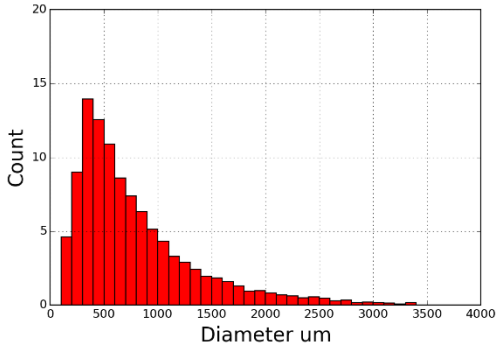


Figure A. 1176: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

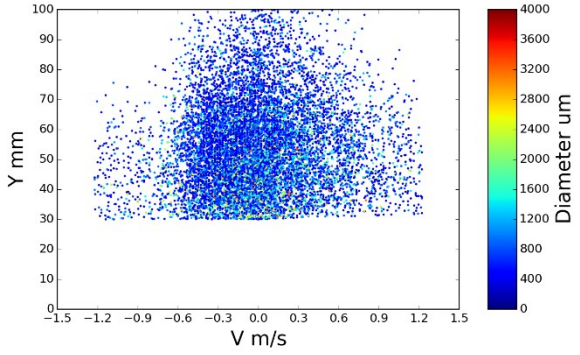


Figure A. 1179: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

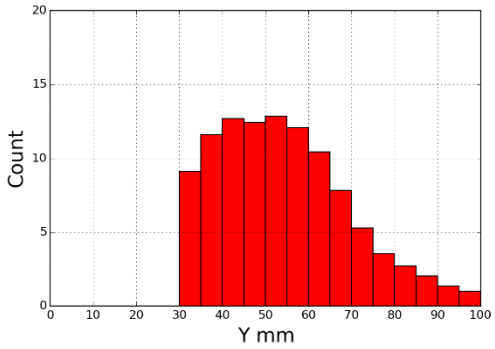


Figure A. 1177: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

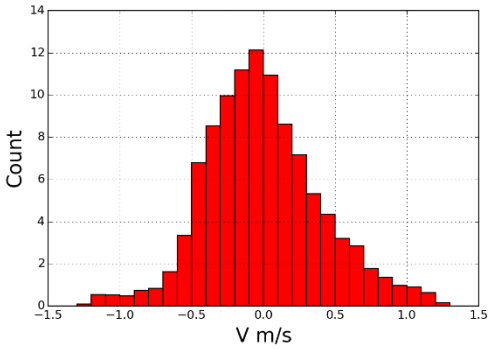


Figure A. 1180: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

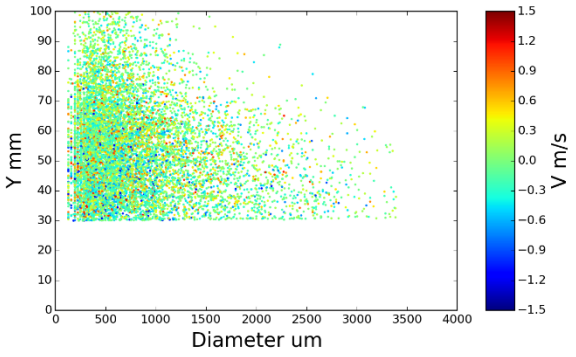


Figure A. 1178: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	33.91	33.61	128.6	3406	773.5	648.4	128.6	3414	779.7	650.5
40-60mm	71.69	70.64	128.6	3414	682.9	563.1	128.6	3389	686.6	567.4
60-80mm	31.67	31.84	128.6	3353	597.5	433.3	128.6	3381	590.8	429.3
80-100mm	7.53	7.52	128.6	2649	552.1	367.9	128.6	2923	546.3	363.9
All	144.8	143.61	128.6	3414	678.6	554.9	128.6	3414	679.8	557.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.9210				99.9780			
Lowest Particle			30.0390				30.0390			

Table A. 125: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	16.58	128.6	3365	963.1	688.8	128.6	3361	937.9	681.6	-1.210	1.210	-0.060	0.350	-1.190	1.220	-0.010	0.450
40-60mm	43.81	128.6	3414	800.6	585.6	128.6	3379	792.9	583.9	-1.220	1.220	-0.050	0.300	-1.220	1.220	-0.010	0.430
60-80mm	21.47	128.6	3353	699.8	451.3	128.6	3279	683.3	443.6	-1.220	1.220	-0.060	0.230	-1.130	1.170	-0.030	0.340
80-100mm	5.56	128.6	2649	624.8	380.8	128.6	2923	616.2	379.6	-1.220	0.580	-0.060	0.170	-0.840	1.050	-0.040	0.270
All	87.42	128.6	3414	795.5	574.9	128.6	3379	782.2	570.2	-1.220	1.220	-0.060	0.290	-1.220	1.220	-0.020	0.400

Table A. 126: Matched Droplet Info

A.2.1.2 All Droplets for .LA Image

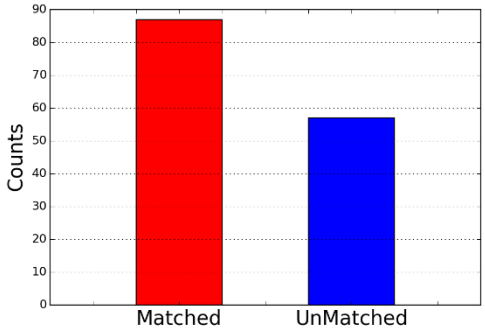


Figure A. 1181: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

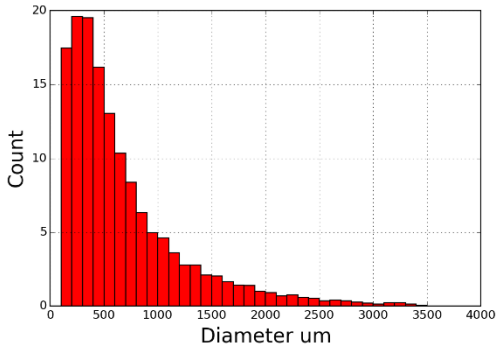


Figure A. 1182: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

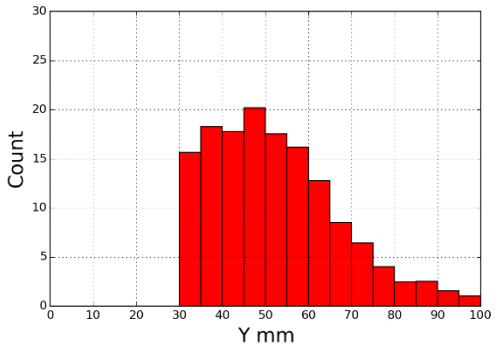


Figure A. 1183: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

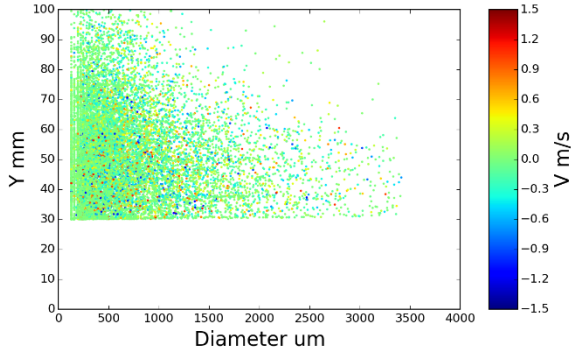


Figure A. 1184: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

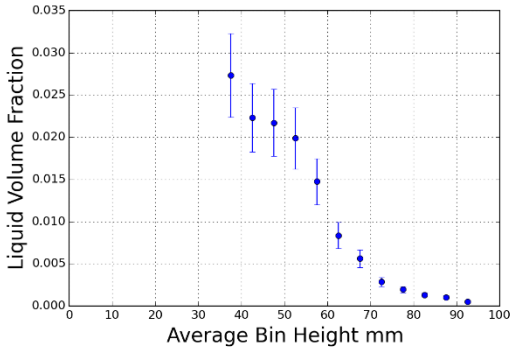


Figure A. 1185: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 All Droplets for .LB Image

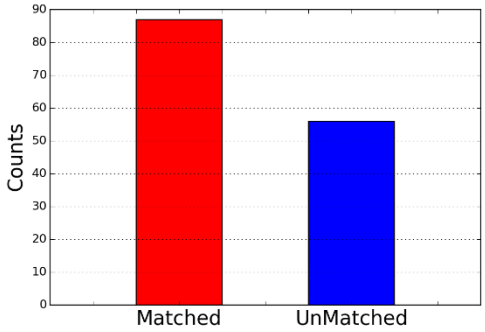


Figure A. 1186: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

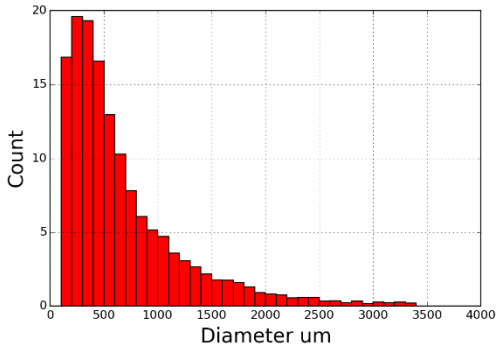


Figure A. 1187: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

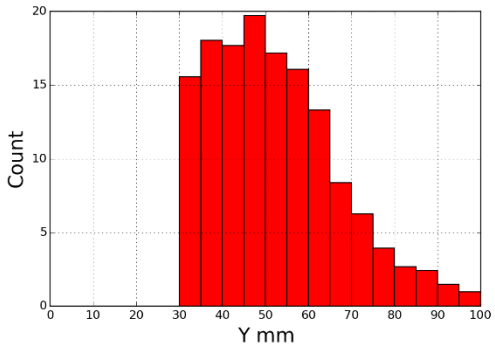


Figure A. 1188: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

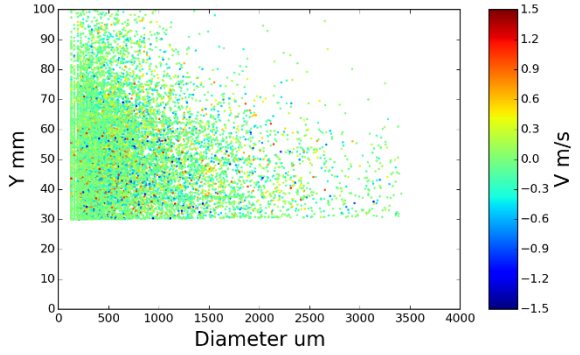


Figure A. 1189: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

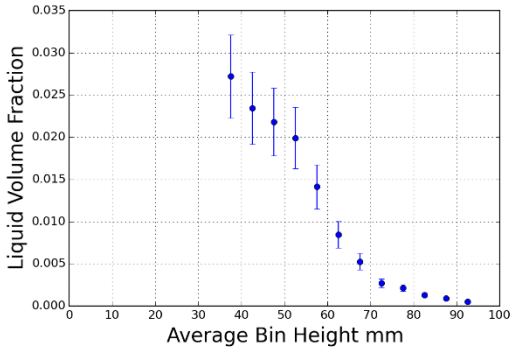


Figure A. 1190: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 Matched Only Droplets for .LA Image

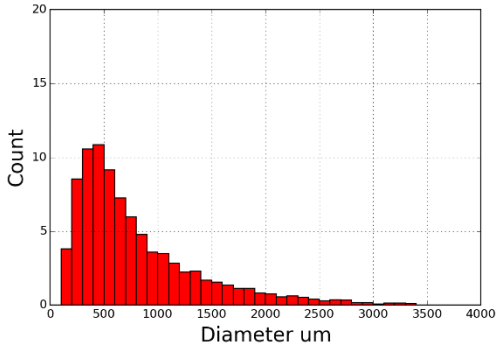


Figure A. 1191: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

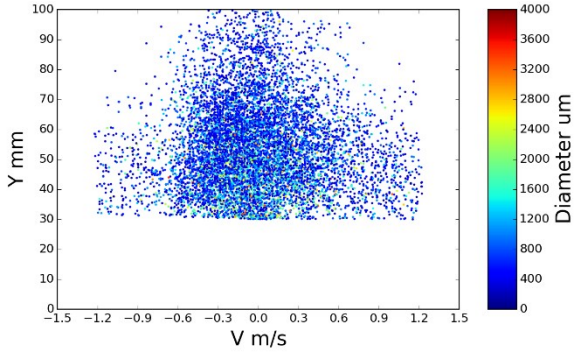


Figure A. 1194: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

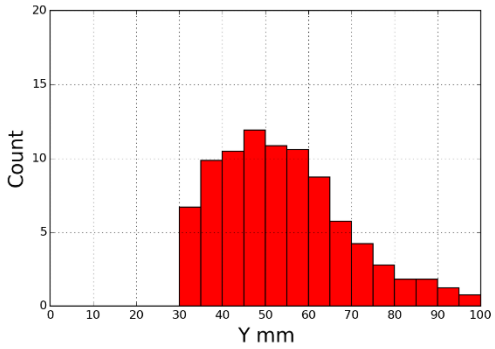


Figure A. 1192: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

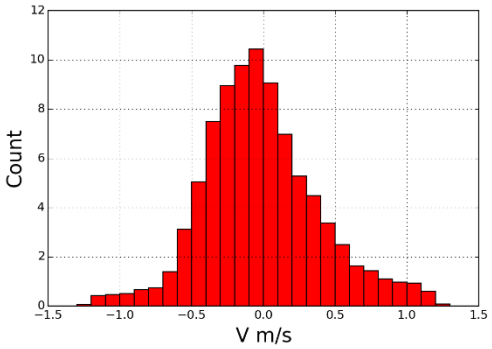


Figure A. 1195: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

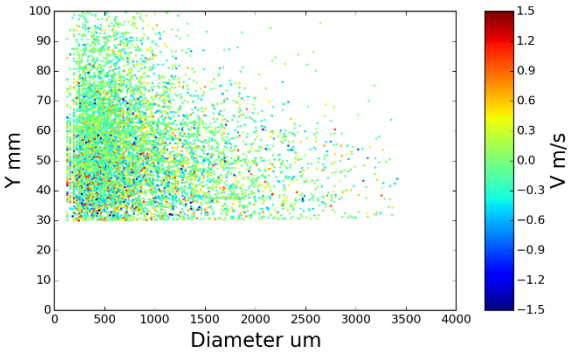


Figure A. 1193: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.1.2 Matched Only Droplets for .LB Image

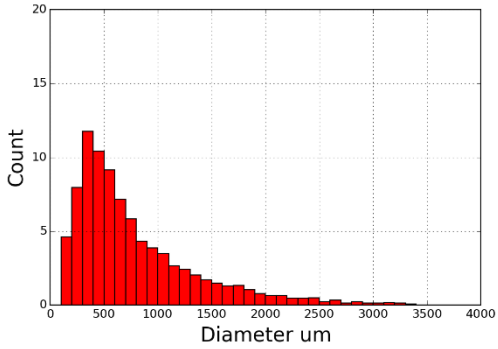


Figure A. 1196: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

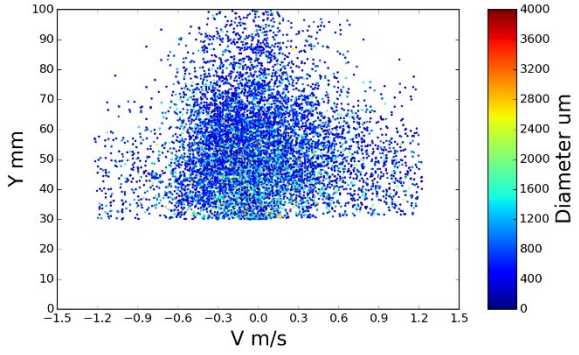


Figure A. 1199: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

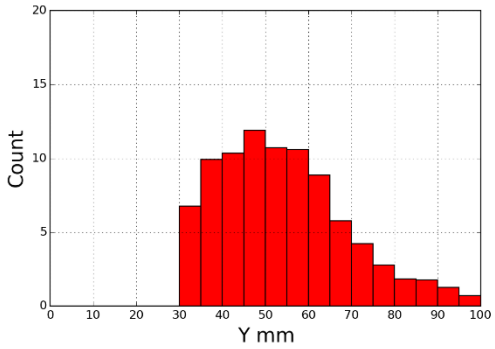


Figure A. 1197: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

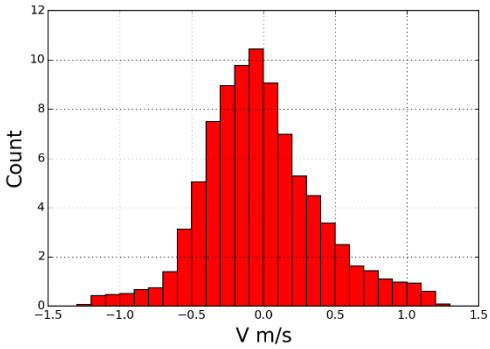


Figure A. 1200: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

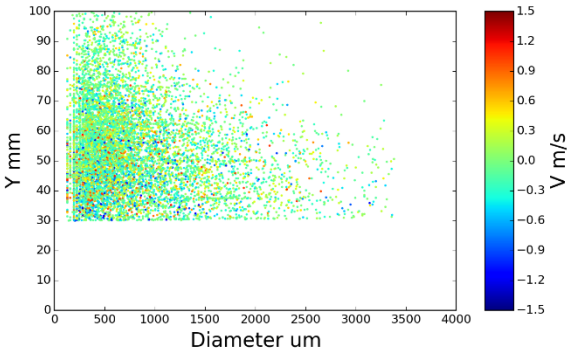


Figure A. 1198: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2 Liquid Level 2

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	23588 / 2.972
Ref Mass Flow (lb/hr) / (kg/s)	1619 / 0.204
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15043 / 20.401
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	7355 / 23.20
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	40.2 / 4.57
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.4 / 4.68
Total Bundle Q (Btu/hr) / (kW)	152247 / 44.62
Total Bundle & Preboiler Q (Btu/hr) / (kW)	152247 / 44.62
Top Two Rows HTC Ratio	1.073
Bundle Inlet Quality	0.00
Bundle Exit Quality	0.08

Table A. 127: Thermal Conditions

A.2.2.1 Lens 100mm Mag 0_29x

A.2.2.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	130.65	130.19	57.2	3039	429.0	451.3	57.2	3041	430.6	453.5
40-60mm	165.85	166.03	57.2	2957	375.0	378.1	57.2	3009	375.6	378.0
60-80mm	54.86	54.9	57.2	2152	302.5	307.6	57.2	2108	303.7	308.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	351.4	351.17	57.2	3039	383.7	399.8	57.2	3041	384.8	400.7
			Height A (mm)				Height B (mm)			
Highest Particle			76.0466				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 128: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	80.48	57.2	3038	523.6	473.4	57.2	3028	519.3	470.3	-1.270	1.260	-0.080	0.260	-1.270	1.270	0.010	0.380
40-60mm	114.9	57.2	2957	451.1	395.4	57.2	3009	448.4	392.7	-1.270	1.270	-0.080	0.210	-1.270	1.270	0.030	0.320
60-80mm	38.34	57.2	2152	373.8	330.4	57.2	2108	370.8	330.1	-1.270	1.230	-0.090	0.170	-1.270	1.270	0.020	0.270
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	233.72	57.2	3038	463.4	417.8	57.2	3028	460.1	415.2	-1.270	1.270	-0.080	0.220	-1.270	1.270	0.020	0.330

Table A. 129: Matched Droplet Info

A.2.2.1 All Droplets for .LA Image

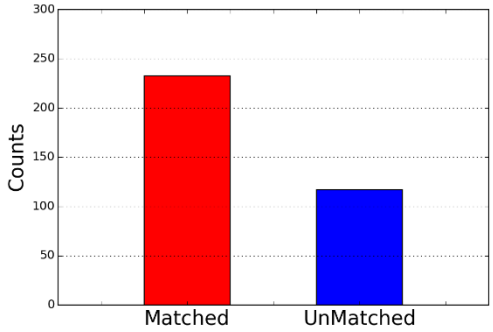


Figure A. 1201: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

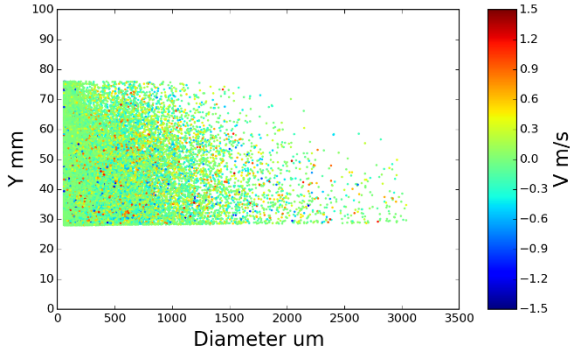


Figure A. 1204: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

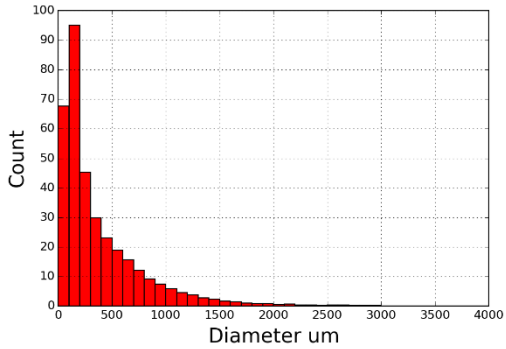


Figure A. 1202: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

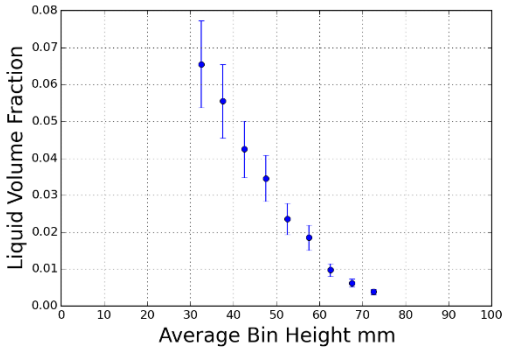


Figure A. 1205: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

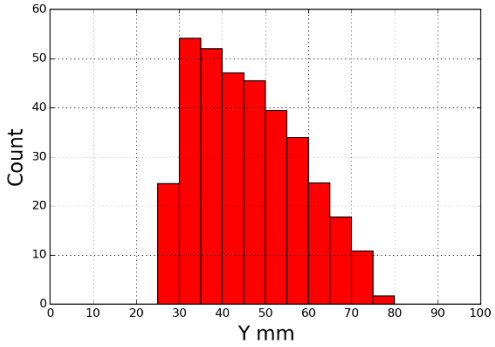


Figure A. 1203: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 All Droplets for .LB Image

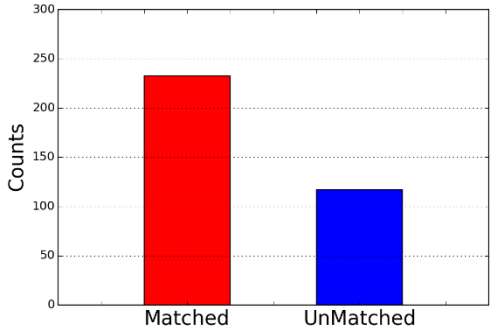


Figure A. 1206: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

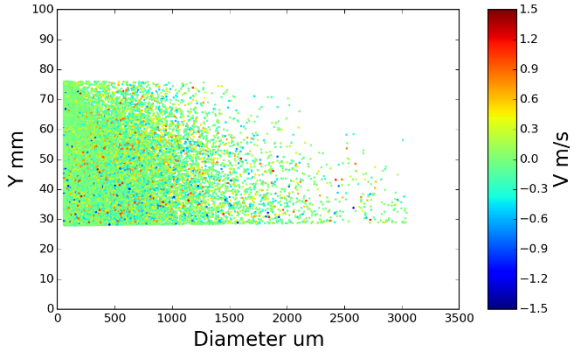


Figure A. 1209: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

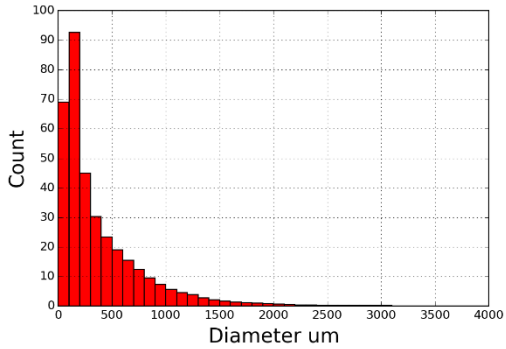


Figure A. 1207: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

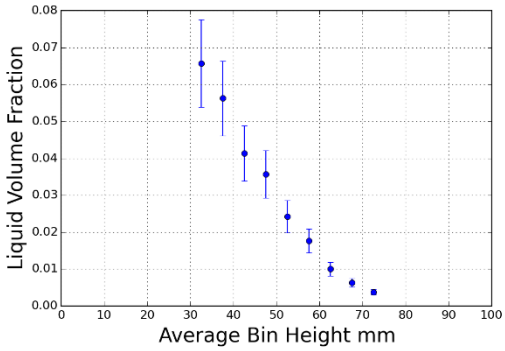


Figure A. 1210: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

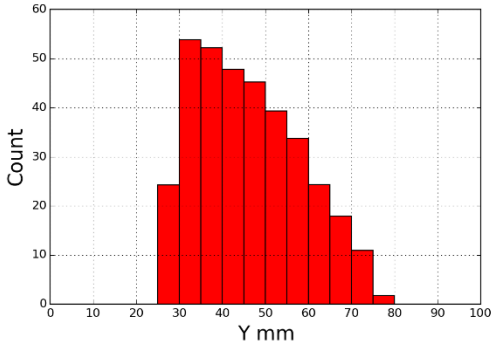


Figure A. 1208: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 Matched Only Droplets for .LA Image

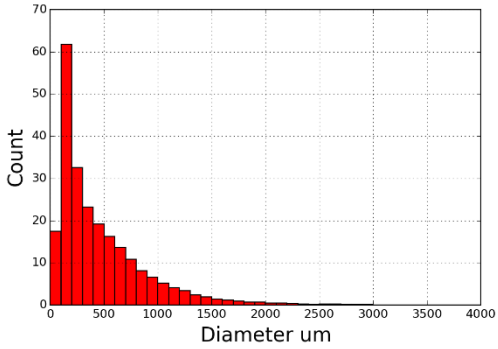


Figure A. 1211: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

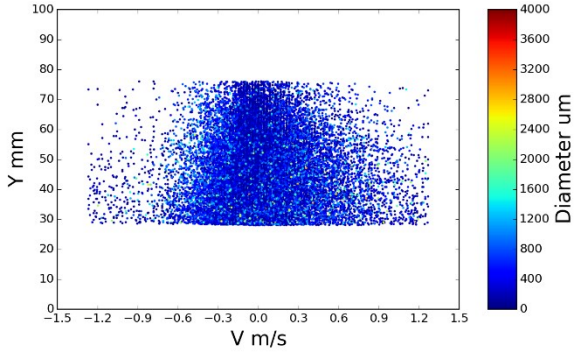


Figure A. 1214: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

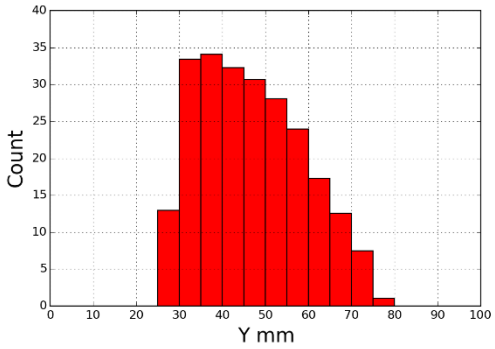


Figure A. 1212: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

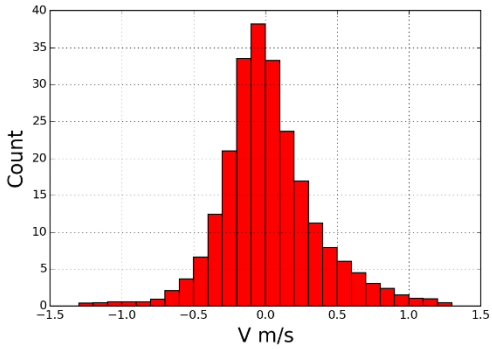


Figure A. 1215: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

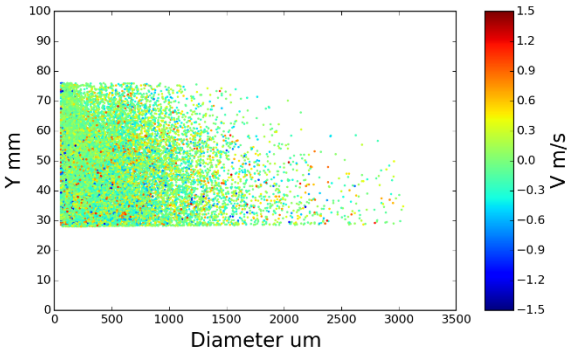


Figure A. 1213: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 Matched Only Droplets for .LB Image

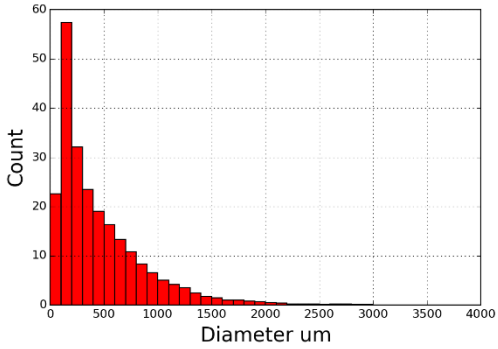


Figure A. 1216: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

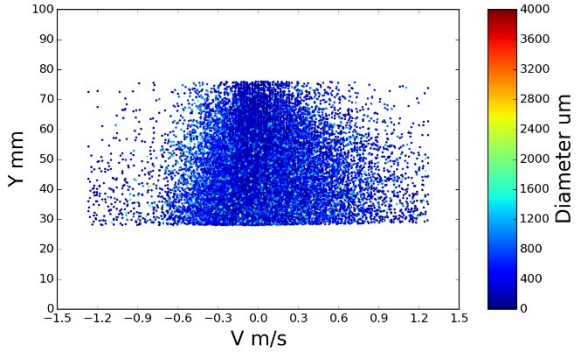


Figure A. 1219: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

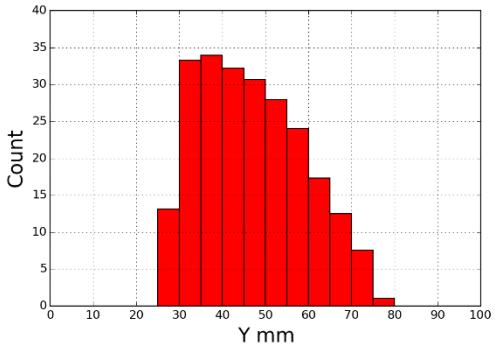


Figure A. 1217: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

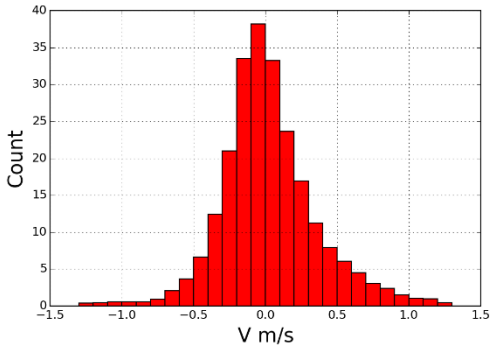


Figure A. 1220: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

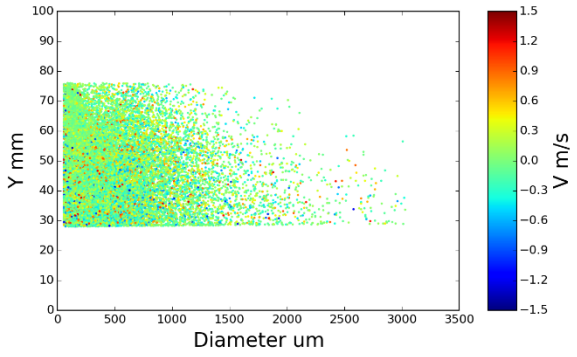


Figure A. 1218: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	119.74	120.75	57.2	3044	479.3	486.3	57.2	3043	475.8	484.6
40-60mm	165.57	168.83	57.2	3044	412.0	423.6	57.2	3037	410.5	428.9
60-80mm	54.51	69.63	57.2	2634	342.6	358.7	57.2	2633	307.2	341.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	339.87	359.91	57.2	3044	424.6	440.0	57.2	3043	412.4	437.6
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0466			
Lowest Particle			28.0846				28.0846			

Table A. 130: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	72.35	57.2	3026	590.3	510.6	57.2	3039	584.8	506.7	-1.270	1.260	-0.080	0.250	-1.270	1.260	0.010	0.390
40-60mm	110.76	57.2	3037	504.0	444.4	57.2	3037	500.6	442.7	-1.270	1.270	-0.080	0.210	-1.270	1.260	0.000	0.330
60-80mm	35.77	57.2	2634	442.3	386.1	57.2	2461	439.0	385.0	-1.250	1.250	-0.080	0.180	-1.270	1.250	-0.020	0.280
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	218.88	57.2	3037	522.4	461.7	57.2	3039	518.4	459.3	-1.270	1.270	-0.080	0.220	-1.270	1.260	0.000	0.340

Table A. 131: Matched Droplet Info

A.2.2.1 All Droplets for .LA Image

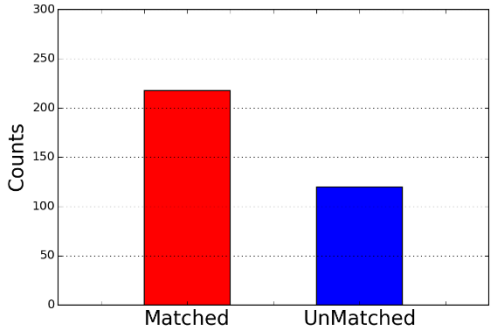


Figure A. 1221: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

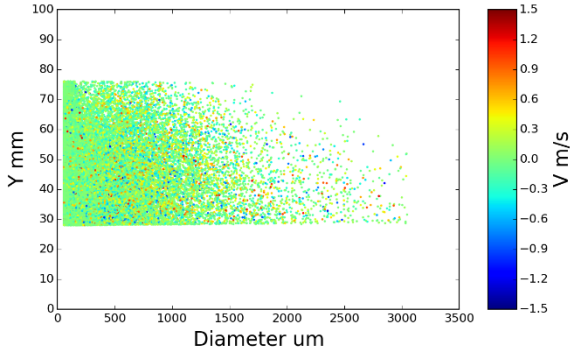


Figure A. 1224: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

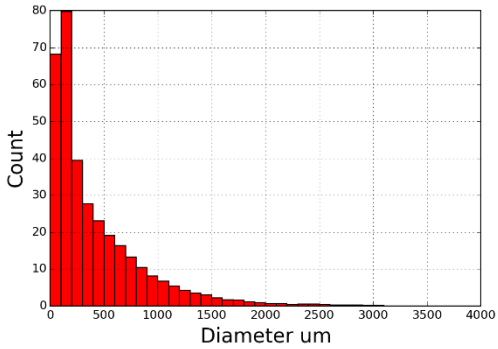


Figure A. 1222: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

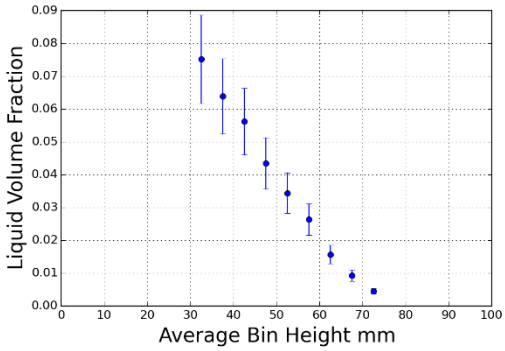


Figure A. 1225: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

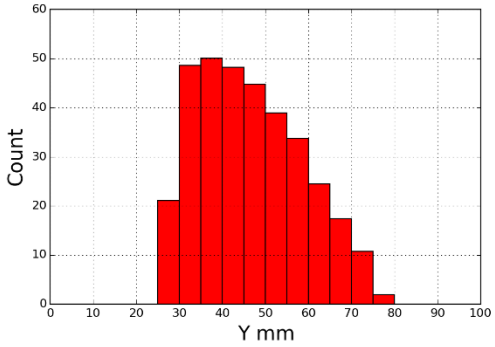


Figure A. 1223: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 All Droplets for .LB Image

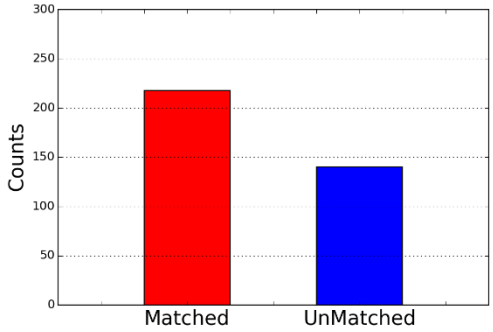


Figure A. 1226: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

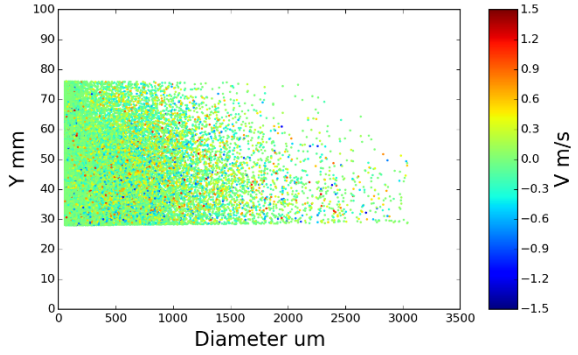


Figure A. 1229: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

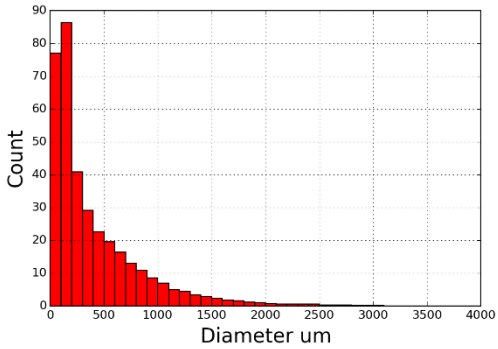


Figure A. 1227: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

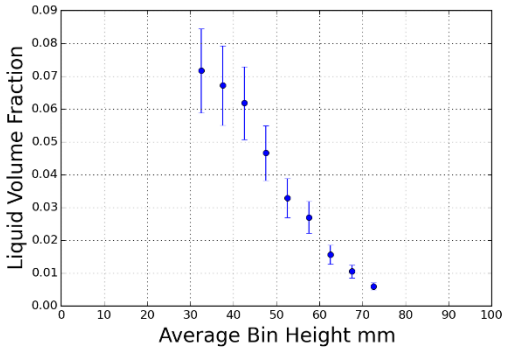


Figure A. 1230: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

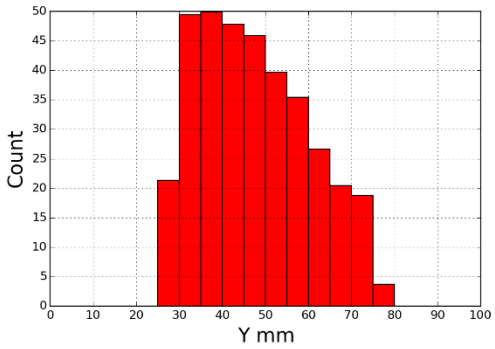


Figure A. 1228: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 Matched Only Droplets for .LA Image

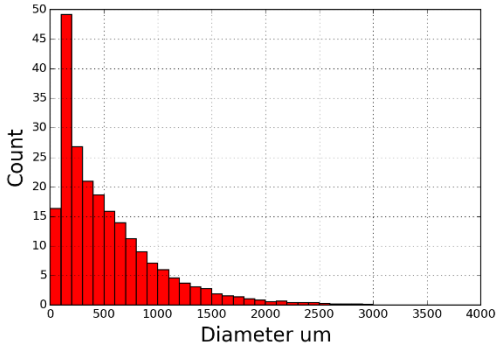


Figure A. 1231: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

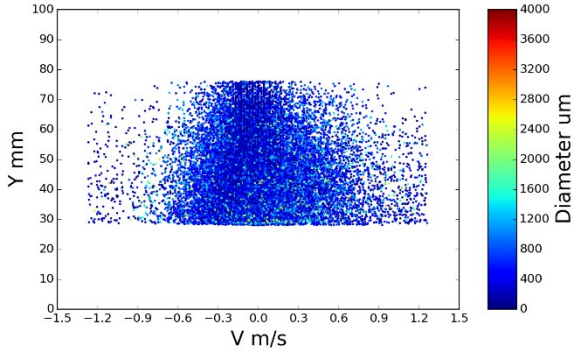


Figure A. 1234: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

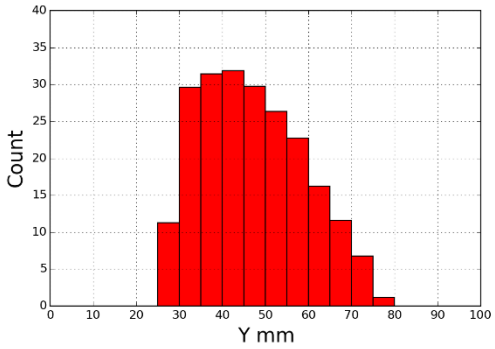


Figure A. 1232: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

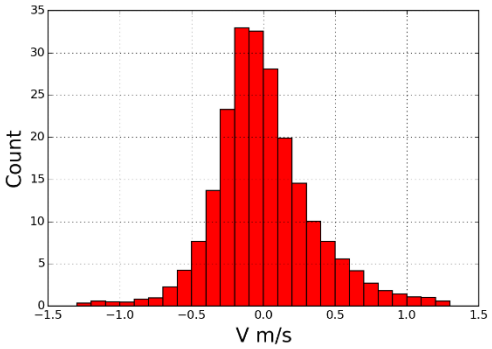


Figure A. 1235: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

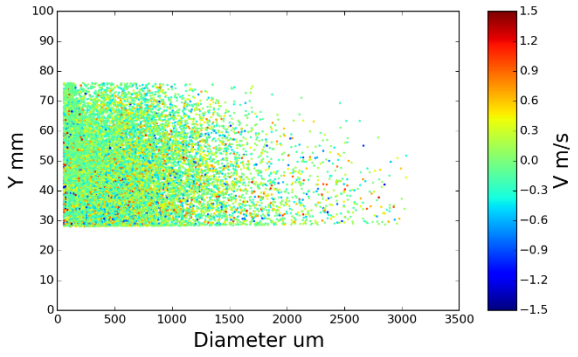


Figure A. 1233: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 Matched Only Droplets for .LB Image

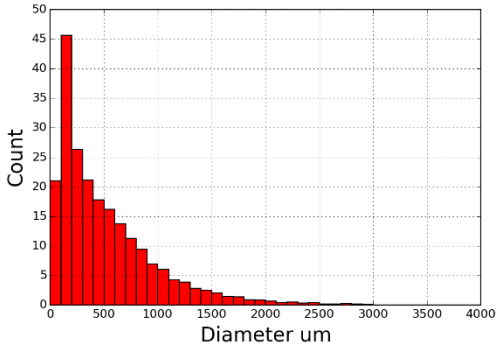


Figure A. 1236: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

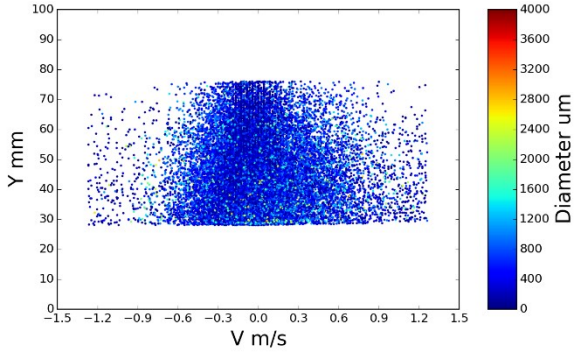


Figure A. 1239: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

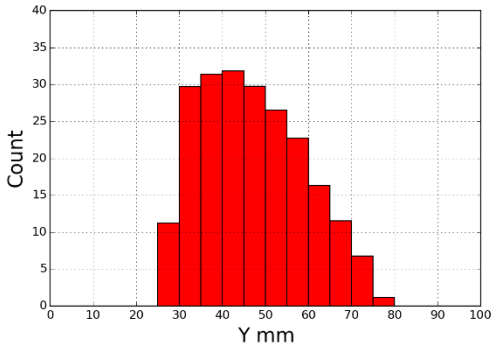


Figure A. 1237: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

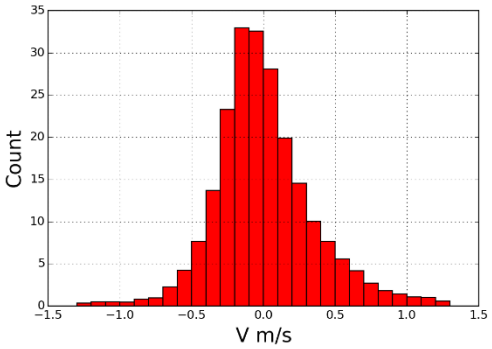


Figure A. 1240: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

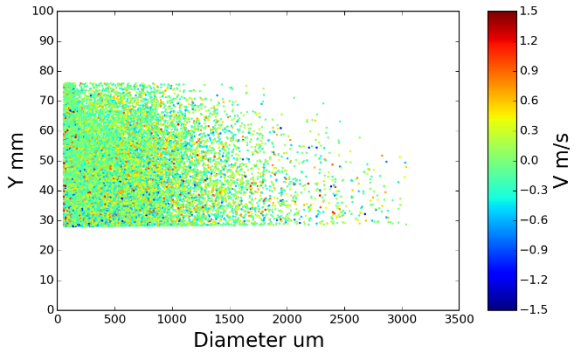


Figure A. 1238: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	100.15	99.07	57.2	3036	478.4	500.5	57.2	3043	487.1	507.2
40-60mm	144.83	138.77	57.2	3043	418.9	448.8	57.2	3041	434.7	454.8
60-80mm	48.4	46.71	57.2	2654	347.1	381.9	57.2	2835	355.4	383.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	293.41	284.61	57.2	3043	427.4	459.4	57.2	3043	439.9	465.4
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 132: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	55.84	57.2	3036	632.3	546.8	57.2	3005	626.5	542.9	-1.270	1.250	-0.070	0.250	-1.270	1.270	-0.040	0.360
40-60mm	91.06	57.2	3043	538.2	479.1	57.2	2997	537.0	478.8	-1.270	1.270	-0.070	0.230	-1.270	1.270	-0.030	0.330
60-80mm	29.47	57.2	2654	475.0	422.9	57.2	2835	470.7	420.3	-1.230	1.230	-0.070	0.200	-1.260	1.270	-0.040	0.280
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	176.37	57.2	3043	557.4	496.1	57.2	3005	554.2	494.1	-1.270	1.270	-0.070	0.230	-1.270	1.270	-0.040	0.330

Table A. 133: Matched Droplet Info

A.2.2.1 All Droplets for .LA Image

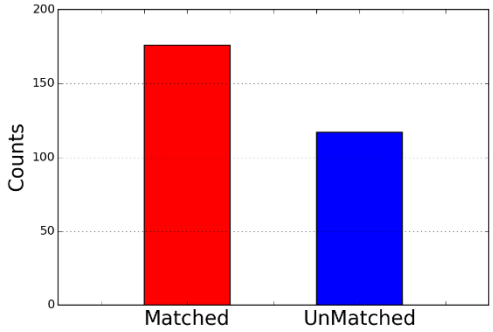


Figure A. 1241: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

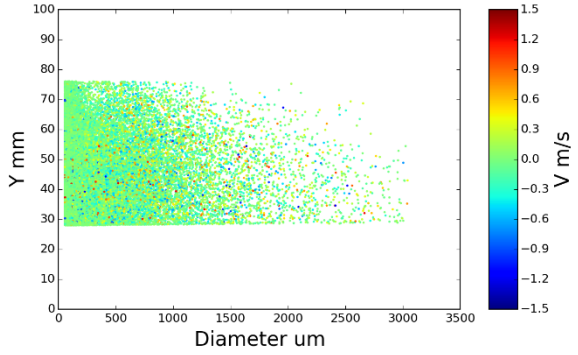


Figure A. 1244: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

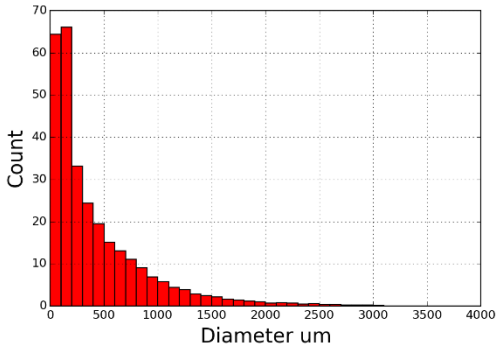


Figure A. 1242: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

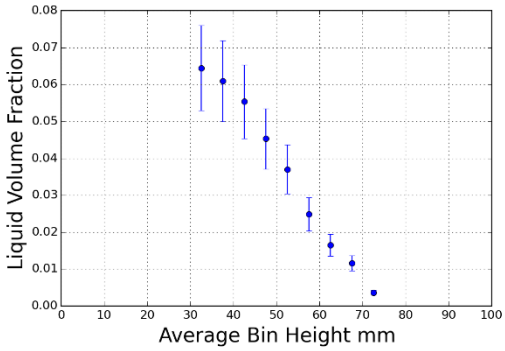


Figure A. 1245: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

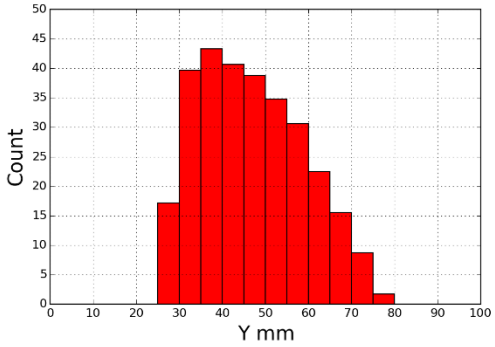


Figure A. 1243: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 All Droplets for .LB Image

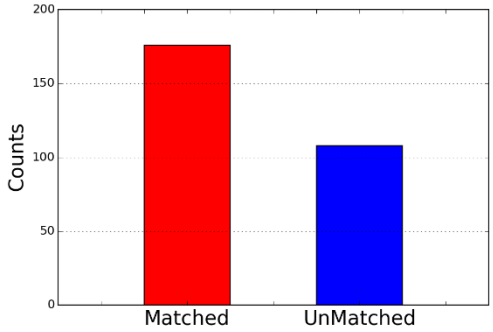


Figure A. 1246: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

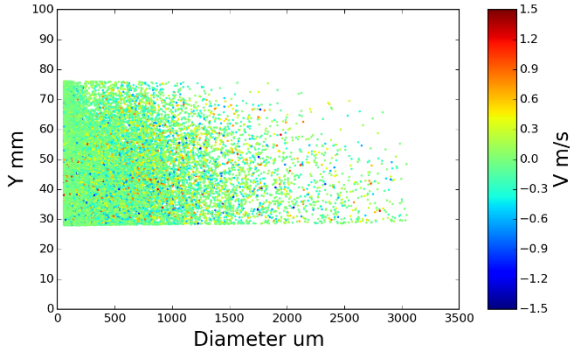


Figure A. 1249: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

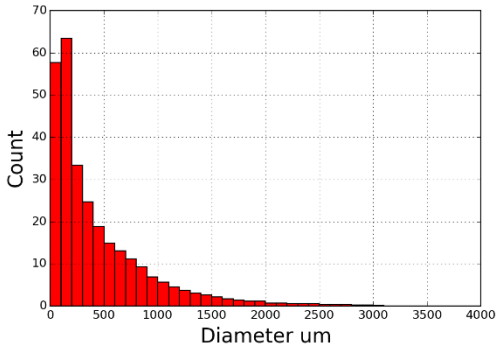


Figure A. 1247: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

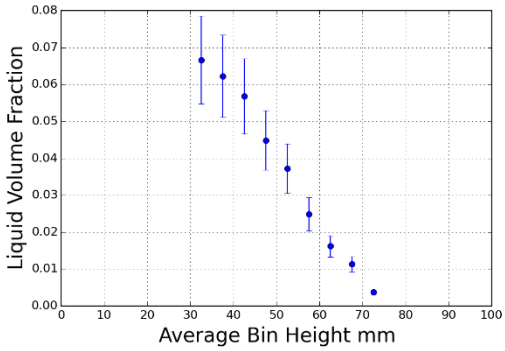


Figure A. 1250: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

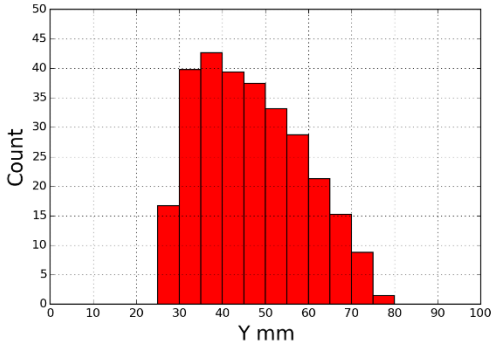


Figure A. 1248: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 Matched Only Droplets for .LA Image

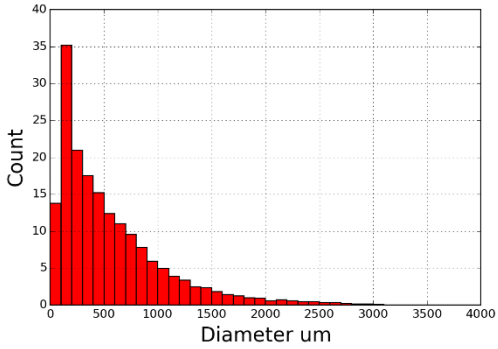


Figure A. 1251: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

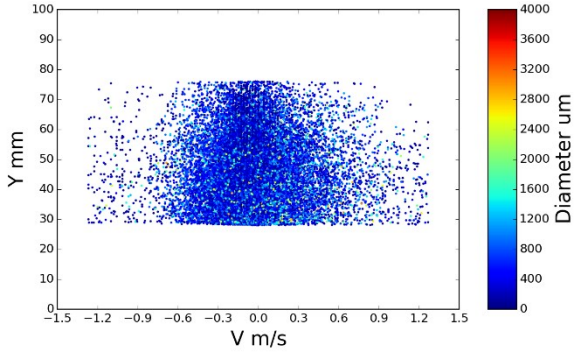


Figure A. 1254: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

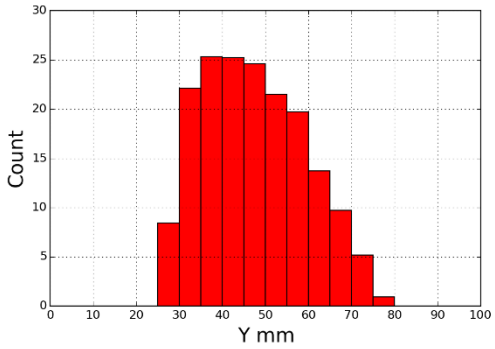


Figure A. 1252: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

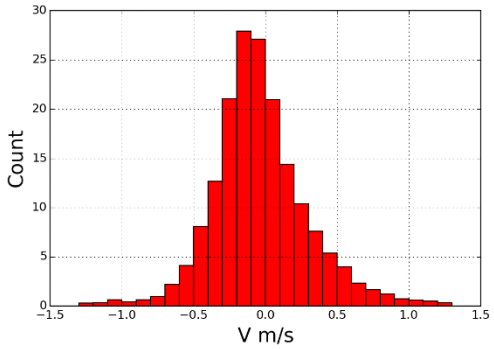


Figure A. 1255: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

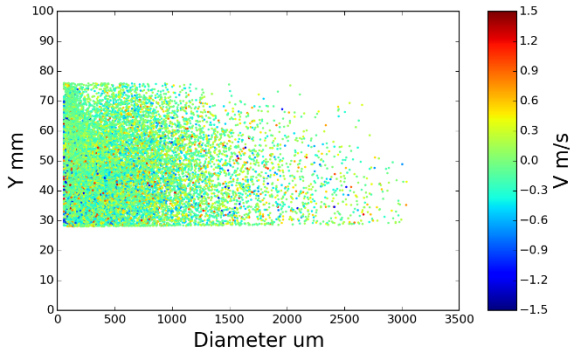


Figure A. 1253: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 Matched Only Droplets for .LB Image

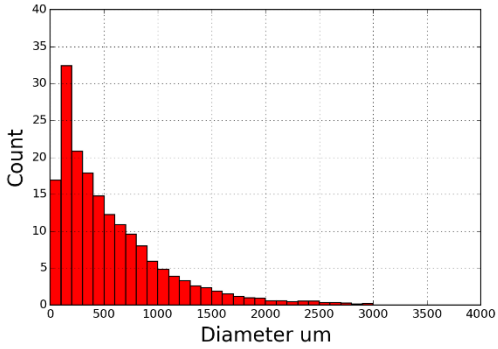


Figure A. 1256: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

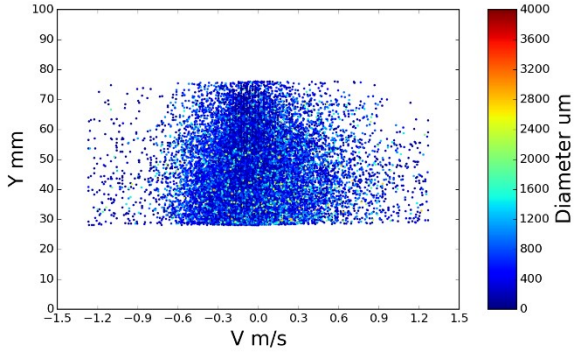


Figure A. 1259: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

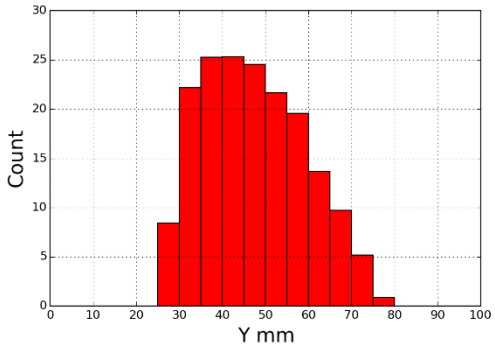


Figure A. 1257: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

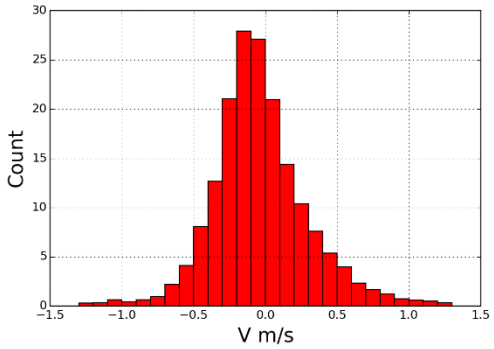


Figure A. 1260: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

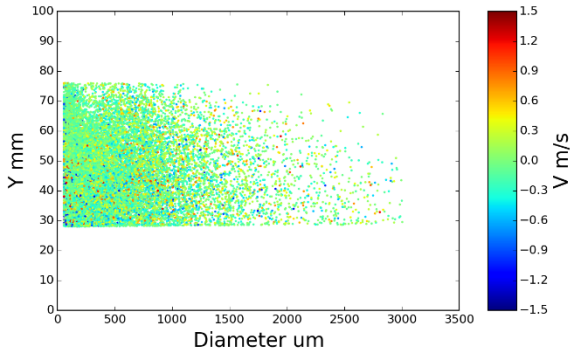


Figure A. 1258: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	93.98	94.62	57.2	3040	472.2	504.1	57.2	3041	481.2	503.8
40-60mm	143.33	138.78	57.2	3016	397.0	424.0	57.2	3042	406.6	423.3
60-80mm	47.8	46.39	57.2	2860	325.7	348.6	57.2	3033	334.8	358.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	285.12	280.01	57.2	3040	409.8	443.9	57.2	3042	419.9	445.6
			Height A (mm)				Height B (mm)			
Highest Particle			76.0347				76.0466			
Lowest Particle			28.0846				28.0846			

Table A. 134: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	50.21	57.2	3040	638.9	551.2	57.2	3041	633.1	551.0	-1.270	1.240	-0.060	0.270	-1.260	1.270	-0.010	0.380
40-60mm	86.8	57.2	2997	516.6	452.6	57.2	3016	511.7	449.3	-1.270	1.270	-0.060	0.240	-1.270	1.270	-0.020	0.340
60-80mm	29.36	57.2	2860	440.2	381.7	57.2	2945	435.8	381.2	-1.270	1.250	-0.060	0.210	-1.270	1.250	-0.040	0.290
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	166.37	57.2	3040	540.0	478.8	57.2	3041	535.1	477.1	-1.270	1.270	-0.060	0.250	-1.270	1.270	-0.020	0.350

Table A. 135: Matched Droplet Info

A.2.2.1 All Droplets for .LA Image

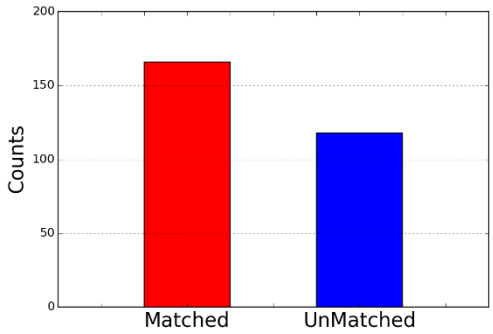


Figure A. 1261: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

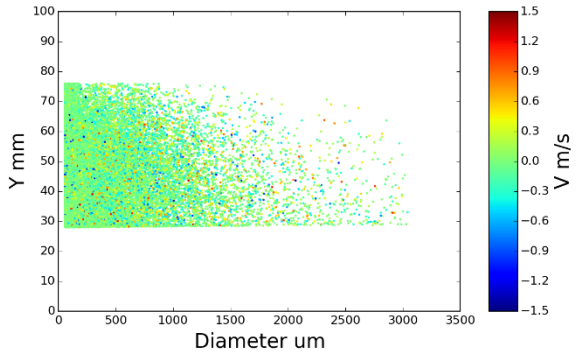


Figure A. 1264: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

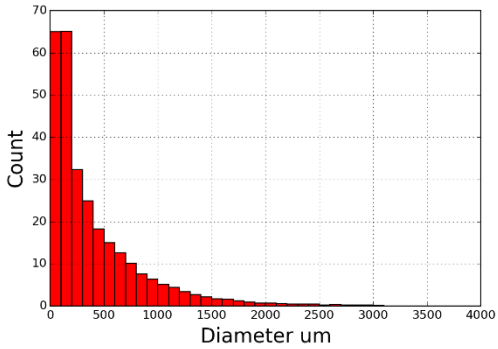


Figure A. 1262: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

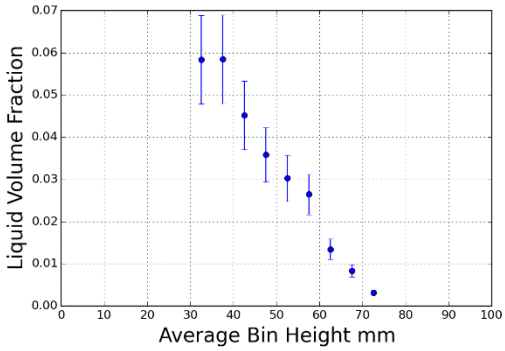


Figure A. 1265: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

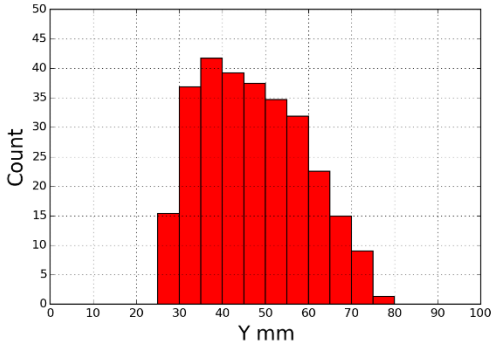


Figure A. 1263: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 All Droplets for .LB Image

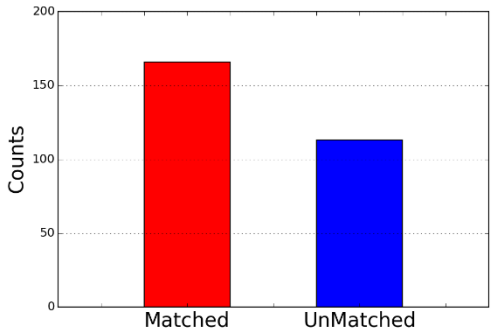


Figure A. 1266: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

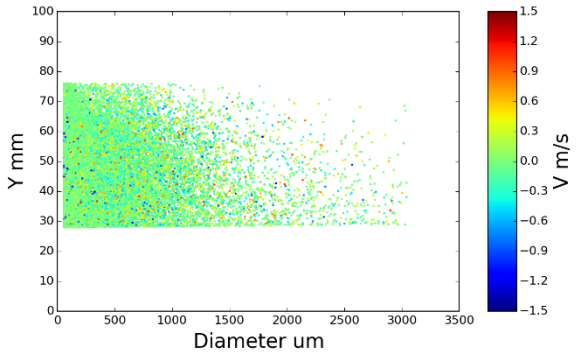


Figure A. 1269: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

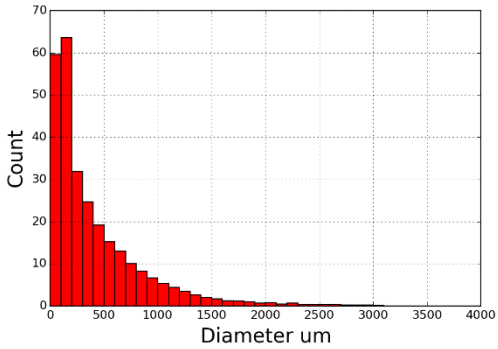


Figure A. 1267: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

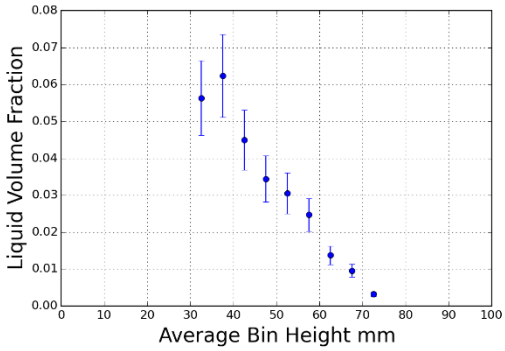


Figure A. 1270: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

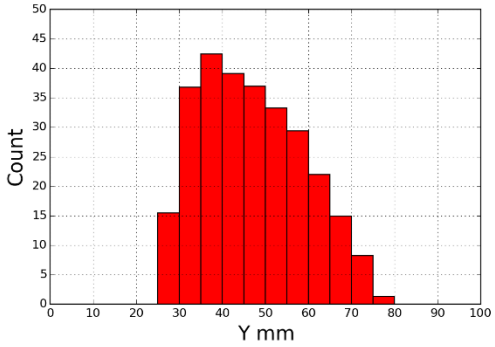


Figure A. 1268: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 Matched Only Droplets for .LA Image

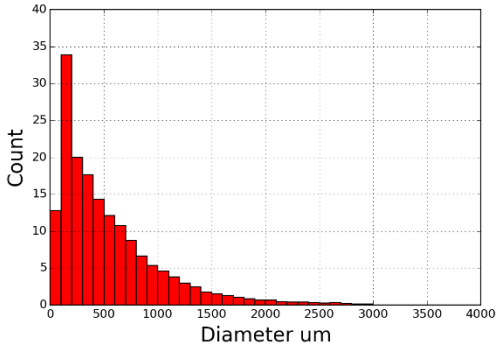


Figure A. 1271: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

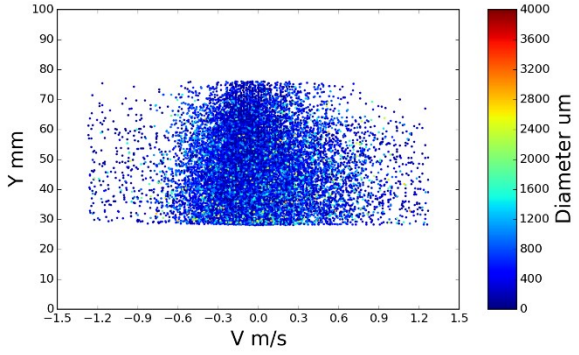


Figure A. 1274: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

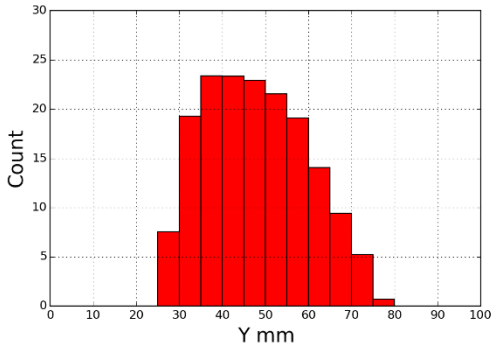


Figure A. 1272: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

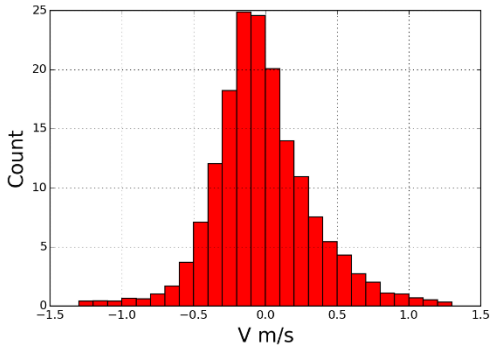


Figure A. 1275: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

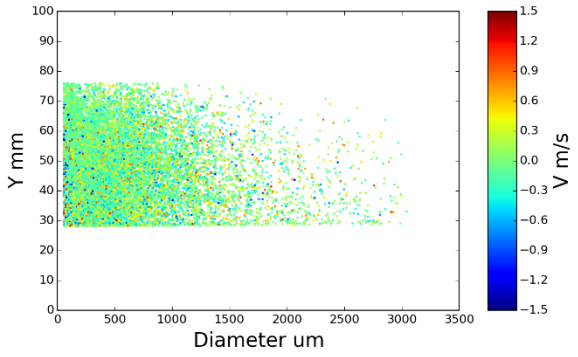


Figure A. 1273: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 Matched Only Droplets for .LB Image

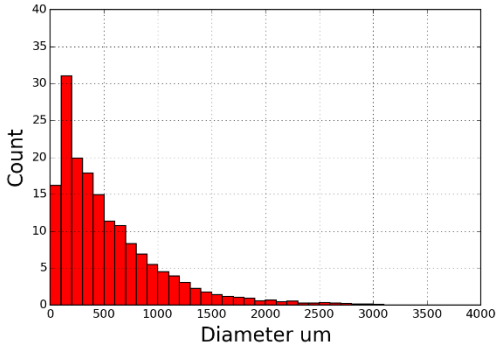


Figure A. 1276: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

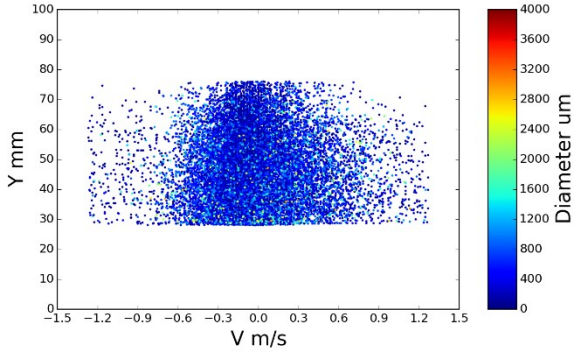


Figure A. 1279: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

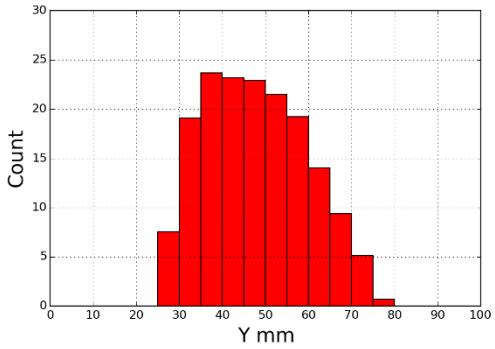


Figure A. 1277: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

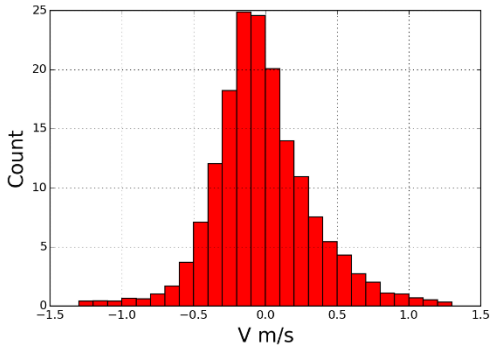


Figure A. 1280: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

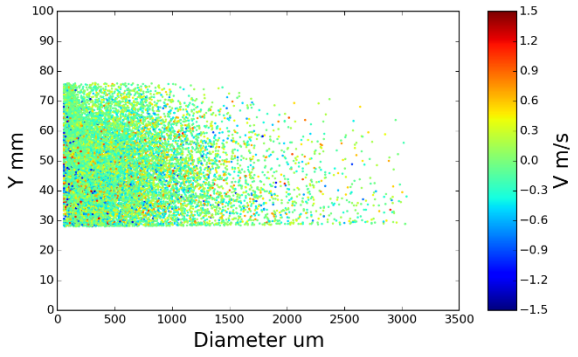


Figure A. 1278: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	83.12	80.8	57.2	3033	458.4	495.1	57.2	3044	473.6	509.0
40-60mm	139.13	134.89	57.2	2988	371.1	405.1	57.2	3031	381.8	409.7
60-80mm	46.09	44.58	57.2	3002	312.1	328.3	57.2	2434	316.2	327.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	268.39	260.29	57.2	3033	388.0	426.8	57.2	3044	399.0	434.5
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0476			
Lowest Particle			28.0846				28.0846			

Table A. 136: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	40.44	57.2	2961	644.6	552.1	57.2	3042	643.1	561.8	-1.270	1.270	-0.050	0.290	-1.260	1.270	0.030	0.400
40-60mm	82.71	57.2	2981	491.9	444.9	57.2	3016	487.5	440.8	-1.270	1.270	-0.060	0.240	-1.270	1.270	0.040	0.370
60-80mm	28.12	57.2	2551	418.2	359.4	57.2	2434	411.3	354.6	-1.200	1.270	-0.050	0.210	-1.260	1.270	0.010	0.310
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	151.27	57.2	2981	519.0	469.3	57.2	3042	514.9	469.9	-1.270	1.270	-0.050	0.250	-1.270	1.270	0.030	0.370

Table A. 137: Matched Droplet Info

A.2.2.1 All Droplets for .LA Image

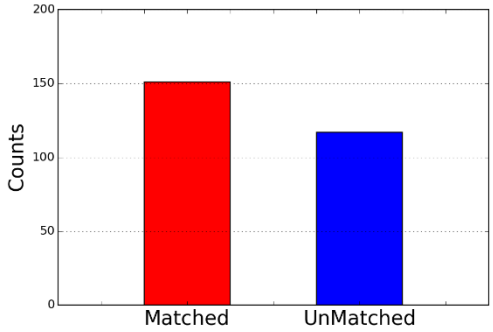


Figure A. 1281: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

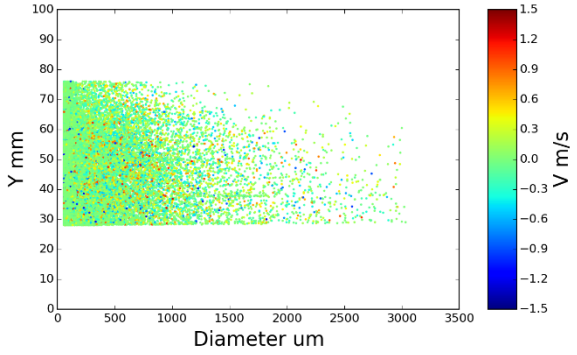


Figure A. 1284: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

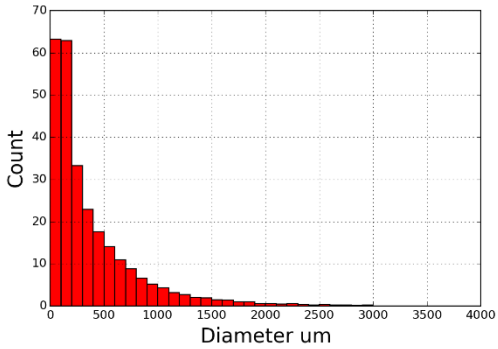


Figure A. 1282: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

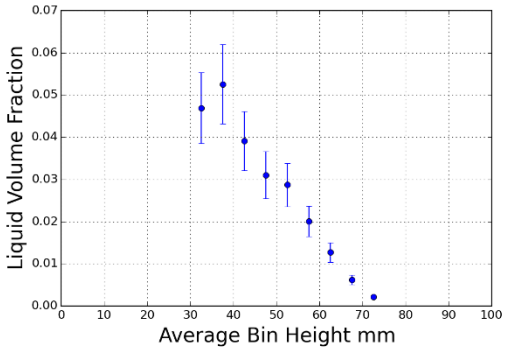


Figure A. 1285: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

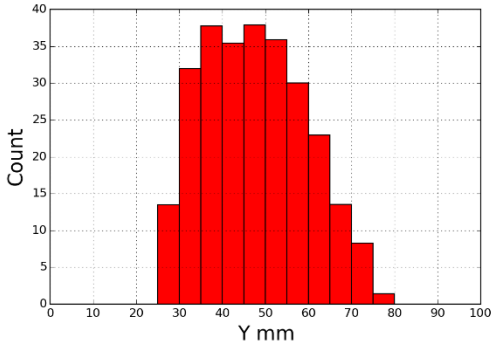


Figure A. 1283: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 All Droplets for .LB Image

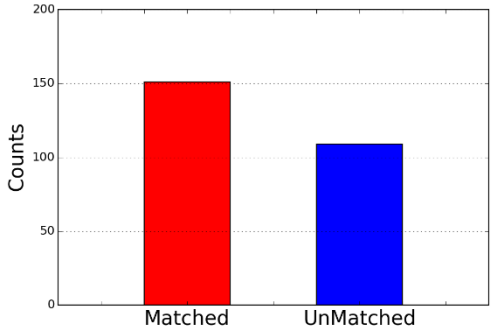


Figure A. 1286: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

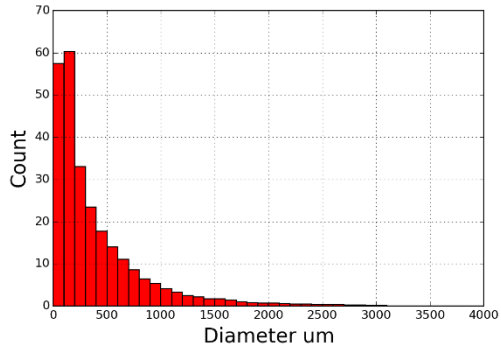


Figure A. 1287: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

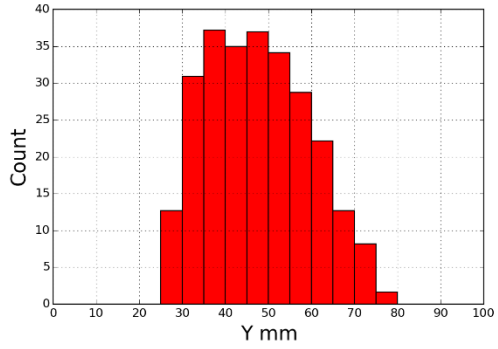


Figure A. 1288: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

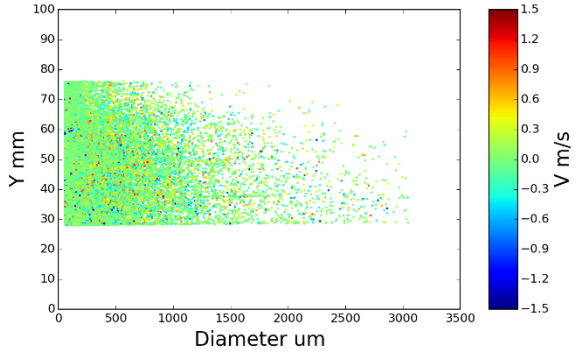


Figure A. 1289: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

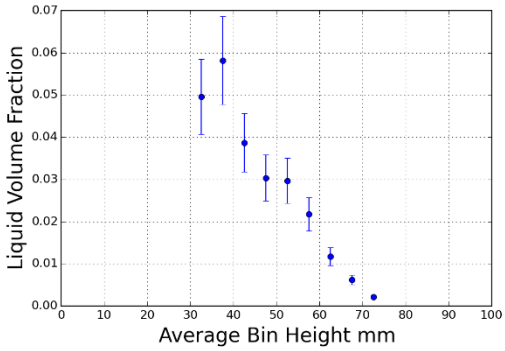


Figure A. 1290: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 Matched Only Droplets for .LA Image

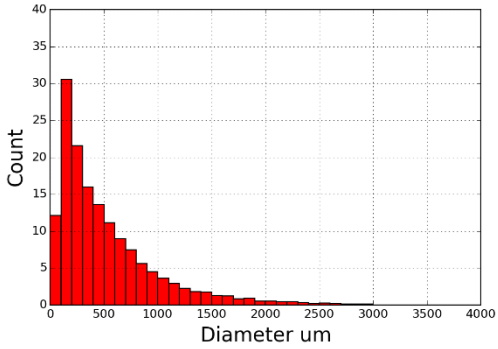


Figure A. 1291: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

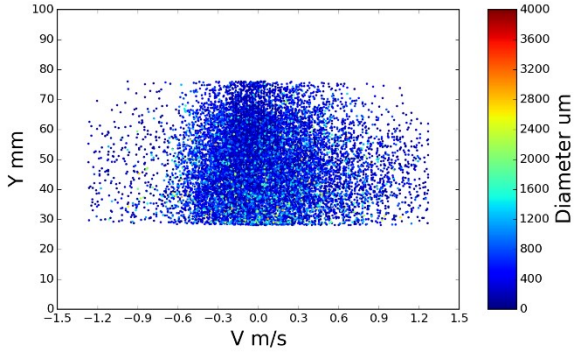


Figure A. 1294: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

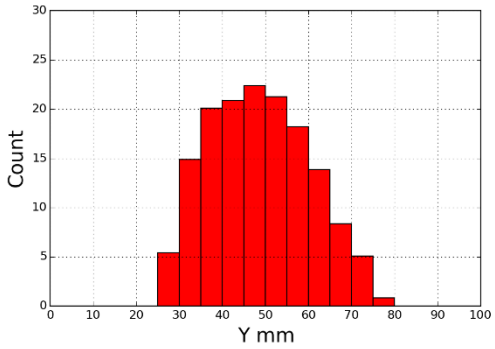


Figure A. 1292: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

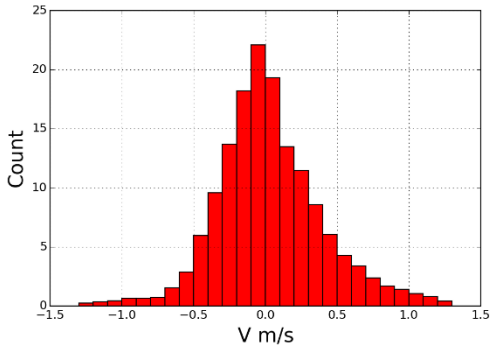


Figure A. 1295: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

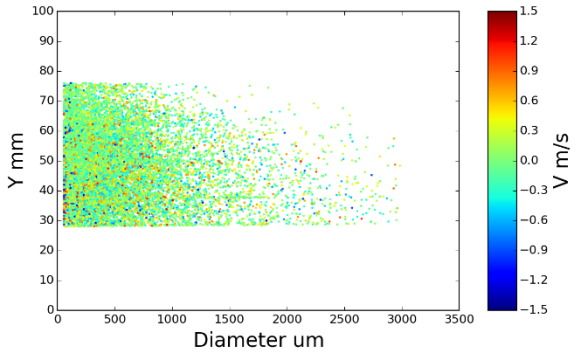


Figure A. 1293: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.1 Matched Only Droplets for .LB Image

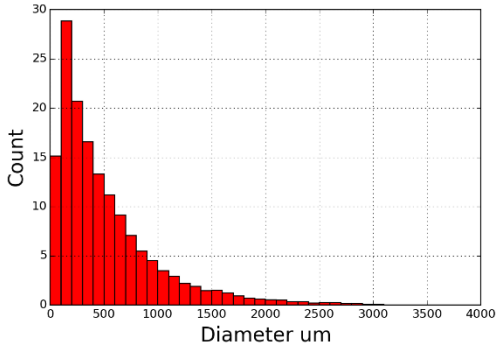


Figure A. 1296: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

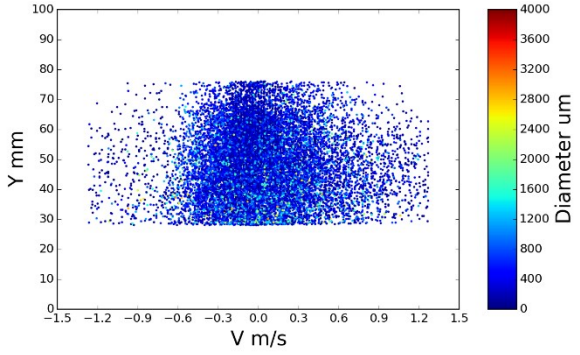


Figure A. 1299: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

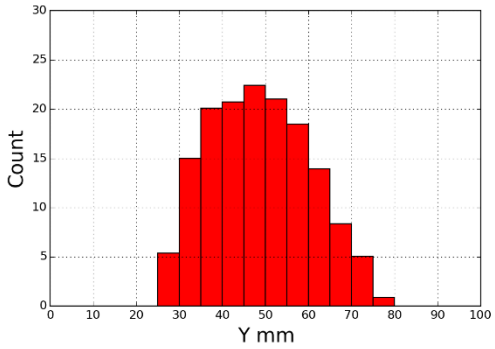


Figure A. 1297: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

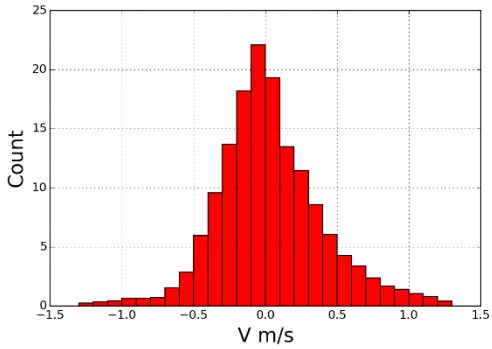


Figure A. 1300: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

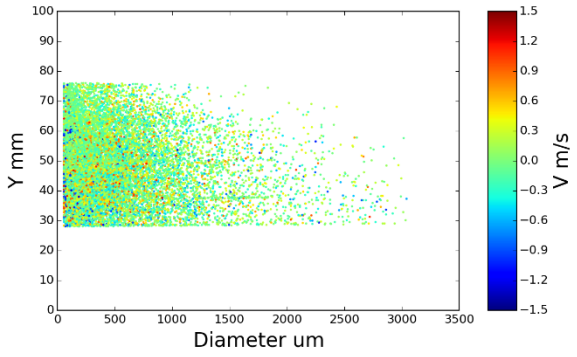


Figure A. 1298: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 Lens 50mm Mag 0_13x

A.2.2.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	139.14	140.91	128.6	3414	636.8	535.1	128.6	3416	639.7	539.7
40-60mm	115.87	115.53	128.6	3394	568.4	416.8	128.6	3367	564.0	413.3
60-80mm	37.3	36.78	128.6	2357	520.3	314.4	128.6	2587	519.8	315.3
80-100mm	5.29	5.32	128.6	1495	506.6	238.9	128.6	1573	506.3	236.8
All	297.6	298.54	128.6	3414	593.2	465.7	128.6	3416	593.2	467.9
			Height A (mm)				Height B (mm)			
Highest Particle			99.8996				99.9239			
Lowest Particle			20.0640				20.0640			

Table A. 138: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	74.02	128.6	3412	741.5	563.4	128.6	3411	723.1	550.9	-1.220	1.220	-0.090	0.410	-1.210	1.220	0.000	0.480
40-60mm	74.15	128.6	3394	648.6	433.3	128.6	3367	638.1	422.8	-1.220	1.220	-0.080	0.310	-1.220	1.220	0.010	0.410
60-80mm	27.54	128.6	2357	578.6	312.8	128.6	2587	573.3	316.0	-1.210	1.190	-0.080	0.220	-1.220	1.220	-0.000	0.330
80-100mm	4.43	128.6	1495	548.0	230.2	128.6	1573	542.1	229.1	-1.050	1.190	-0.060	0.160	-0.780	0.770	0.000	0.260
All	180.14	128.6	3412	673.6	477.4	128.6	3411	660.7	467.0	-1.220	1.220	-0.090	0.340	-1.220	1.220	0.000	0.430

Table A. 139: Matched Droplet Info

A.2.2.2 All Droplets for .LA Image

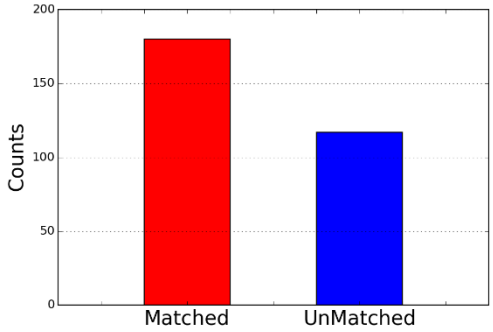


Figure A. 1301: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

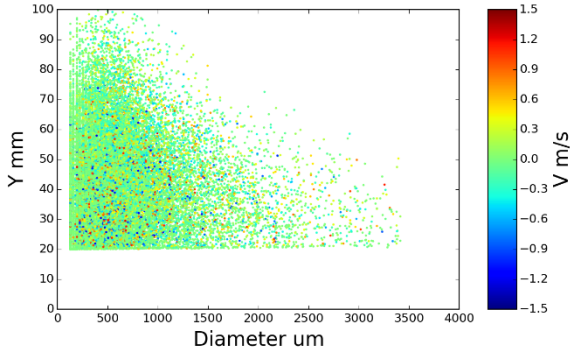


Figure A. 1304: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

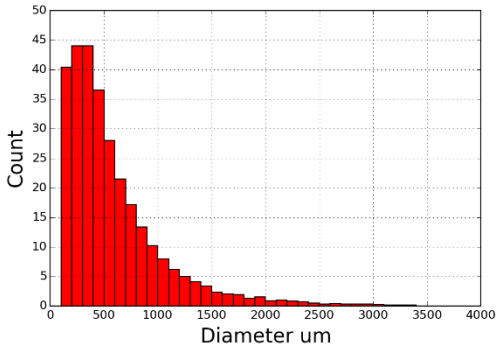


Figure A. 1302: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

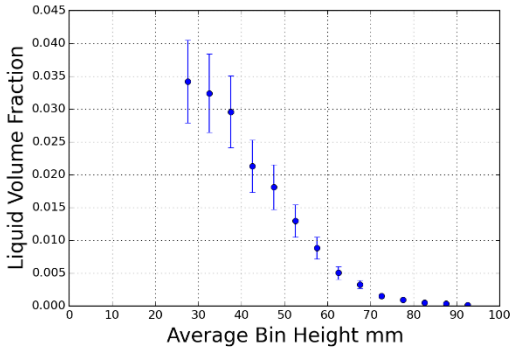


Figure A. 1305: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

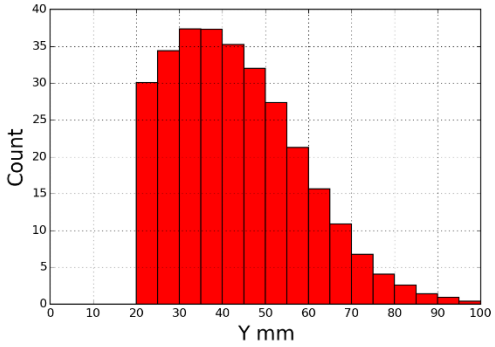


Figure A. 1303: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 All Droplets for .LB Image

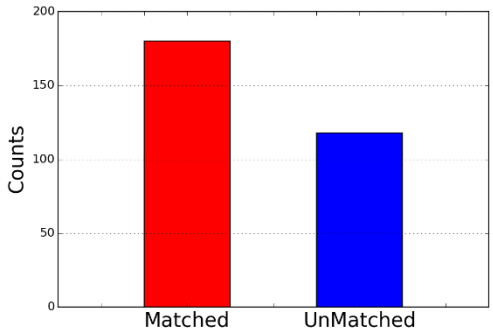


Figure A. 1306: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

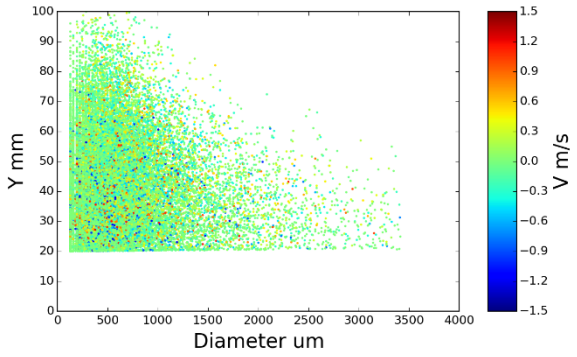


Figure A. 1309: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

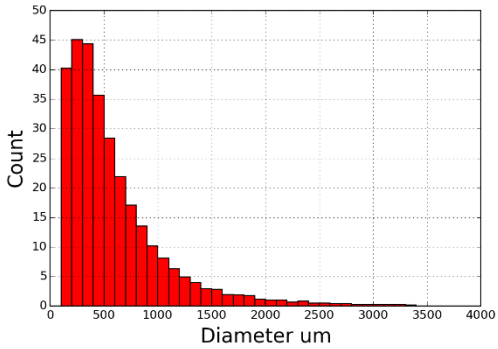


Figure A. 1307: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

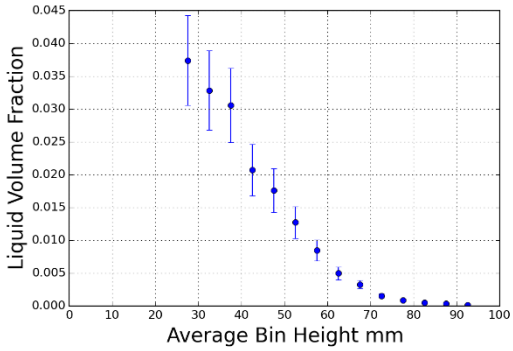


Figure A. 1310: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

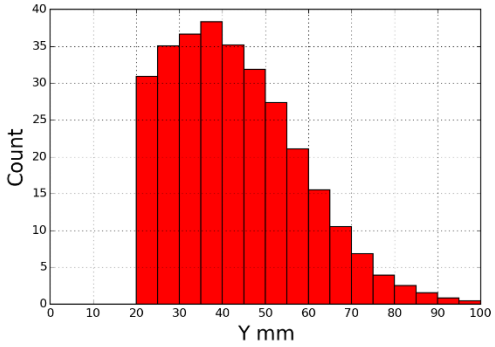


Figure A. 1308: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 Matched Only Droplets for .LA Image

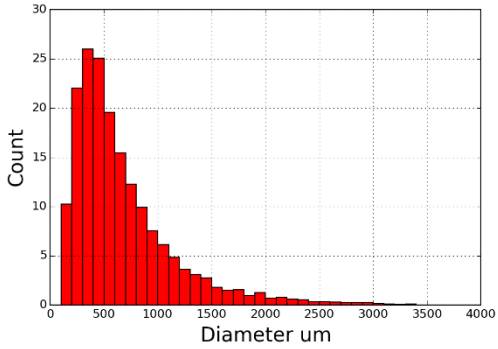


Figure A. 1311: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

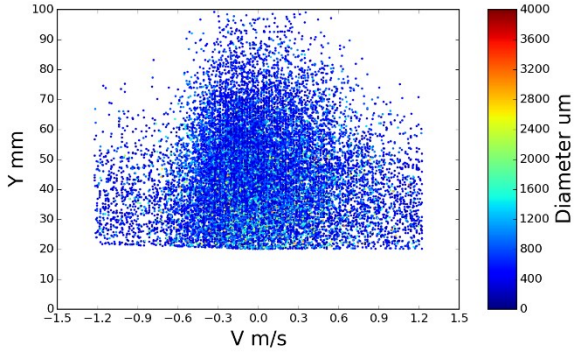


Figure A. 1314: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

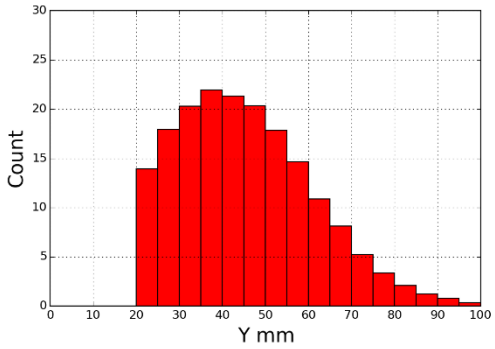


Figure A. 1312: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

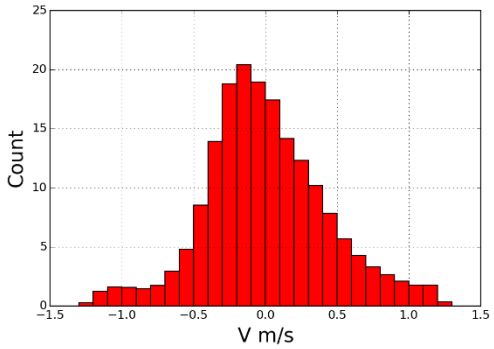


Figure A. 1315: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

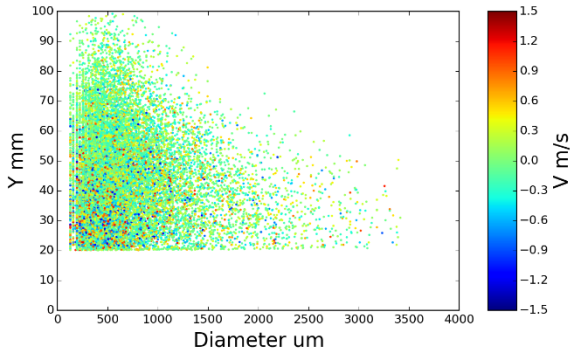


Figure A. 1313: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 Matched Only Droplets for .LB Image

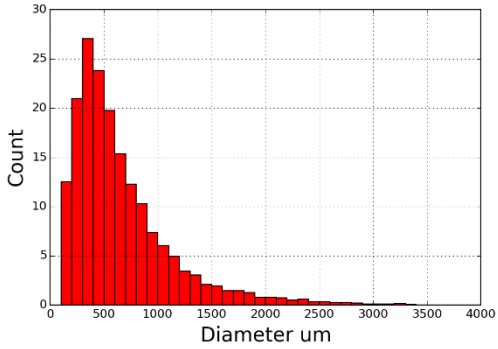


Figure A. 1316: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

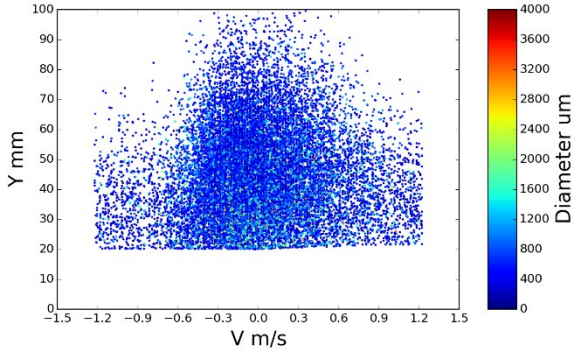


Figure A. 1319: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

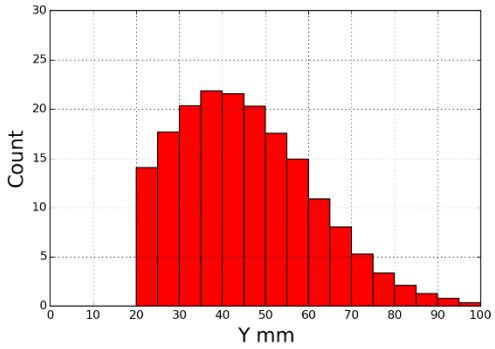


Figure A. 1317: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

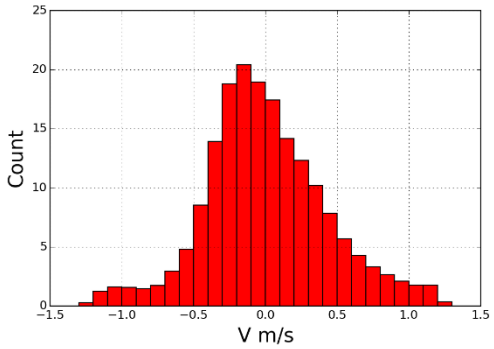


Figure A. 1320: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

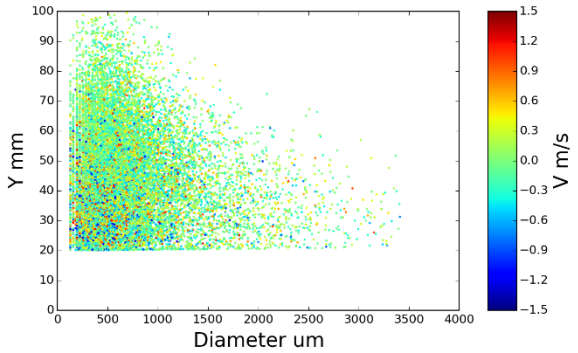


Figure A. 1318: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	129.79	130.38	128.6	3414	689.8	554.3	128.6	3408	694.4	568.5
40-60mm	114.49	113.99	128.6	3383	613.8	440.4	128.6	3412	614.8	440.1
60-80mm	38.01	38.05	128.6	3133	576.0	343.1	128.6	2679	576.4	340.8
80-100mm	6.32	6.25	128.6	1479	535.7	248.5	128.6	1500	527.1	251.9
All	288.61	288.67	128.6	3414	641.3	483.9	128.6	3412	643.8	491.4
			Height A (mm)				Height B (mm)			
Highest Particle			99.9780				99.9780			
Lowest Particle			20.0640				20.0640			

Table A. 140: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	69.13	128.6	3411	806.2	587.9	128.6	3390	792.0	582.0	-1.220	1.220	-0.090	0.400	-1.220	1.220	-0.010	0.470
40-60mm	73.55	128.6	3383	692.7	451.3	128.6	3354	683.8	444.4	-1.220	1.220	-0.080	0.310	-1.220	1.220	-0.000	0.410
60-80mm	28.72	128.6	2815	633.5	337.0	128.6	2679	629.4	338.8	-1.220	1.200	-0.090	0.210	-1.220	1.220	-0.020	0.350
80-100mm	5.32	128.6	1479	580.6	236.6	128.6	1500	569.0	242.5	-0.810	0.750	-0.080	0.140	-1.160	0.770	-0.010	0.280
All	176.72	128.6	3411	724.1	495.1	128.6	3390	713.9	489.6	-1.220	1.220	-0.090	0.330	-1.220	1.220	-0.010	0.430

Table A. 141: Matched Droplet Info

A.2.2.2 All Droplets for .LA Image

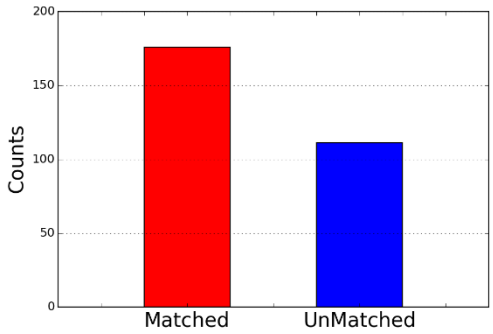


Figure A. 1321: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

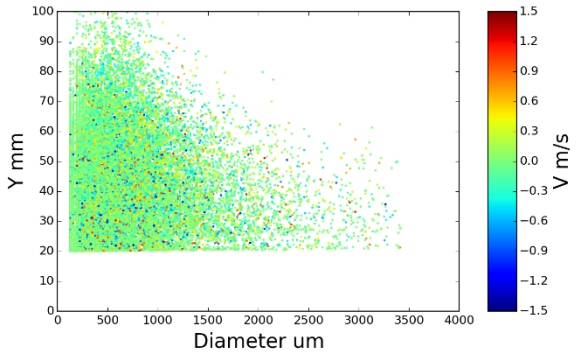


Figure A. 1324: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

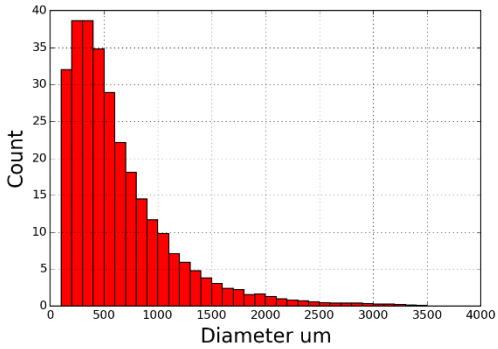


Figure A. 1322: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

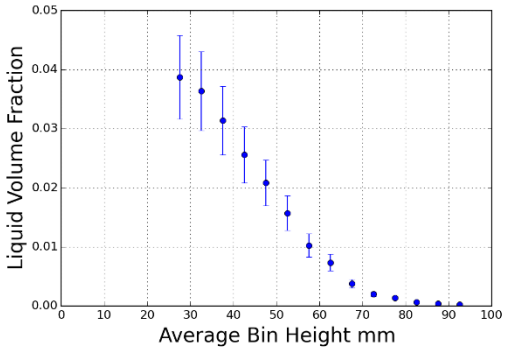


Figure A. 1325: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

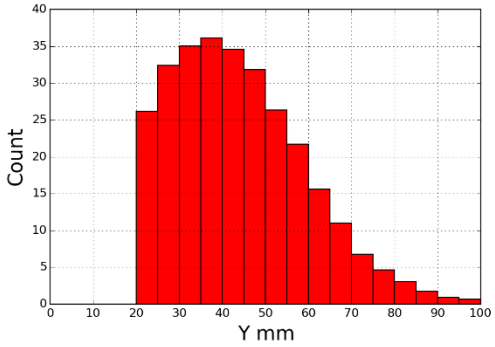


Figure A. 1323: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 All Droplets for .LB Image

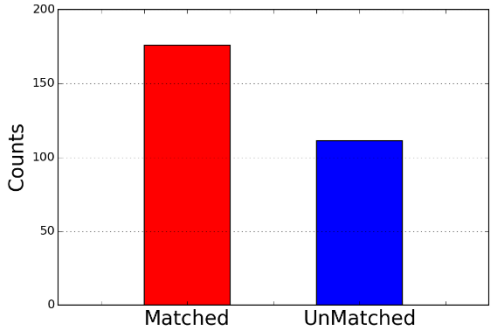


Figure A. 1326: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

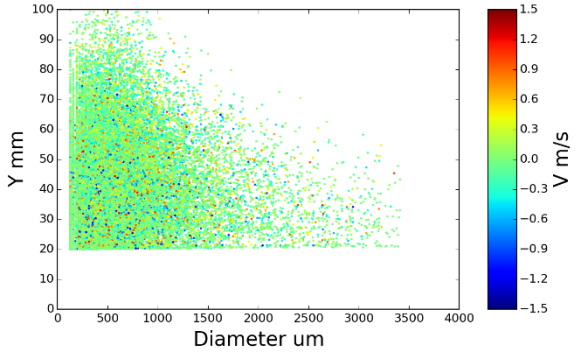


Figure A. 1329: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

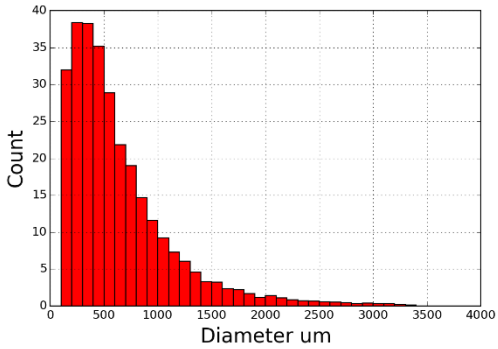


Figure A. 1327: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

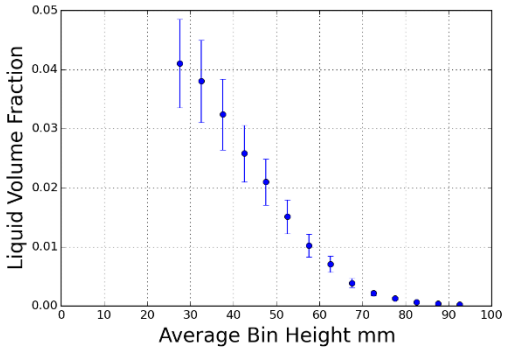


Figure A. 1330: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

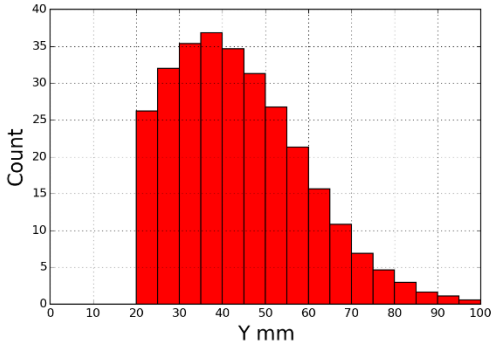


Figure A. 1328: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 Matched Only Droplets for .LA Image

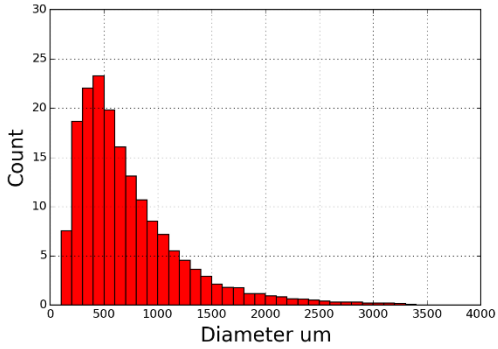


Figure A. 1331: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

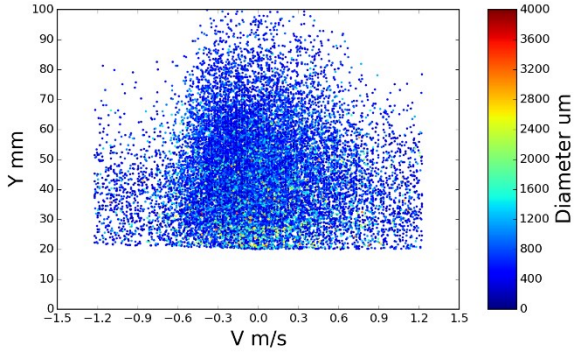


Figure A. 1334: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

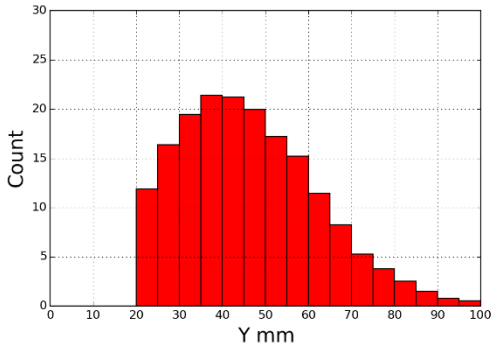


Figure A. 1332: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

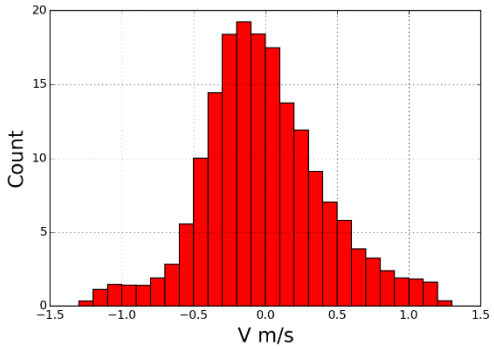


Figure A. 1335: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

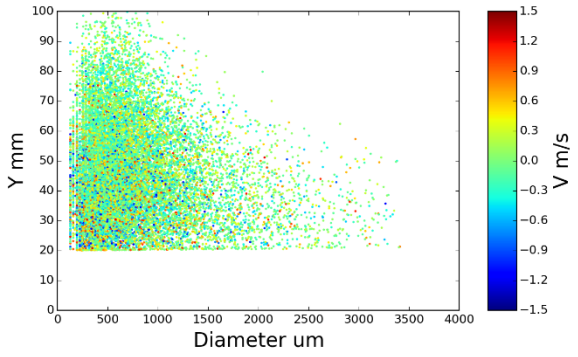


Figure A. 1333: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 Matched Only Droplets for .LB Image

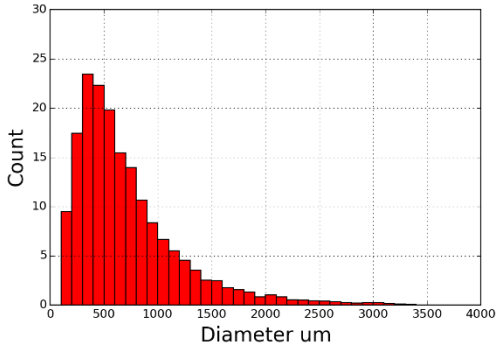


Figure A. 1336: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

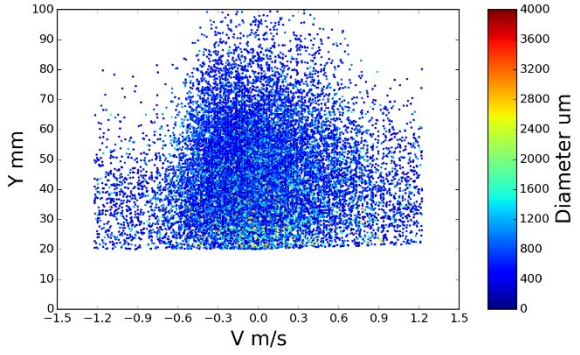


Figure A. 1339: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

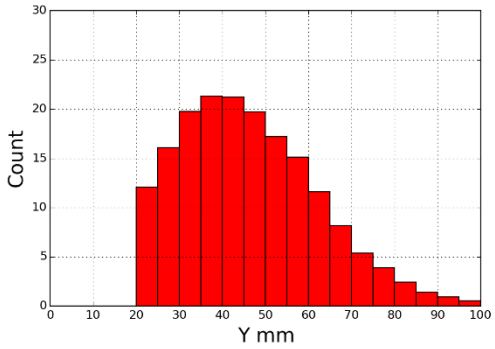


Figure A. 1337: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

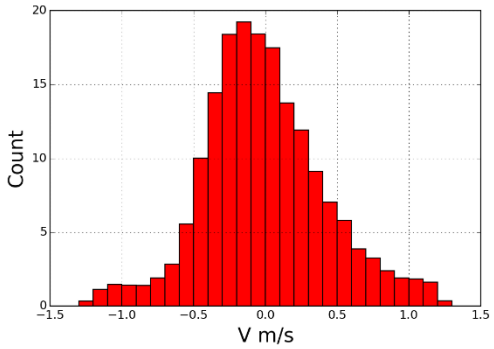


Figure A. 1340: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

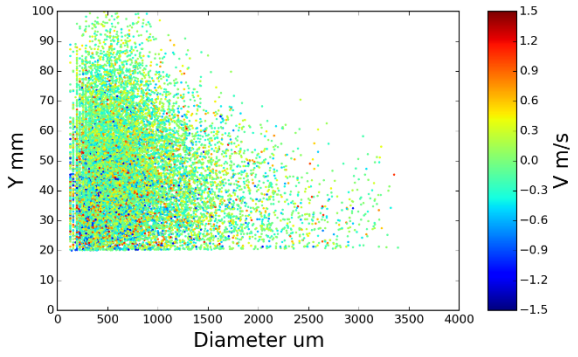


Figure A. 1338: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	115.24	114.73	128.6	3413	736.1	603.5	128.6	3419	731.7	600.7
40-60mm	100.39	101.35	128.6	3390	651.7	483.9	128.6	3372	648.1	482.2
60-80mm	34.88	35.15	128.6	2918	589.6	354.9	128.6	2714	588.5	352.7
80-100mm	5.14	5.09	128.6	1759	560.1	272.6	128.6	1812	558.2	277.7
All	255.65	256.32	128.6	3413	679.5	527.2	128.6	3419	675.6	524.5
			Height A (mm)				Height B (mm)			
Highest Particle			99.9780				99.7346			
Lowest Particle			20.0640				20.0640			

Table A. 142: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	58.62	128.6	3413	879.7	635.5	128.6	3415	858.5	629.7	-1.220	1.220	-0.070	0.390	-1.220	1.220	-0.020	0.470
40-60mm	65.21	128.6	3250	740.4	497.1	128.6	3372	731.6	493.8	-1.220	1.220	-0.070	0.290	-1.220	1.220	-0.020	0.400
60-80mm	25.9	128.6	2635	655.2	353.4	128.6	2714	651.0	355.1	-1.220	1.190	-0.080	0.220	-1.220	1.180	-0.020	0.330
80-100mm	4.18	128.6	1759	613.4	260.0	128.6	1812	607.3	260.0	-1.100	0.660	-0.090	0.150	-1.030	1.040	-0.040	0.270
All	153.91	128.6	3413	775.7	537.7	128.6	3415	763.0	533.0	-1.220	1.220	-0.070	0.320	-1.220	1.220	-0.020	0.410

Table A. 143: Matched Droplet Info

A.2.2.2 All Droplets for .LA Image

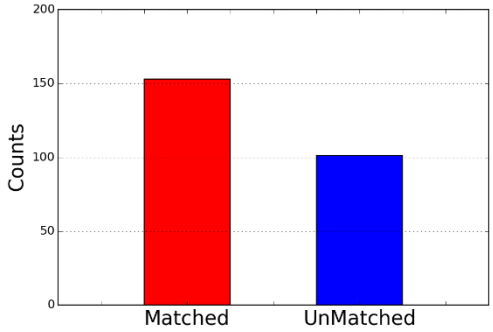


Figure A. 1341: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

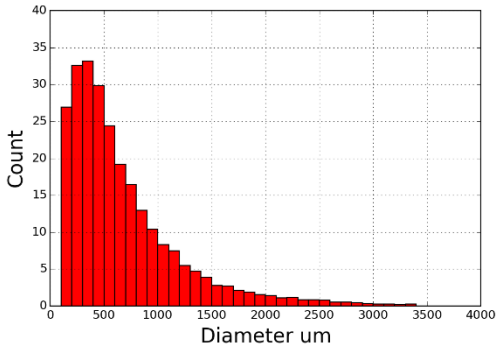


Figure A. 1342: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

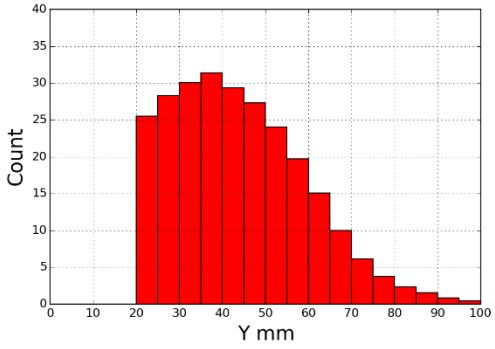


Figure A. 1343: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

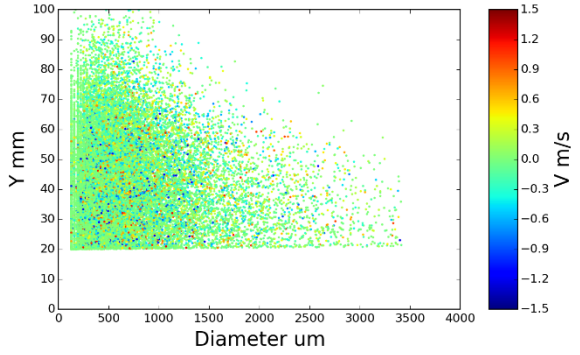


Figure A. 1344: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

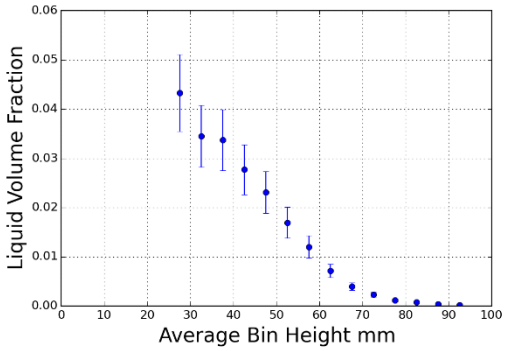


Figure A. 1345: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 All Droplets for .LB Image

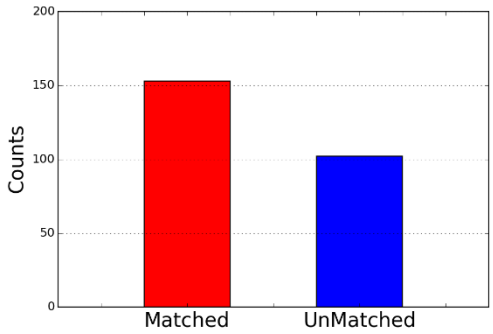


Figure A. 1346: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

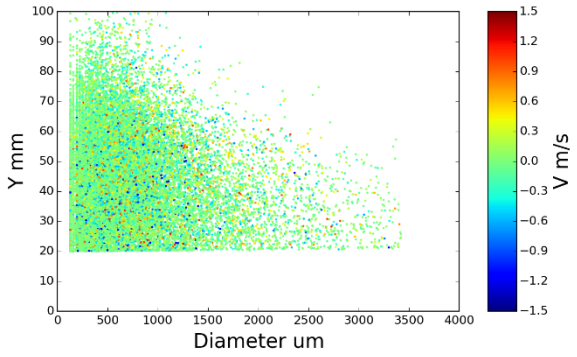


Figure A. 1349: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

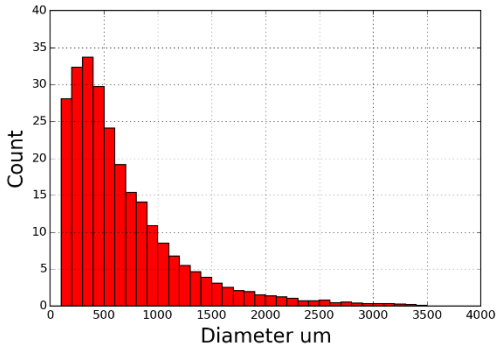


Figure A. 1347: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

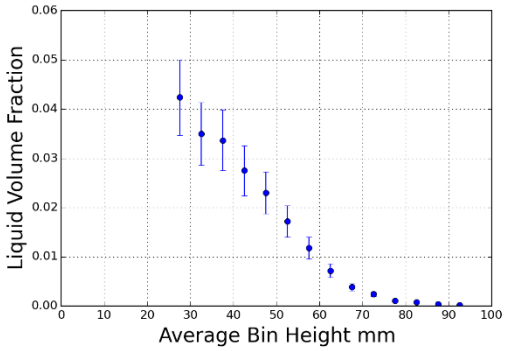


Figure A. 1350: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

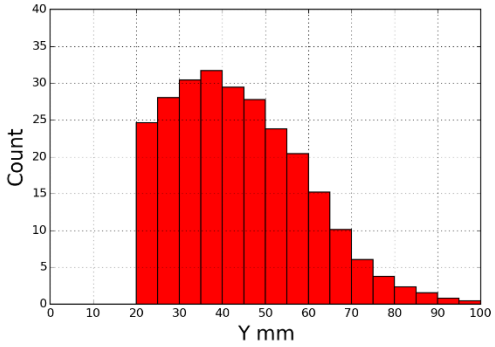


Figure A. 1348: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 Matched Only Droplets for .LA Image

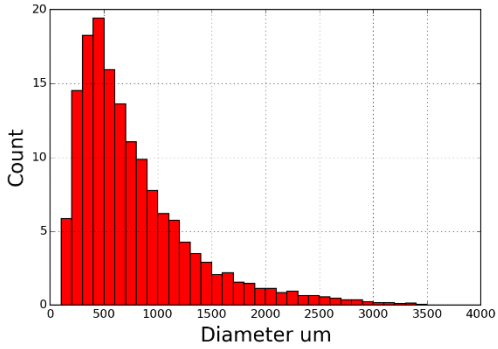


Figure A. 1351: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

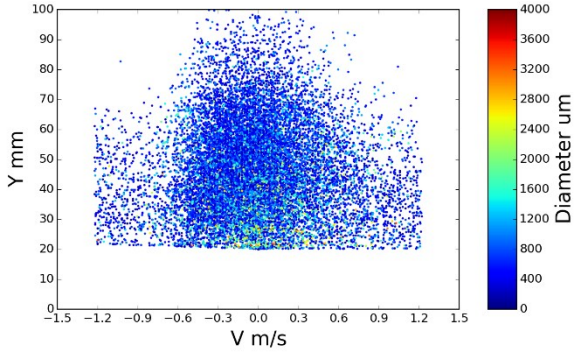


Figure A. 1354: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

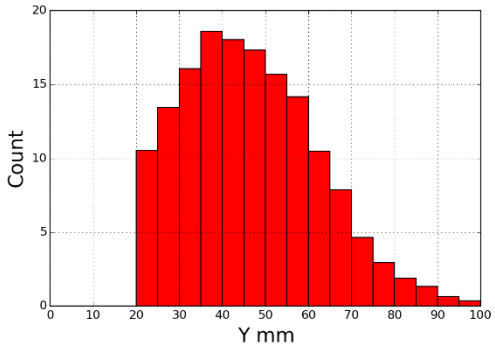


Figure A. 1352: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

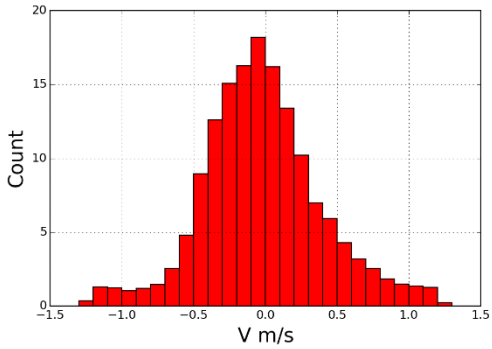


Figure A. 1355: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

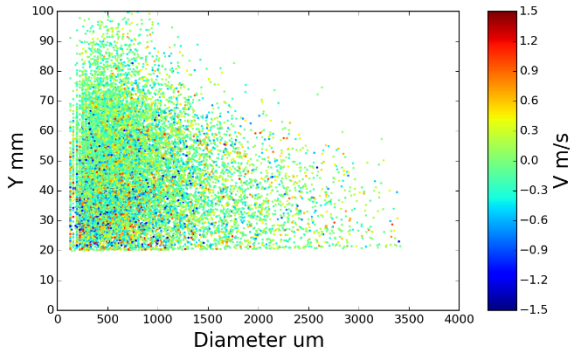


Figure A. 1353: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 Matched Only Droplets for .LB Image

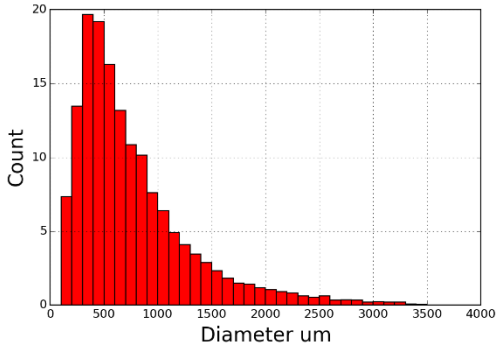


Figure A. 1356: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

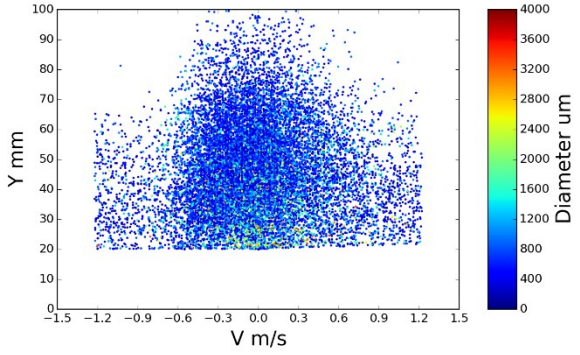


Figure A. 1359: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

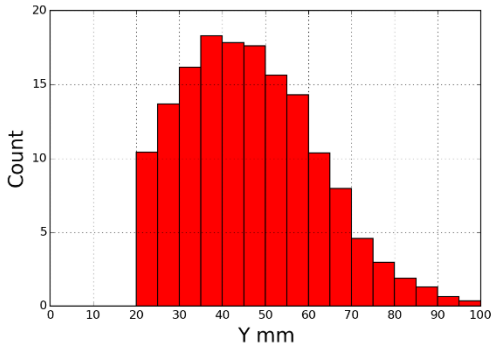


Figure A. 1357: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

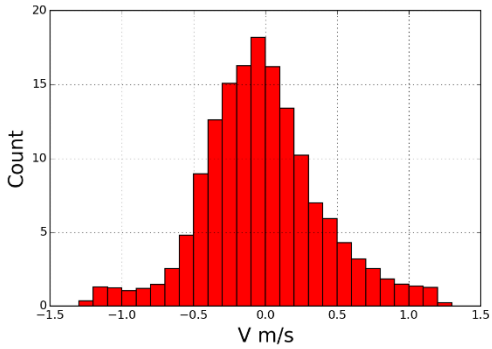


Figure A. 1360: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

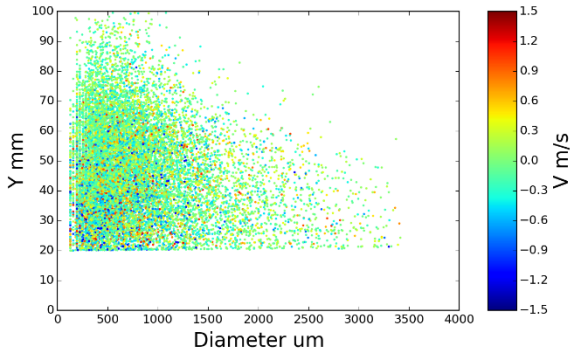


Figure A. 1358: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	97.17	96.44	128.6	3417	749.5	617.4	128.6	3408	749.2	617.3
40-60mm	90.7	90.34	128.6	3398	635.0	475.9	128.6	3403	638.9	480.3
60-80mm	29.54	29.54	128.6	3189	563.4	360.1	128.6	3283	560.0	368.8
80-100mm	4.92	4.73	128.6	1540	512.0	268.5	128.6	2124	520.0	274.1
All	222.33	221.05	128.6	3417	672.8	532.1	128.6	3408	673.9	534.4
			Height A (mm)				Height B (mm)			
Highest Particle			99.8640				99.9495			
Lowest Particle			20.0640				20.0640			

Table A. 144: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	47.05	128.6	3396	906.9	653.5	128.6	3407	882.0	638.9	-1.220	1.220	-0.070	0.380	-1.220	1.220	-0.040	0.450
40-60mm	57.17	128.6	3250	729.1	488.2	128.6	3367	720.6	483.3	-1.220	1.220	-0.080	0.290	-1.220	1.220	-0.020	0.390
60-80mm	21.03	128.6	3189	640.4	367.8	128.6	3283	632.9	370.6	-1.220	1.220	-0.070	0.220	-1.190	1.210	-0.000	0.330
80-100mm	3.8	157.6	1540	564.0	253.9	128.6	1598	559.3	256.9	-0.880	0.620	-0.090	0.150	-0.770	0.810	0.010	0.280
All	129.05	128.6	3396	774.6	544.8	128.6	3407	760.5	535.4	-1.220	1.220	-0.070	0.320	-1.220	1.220	-0.020	0.400

Table A. 145: Matched Droplet Info

A.2.2.2 All Droplets for .LA Image

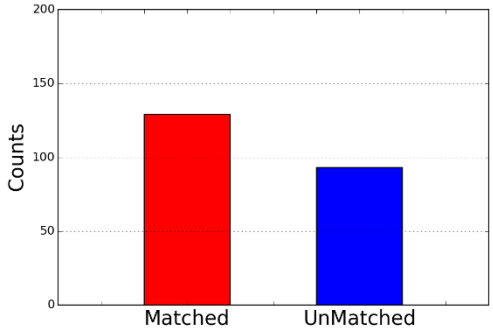


Figure A. 1361: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

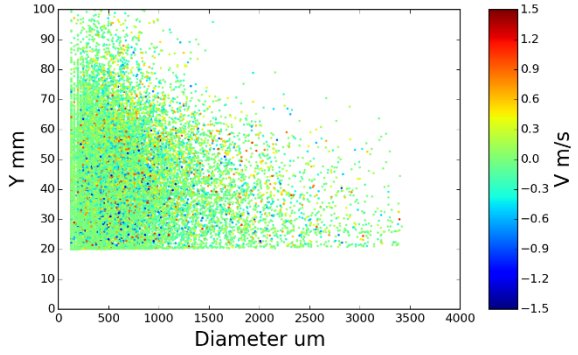


Figure A. 1364: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

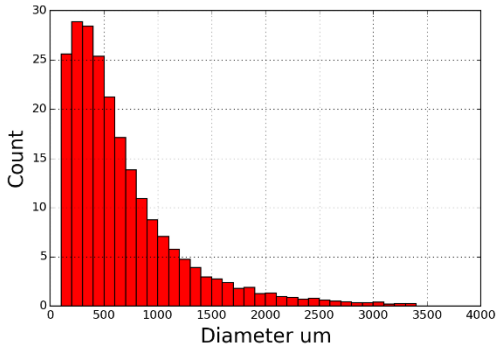


Figure A. 1362: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

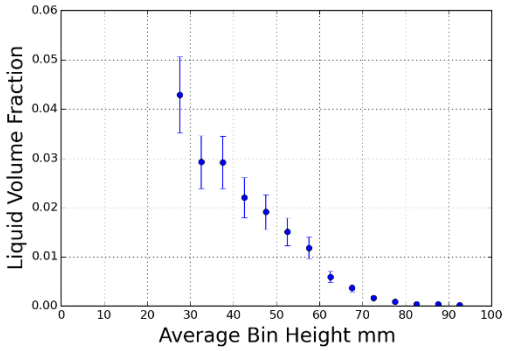


Figure A. 1365: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

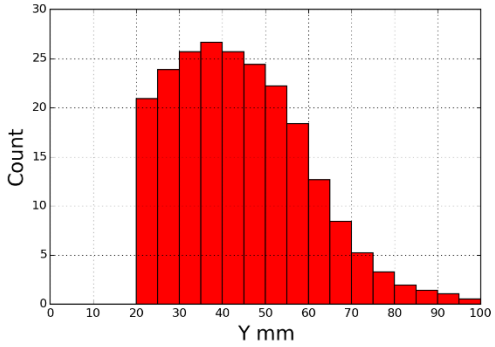


Figure A. 1363: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 All Droplets for .LB Image

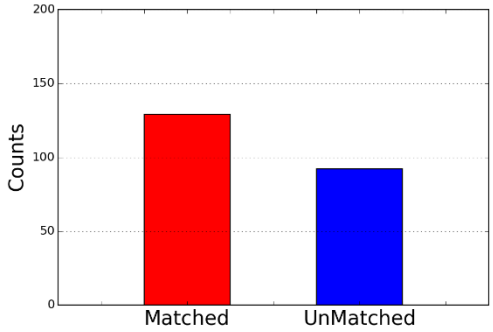


Figure A. 1366: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

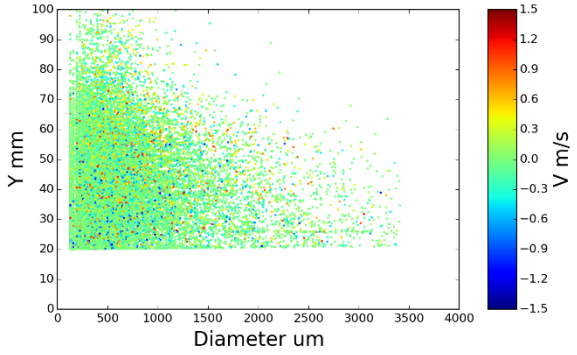


Figure A. 1369: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

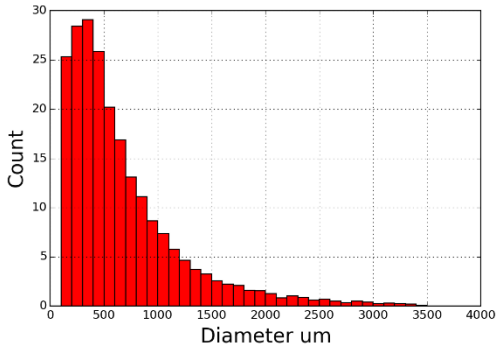


Figure A. 1367: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

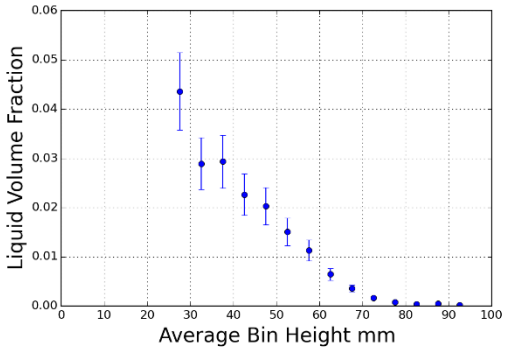


Figure A. 1370: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

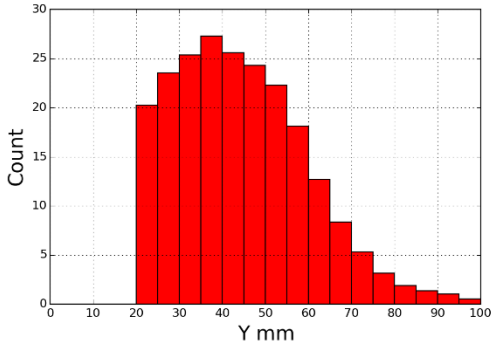


Figure A. 1368: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 Matched Only Droplets for .LA Image

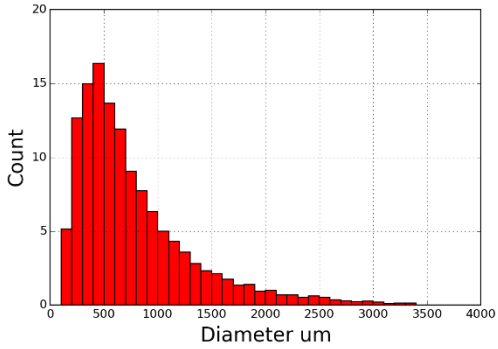


Figure A. 1371: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

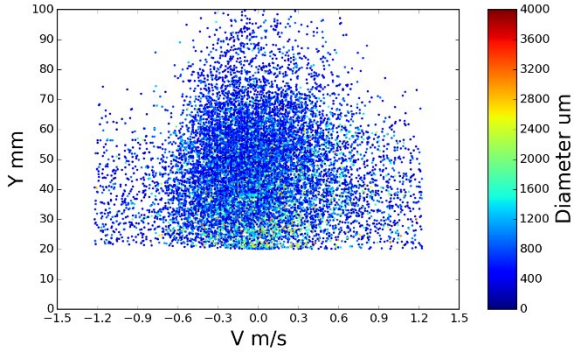


Figure A. 1374: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

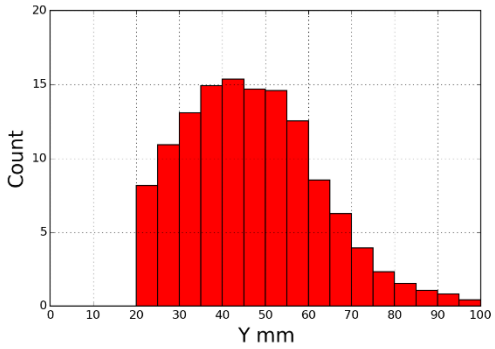


Figure A. 1372: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

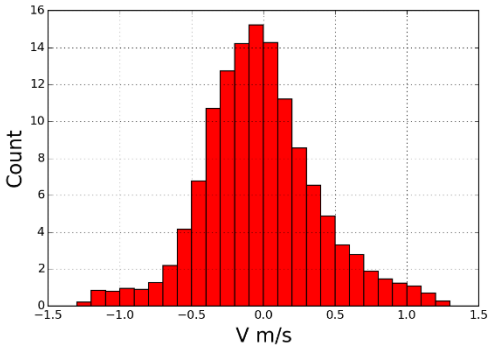


Figure A. 1375: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

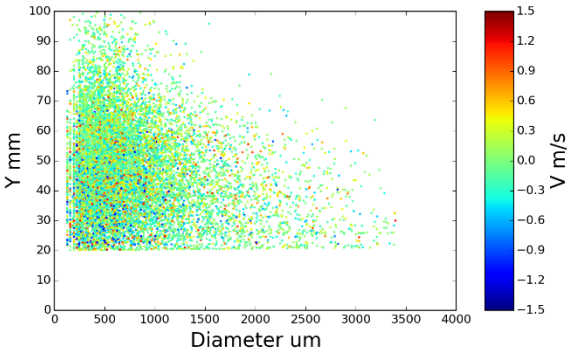


Figure A. 1373: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 Matched Only Droplets for .LB Image

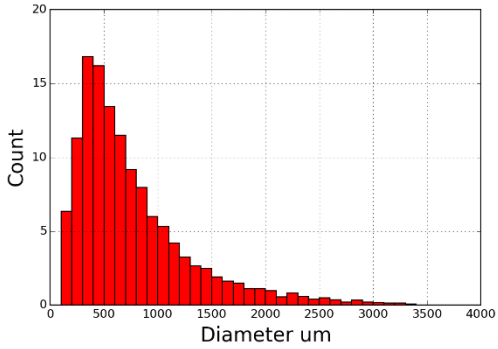


Figure A. 1376: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

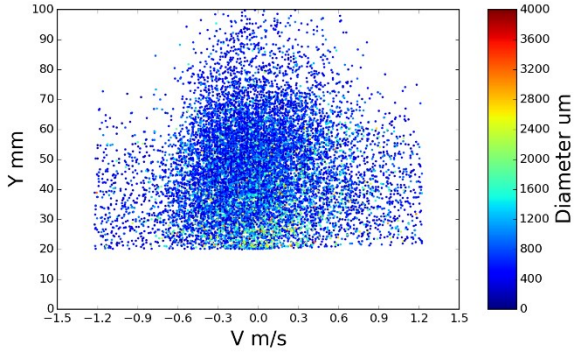


Figure A. 1379: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

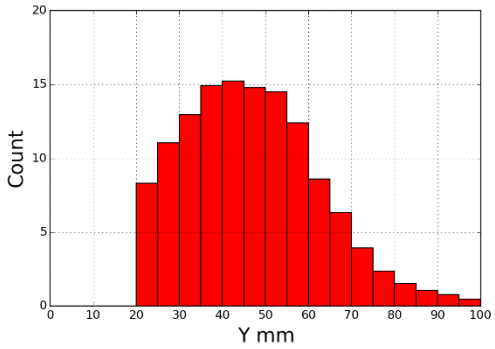


Figure A. 1377: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

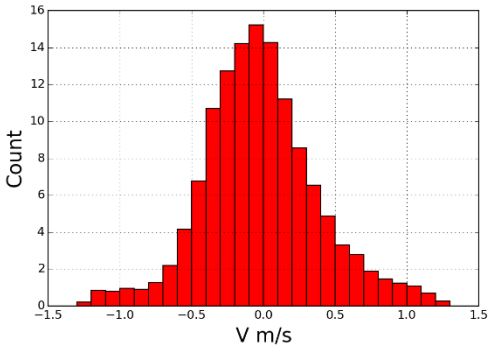


Figure A. 1380: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

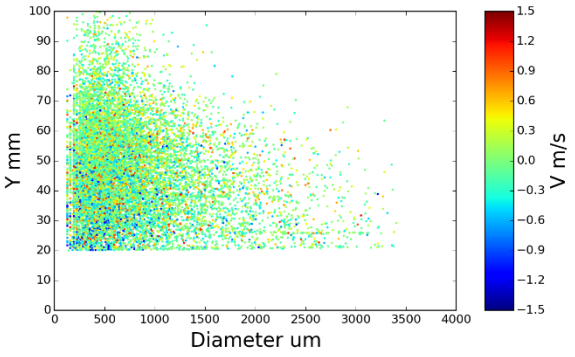


Figure A. 1378: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	78.37	78.69	128.6	3419	753.7	649.0	128.6	3418	743.1	639.9
40-60mm	78.06	79.09	128.6	3313	629.6	495.5	128.6	3398	622.1	493.3
60-80mm	27.24	26.86	128.6	3134	552.9	377.6	128.6	3110	552.5	380.2
80-100mm	5.13	4.98	128.6	1682	498.6	284.2	128.6	1973	515.4	286.9
All	188.8	189.62	128.6	3419	666.5	552.7	128.6	3418	659.6	547.5
			Height A (mm)				Height B (mm)			
Highest Particle			99.9495				99.9495			
Lowest Particle			20.0640				20.0640			

Table A. 146: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	35.32	128.6	3419	924.4	698.6	128.6	3411	901.5	688.6	-1.220	1.220	-0.080	0.400	-1.220	1.220	-0.010	0.470
40-60mm	47.47	128.6	3302	732.0	506.9	128.6	3392	718.8	501.2	-1.220	1.220	-0.060	0.290	-1.220	1.220	-0.020	0.410
60-80mm	18.06	128.6	3134	639.1	394.1	128.6	3110	635.8	395.6	-1.220	1.210	-0.060	0.220	-1.210	1.190	-0.010	0.340
80-100mm	3.72	128.6	1682	571.5	275.4	128.6	1973	573.1	283.0	-1.200	0.970	-0.080	0.170	-1.130	0.780	0.040	0.270
All	104.57	128.6	3419	775.2	569.2	128.6	3411	761.4	562.2	-1.220	1.220	-0.070	0.320	-1.220	1.220	-0.010	0.420

Table A. 147: Matched Droplet Info

A.2.2.2 All Droplets for .LA Image

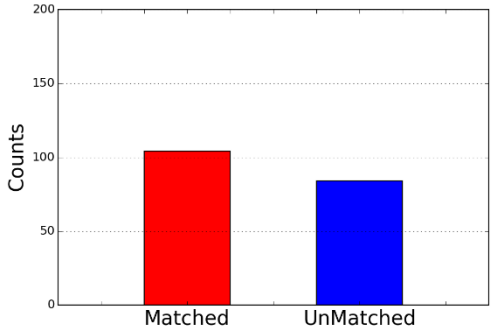


Figure A. 1381: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

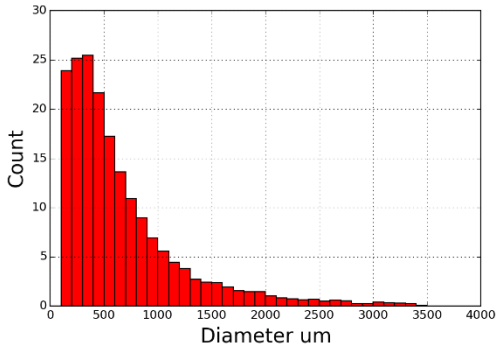


Figure A. 1382: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

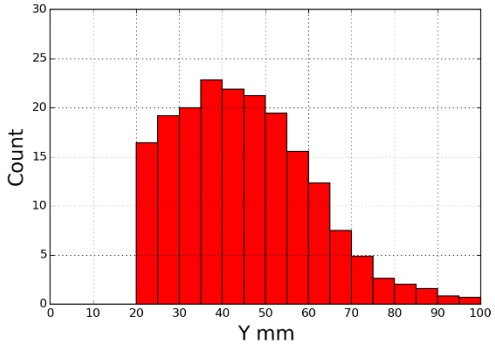


Figure A. 1383: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

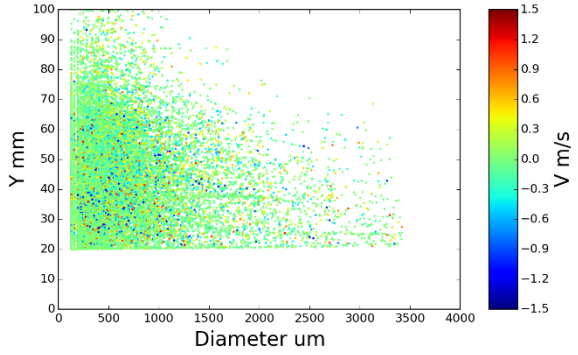


Figure A. 1384: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

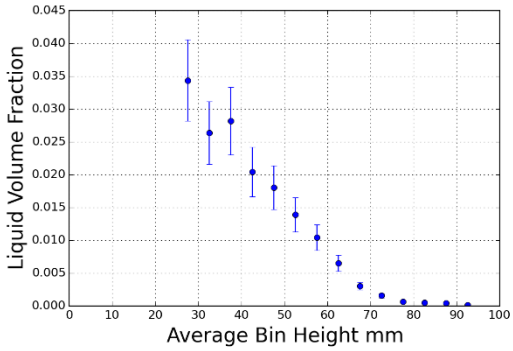


Figure A. 1385: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 All Droplets for .LB Image

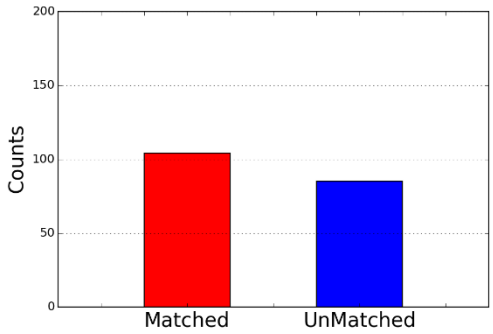


Figure A. 1386: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

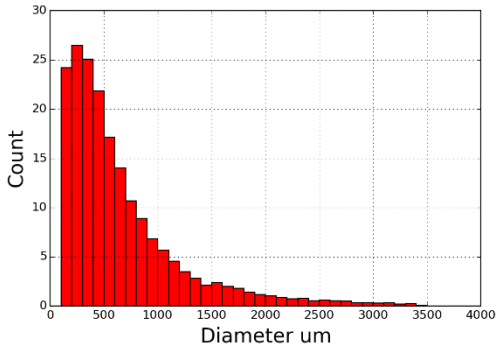


Figure A. 1387: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

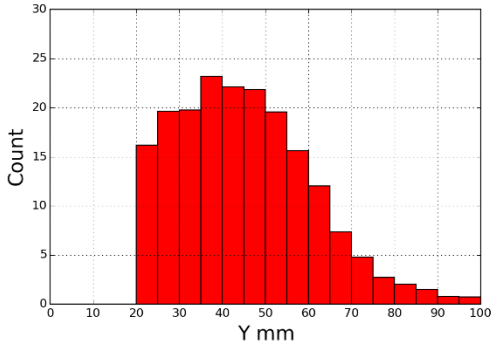


Figure A. 1388: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

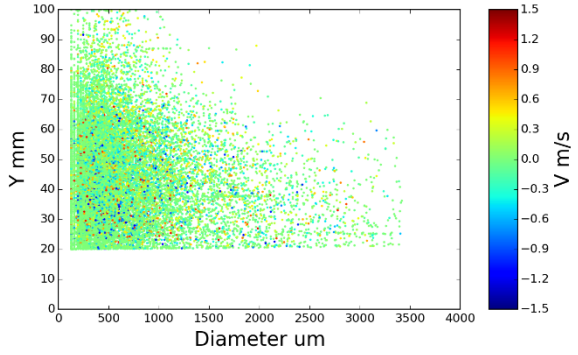


Figure A. 1389: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

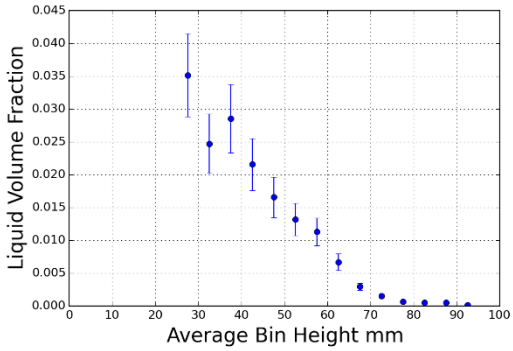


Figure A. 1390: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 Matched Only Droplets for .LA Image

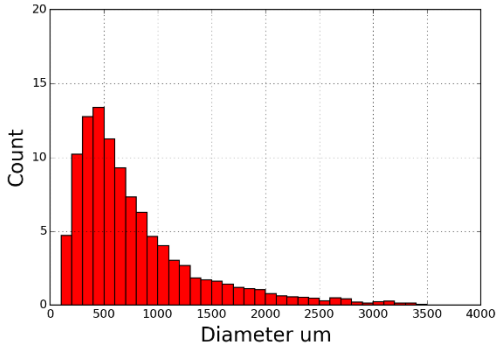


Figure A. 1391: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

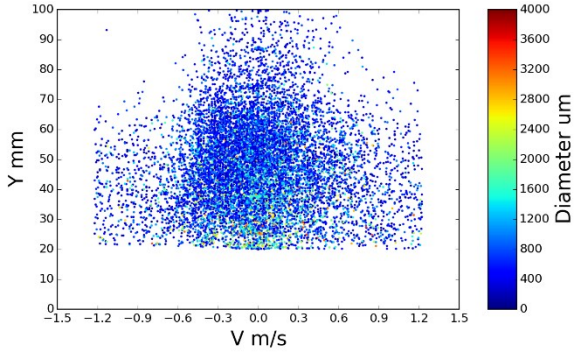


Figure A. 1394: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

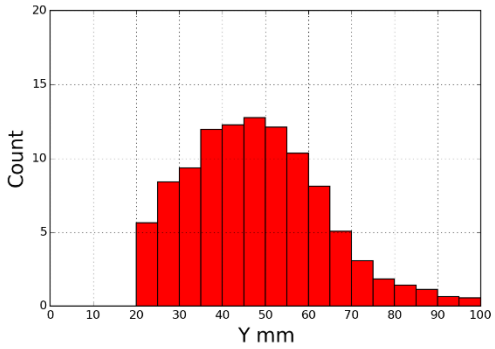


Figure A. 1392: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

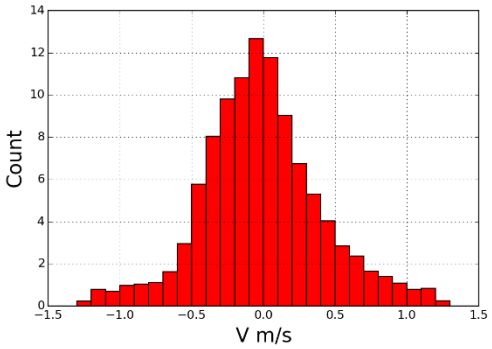


Figure A. 1395: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

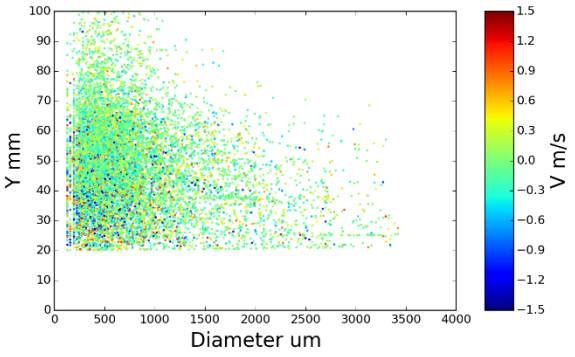


Figure A. 1393: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.2.2 Matched Only Droplets for .LB Image

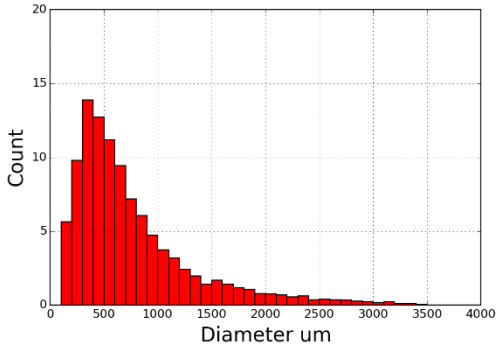


Figure A. 1396: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

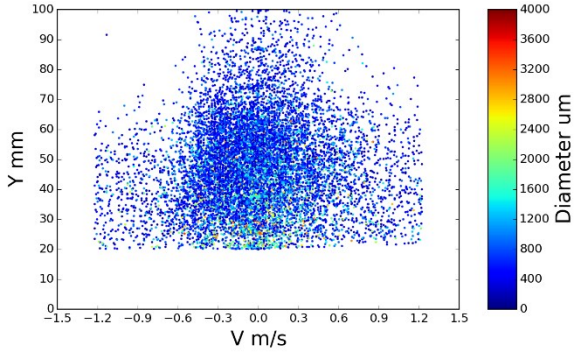


Figure A. 1399: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

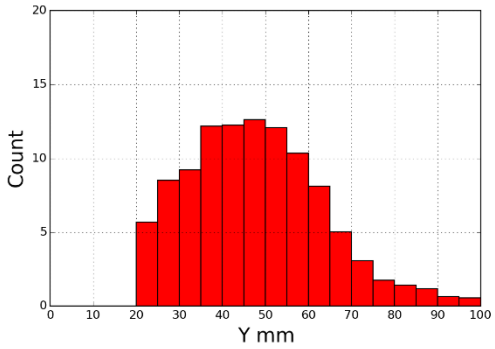


Figure A. 1397: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

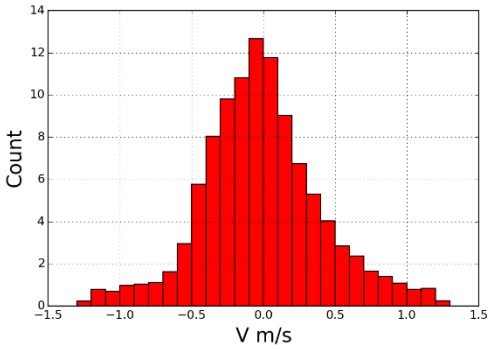


Figure A. 1400: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

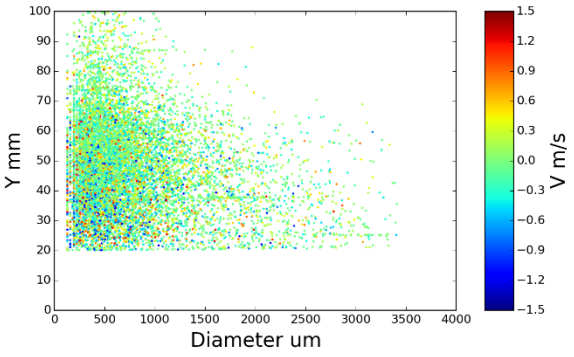


Figure A. 1398: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3 Liquid Level 3

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	23584 / 2.972
Ref Mass Flow (lb/hr) / (kg/s)	1621 / 0.204
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15061 / 20.427
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	7245 / 22.85
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	40.1 / 4.49
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.3 / 4.60
Total Bundle Q (Btu/hr) / (kW)	152352 / 44.65
Total Bundle & Preboiler Q (Btu/hr) / (kW)	152352 / 44.65
Top Two Rows HTC Ratio	1.021
Bundle Inlet Quality	0.00
Bundle Exit Quality	0.08

Table A. 148: Thermal Conditions

A.2.3.1 Lens 100mm Mag 0_29x

A.2.3.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	56.52	57.18	57.2	2958	379.5	352.5	57.2	2949	382.5	360.1
40-60mm	51.06	52.35	57.2	2249	299.0	299.4	57.2	2259	296.7	300.8
60-80mm	15.5	15.63	57.2	1773	199.8	216.9	57.2	1819	197.5	218.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	123.08	125.16	57.2	2958	323.5	322.2	57.2	2949	323.5	326.9
			Height A (mm)				Height B (mm)			
Highest Particle			76.0339				76.0339			
Lowest Particle			28.0846				28.0846			

Table A. 149: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	41.21	57.2	2958	449.7	368.2	57.2	2949	450.1	370.1	-1.250	1.260	-0.060	0.180	-1.230	1.240	0.060	0.300
40-60mm	38.07	57.2	2249	356.7	317.3	57.2	2232	356.3	318.3	-1.270	1.270	-0.060	0.150	-1.230	1.270	0.040	0.260
60-80mm	10.65	57.2	1773	240.7	244.1	57.2	1819	236.4	245.1	-1.210	1.270	-0.060	0.120	-1.270	1.100	-0.020	0.210
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	89.93	57.2	2958	385.6	341.4	57.2	2949	385.0	342.9	-1.270	1.270	-0.060	0.160	-1.270	1.270	0.040	0.270

Table A. 150: Matched Droplet Info

A.2.3.1 All Droplets for .LA Image

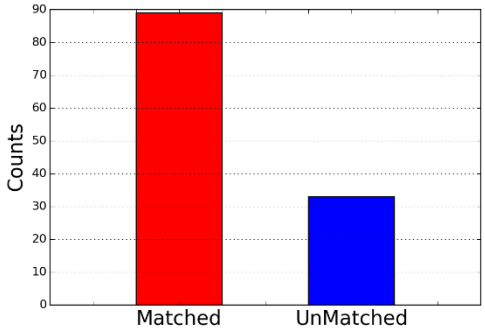


Figure A. 1401: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

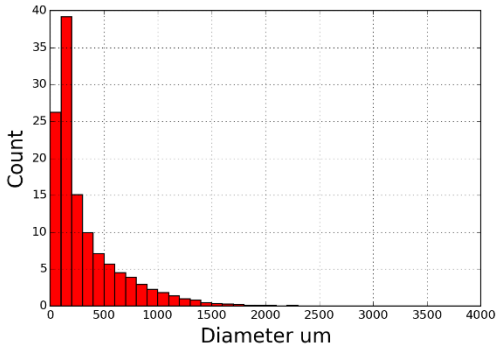


Figure A. 1402: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

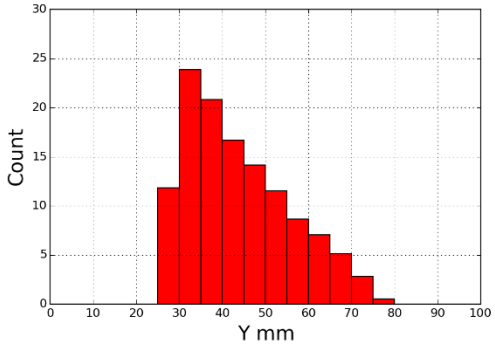


Figure A. 1403: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

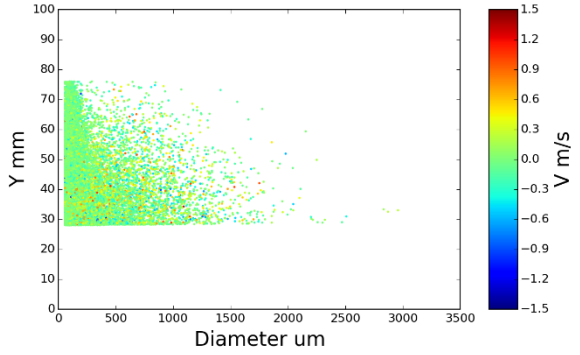


Figure A. 1404: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

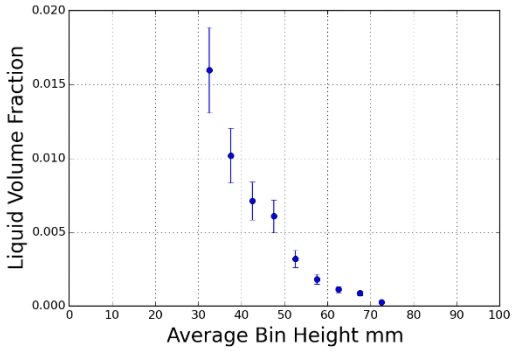


Figure A. 1405: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 All Droplets for .LB Image

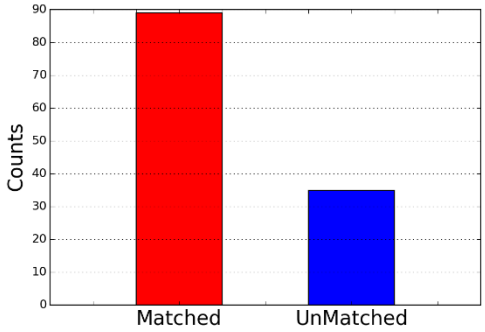


Figure A. 1406: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

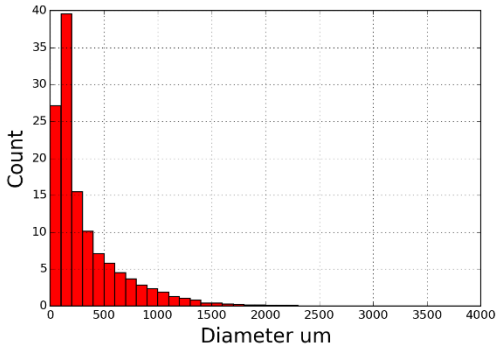


Figure A. 1407: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

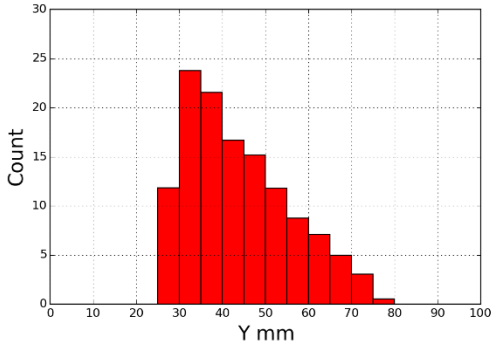


Figure A. 1408: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

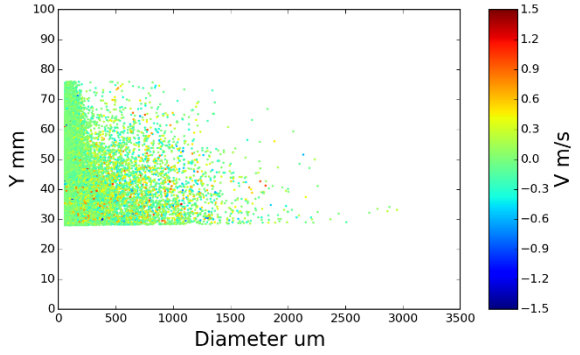


Figure A. 1409: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

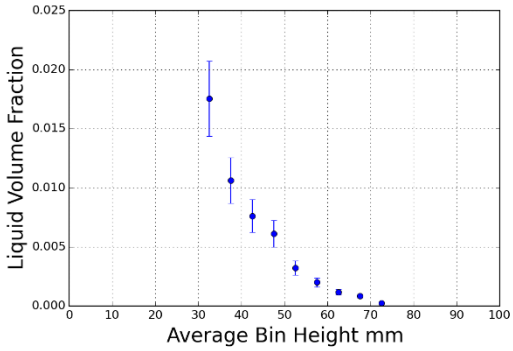


Figure A. 1410: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 Matched Only Droplets for .LA Image

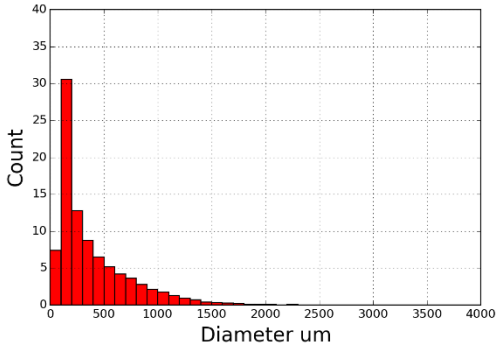


Figure A. 1411: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

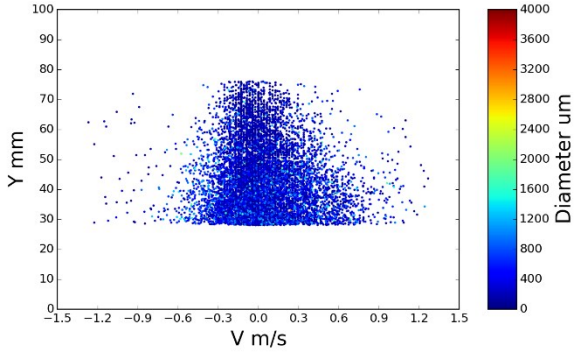


Figure A. 1414: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

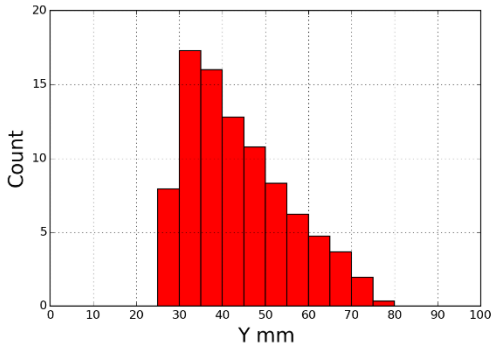


Figure A. 1412: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

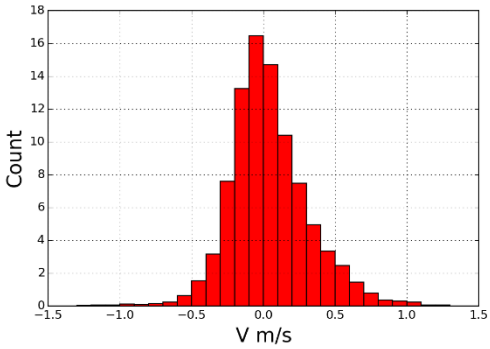


Figure A. 1415: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

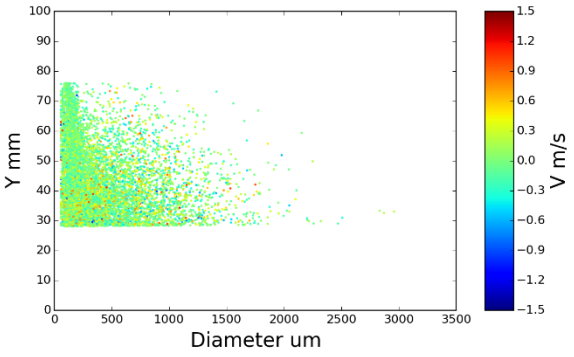


Figure A. 1413: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 Matched Only Droplets for .LB Image

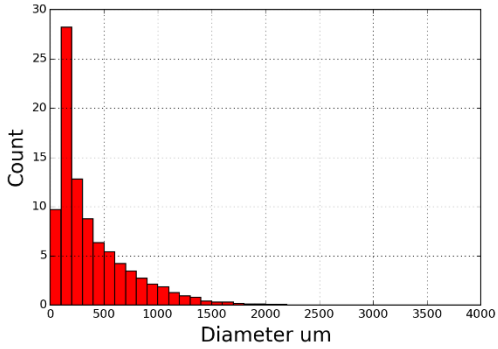


Figure A. 1416: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

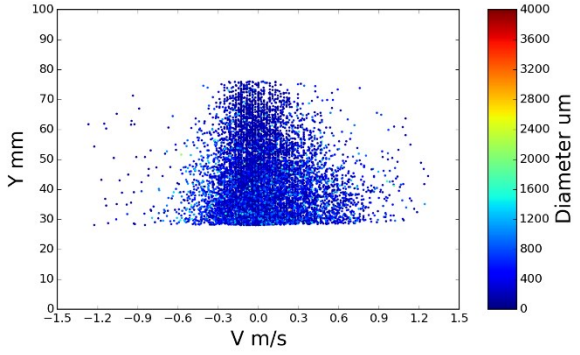


Figure A. 1419: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

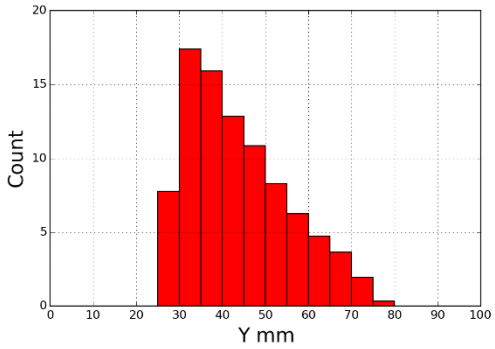


Figure A. 1417: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

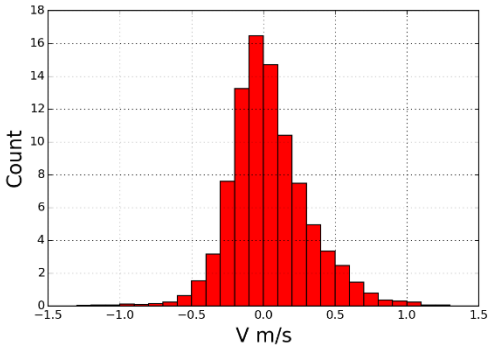


Figure A. 1420: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

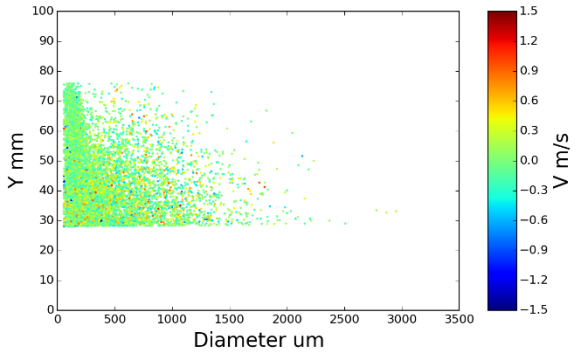


Figure A. 1418: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	53.81	56.11	57.2	2726	406.3	392.8	57.2	2939	398.0	392.8
40-60mm	48.61	51.47	57.2	2690	323.1	342.0	57.2	2960	309.9	338.1
60-80mm	14.57	15.05	57.2	2084	220.2	274.9	57.2	1825	220.3	273.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	117.0	122.65	57.2	2726	348.6	364.5	57.2	2960	339.2	362.5
			Height A (mm)				Height B (mm)			
Highest Particle			76.0339				76.0466			
Lowest Particle			28.0846				28.0846			

Table A. 151: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	37.15	57.2	2726	489.7	410.5	57.2	2939	487.4	409.9	-1.270	1.270	-0.050	0.200	-1.240	1.270	-0.010	0.320
40-60mm	34.23	57.2	2690	402.8	369.4	57.2	2960	399.3	372.8	-1.250	1.270	-0.060	0.160	-1.270	1.250	-0.050	0.270
60-80mm	9.27	57.2	2084	285.0	317.7	57.2	1825	285.6	321.4	-1.060	1.070	-0.090	0.120	-1.270	1.250	-0.090	0.200
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	80.65	57.2	2726	429.3	389.2	57.2	2960	426.8	390.6	-1.270	1.270	-0.060	0.180	-1.270	1.270	-0.040	0.290

Table A. 152: Matched Droplet Info

A.2.3.1 All Droplets for .LA Image

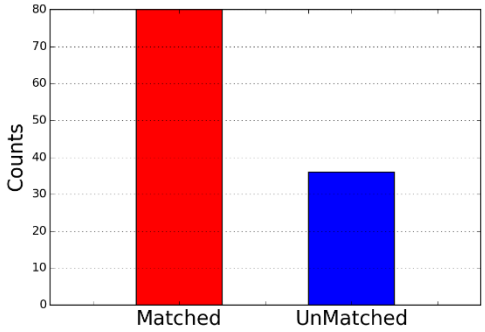


Figure A. 1421: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

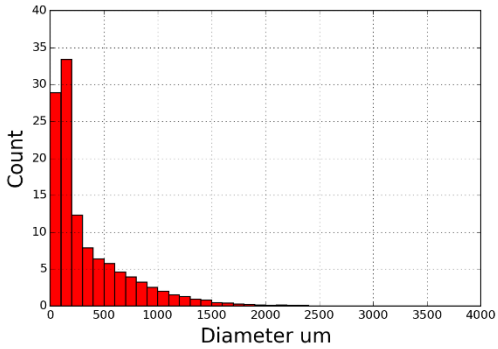


Figure A. 1422: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

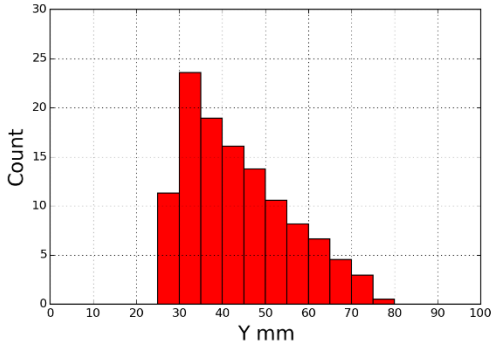


Figure A. 1423: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

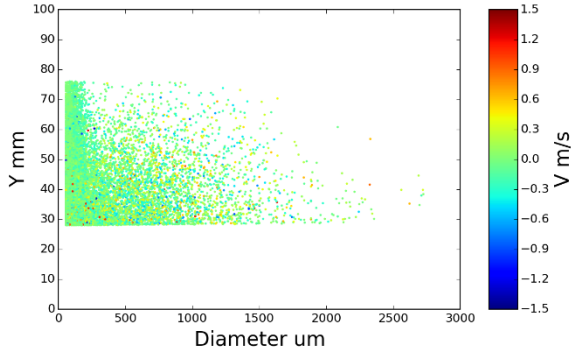


Figure A. 1424: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

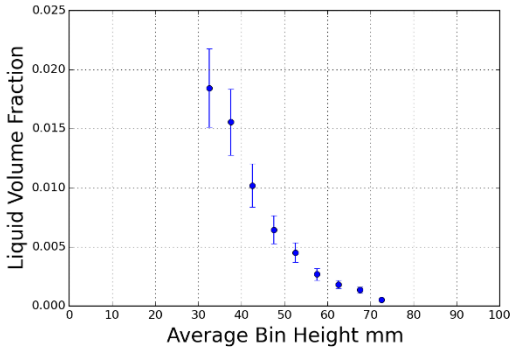


Figure A. 1425: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 All Droplets for .LB Image

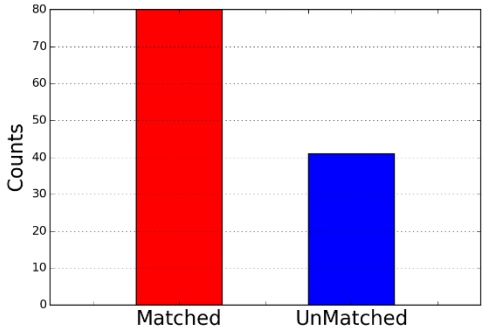


Figure A. 1426: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

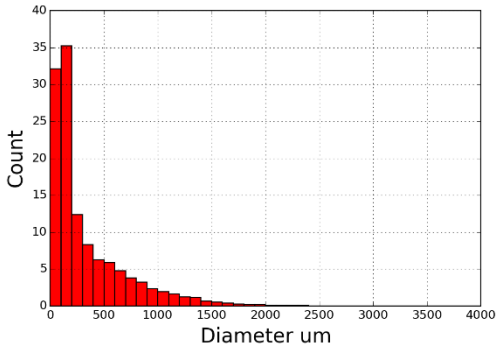


Figure A. 1427: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

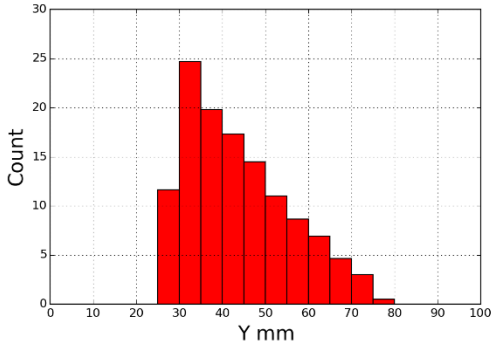


Figure A. 1428: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

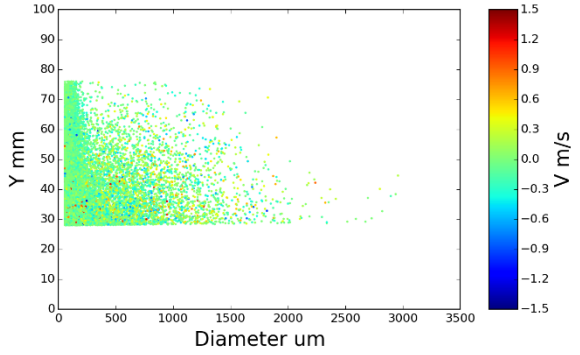


Figure A. 1429: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

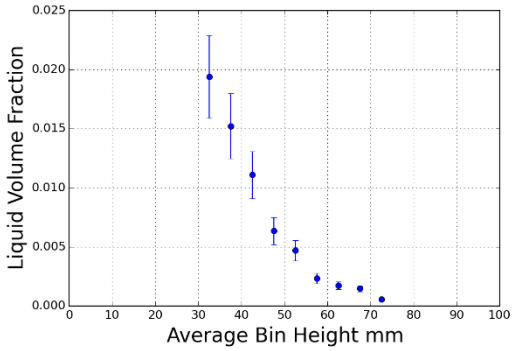


Figure A. 1430: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 Matched Only Droplets for .LA Image

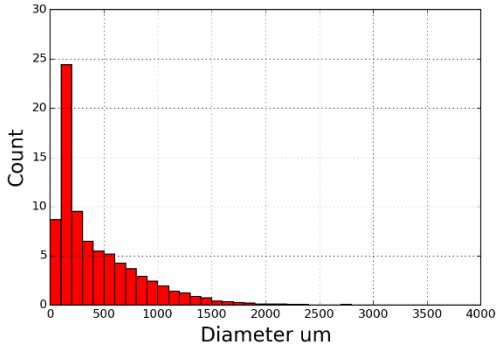


Figure A. 1431: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

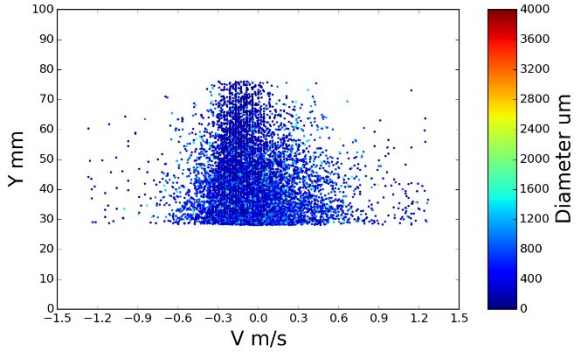


Figure A. 1434: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

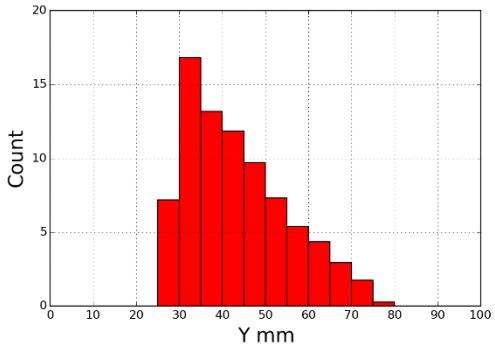


Figure A. 1432: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

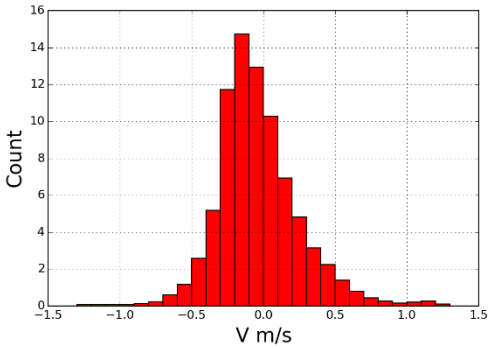


Figure A. 1435: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

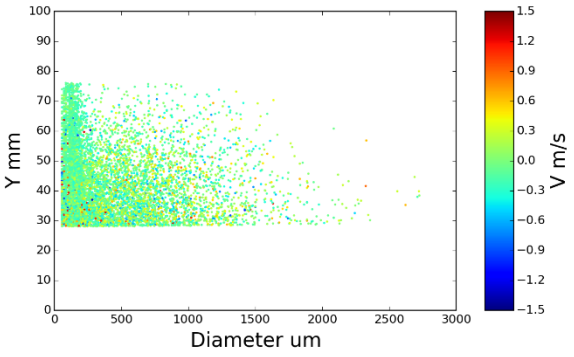


Figure A. 1433: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 Matched Only Droplets for .LB Image

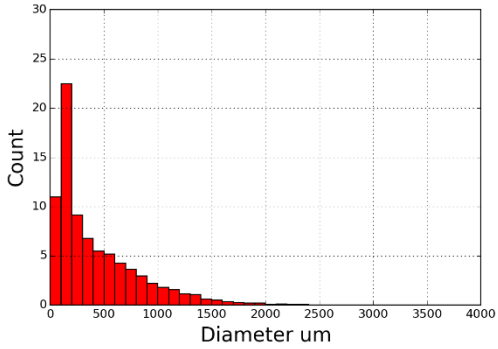


Figure A. 1436: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

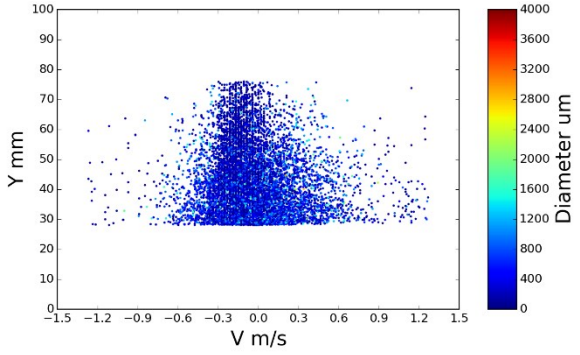


Figure A. 1439: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

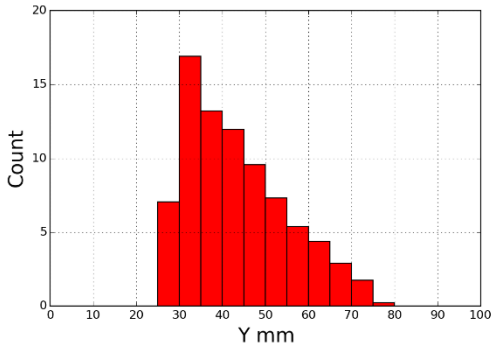


Figure A. 1437: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

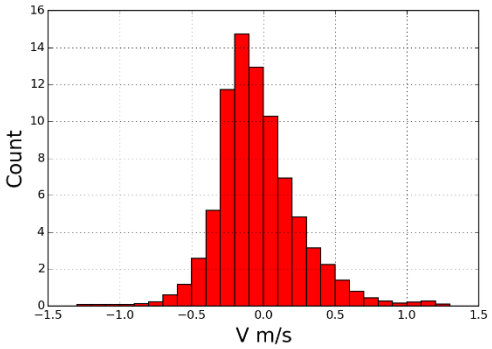


Figure A. 1440: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

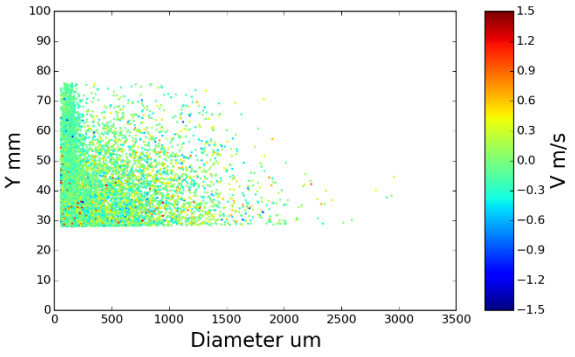


Figure A. 1438: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	54.2	55.84	57.2	3027	394.6	405.2	57.2	3004	388.5	407.5
40-60mm	54.72	56.11	57.2	2762	308.6	347.6	57.2	2962	303.1	347.4
60-80mm	17.93	17.92	57.2	1892	193.5	221.1	57.2	2078	189.1	215.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	126.85	129.87	57.2	3027	329.1	365.8	57.2	3004	324.1	366.6
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0466			
Lowest Particle			28.0846				28.0846			

Table A. 153: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	34.53	57.2	2886	499.3	437.1	57.2	3004	495.6	437.8	-1.250	1.270	-0.050	0.210	-1.270	1.270	-0.060	0.310
40-60mm	36.0	57.2	2762	390.9	383.2	57.2	2962	387.4	383.3	-1.260	1.190	-0.060	0.180	-1.230	1.270	-0.080	0.260
60-80mm	11.09	57.2	1892	233.4	248.0	57.2	1844	231.0	246.0	-1.190	0.720	-0.100	0.140	-1.160	1.250	-0.110	0.180
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	81.62	57.2	2886	415.4	402.1	57.2	3004	412.2	402.4	-1.260	1.270	-0.060	0.190	-1.270	1.270	-0.080	0.270

Table A. 154: Matched Droplet Info

A.2.3.1 All Droplets for .LA Image

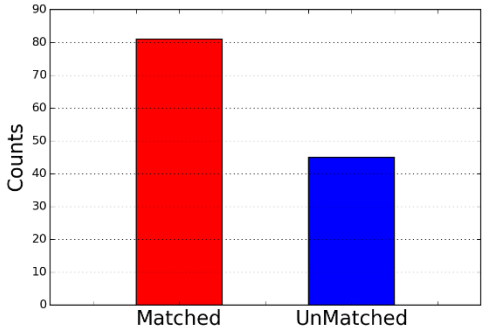


Figure A. 1441: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

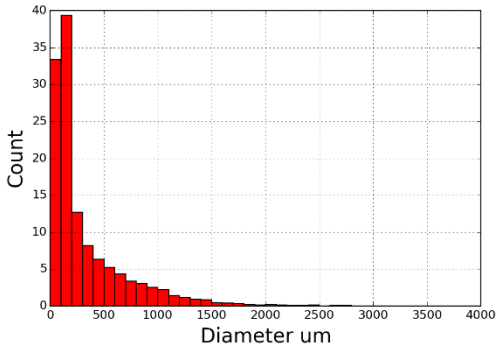


Figure A. 1442: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

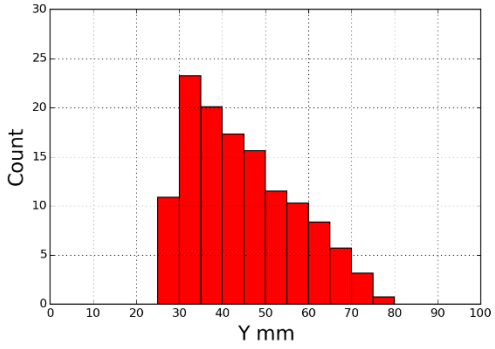


Figure A. 1443: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

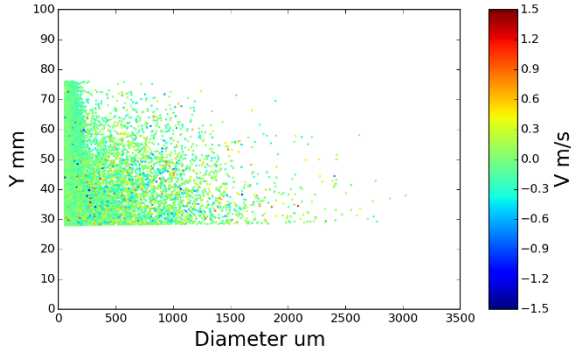


Figure A. 1444: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

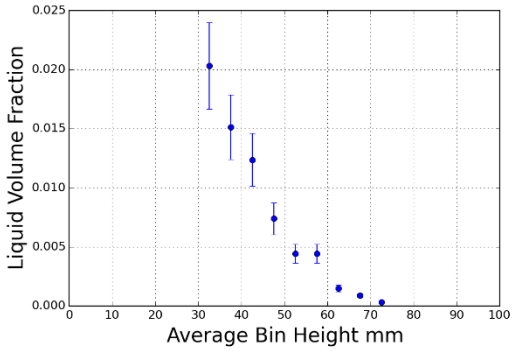


Figure A. 1445: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 All Droplets for .LB Image

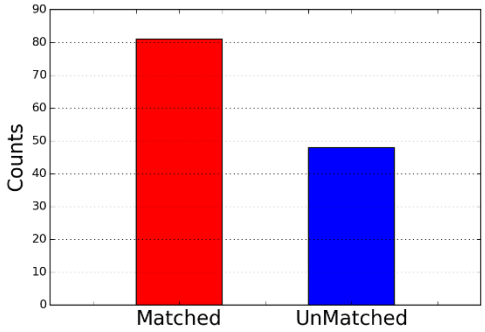


Figure A. 1446: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

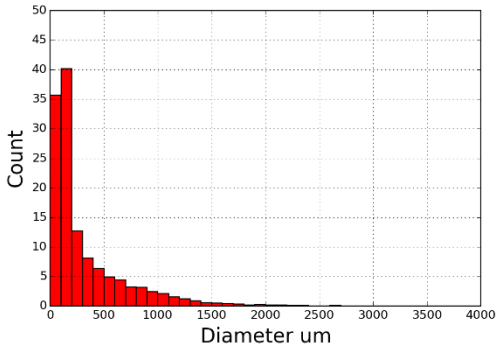


Figure A. 1447: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

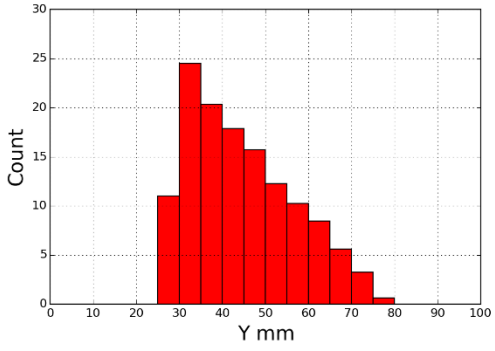


Figure A. 1448: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

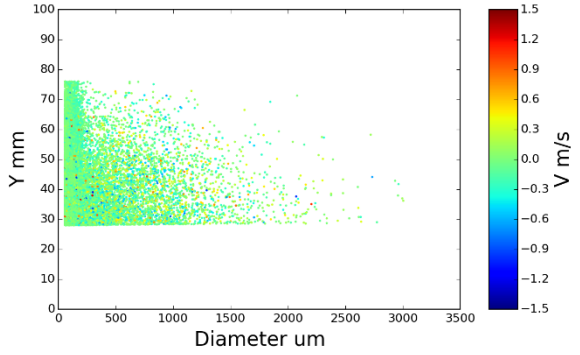


Figure A. 1449: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

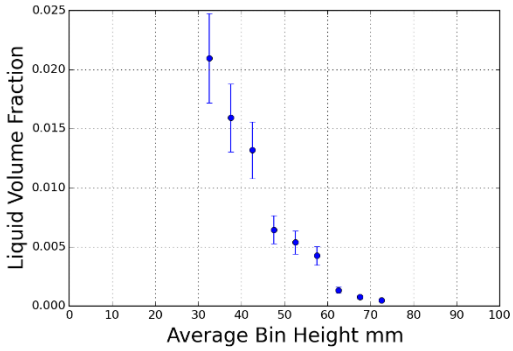


Figure A. 1450: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 Matched Only Droplets for .LA Image

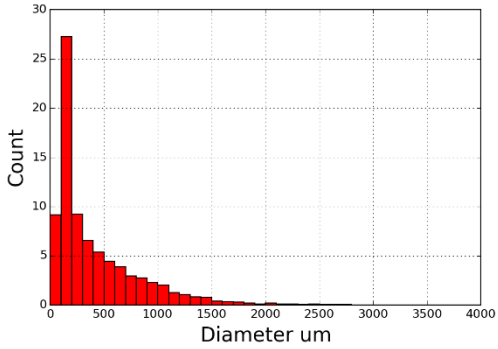


Figure A. 1451: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

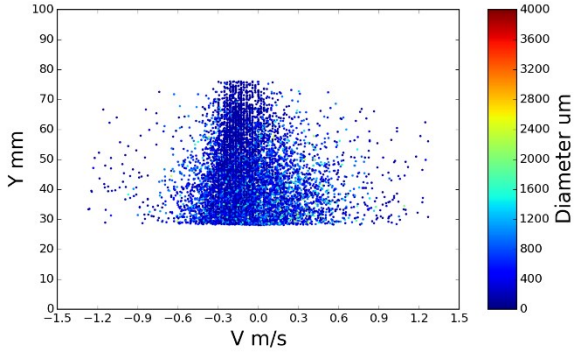


Figure A. 1454: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

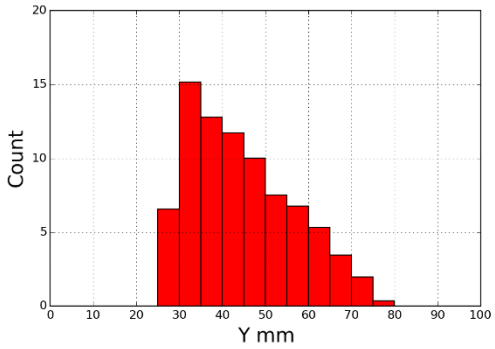


Figure A. 1452: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

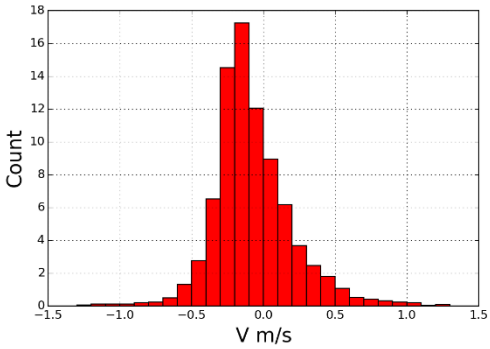


Figure A. 1455: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

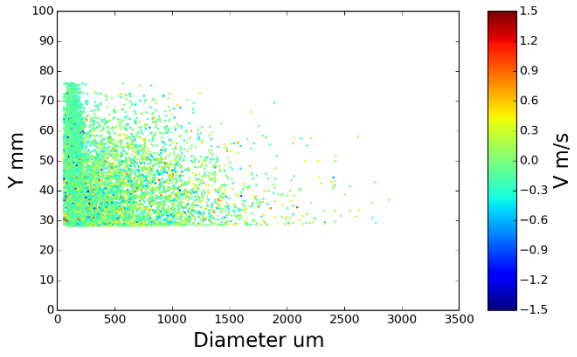


Figure A. 1453: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 Matched Only Droplets for .LB Image

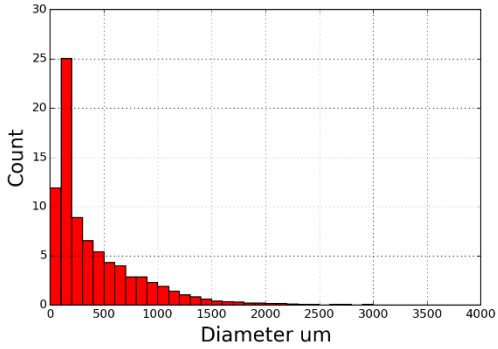


Figure A. 1456: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

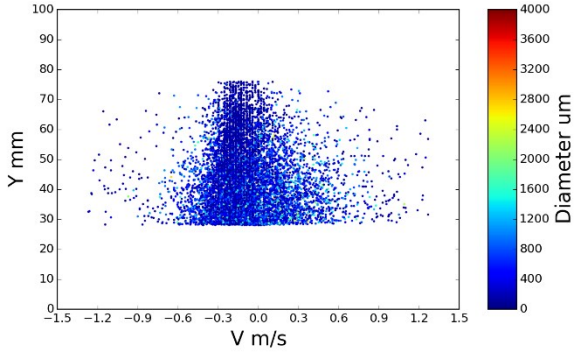


Figure A. 1459: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

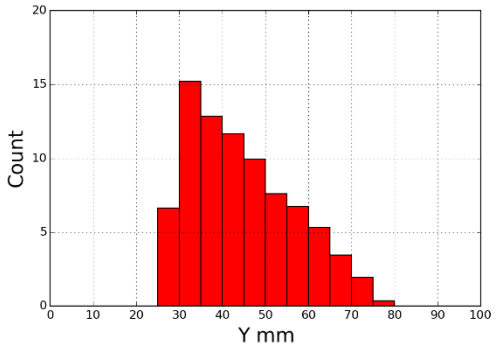


Figure A. 1457: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

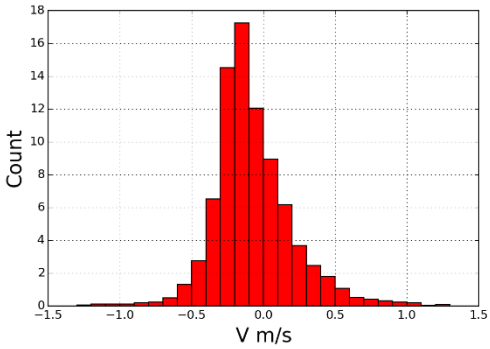


Figure A. 1460: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

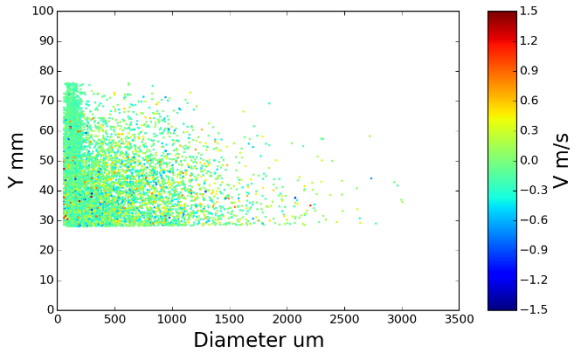


Figure A. 1458: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	52.37	54.1	57.2	3032	382.8	377.1	57.2	2860	372.6	376.1
40-60mm	59.87	61.99	57.2	2649	291.5	314.4	57.2	2676	285.2	307.5
60-80mm	19.36	19.06	57.2	3026	192.7	215.9	57.2	1732	194.1	214.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	131.6	135.18	57.2	3032	313.3	335.7	57.2	2860	307.3	332.0
			Height A (mm)				Height B (mm)			
Highest Particle			76.0212				76.0476			
Lowest Particle			28.0846				28.0846			

Table A. 155: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	33.46	57.2	2647	476.2	398.4	57.2	2860	472.3	395.7	-1.220	1.250	-0.060	0.200	-1.240	1.270	-0.030	0.320
40-60mm	40.37	57.2	2649	363.4	345.4	57.2	2676	359.4	341.1	-1.250	1.260	-0.060	0.180	-1.240	1.250	-0.040	0.270
60-80mm	12.23	57.2	1963	237.2	239.5	57.2	1732	235.2	242.1	-1.250	1.240	-0.090	0.170	-1.270	1.260	-0.070	0.200
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	86.06	57.2	2649	389.3	363.8	57.2	2860	386.0	361.0	-1.250	1.260	-0.070	0.190	-1.270	1.270	-0.040	0.280

Table A. 156: Matched Droplet Info

A.2.3.1 All Droplets for .LA Image

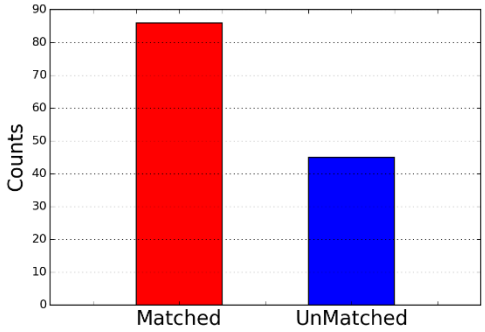


Figure A. 1461: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

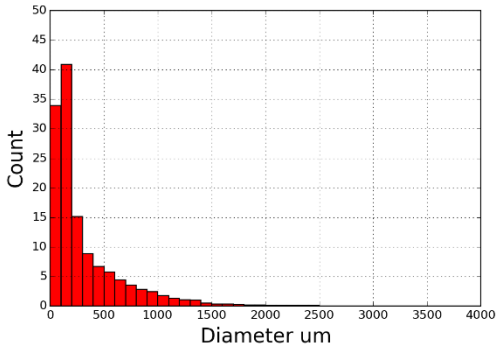


Figure A. 1462: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

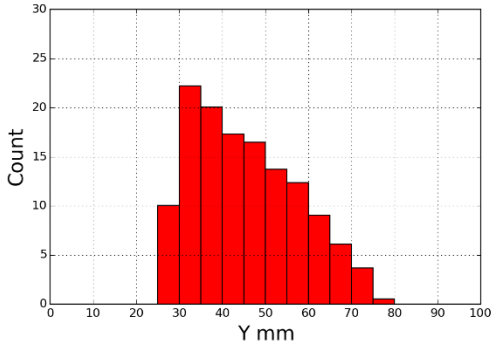


Figure A. 1463: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

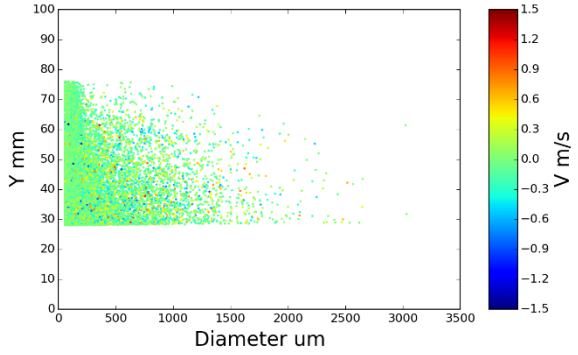


Figure A. 1464: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

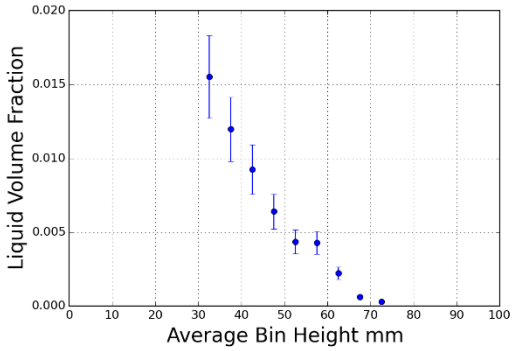


Figure A. 1465: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 All Droplets for .LB Image

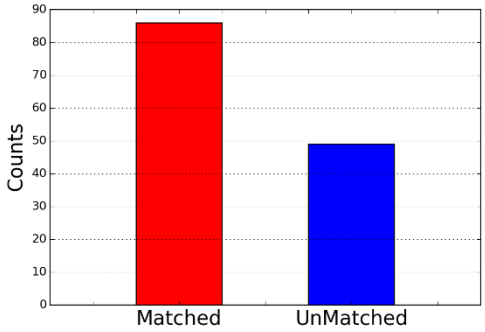


Figure A. 1466: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

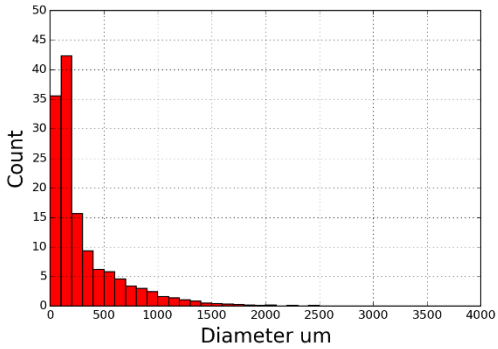


Figure A. 1467: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

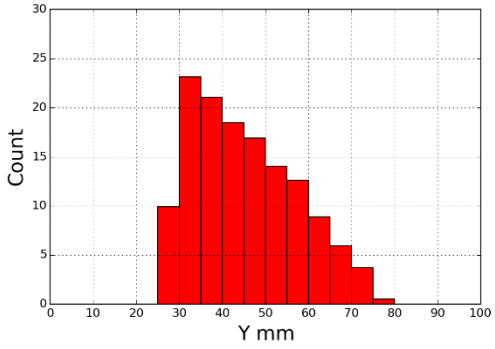


Figure A. 1468: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

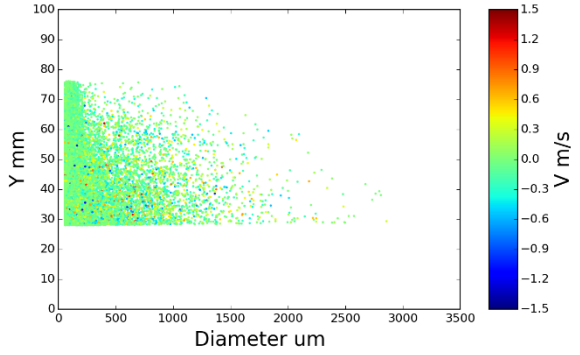


Figure A. 1469: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

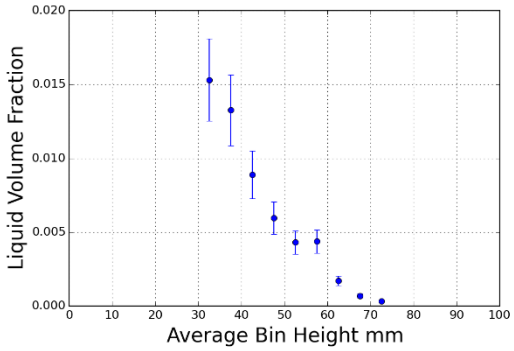


Figure A. 1470: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 Matched Only Droplets for .LA Image

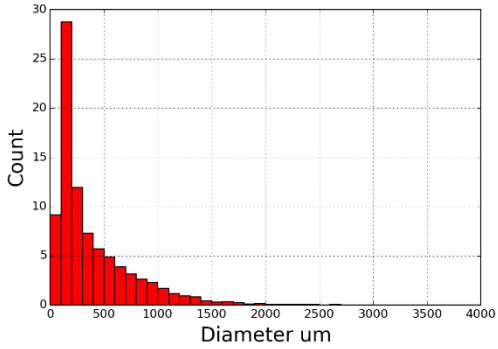


Figure A. 1471: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

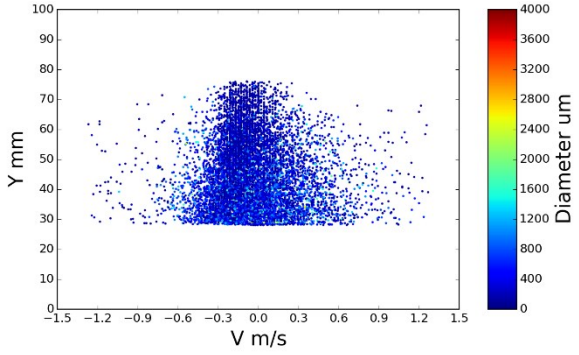


Figure A. 1474: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

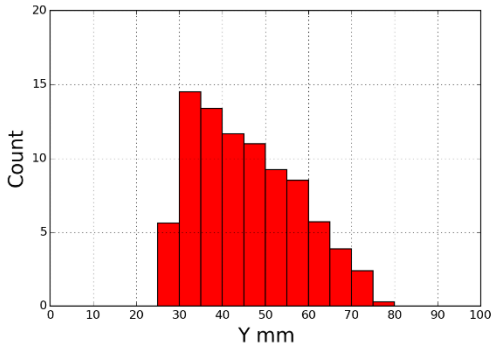


Figure A. 1472: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

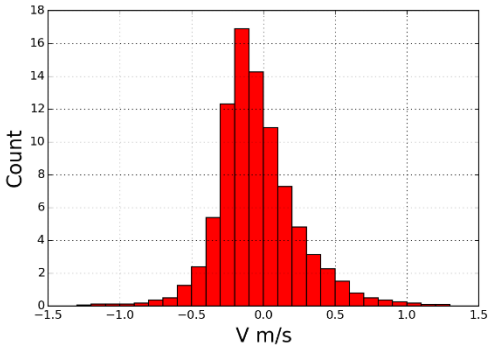


Figure A. 1475: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

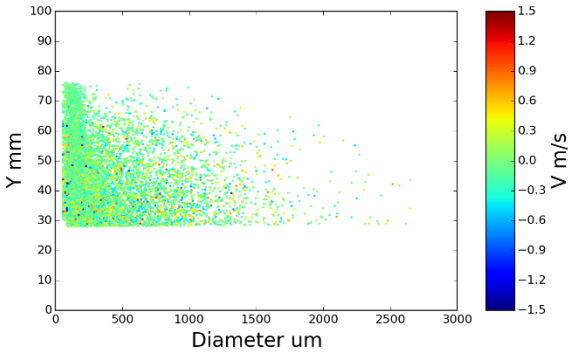


Figure A. 1473: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 Matched Only Droplets for .LB Image

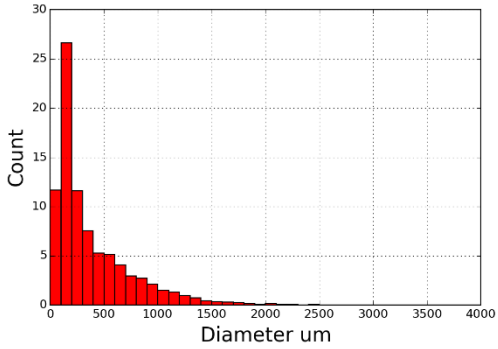


Figure A. 1476: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

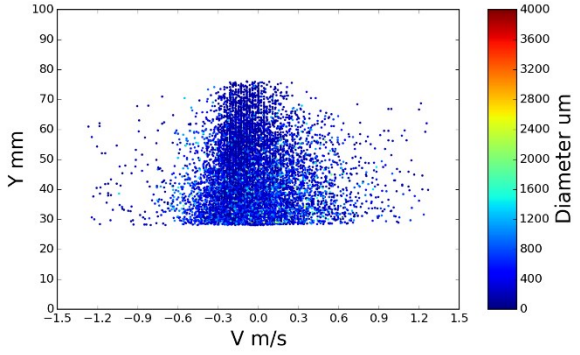


Figure A. 1479: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

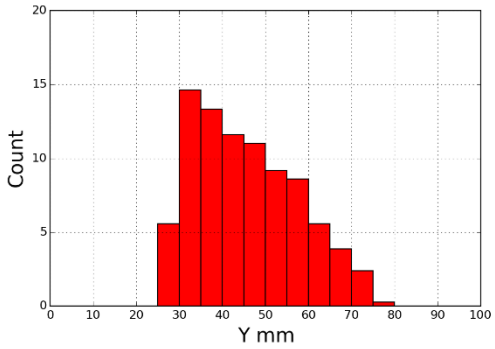


Figure A. 1477: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

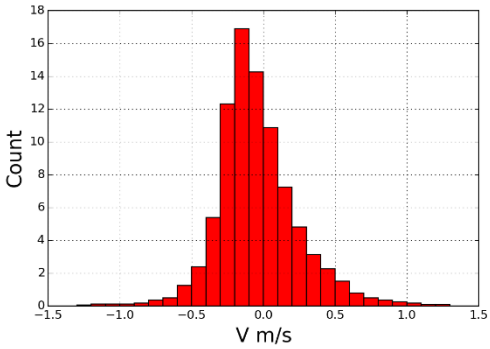


Figure A. 1480: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

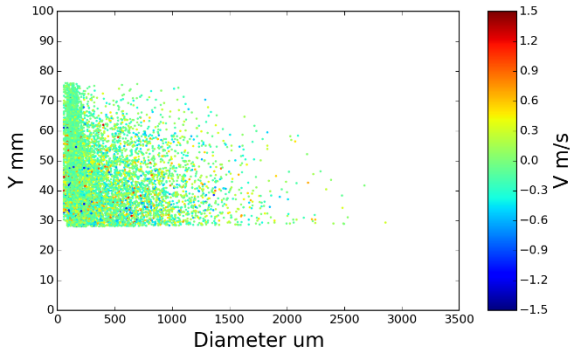


Figure A. 1478: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	50.58	51.35	57.2	2732	356.3	341.0	57.2	3021	358.3	349.1
40-60mm	64.68	65.97	57.2	3044	271.0	281.2	57.2	2588	267.4	277.2
60-80mm	21.46	21.97	57.2	1793	197.1	207.2	57.2	1806	194.4	202.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	136.74	139.3	57.2	3044	291.0	300.5	57.2	3021	289.4	302.0
			Height A (mm)				Height B (mm)			
Highest Particle			76.0339				76.0466			
Lowest Particle			28.0846				28.0846			

Table A. 157: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	31.71	57.2	2732	448.4	362.9	57.2	3021	446.0	362.4	-1.270	1.260	-0.080	0.210	-1.270	1.250	0.030	0.340
40-60mm	42.88	57.2	3044	334.3	309.4	57.2	2588	330.9	306.1	-1.270	1.250	-0.070	0.190	-1.270	1.270	0.000	0.280
60-80mm	13.68	57.2	1793	239.8	234.0	57.2	1806	234.9	227.3	-1.180	1.120	-0.070	0.120	-1.270	1.260	-0.020	0.200
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	88.27	57.2	3044	360.6	328.1	57.2	3021	357.4	325.9	-1.270	1.260	-0.070	0.190	-1.270	1.270	0.010	0.300

Table A. 158: Matched Droplet Info

A.2.3.1 All Droplets for .LA Image

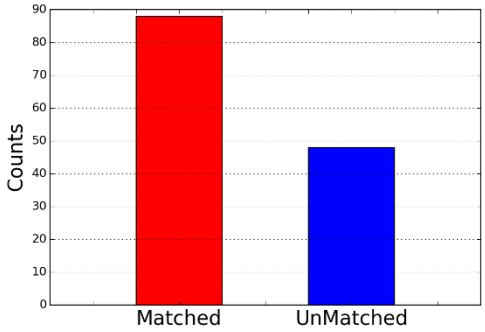


Figure A. 1481: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

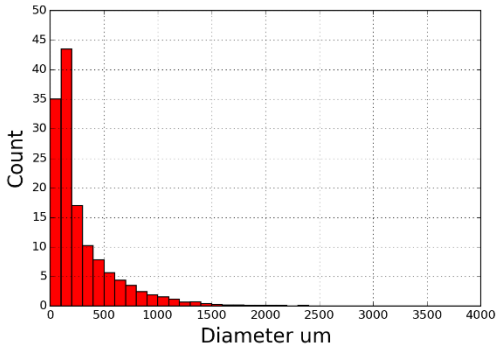


Figure A. 1482: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

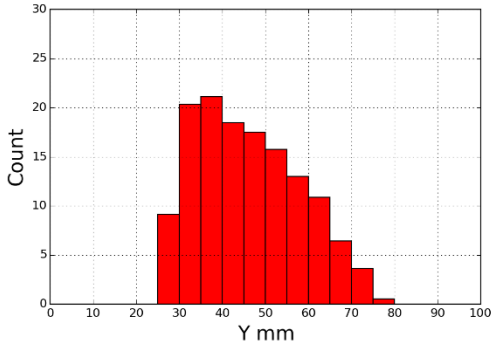


Figure A. 1483: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

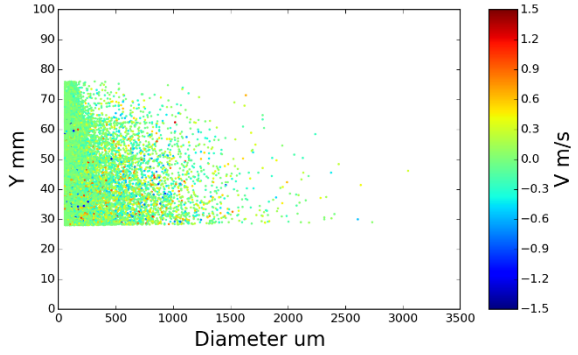


Figure A. 1484: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

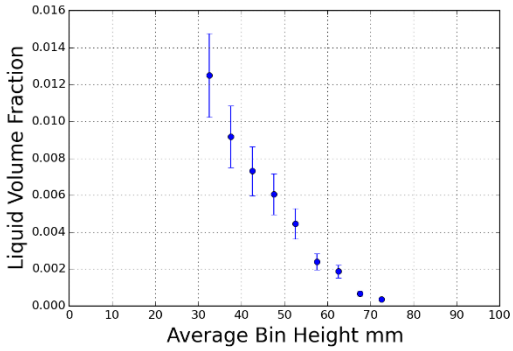


Figure A. 1485: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 All Droplets for .LB Image

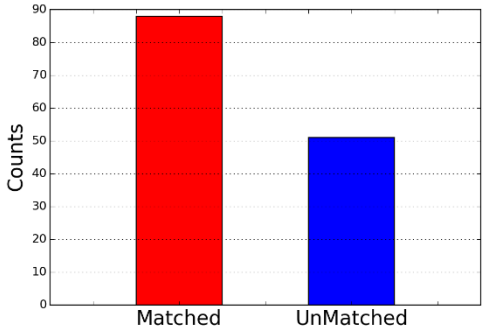


Figure A. 1486: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

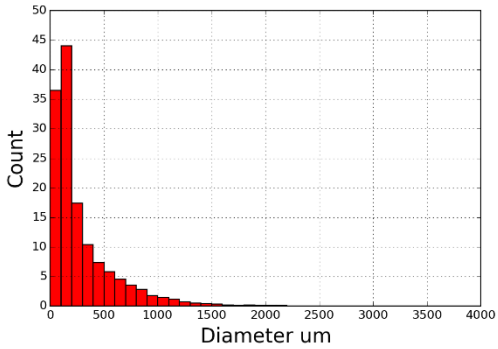


Figure A. 1487: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

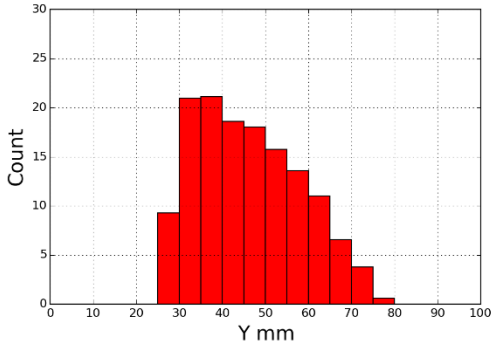


Figure A. 1488: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

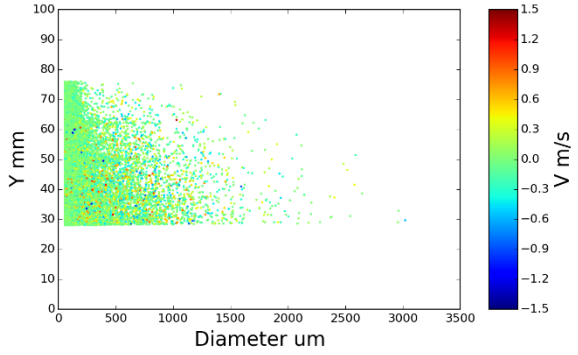


Figure A. 1489: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

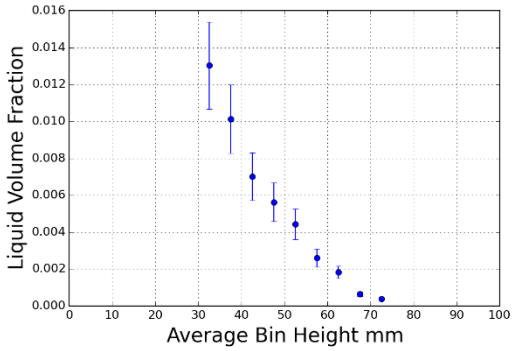


Figure A. 1490: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 Matched Only Droplets for .LA Image

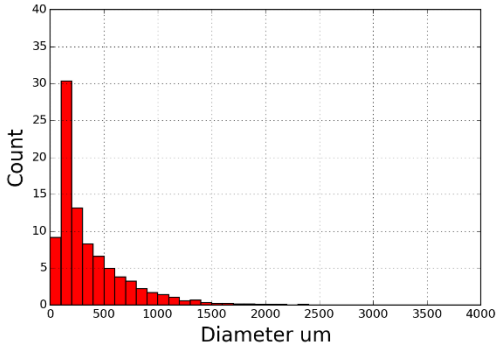


Figure A. 1491: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

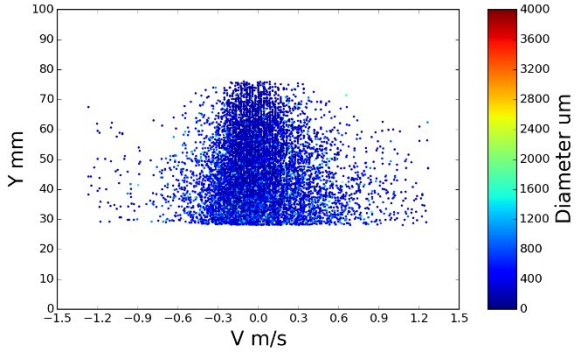


Figure A. 1494: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

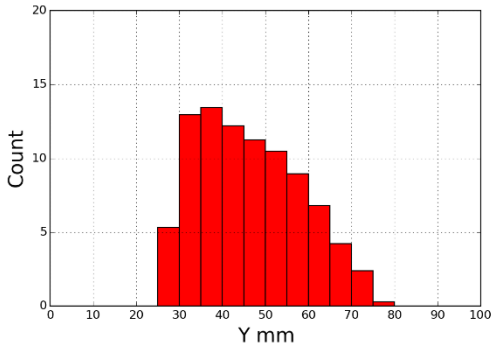


Figure A. 1492: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

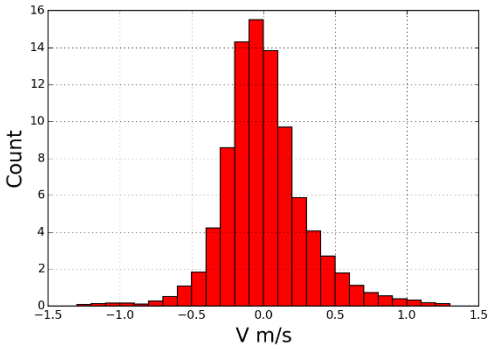


Figure A. 1495: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

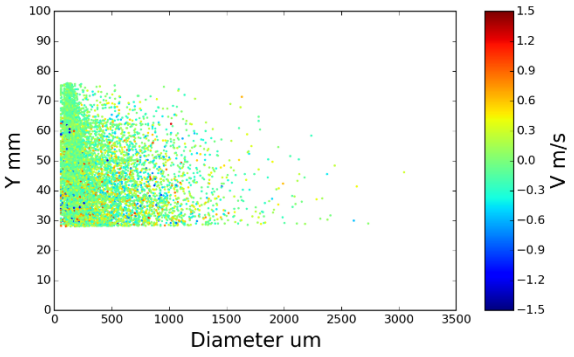


Figure A. 1493: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.1 Matched Only Droplets for .LB Image

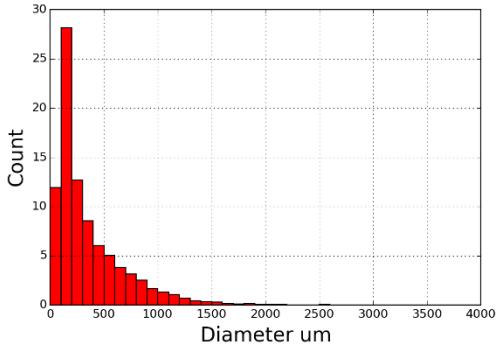


Figure A. 1496: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

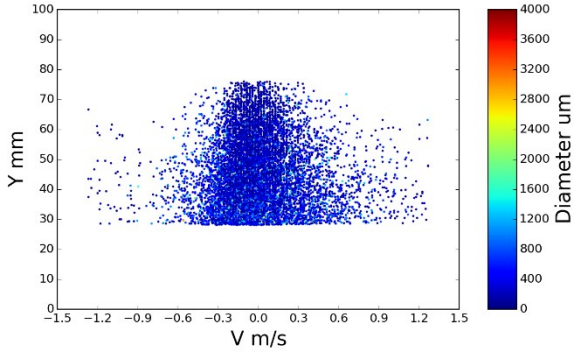


Figure A. 1499: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

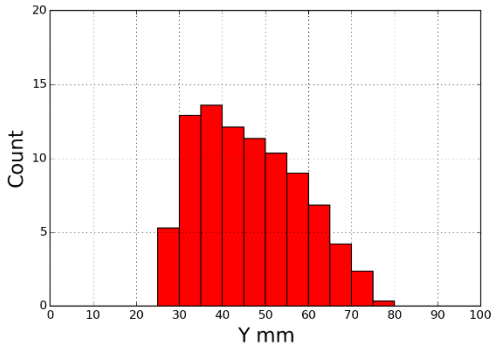


Figure A. 1497: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

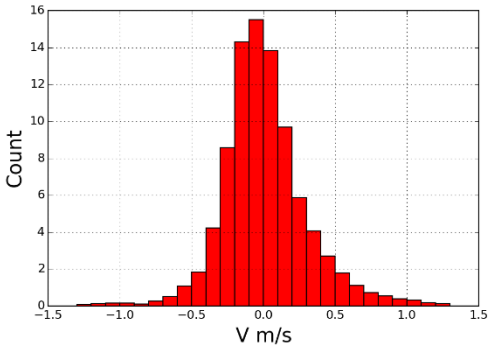


Figure A. 1500: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

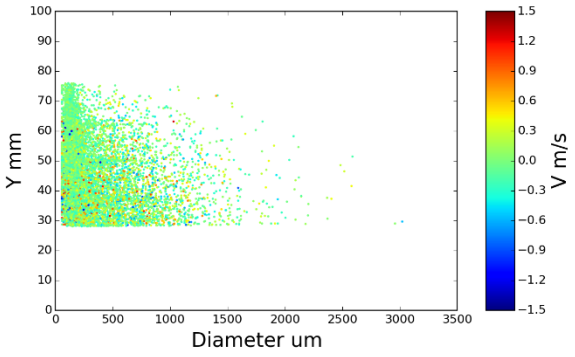


Figure A. 1498: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 Lens 50mm Mag 0_13x

A.2.3.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	68.92	70.02	128.6	3418	733.2	599.4	128.6	3379	728.0	589.1
20-40mm	93.41	93.19	128.6	3326	599.9	433.9	128.6	3290	604.0	437.1
40-60mm	32.18	32.33	128.6	2539	518.9	329.6	128.6	2109	518.5	328.5
60-80mm	5.15	5.16	128.6	1704	496.9	289.1	128.6	1728	500.1	288.7
80-100mm	0.33	0.3	128.6	891.2	469.2	205.7	192.9	907.3	510.6	189.5
All	199.99	201.0	128.6	3418	629.9	487.9	128.6	3379	630.6	484.9
			Height A (mm)				Height B (mm)			
Highest Particle			92.1184				91.4817			
Lowest Particle			10.0890				10.0890			

Table A. 159: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	36.46	128.6	3418	859.0	614.4	128.6	3376	836.5	597.1	-1.220	1.220	-0.080	0.400	-1.220	1.220	0.030	0.430
20-40mm	60.33	128.6	3322	672.5	437.3	128.6	3198	667.4	435.4	-1.210	1.220	-0.070	0.270	-1.220	1.220	0.010	0.380
40-60mm	23.91	128.6	2539	586.8	330.5	128.6	2109	581.0	330.0	-1.220	1.180	-0.070	0.180	-1.200	1.210	0.010	0.310
60-80mm	4.01	128.6	1503	556.7	276.4	128.6	1728	554.8	283.9	-1.130	0.690	-0.060	0.150	-0.880	0.980	-0.030	0.230
80-100mm	0.28	257.3	891.2	527.0	166.8	192.9	907.3	531.0	179.3	-0.280	0.100	-0.110	0.100	-0.450	0.280	-0.060	0.190
All	124.99	128.6	3418	706.5	486.5	128.6	3376	696.2	477.8	-1.220	1.220	-0.070	0.300	-1.220	1.220	0.020	0.380

Table A. 160: Matched Droplet Info

A.2.3.2 All Droplets for .LA Image

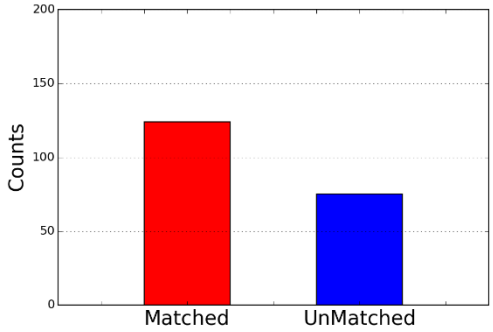


Figure A. 1501: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

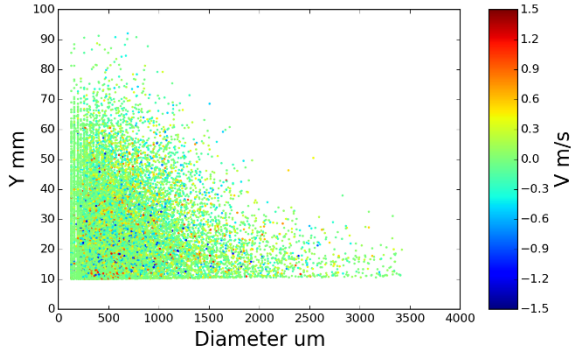


Figure A. 1504: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

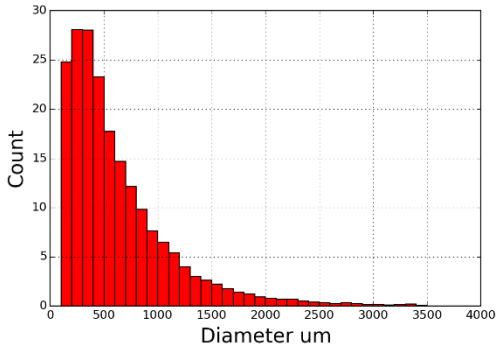


Figure A. 1502: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

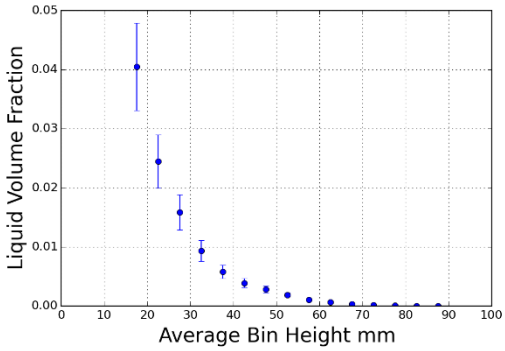


Figure A. 1505: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

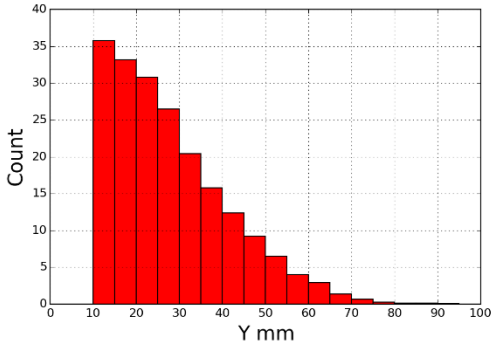


Figure A. 1503: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 All Droplets for .LB Image

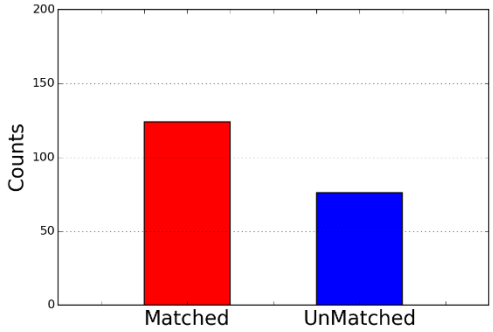


Figure A. 1506: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

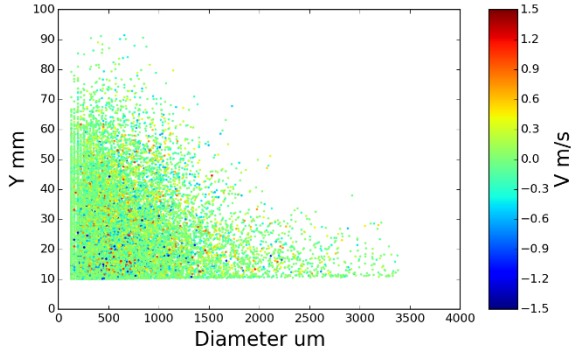


Figure A. 1509: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

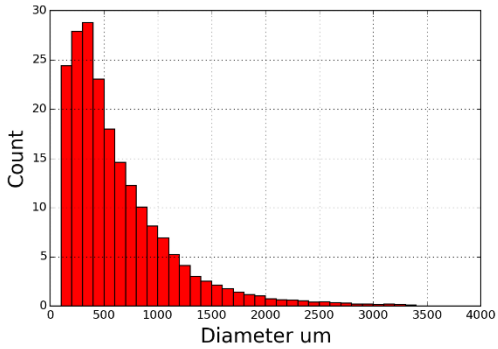


Figure A. 1507: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

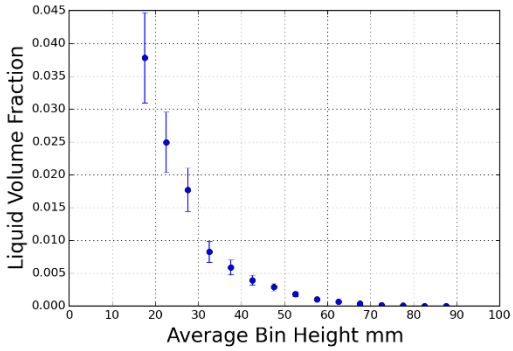


Figure A. 1510: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

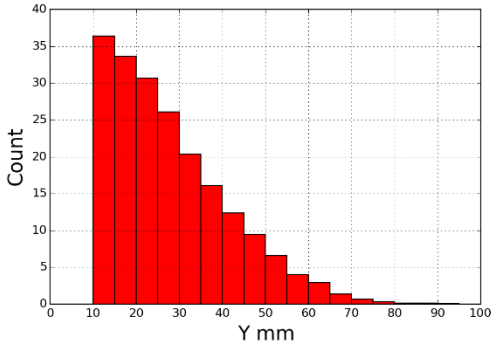


Figure A. 1508: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 Matched Only Droplets for .LA Image

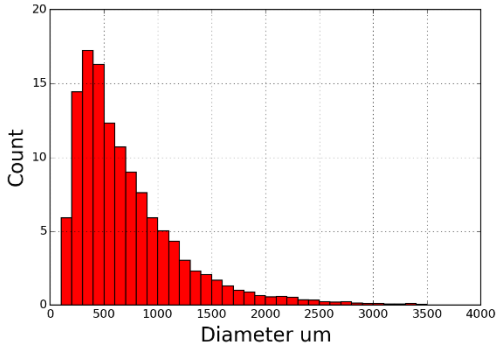


Figure A. 1511: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

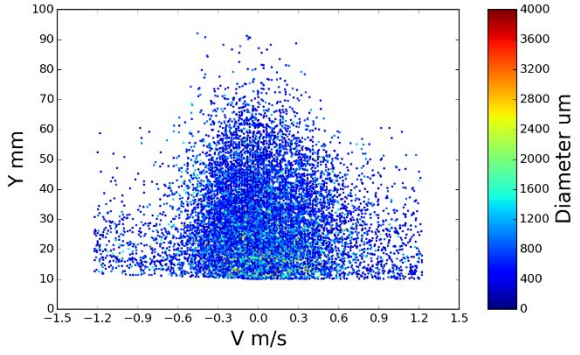


Figure A. 1514: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

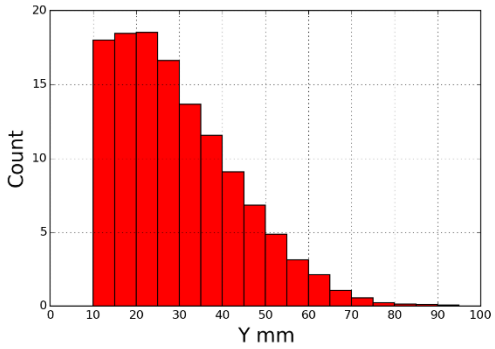


Figure A. 1512: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

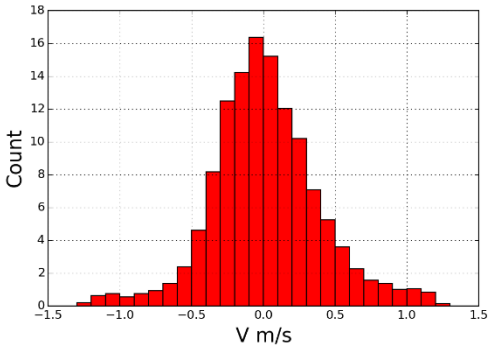


Figure A. 1515: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

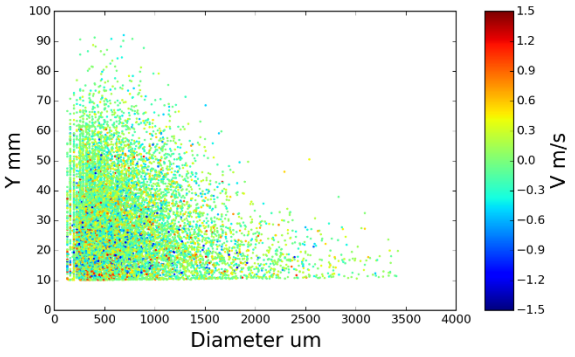


Figure A. 1513: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 Matched Only Droplets for .LB Image

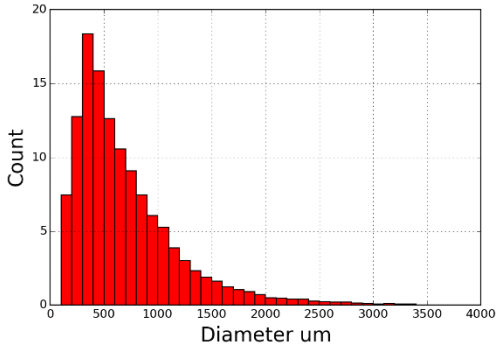


Figure A. 1516: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

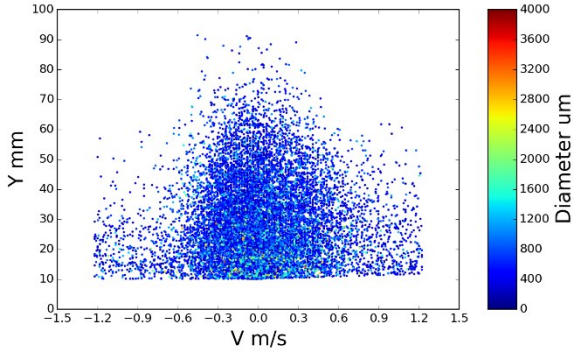


Figure A. 1519: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

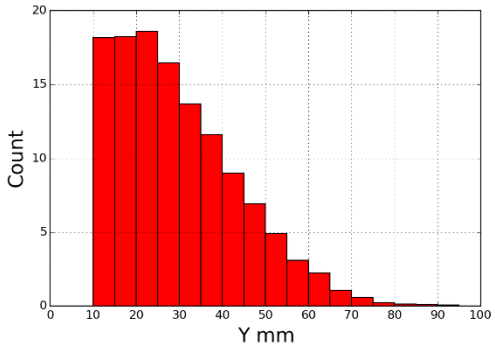


Figure A. 1517: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

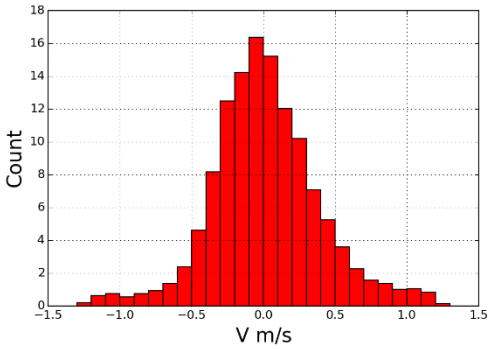


Figure A. 1520: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

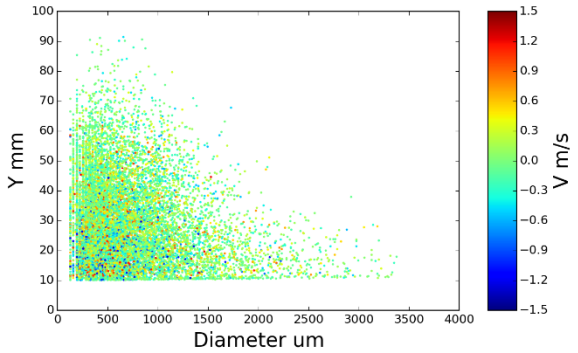


Figure A. 1518: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	64.6	65.04	128.6	3414	775.7	614.0	128.6	3378	774.5	612.9
20-40mm	90.15	90.75	128.6	3284	648.4	471.2	128.6	3402	647.4	473.3
40-60mm	32.04	32.54	128.6	2349	582.3	348.4	128.6	2667	583.6	350.1
60-80mm	5.72	5.52	128.6	2154	535.1	327.8	128.6	2161	533.5	320.3
80-100mm	0.28	0.29	192.9	1110	611.2	283.9	128.6	1084	587.6	279.4
All	192.79	194.14	128.6	3414	676.7	509.3	128.6	3402	676.0	509.7
			Height A (mm)				Height B (mm)			
Highest Particle			98.3925				97.9113			
Lowest Particle			10.0890				10.0890			

Table A. 161: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	32.99	128.6	3414	919.1	635.4	128.6	3378	901.3	628.3	-1.220	1.220	-0.080	0.410	-1.220	1.220	-0.010	0.450
20-40mm	57.43	128.6	3284	737.5	486.0	128.6	3402	725.5	479.1	-1.220	1.220	-0.070	0.290	-1.220	1.220	-0.030	0.380
40-60mm	24.04	128.6	2349	654.5	345.7	128.6	2667	649.0	347.6	-1.140	1.200	-0.060	0.180	-1.220	1.180	-0.020	0.300
60-80mm	4.21	128.6	2154	622.6	324.5	128.6	2161	614.0	313.5	-1.210	1.140	-0.070	0.150	-0.670	1.030	-0.030	0.240
80-100mm	0.23	280.4	1110	679.9	266.5	222.8	1084	654.5	257.6	-0.320	0.100	-0.090	0.120	-0.380	0.320	-0.030	0.220
All	118.9	128.6	3414	766.9	514.1	128.6	3402	754.9	507.9	-1.220	1.220	-0.070	0.310	-1.220	1.220	-0.020	0.380

Table A. 162: Matched Droplet Info

A.2.3.2 All Droplets for .LA Image

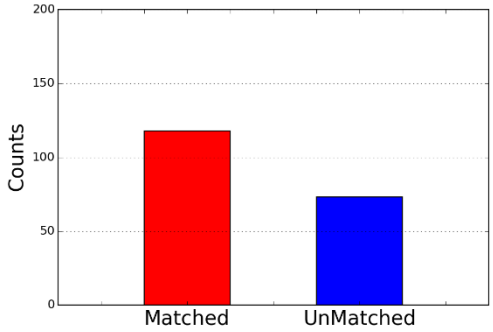


Figure A. 1521: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

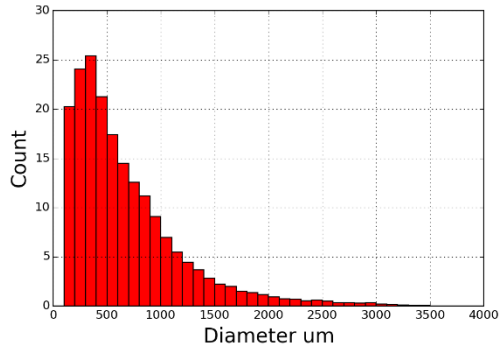


Figure A. 1522: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

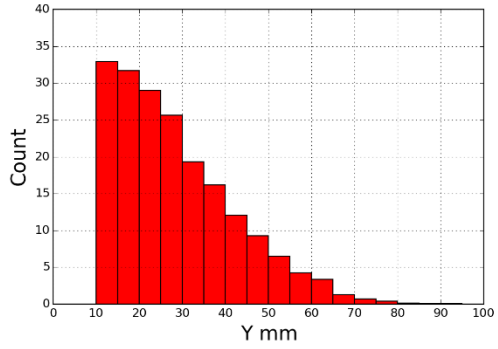


Figure A. 1523: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

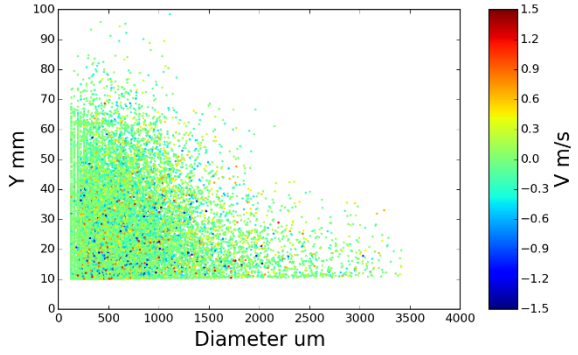


Figure A. 1524: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

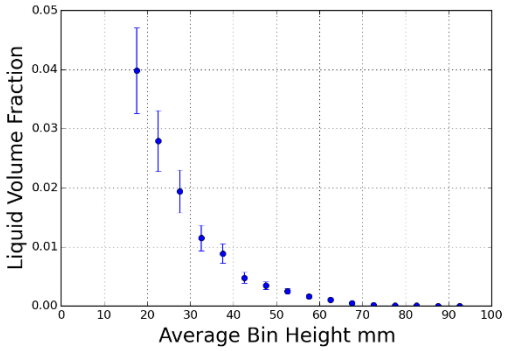


Figure A. 1525: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 All Droplets for .LB Image

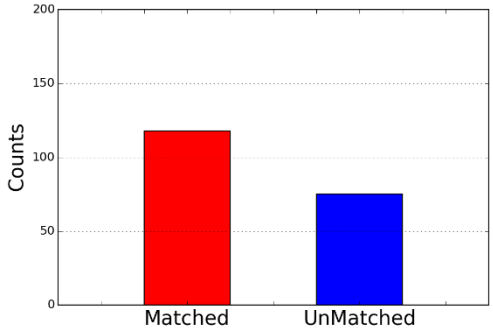


Figure A. 1526: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

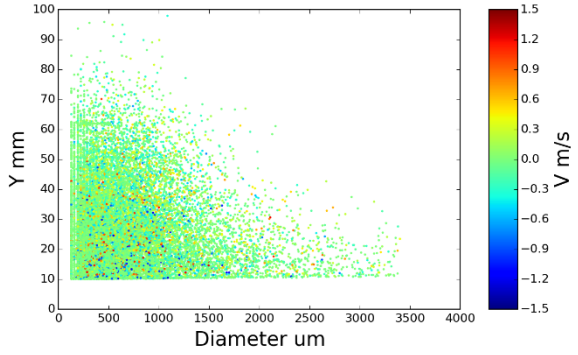


Figure A. 1529: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

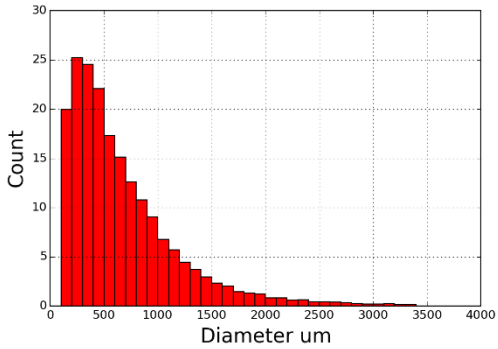


Figure A. 1527: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

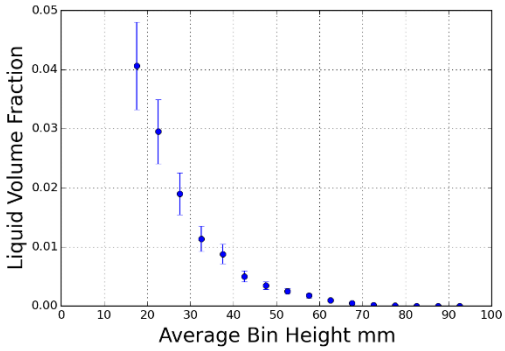


Figure A. 1530: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

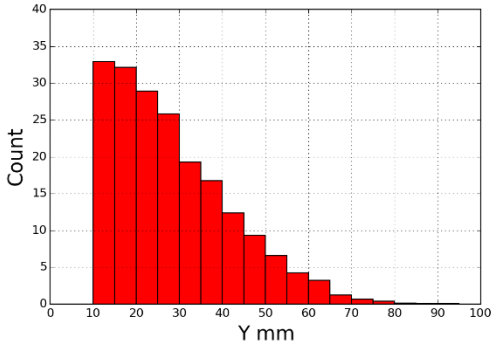


Figure A. 1528: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 Matched Only Droplets for .LA Image

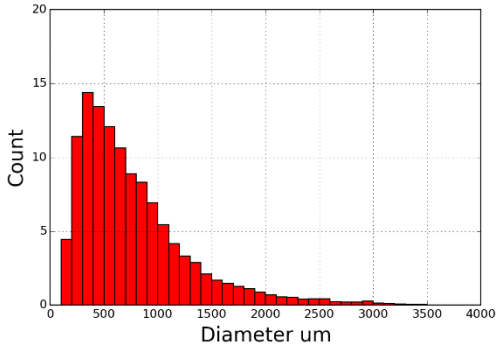


Figure A. 1531: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

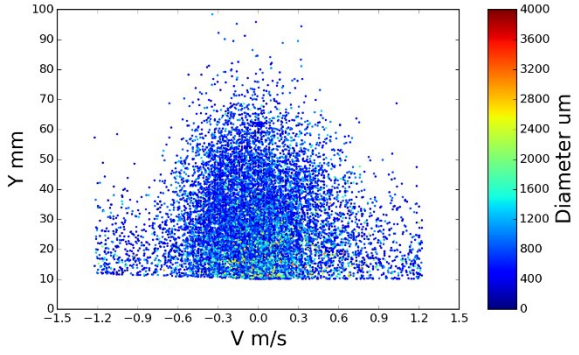


Figure A. 1534: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

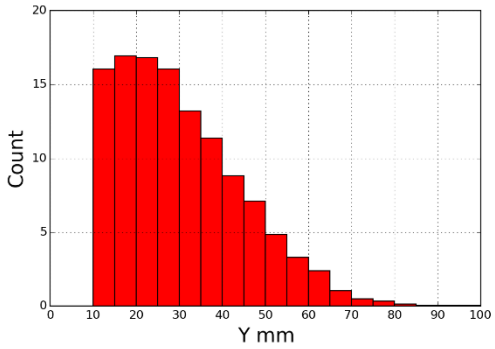


Figure A. 1532: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

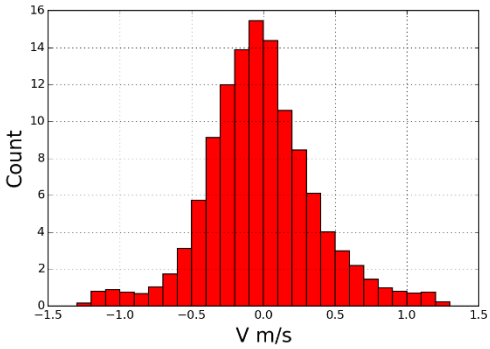


Figure A. 1535: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

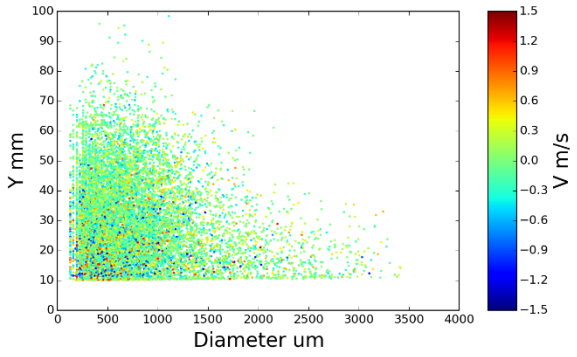


Figure A. 1533: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 Matched Only Droplets for .LB Image

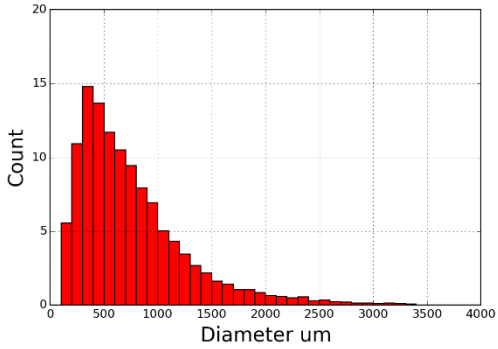


Figure A. 1536: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

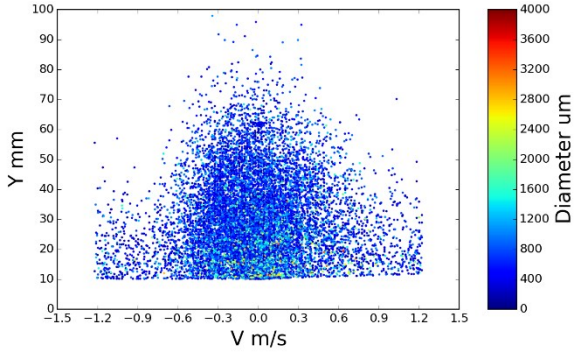


Figure A. 1539: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

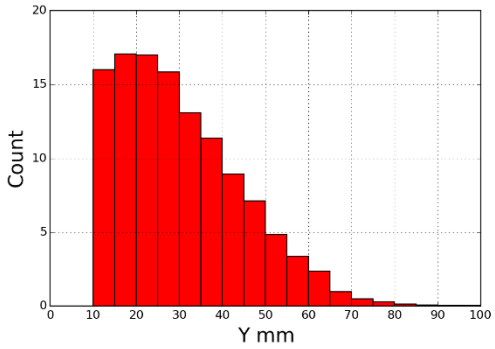


Figure A. 1537: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

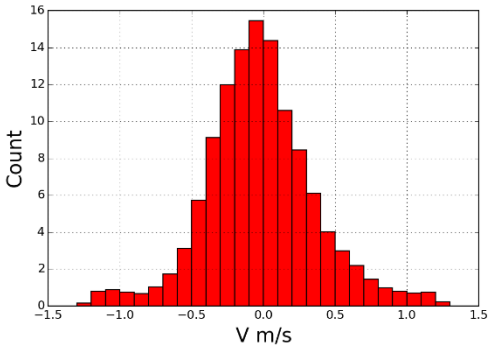


Figure A. 1540: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

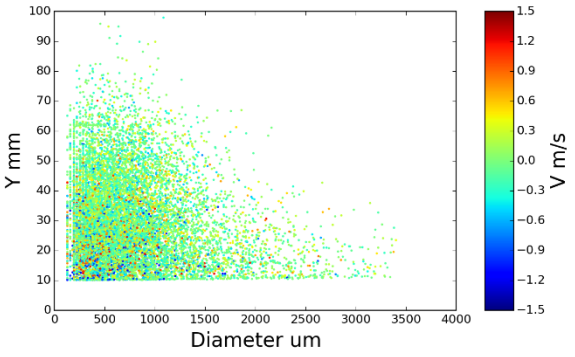


Figure A. 1538: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	60.19	59.44	128.6	3414	792.0	636.2	128.6	3398	793.4	631.1
20-40mm	82.87	83.46	128.6	3395	644.7	471.3	128.6	3414	642.6	472.1
40-60mm	29.94	29.97	128.6	2764	584.1	383.8	128.6	2498	580.1	382.4
60-80mm	4.64	4.65	128.6	2234	536.2	331.7	128.6	2332	531.0	316.7
80-100mm	0.23	0.19	128.6	1013	355.9	206.4	128.6	1023	383.3	215.0
All	177.87	177.71	128.6	3414	681.1	524.6	128.6	3414	679.3	522.1
			Height A (mm)				Height B (mm)			
Highest Particle			98.8468				98.8380			
Lowest Particle			10.0890				10.0890			

Table A. 163: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	28.31	128.6	3411	972.1	666.9	128.6	3378	950.4	667.9	-1.220	1.220	-0.070	0.420	-1.220	1.220	-0.010	0.460
20-40mm	50.83	128.6	3395	739.8	483.2	128.6	3273	728.2	473.9	-1.220	1.220	-0.080	0.310	-1.220	1.220	-0.040	0.400
40-60mm	21.55	128.6	2764	667.1	386.1	128.6	2498	664.5	386.3	-1.190	1.220	-0.080	0.190	-1.180	1.220	-0.050	0.310
60-80mm	3.48	128.6	2234	606.6	321.1	128.6	2332	596.0	316.6	-1.010	1.020	-0.090	0.150	-0.680	1.060	-0.040	0.250
80-100mm	0.11	222.8	1013	470.7	233.4	192.9	1023	459.2	249.3	-0.180	0.530	-0.040	0.190	-0.970	0.080	-0.310	0.260
All	104.28	128.6	3411	783.1	532.4	128.6	3378	771.2	527.7	-1.220	1.220	-0.080	0.320	-1.220	1.220	-0.040	0.400

Table A. 164: Matched Droplet Info

A.2.3.2 All Droplets for .LA Image

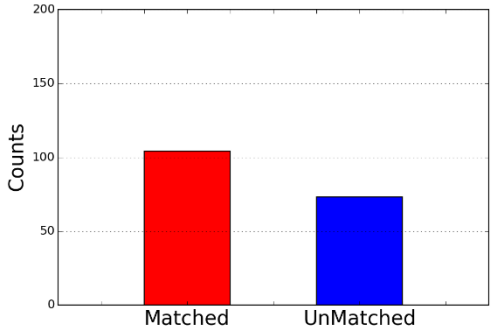


Figure A. 1541: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

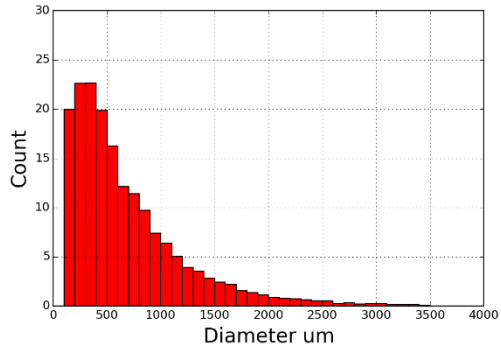


Figure A. 1542: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

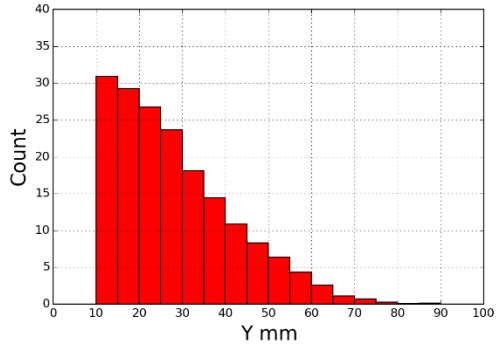


Figure A. 1543: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

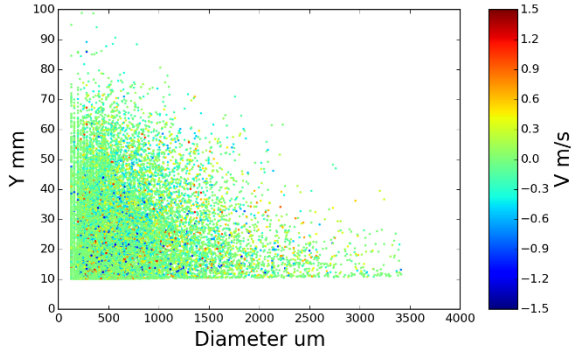


Figure A. 1544: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

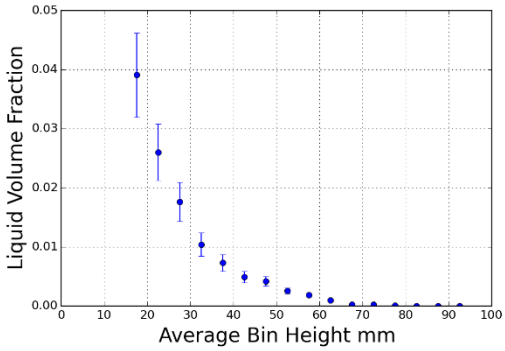


Figure A. 1545: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 All Droplets for .LB Image

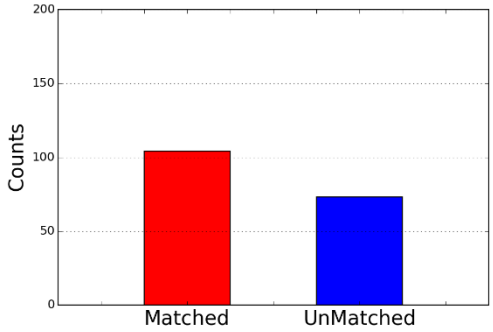


Figure A. 1546: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

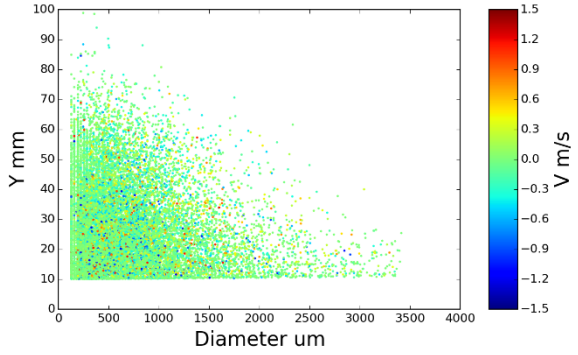


Figure A. 1549: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

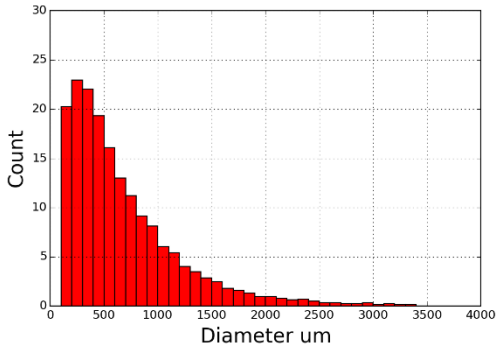


Figure A. 1547: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

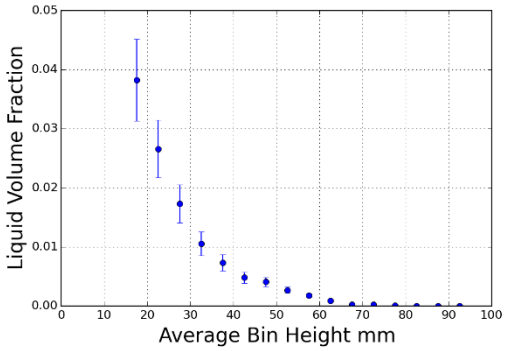


Figure A. 1550: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

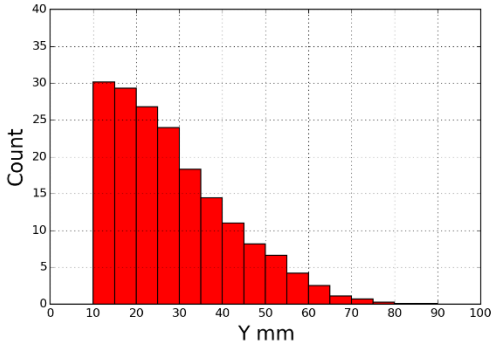


Figure A. 1548: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 Matched Only Droplets for .LA Image

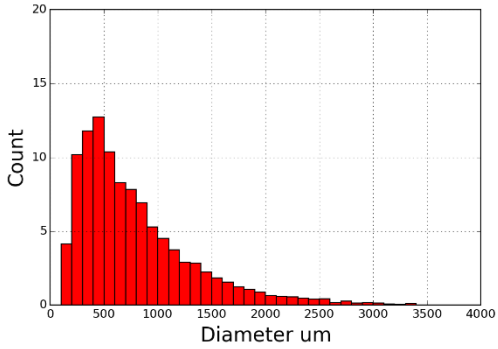


Figure A. 1551: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

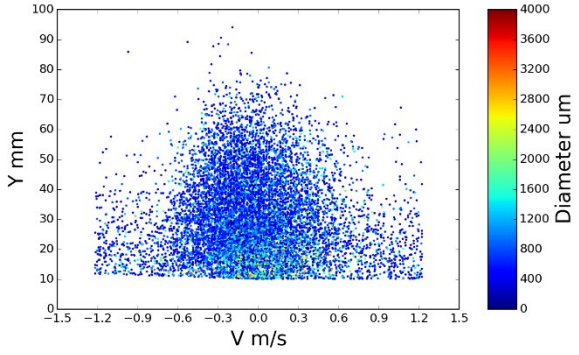


Figure A. 1554: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

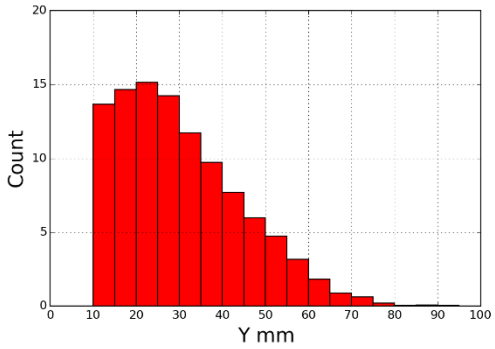


Figure A. 1552: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

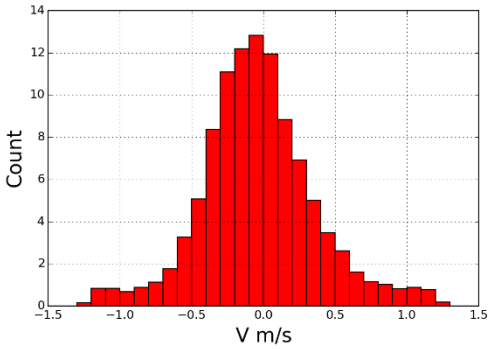


Figure A. 1555: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

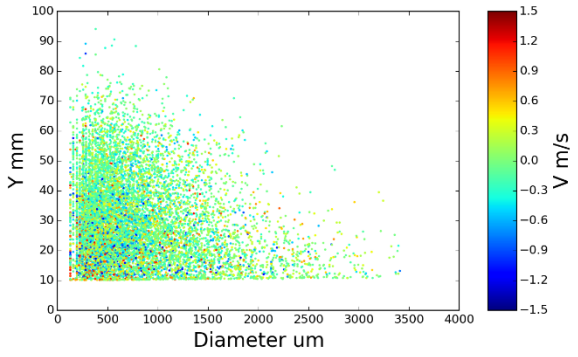


Figure A. 1553: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 Matched Only Droplets for .LB Image

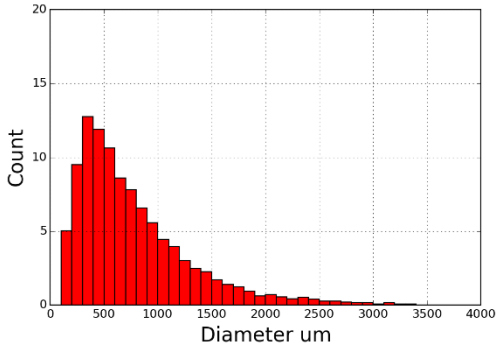


Figure A. 1556: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

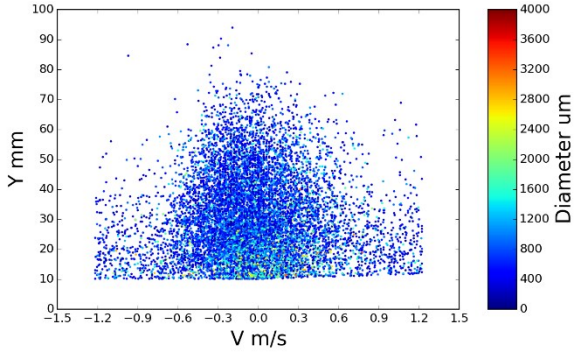


Figure A. 1559: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

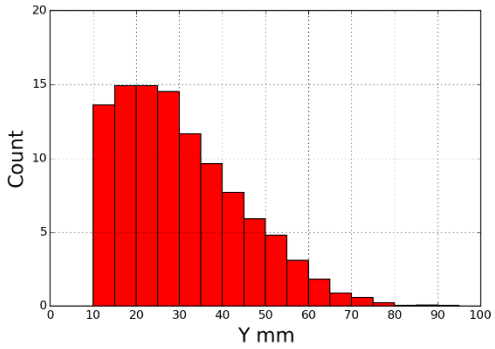


Figure A. 1557: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

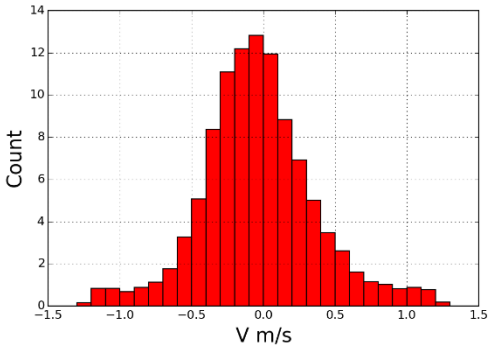


Figure A. 1560: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

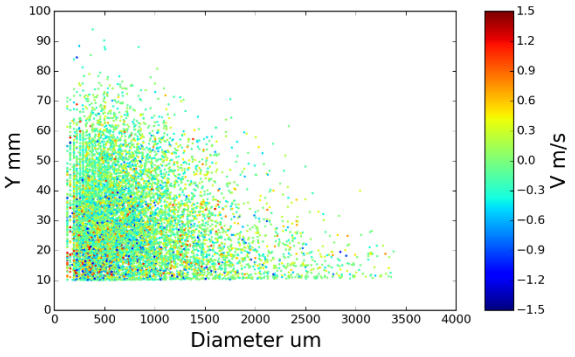


Figure A. 1558: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	52.39	53.15	128.6	3412	769.8	645.6	128.6	3419	759.7	633.9
20-40mm	77.06	77.68	128.6	3219	623.0	461.4	128.6	3418	626.0	466.8
40-60mm	31.28	31.32	128.6	3276	545.2	380.1	128.6	2993	546.6	368.3
60-80mm	5.46	5.51	128.6	1975	506.3	312.4	128.6	2082	501.7	311.7
80-100mm	0.53	0.54	157.6	1321	471.9	251.9	157.6	1387	465.5	242.8
All	166.72	168.2	128.6	3412	650.2	517.3	128.6	3419	648.9	512.9
			Height A (mm)				Height B (mm)			
Highest Particle			96.1875				95.9880			
Lowest Particle			10.0890				10.0890			

Table A. 165: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	22.7	128.6	3412	979.3	703.1	128.6	3419	959.0	697.4	-1.220	1.220	-0.070	0.430	-1.220	1.220	-0.010	0.470
20-40mm	45.35	128.6	3219	725.0	477.1	128.6	3339	714.0	473.6	-1.220	1.220	-0.080	0.310	-1.220	1.220	-0.030	0.390
40-60mm	21.51	128.6	3276	632.6	383.6	128.6	2993	625.4	373.6	-1.170	1.180	-0.090	0.190	-1.220	1.210	-0.030	0.320
60-80mm	4.09	128.6	1975	581.1	312.9	128.6	2082	579.9	310.5	-0.900	0.890	-0.090	0.140	-1.190	0.950	-0.040	0.260
80-100mm	0.38	192.9	1152	496.2	215.1	181.9	1387	504.1	237.4	-0.520	0.100	-0.120	0.130	-0.420	0.720	0.090	0.230
All	94.03	128.6	3412	758.0	533.7	128.6	3419	746.1	527.4	-1.220	1.220	-0.080	0.320	-1.220	1.220	-0.020	0.390

Table A. 166: Matched Droplet Info

A.2.3.2 All Droplets for .LA Image

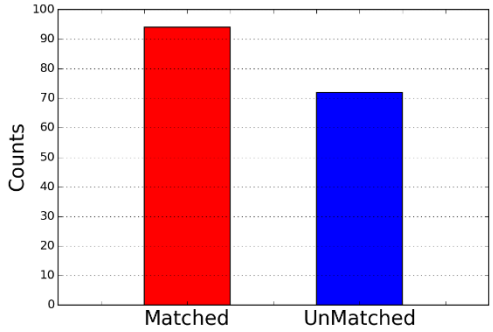


Figure A. 1561: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

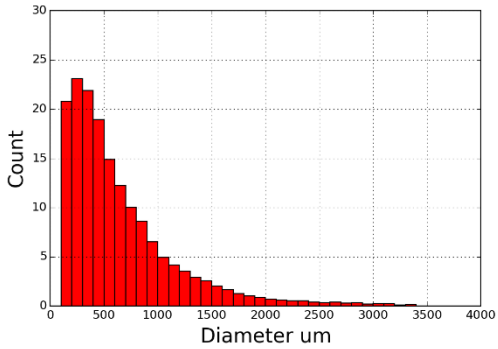


Figure A. 1562: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

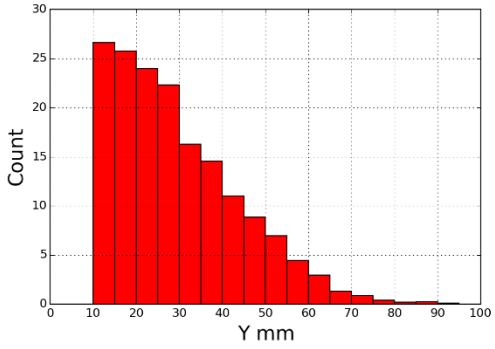


Figure A. 1563: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

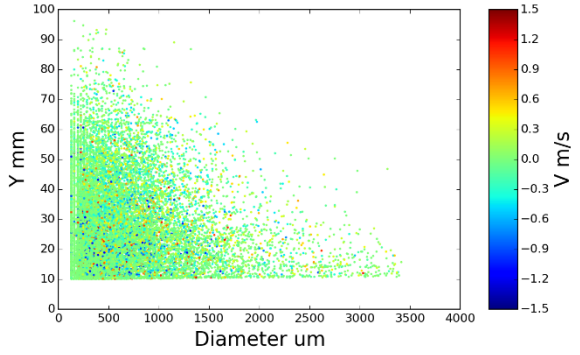


Figure A. 1564: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

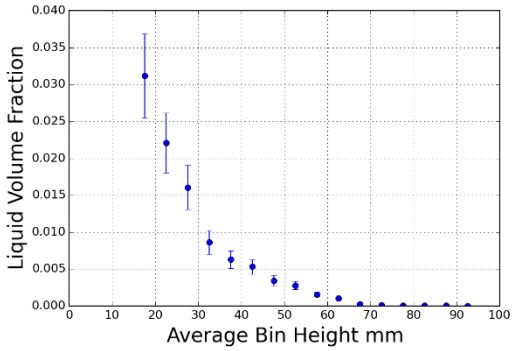


Figure A. 1565: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 All Droplets for .LB Image

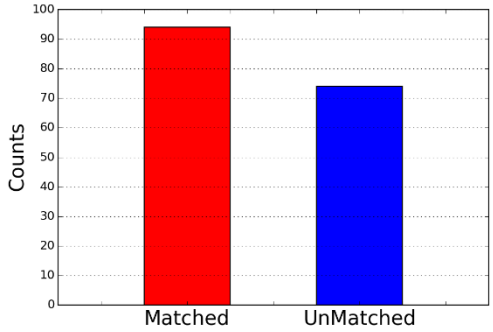


Figure A. 1566: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

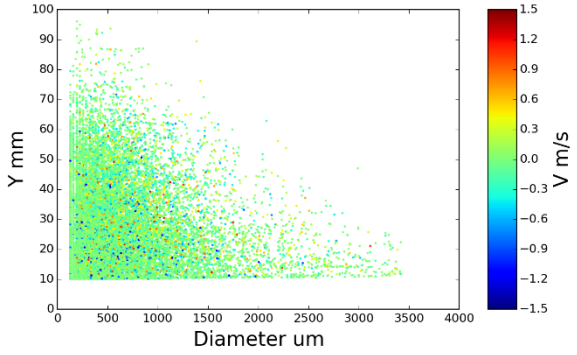


Figure A. 1569: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

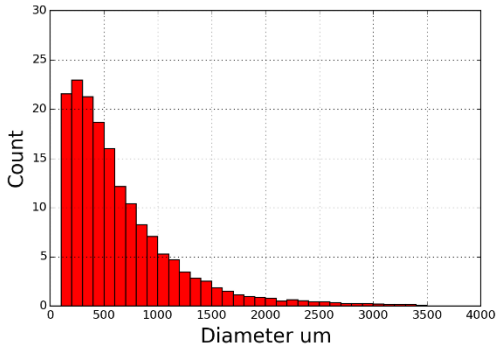


Figure A. 1567: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

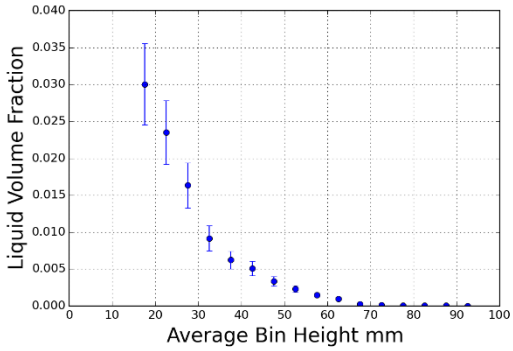


Figure A. 1570: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

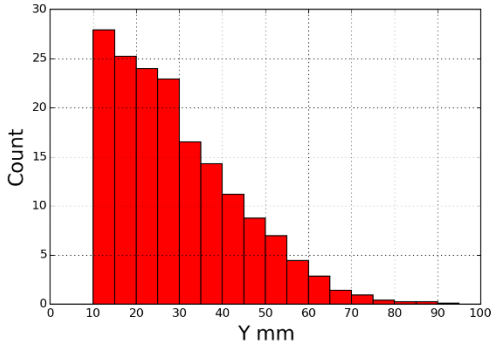


Figure A. 1568: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 Matched Only Droplets for .LA Image

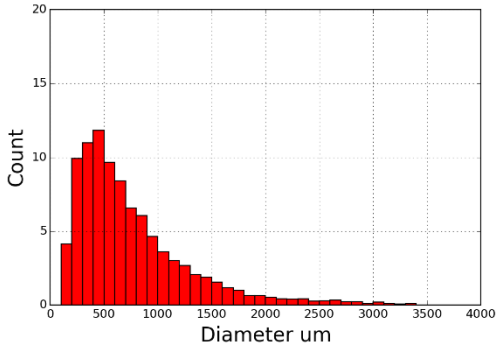


Figure A. 1571: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

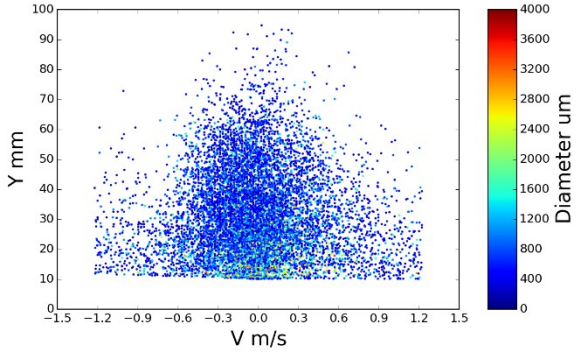


Figure A. 1574: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

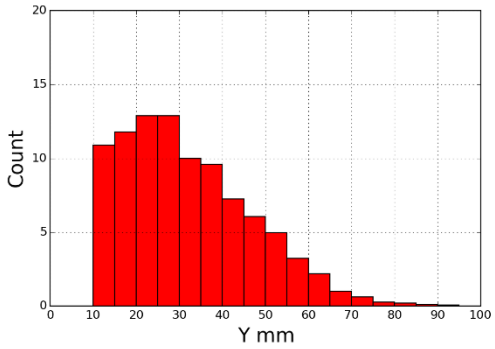


Figure A. 1572: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

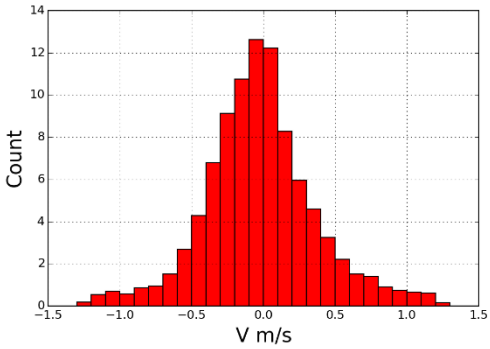


Figure A. 1575: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

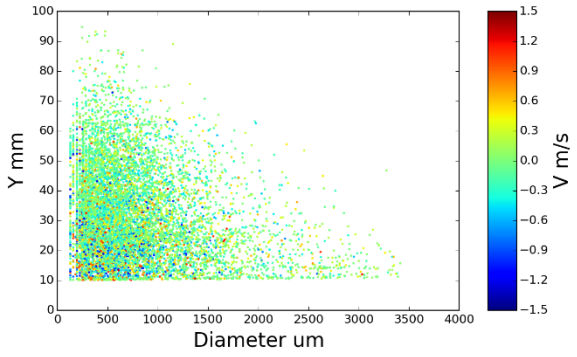


Figure A. 1573: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 Matched Only Droplets for .LB Image

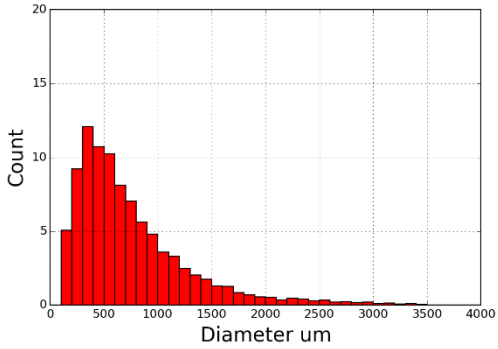


Figure A. 1576: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

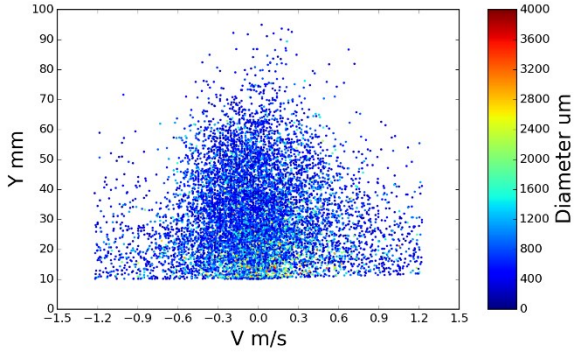


Figure A. 1579: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

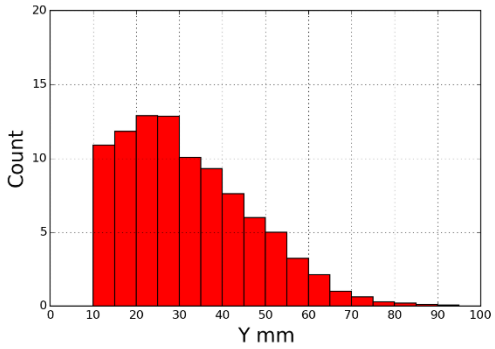


Figure A. 1577: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

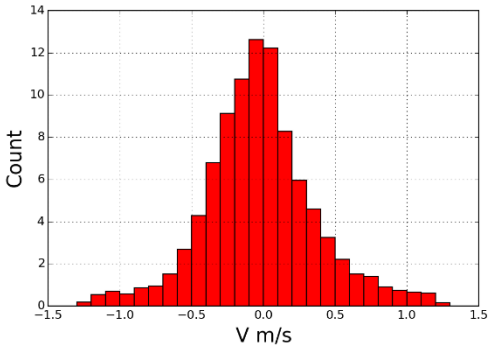


Figure A. 1580: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

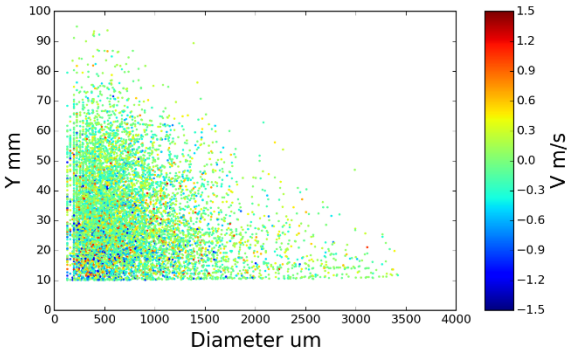


Figure A. 1578: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	45.3	46.78	128.6	3391	748.5	624.9	128.6	3413	738.0	616.6
20-40mm	61.99	63.19	128.6	3372	602.0	460.7	128.6	3271	591.5	448.5
40-60mm	28.63	28.2	128.6	2959	488.9	359.4	128.6	3287	492.1	358.5
60-80mm	5.55	5.68	128.6	2674	468.4	319.1	128.6	2630	457.2	308.3
80-100mm	0.44	0.44	128.6	1858	425.9	311.9	128.6	1637	401.8	261.3
All	141.92	144.29	128.6	3391	620.2	507.5	128.6	3413	613.7	499.6
			Height A (mm)				Height B (mm)			
Highest Particle			98.7750				99.2892			
Lowest Particle			10.0890				10.0890			

Table A. 167: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	19.23	128.6	3391	933.4	683.2	128.6	3413	909.9	669.6	-1.190	1.220	-0.070	0.430	-1.220	1.220	0.000	0.460
20-40mm	35.48	128.6	3310	706.9	478.1	128.6	3169	693.1	467.9	-1.210	1.220	-0.090	0.290	-1.220	1.220	0.000	0.400
40-60mm	19.05	128.6	2959	573.1	363.9	128.6	3287	565.6	362.8	-1.220	1.220	-0.090	0.190	-1.210	1.170	0.020	0.330
60-80mm	3.79	128.6	1886	546.9	306.0	128.6	1592	536.2	293.5	-0.880	0.650	-0.090	0.140	-1.160	0.850	-0.020	0.270
80-100mm	0.3	192.9	1858	483.9	304.7	222.8	1637	465.7	269.2	-0.350	0.210	-0.130	0.130	-0.380	0.410	-0.060	0.200
All	77.85	128.6	3391	721.5	524.5	128.6	3413	707.1	514.1	-1.220	1.220	-0.080	0.310	-1.220	1.220	0.010	0.400

Table A. 168: Matched Droplet Info

A.2.3.2 All Droplets for .LA Image

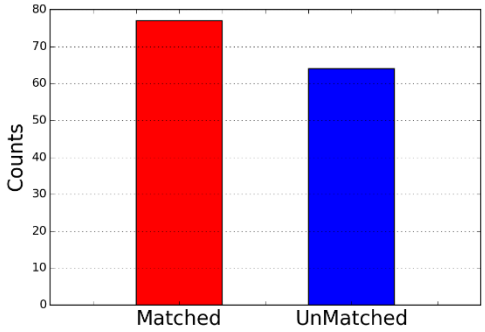


Figure A. 1581: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

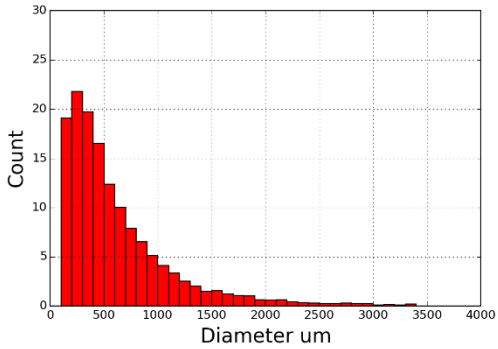


Figure A. 1582: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

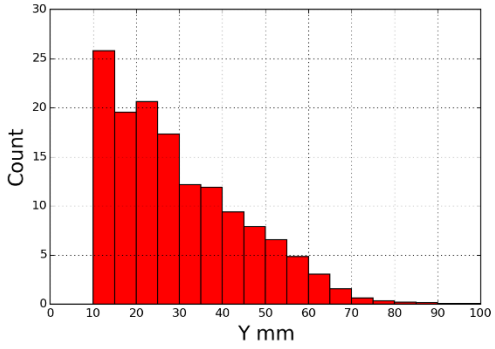


Figure A. 1583: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

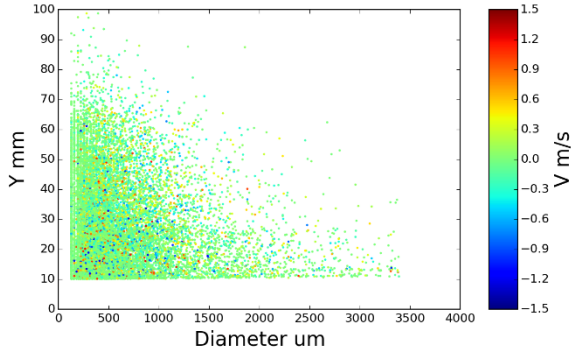


Figure A. 1584: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

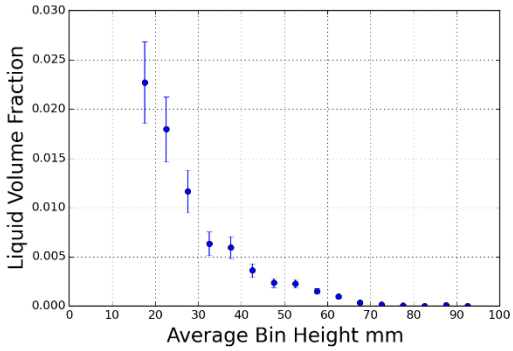


Figure A. 1585: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 All Droplets for .LB Image

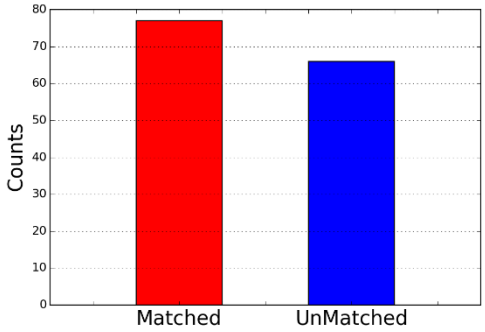


Figure A. 1586: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

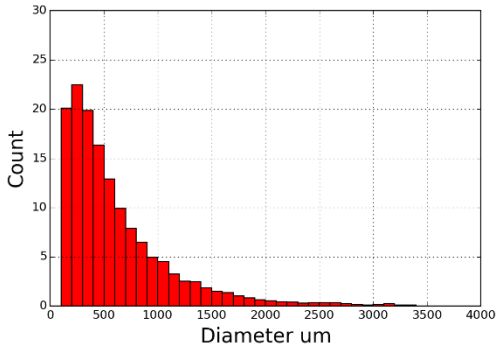


Figure A. 1587: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

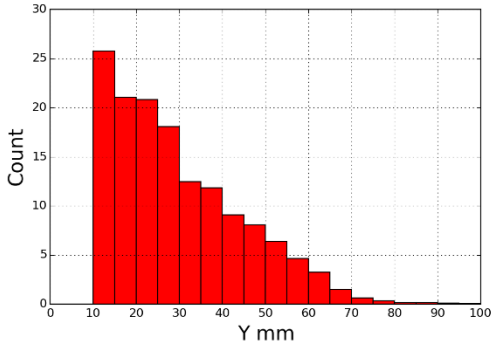


Figure A. 1588: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

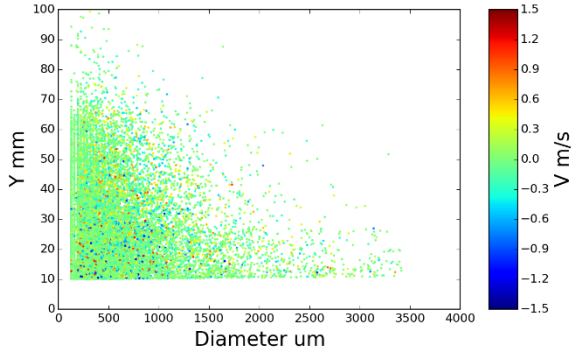


Figure A. 1589: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

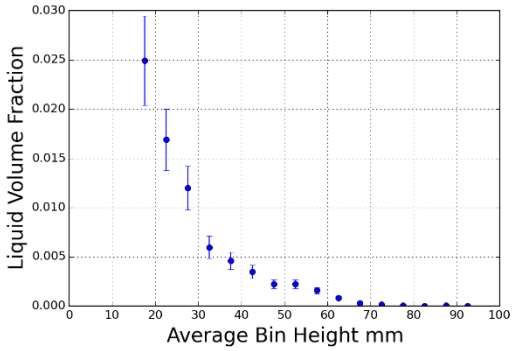


Figure A. 1590: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 Matched Only Droplets for .LA Image

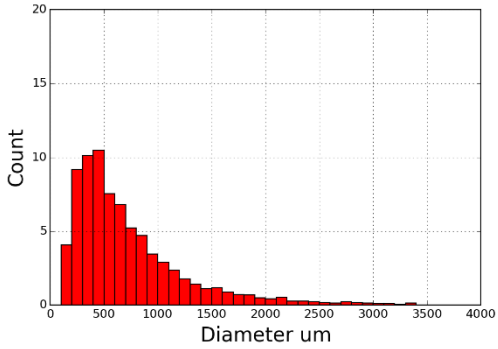


Figure A. 1591: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

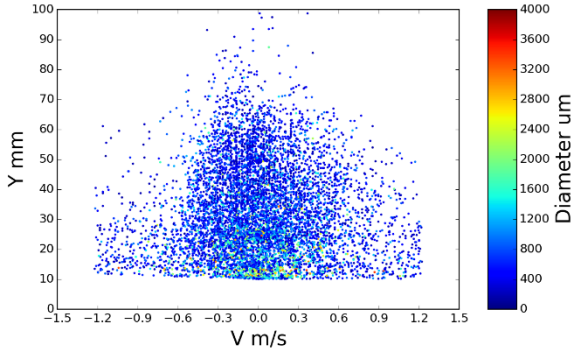


Figure A. 1594: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

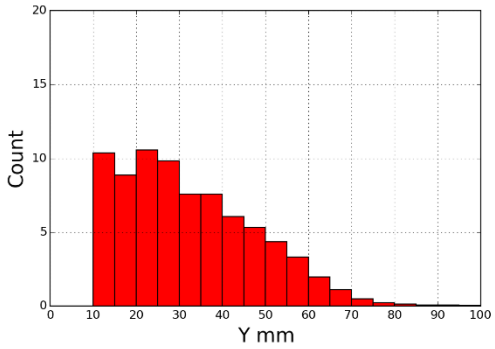


Figure A. 1592: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

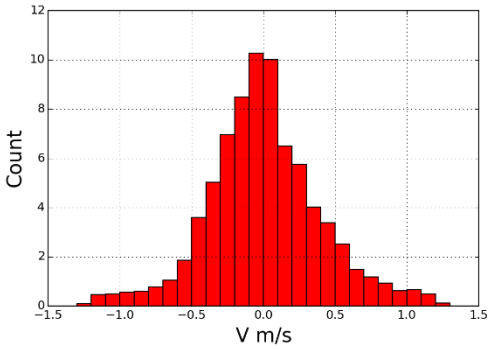


Figure A. 1595: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

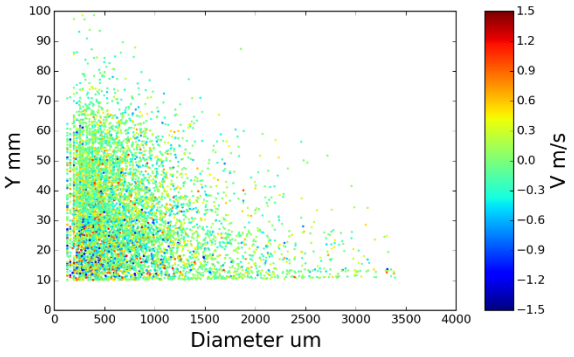


Figure A. 1593: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.3.2 Matched Only Droplets for .LB Image

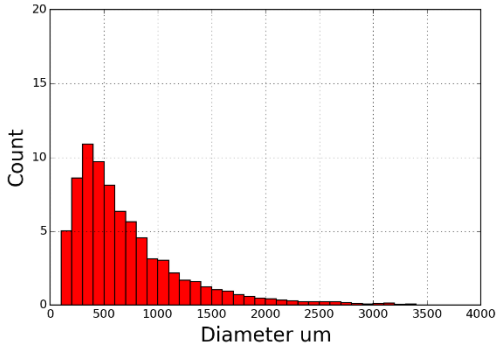


Figure A. 1596: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

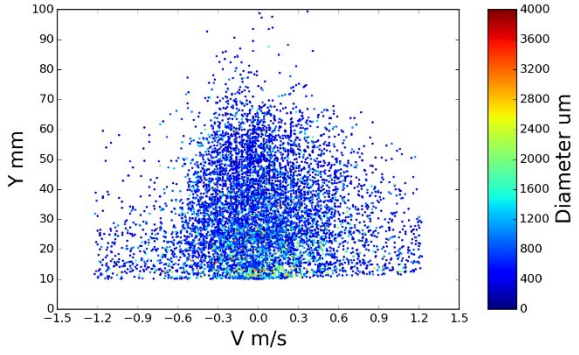


Figure A. 1599: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

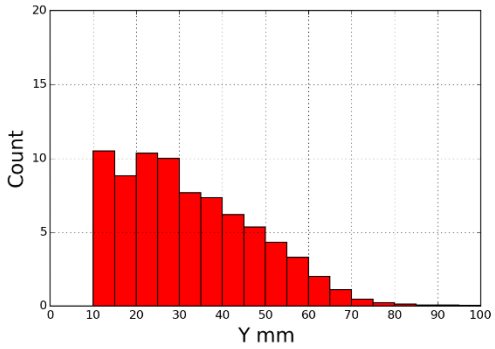


Figure A. 1597: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

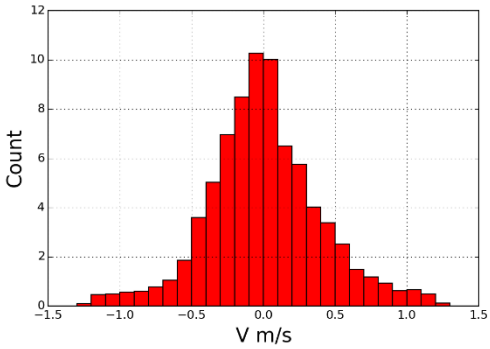


Figure A. 1600: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

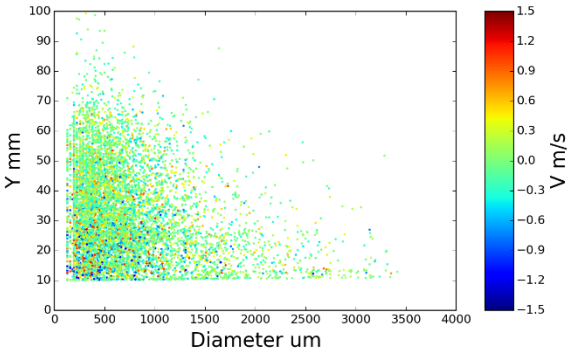


Figure A. 1598: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4 Liquid Level 4

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	23595 / 2.973
Ref Mass Flow (lb/hr) / (kg/s)	1620 / 0.204
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15052 / 20.414
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	7112 / 22.43
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	40.1 / 4.53
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.4 / 4.64
Total Bundle Q (Btu/hr) / (kW)	152280 / 44.63
Total Bundle & Preboiler Q (Btu/hr) / (kW)	152280 / 44.63
Top Two Rows HTC Ratio	0.937
Bundle Inlet Quality	0.00
Bundle Exit Quality	0.08

Table A. 169: Thermal Conditions

A.2.4.1 Lens 100mm Mag 0_29x

A.2.4.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	19.99	20.74	57.2	1907	288.9	275.9	57.2	2124	286.3	278.3
40-60mm	16.09	16.31	57.2	1659	207.8	223.4	57.2	1803	205.2	222.8
60-80mm	4.4	4.29	57.2	1233	113.7	92.5	57.2	1231	117.0	91.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	40.48	41.35	57.2	1907	237.6	248.3	57.2	2124	236.7	249.8
			Height A (mm)				Height B (mm)			
Highest Particle			75.9213				75.8436			
Lowest Particle			28.0846				28.0966			

Table A. 170: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	14.36	57.2	1907	348.9	293.3	57.2	1890	348.1	292.3	-1.180	1.180	-0.100	0.140	-1.210	1.250	0.040	0.250
40-60mm	10.67	57.2	1659	260.4	252.4	57.2	1803	256.6	254.2	-1.100	1.170	-0.070	0.120	-1.140	1.030	-0.000	0.200
60-80mm	2.49	57.2	1233	137.6	116.2	57.2	1231	135.3	114.7	-0.720	0.140	-0.060	0.080	-0.580	0.550	-0.060	0.120
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	27.52	57.2	1907	295.5	273.9	57.2	1890	293.4	274.2	-1.180	1.180	-0.080	0.130	-1.210	1.250	0.010	0.220

Table A. 171: Matched Droplet Info

A.2.4.1 All Droplets for .LA Image

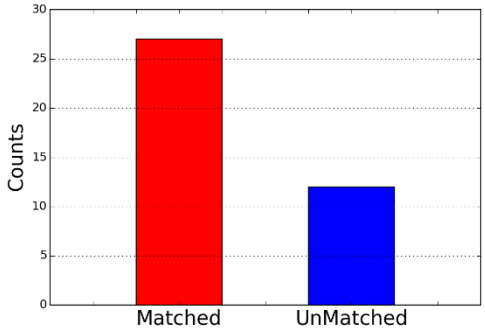


Figure A. 1601: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

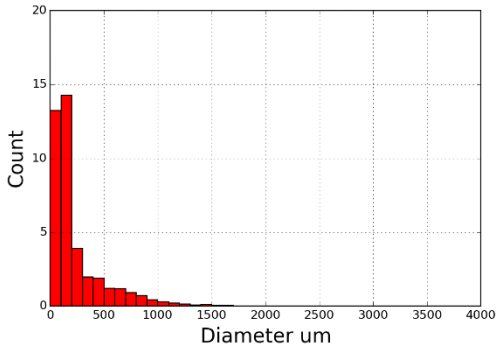


Figure A. 1602: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

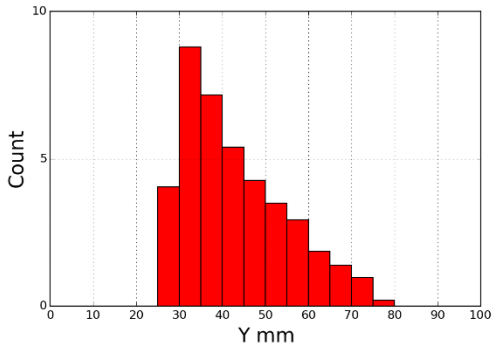


Figure A. 1603: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

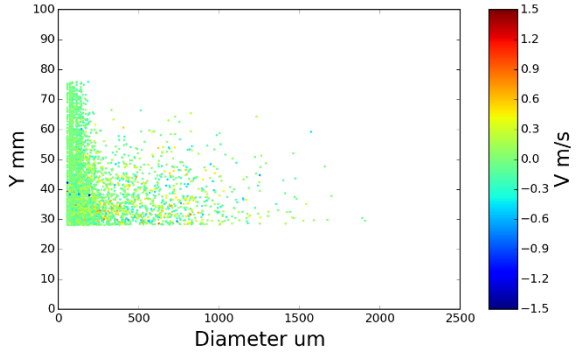


Figure A. 1604: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

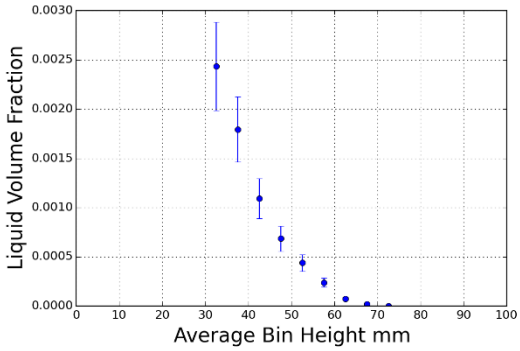


Figure A. 1605: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 All Droplets for .LB Image

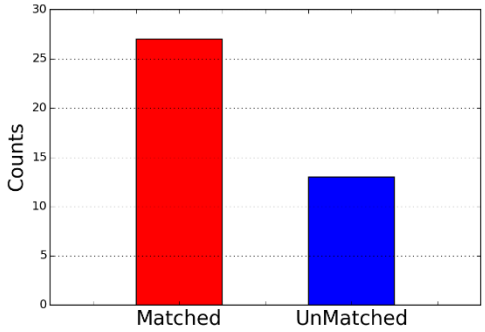


Figure A. 1606: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

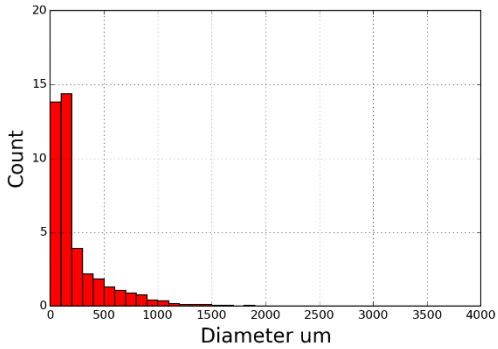


Figure A. 1607: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

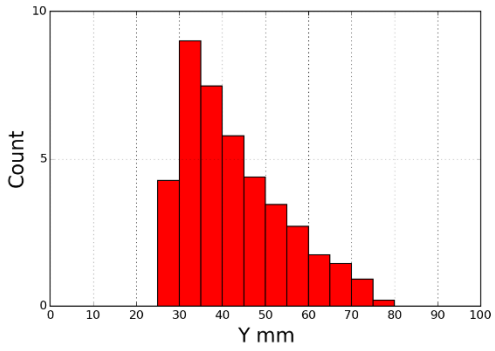


Figure A. 1608: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

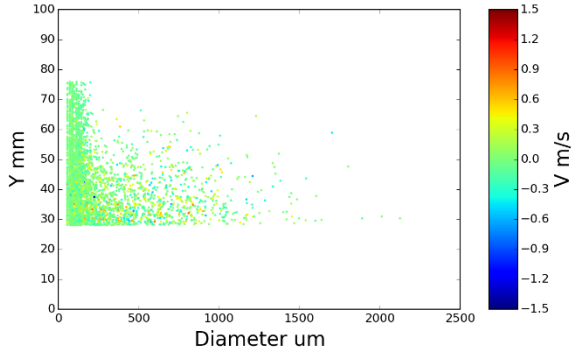


Figure A. 1609: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

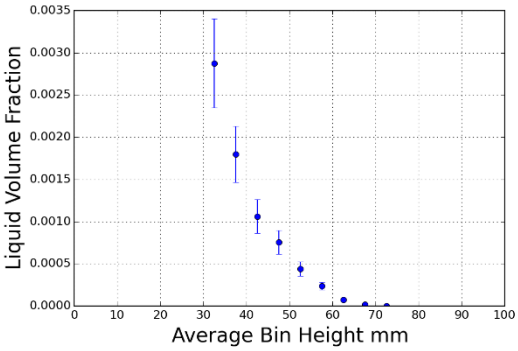


Figure A. 1610: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 Matched Only Droplets for .LA Image

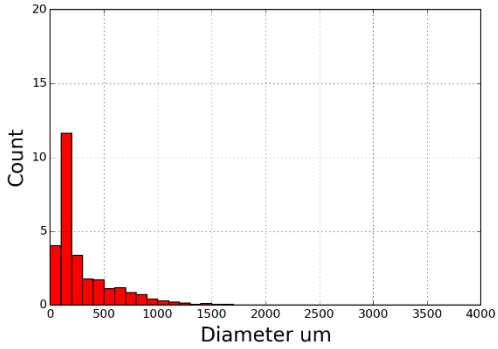


Figure A. 1611: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

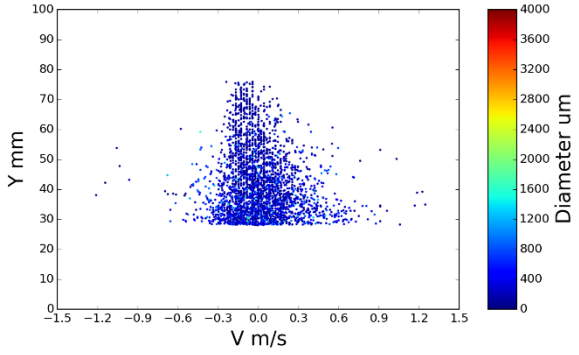


Figure A. 1614: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

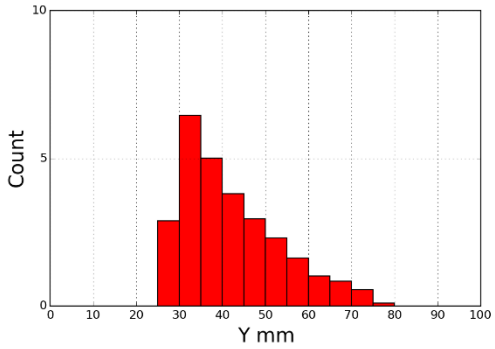


Figure A. 1612: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

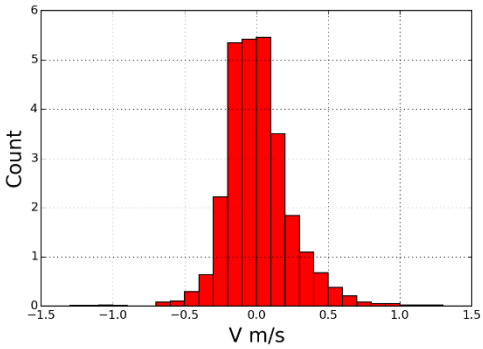


Figure A. 1615: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

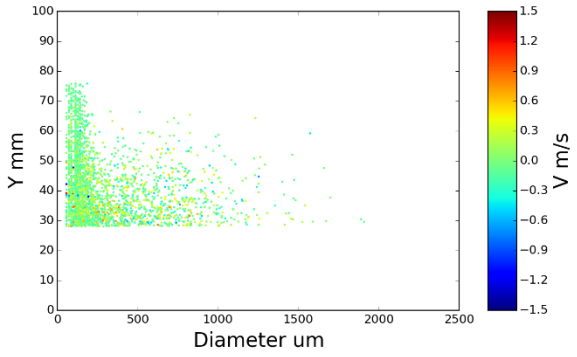


Figure A. 1613: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 Matched Only Droplets for .LB Image

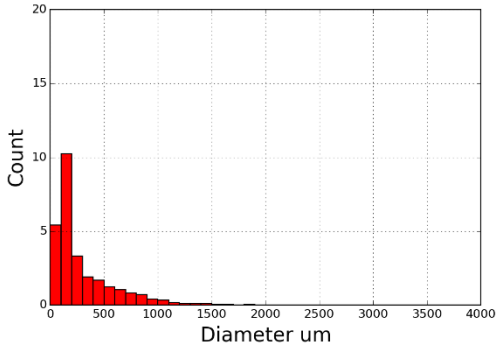


Figure A. 1616: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

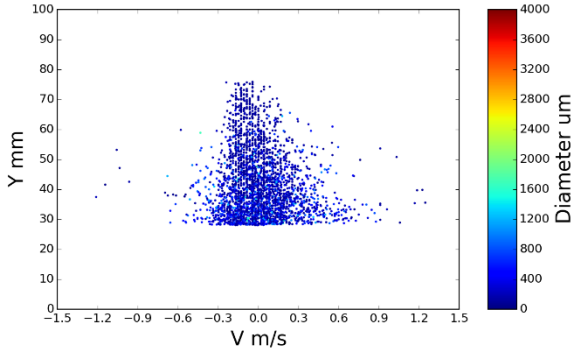


Figure A. 1619: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

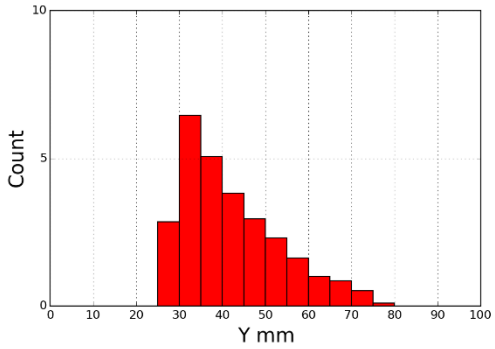


Figure A. 1617: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

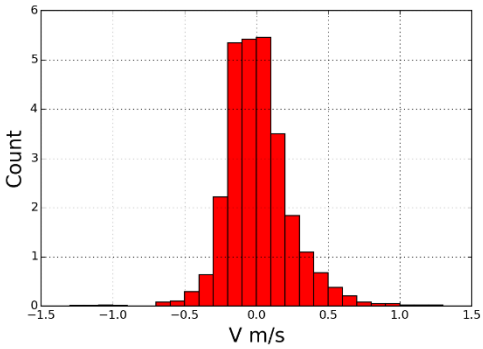


Figure A. 1620: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

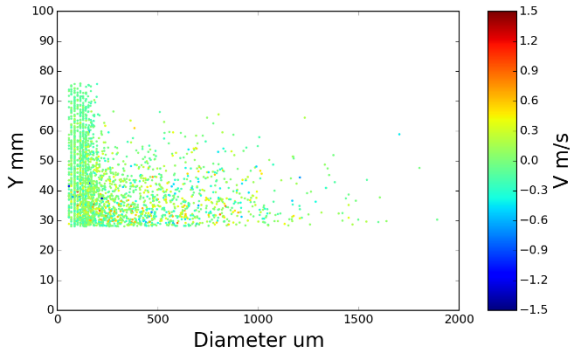


Figure A. 1618: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	23.61	24.02	57.2	2139	325.4	316.0	57.2	2345	324.9	317.3
40-60mm	18.65	19.19	57.2	1914	234.7	292.4	57.2	2074	233.1	295.0
60-80mm	5.82	5.75	57.2	1399	124.9	131.9	57.2	1310	124.3	120.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	48.08	48.96	57.2	2139	265.9	298.0	57.2	2345	265.4	299.5
			Height A (mm)				Height B (mm)			
Highest Particle			75.9831				76.0466			
Lowest Particle			28.0950				28.0846			

Table A. 172: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	16.83	57.2	2139	397.7	338.3	57.2	2345	395.8	339.9	-1.250	0.840	-0.070	0.150	-1.160	1.230	-0.030	0.250
40-60mm	12.27	57.2	1914	299.8	337.1	57.2	2074	300.5	340.6	-1.250	1.230	-0.060	0.140	-1.200	1.010	-0.090	0.200
60-80mm	3.4	57.2	1399	148.0	151.0	57.2	1310	145.1	148.6	-0.360	0.830	-0.060	0.090	-0.550	1.250	-0.140	0.120
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	32.5	57.2	2139	334.6	332.7	57.2	2345	333.7	334.9	-1.250	1.230	-0.060	0.140	-1.200	1.250	-0.060	0.220

Table A. 173: Matched Droplet Info

A.2.4.1 All Droplets for .LA Image

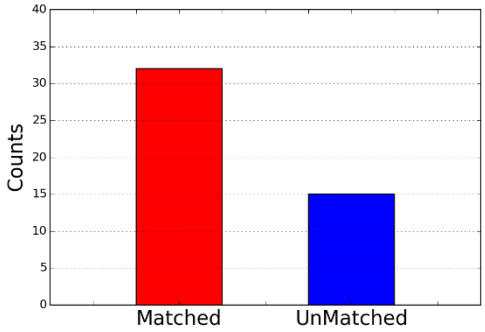


Figure A. 1621: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

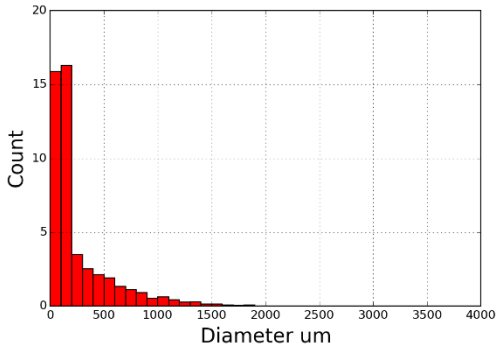


Figure A. 1622: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

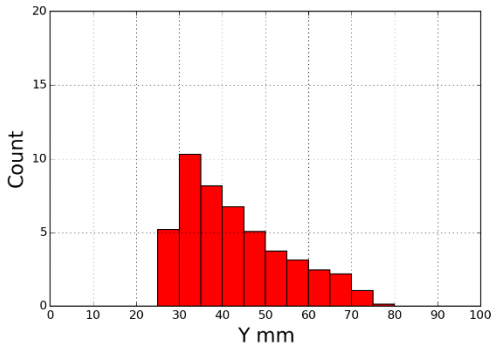


Figure A. 1623: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

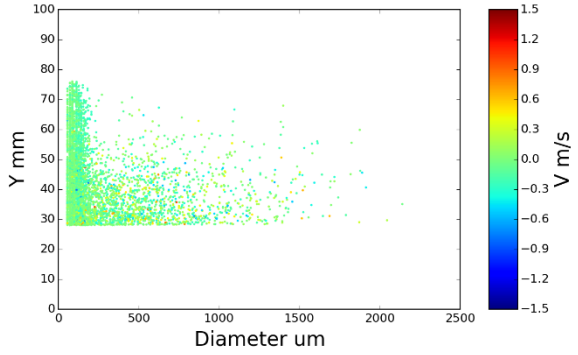


Figure A. 1624: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

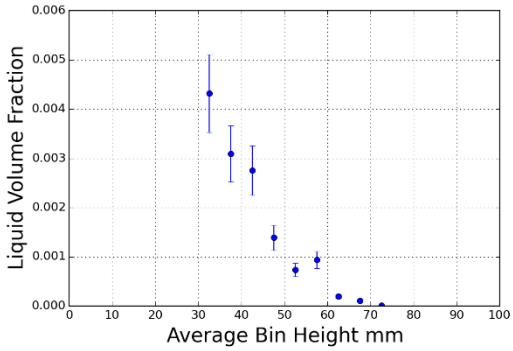


Figure A. 1625: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 All Droplets for .LB Image

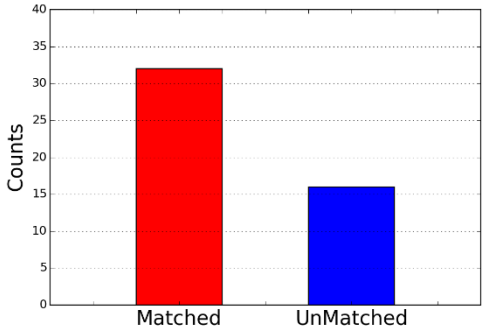


Figure A. 1626: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

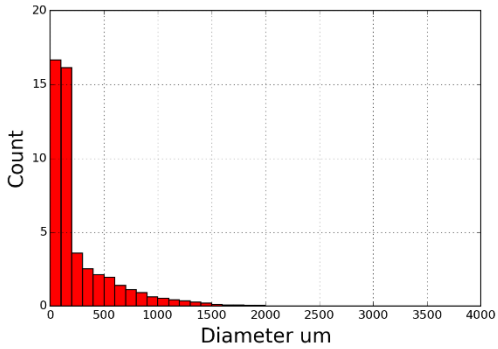


Figure A. 1627: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

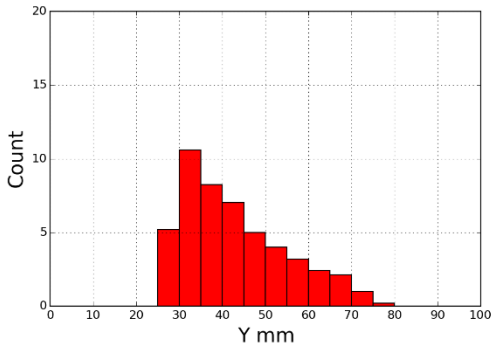


Figure A. 1628: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

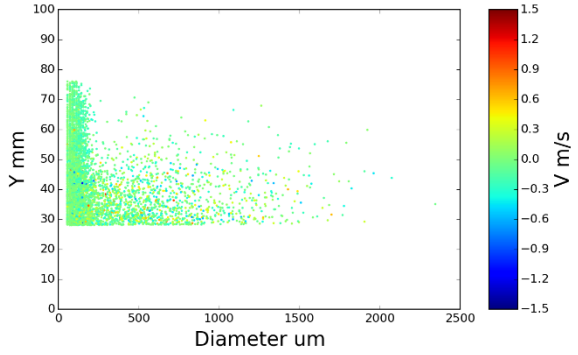


Figure A. 1629: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

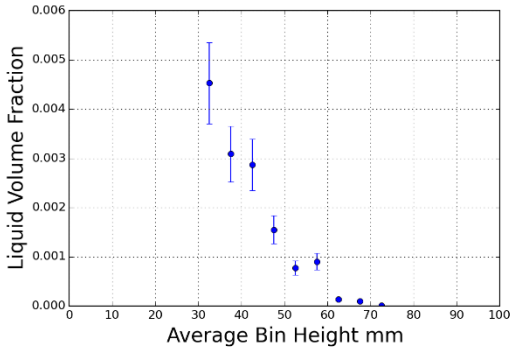


Figure A. 1630: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 Matched Only Droplets for .LA Image

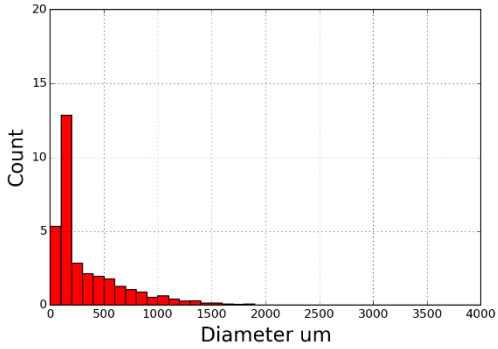


Figure A. 1631: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

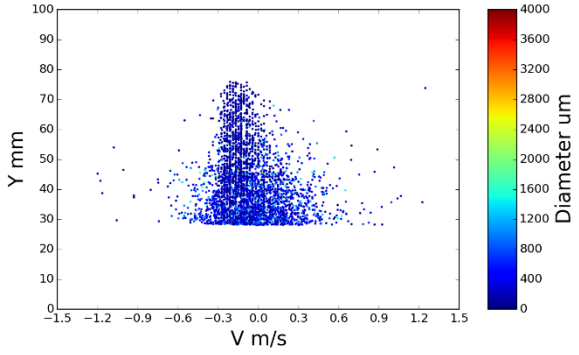


Figure A. 1634: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

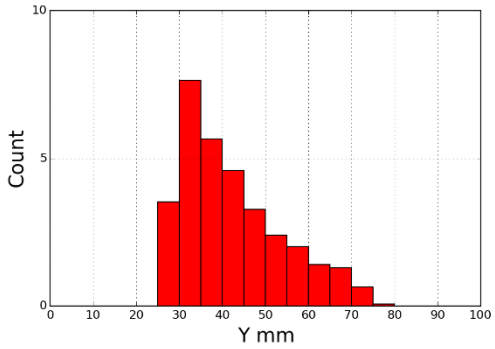


Figure A. 1632: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

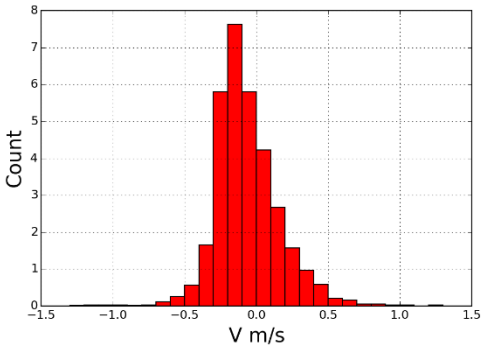


Figure A. 1635: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

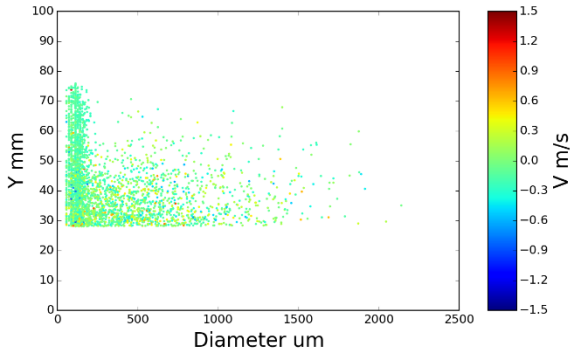


Figure A. 1633: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 Matched Only Droplets for .LB Image

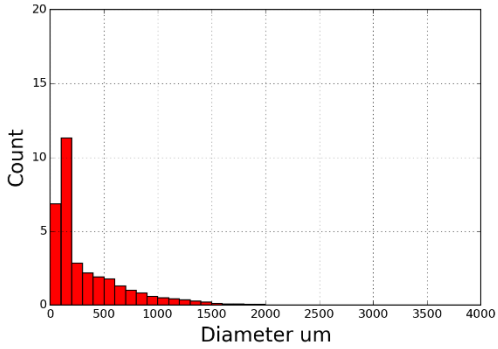


Figure A. 1636: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

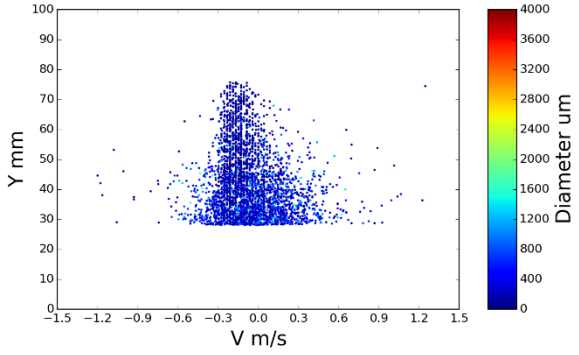


Figure A. 1639: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

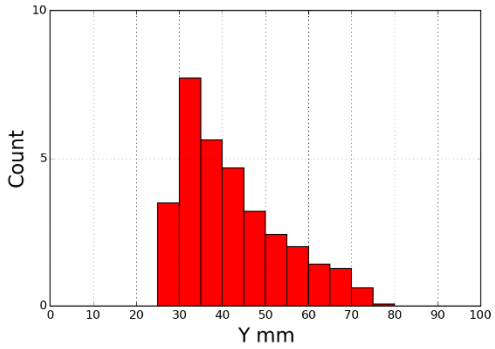


Figure A. 1637: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

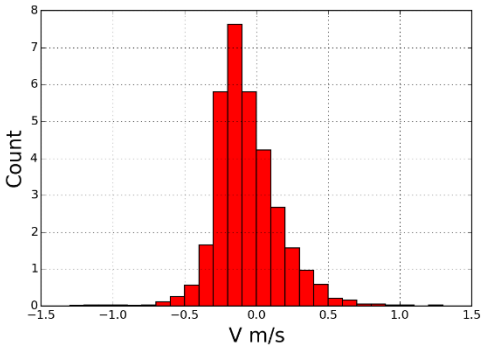


Figure A. 1640: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

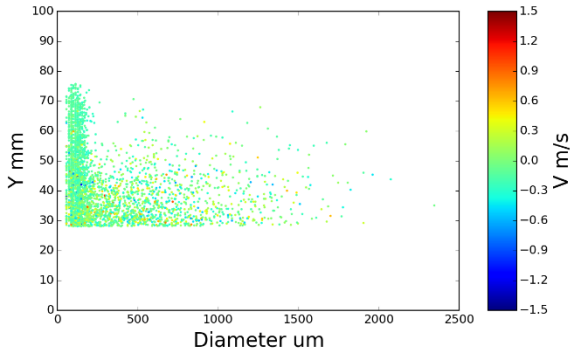


Figure A. 1638: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	25.5	25.91	57.2	2518	317.0	314.1	57.2	2687	319.3	315.3
40-60mm	20.11	20.06	57.2	2237	221.2	261.7	57.2	2185	223.3	263.8
60-80mm	6.66	6.49	57.2	1474	135.5	147.5	57.2	1547	138.5	157.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	52.27	52.46	57.2	2518	257.0	285.3	57.2	2687	260.2	287.8
			Height A (mm)				Height B (mm)			
Highest Particle			76.0066				75.8817			
Lowest Particle			28.0846				28.0846			

Table A. 174: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	17.18	57.2	2518	398.3	335.5	57.2	2687	396.7	336.4	-1.130	1.180	-0.070	0.160	-1.210	1.270	-0.010	0.290
40-60mm	12.62	57.2	2237	280.7	298.4	57.2	2185	280.2	299.6	-1.190	0.930	-0.050	0.130	-1.270	1.180	-0.100	0.230
60-80mm	4.09	57.2	1474	164.3	178.7	57.2	1547	164.6	188.4	-0.850	0.630	-0.060	0.080	-0.890	0.590	-0.140	0.110
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	33.89	57.2	2518	326.3	317.2	57.2	2687	325.4	318.7	-1.190	1.180	-0.060	0.140	-1.270	1.270	-0.060	0.260

Table A. 175: Matched Droplet Info

A.2.4.1 All Droplets for .LA Image

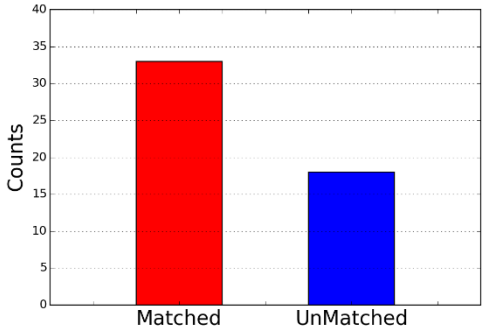


Figure A. 1641: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

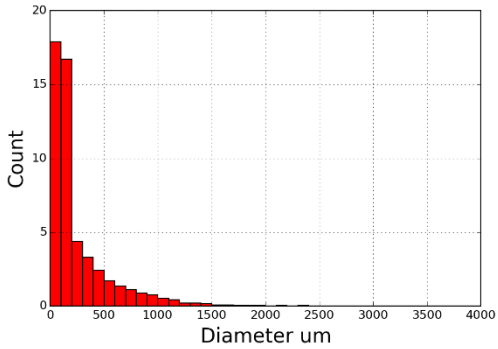


Figure A. 1642: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

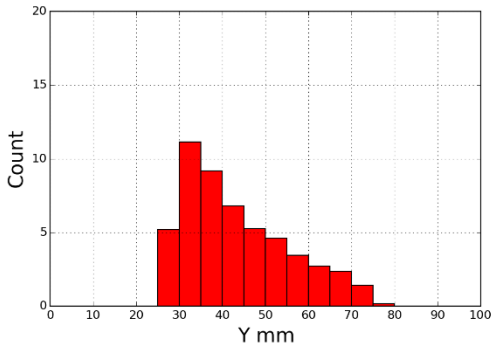


Figure A. 1643: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

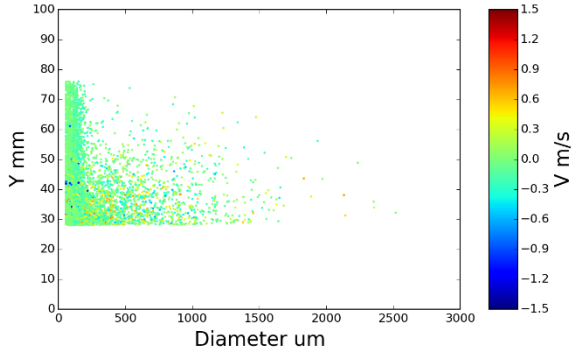


Figure A. 1644: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

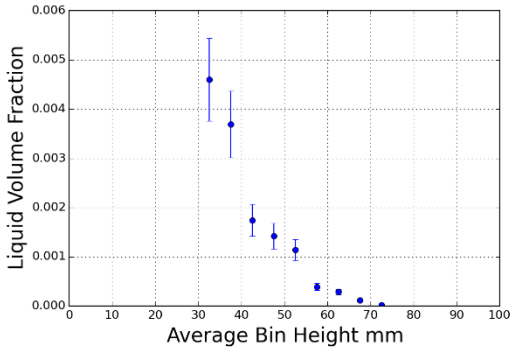


Figure A. 1645: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 All Droplets for .LB Image

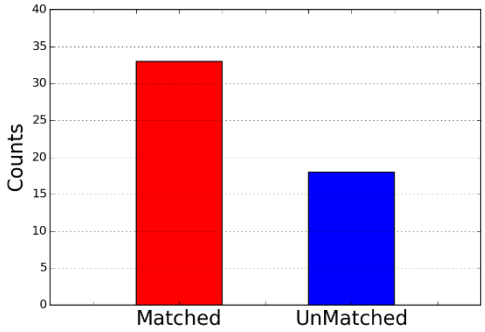


Figure A. 1646: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

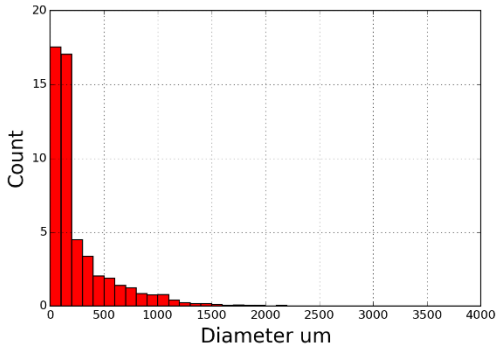


Figure A. 1647: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

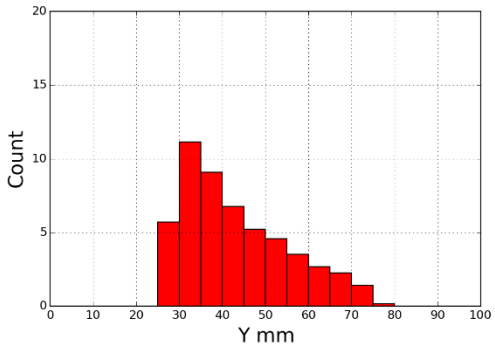


Figure A. 1648: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

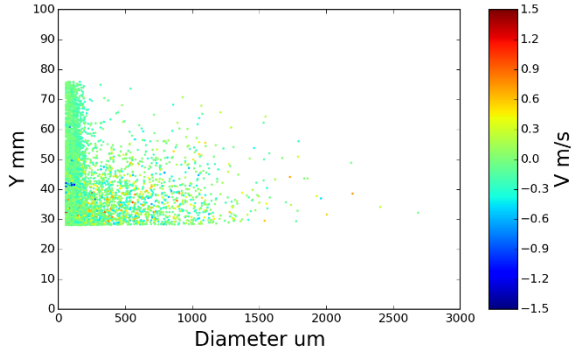


Figure A. 1649: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

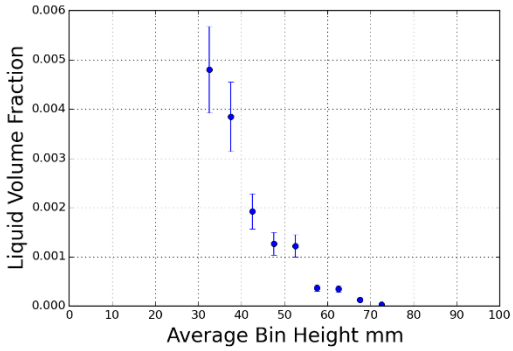


Figure A. 1650: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 Matched Only Droplets for .LA Image

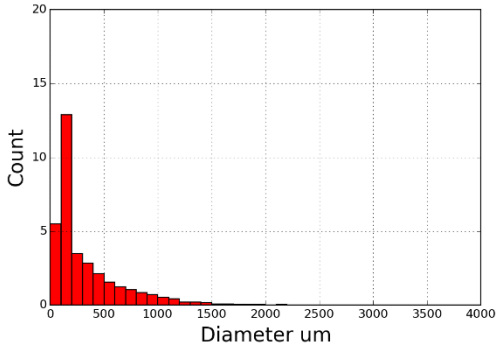


Figure A. 1651: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

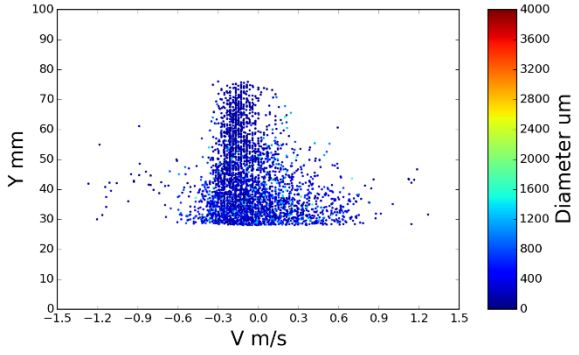


Figure A. 1654: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

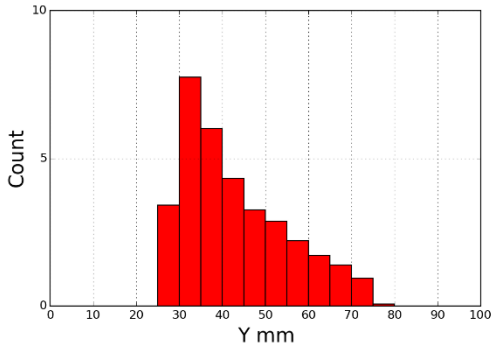


Figure A. 1652: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

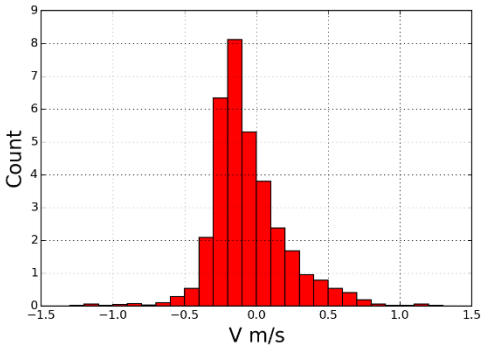


Figure A. 1655: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

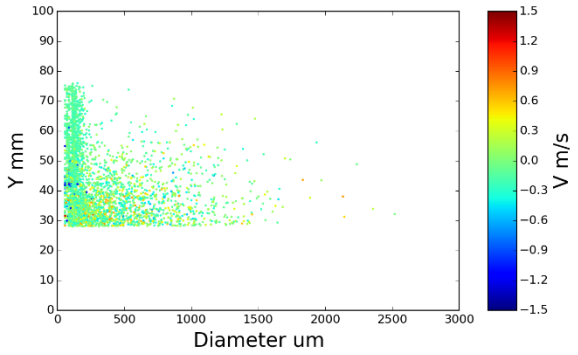


Figure A. 1653: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 Matched Only Droplets for .LB Image

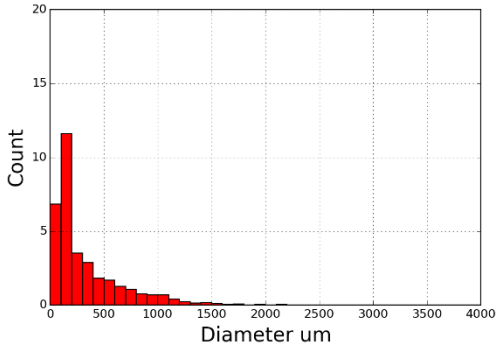


Figure A. 1656: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

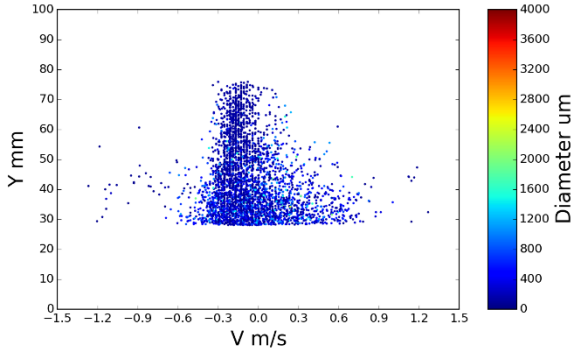


Figure A. 1659: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

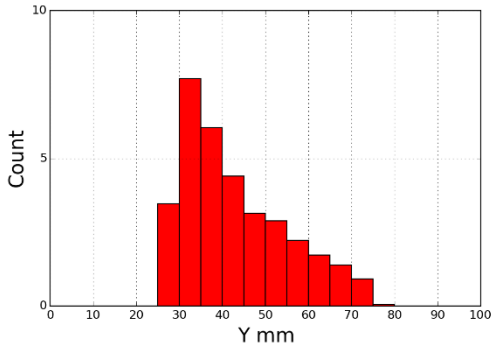


Figure A. 1657: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

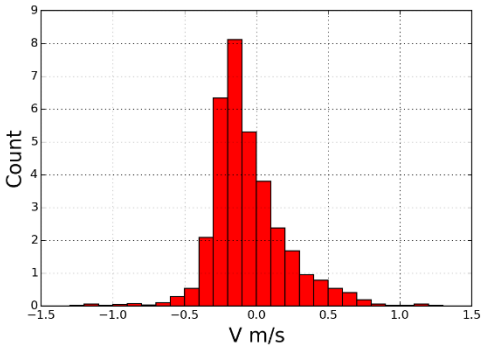


Figure A. 1660: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

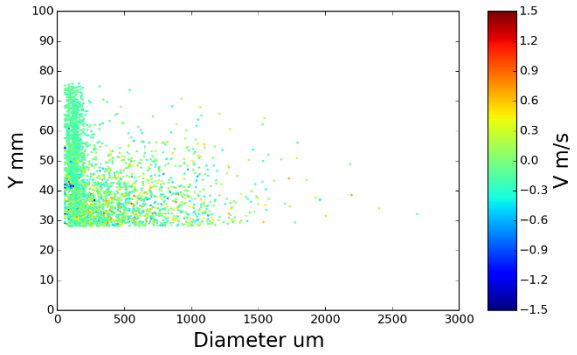


Figure A. 1658: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	25.81	26.35	57.2	2227	296.4	291.7	57.2	2219	298.1	293.6
40-60mm	25.58	26.44	57.2	2792	211.8	244.6	57.2	2799	211.7	244.4
60-80mm	8.66	8.76	57.2	1070	126.9	99.0	57.2	997.9	127.0	102.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	60.05	61.55	57.2	2792	235.9	258.8	57.2	2799	236.6	260.1
			Height A (mm)				Height B (mm)			
Highest Particle			76.0466				75.9831			
Lowest Particle			28.0846				28.0938			

Table A. 176: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	17.61	57.2	2227	367.1	316.9	57.2	2219	366.5	315.6	-1.180	0.980	-0.090	0.150	-1.170	1.170	-0.030	0.260
40-60mm	16.18	57.2	2792	269.0	285.2	57.2	2799	268.7	285.0	-1.250	1.230	-0.080	0.150	-1.210	1.270	-0.070	0.210
60-80mm	5.3	57.2	1070	149.5	115.9	57.2	997.9	148.1	118.4	-0.400	0.470	-0.070	0.070	-0.910	1.250	-0.100	0.130
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	39.09	57.2	2792	297.0	293.6	57.2	2799	296.4	293.2	-1.250	1.230	-0.090	0.140	-1.210	1.270	-0.060	0.230

Table A. 177: Matched Droplet Info

A.2.4.1 All Droplets for .LA Image

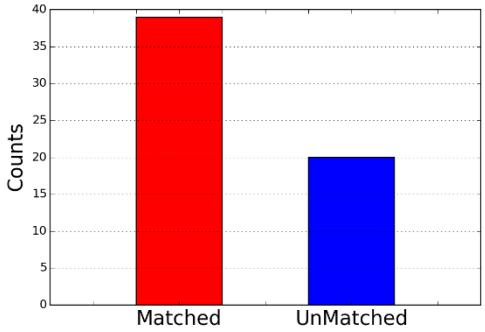


Figure A. 1661: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

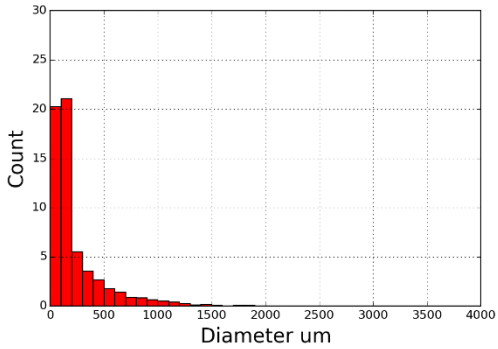


Figure A. 1662: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

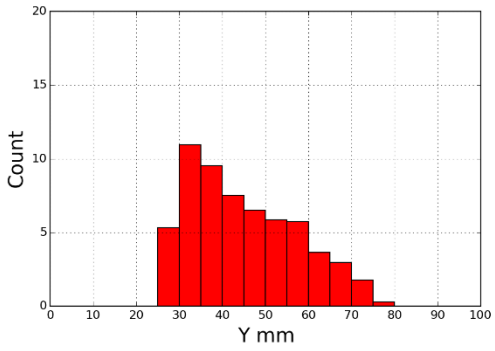


Figure A. 1663: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

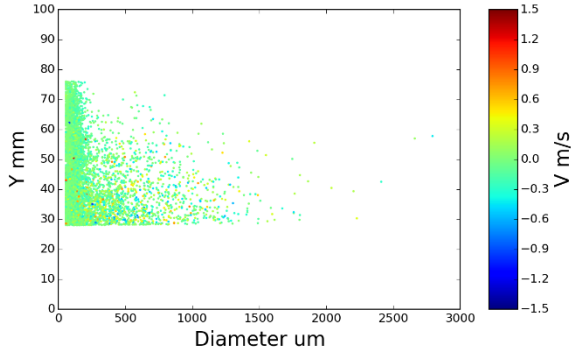


Figure A. 1664: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

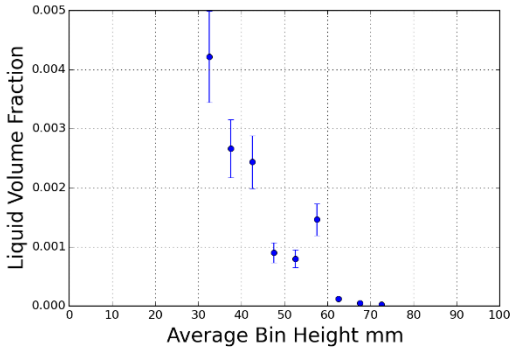


Figure A. 1665: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 All Droplets for .LB Image

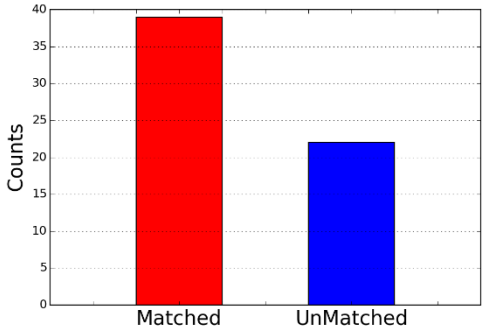


Figure A. 1666: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

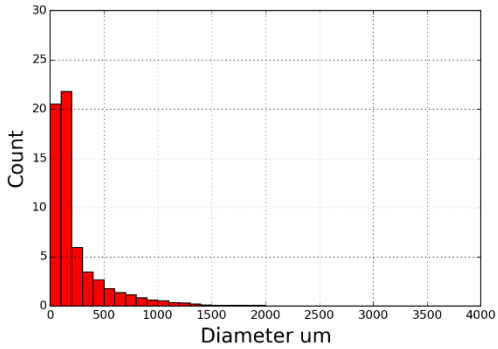


Figure A. 1667: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

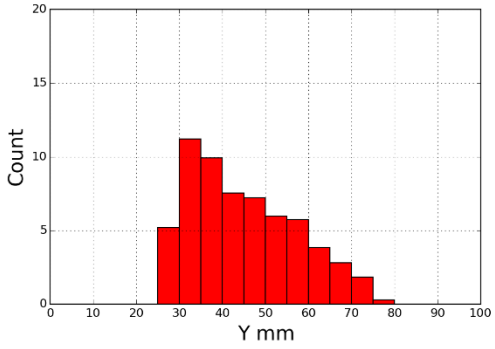


Figure A. 1668: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

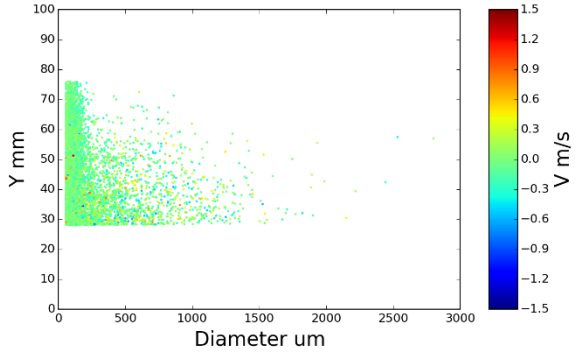


Figure A. 1669: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

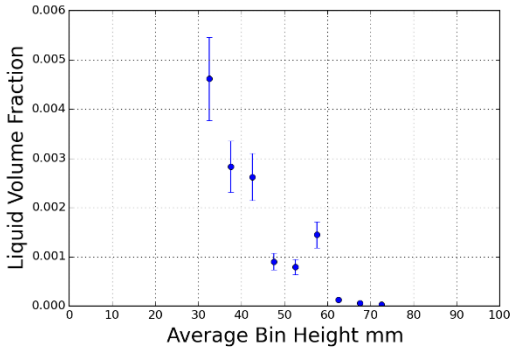


Figure A. 1670: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 Matched Only Droplets for .LA Image

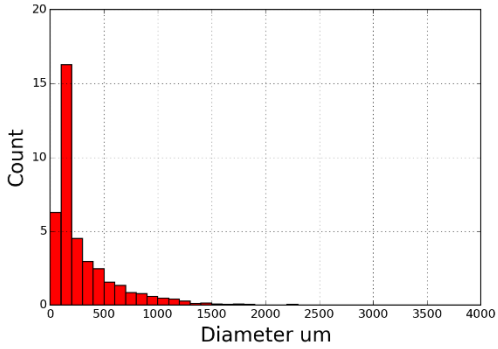


Figure A. 1671: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

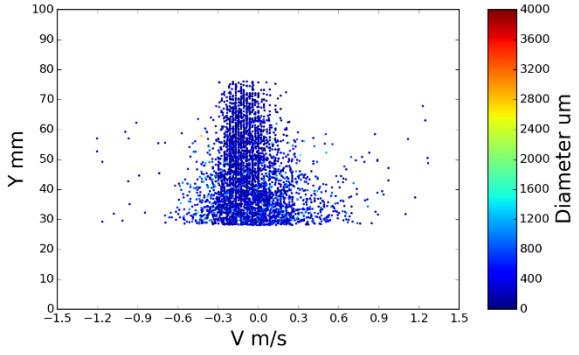


Figure A. 1674: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

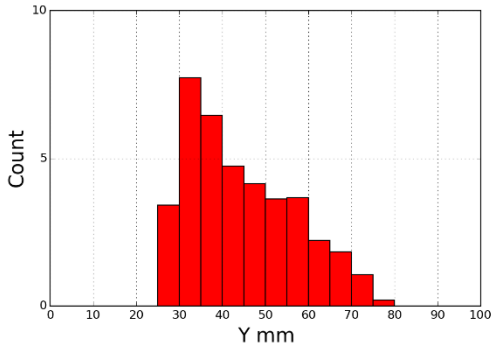


Figure A. 1672: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

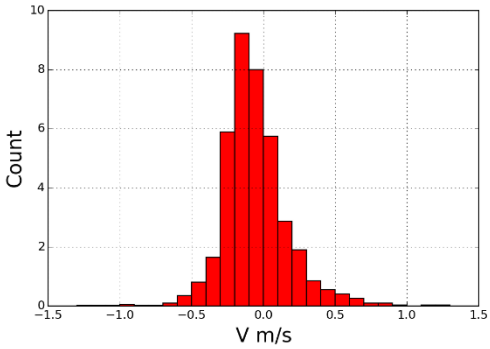


Figure A. 1675: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

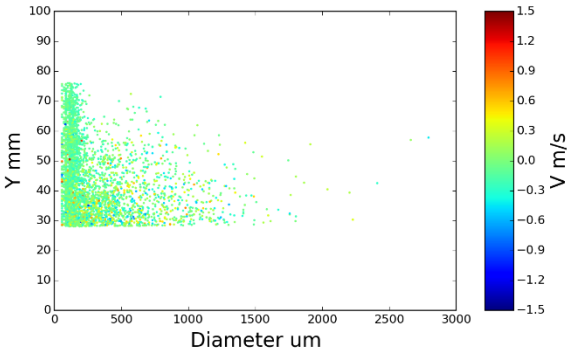


Figure A. 1673: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 Matched Only Droplets for .LB Image

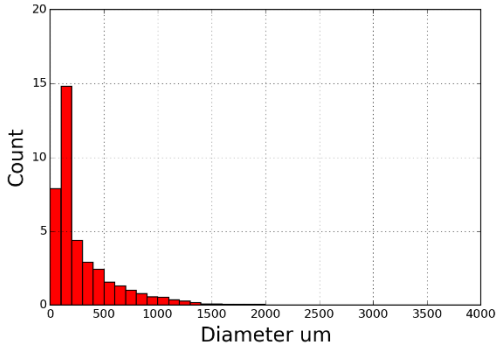


Figure A. 1676: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

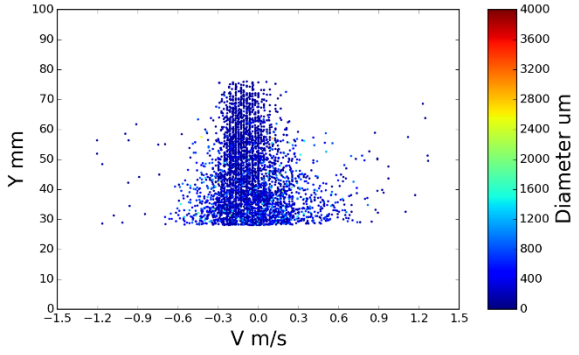


Figure A. 1679: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

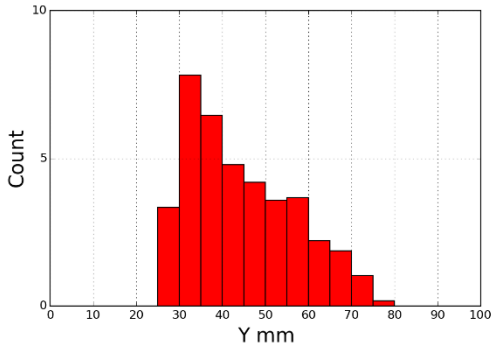


Figure A. 1677: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

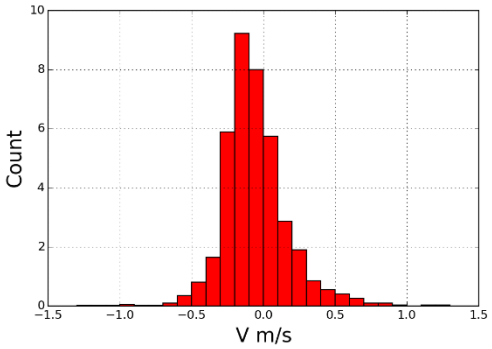


Figure A. 1680: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

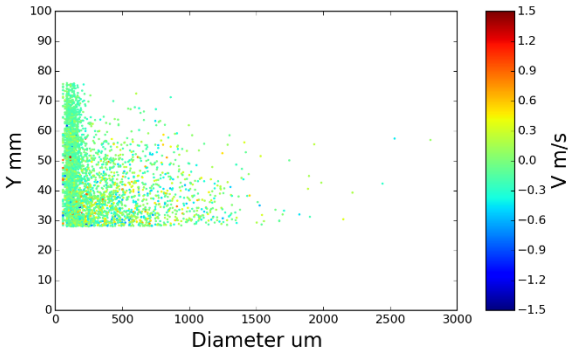


Figure A. 1678: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	20.84	21.33	57.2	1764	276.7	269.4	57.2	1766	278.2	270.7
40-60mm	26.37	26.15	57.2	1776	199.2	205.6	57.2	1778	201.6	208.6
60-80mm	9.25	8.98	57.2	1500	127.5	115.8	57.2	1440	128.0	114.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	56.46	56.46	57.2	1776	216.1	226.9	57.2	1778	218.9	229.6
			Height A (mm)				Height B (mm)			
Highest Particle			75.9958				76.0466			
Lowest Particle			28.0846				28.0952			

Table A. 178: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	13.76	57.2	1764	344.9	295.7	57.2	1766	345.1	295.6	-1.090	1.100	-0.110	0.160	-1.060	1.230	0.020	0.280
40-60mm	16.85	57.2	1776	248.6	235.7	57.2	1778	248.1	238.7	-1.270	1.100	-0.110	0.140	-1.180	1.220	-0.010	0.210
60-80mm	5.6	57.2	1500	151.0	135.7	57.2	1440	148.3	134.2	-0.720	0.800	-0.090	0.090	-1.140	0.550	-0.030	0.140
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	36.21	57.2	1776	270.1	257.8	57.2	1778	269.6	259.2	-1.270	1.100	-0.110	0.140	-1.180	1.230	-0.000	0.230

Table A. 179: Matched Droplet Info

A.2.4.1 All Droplets for .LA Image

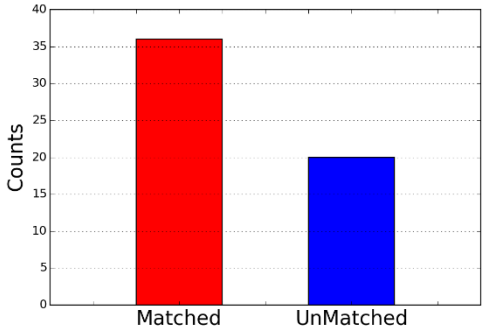


Figure A. 1681: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

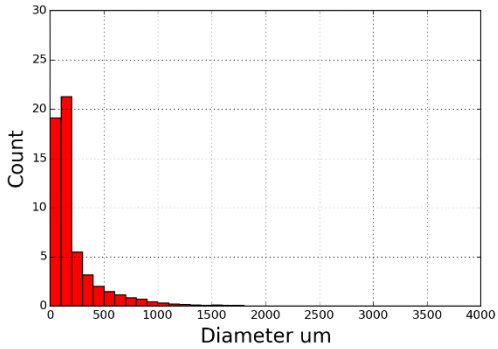


Figure A. 1682: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

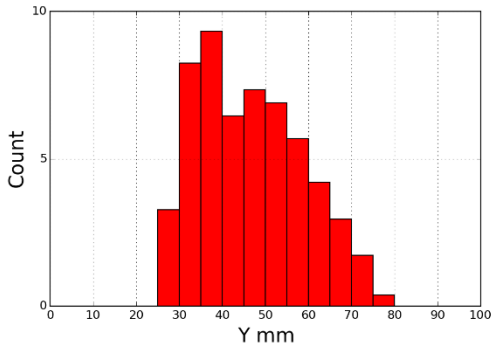


Figure A. 1683: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

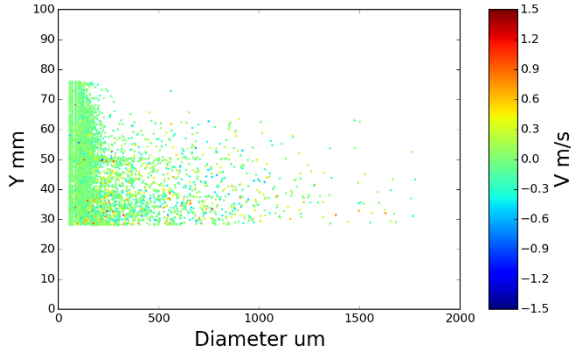


Figure A. 1684: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

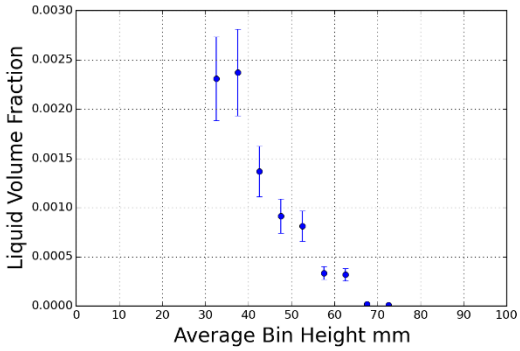


Figure A. 1685: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 All Droplets for .LB Image

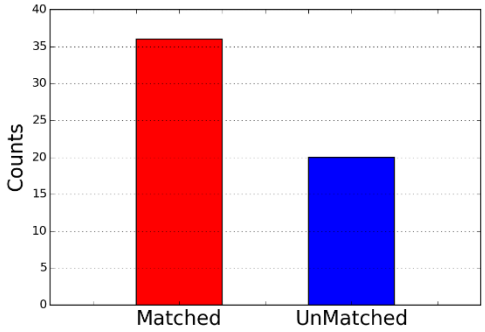


Figure A. 1686: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

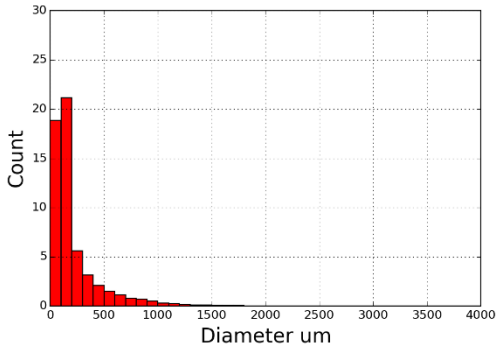


Figure A. 1687: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

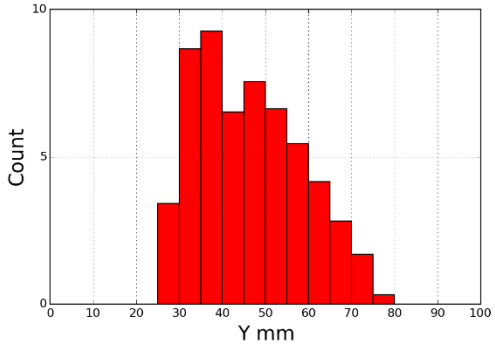


Figure A. 1688: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

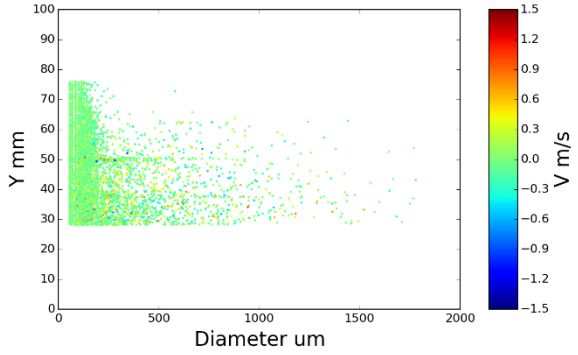


Figure A. 1689: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

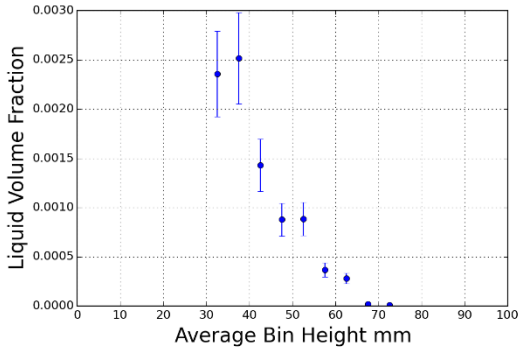


Figure A. 1690: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 Matched Only Droplets for .LA Image

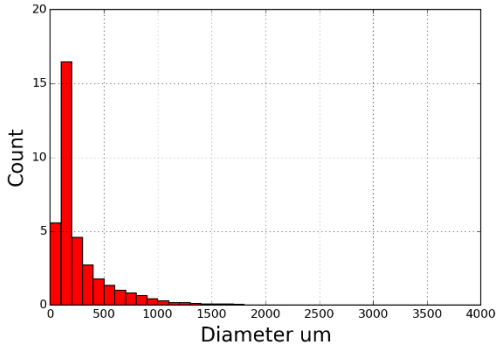


Figure A. 1691: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

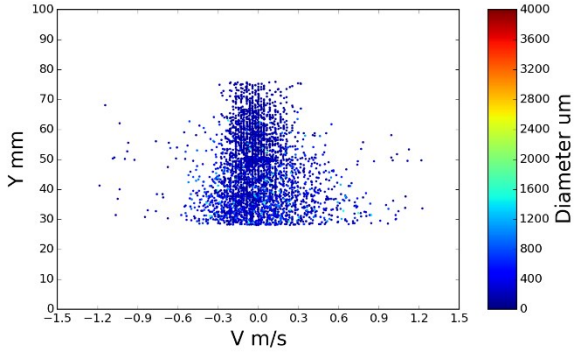


Figure A. 1694: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

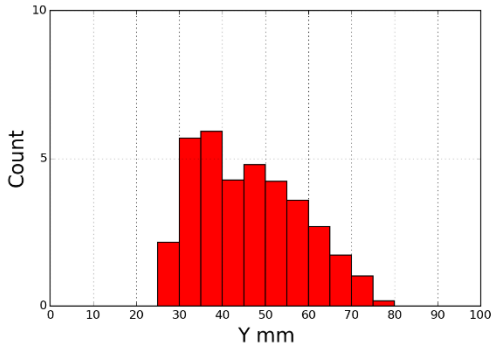


Figure A. 1692: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

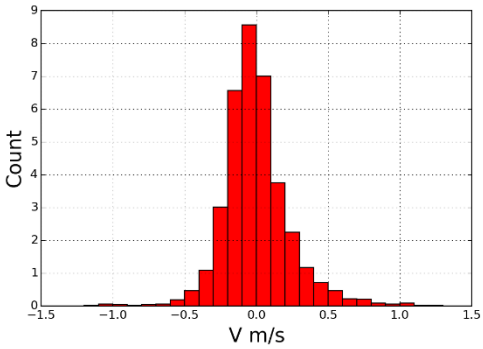


Figure A. 1695: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

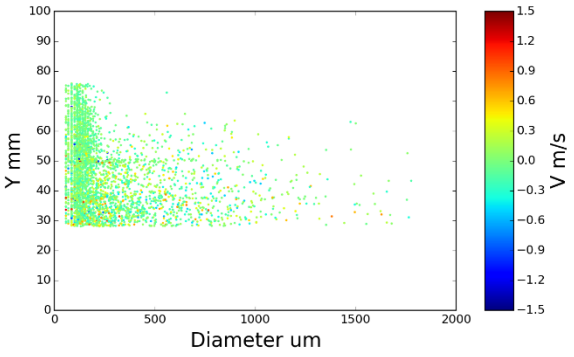


Figure A. 1693: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.1 Matched Only Droplets for .LB Image

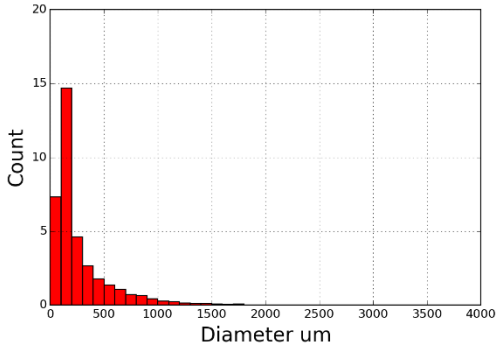


Figure A. 1696: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

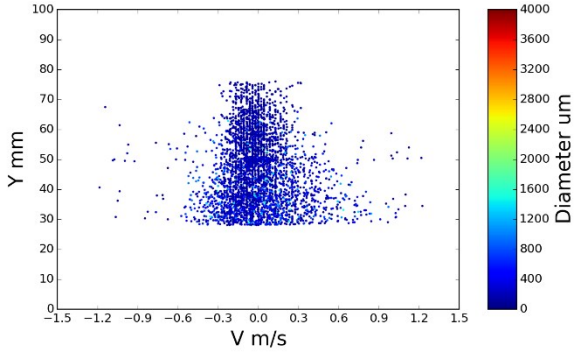


Figure A. 1699: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

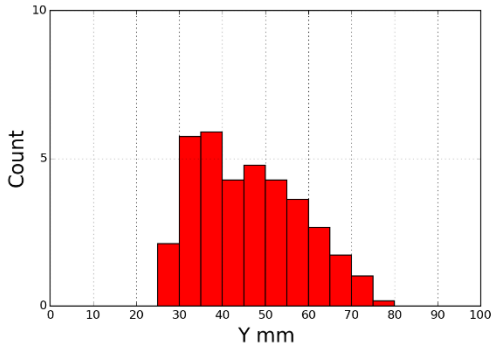


Figure A. 1697: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

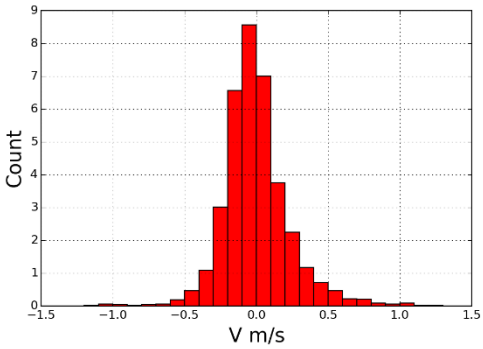


Figure A. 1700: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

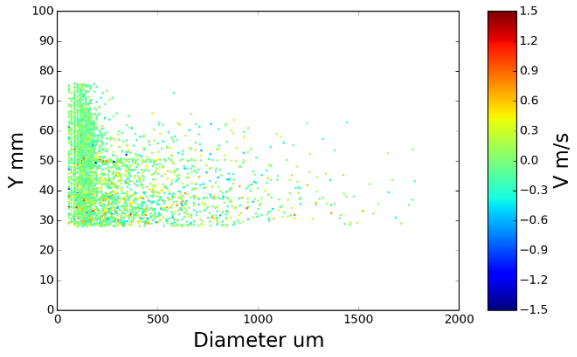


Figure A. 1698: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 Lens 50mm Mag 0_13x

A.2.4.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	67.73	68.04	128.6	3412	682.0	518.3	128.6	3408	690.9	529.9
20-40mm	31.21	31.27	128.6	3397	500.7	340.5	128.6	2495	504.9	339.3
40-60mm	5.5	5.59	128.6	2339	474.9	288.4	128.6	2294	468.9	287.4
60-80mm	0.19	0.15	157.6	1127	580.4	304.2	157.6	1145	641.3	287.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	104.63	105.05	128.6	3412	616.8	469.9	128.6	3408	623.6	478.6
			Height A (mm)				Height B (mm)			
Highest Particle			75.6675				75.8670			
Lowest Particle			5.0730				5.0730			

Table A. 180: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	41.69	128.6	3412	780.2	533.7	128.6	3287	768.8	524.1	-1.220	1.220	-0.100	0.290	-1.220	1.220	0.010	0.360
20-40mm	22.09	128.6	3397	567.0	342.5	128.6	2495	564.0	336.1	-1.220	1.200	-0.110	0.180	-1.220	1.200	0.020	0.300
40-60mm	4.22	128.6	2339	537.9	289.4	128.6	2294	535.3	286.8	-0.390	0.190	-0.090	0.100	-0.560	0.690	0.010	0.210
60-80mm	0.14	280.4	1127	716.7	233.7	287.6	1145	708.1	248.1	-0.280	0.020	-0.130	0.080	-0.340	0.190	-0.050	0.170
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	68.14	128.6	3412	696.0	478.4	128.6	3287	687.6	469.3	-1.220	1.220	-0.110	0.250	-1.220	1.220	0.010	0.330

Table A. 181: Matched Droplet Info

A.2.4.2 All Droplets for .LA Image

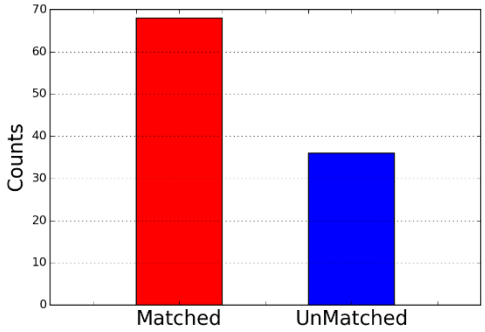


Figure A. 1701: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

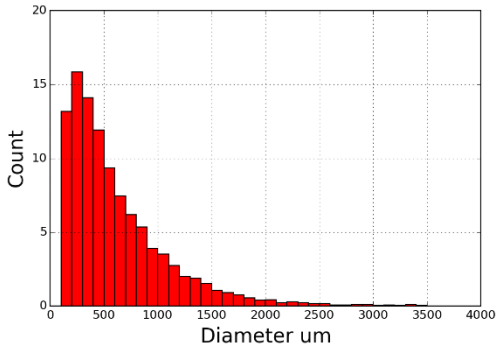


Figure A. 1702: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

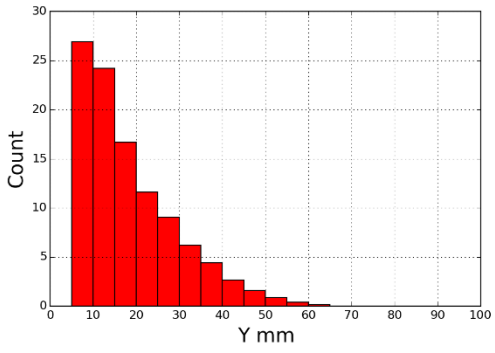


Figure A. 1703: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

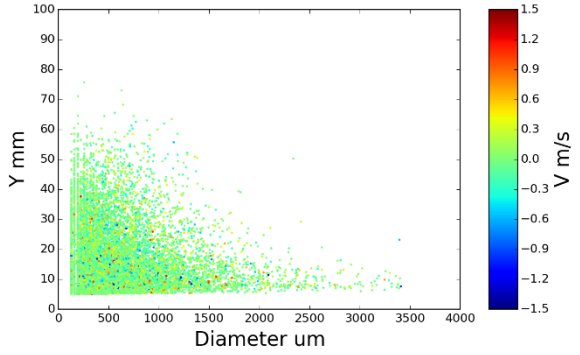


Figure A. 1704: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

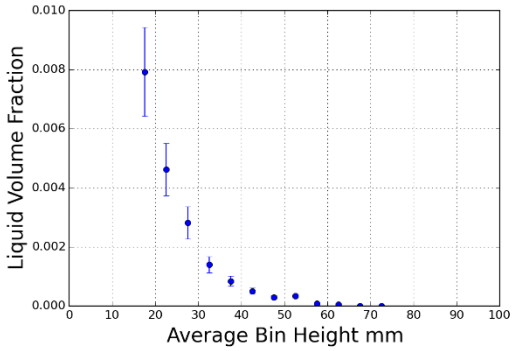


Figure A. 1705: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 All Droplets for .LB Image

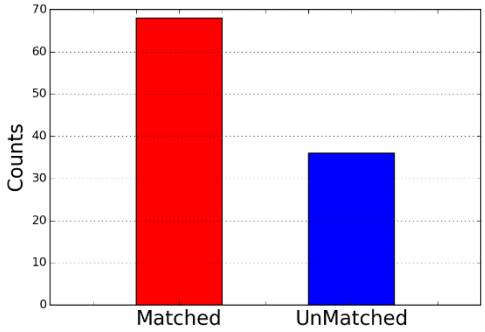


Figure A. 1706: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

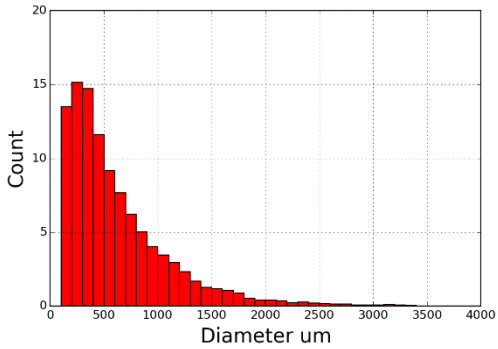


Figure A. 1707: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

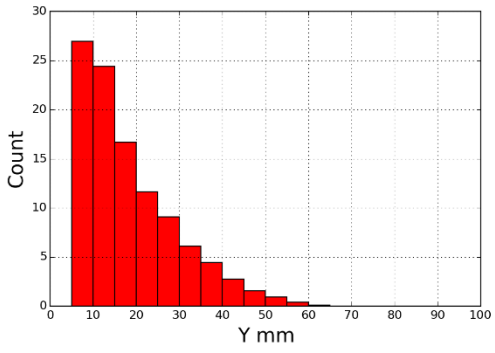


Figure A. 1708: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

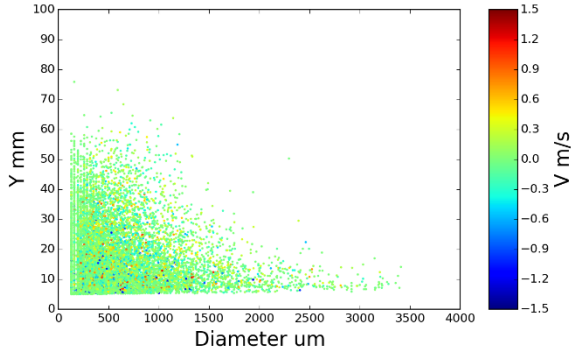


Figure A. 1709: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

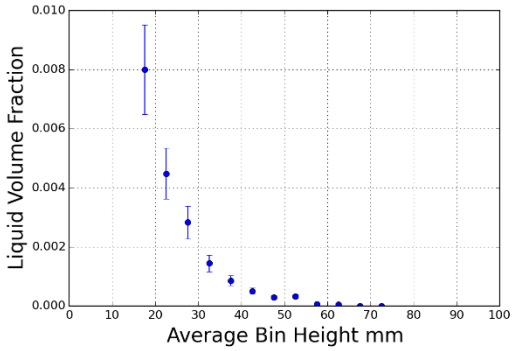


Figure A. 1710: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 Matched Only Droplets for .LA Image

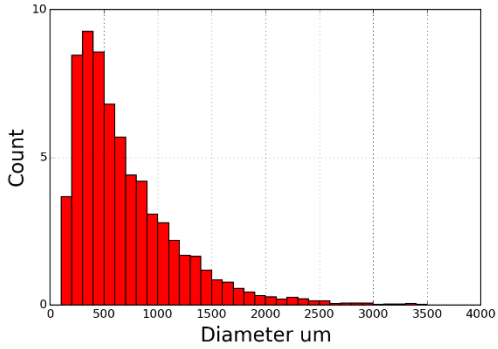


Figure A. 1711: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

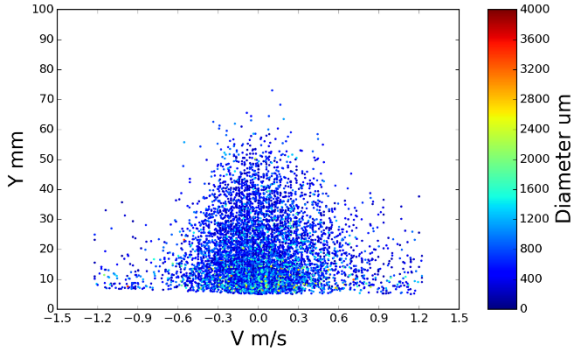


Figure A. 1714: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

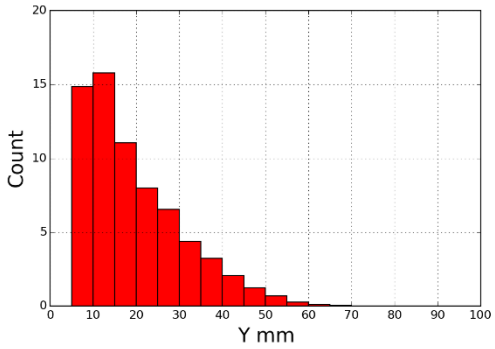


Figure A. 1712: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

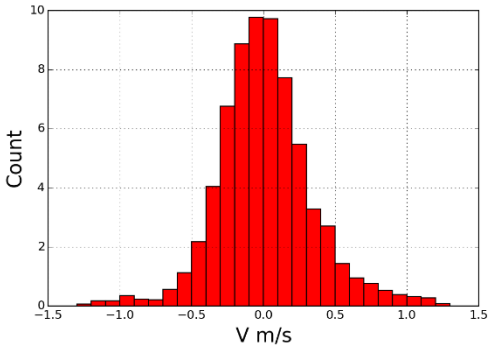


Figure A. 1715: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

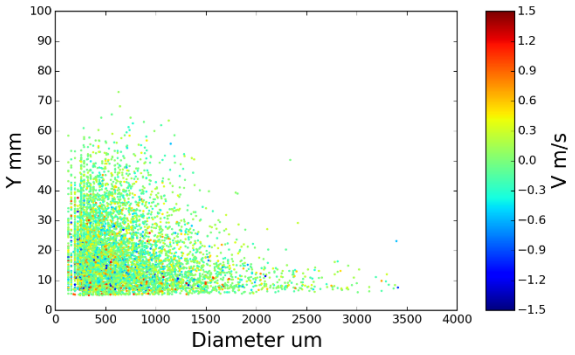


Figure A. 1713: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 Matched Only Droplets for .LB Image

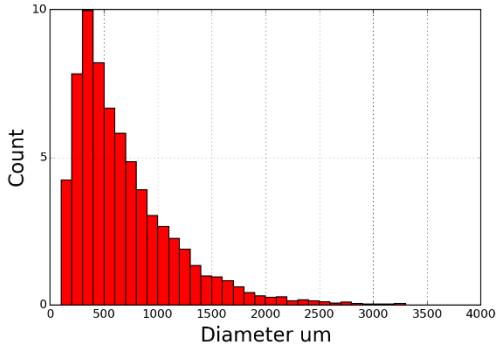


Figure A. 1716: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

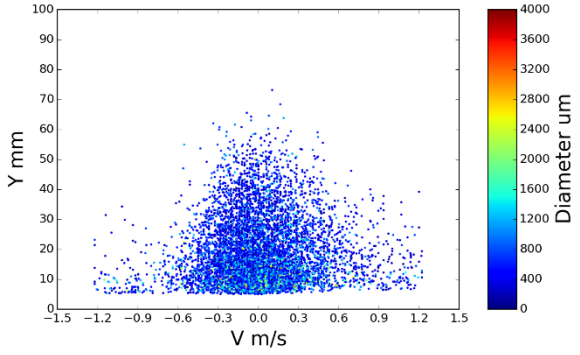


Figure A. 1719: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

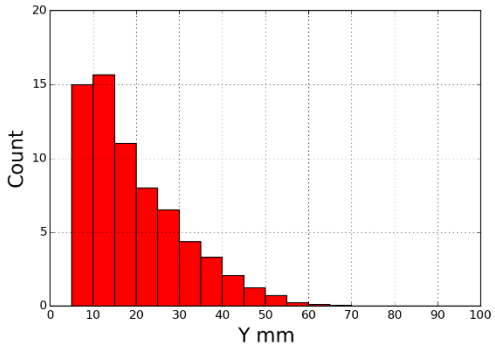


Figure A. 1717: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

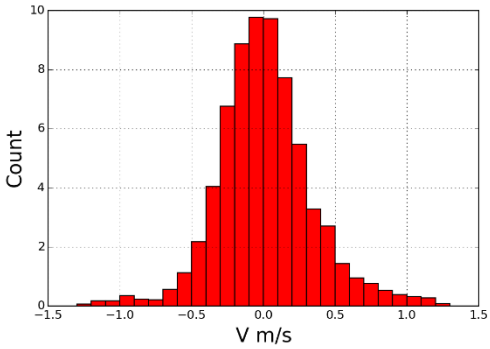


Figure A. 1720: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

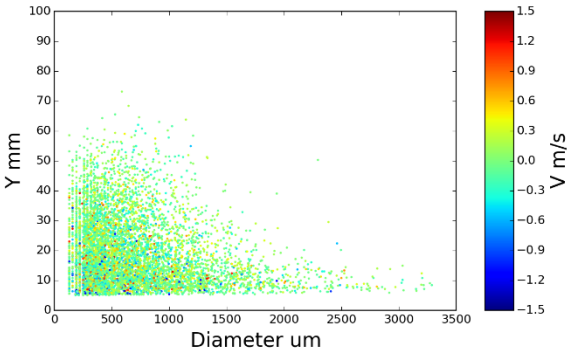


Figure A. 1718: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	79.87	80.38	128.6	3408	713.0	543.9	128.6	3412	709.9	540.8
20-40mm	35.57	35.74	128.6	3363	532.9	359.5	128.6	3161	532.1	353.9
40-60mm	6.33	6.07	128.6	1750	549.3	334.4	128.6	1610	555.1	333.6
60-80mm	0.3	0.34	128.6	1247	586.9	261.2	128.6	1264	557.9	277.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	122.07	122.53	128.6	3408	651.8	494.3	128.6	3412	650.0	490.9
			Height A (mm)				Height B (mm)			
Highest Particle			70.9611				70.7829			
Lowest Particle			5.0730				5.0730			

Table A. 182: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	47.66	128.6	3376	826.2	558.7	128.6	3410	814.4	549.1	-1.220	1.220	-0.110	0.330	-1.220	1.220	0.000	0.380
20-40mm	24.83	128.6	3363	602.4	360.2	128.6	3161	596.4	354.0	-1.210	1.220	-0.090	0.200	-1.220	1.170	-0.020	0.320
40-60mm	4.65	128.6	1750	639.3	330.1	128.6	1610	634.2	326.4	-0.810	0.230	-0.080	0.130	-1.160	1.200	-0.020	0.250
60-80mm	0.26	240.7	1247	648.9	222.4	272.9	1264	658.5	227.6	-0.310	0.120	-0.100	0.110	-0.450	0.320	-0.100	0.230
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	77.4	128.6	3376	742.6	501.8	128.6	3410	732.9	492.9	-1.220	1.220	-0.100	0.280	-1.220	1.220	-0.010	0.350

Table A. 183: Matched Droplet Info

A.2.4.2 All Droplets for .LA Image

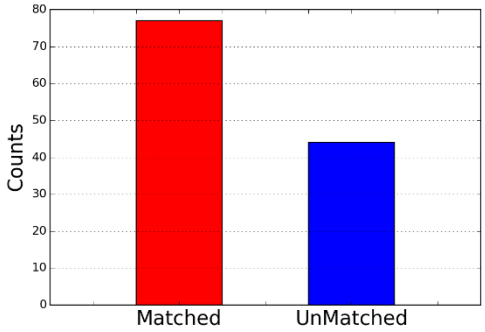


Figure A. 1721: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

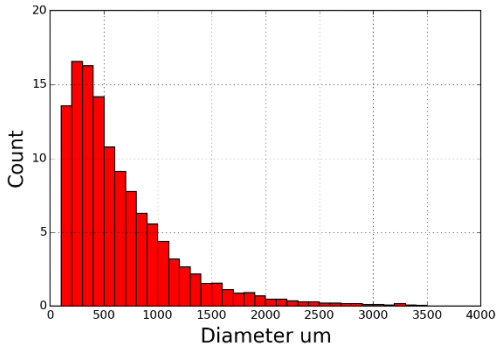


Figure A. 1722: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

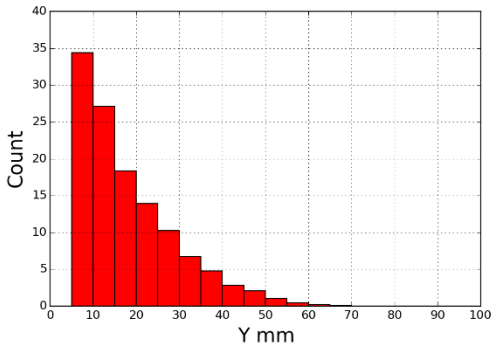


Figure A. 1723: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

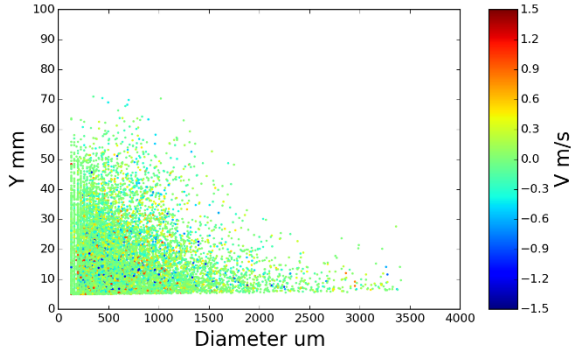


Figure A. 1724: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

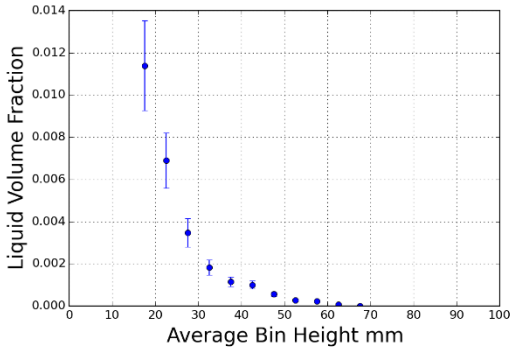


Figure A. 1725: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 All Droplets for .LB Image

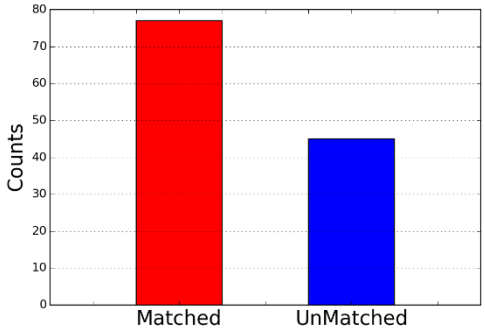


Figure A. 1726: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

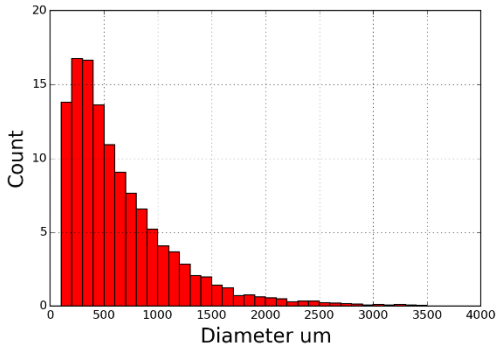


Figure A. 1727: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

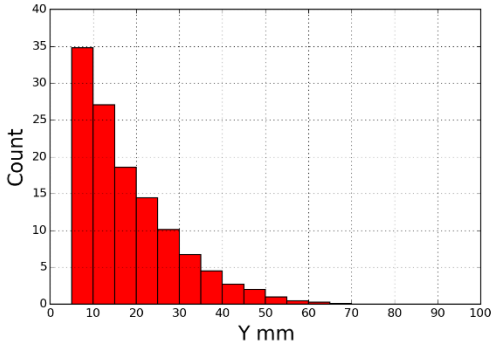


Figure A. 1728: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

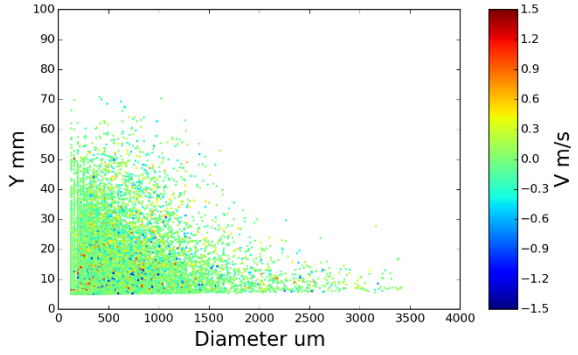


Figure A. 1729: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

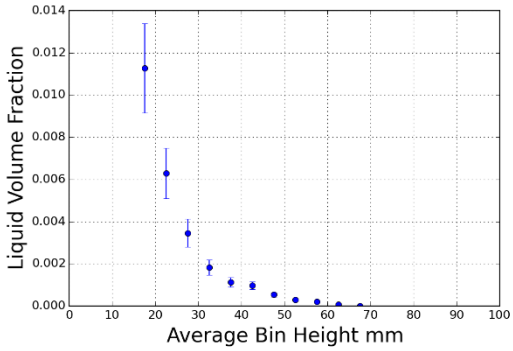


Figure A. 1730: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 Matched Only Droplets for .LA Image

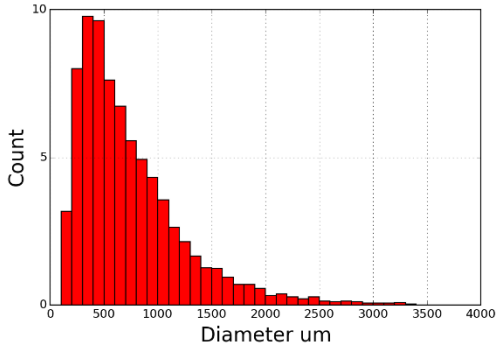


Figure A. 1731: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

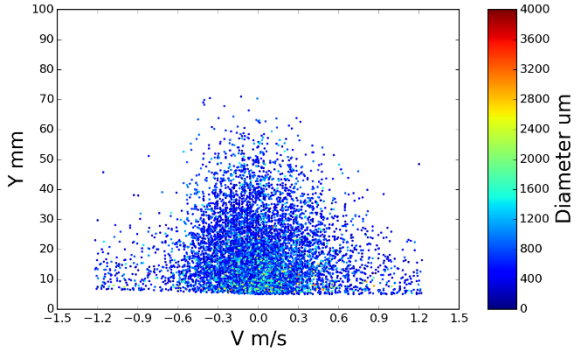


Figure A. 1734: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

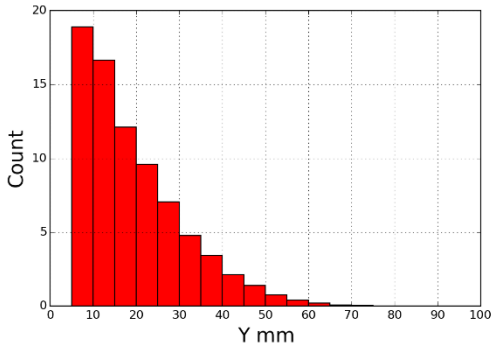


Figure A. 1732: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

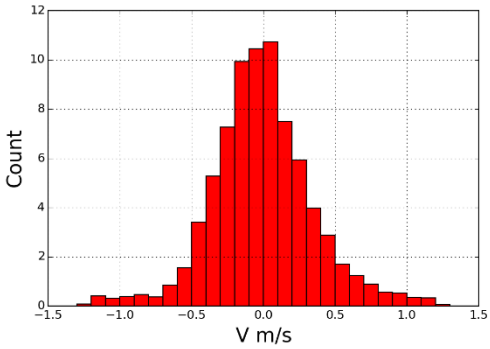


Figure A. 1735: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

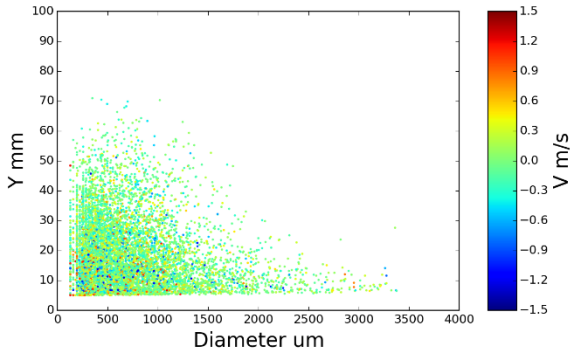


Figure A. 1733: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 Matched Only Droplets for .LB Image

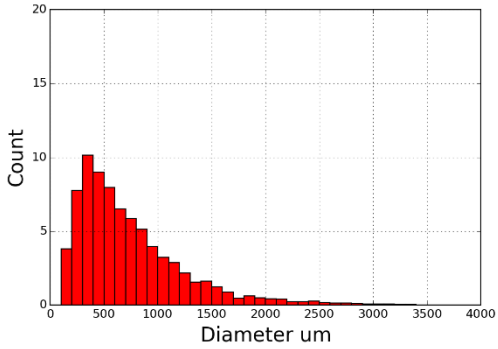


Figure A. 1736: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

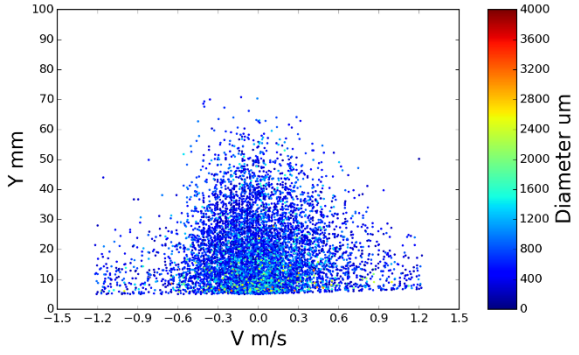


Figure A. 1739: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

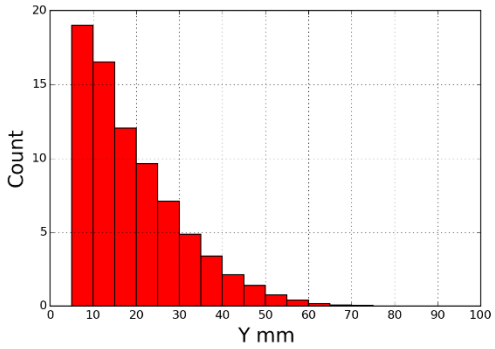


Figure A. 1737: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

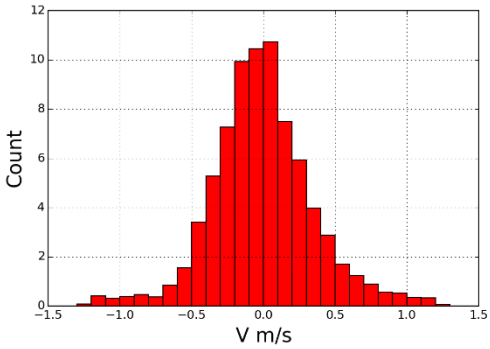


Figure A. 1740: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

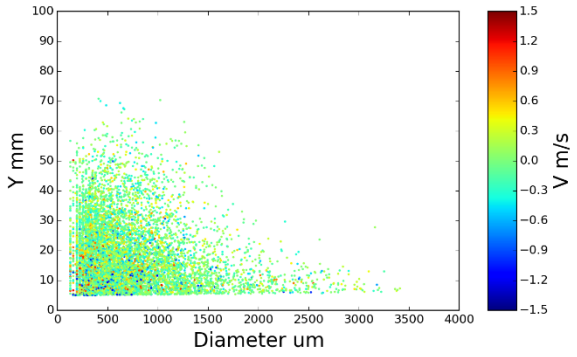


Figure A. 1738: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	80.19	81.95	128.6	3420	736.9	572.2	128.6	3417	738.4	572.3
20-40mm	42.78	43.21	128.6	2796	534.8	361.2	128.6	2837	539.5	367.4
40-60mm	8.18	8.09	128.6	2359	508.6	343.0	128.6	2302	516.7	347.7
60-80mm	0.3	0.34	128.6	1140	442.6	262.9	128.6	1249	416.0	254.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	131.45	133.59	128.6	3420	656.3	509.8	128.6	3417	659.8	511.8
			Height A (mm)				Height B (mm)			
Highest Particle			72.7216				72.1240			
Lowest Particle			5.0730				5.0730			

Table A. 184: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	45.97	128.6	3400	863.0	594.8	128.6	3417	848.9	583.3	-1.220	1.220	-0.100	0.330	-1.210	1.220	-0.000	0.390
20-40mm	29.17	128.6	2796	614.8	368.2	128.6	2837	611.4	370.9	-1.220	1.210	-0.100	0.210	-1.190	1.210	-0.010	0.310
40-60mm	5.87	128.6	2359	595.4	346.3	128.6	2302	592.7	347.7	-0.940	1.080	-0.080	0.140	-0.850	1.200	-0.010	0.260
60-80mm	0.19	157.6	1140	513.6	234.8	157.6	1249	520.8	262.6	-1.060	0.030	-0.150	0.240	-0.430	0.290	-0.050	0.210
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	81.2	128.6	3400	753.7	522.9	128.6	3417	744.3	515.0	-1.220	1.220	-0.100	0.280	-1.210	1.220	-0.000	0.360

Table A. 185: Matched Droplet Info

A.2.4.2 All Droplets for .LA Image

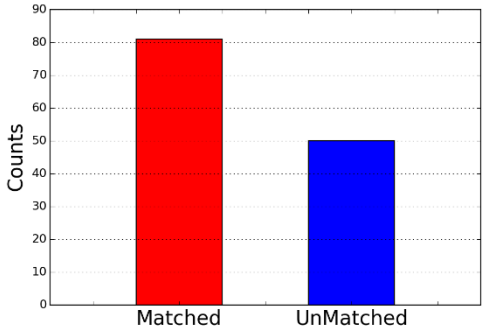


Figure A. 1741: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

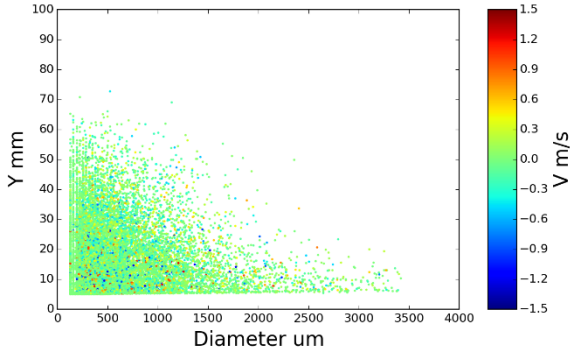


Figure A. 1744: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

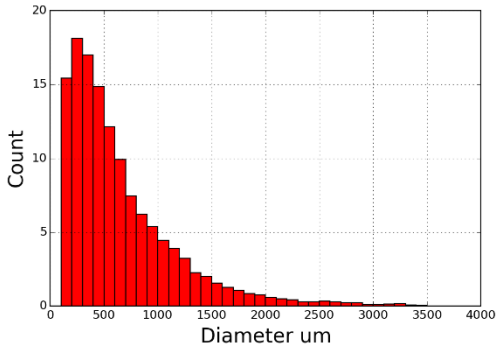


Figure A. 1742: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

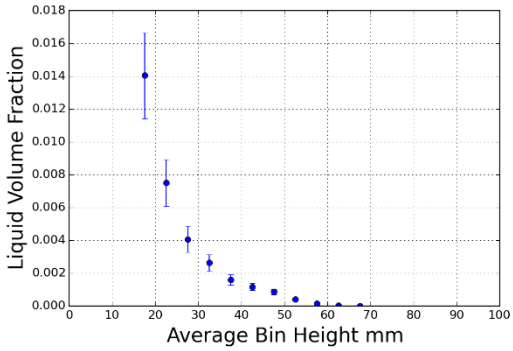


Figure A. 1745: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

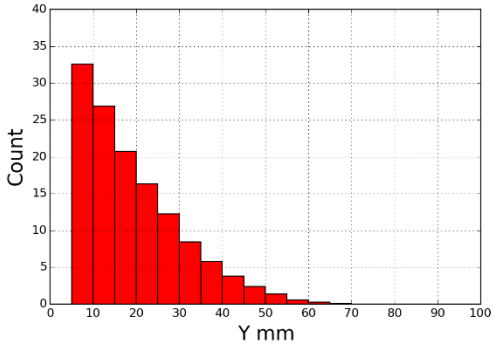


Figure A. 1743: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 All Droplets for .LB Image

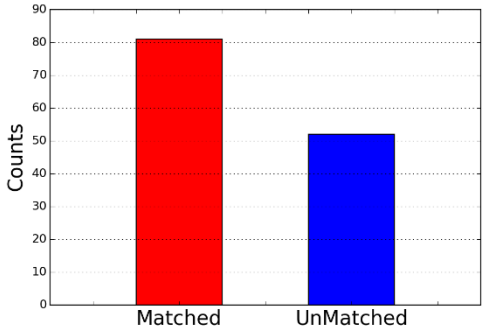


Figure A. 1746: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

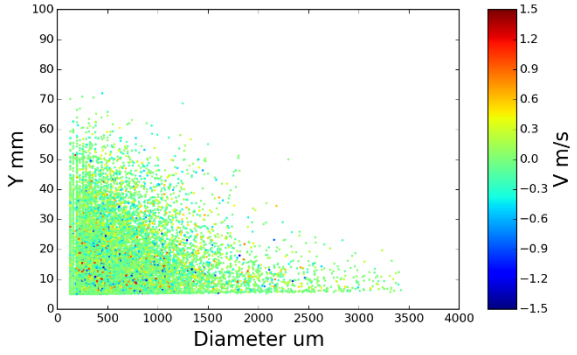


Figure A. 1749: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

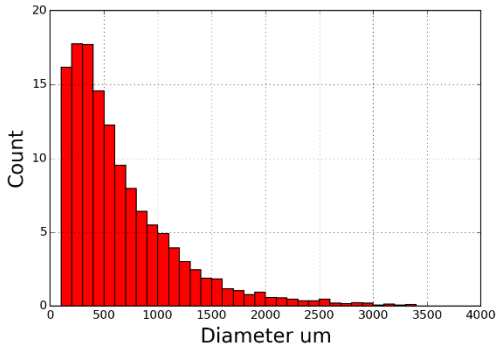


Figure A. 1747: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

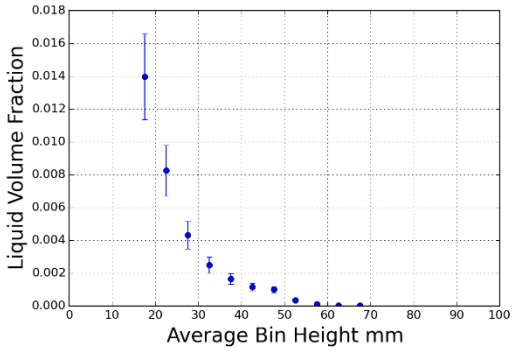


Figure A. 1750: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

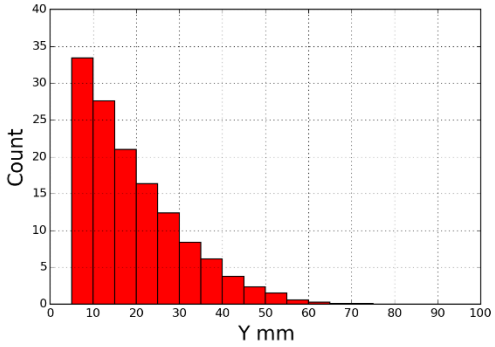


Figure A. 1748: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 Matched Only Droplets for .LA Image

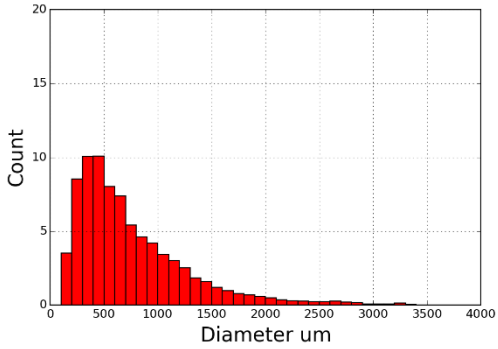


Figure A. 1751: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

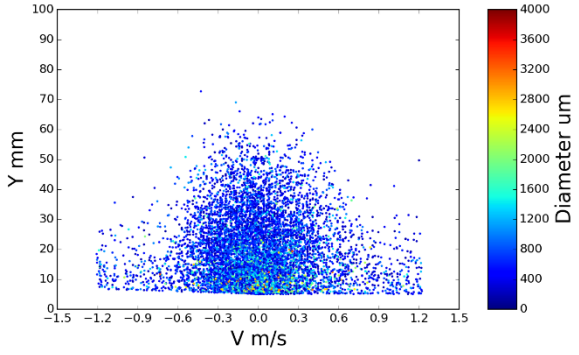


Figure A. 1754: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

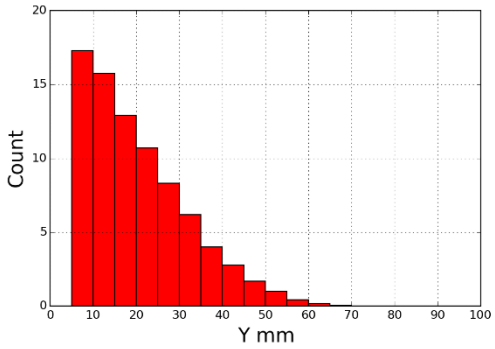


Figure A. 1752: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

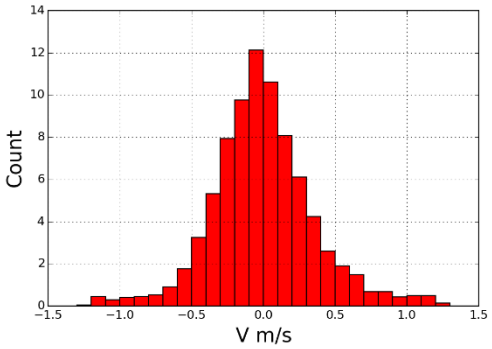


Figure A. 1755: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

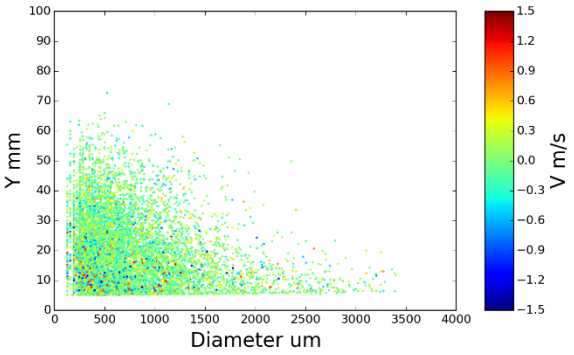


Figure A. 1753: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 Matched Only Droplets for .LB Image

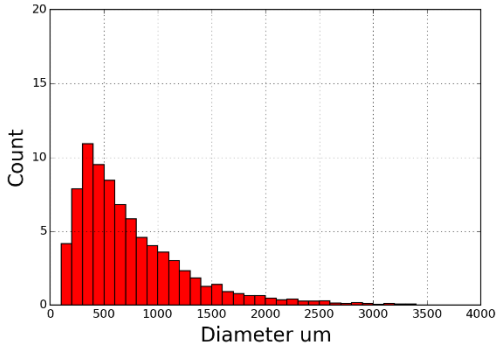


Figure A. 1756: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

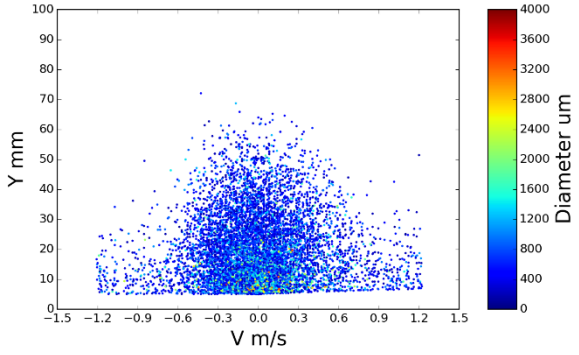


Figure A. 1759: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

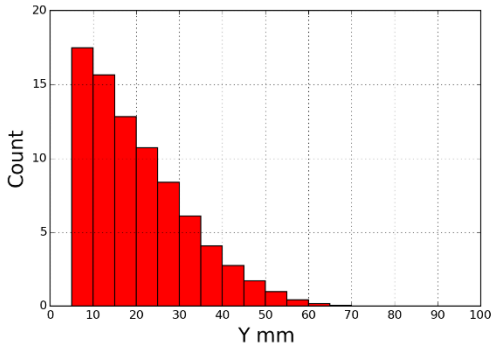


Figure A. 1757: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

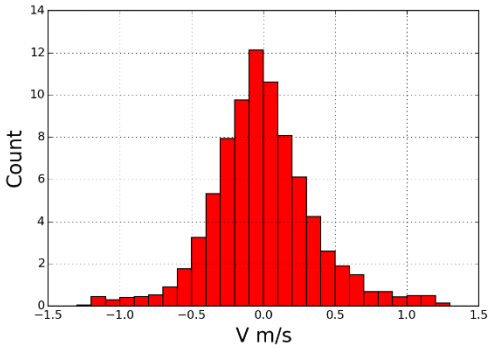


Figure A. 1760: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

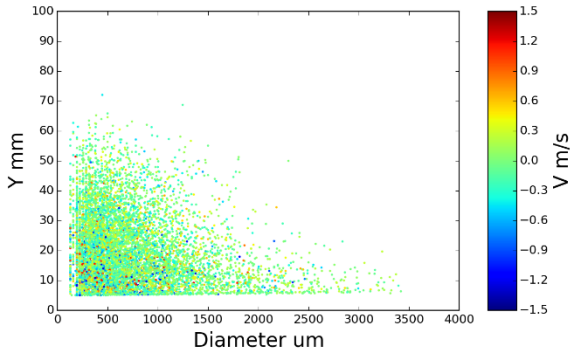


Figure A. 1758: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	69.14	70.1	128.6	3406	739.1	576.8	128.6	3416	736.8	563.0
20-40mm	36.71	37.13	128.6	3306	532.1	371.8	128.6	3146	533.7	375.0
40-60mm	8.95	8.81	128.6	2610	464.6	316.6	128.6	2258	464.6	303.9
60-80mm	0.95	0.9	128.6	1342	469.3	315.5	128.6	1400	483.1	319.5
80-100mm	0.01	0.01	599.9	599.9	599.9	0.0	596.5	596.5	596.5	0.0
All	115.76	116.95	128.6	3406	650.0	513.0	128.6	3416	649.8	504.0
			Height A (mm)				Height B (mm)			
Highest Particle			93.0561				93.0996			
Lowest Particle			5.0730				5.0730			

Table A. 186: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	37.5	128.6	3404	871.2	592.1	128.6	3416	856.9	589.5	-1.220	1.220	-0.110	0.330	-1.220	1.220	-0.020	0.390
20-40mm	24.63	128.6	3306	618.6	385.6	128.6	3146	614.3	386.2	-1.220	1.180	-0.110	0.220	-1.220	1.220	-0.020	0.320
40-60mm	6.19	128.6	2610	538.2	318.7	128.6	2258	531.1	308.9	-1.140	1.180	-0.110	0.150	-0.980	1.020	-0.020	0.270
60-80mm	0.62	128.6	1342	602.9	311.5	157.6	1400	592.4	314.5	-0.610	0.030	-0.120	0.130	-0.490	0.420	-0.030	0.190
80-100mm	0.01	599.9	599.9	599.9	0.0	596.5	596.5	596.5	0.0	-0.350	-0.350	-0.350	0.000	0.030	0.030	0.030	0.000
All	68.95	128.6	3404	748.6	521.7	128.6	3416	738.8	518.8	-1.220	1.220	-0.110	0.280	-1.220	1.220	-0.020	0.350

Table A. 187: Matched Droplet Info

A.2.4.2 All Droplets for .LA Image

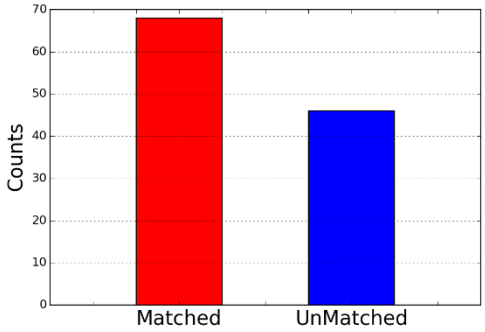


Figure A. 1761: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

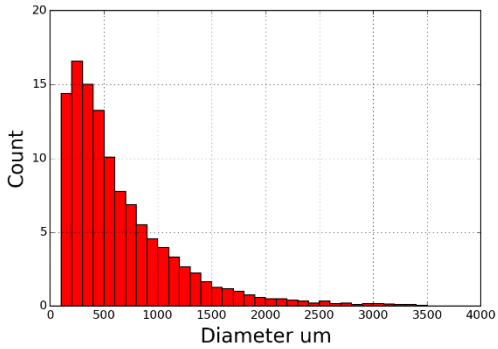


Figure A. 1762: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

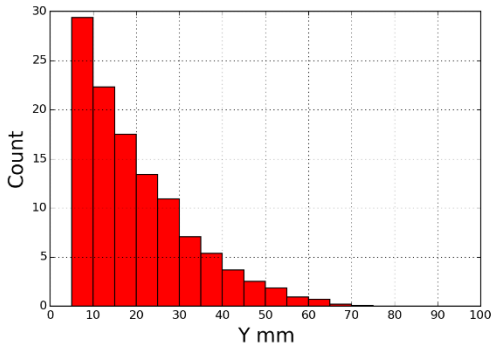


Figure A. 1763: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

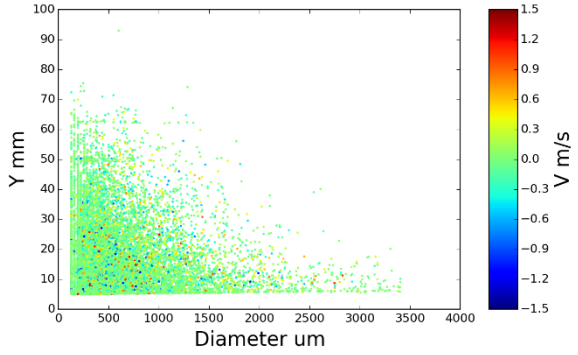


Figure A. 1764: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

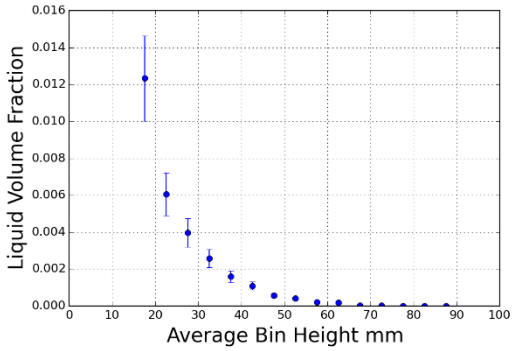


Figure A. 1765: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 All Droplets for .LB Image

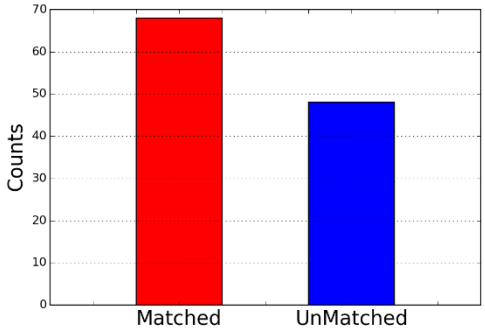


Figure A. 1766: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

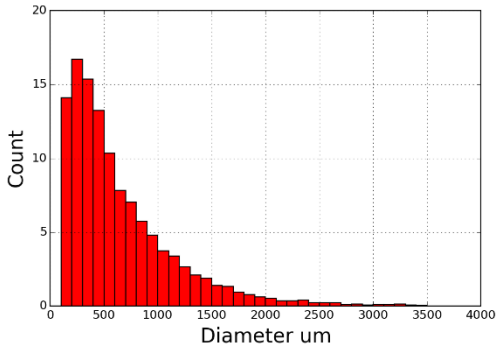


Figure A. 1767: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

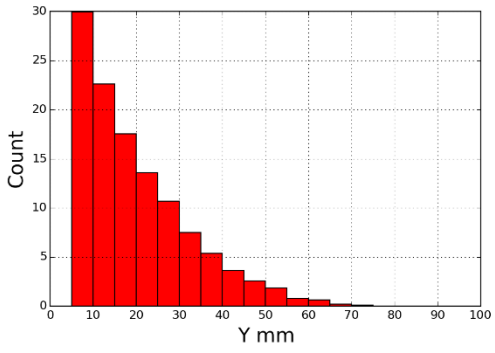


Figure A. 1768: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

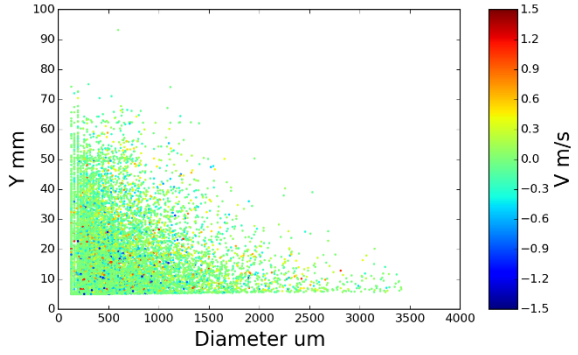


Figure A. 1769: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

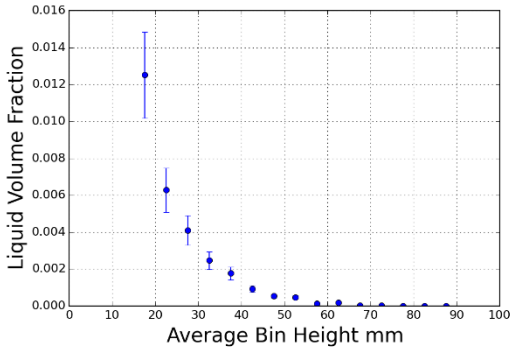


Figure A. 1770: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 Matched Only Droplets for .LA Image

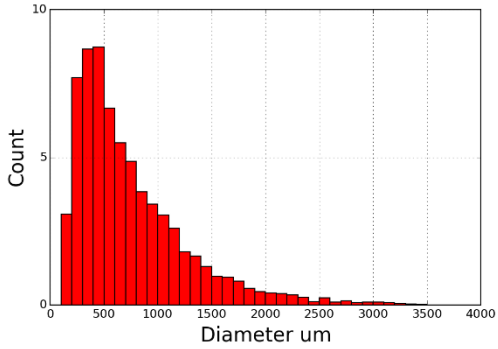


Figure A. 1771: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

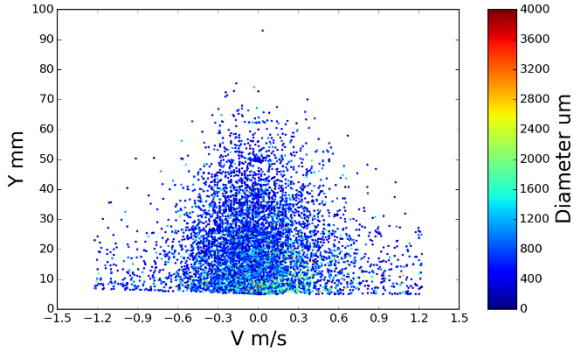


Figure A. 1774: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

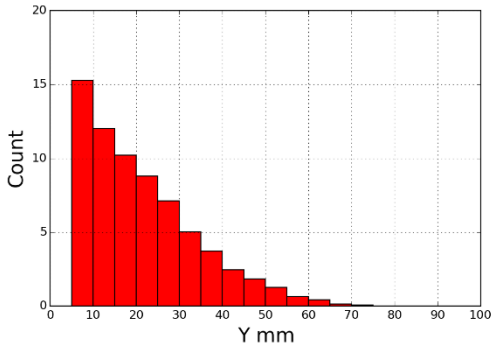


Figure A. 1772: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

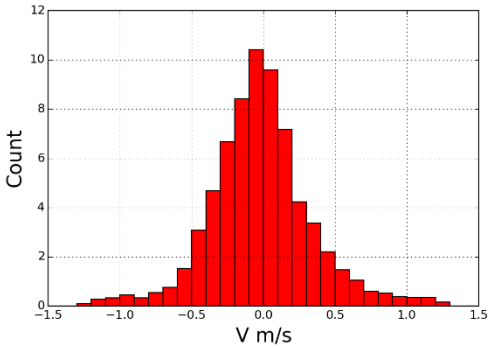


Figure A. 1775: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

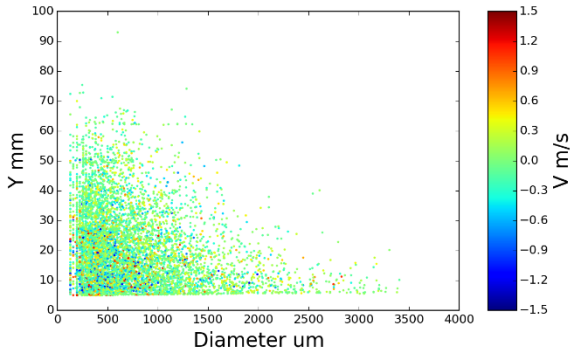


Figure A. 1773: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 Matched Only Droplets for .LB Image

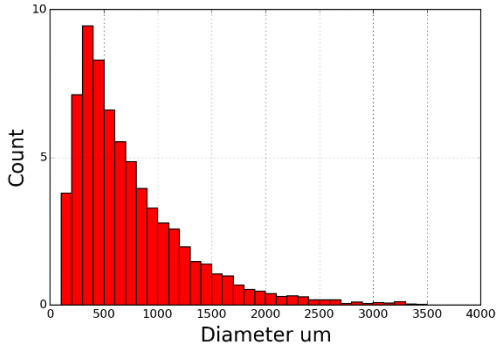


Figure A. 1776: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

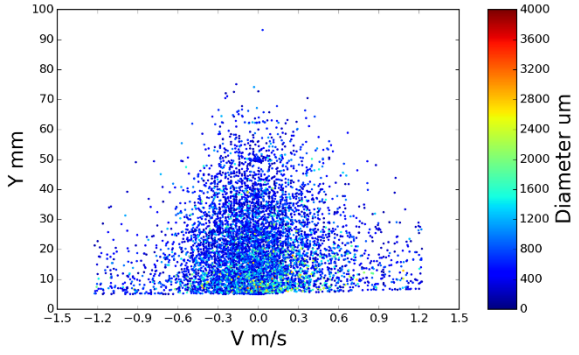


Figure A. 1779: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

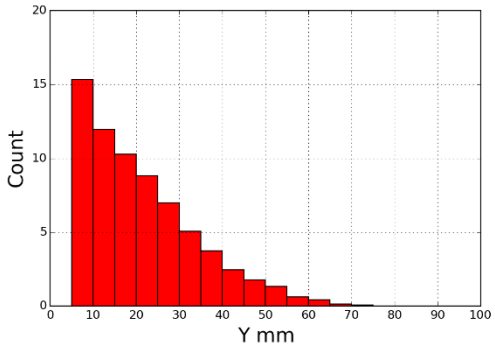


Figure A. 1777: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

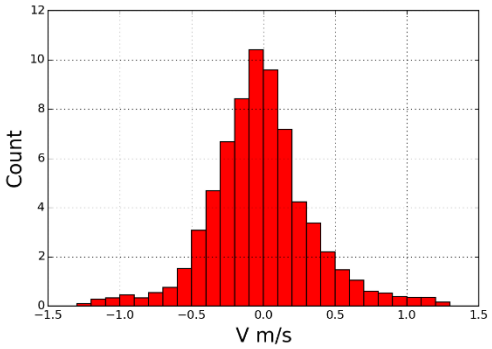


Figure A. 1780: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

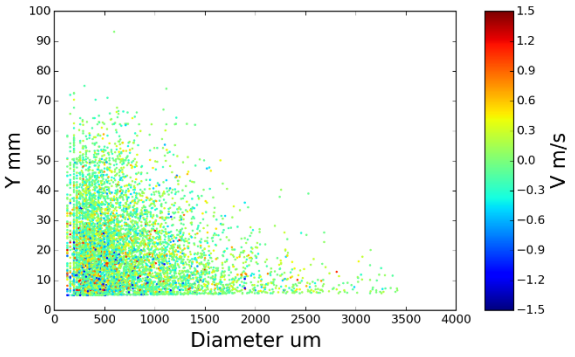


Figure A. 1778: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	51.58	52.29	128.6	3371	712.9	554.3	128.6	3414	713.5	555.3
20-40mm	25.78	26.38	128.6	3236	524.2	366.9	128.6	3170	523.0	372.6
40-60mm	7.45	7.68	128.6	2606	451.1	337.5	128.6	2544	441.9	328.1
60-80mm	1.22	1.16	128.6	1660	490.5	352.5	128.6	1620	518.1	351.6
80-100mm	0.01	0.0	315.1	315.1	315.1	0.0	-	-	-	-
All	86.04	87.51	128.6	3371	630.5	496.7	128.6	3414	629.7	498.1
			Height A (mm)				Height B (mm)			
Highest Particle			84.5928				79.7982			
Lowest Particle			5.0730				5.0730			

Table A. 188: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	26.32	128.6	3371	886.2	606.1	128.6	3414	869.1	595.4	-1.220	1.220	-0.110	0.330	-1.220	1.220	0.000	0.400
20-40mm	16.35	128.6	3236	618.5	374.9	128.6	3085	612.9	379.8	-1.210	1.160	-0.130	0.210	-1.200	1.210	-0.000	0.330
40-60mm	4.69	128.6	2606	553.3	364.8	128.6	2544	545.2	348.9	-1.220	1.190	-0.130	0.190	-1.200	1.220	0.030	0.280
60-80mm	0.75	128.6	1660	637.7	358.4	128.6	1620	632.8	355.3	-0.590	0.070	-0.070	0.120	-0.340	1.000	0.020	0.220
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	48.11	128.6	3371	758.9	532.6	128.6	3414	746.9	524.7	-1.220	1.220	-0.120	0.280	-1.220	1.220	0.000	0.370

Table A. 189: Matched Droplet Info

A.2.4.2 All Droplets for .LA Image

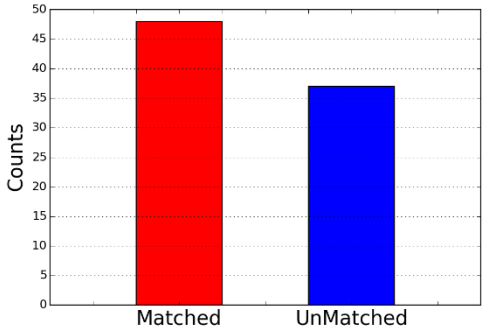


Figure A. 1781: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

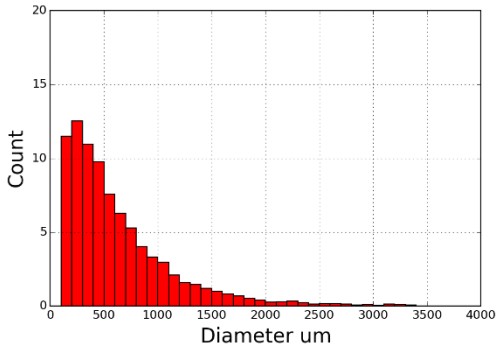


Figure A. 1782: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

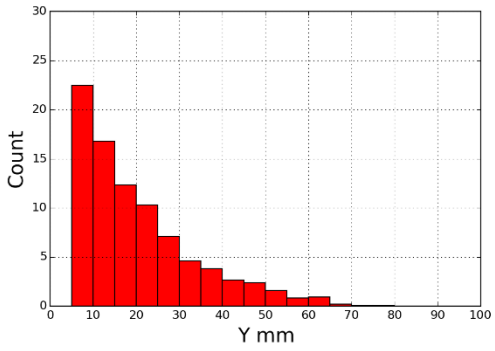


Figure A. 1783: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

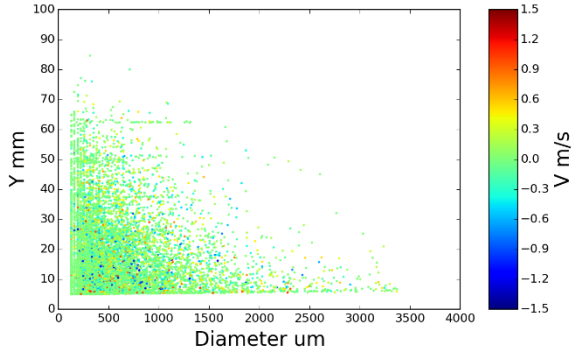


Figure A. 1784: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

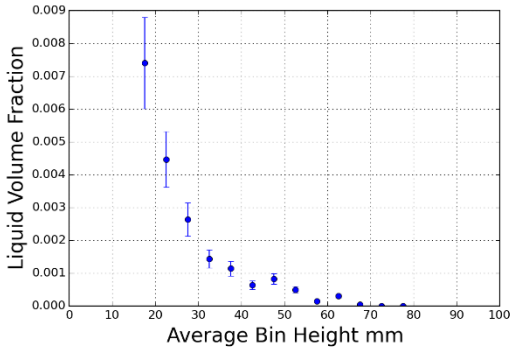


Figure A. 1785: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 All Droplets for .LB Image

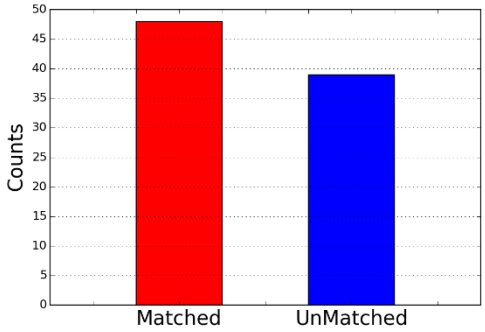


Figure A. 1786: CHC Count Comparison R-134a 40F 7500Btu 15000Lb Tri

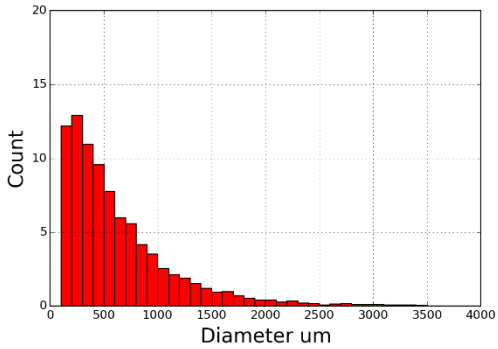


Figure A. 1787: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

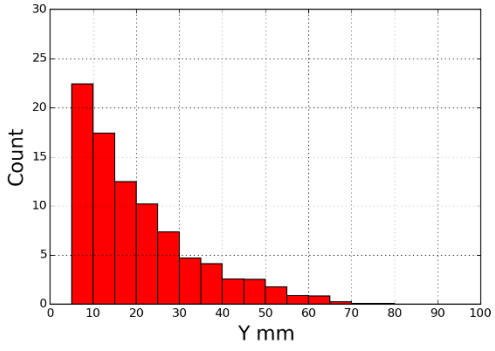


Figure A. 1788: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

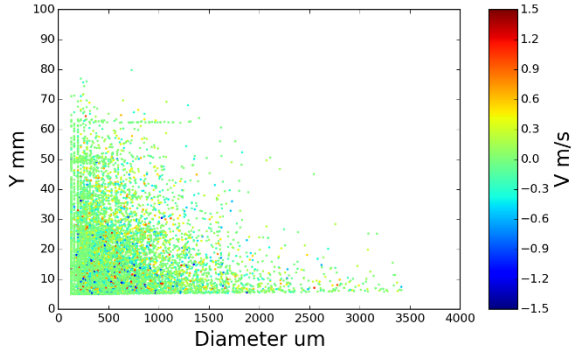


Figure A. 1789: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

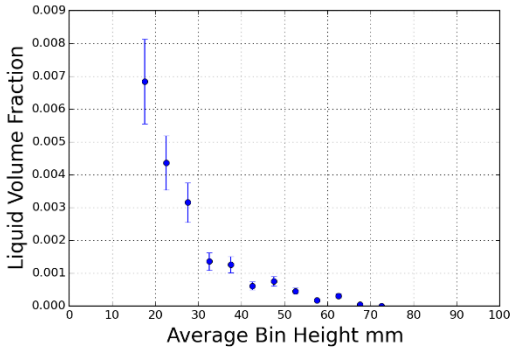


Figure A. 1790: Void Fraction R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 Matched Only Droplets for .LA Image

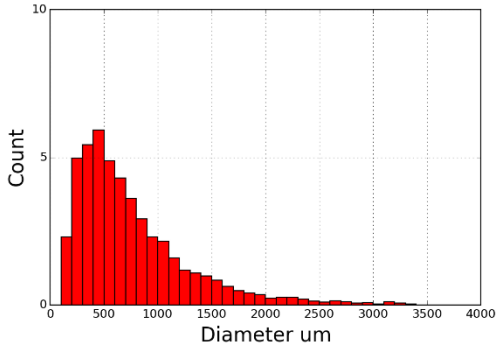


Figure A. 1791: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

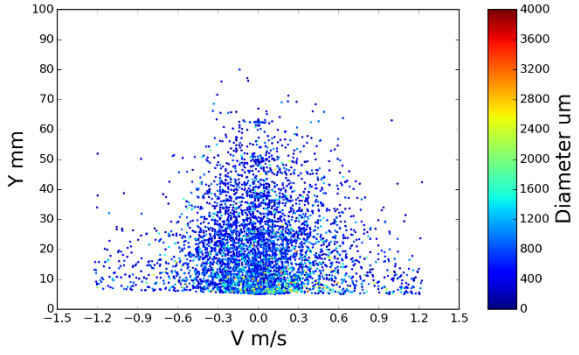


Figure A. 1794: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

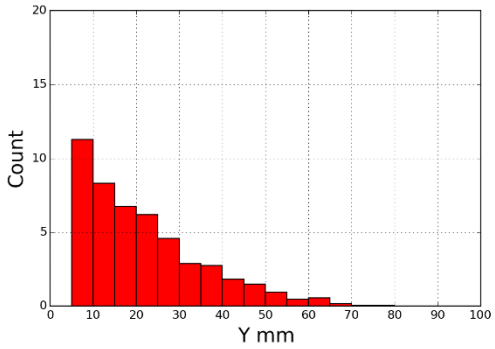


Figure A. 1792: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

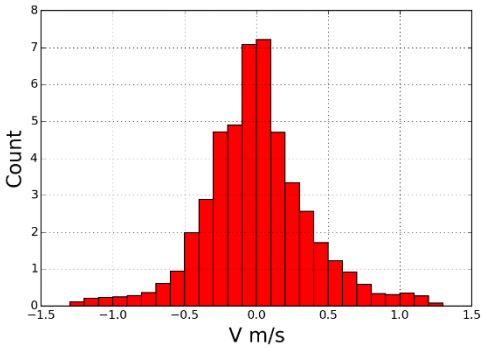


Figure A. 1795: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

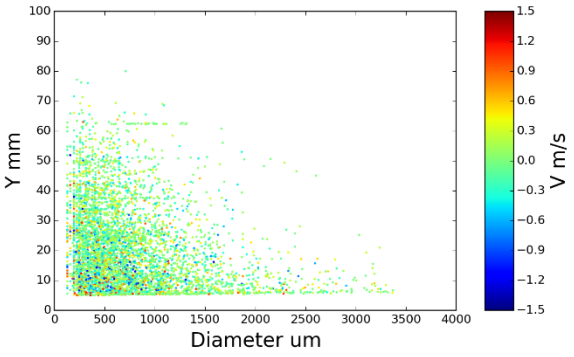


Figure A. 1793: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.2.4.2 Matched Only Droplets for .LB Image

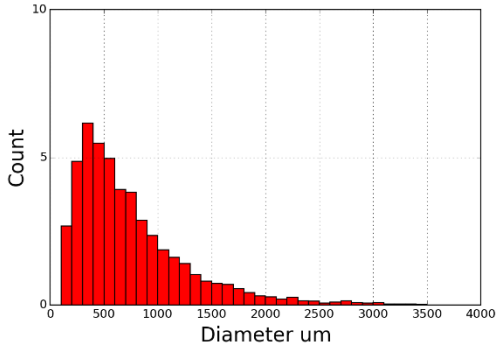


Figure A. 1796: Droplet Diameter Histogram R-134a 40F 7500Btu 15000Lb Tri

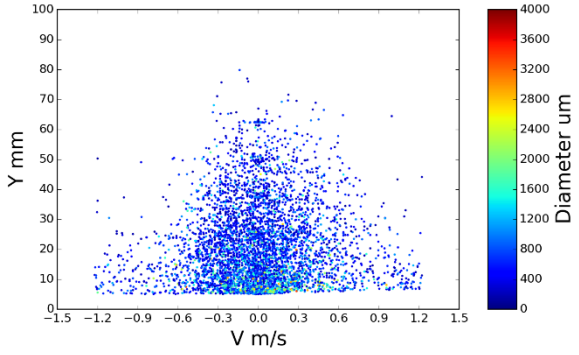


Figure A. 1799: Droplet Height vs Vertical Velocity R-134a 40F 7500Btu 15000Lb Tri

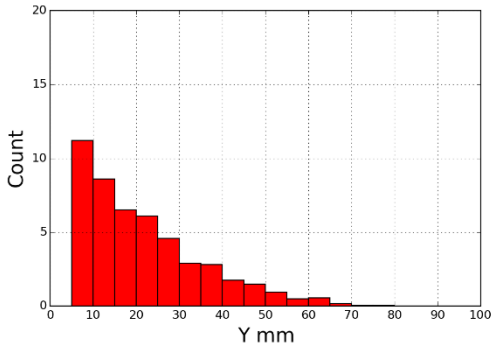


Figure A. 1797: Droplet Height Histogram R-134a 40F 7500Btu 15000Lb Tri

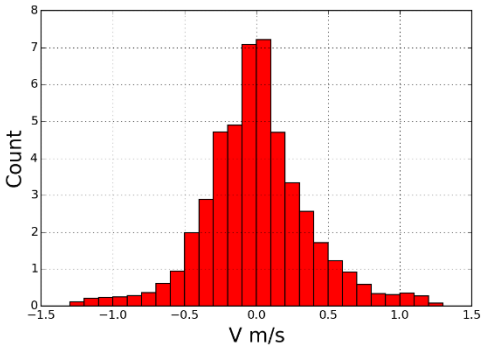


Figure A. 1800: Droplet Vertical Velocity Histogram R-134a 40F 7500Btu 15000Lb Tri

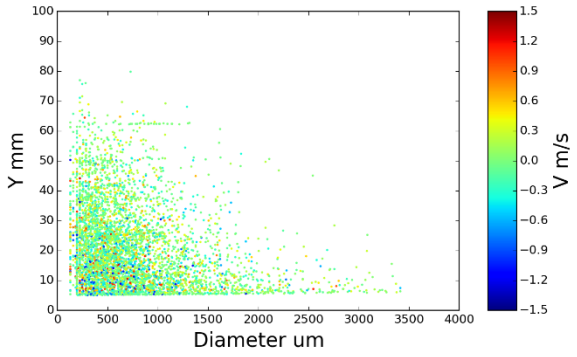


Figure A. 1798: Droplet Height vs Diameter R-134a 40F 7500Btu 15000Lb Tri

A.3 - 1556 R-134a 40F 5000Btu 30000Lb Tri

A.3.1 Liquid Level 1

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	16753 / 2.111
Ref Mass Flow (lb/hr) / (kg/s)	3210 / 0.404
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	29819 / 40.442
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4951 / 15.62
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	40.4 / 4.65
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.6 / 4.77
Total Bundle Q (Btu/hr) / (kW)	114453 / 33.54
Total Bundle & Preboiler Q (Btu/hr) / (kW)	288934 / 84.68
Top Two Rows HTC Ratio	1.140
Bundle Inlet Quality	0.56
Bundle Exit Quality	0.99

Table A. 190: Thermal Conditions

A.3.1.1 Lens 100mm Mag 0_29x

A.3.1.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	149.25	149.4	57.2	3033	430.0	452.6	57.2	3035	449.6	462.0
40-60mm	316.56	309.35	57.2	3042	380.8	406.9	57.2	3043	389.2	410.0
60-80mm	215.25	210.3	57.2	3010	318.7	326.2	57.2	3038	325.4	328.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	684.84	673.51	57.2	3042	371.9	396.4	57.2	3043	382.6	401.7
			Height A (mm)				Height B (mm)			
Highest Particle			76.0293				76.0293			
Lowest Particle			28.0482				28.0482			

Table A. 191: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	65.46	57.2	3019	541.6	511.1	57.2	3025	539.7	510.2	-2.540	2.540	-0.010	0.560	-2.540	2.540	-0.060	0.620
40-60mm	182.4	57.2	3033	467.1	438.6	57.2	3043	466.3	439.4	-2.540	2.540	-0.010	0.440	-2.540	2.540	-0.020	0.520
60-80mm	140.69	57.2	3010	387.4	350.3	57.2	3038	387.2	350.6	-2.540	2.540	-0.020	0.370	-2.540	2.540	0.010	0.430
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	388.55	57.2	3033	450.8	426.3	57.2	3043	450.1	426.6	-2.540	2.540	-0.010	0.440	-2.540	2.540	-0.020	0.510

Table A. 192: Matched Droplet Info

A.3.1.1 All Droplets for .LA Image

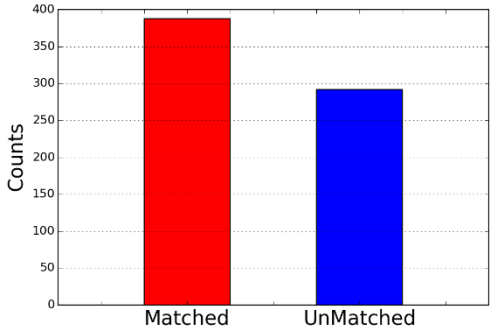


Figure A. 1801: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

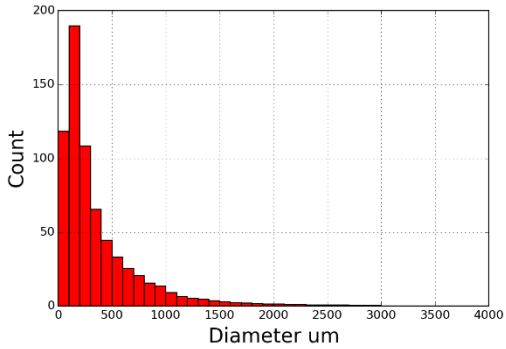


Figure A. 1802: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

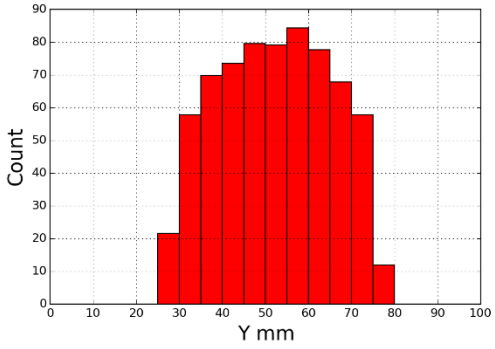


Figure A. 1803: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

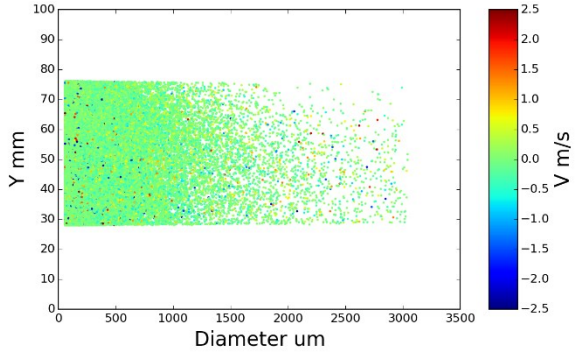


Figure A. 1804: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

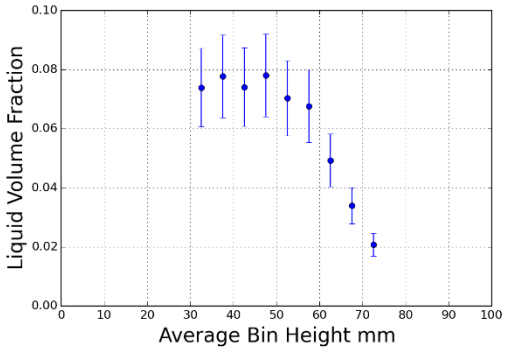


Figure A. 1805: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 All Droplets for .LB Image

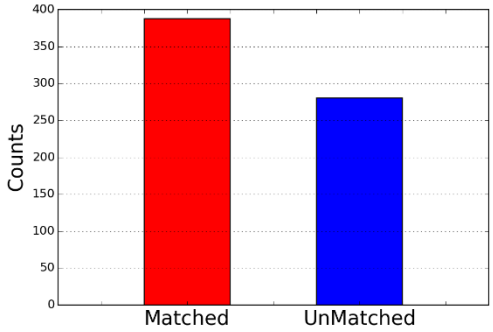


Figure A. 1806: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

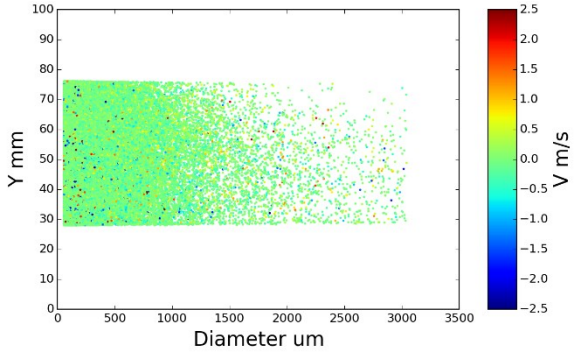


Figure A. 1809: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

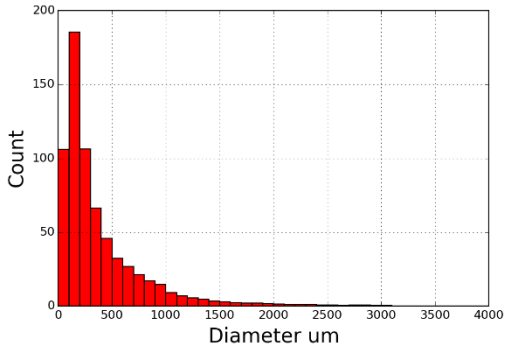


Figure A. 1807: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

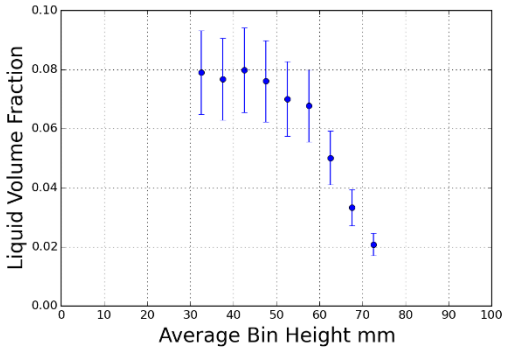


Figure A. 1810: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

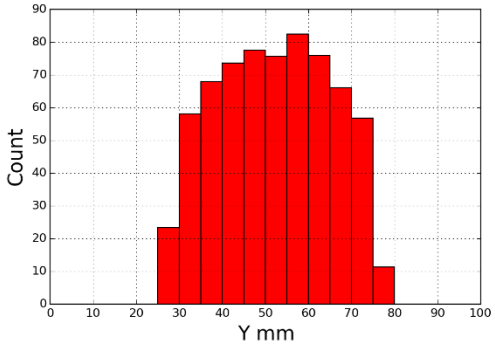


Figure A. 1808: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 Matched Only Droplets for .LA Image

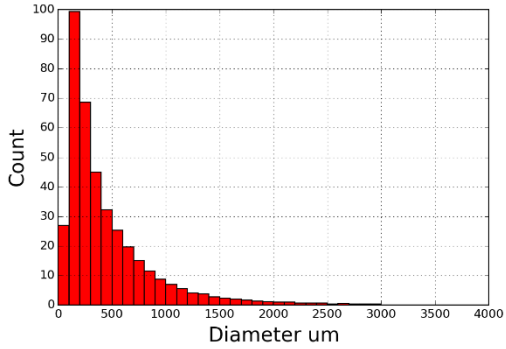


Figure A. 1811: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

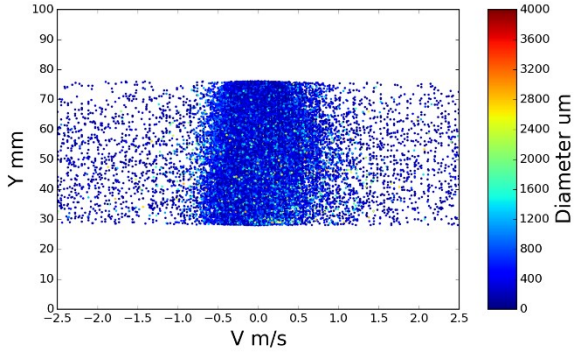


Figure A. 1814: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

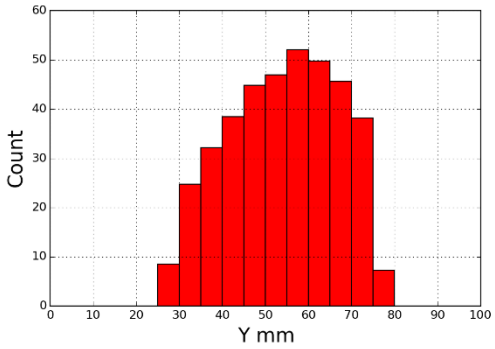


Figure A. 1812: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

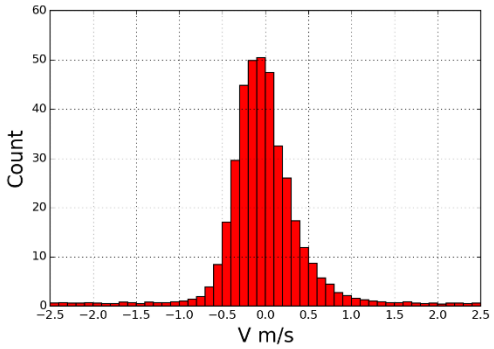


Figure A. 1815: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

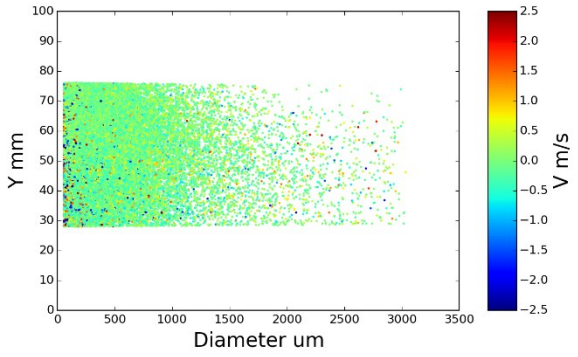


Figure A. 1813: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 Matched Only Droplets for .LB Image

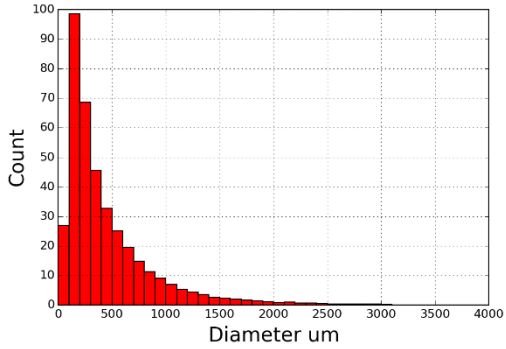


Figure A. 1816: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

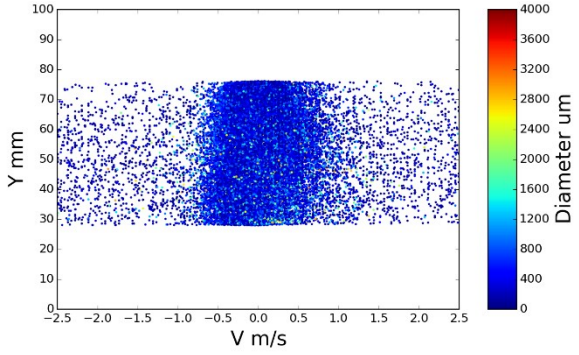


Figure A. 1819: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

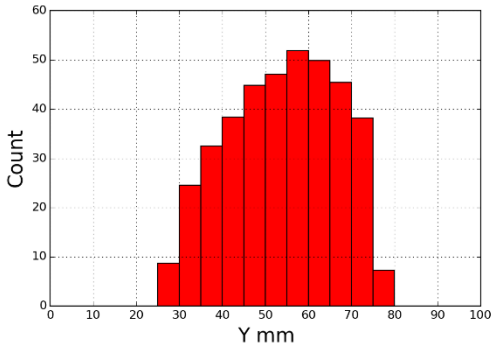


Figure A. 1817: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

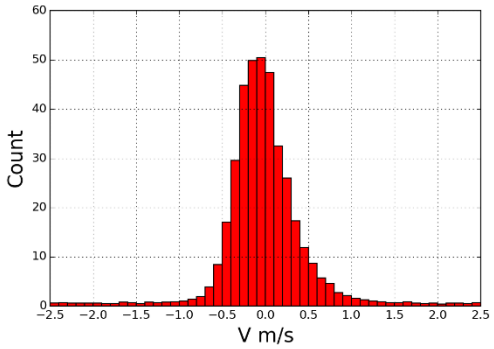


Figure A. 1820: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

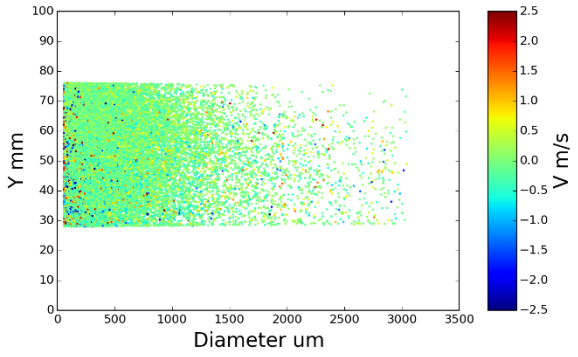


Figure A. 1818: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	115.42	117.27	57.2	3043	472.6	482.7	57.2	3036	485.7	487.7
40-60mm	275.15	268.3	57.2	3043	410.8	444.8	57.2	3035	419.6	445.6
60-80mm	203.15	197.76	57.2	3012	344.7	365.7	57.2	3022	350.1	368.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	598.91	588.05	57.2	3043	400.2	430.0	57.2	3036	409.3	433.1
			Height A (mm)				Height B (mm)			
Highest Particle			76.0293				76.0293			
Lowest Particle			28.0482				28.0482			

Table A. 193: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	43.35	57.2	3043	632.0	562.9	57.2	3036	629.0	559.8	-2.540	2.540	-0.040	0.560	-2.540	2.540	-0.040	0.630
40-60mm	145.64	57.2	3042	525.8	491.5	57.2	3035	523.1	490.4	-2.540	2.540	-0.040	0.440	-2.540	2.540	-0.030	0.530
60-80mm	123.99	57.2	2975	431.4	397.5	57.2	2976	427.6	395.5	-2.540	2.540	-0.040	0.380	-2.530	2.540	-0.030	0.440
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	312.98	57.2	3043	503.1	472.7	57.2	3036	499.9	471.1	-2.540	2.540	-0.040	0.440	-2.540	2.540	-0.030	0.510

Table A. 194: Matched Droplet Info

A.3.1.1 All Droplets for .LA Image

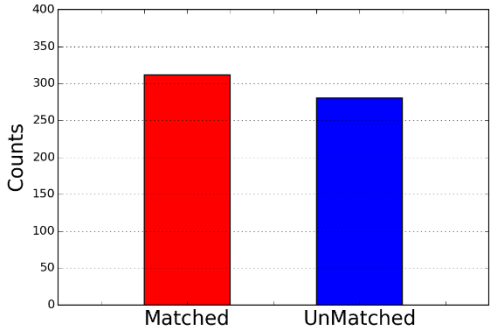


Figure A. 1821: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

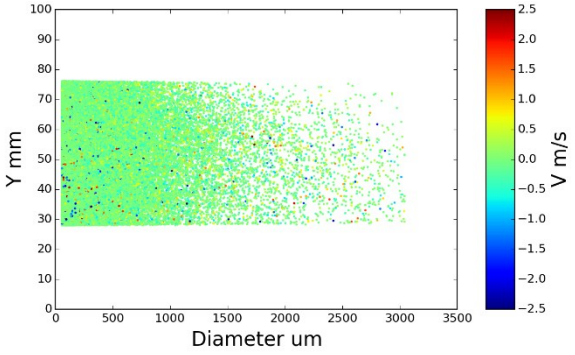


Figure A. 1824: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

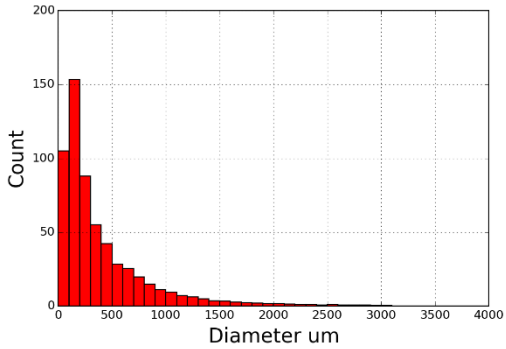


Figure A. 1822: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

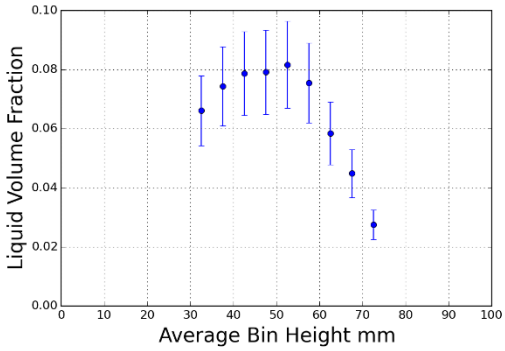


Figure A. 1825: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

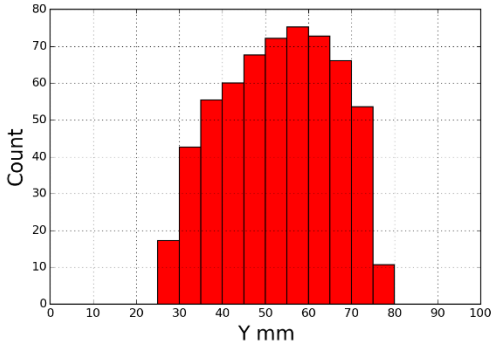


Figure A. 1823: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 All Droplets for .LB Image

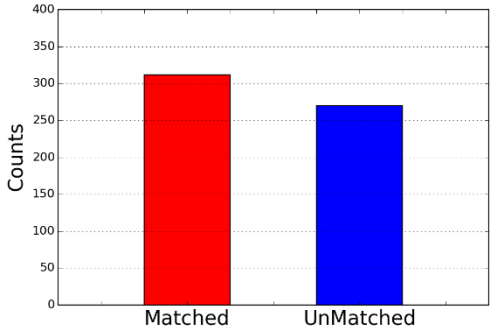


Figure A. 1826: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

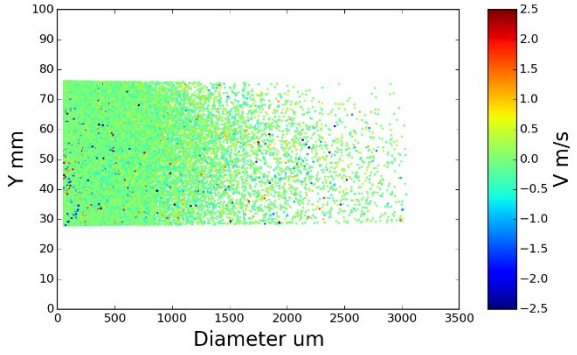


Figure A. 1829: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

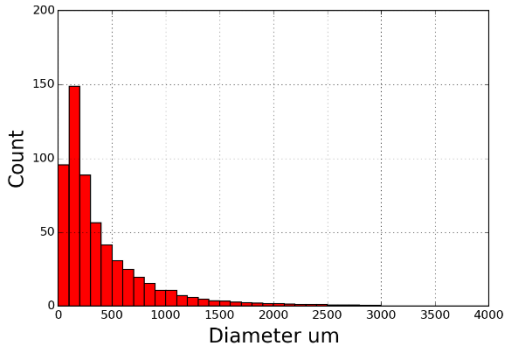


Figure A. 1827: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

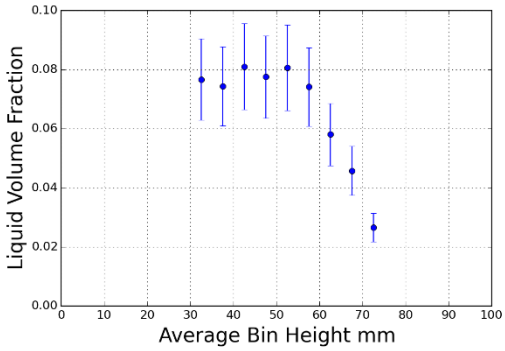


Figure A. 1830: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

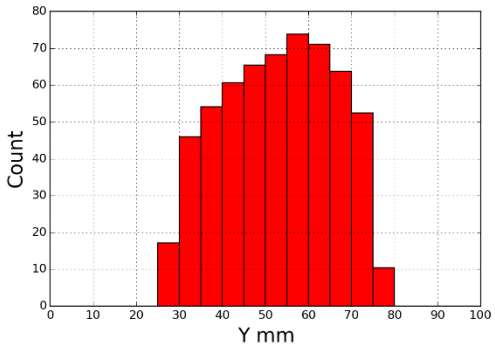


Figure A. 1828: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 Matched Only Droplets for .LA Image

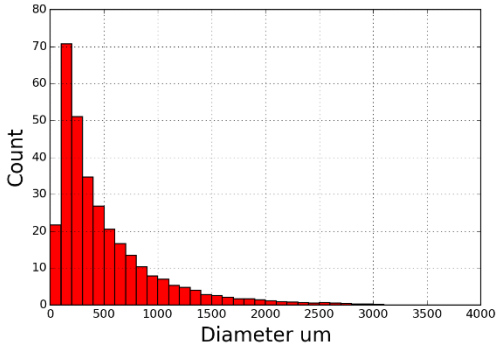


Figure A. 1831: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

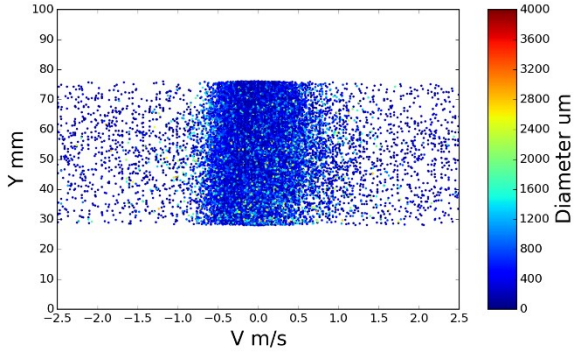


Figure A. 1834: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

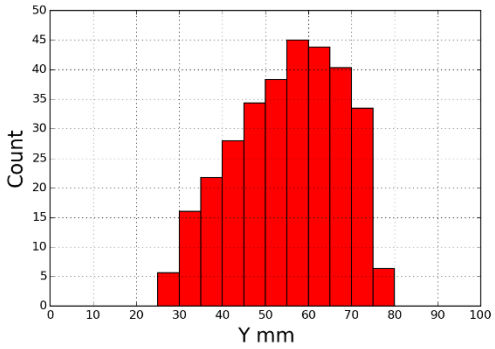


Figure A. 1832: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

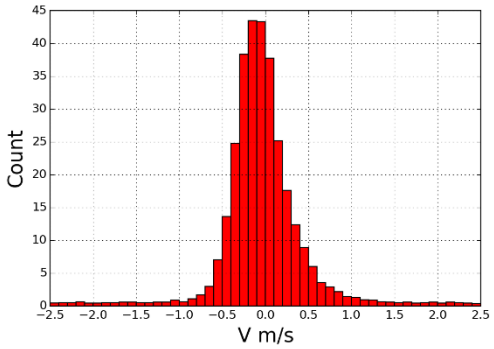


Figure A. 1835: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

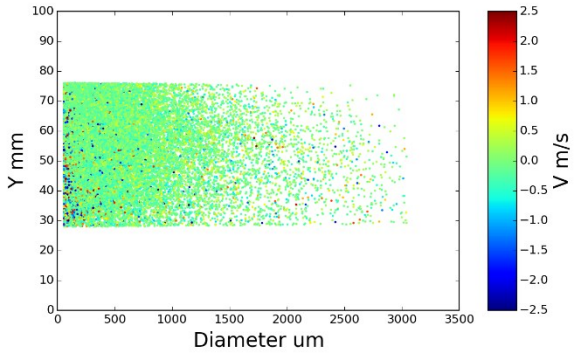


Figure A. 1833: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 Matched Only Droplets for .LB Image

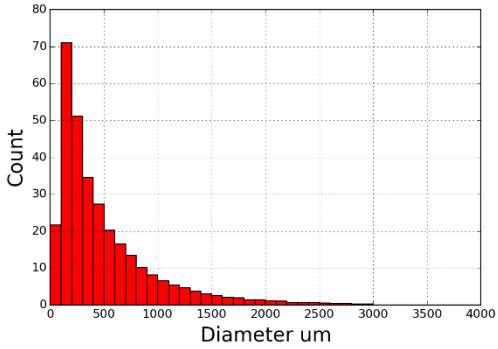


Figure A. 1836: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

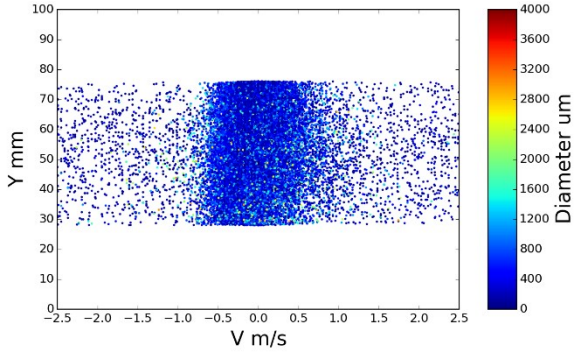


Figure A. 1839: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

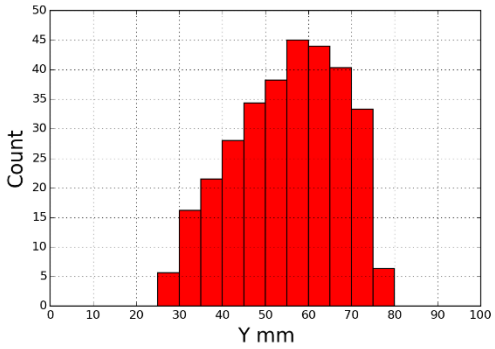


Figure A. 1837: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

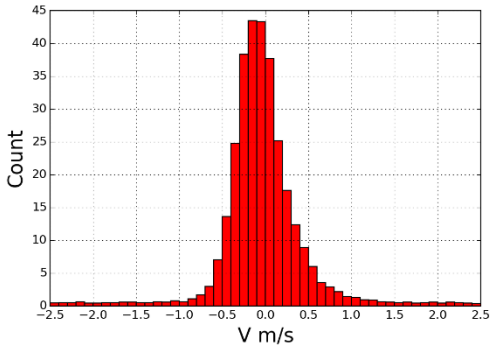


Figure A. 1840: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

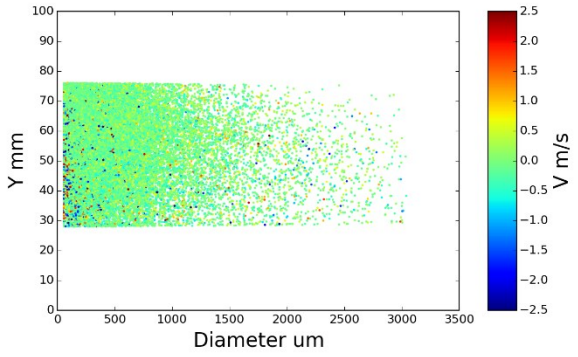


Figure A. 1838: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	86.72	86.35	57.2	3039	507.7	515.8	57.2	3020	510.2	517.9
40-60mm	243.87	241.13	57.2	3042	420.5	462.1	57.2	3017	432.2	460.0
60-80mm	189.77	180.87	57.2	3030	337.0	370.0	57.2	3019	348.5	375.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	523.6	511.49	57.2	3042	404.6	444.9	57.2	3020	415.7	446.6
			Height A (mm)				Height B (mm)			
Highest Particle			76.0293				76.0293			
Lowest Particle			28.0482				28.0482			

Table A. 195: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	29.79	57.2	3039	719.2	605.2	57.2	3020	717.4	611.9	-2.540	2.540	-0.010	0.560	-2.540	2.540	-0.010	0.640
40-60mm	124.91	57.2	3011	555.4	514.7	57.2	2992	552.2	513.2	-2.540	2.540	-0.010	0.460	-2.540	2.540	-0.010	0.540
60-80mm	110.42	57.2	3010	431.5	406.2	57.2	3019	429.6	404.6	-2.540	2.540	-0.040	0.410	-2.540	2.540	-0.040	0.480
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	265.12	57.2	3039	522.2	492.9	57.2	3020	519.7	492.5	-2.540	2.540	-0.020	0.450	-2.540	2.540	-0.020	0.530

Table A. 196: Matched Droplet Info

A.3.1.1 All Droplets for .LA Image

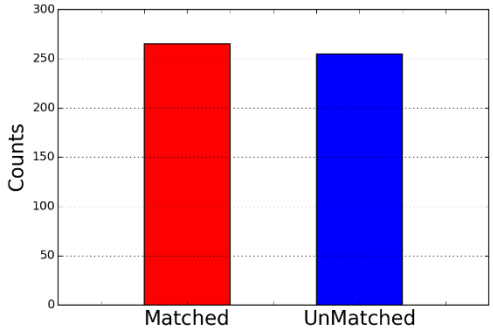


Figure A. 1841: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

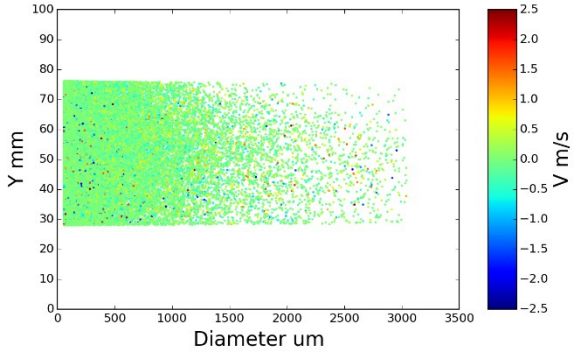


Figure A. 1844: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

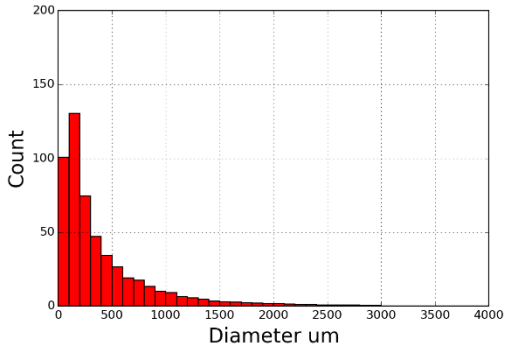


Figure A. 1842: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

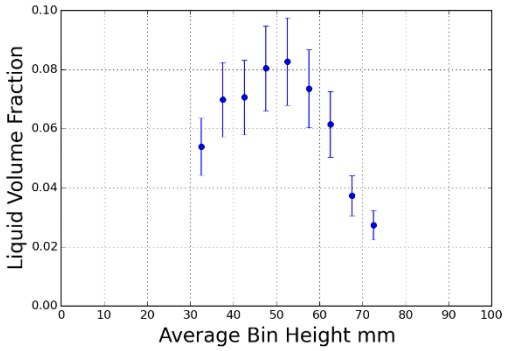


Figure A. 1845: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

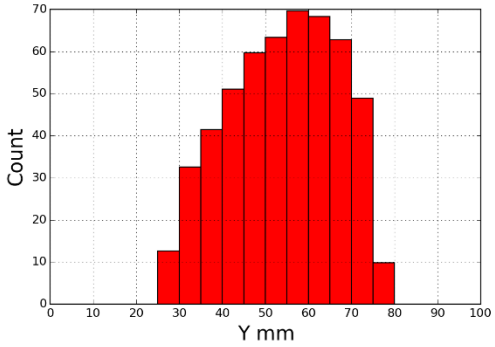


Figure A. 1843: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 All Droplets for .LB Image

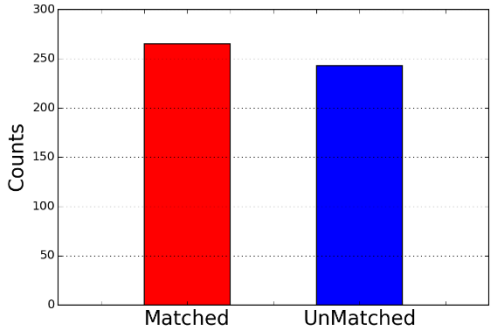


Figure A. 1846: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

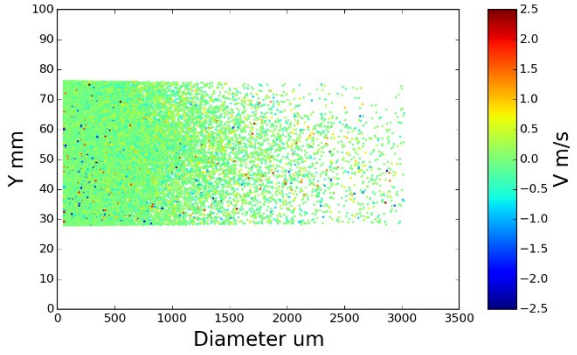


Figure A. 1849: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

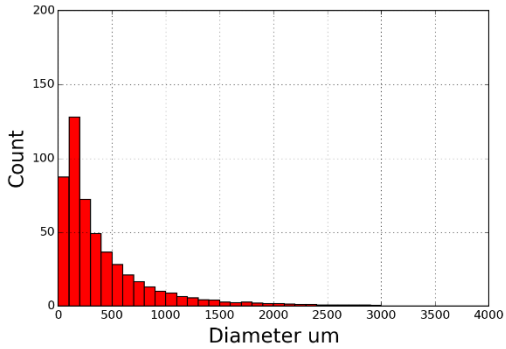


Figure A. 1847: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

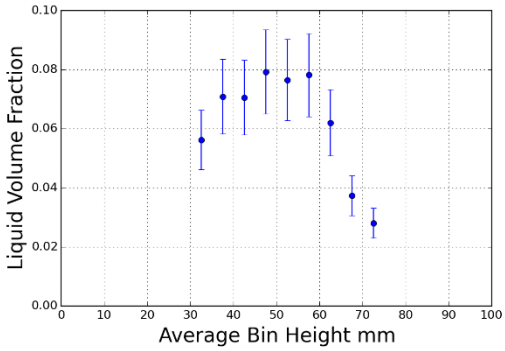


Figure A. 1850: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

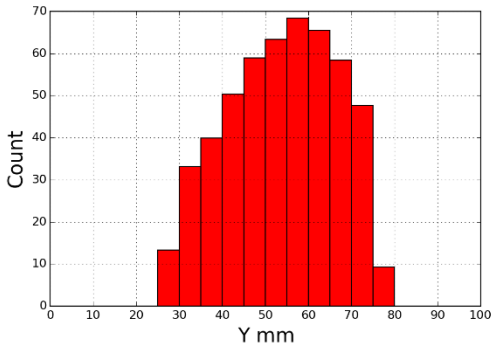


Figure A. 1848: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 Matched Only Droplets for .LA Image

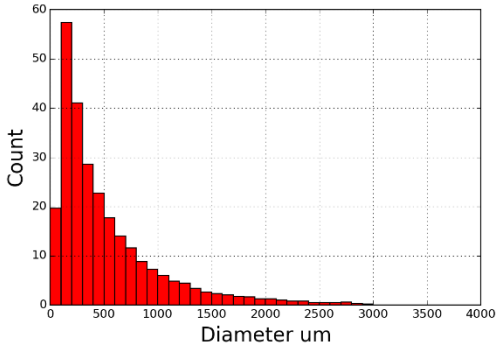


Figure A. 1851: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

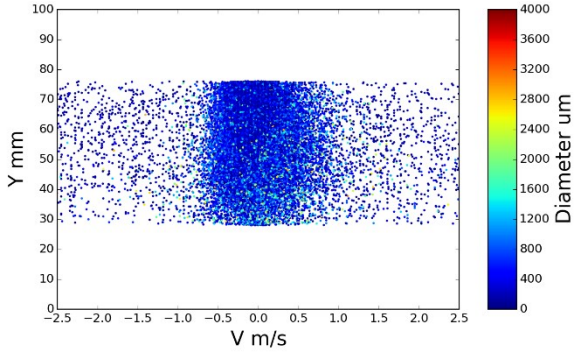


Figure A. 1854: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

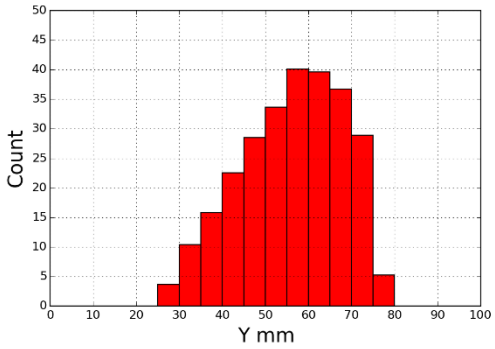


Figure A. 1852: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

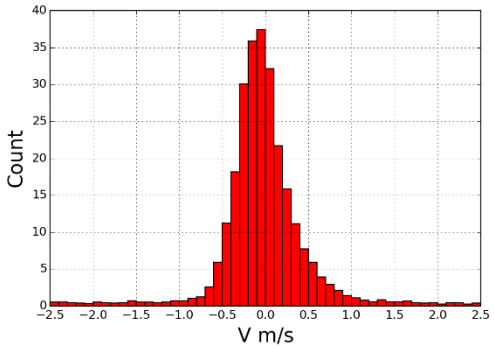


Figure A. 1855: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

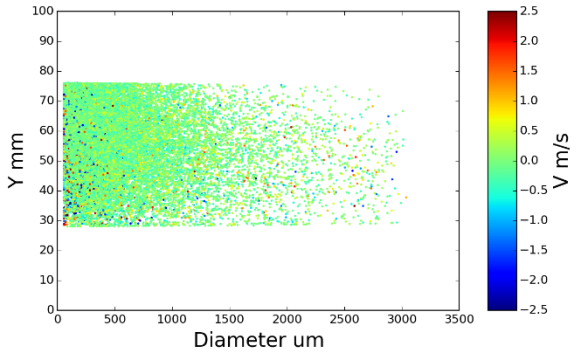


Figure A. 1853: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 Matched Only Droplets for .LB Image

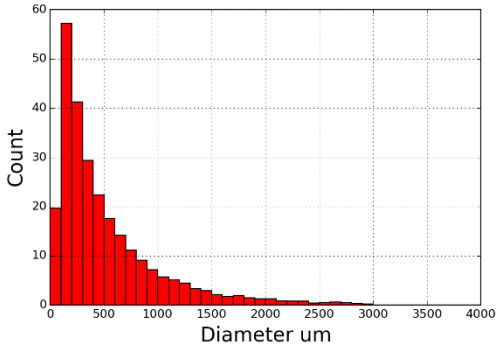


Figure A. 1856: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

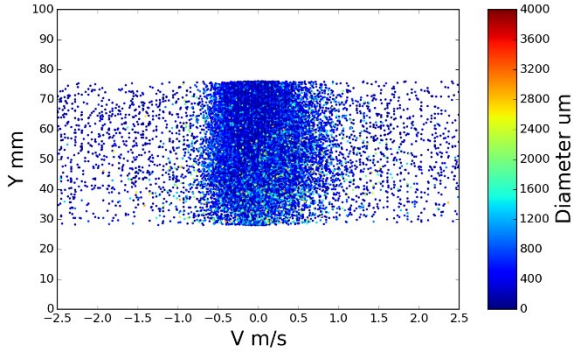


Figure A. 1859: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

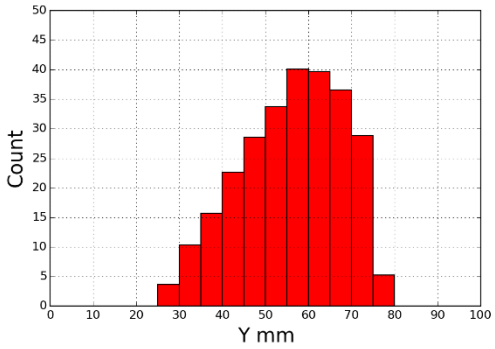


Figure A. 1857: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

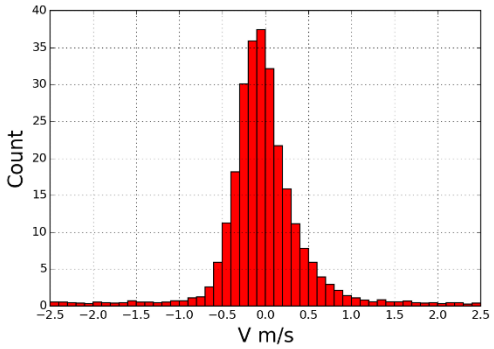


Figure A. 1860: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

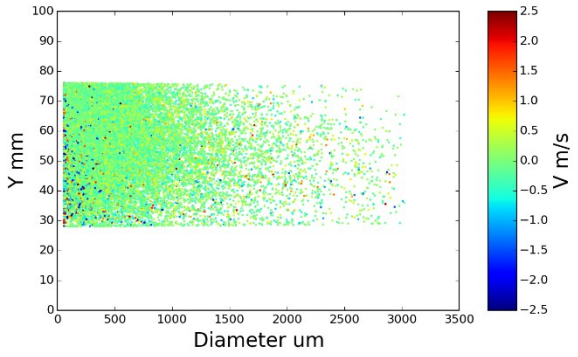


Figure A. 1858: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	83.93	77.38	57.2	3040	510.6	514.7	57.2	3034	507.3	511.7
40-60mm	208.02	194.15	57.2	3039	434.0	471.0	57.2	3040	456.2	480.2
60-80mm	169.36	163.01	57.2	3036	352.6	385.8	57.2	3012	363.1	387.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	465.12	438.51	57.2	3040	418.1	454.0	57.2	3040	430.4	457.2
			Height A (mm)				Height B (mm)			
Highest Particle			76.0293				76.0293			
Lowest Particle			28.0482				28.0482			

Table A. 197: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	22.81	57.2	2990	741.8	619.2	57.2	3034	736.8	615.6	-2.510	2.540	-0.020	0.680	-2.530	2.540	0.140	0.890
40-60mm	90.9	57.2	3026	601.0	537.0	57.2	3040	592.5	529.0	-2.540	2.540	-0.020	0.520	-2.540	2.540	-0.000	0.600
60-80mm	91.07	57.2	3036	466.0	424.8	57.2	3012	460.0	421.1	-2.540	2.540	-0.030	0.450	-2.540	2.540	-0.000	0.520
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	204.78	57.2	3036	556.7	509.2	57.2	3040	549.8	503.7	-2.540	2.540	-0.020	0.510	-2.540	2.540	0.010	0.610

Table A. 198: Matched Droplet Info

A.3.1.1 All Droplets for .LA Image

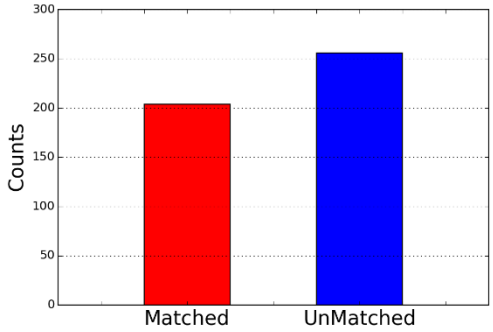


Figure A. 1861: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

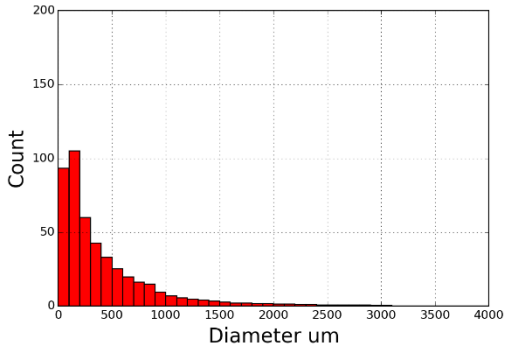


Figure A. 1862: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

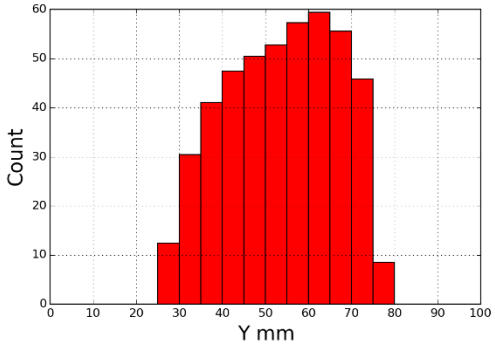


Figure A. 1863: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

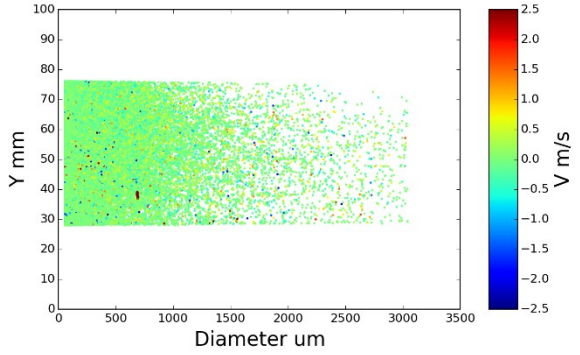


Figure A. 1864: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

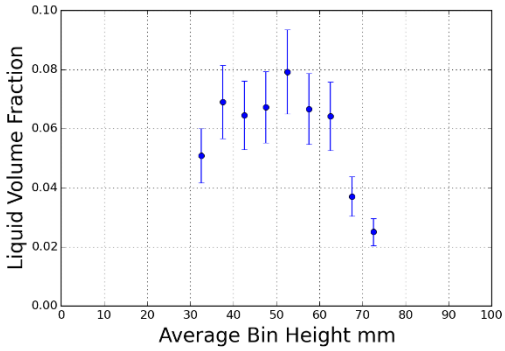


Figure A. 1865: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 All Droplets for .LB Image

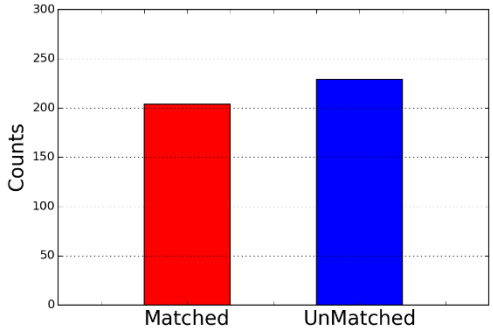


Figure A. 1866: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

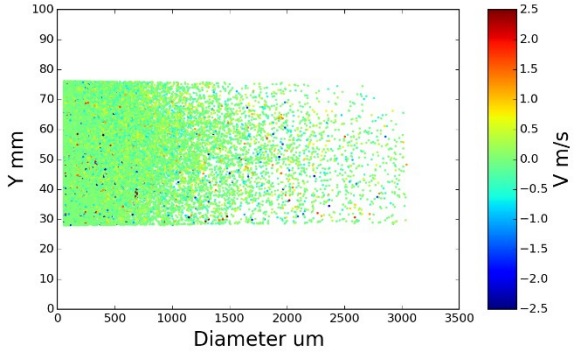


Figure A. 1869: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

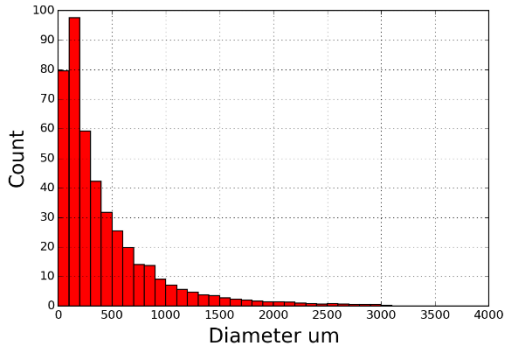


Figure A. 1867: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

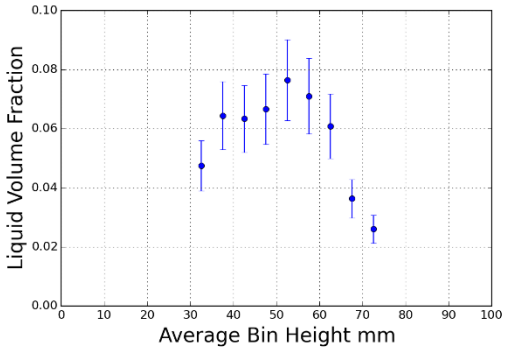


Figure A. 1870: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

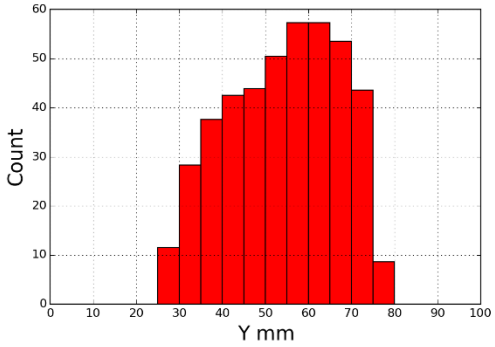


Figure A. 1868: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 Matched Only Droplets for .LA Image

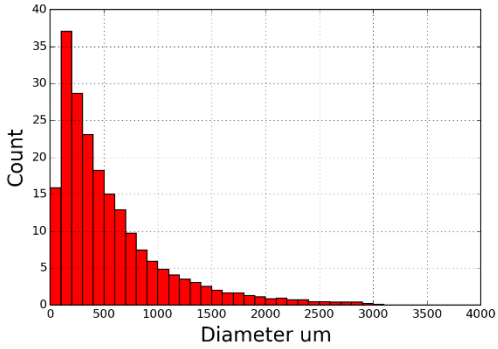


Figure A. 1871: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

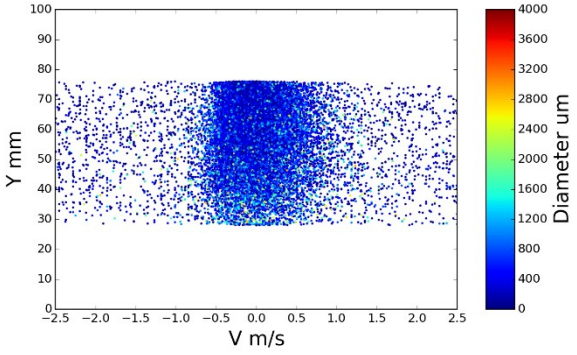


Figure A. 1874: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

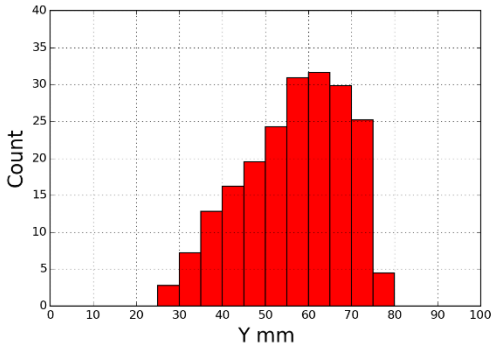


Figure A. 1872: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

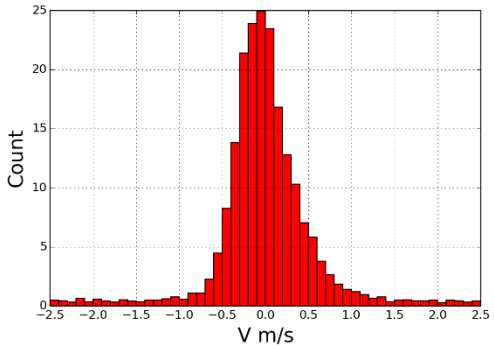


Figure A. 1875: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

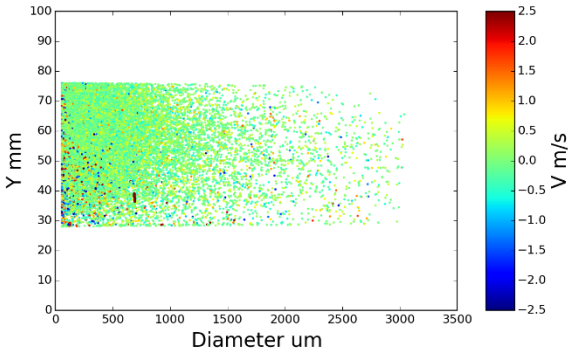


Figure A. 1873: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 Matched Only Droplets for .LB Image

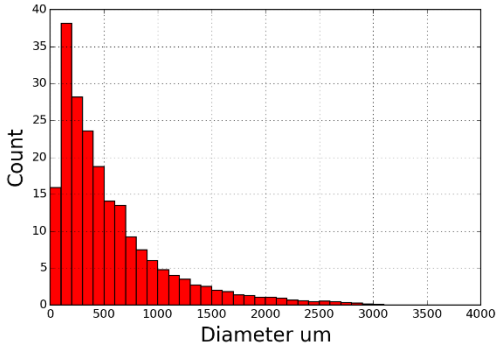


Figure A. 1876: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

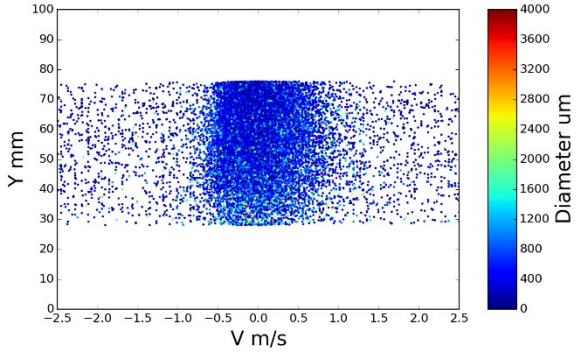


Figure A. 1879: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

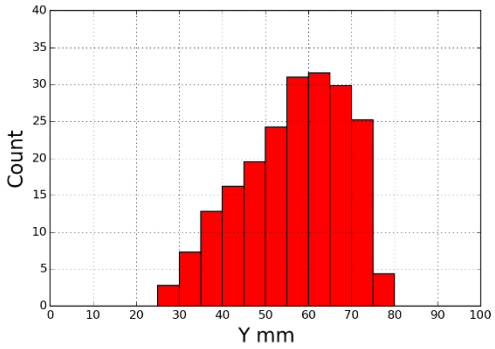


Figure A. 1877: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

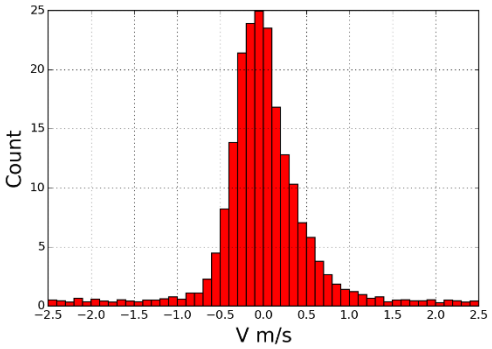


Figure A. 1880: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

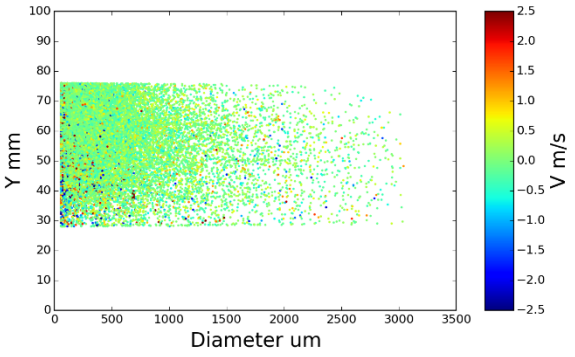


Figure A. 1878: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	76.41	69.95	57.2	3040	493.8	501.1	57.2	3011	529.3	520.1
40-60mm	183.22	163.9	57.2	3030	421.4	474.5	57.2	3042	449.9	487.7
60-80mm	153.67	144.6	57.2	3016	344.1	375.5	57.2	3014	355.9	383.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	418.59	382.57	57.2	3040	406.1	449.0	57.2	3042	428.6	461.9
			Height A (mm)				Height B (mm)			
Highest Particle			76.0293				76.0293			
Lowest Particle			28.0482				28.0482			

Table A. 199: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	16.83	57.2	3024	762.1	659.2	57.2	2996	758.4	659.8	-2.540	2.540	-0.020	0.810	-2.540	2.540	0.120	1.040
40-60mm	73.58	57.2	3017	611.1	563.7	57.2	3042	608.7	564.4	-2.540	2.540	-0.020	0.550	-2.540	2.540	0.010	0.640
60-80mm	80.09	57.2	3003	464.5	427.0	57.2	2928	460.9	423.7	-2.530	2.540	-0.010	0.450	-2.530	2.540	0.030	0.540
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	170.5	57.2	3024	557.1	524.5	57.2	3042	553.9	523.6	-2.540	2.540	-0.010	0.540	-2.540	2.540	0.030	0.650

Table A. 200: Matched Droplet Info

A.3.1.1 All Droplets for .LA Image

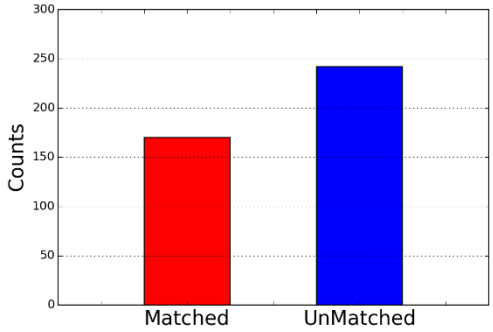


Figure A. 1881: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

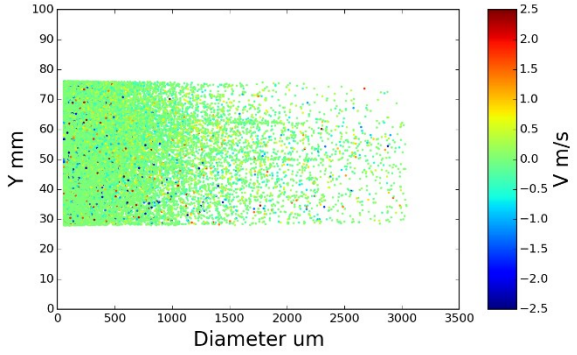


Figure A. 1884: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

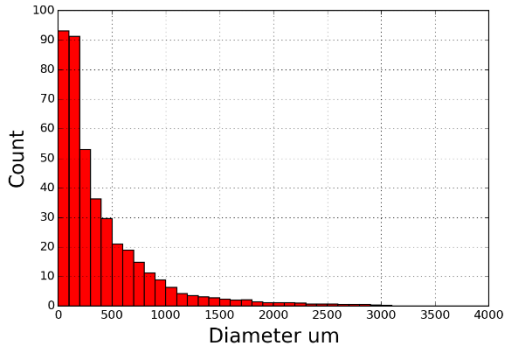


Figure A. 1882: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

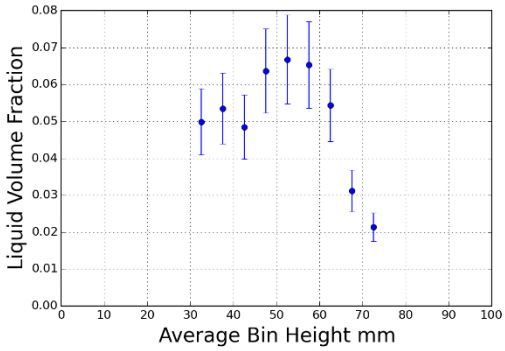


Figure A. 1885: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

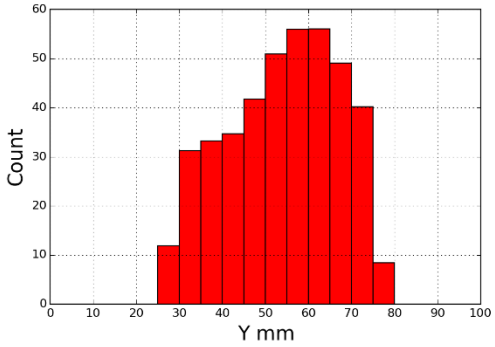


Figure A. 1883: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 All Droplets for .LB Image

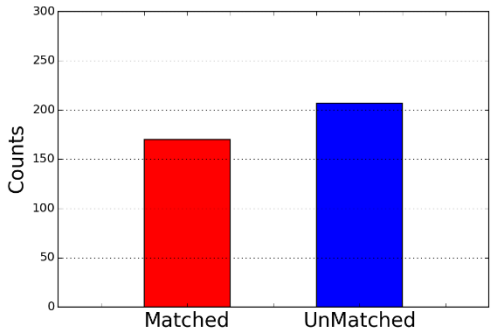


Figure A. 1886: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

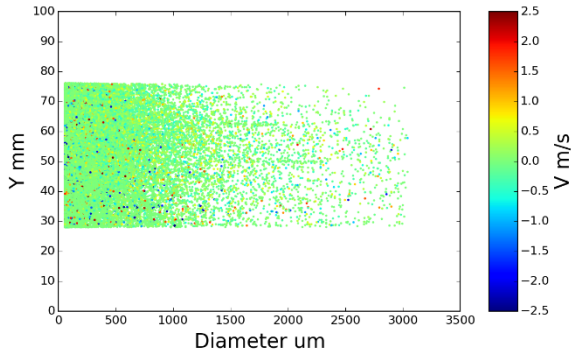


Figure A. 1889: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

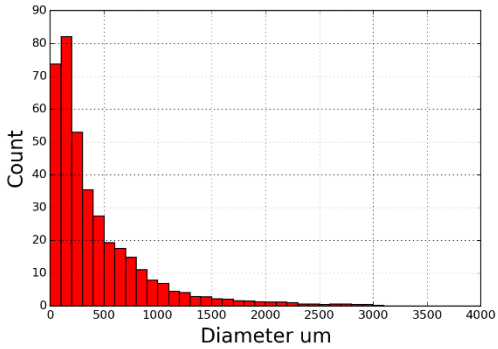


Figure A. 1887: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

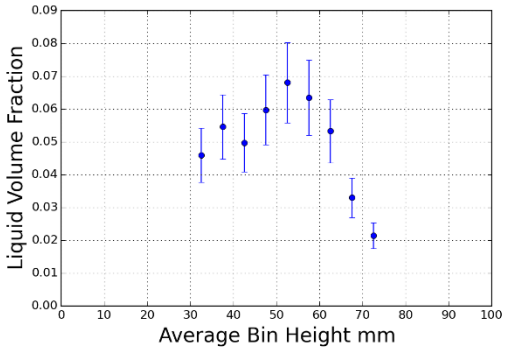


Figure A. 1890: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

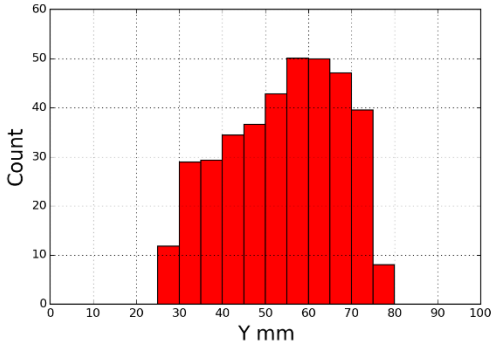


Figure A. 1888: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 Matched Only Droplets for .LA Image

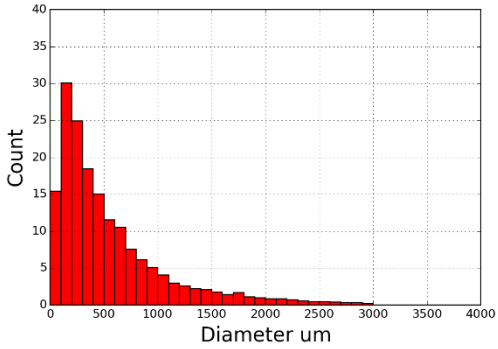


Figure A. 1891: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

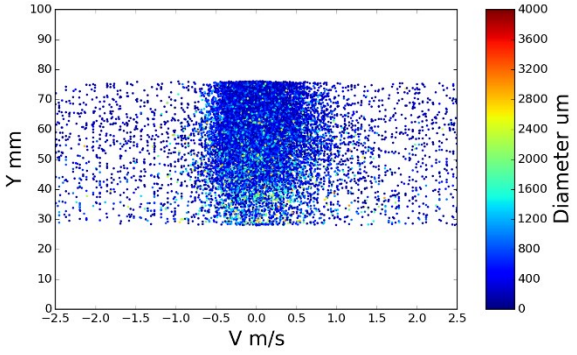


Figure A. 1894: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

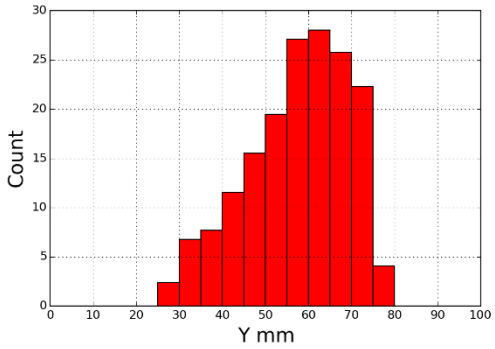


Figure A. 1892: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

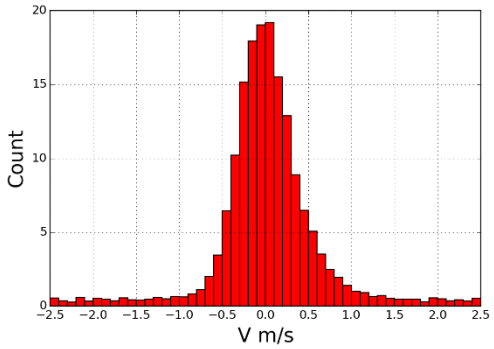


Figure A. 1895: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

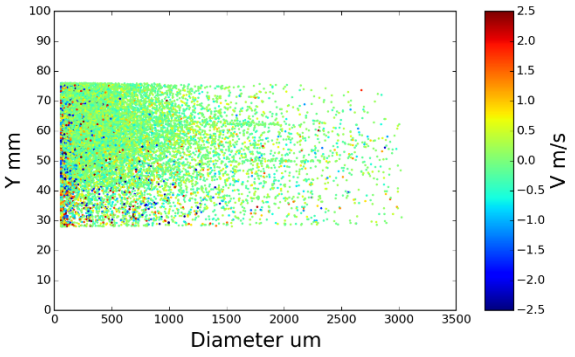


Figure A. 1893: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.1 Matched Only Droplets for .LB Image

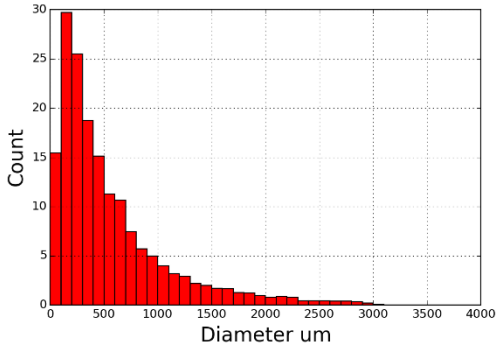


Figure A. 1896: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

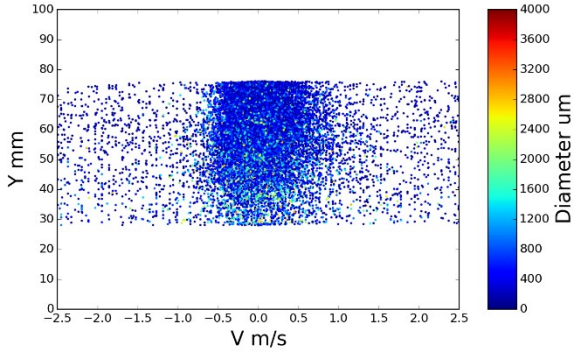


Figure A. 1899: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

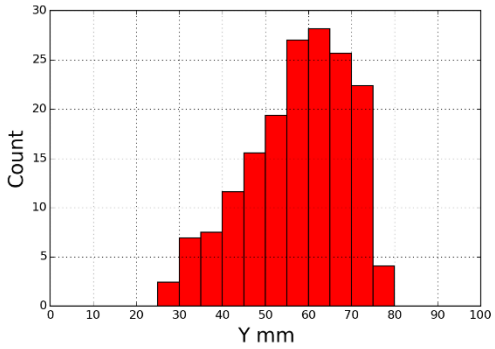


Figure A. 1897: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

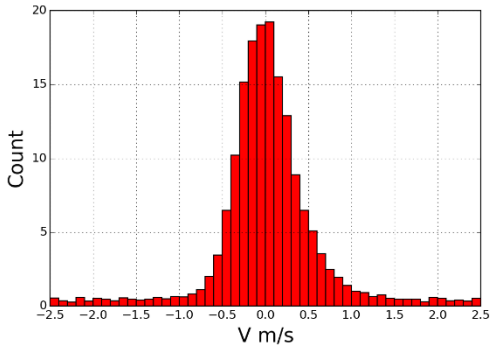


Figure A. 1900: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

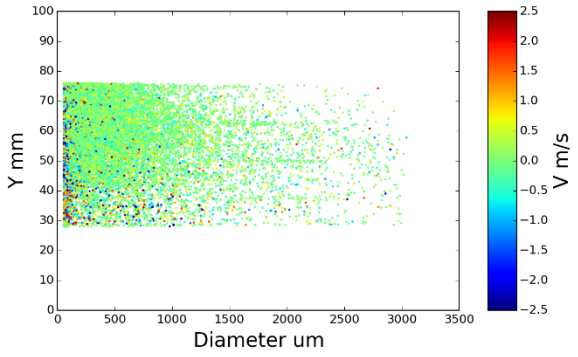


Figure A. 1898: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 Lens 50mm Mag 0_13x

A.3.1.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	65.3	65.94	128.6	3374	632.1	548.1	128.6	3411	630.2	550.5
40-60mm	184.96	184.18	128.6	3407	587.5	489.5	128.6	3416	588.1	488.6
60-80mm	148.89	146.68	128.6	3379	497.1	369.3	128.6	3346	495.1	363.6
80-100mm	49.99	50.1	128.6	3264	419.5	260.1	128.6	2464	417.2	255.2
All	449.14	446.98	128.6	3407	545.3	446.6	128.6	3416	544.6	445.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.9320				99.9605			
Lowest Particle			30.0337				30.0337			

Table A. 201: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	20.66	128.6	3374	747.2	605.2	128.6	3405	745.2	598.9	-2.440	2.440	-0.010	0.810	-2.440	2.440	-0.030	0.850
40-60mm	72.17	128.6	3359	667.6	513.4	128.6	3342	664.5	510.2	-2.440	2.440	-0.060	0.790	-2.440	2.440	-0.040	0.820
60-80mm	64.2	128.6	2996	569.2	387.9	128.6	3051	565.5	384.7	-2.440	2.440	-0.040	0.700	-2.440	2.440	-0.050	0.750
80-100mm	24.03	128.6	2476	492.0	282.3	128.6	2464	491.8	283.5	-2.440	2.440	-0.040	0.490	-2.430	2.440	-0.060	0.570
All	181.06	128.6	3374	618.5	465.4	128.6	3405	615.8	462.4	-2.440	2.440	-0.040	0.730	-2.440	2.440	-0.050	0.770

Table A. 202: Matched Droplet Info

A.3.1.2 All Droplets for .LA Image

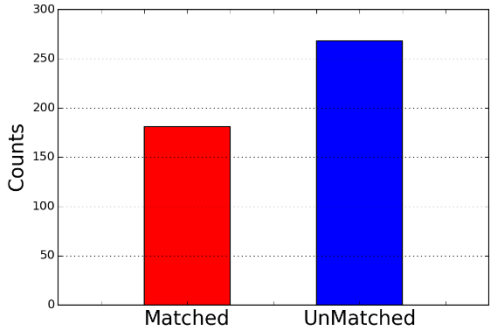


Figure A. 1901: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

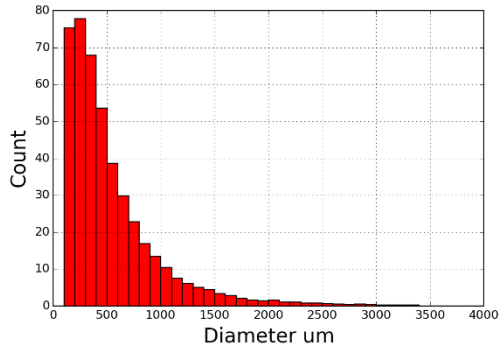


Figure A. 1902: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

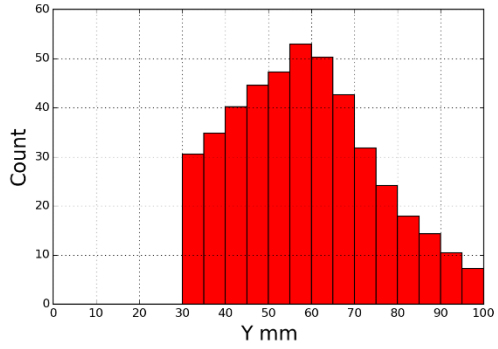


Figure A. 1903: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

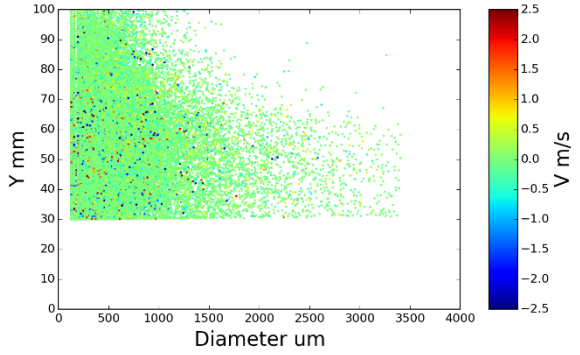


Figure A. 1904: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

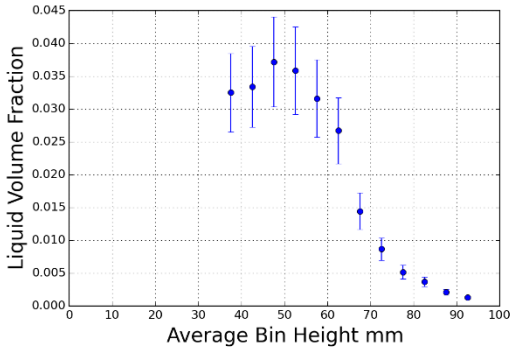


Figure A. 1905: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 All Droplets for .LB Image

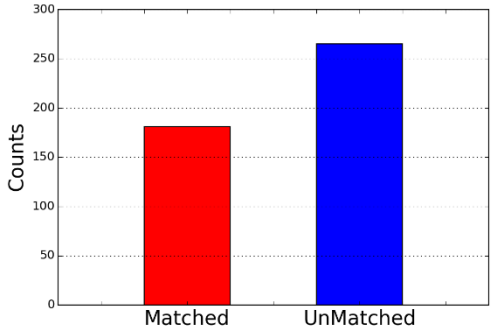


Figure A. 1906: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

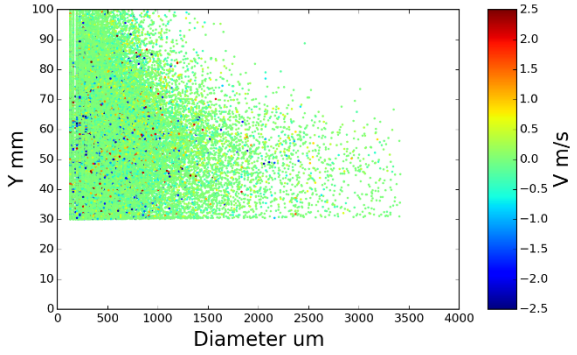


Figure A. 1909: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

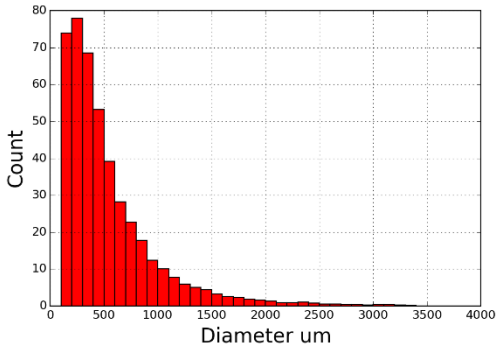


Figure A. 1907: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

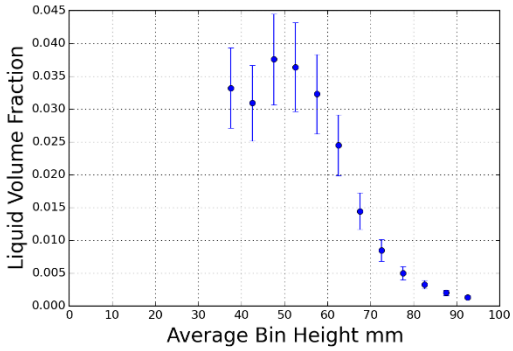


Figure A. 1910: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

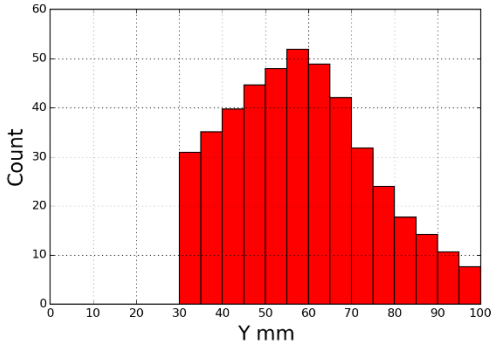


Figure A. 1908: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 Matched Only Droplets for .LA Image

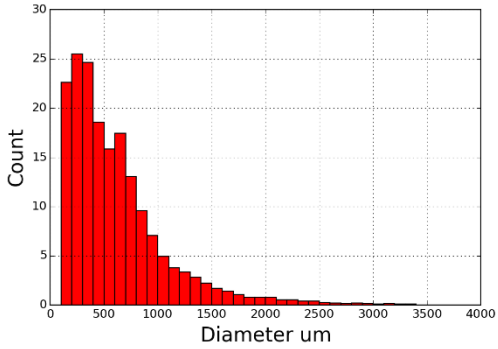


Figure A. 1911: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

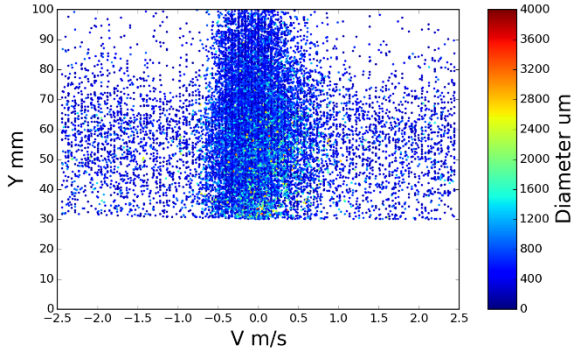


Figure A. 1914: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

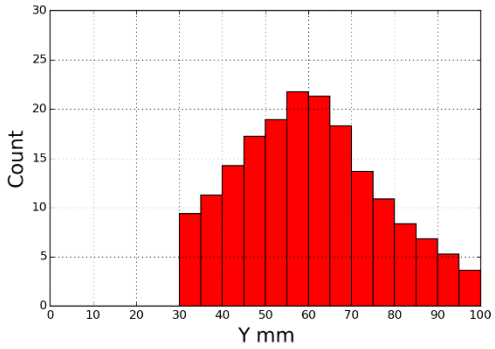


Figure A. 1912: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

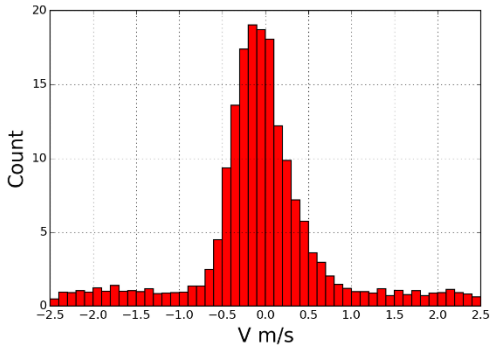


Figure A. 1915: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

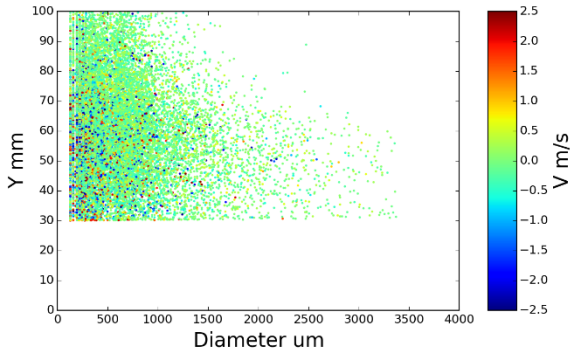


Figure A. 1913: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 Matched Only Droplets for .LB Image

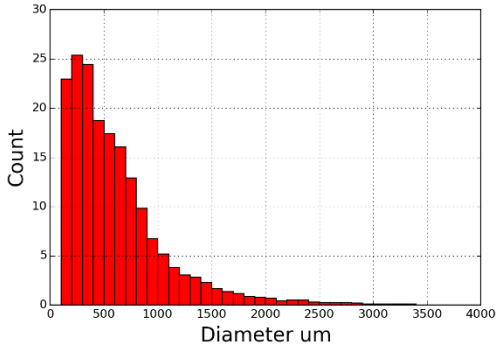


Figure A. 1916: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

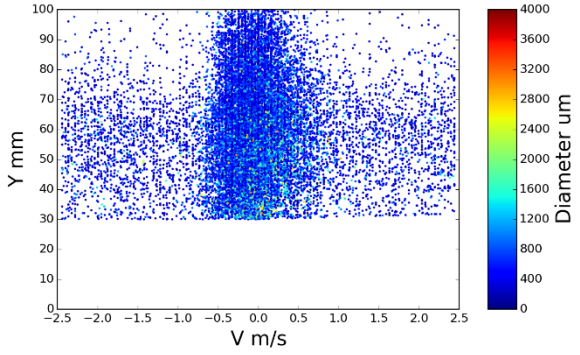


Figure A. 1919: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

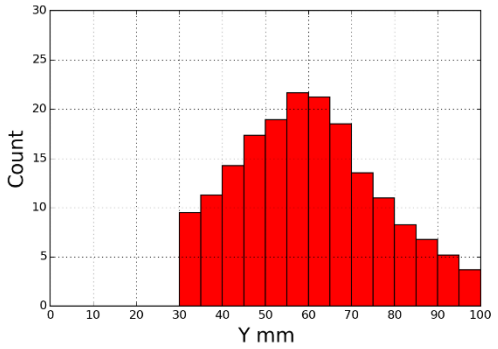


Figure A. 1917: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

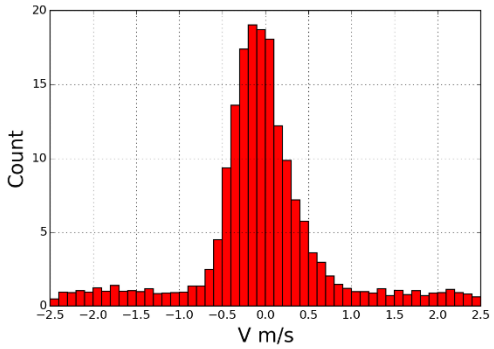


Figure A. 1920: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

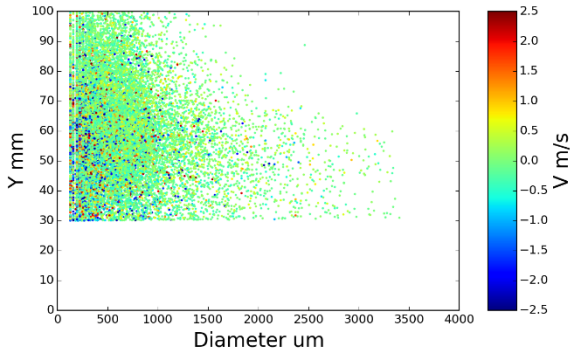


Figure A. 1918: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	52.03	51.86	128.6	3412	667.3	571.1	128.6	3417	679.2	571.3
40-60mm	153.24	154.31	128.6	3414	629.1	514.2	128.6	3414	634.9	512.1
60-80mm	131.9	130.82	128.6	3357	545.4	414.3	128.6	3409	543.0	406.9
80-100mm	47.06	46.33	128.6	2924	456.0	290.3	128.6	2759	454.6	286.7
All	384.38	383.54	128.6	3414	584.4	472.4	128.6	3417	587.7	470.1
			Height A (mm)				Height B (mm)			
Highest Particle			99.9605				99.9332			
Lowest Particle			30.0337				30.0337			

Table A. 203: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	14.53	128.6	3350	841.7	632.7	128.6	3342	835.8	628.2	-2.430	2.440	-0.040	0.810	-2.440	2.440	-0.030	0.860
40-60mm	57.73	128.6	3414	726.2	530.2	128.6	3387	721.2	525.9	-2.440	2.440	-0.030	0.730	-2.440	2.440	-0.030	0.790
60-80mm	55.93	128.6	3252	634.2	440.3	128.6	3409	631.9	437.3	-2.440	2.440	-0.040	0.670	-2.440	2.440	-0.060	0.730
80-100mm	22.39	128.6	2924	545.7	324.6	128.6	2759	543.6	321.8	-2.440	2.440	-0.040	0.490	-2.440	2.400	-0.060	0.560
All	150.58	128.6	3414	676.3	490.8	128.6	3409	673.0	487.3	-2.440	2.440	-0.040	0.690	-2.440	2.440	-0.050	0.750

Table A. 204: Matched Droplet Info

A.3.1.2 All Droplets for .LA Image

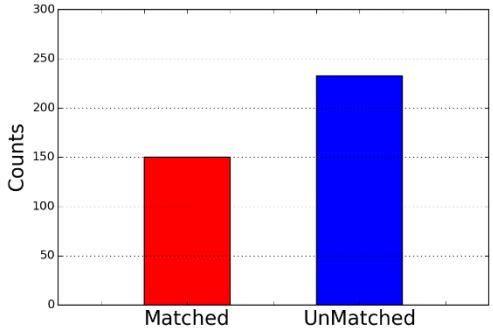


Figure A. 1921: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

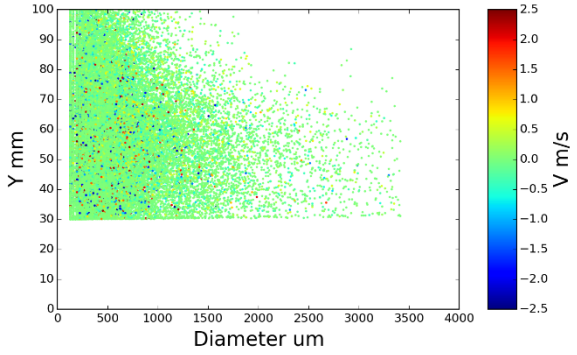


Figure A. 1924: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

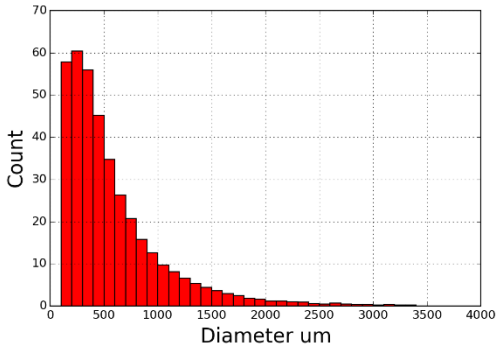


Figure A. 1922: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

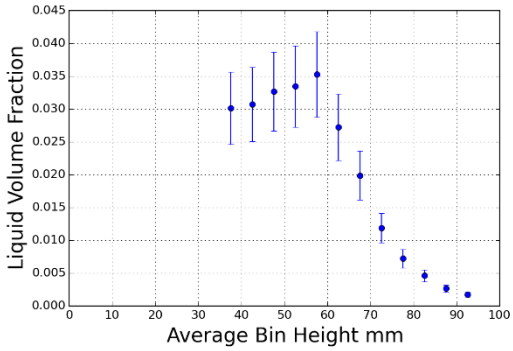


Figure A. 1925: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

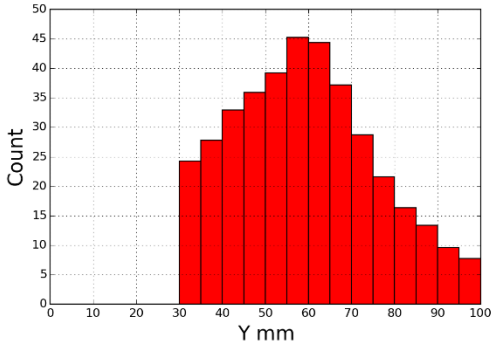


Figure A. 1923: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 All Droplets for .LB Image

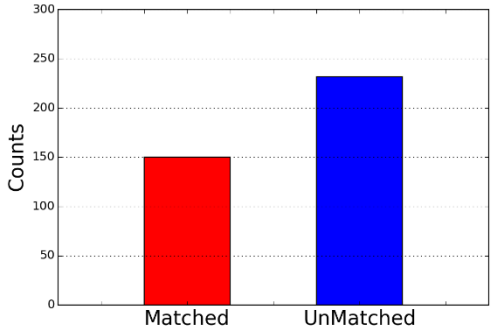


Figure A. 1926: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

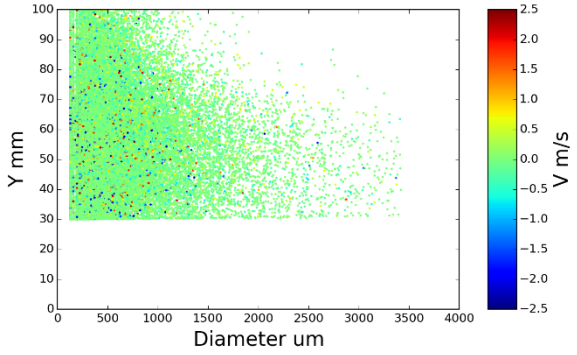


Figure A. 1929: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

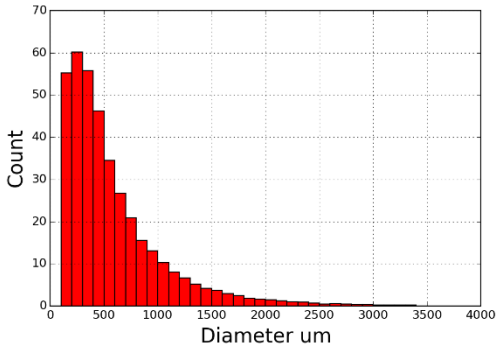


Figure A. 1927: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

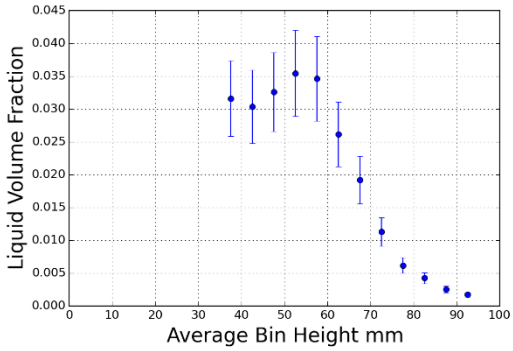


Figure A. 1930: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

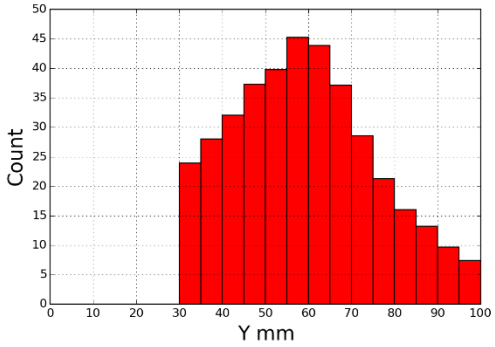


Figure A. 1928: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 Matched Only Droplets for .LA Image

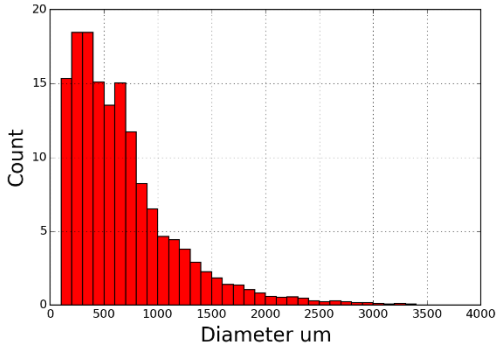


Figure A. 1931: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

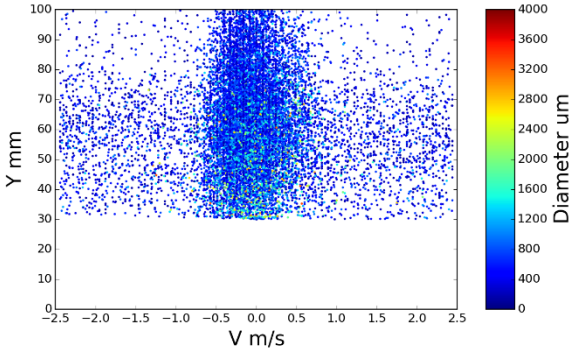


Figure A. 1934: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

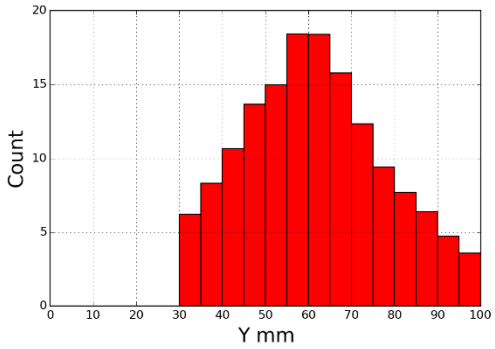


Figure A. 1932: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

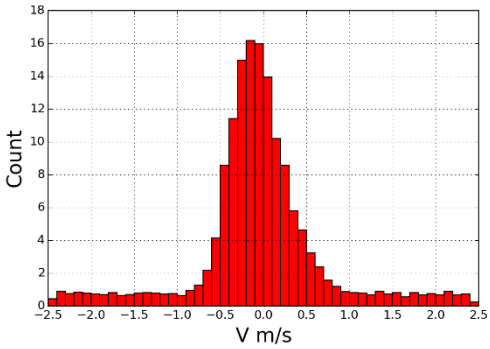


Figure A. 1935: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

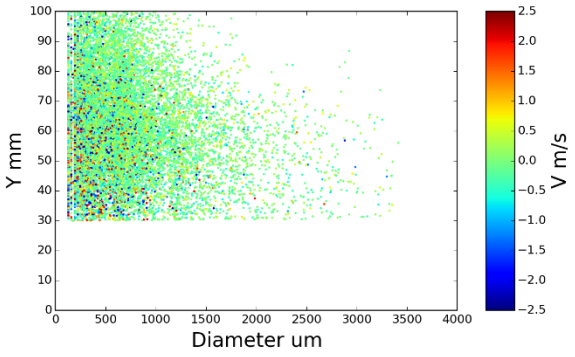


Figure A. 1933: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 Matched Only Droplets for .LB Image

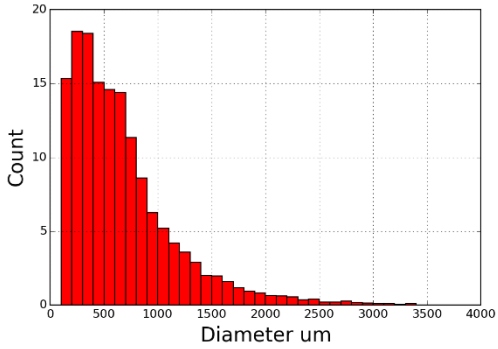


Figure A. 1936: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

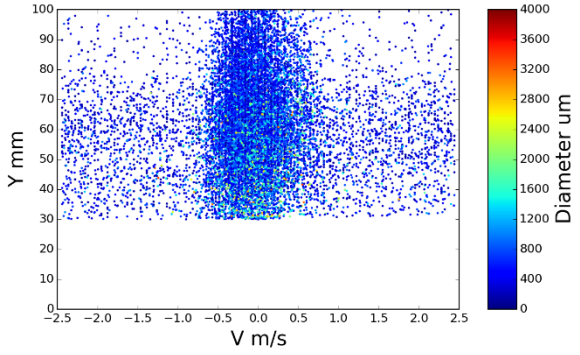


Figure A. 1939: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

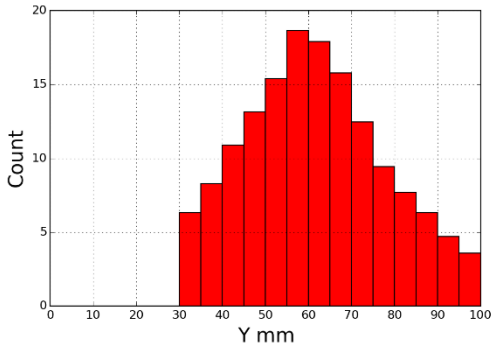


Figure A. 1937: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

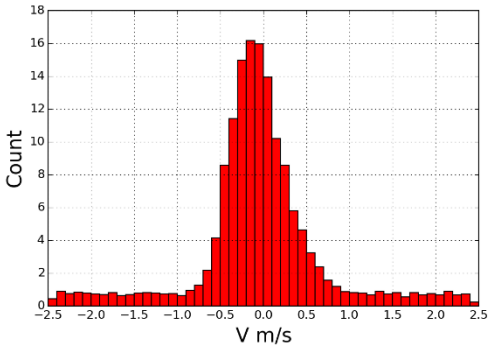


Figure A. 1940: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

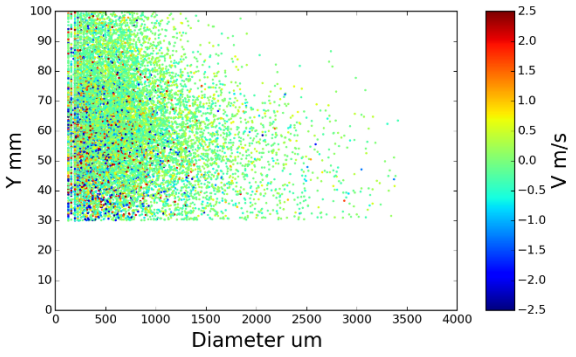


Figure A. 1938: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	45.01	43.76	128.6	3418	729.4	620.4	128.6	3408	741.7	638.4
40-60mm	140.81	141.68	128.6	3419	663.9	551.6	128.6	3403	663.2	555.6
60-80mm	119.34	118.45	128.6	3418	561.2	426.1	128.6	3418	564.4	433.7
80-100mm	43.05	42.31	128.6	2483	462.6	287.1	128.6	2769	464.7	287.9
All	348.47	346.2	128.6	3419	612.3	501.7	128.6	3418	615.0	508.9
			Height A (mm)				Height B (mm)			
Highest Particle			99.9605				99.9605			
Lowest Particle			30.0337				30.0337			

Table A. 205: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	11.35	128.6	3340	941.2	713.4	128.6	3328	934.1	707.1	-2.440	2.420	0.000	0.790	-2.440	2.440	-0.020	0.820
40-60mm	51.51	128.6	3419	789.5	599.6	128.6	3397	785.7	597.0	-2.440	2.440	-0.040	0.750	-2.440	2.440	-0.030	0.790
60-80mm	47.9	128.6	3290	657.9	451.4	128.6	3411	656.8	451.9	-2.440	2.440	-0.040	0.680	-2.440	2.440	-0.020	0.700
80-100mm	18.57	128.6	2383	537.6	308.2	128.6	2372	535.3	307.2	-2.300	2.440	-0.060	0.480	-2.400	2.430	-0.050	0.520
All	129.33	128.6	3419	717.9	538.0	128.6	3411	715.1	535.9	-2.440	2.440	-0.040	0.690	-2.440	2.440	-0.030	0.730

Table A. 206: Matched Droplet Info

A.3.1.2 All Droplets for .LA Image

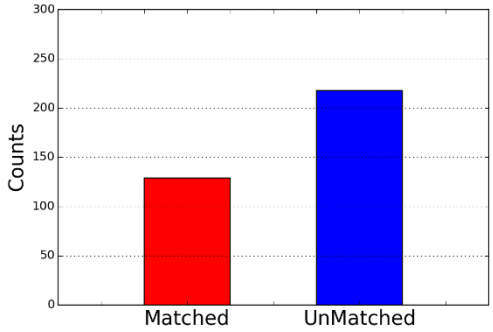


Figure A. 1941: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

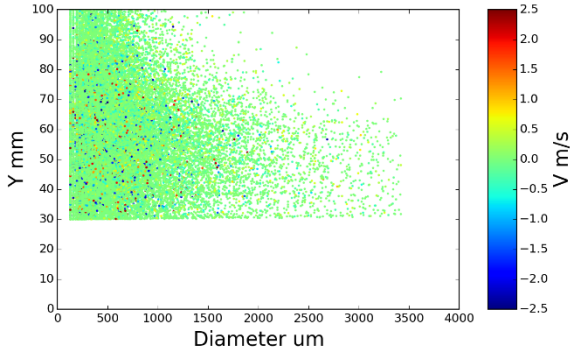


Figure A. 1944: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

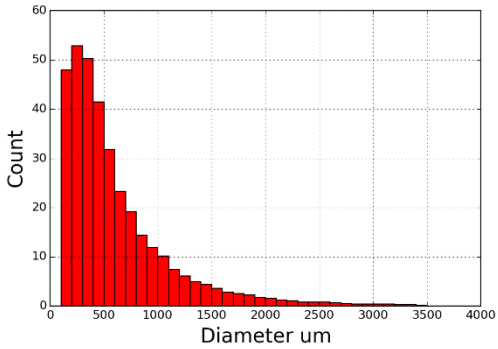


Figure A. 1942: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

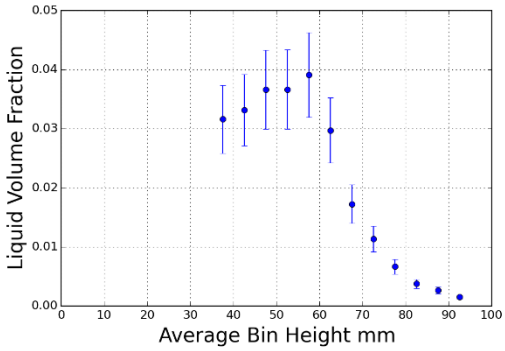


Figure A. 1945: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

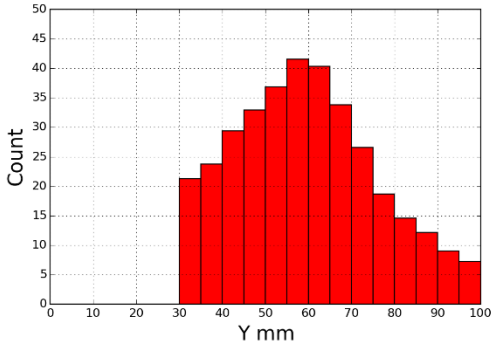


Figure A. 1943: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 All Droplets for .LB Image

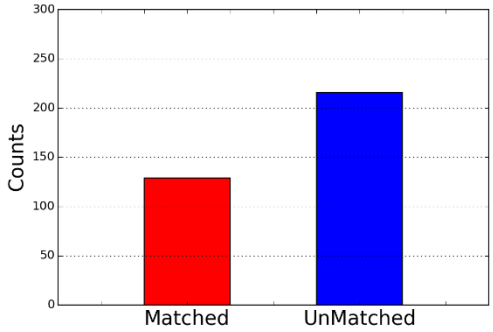


Figure A. 1946: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

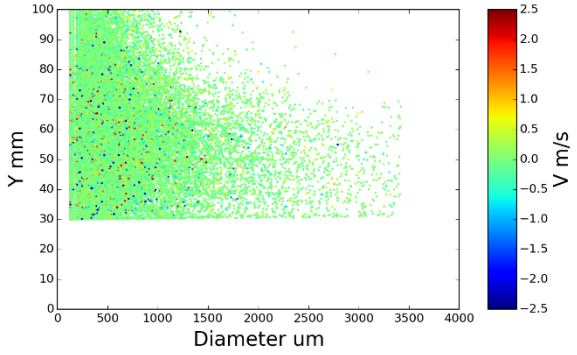


Figure A. 1949: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

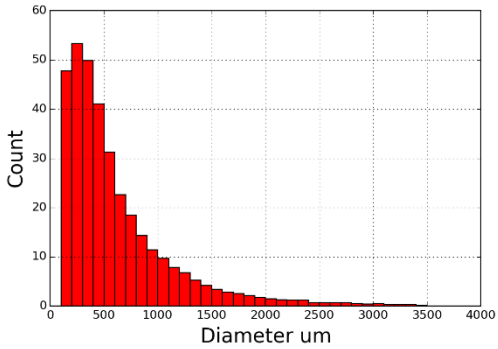


Figure A. 1947: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

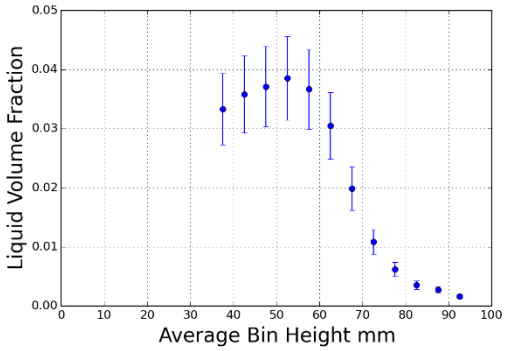


Figure A. 1950: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

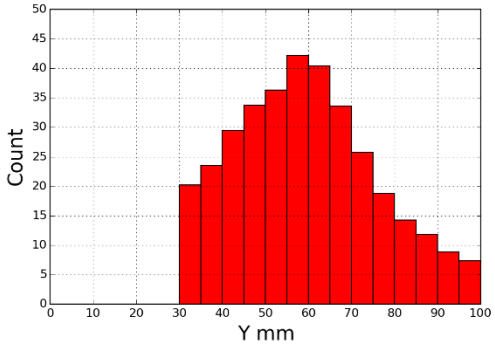


Figure A. 1948: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 Matched Only Droplets for .LA Image

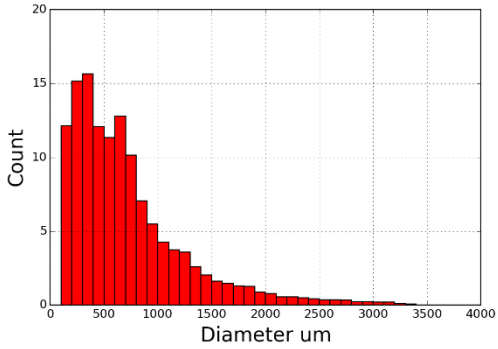


Figure A. 1951: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

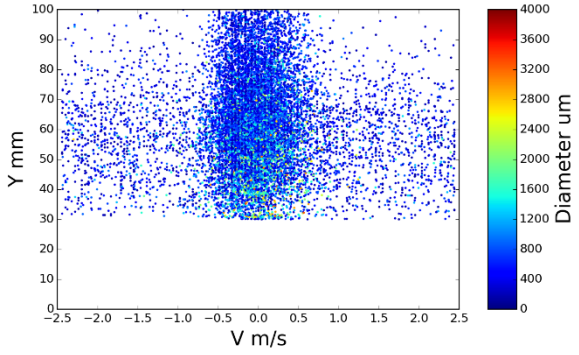


Figure A. 1954: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

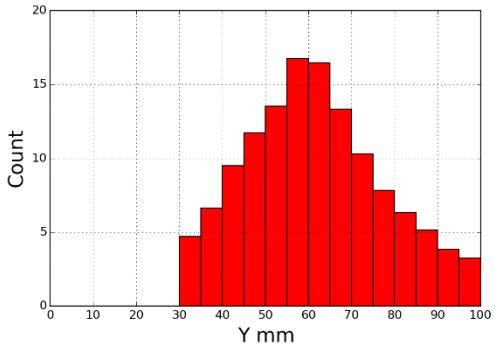


Figure A. 1952: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

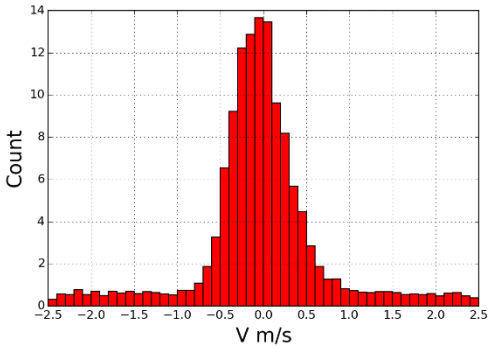


Figure A. 1955: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

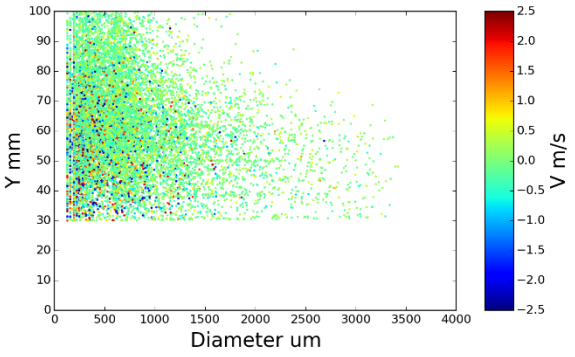


Figure A. 1953: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 Matched Only Droplets for .LB Image

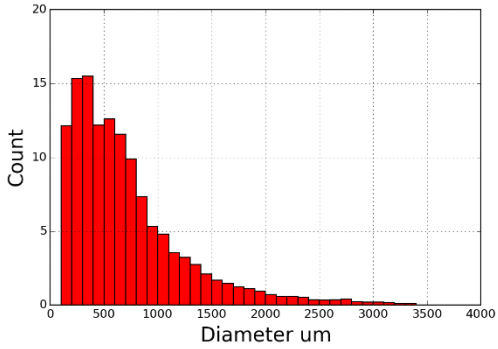


Figure A. 1956: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

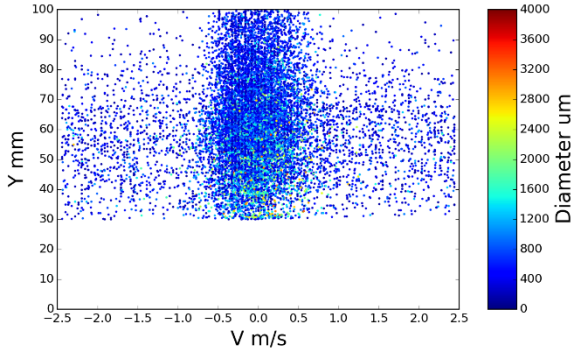


Figure A. 1959: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

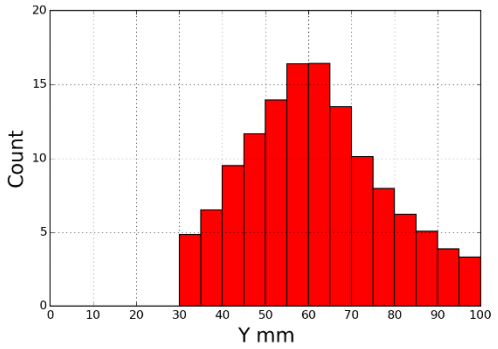


Figure A. 1957: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

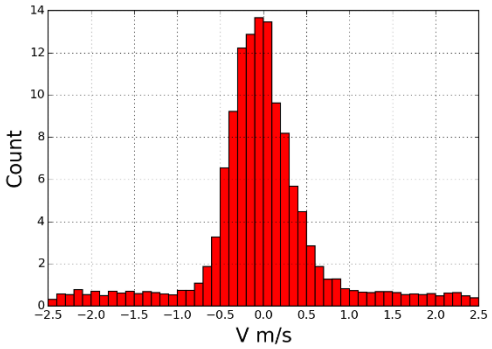


Figure A. 1960: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

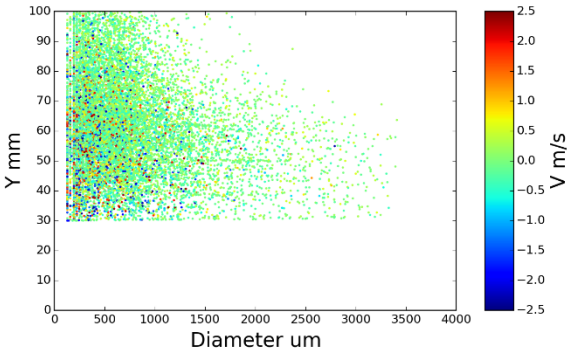


Figure A. 1958: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	34.11	33.68	128.6	3417	744.4	645.7	128.6	3416	770.7	665.2
40-60mm	115.32	116.65	128.6	3416	667.5	565.5	128.6	3416	669.1	560.0
60-80mm	106.56	106.1	128.6	3417	567.5	446.5	128.6	3367	570.0	447.8
80-100mm	38.78	38.58	128.6	3396	452.8	303.6	128.6	3378	448.2	292.2
All	294.78	295.2	128.6	3417	612.0	514.6	128.6	3416	616.2	515.8
			Height A (mm)				Height B (mm)			
Highest Particle			99.9605				99.9605			
Lowest Particle			30.0337				30.0337			

Table A. 207: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	7.75	128.6	3351	1064	792.1	128.6	3383	1048	781.0	-2.440	2.400	-0.010	0.780	-2.360	2.440	0.050	0.850
40-60mm	39.4	128.6	3293	789.2	588.2	128.6	3352	785.3	588.3	-2.440	2.440	-0.040	0.740	-2.440	2.440	-0.020	0.800
60-80mm	39.71	128.6	3381	682.6	487.2	128.6	3367	679.9	484.7	-2.440	2.440	-0.030	0.670	-2.440	2.440	-0.020	0.730
80-100mm	15.71	128.6	3396	537.6	337.9	128.6	3378	535.9	333.4	-2.360	2.430	-0.040	0.480	-2.430	2.400	-0.040	0.580
All	102.57	128.6	3396	730.1	553.1	128.6	3383	726.3	550.3	-2.440	2.440	-0.030	0.680	-2.440	2.440	-0.020	0.750

Table A. 208: Matched Droplet Info

A.3.1.2 All Droplets for .LA Image

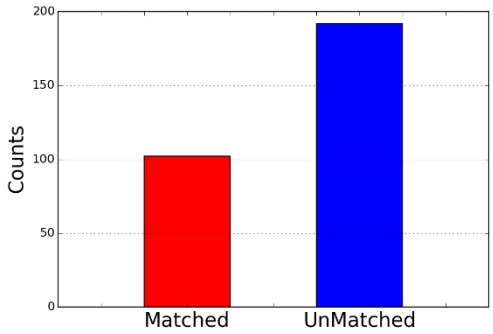


Figure A. 1961: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

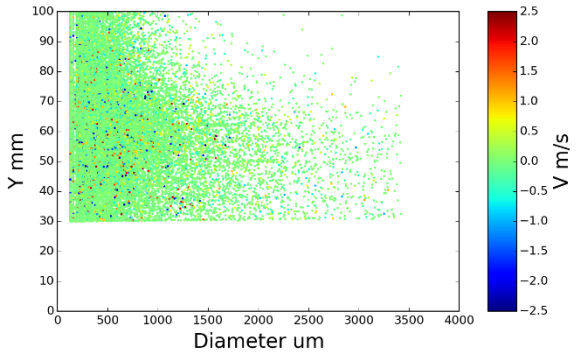


Figure A. 1964: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

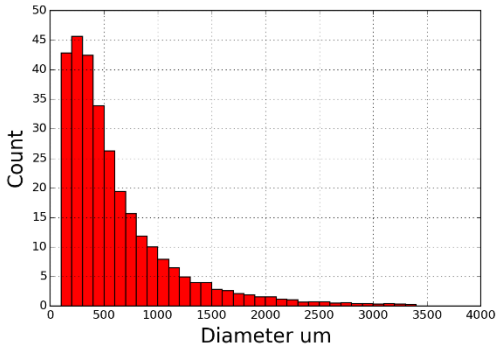


Figure A. 1962: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

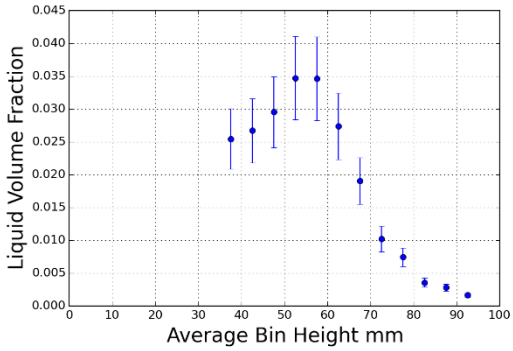


Figure A. 1965: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

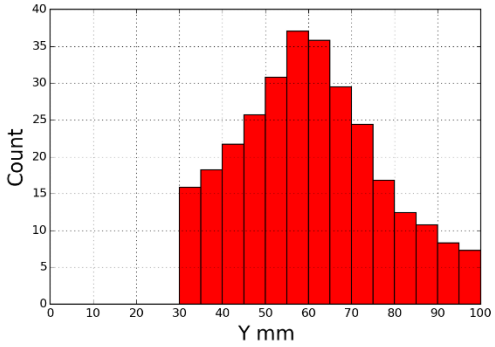


Figure A. 1963: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 All Droplets for .LB Image

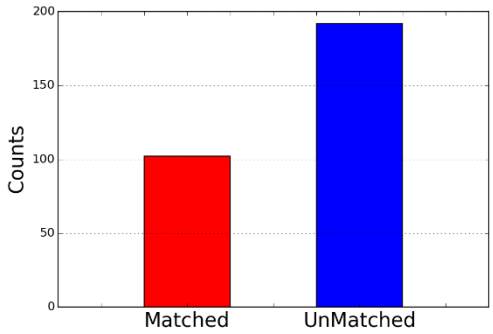


Figure A. 1966: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

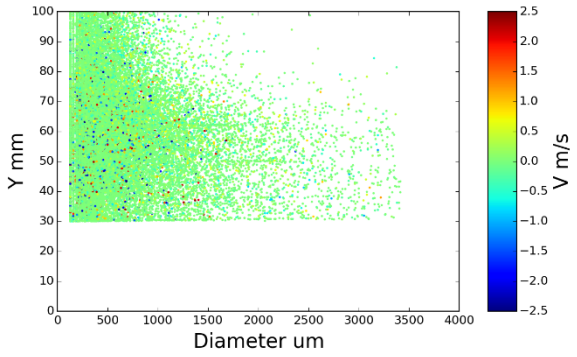


Figure A. 1969: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

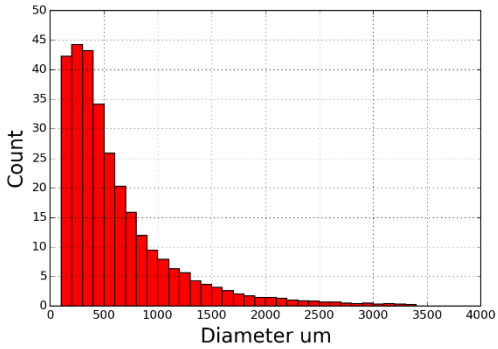


Figure A. 1967: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

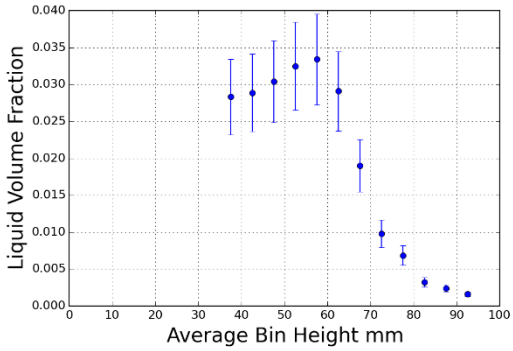


Figure A. 1970: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

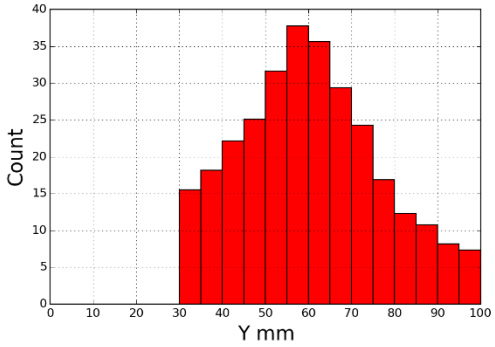


Figure A. 1968: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 Matched Only Droplets for .LA Image

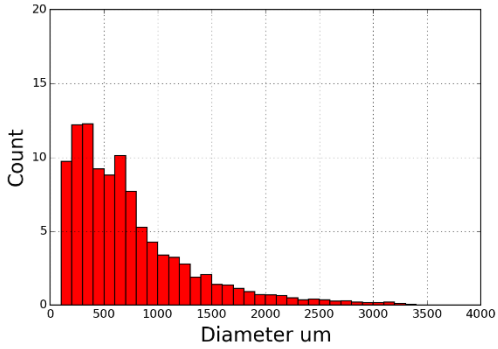


Figure A. 1971: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

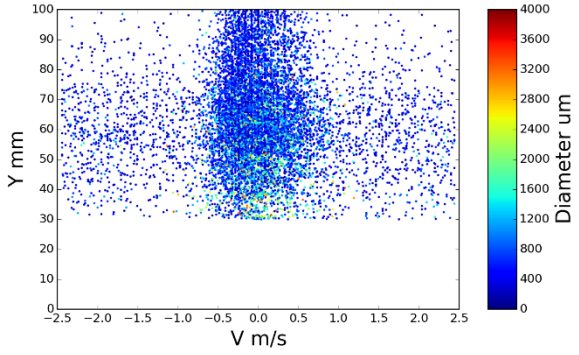


Figure A. 1974: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

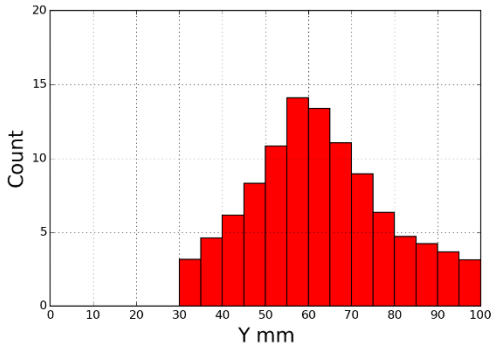


Figure A. 1972: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

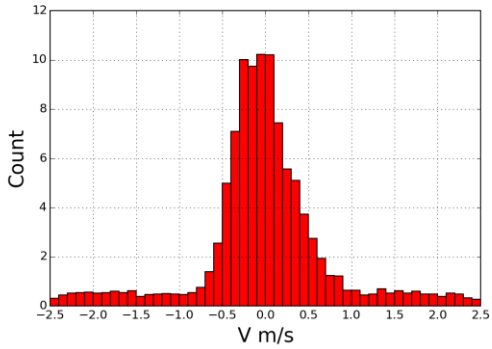


Figure A. 1975: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

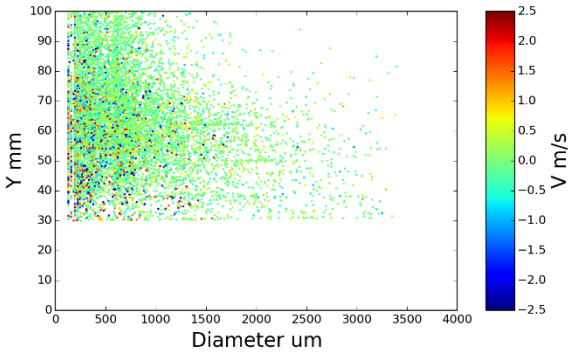


Figure A. 1973: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 Matched Only Droplets for .LB Image

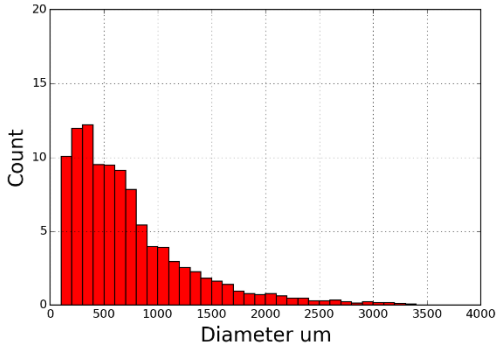


Figure A. 1976: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

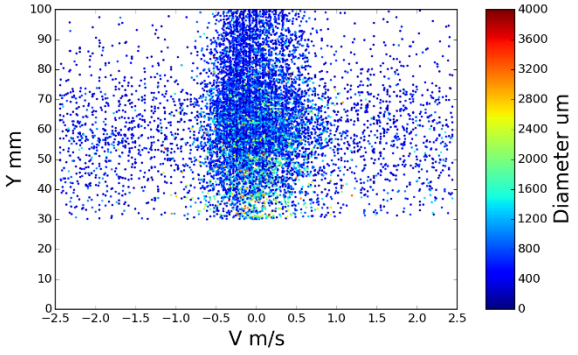


Figure A. 1979: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

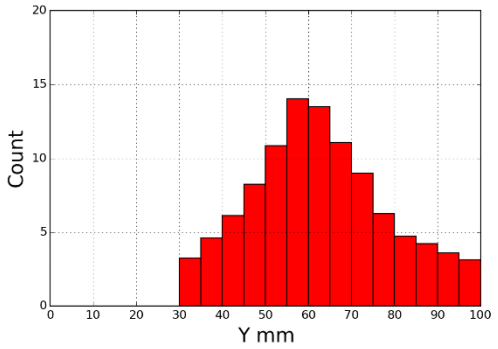


Figure A. 1977: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

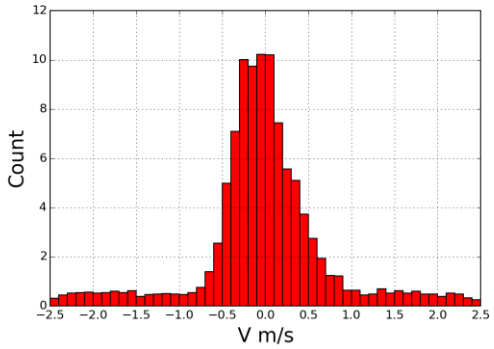


Figure A. 1980: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

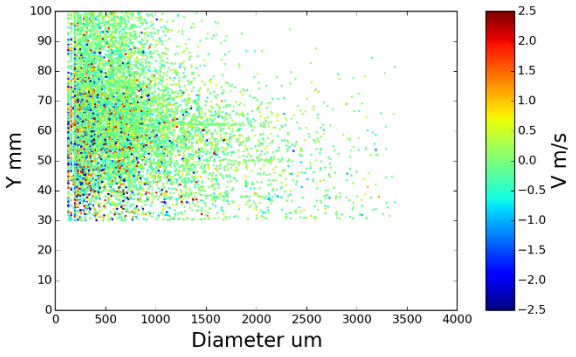


Figure A. 1978: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	23.97	22.77	128.6	3390	789.7	671.8	128.6	3411	811.8	681.7
40-60mm	93.59	93.17	128.6	3396	699.6	603.7	128.6	3418	698.5	605.0
60-80mm	92.75	90.06	128.6	3403	562.5	459.2	128.6	3402	567.4	464.2
80-100mm	41.44	40.47	128.6	3394	447.7	298.8	128.6	2864	448.8	294.0
All	251.8	246.48	128.6	3403	616.2	531.1	128.6	3418	620.1	534.6
			Height A (mm)				Height B (mm)			
Highest Particle			99.9605				99.9605			
Lowest Particle			30.0337				30.0337			

Table A. 209: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	4.9	128.6	3353	1106	797.1	128.6	3378	1108	792.4	-2.440	2.440	-0.040	0.810	-2.360	2.380	0.020	0.870
40-60mm	27.68	128.6	3391	871.8	683.3	128.6	3366	867.8	678.5	-2.440	2.440	-0.010	0.780	-2.430	2.440	0.010	0.820
60-80mm	31.22	128.6	3399	698.3	523.9	128.6	3402	694.9	526.8	-2.440	2.440	-0.010	0.690	-2.440	2.440	-0.030	0.760
80-100mm	15.66	128.6	2706	527.6	316.2	128.6	2535	525.5	312.4	-2.440	2.440	-0.040	0.540	-2.440	2.390	-0.030	0.580
All	79.46	128.6	3399	750.3	594.2	128.6	3402	747.3	592.6	-2.440	2.440	-0.020	0.700	-2.440	2.440	-0.020	0.760

Table A. 210: Matched Droplet Info

A.3.1.2 All Droplets for .LA Image

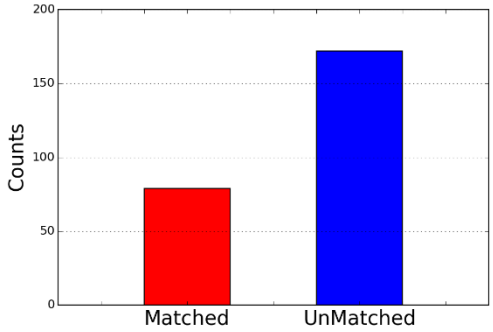


Figure A. 1981: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

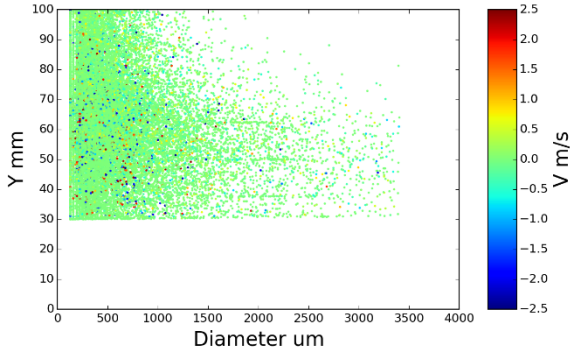


Figure A. 1984: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

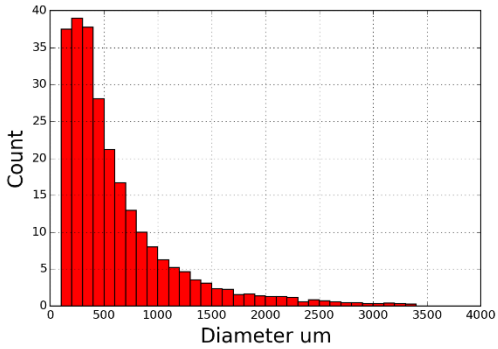


Figure A. 1982: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

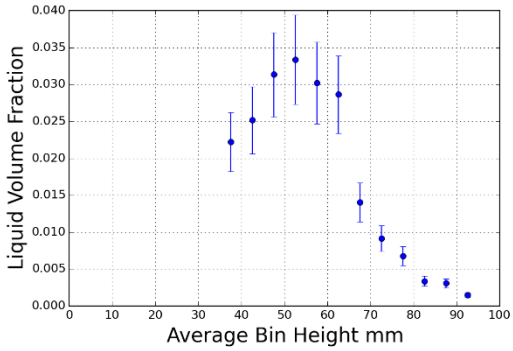


Figure A. 1985: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

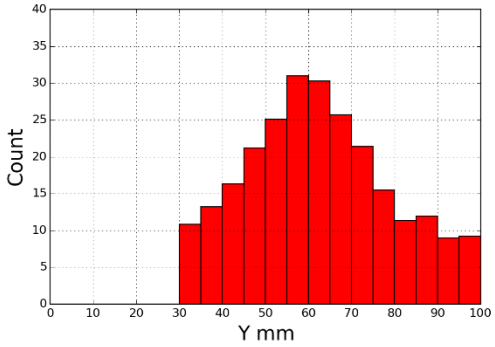


Figure A. 1983: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 All Droplets for .LB Image

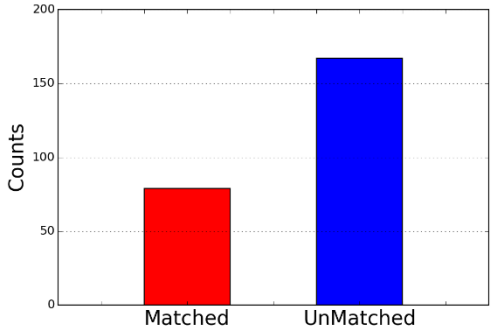


Figure A. 1986: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

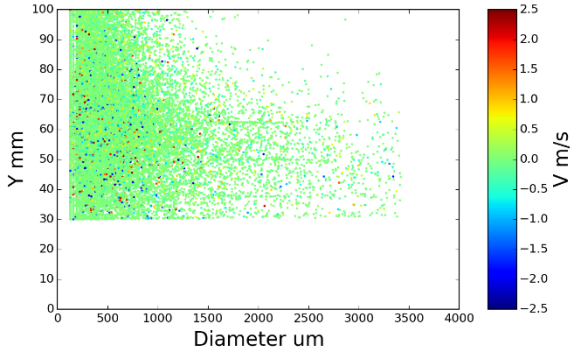


Figure A. 1989: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

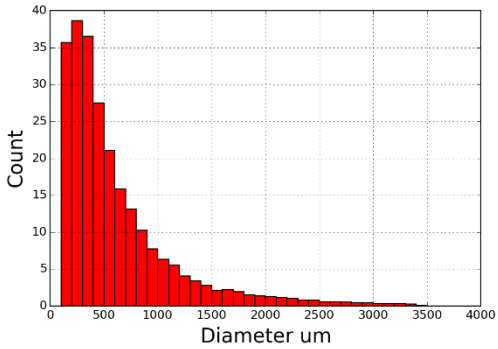


Figure A. 1987: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

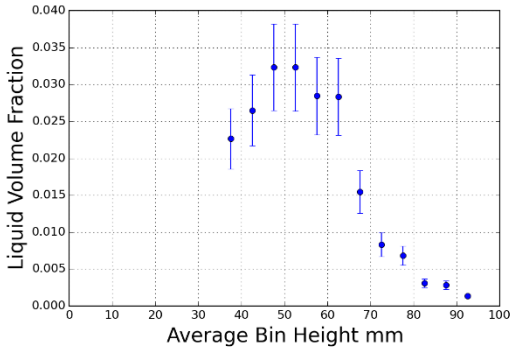


Figure A. 1990: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

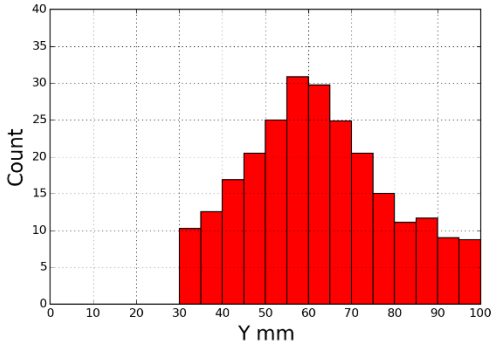


Figure A. 1988: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 Matched Only Droplets for .LA Image

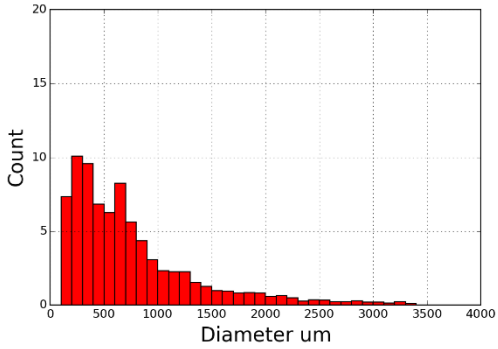


Figure A. 1991: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

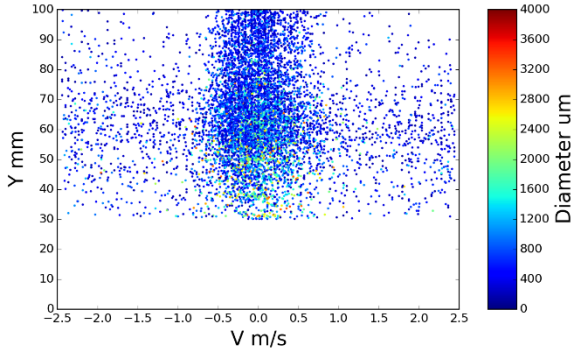


Figure A. 1994: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

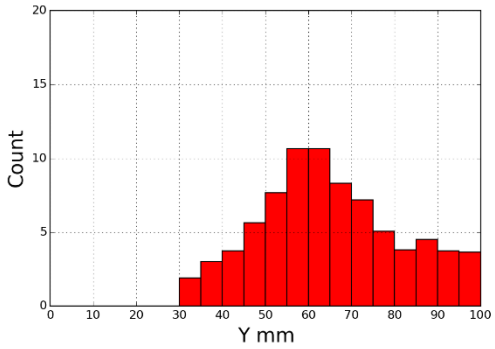


Figure A. 1992: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

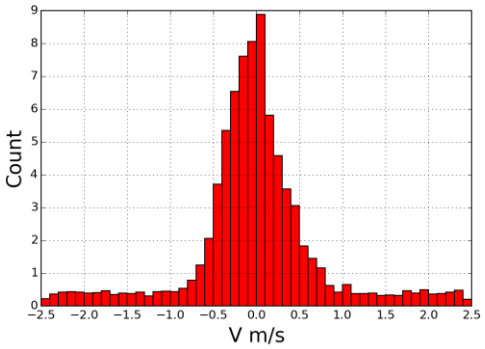


Figure A. 1995: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

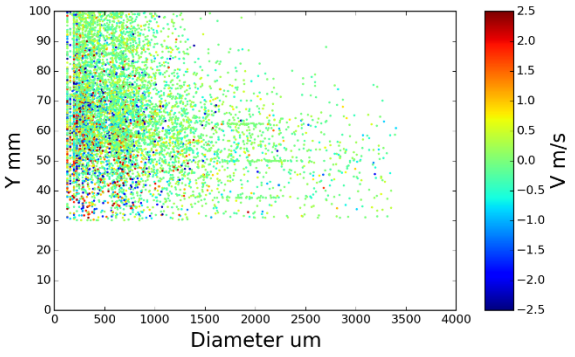


Figure A. 1993: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.1.2 Matched Only Droplets for .LB Image

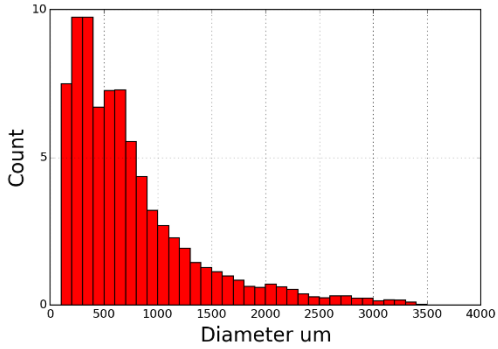


Figure A. 1996: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

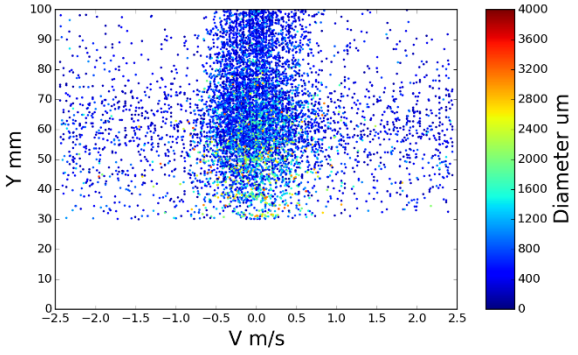


Figure A. 1999: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

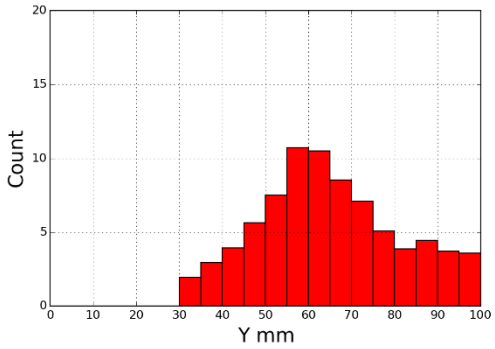


Figure A. 1997: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

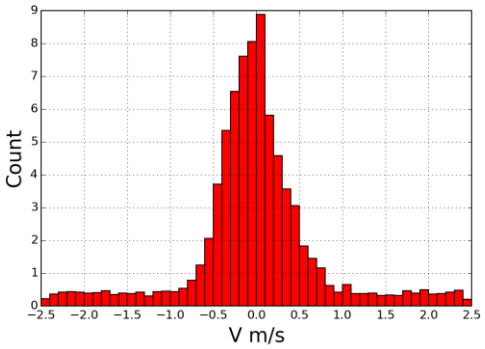


Figure A. 2000: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

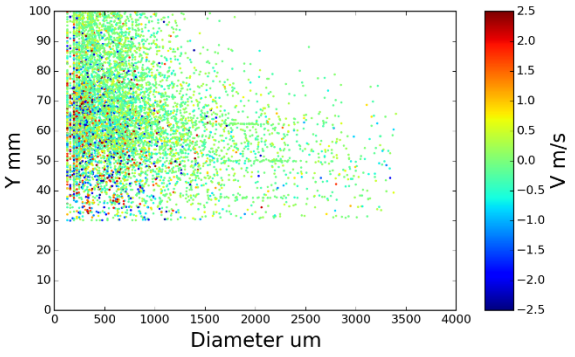


Figure A. 1998: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2 Liquid Level 2

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	17574 / 2.214
Ref Mass Flow (lb/hr) / (kg/s)	3206 / 0.404
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	29778 / 40.386
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4934 / 15.56
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	39.9 / 4.38
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.1 / 4.50
Total Bundle Q (Btu/hr) / (kW)	113561 / 33.28
Total Bundle & Preboiler Q (Btu/hr) / (kW)	289693 / 84.90
Top Two Rows HTC Ratio	1.100
Bundle Inlet Quality	0.57
Bundle Exit Quality	1.00

Table A. 211: Thermal Conditions

A.3.2.1 Lens 100mm Mag 0_29x

A.3.2.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	157.1	157.43	57.2	3021	421.2	437.6	57.2	3039	409.2	430.1
40-60mm	246.81	251.13	57.2	3035	356.2	366.0	57.2	3035	352.2	364.7
60-80mm	127.21	129.49	57.2	2883	268.7	255.0	57.2	3029	265.7	257.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	532.41	538.89	57.2	3035	354.5	370.9	57.2	3039	348.1	367.3
			Height A (mm)				Height B (mm)			
Highest Particle			76.0293				76.0293			
Lowest Particle			28.0482				28.0482			

Table A. 212: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	83.31	57.2	3021	521.3	470.3	57.2	3024	519.3	468.6	-2.540	2.540	-0.010	0.480	-2.540	2.540	-0.000	0.560
40-60mm	161.41	57.2	3035	427.1	386.0	57.2	3028	425.4	385.4	-2.540	2.540	-0.010	0.370	-2.540	2.540	0.010	0.460
60-80mm	86.58	57.2	2883	320.3	276.9	57.2	2955	318.9	278.4	-2.540	2.510	-0.030	0.300	-2.510	2.540	-0.010	0.360
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	331.3	57.2	3035	422.9	391.7	57.2	3028	421.2	391.1	-2.540	2.540	-0.020	0.380	-2.540	2.540	0.000	0.460

Table A. 213: Matched Droplet Info

A.3.2.1 All Droplets for .LA Image

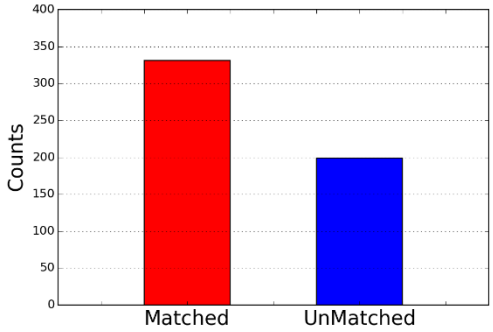


Figure A. 2001: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

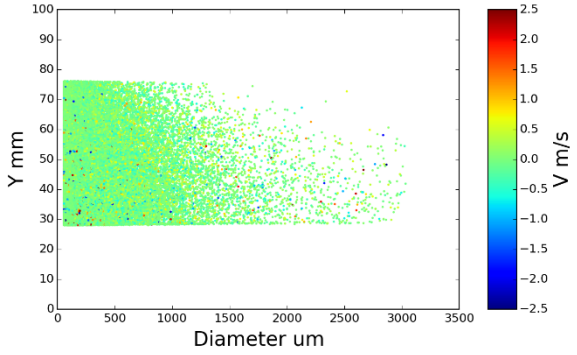


Figure A. 2004: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

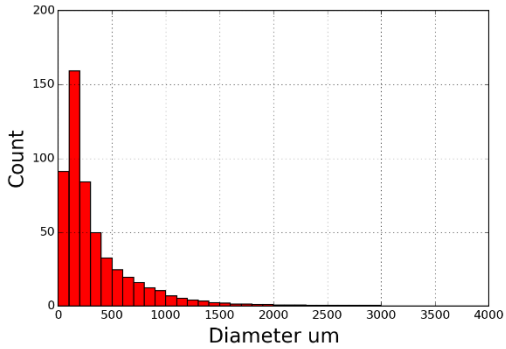


Figure A. 2002: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

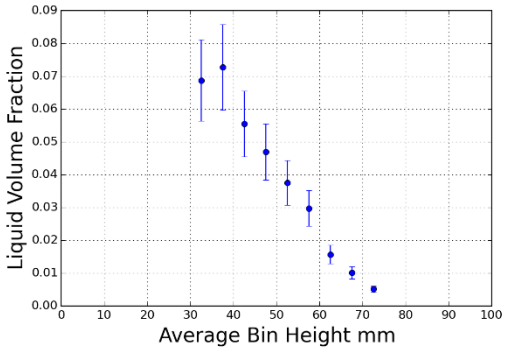


Figure A. 2005: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

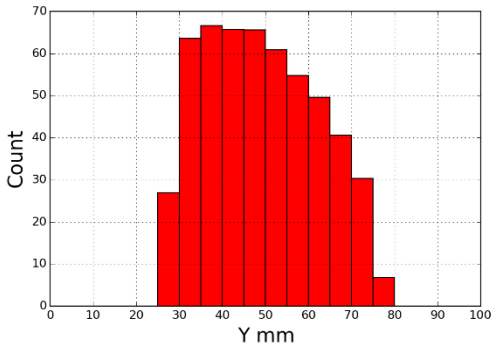


Figure A. 2003: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 All Droplets for .LB Image

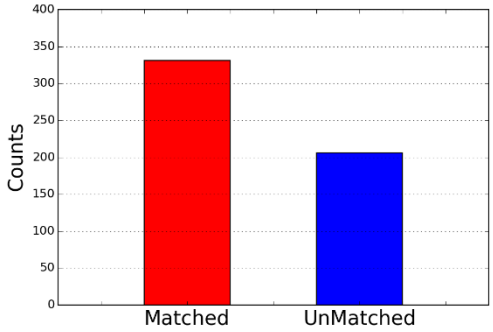


Figure A. 2006: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

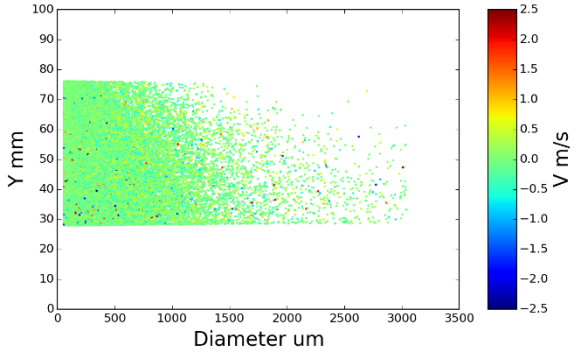


Figure A. 2009: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

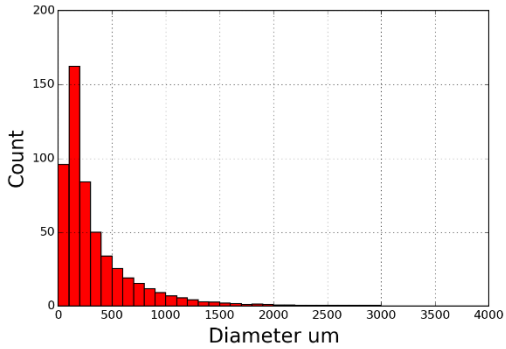


Figure A. 2007: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

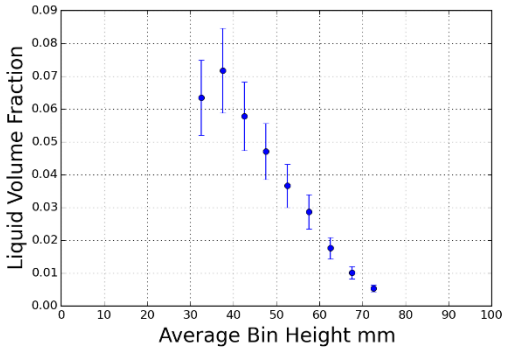


Figure A. 2010: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

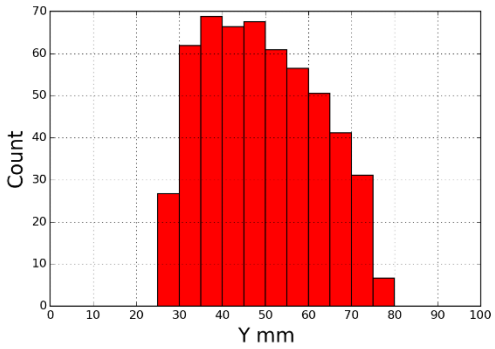


Figure A. 2008: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 Matched Only Droplets for .LA Image

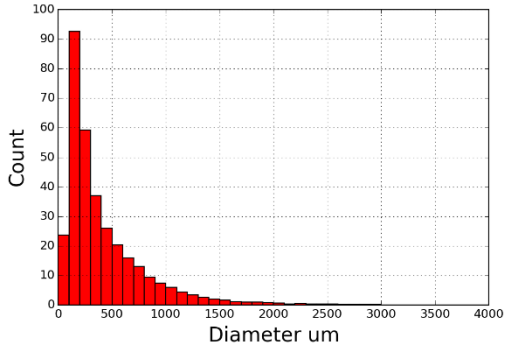


Figure A. 2011: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

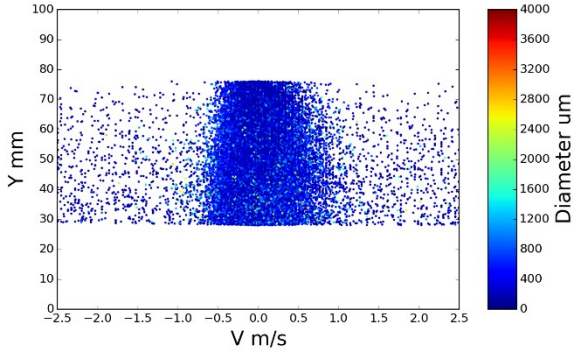


Figure A. 2014: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

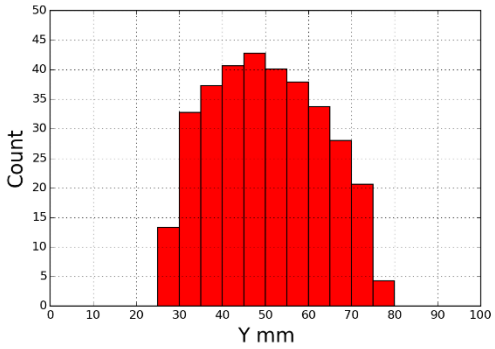


Figure A. 2012: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

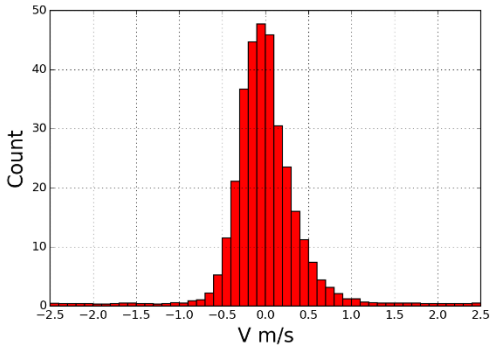


Figure A. 2015: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

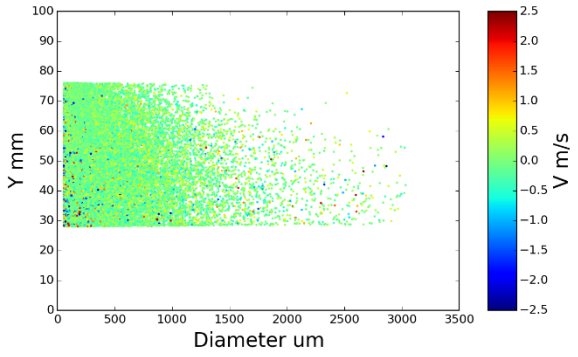


Figure A. 2013: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 Matched Only Droplets for .LB Image

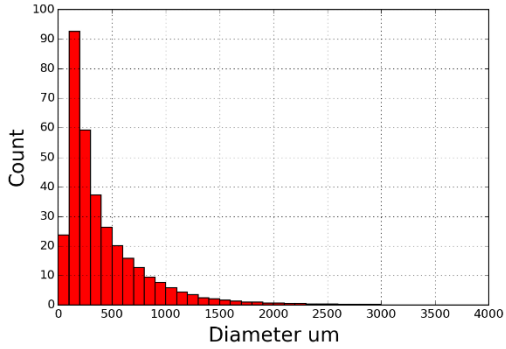


Figure A. 2016: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

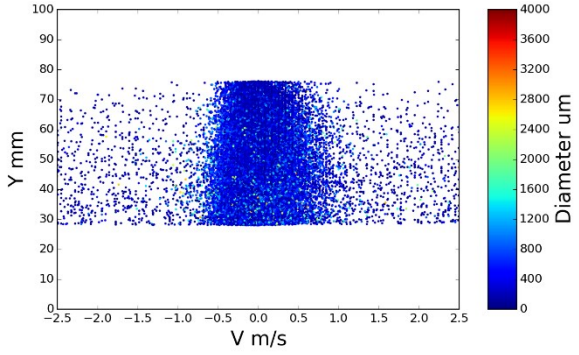


Figure A. 2019: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

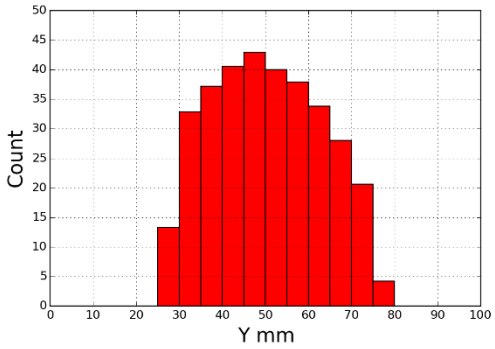


Figure A. 2017: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

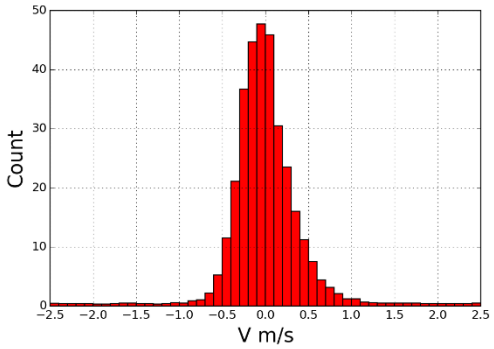


Figure A. 2020: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

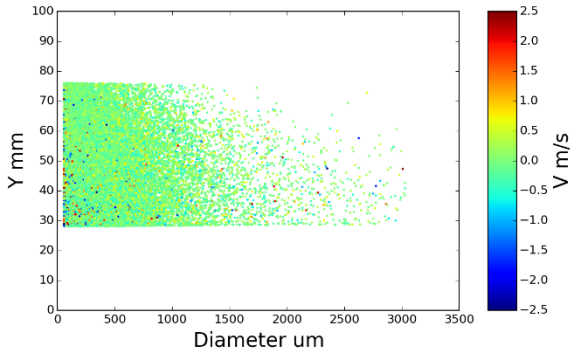


Figure A. 2018: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	124.65	123.89	57.2	3032	446.7	468.7	57.2	3041	454.7	473.0
40-60mm	223.15	224.81	57.2	3040	380.0	416.5	57.2	3037	377.2	413.8
60-80mm	116.4	117.01	57.2	2983	291.1	313.6	57.2	3023	289.2	310.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	464.8	466.22	57.2	3040	375.6	412.6	57.2	3041	375.7	412.3
			Height A (mm)				Height B (mm)			
Highest Particle			76.0293				76.0293			
Lowest Particle			28.0482				28.0482			

Table A. 214: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	63.8	57.2	2987	579.4	513.9	57.2	3009	578.6	517.5	-2.540	2.540	-0.020	0.470	-2.540	2.540	-0.020	0.540
40-60mm	137.82	57.2	3035	472.2	446.3	57.2	3031	470.6	443.8	-2.540	2.540	-0.030	0.400	-2.540	2.530	-0.050	0.470
60-80mm	75.97	57.2	2983	362.7	347.0	57.2	3023	361.1	345.2	-2.540	2.540	-0.040	0.330	-2.540	2.540	-0.060	0.390
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	277.59	57.2	3035	466.9	445.5	57.2	3031	465.5	444.9	-2.540	2.540	-0.030	0.400	-2.540	2.540	-0.040	0.470

Table A. 215: Matched Droplet Info

A.3.2.1 All Droplets for .LA Image

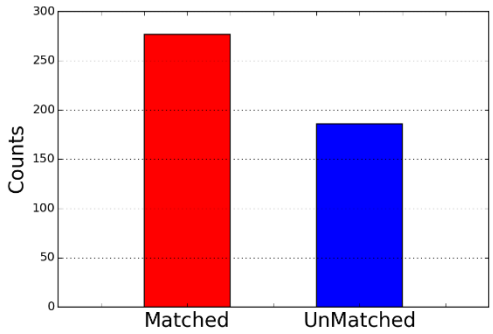


Figure A. 2021: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

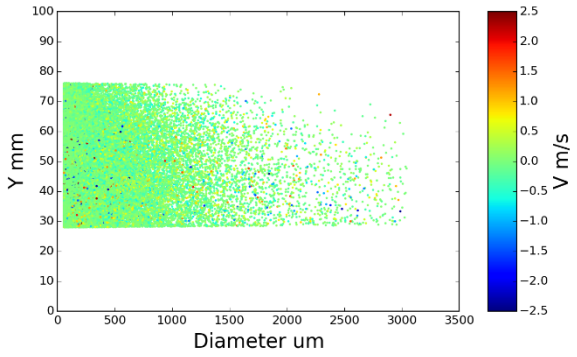


Figure A. 2024: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

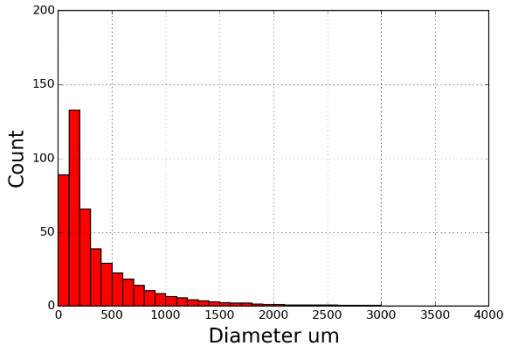


Figure A. 2022: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

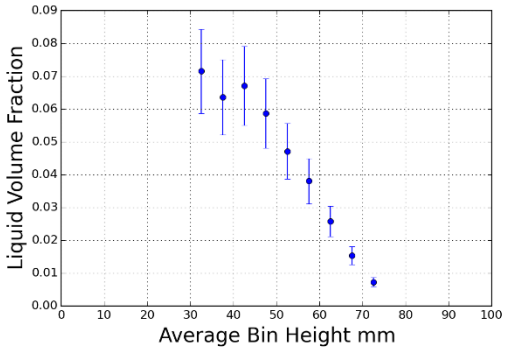


Figure A. 2025: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

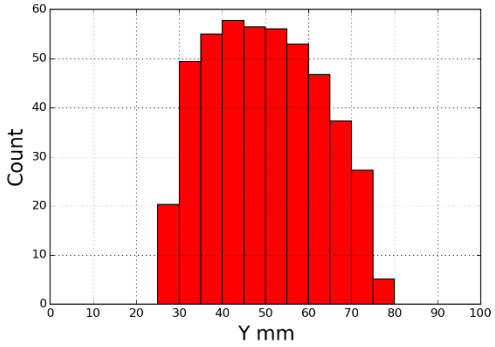


Figure A. 2023: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 All Droplets for .LB Image

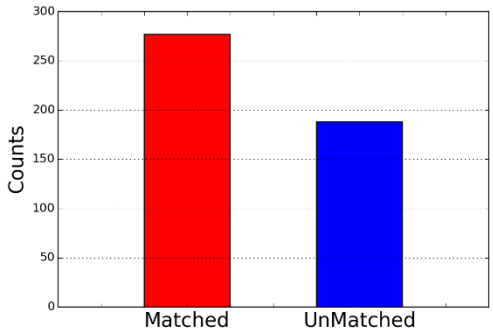


Figure A. 2026: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

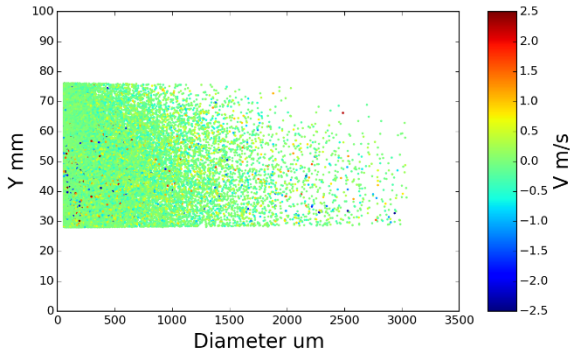


Figure A. 2029: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

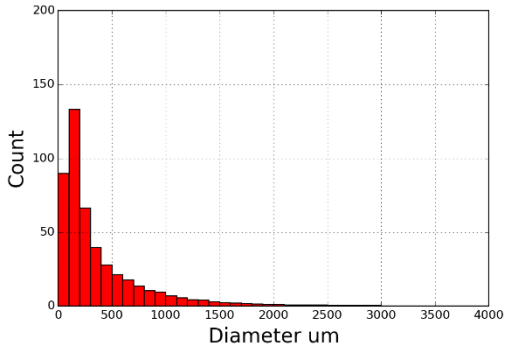


Figure A. 2027: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

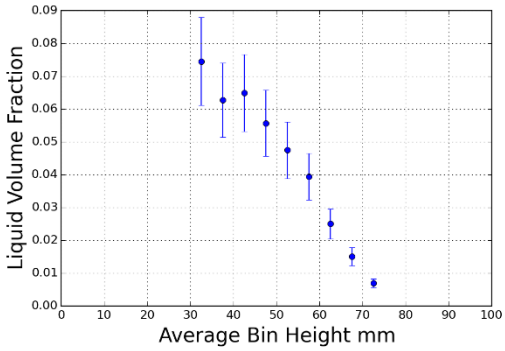


Figure A. 2030: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

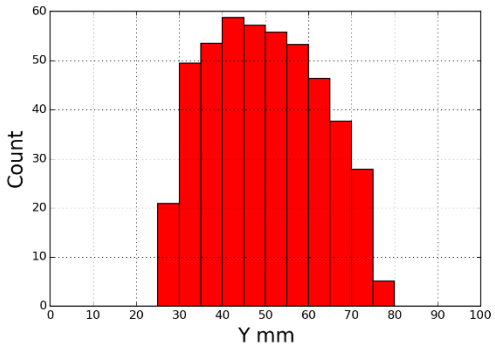


Figure A. 2028: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 Matched Only Droplets for .LA Image

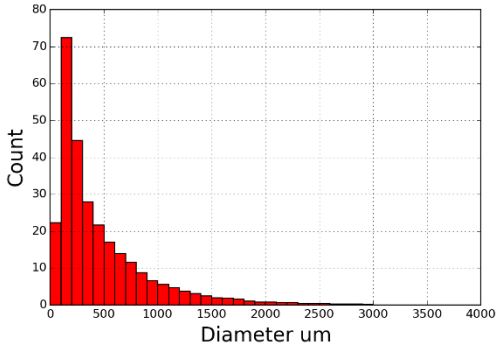


Figure A. 2031: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

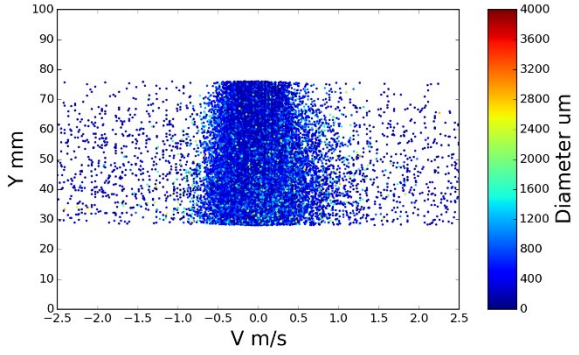


Figure A. 2034: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

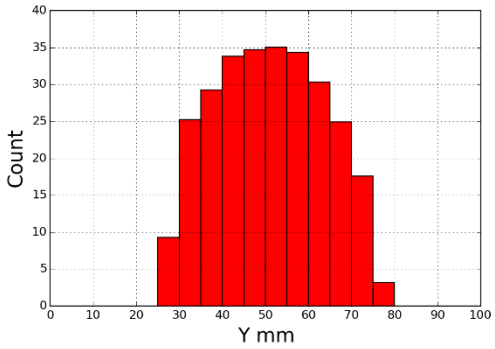


Figure A. 2032: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

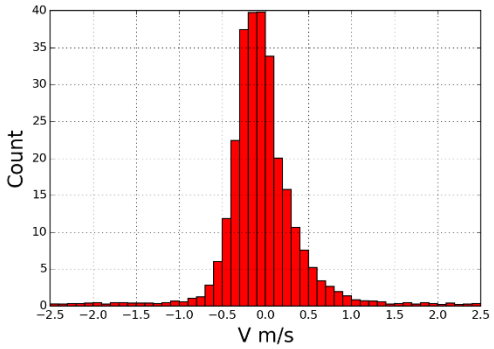


Figure A. 2035: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

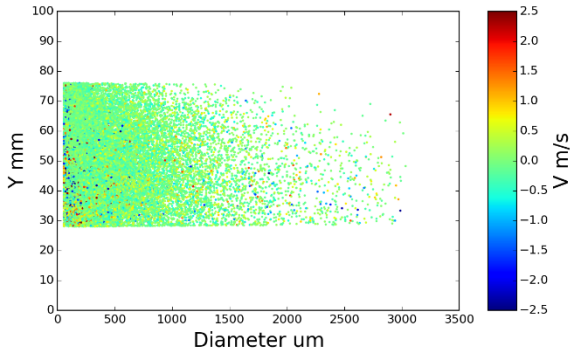


Figure A. 2033: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 Matched Only Droplets for .LB Image

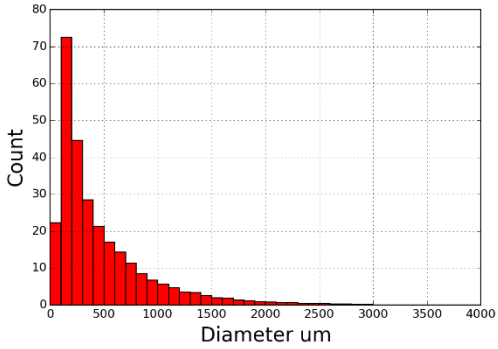


Figure A. 2036: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

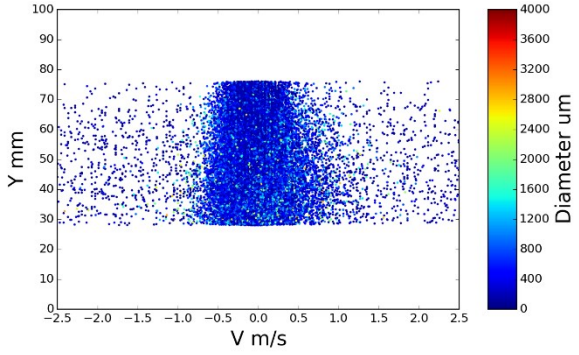


Figure A. 2039: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

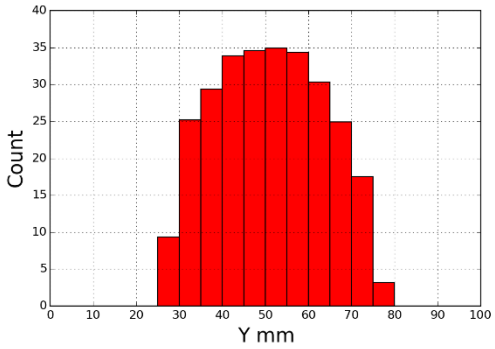


Figure A. 2037: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

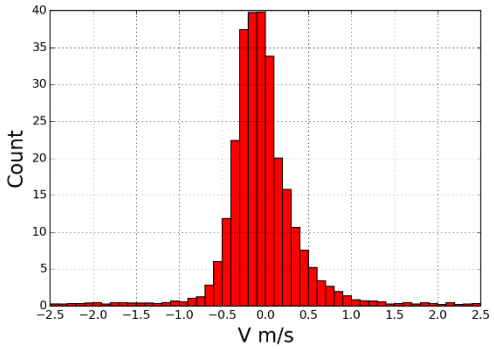


Figure A. 2040: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

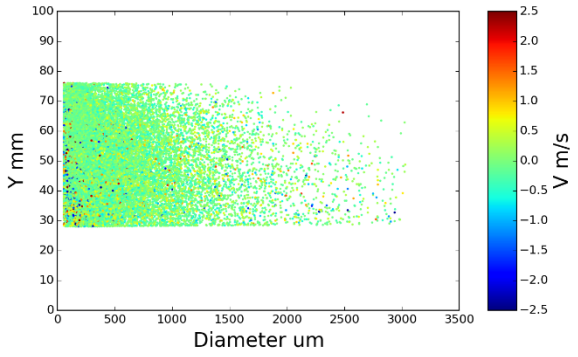


Figure A. 2038: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	102.35	102.85	57.2	3031	464.4	487.4	57.2	3016	462.1	481.6
40-60mm	213.89	213.81	57.2	3035	376.5	410.3	57.2	3041	378.1	408.1
60-80mm	109.6	109.0	57.2	2998	287.6	313.7	57.2	2986	288.7	314.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	427.55	427.14	57.2	3035	374.7	413.4	57.2	3041	375.5	410.8
			Height A (mm)				Height B (mm)			
Highest Particle			76.0293				76.0166			
Lowest Particle			28.0482				28.0482			

Table A. 216: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	44.74	57.2	3031	628.2	539.7	57.2	3016	627.7	541.4	-2.540	2.540	-0.000	0.520	-2.530	2.540	-0.030	0.580
40-60mm	119.56	57.2	3035	484.4	446.8	57.2	3041	481.7	445.4	-2.540	2.540	-0.020	0.430	-2.540	2.540	-0.050	0.510
60-80mm	65.09	57.2	2998	369.2	353.7	57.2	2986	367.4	352.0	-2.540	2.540	-0.050	0.350	-2.540	2.540	-0.060	0.420
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	229.39	57.2	3035	479.8	451.8	57.2	3041	477.9	451.3	-2.540	2.540	-0.030	0.430	-2.540	2.540	-0.050	0.500

Table A. 217: Matched Droplet Info

A.3.2.1 All Droplets for .LA Image

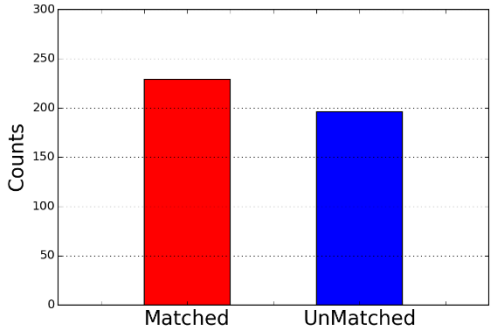


Figure A. 2041: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

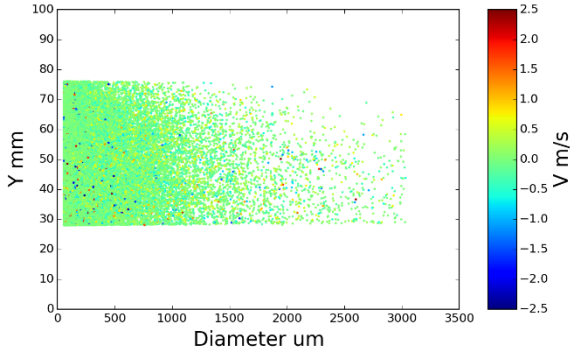


Figure A. 2044: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

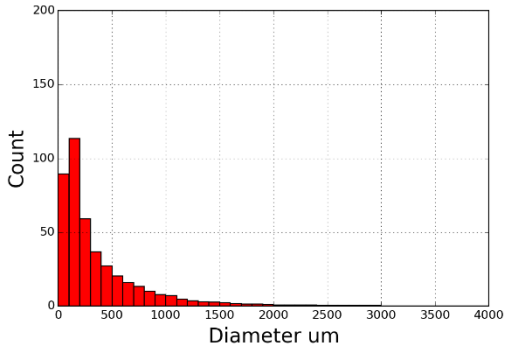


Figure A. 2042: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

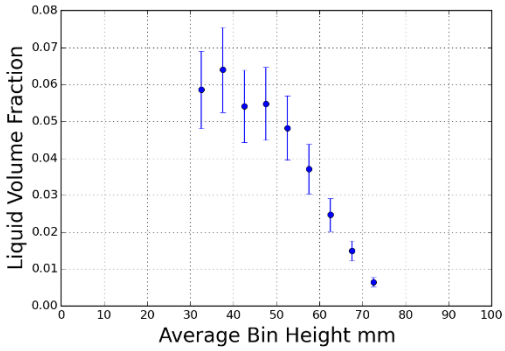


Figure A. 2045: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

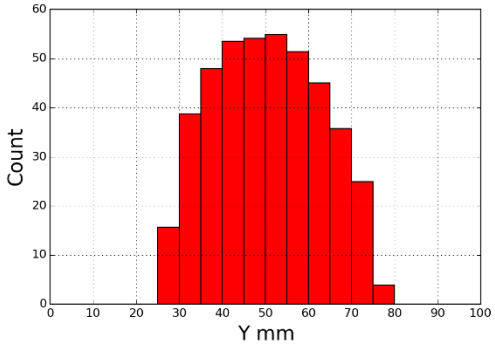


Figure A. 2043: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 All Droplets for .LB Image

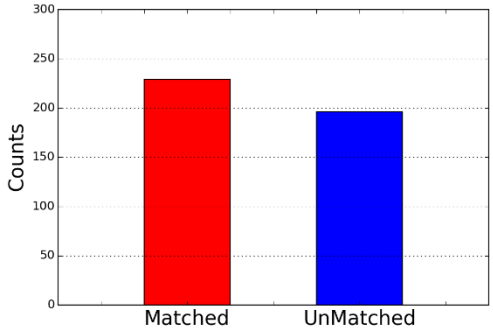


Figure A. 2046: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

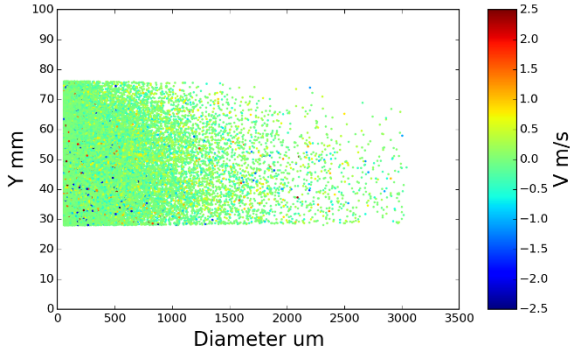


Figure A. 2049: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

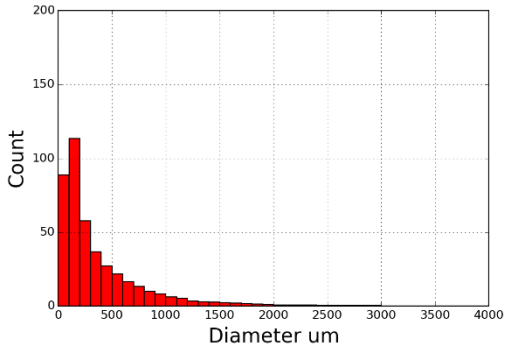


Figure A. 2047: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

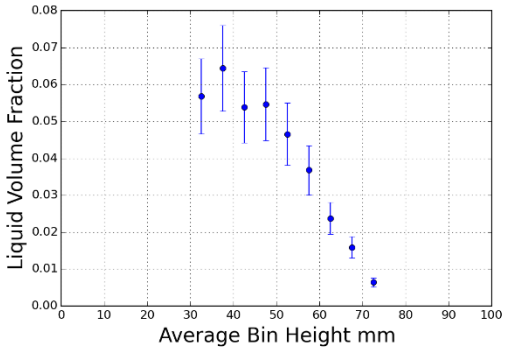


Figure A. 2050: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

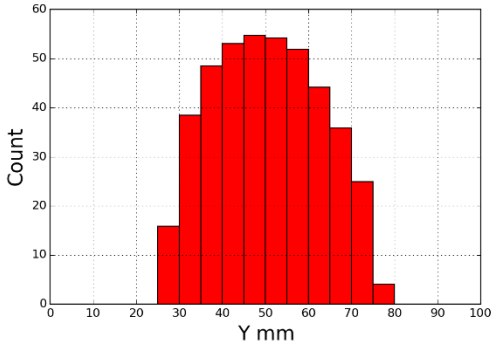


Figure A. 2048: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 Matched Only Droplets for .LA Image

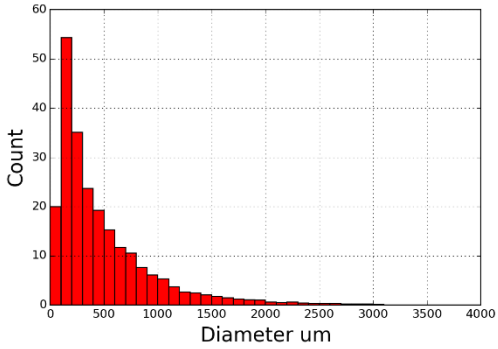


Figure A. 2051: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

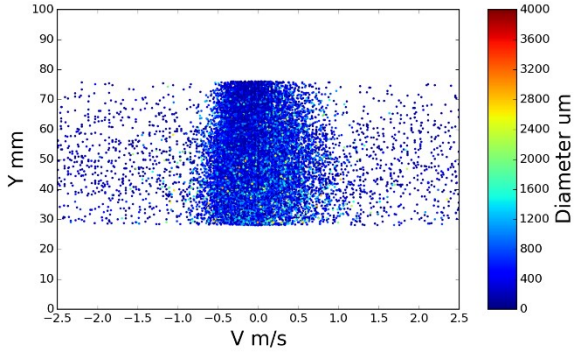


Figure A. 2054: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

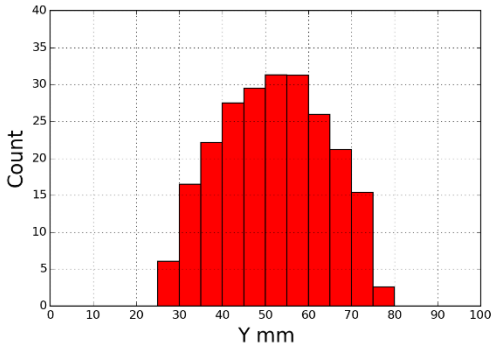


Figure A. 2052: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

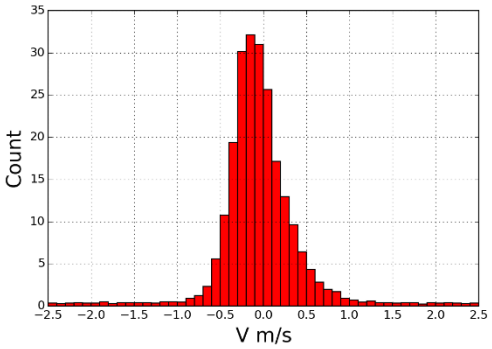


Figure A. 2055: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

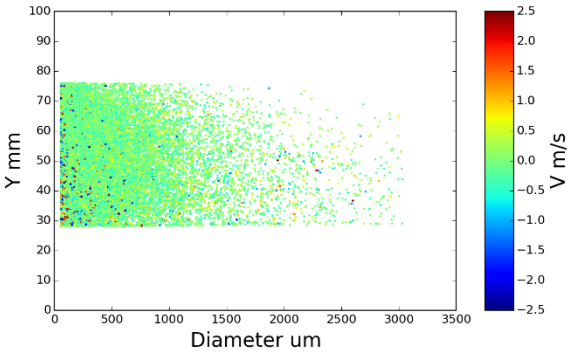


Figure A. 2053: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 Matched Only Droplets for .LB Image

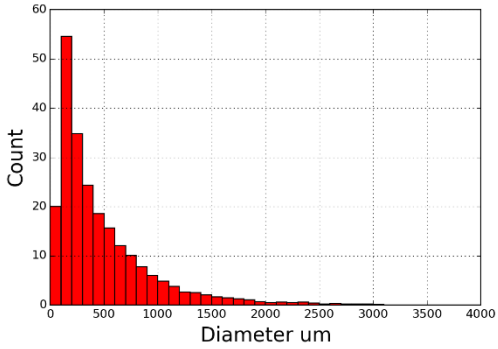


Figure A. 2056: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

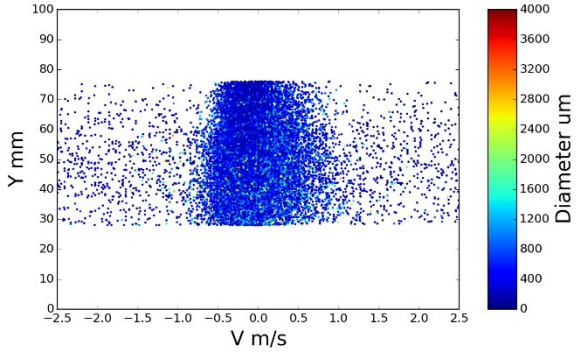


Figure A. 2059: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

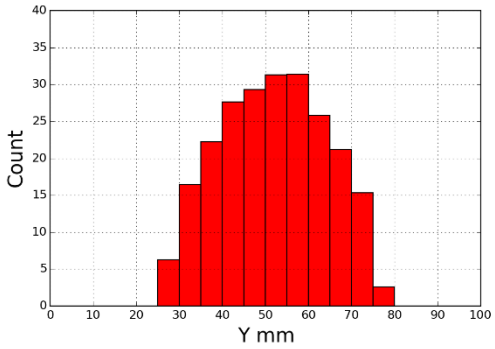


Figure A. 2057: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

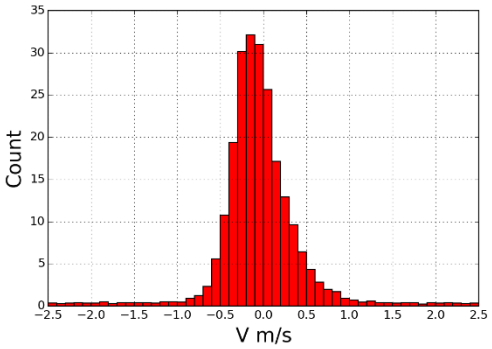


Figure A. 2060: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

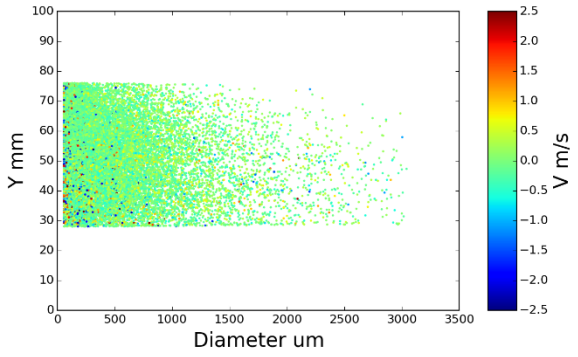


Figure A. 2058: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	94.92	99.0	57.2	3036	466.3	480.3	57.2	3041	456.9	464.2
40-60mm	201.71	199.4	57.2	3039	381.8	411.6	57.2	3043	384.3	414.9
60-80mm	105.46	103.83	57.2	3002	292.7	306.4	57.2	2871	293.3	304.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	404.47	404.41	57.2	3039	378.4	409.7	57.2	3043	378.7	407.0
			Height A (mm)				Height B (mm)			
Highest Particle			76.0293				76.0293			
Lowest Particle			28.0482				28.0482			

Table A. 218: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	37.27	57.2	3036	648.1	544.7	57.2	3037	646.2	543.5	-2.540	2.540	0.000	0.540	-2.540	2.540	0.010	0.620
40-60mm	108.07	57.2	3020	504.0	456.6	57.2	3043	501.9	454.9	-2.540	2.540	-0.010	0.440	-2.540	2.540	0.010	0.520
60-80mm	61.75	57.2	2851	375.2	334.8	57.2	2724	372.1	332.5	-2.530	2.490	-0.010	0.370	-2.540	2.530	-0.010	0.450
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	207.09	57.2	3036	491.5	451.8	57.2	3043	489.1	450.2	-2.540	2.540	-0.010	0.440	-2.540	2.540	0.000	0.520

Table A. 219: Matched Droplet Info

A.3.2.1 All Droplets for .LA Image

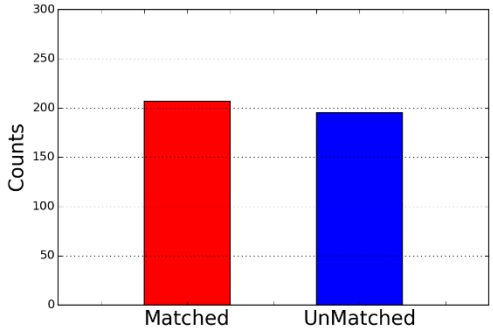


Figure A. 2061: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

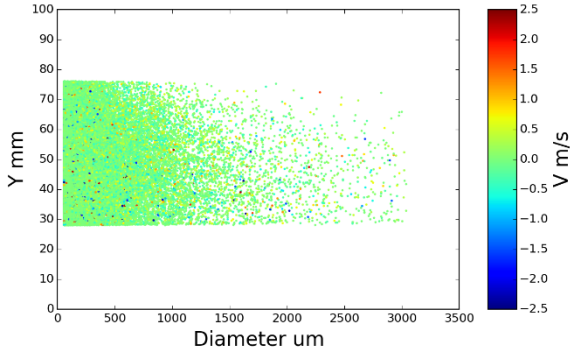


Figure A. 2064: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

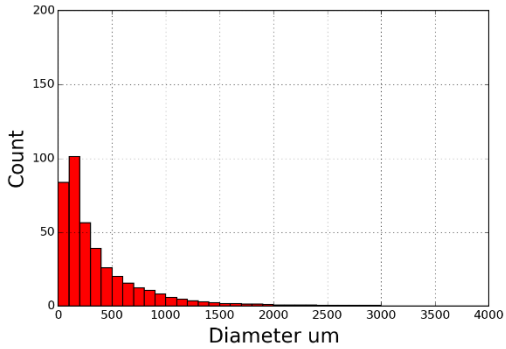


Figure A. 2062: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

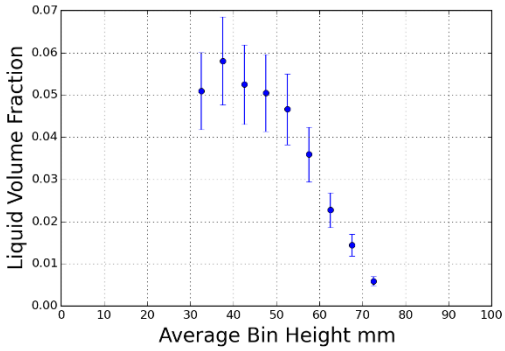


Figure A. 2065: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

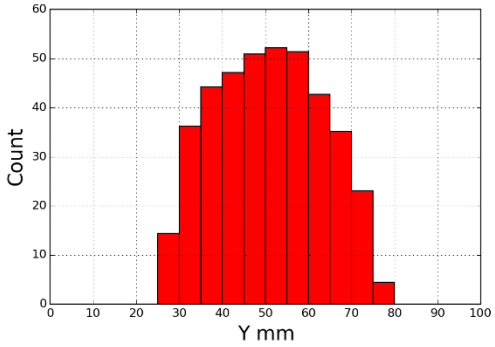


Figure A. 2063: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 All Droplets for .LB Image

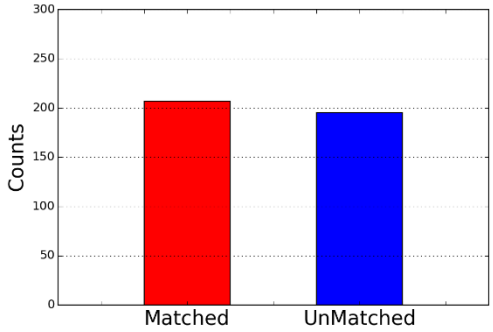


Figure A. 2066: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

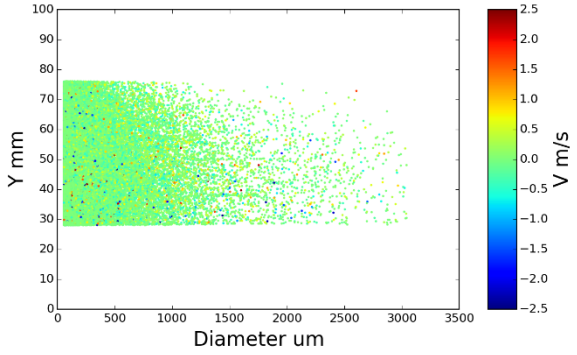


Figure A. 2069: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

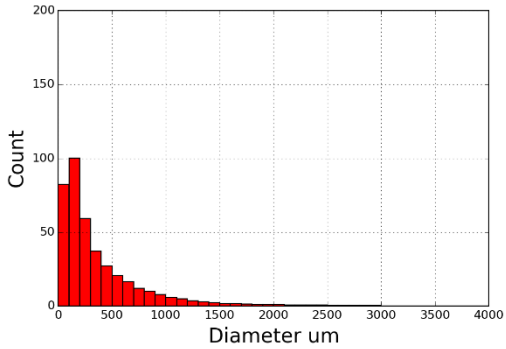


Figure A. 2067: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

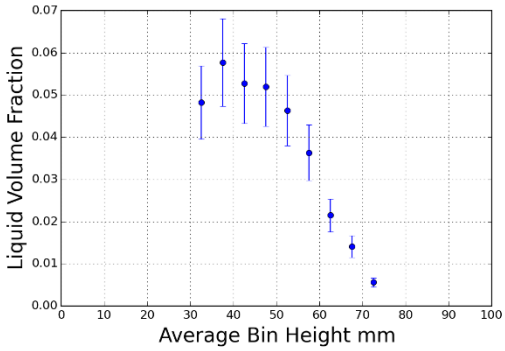


Figure A. 2070: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

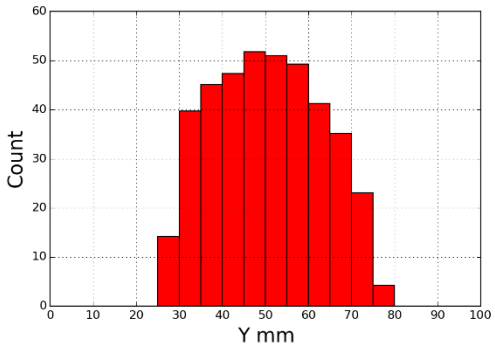


Figure A. 2068: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 Matched Only Droplets for .LA Image

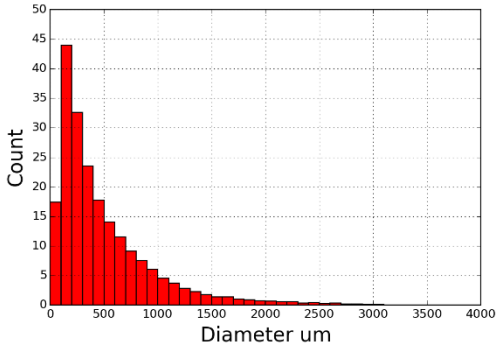


Figure A. 2071: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

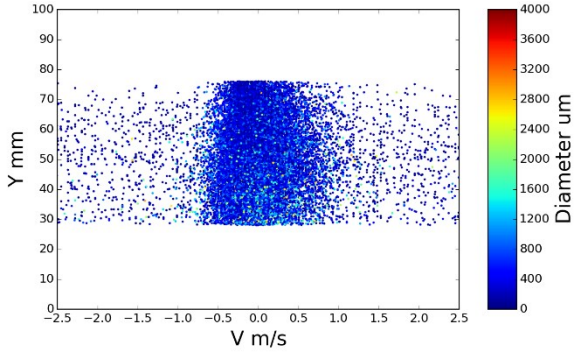


Figure A. 2074: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

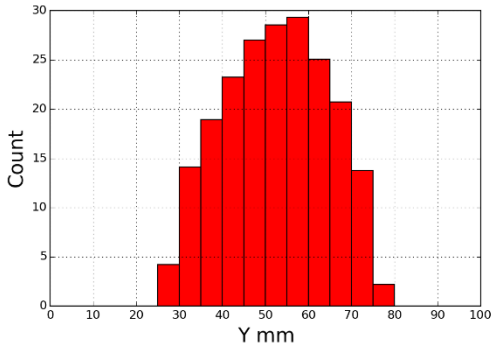


Figure A. 2072: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

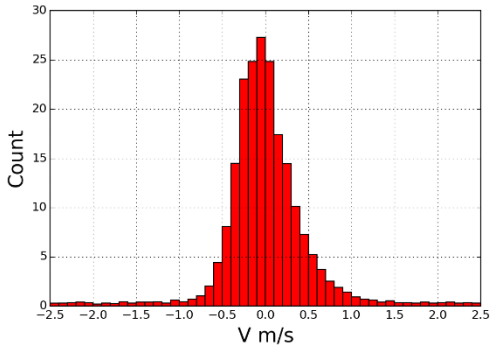


Figure A. 2075: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

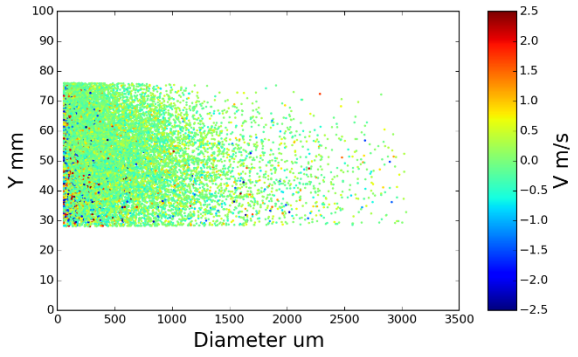


Figure A. 2073: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 Matched Only Droplets for .LB Image

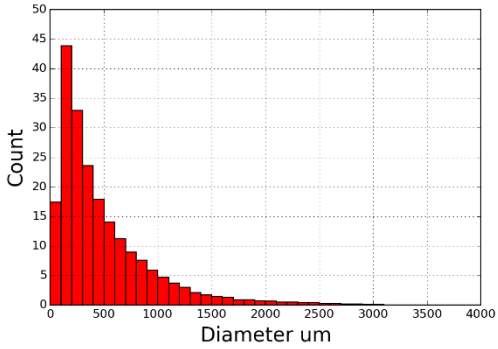


Figure A. 2076: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

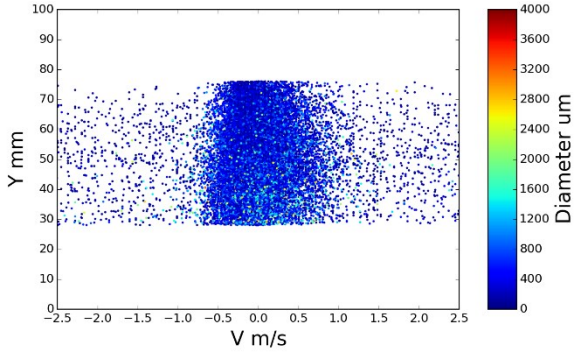


Figure A. 2079: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

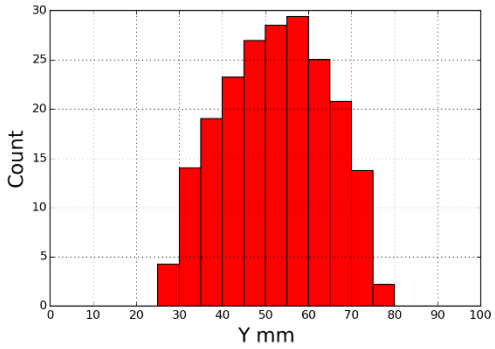


Figure A. 2077: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

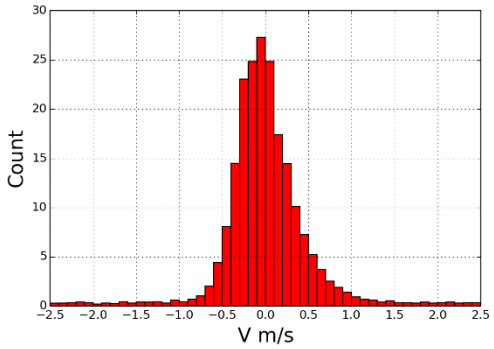


Figure A. 2080: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

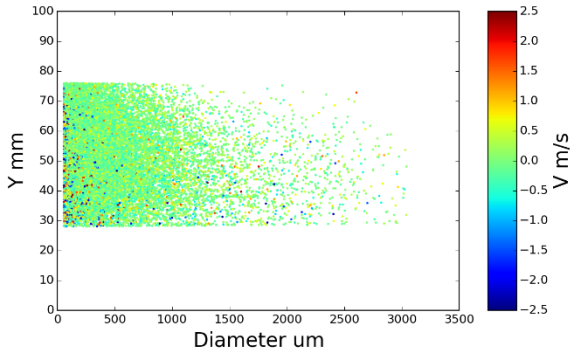


Figure A. 2078: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	85.5	83.91	57.2	3035	462.3	505.5	57.2	2999	465.9	504.7
40-60mm	198.28	194.84	57.2	3018	391.9	417.0	57.2	3039	395.2	418.2
60-80mm	114.46	112.59	57.2	2994	301.8	297.8	57.2	2859	303.9	296.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	399.06	392.15	57.2	3035	381.1	412.6	57.2	3039	384.1	412.8
			Height A (mm)				Height B (mm)			
Highest Particle			76.0293				76.0293			
Lowest Particle			28.0482				28.0482			

Table A. 220: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	30.04	57.2	3035	699.4	604.5	57.2	2949	700.7	607.1	-2.540	2.540	-0.000	0.610	-2.540	2.540	0.090	0.680
40-60mm	104.29	57.2	3006	523.6	460.8	57.2	3025	521.3	460.0	-2.540	2.540	0.000	0.470	-2.540	2.540	0.060	0.550
60-80mm	67.82	57.2	2807	385.3	327.0	57.2	2859	381.9	324.3	-2.540	2.540	-0.000	0.370	-2.540	2.540	0.050	0.450
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	202.15	57.2	3035	503.3	458.6	57.2	3025	501.0	458.2	-2.540	2.540	-0.000	0.460	-2.540	2.540	0.060	0.540

Table A. 221: Matched Droplet Info

A.3.2.1 All Droplets for .LA Image

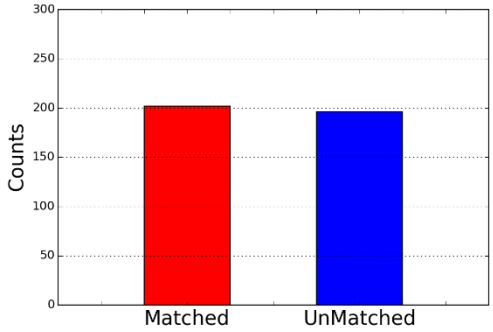


Figure A. 2081: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

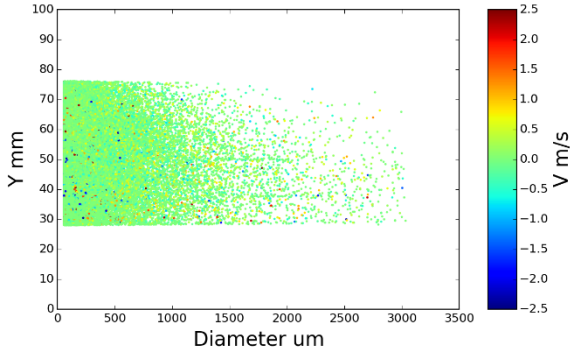


Figure A. 2084: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

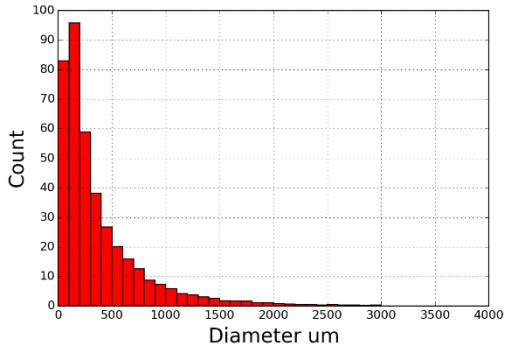


Figure A. 2082: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

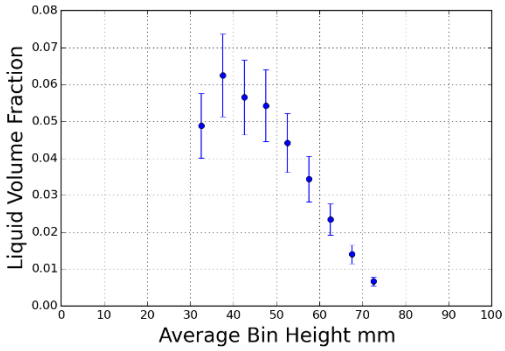


Figure A. 2085: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

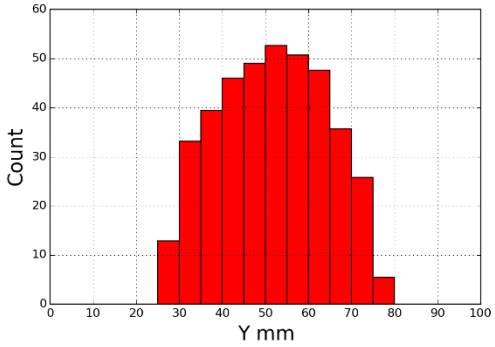


Figure A. 2083: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 All Droplets for .LB Image

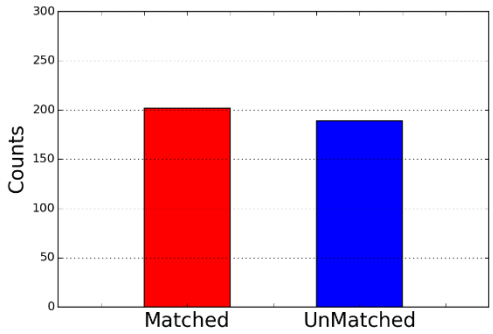


Figure A. 2086: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

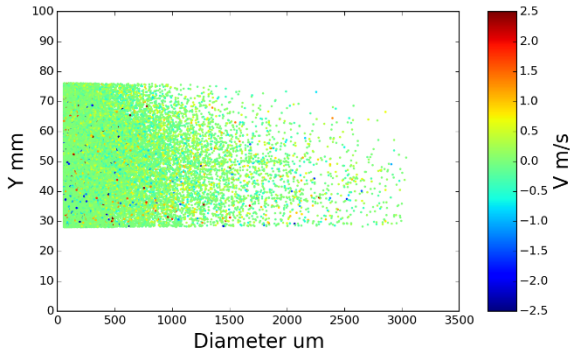


Figure A. 2089: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

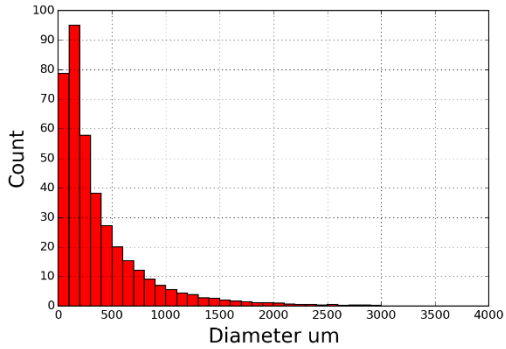


Figure A. 2087: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

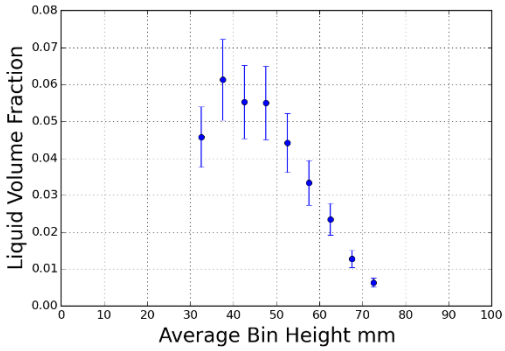


Figure A. 2090: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

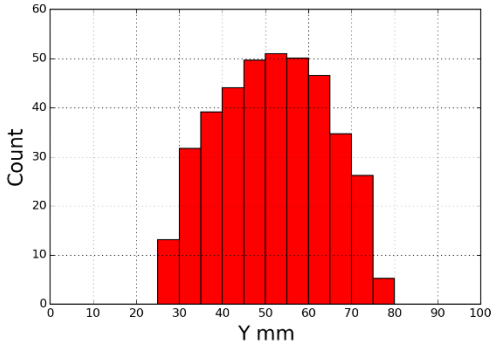


Figure A. 2088: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 Matched Only Droplets for .LA Image

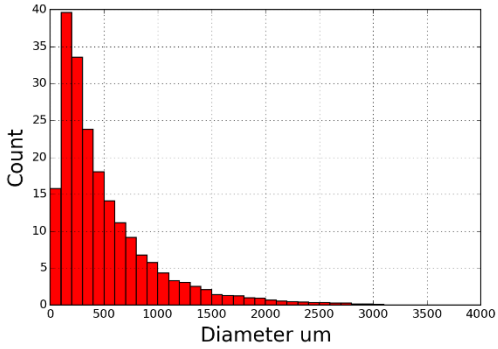


Figure A. 2091: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

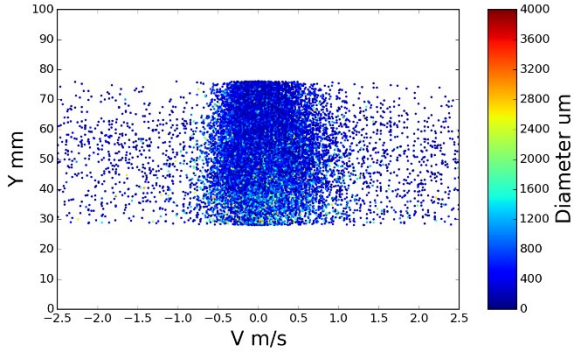


Figure A. 2094: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

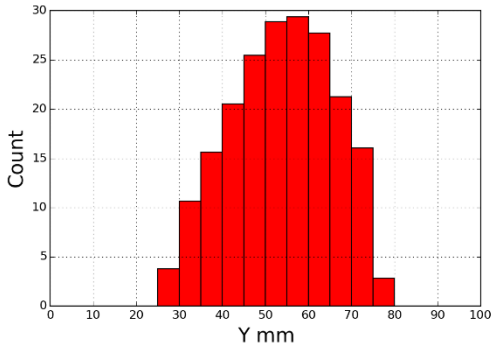


Figure A. 2092: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

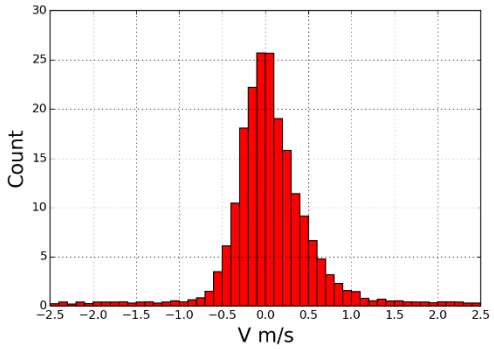


Figure A. 2095: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

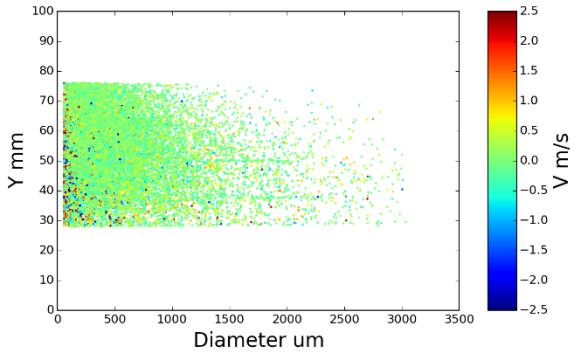


Figure A. 2093: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.1 Matched Only Droplets for .LB Image

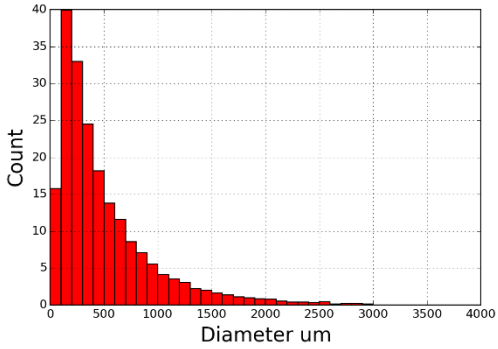


Figure A. 2096: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

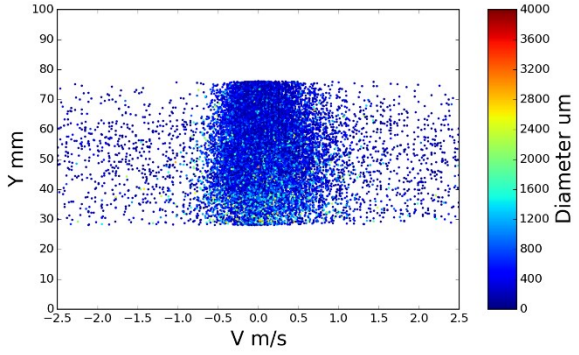


Figure A. 2099: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

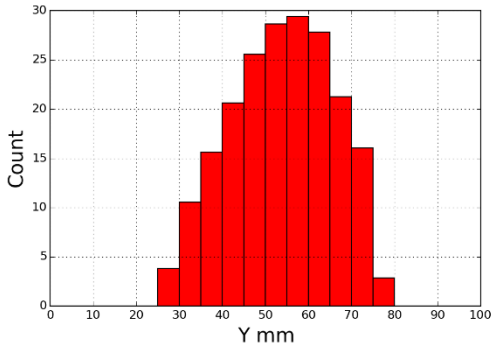


Figure A. 2097: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

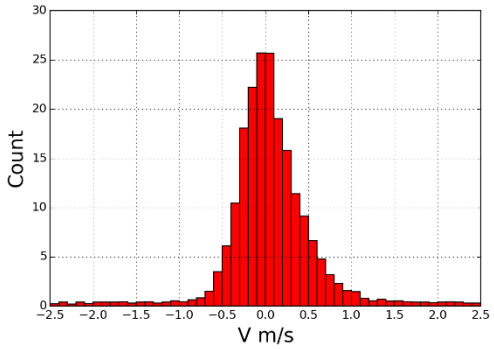


Figure A. 2100: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

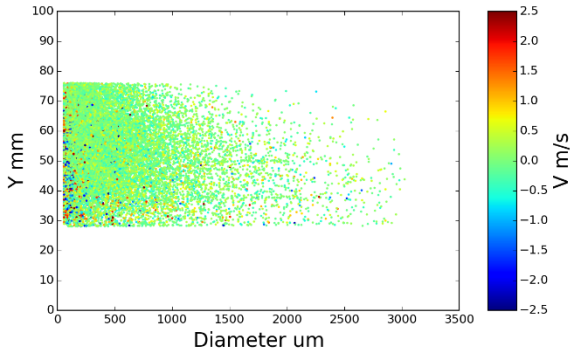


Figure A. 2098: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 Lens 50mm Mag 0_13x

A.3.2.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	144.05	143.71	128.6	3413	629.3	520.3	128.6	3411	629.9	528.3
40-60mm	139.28	139.75	128.6	3410	545.9	423.0	128.6	3408	547.0	424.2
60-80mm	54.42	54.53	128.6	3332	449.1	308.7	128.6	2588	444.9	302.7
80-100mm	11.72	11.57	128.6	1504	407.4	239.0	128.6	1583	412.2	239.5
All	349.53	349.63	128.6	3413	560.6	452.1	128.6	3411	560.7	455.8
			Height A (mm)				Height B (mm)			
Highest Particle			99.8508				99.8777			
Lowest Particle			20.0605				20.0605			

Table A. 222: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	50.55	128.6	3397	737.5	556.3	128.6	3409	734.3	553.8	-2.440	2.440	-0.050	0.780	-2.440	2.440	-0.010	0.820
40-60mm	61.23	128.6	3399	627.9	439.5	128.6	3381	625.6	437.9	-2.440	2.440	-0.020	0.640	-2.440	2.440	-0.040	0.680
60-80mm	25.63	128.6	2686	531.4	326.8	128.6	2588	530.4	325.8	-2.410	2.440	-0.020	0.460	-2.440	2.440	-0.030	0.530
80-100mm	6.17	128.6	1504	487.6	255.3	128.6	1583	488.3	256.1	-1.830	1.980	-0.040	0.250	-2.320	1.770	-0.030	0.350
All	143.58	128.6	3399	643.2	468.7	128.6	3409	641.1	466.9	-2.440	2.440	-0.030	0.650	-2.440	2.440	-0.030	0.700

Table A. 223: Matched Droplet Info

A.3.2.2 All Droplets for .LA Image

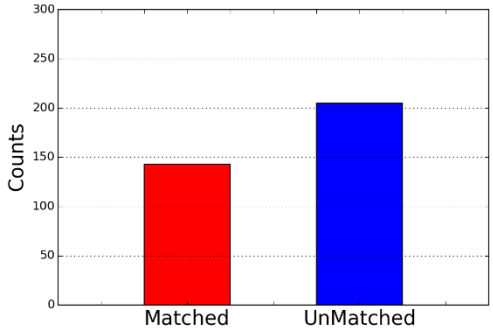


Figure A. 2101: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

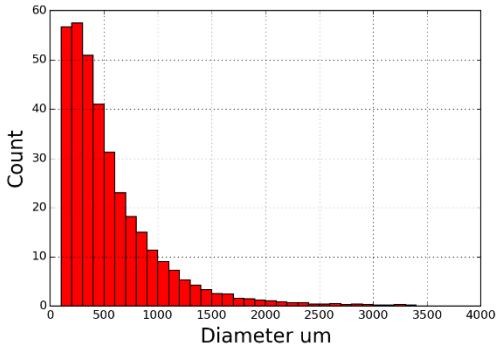


Figure A. 2102: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

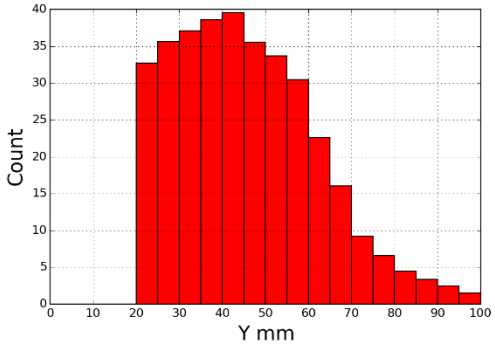


Figure A. 2103: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

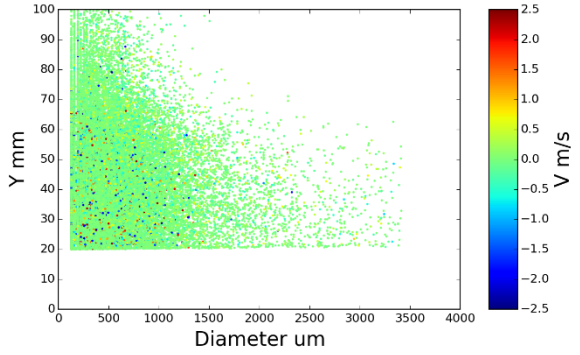


Figure A. 2104: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

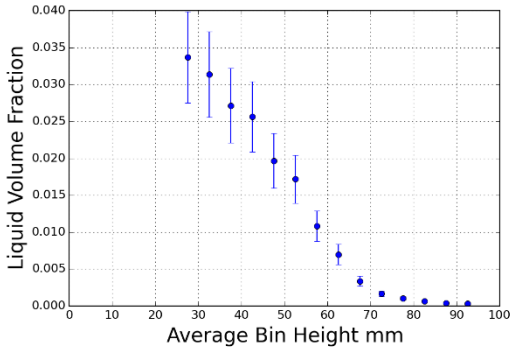


Figure A. 2105: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 All Droplets for .LB Image

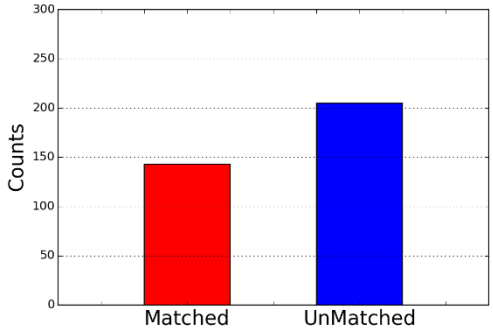


Figure A. 2106: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

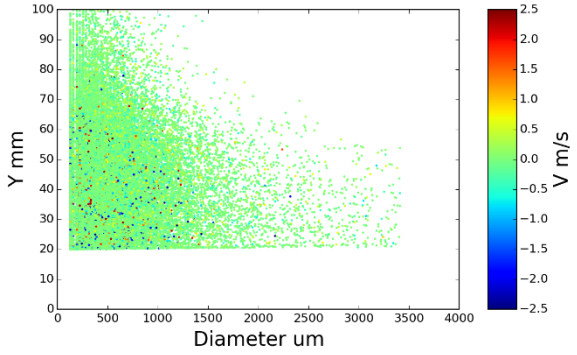


Figure A. 2109: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

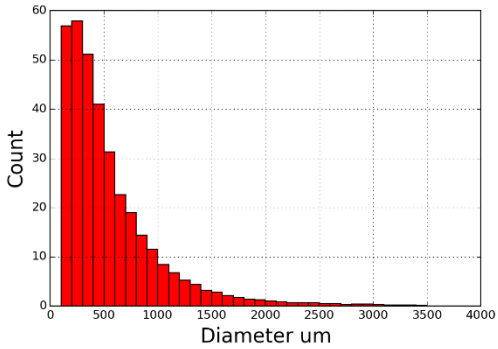


Figure A. 2107: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

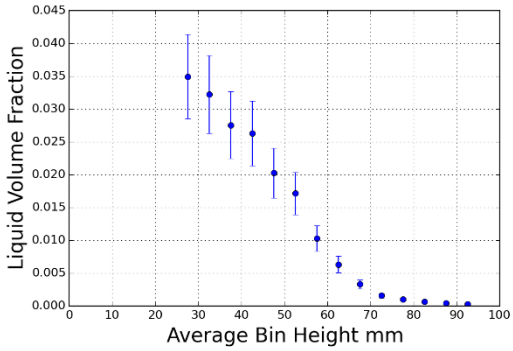


Figure A. 2110: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

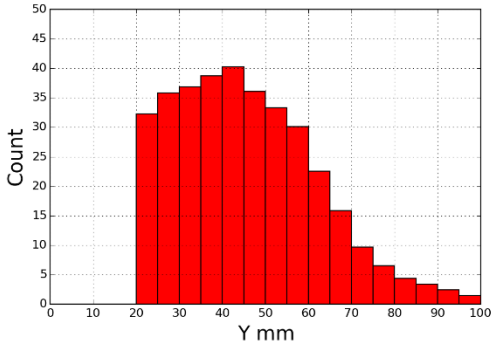


Figure A. 2108: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 Matched Only Droplets for .LA Image

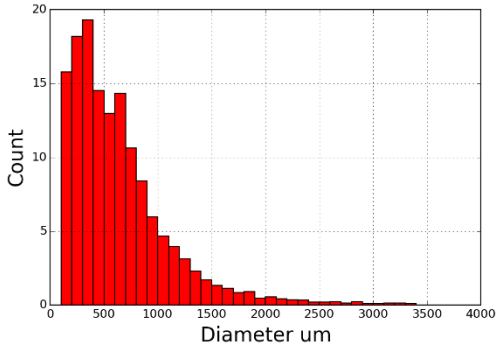


Figure A. 2111: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

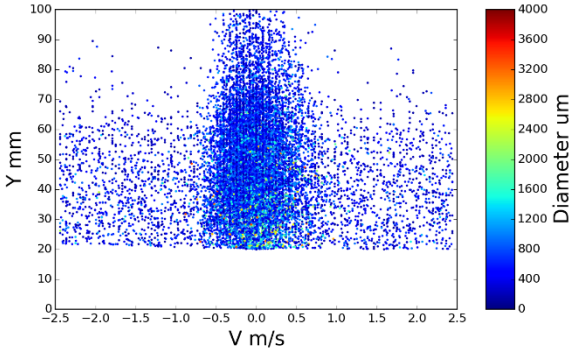


Figure A. 2114: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

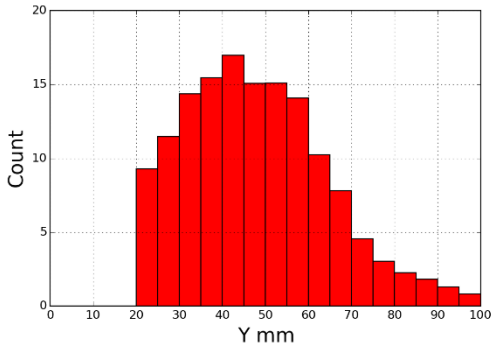


Figure A. 2112: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

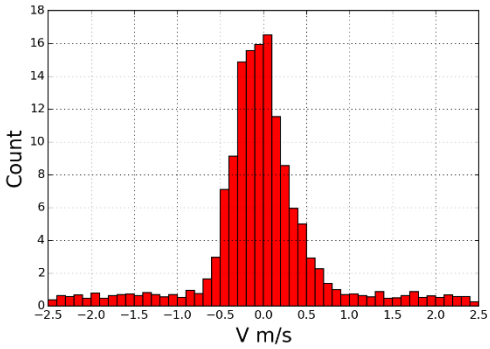


Figure A. 2115: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

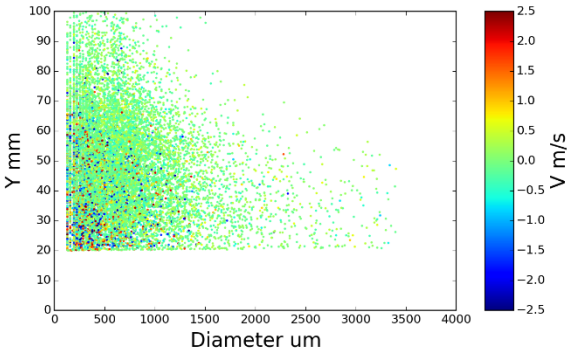


Figure A. 2113: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 Matched Only Droplets for .LB Image

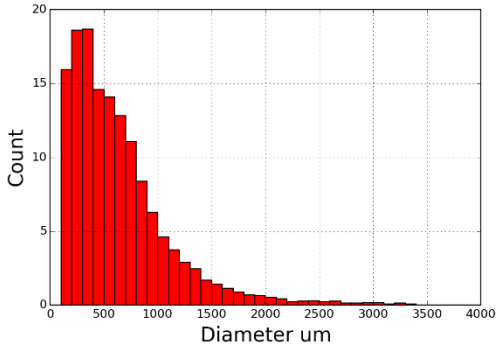


Figure A. 2116: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

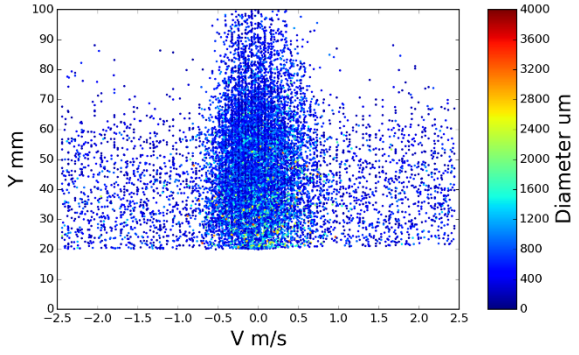


Figure A. 2119: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

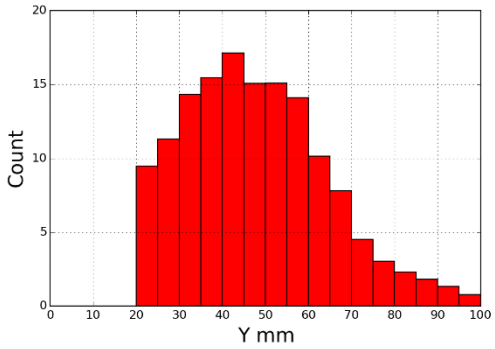


Figure A. 2117: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

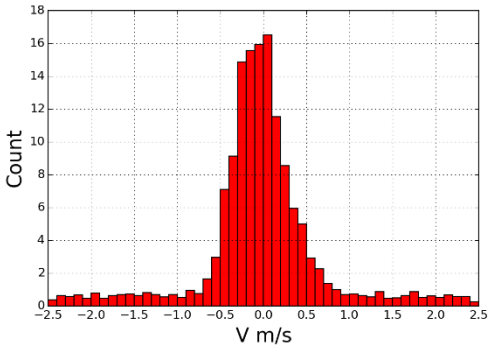


Figure A. 2120: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

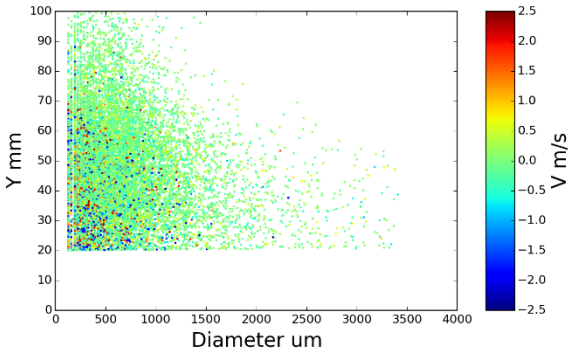


Figure A. 2118: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	127.67	127.11	128.6	3413	677.3	551.4	128.6	3416	682.0	558.9
40-60mm	129.47	129.1	128.6	3403	591.6	460.4	128.6	3326	592.1	454.2
60-80mm	48.57	48.16	128.6	2285	484.2	321.5	128.6	2383	482.5	321.8
80-100mm	10.44	10.3	128.6	1553	440.3	260.3	128.6	1459	440.3	257.8
All	316.17	314.67	128.6	3413	604.7	482.7	128.6	3416	606.7	484.2
			Height A (mm)				Height B (mm)			
Highest Particle			99.9320				99.9320			
Lowest Particle			20.0605				20.0605			

Table A. 224: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	40.75	128.6	3333	811.2	597.0	128.6	3405	806.6	596.7	-2.440	2.440	-0.020	0.770	-2.440	2.440	-0.020	0.810
40-60mm	56.14	128.6	3383	695.2	486.8	128.6	3250	692.8	485.3	-2.440	2.440	-0.040	0.630	-2.440	2.440	-0.040	0.660
60-80mm	22.34	128.6	2285	582.0	347.0	128.6	2291	578.2	345.6	-2.440	2.440	-0.050	0.490	-2.440	2.440	-0.060	0.540
80-100mm	5.02	128.6	1550	539.4	278.9	128.6	1459	537.9	275.7	-2.370	2.160	-0.040	0.370	-2.440	2.360	-0.050	0.440
All	124.25	128.6	3383	706.6	506.2	128.6	3405	703.5	505.4	-2.440	2.440	-0.030	0.650	-2.440	2.440	-0.040	0.690

Table A. 225: Matched Droplet Info

A.3.2.2 All Droplets for .LA Image

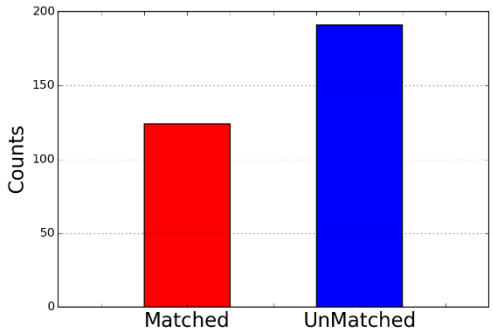


Figure A. 2121: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

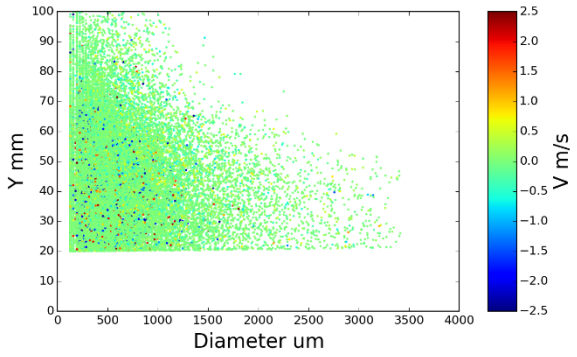


Figure A. 2124: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

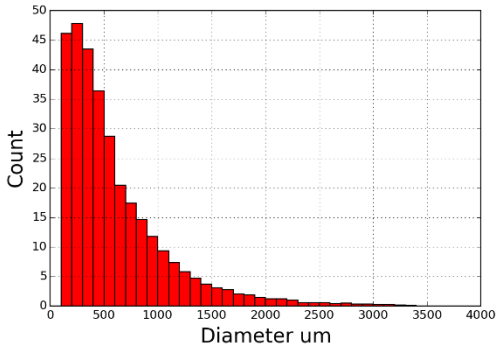


Figure A. 2122: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

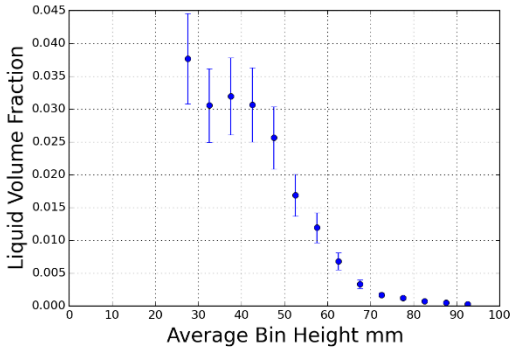


Figure A. 2125: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

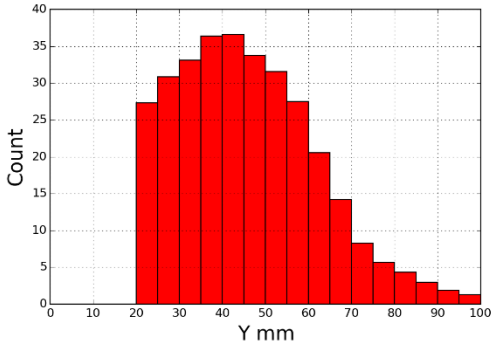


Figure A. 2123: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 All Droplets for .LB Image

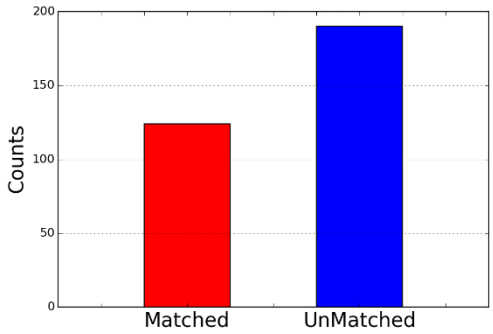


Figure A. 2126: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

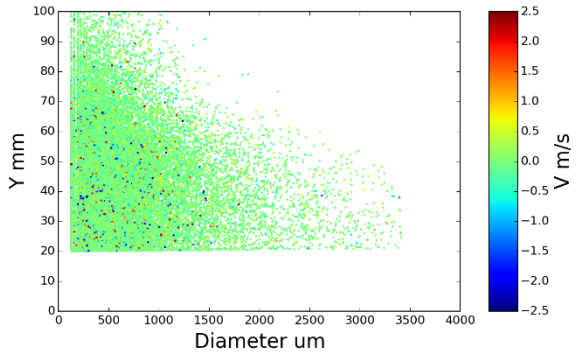


Figure A. 2129: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

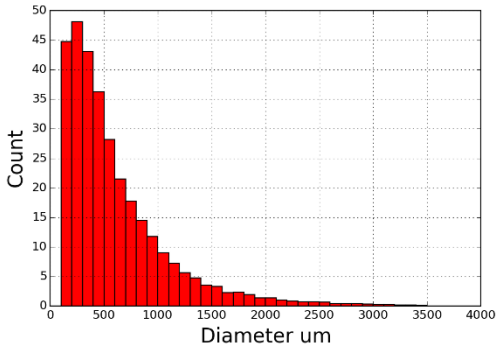


Figure A. 2127: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

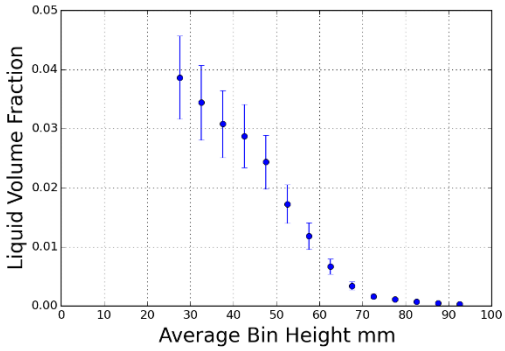


Figure A. 2130: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

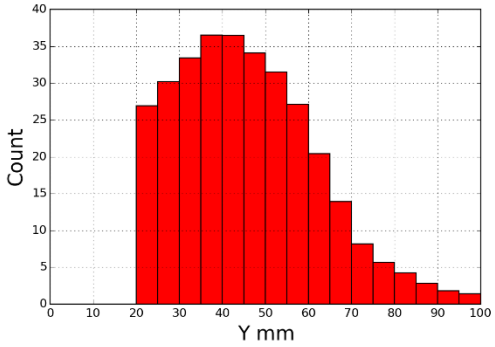


Figure A. 2128: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 Matched Only Droplets for .LA Image

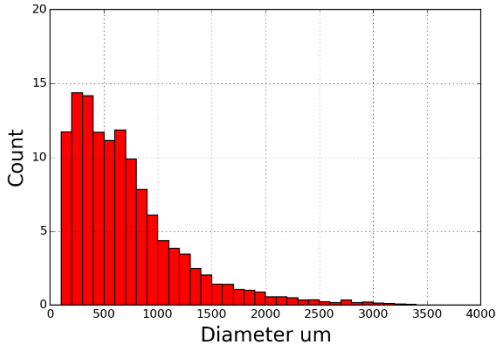


Figure A. 2131: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

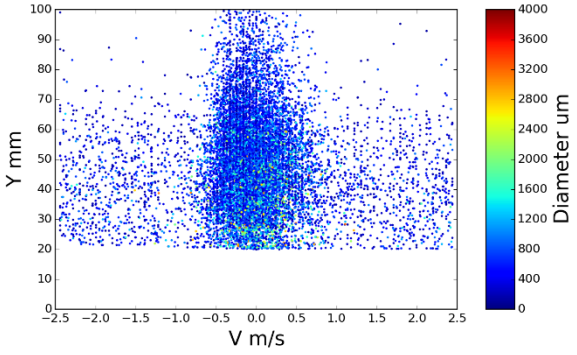


Figure A. 2134: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

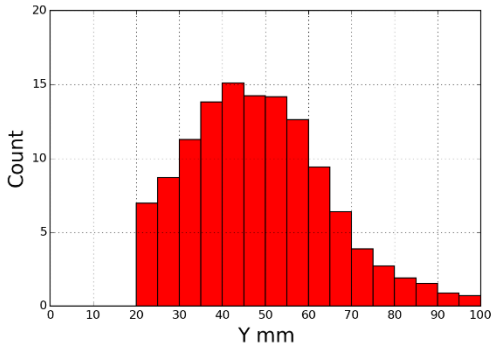


Figure A. 2132: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

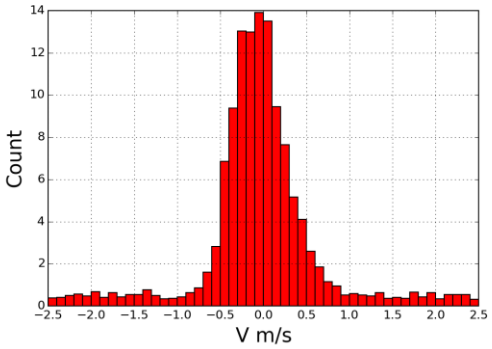


Figure A. 2135: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

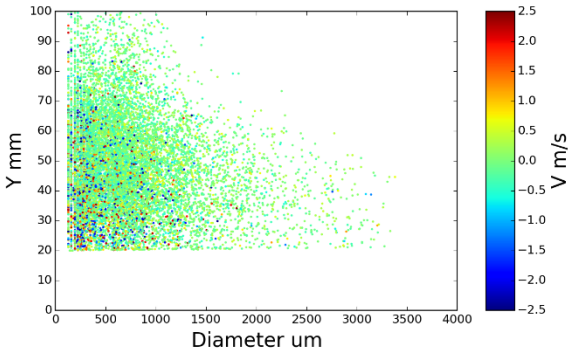


Figure A. 2133: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 Matched Only Droplets for .LB Image

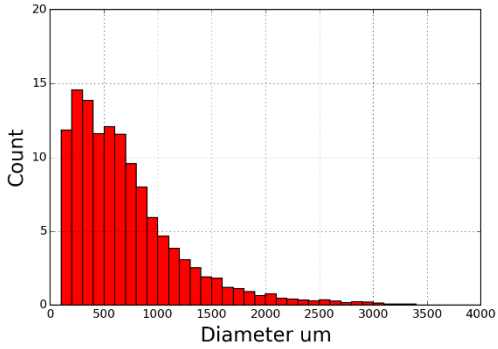


Figure A. 2136: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

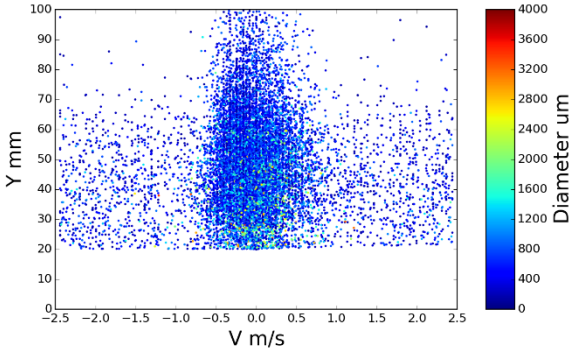


Figure A. 2139: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

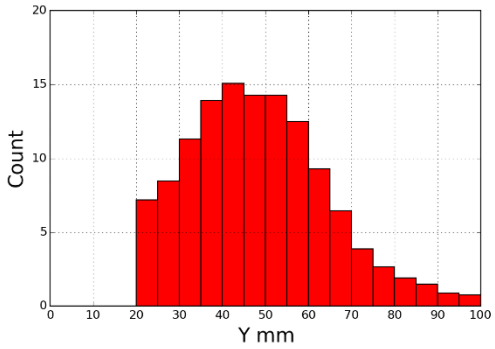


Figure A. 2137: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

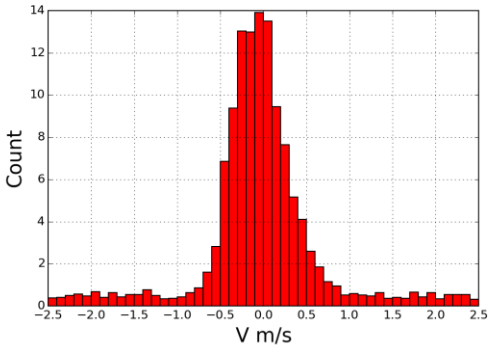


Figure A. 2140: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

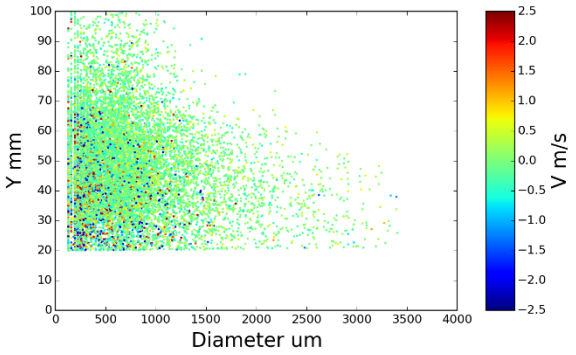


Figure A. 2138: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	104.11	105.11	128.6	3419	713.2	594.5	128.6	3417	709.6	589.4
40-60mm	117.6	117.71	128.6	3399	602.9	471.5	128.6	3403	603.3	477.2
60-80mm	45.78	45.7	128.6	3223	514.6	351.6	128.6	2834	513.8	348.8
80-100mm	9.74	10.0	128.6	2438	445.5	269.1	128.6	2343	437.2	268.1
All	277.23	278.52	128.6	3419	624.2	506.2	128.6	3417	622.8	506.1
			Height A (mm)				Height B (mm)			
Highest Particle			99.9346				99.9087			
Lowest Particle			20.0605				20.0605			

Table A. 226: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	44.06	128.6	3409	871.0	628.6	128.6	3410	860.0	627.0	-2.440	2.440	-0.050	0.770	-2.440	2.440	-0.020	0.810
40-60mm	65.58	128.6	3389	708.5	490.0	128.6	3395	703.7	487.8	-2.440	2.440	-0.050	0.610	-2.440	2.440	-0.050	0.660
60-80mm	27.97	128.6	3223	613.5	355.8	128.6	2834	610.7	358.1	-2.440	2.440	-0.030	0.440	-2.440	2.420	-0.060	0.500
80-100mm	6.5	128.6	2438	526.3	274.0	128.6	2343	521.2	274.2	-2.220	1.790	-0.050	0.250	-2.400	1.930	-0.070	0.350
All	144.11	128.6	3409	731.5	518.5	128.6	3410	725.4	516.9	-2.440	2.440	-0.040	0.630	-2.440	2.440	-0.040	0.670

Table A. 227: Matched Droplet Info

A.3.2.2 All Droplets for .LA Image

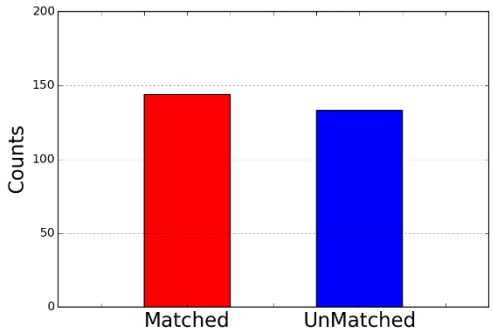


Figure A. 2141: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

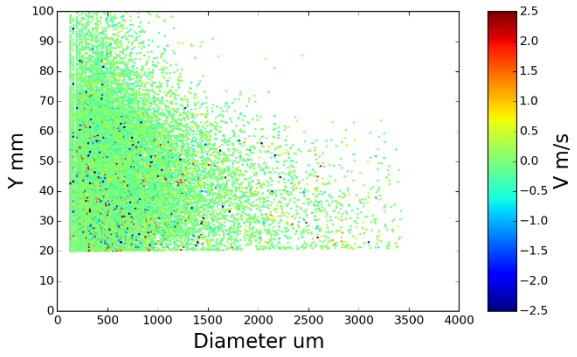


Figure A. 2144: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

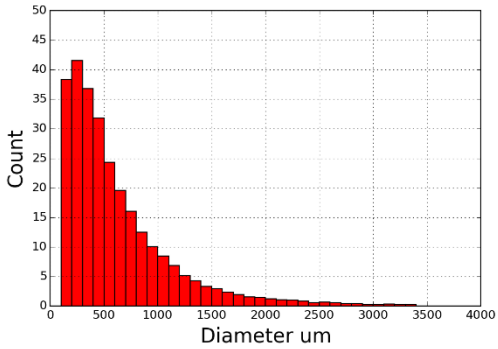


Figure A. 2142: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

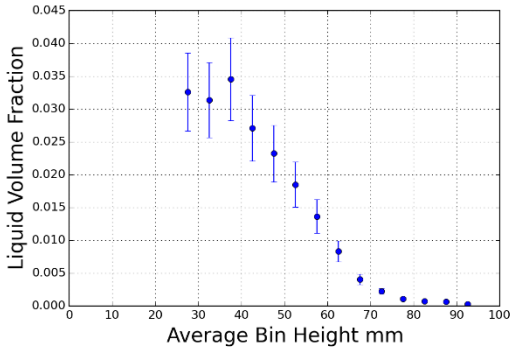


Figure A. 2145: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

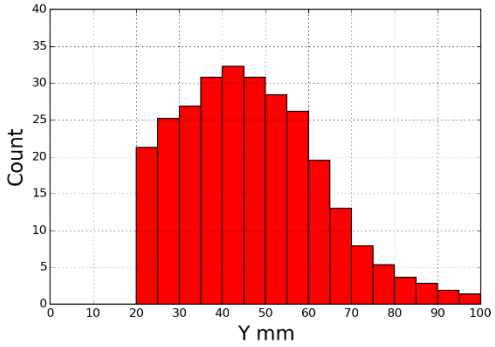


Figure A. 2143: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 All Droplets for .LB Image

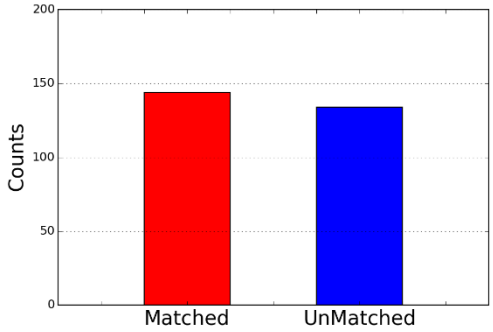


Figure A. 2146: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

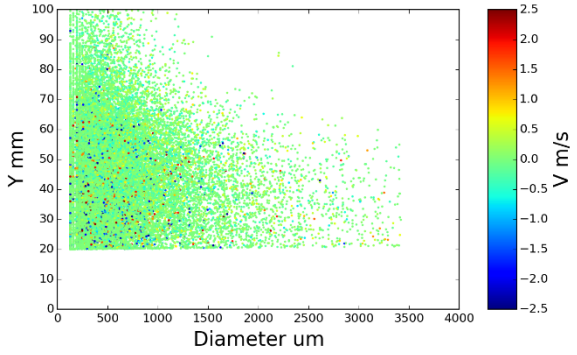


Figure A. 2149: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

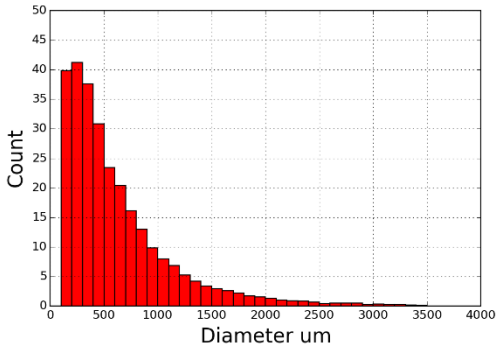


Figure A. 2147: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

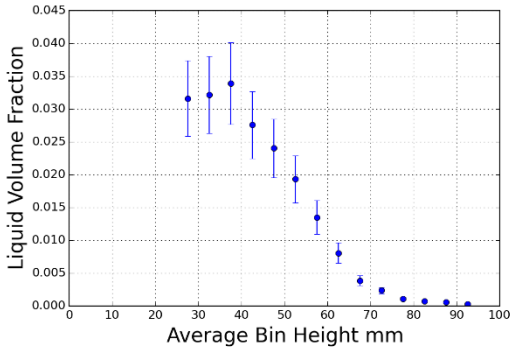


Figure A. 2150: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

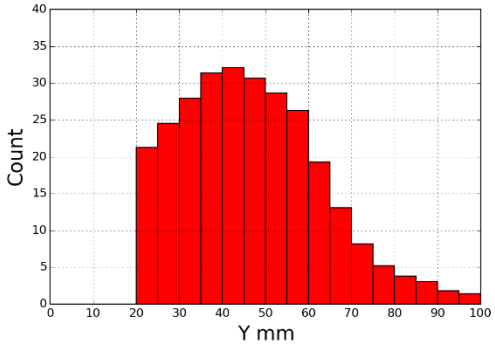


Figure A. 2148: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 Matched Only Droplets for .LA Image

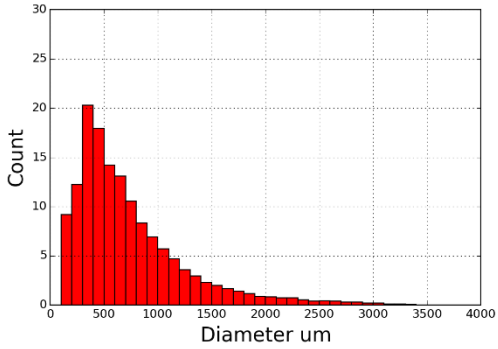


Figure A. 2151: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

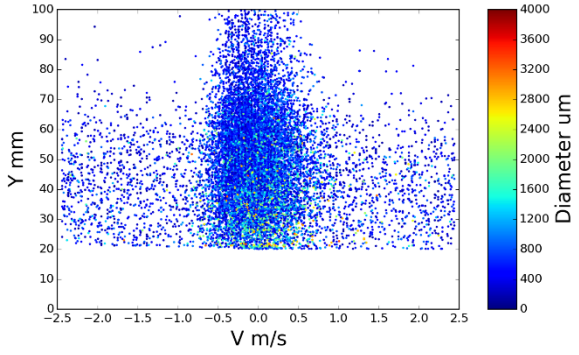


Figure A. 2154: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

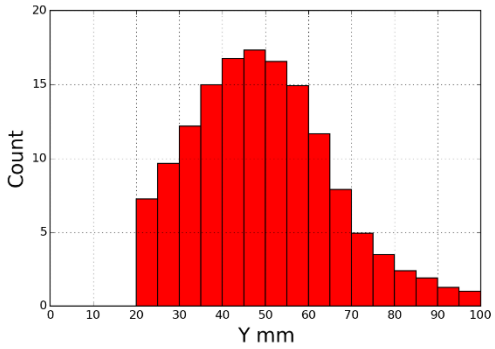


Figure A. 2152: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

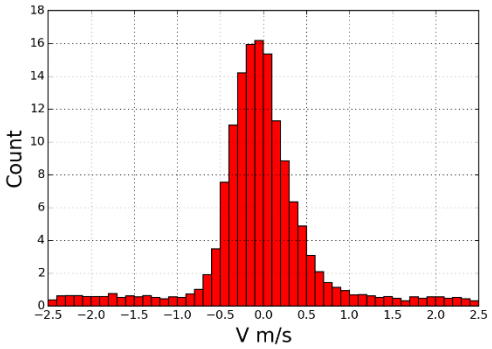


Figure A. 2155: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

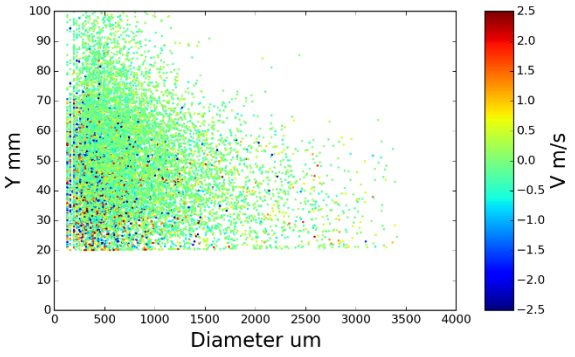


Figure A. 2153: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 Matched Only Droplets for .LB Image

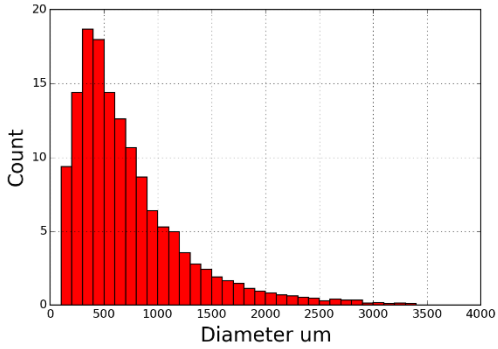


Figure A. 2156: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

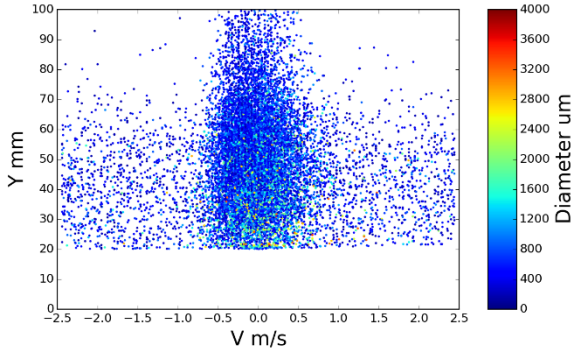


Figure A. 2159: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

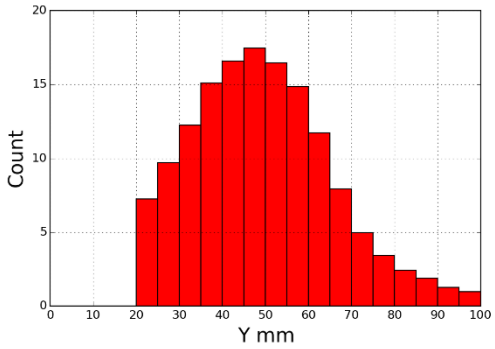


Figure A. 2157: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

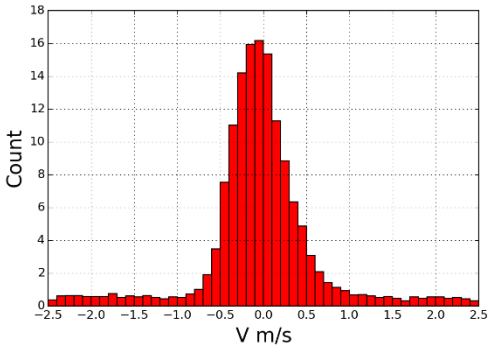


Figure A. 2160: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

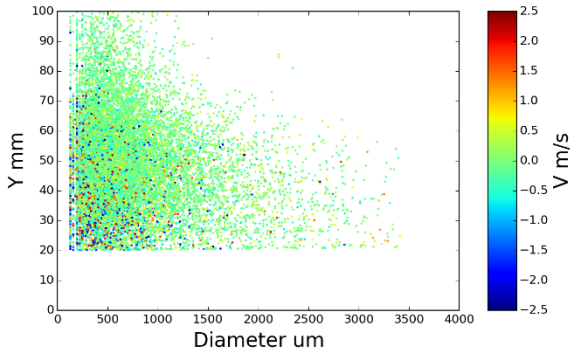


Figure A. 2158: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	87.53	86.52	128.6	3413	718.3	601.5	128.6	3417	729.9	607.2
40-60mm	122.08	123.1	128.6	3414	610.0	489.7	128.6	3418	610.1	491.7
60-80mm	56.19	55.86	128.6	3358	497.7	353.6	128.6	3094	498.3	353.8
80-100mm	16.08	16.02	128.6	2282	405.0	259.4	128.6	2169	405.4	259.1
All	281.94	281.5	128.6	3414	609.6	503.5	128.6	3418	613.1	506.9
			Height A (mm)				Height B (mm)			
Highest Particle			99.9605				99.9365			
Lowest Particle			20.0605				20.0605			

Table A. 228: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	33.63	128.6	3366	918.0	663.3	128.6	3417	907.3	656.8	-2.440	2.440	-0.050	0.810	-2.440	2.440	-0.000	0.840
40-60mm	65.34	128.6	3294	728.4	520.5	128.6	3391	720.4	516.1	-2.440	2.440	-0.040	0.650	-2.440	2.440	-0.020	0.710
60-80mm	31.9	128.6	3358	597.5	370.1	128.6	3094	591.9	368.5	-2.440	2.440	-0.030	0.510	-2.400	2.440	-0.030	0.600
80-100mm	9.7	128.6	2282	482.8	275.8	128.6	2169	479.5	274.6	-2.400	1.920	-0.040	0.310	-2.380	2.440	-0.020	0.410
All	140.57	128.6	3366	727.1	533.1	128.6	3417	719.4	528.4	-2.440	2.440	-0.040	0.650	-2.440	2.440	-0.020	0.700

Table A. 229: Matched Droplet Info

A.3.2.2 All Droplets for .LA Image

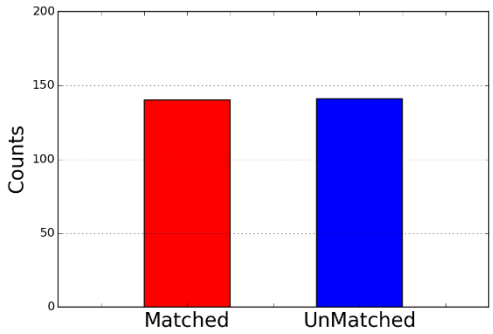


Figure A. 2161: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

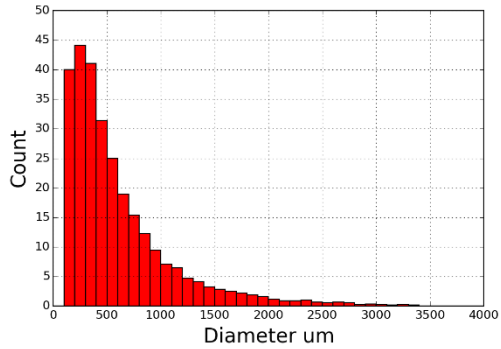


Figure A. 2162: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

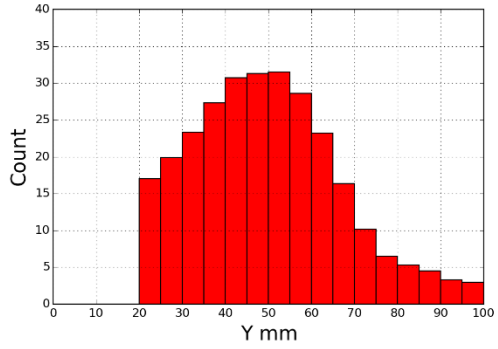


Figure A. 2163: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

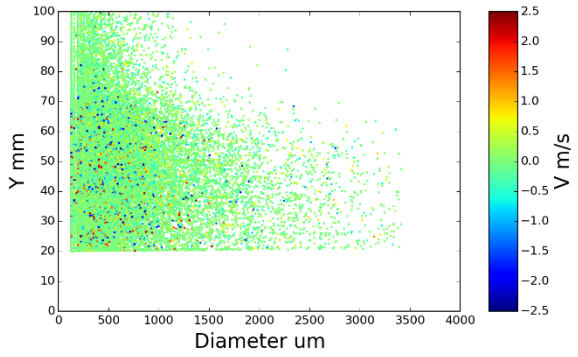


Figure A. 2164: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

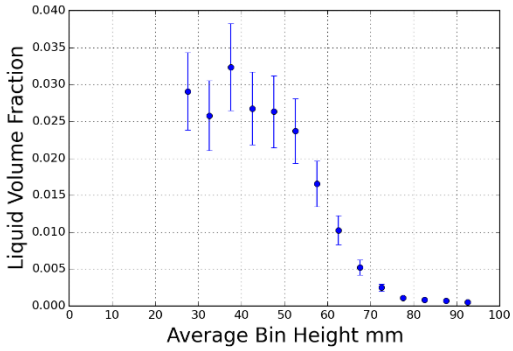


Figure A. 2165: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 All Droplets for .LB Image

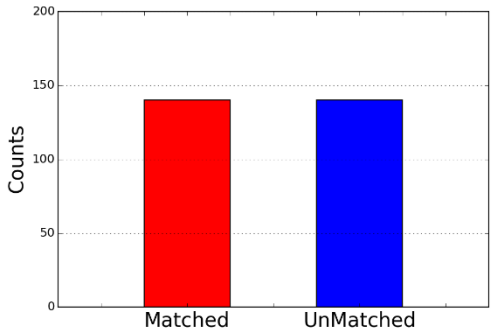


Figure A. 2166: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

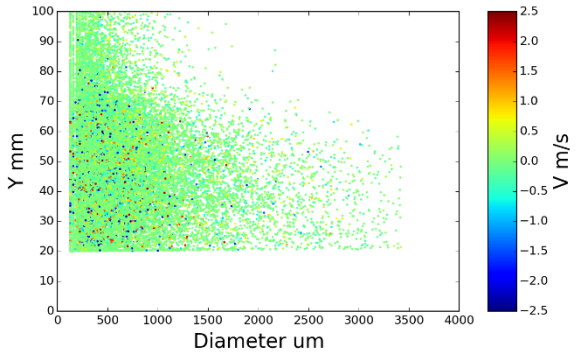


Figure A. 2169: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

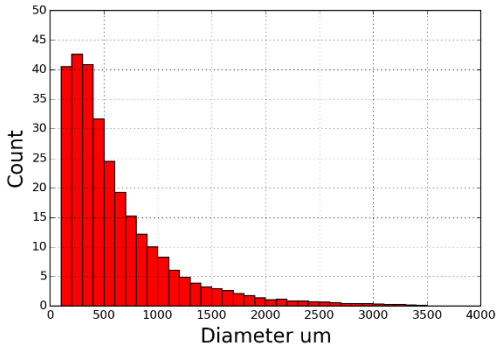


Figure A. 2167: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

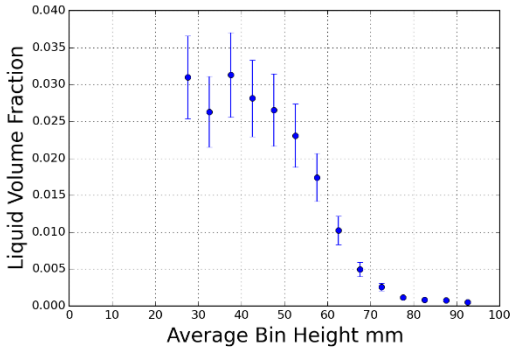


Figure A. 2170: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

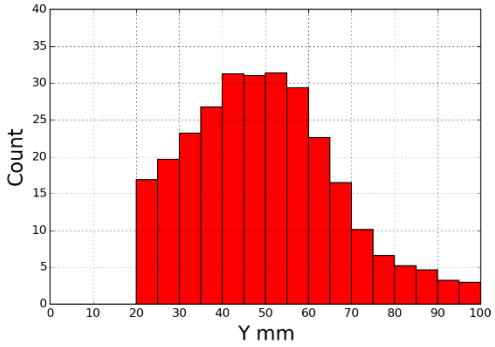


Figure A. 2168: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 Matched Only Droplets for .LA Image

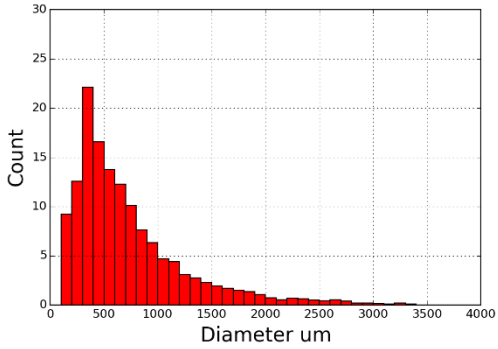


Figure A. 2171: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

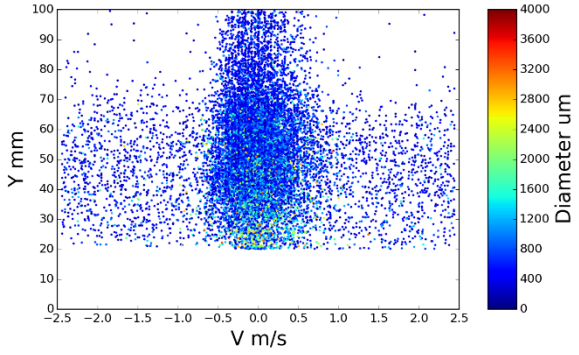


Figure A. 2174: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

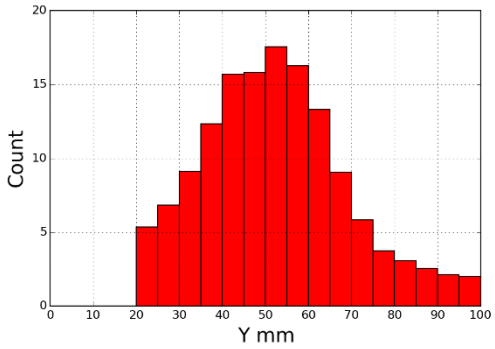


Figure A. 2172: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

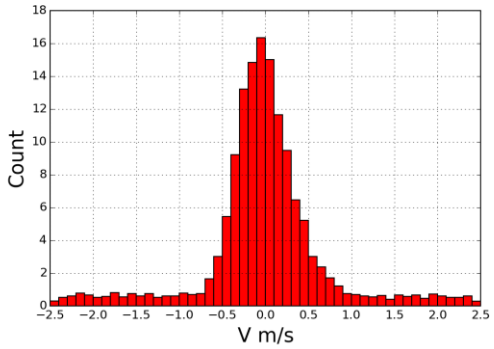


Figure A. 2175: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

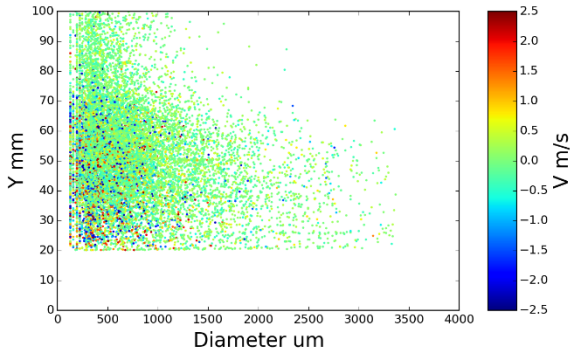


Figure A. 2173: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 Matched Only Droplets for .LB Image

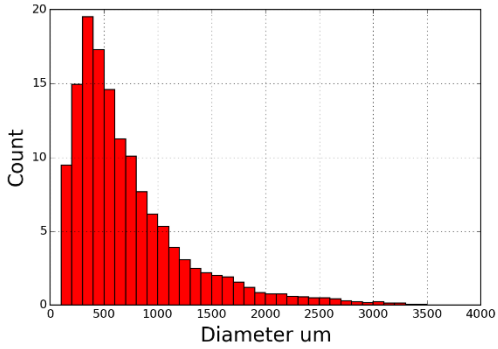


Figure A. 2176: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

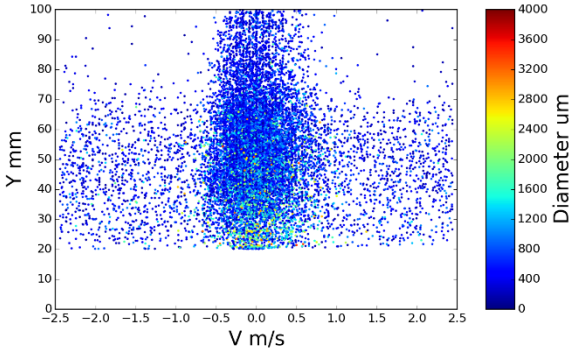


Figure A. 2179: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

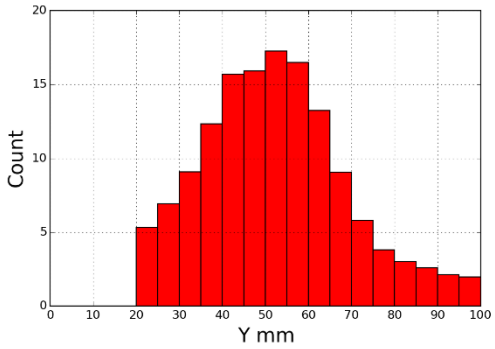


Figure A. 2177: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

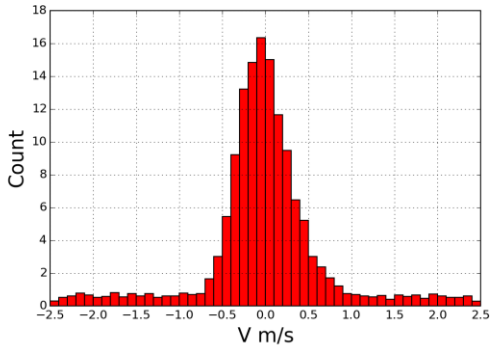


Figure A. 2180: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

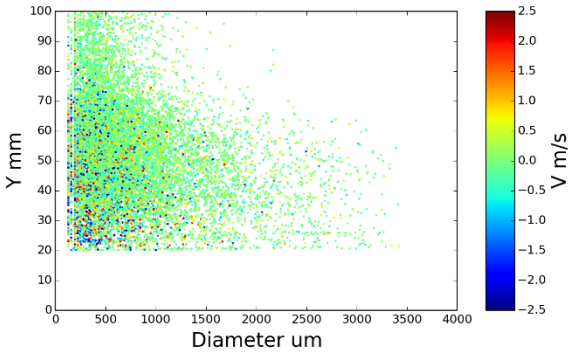


Figure A. 2178: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	68.33	69.9	128.6	3417	726.8	626.9	128.6	3413	727.2	629.0
40-60mm	108.13	109.33	128.6	3418	598.0	490.2	128.6	3409	597.6	495.6
60-80mm	54.12	54.31	128.6	3401	478.0	346.0	128.6	3298	475.6	345.4
80-100mm	19.24	19.12	128.6	1818	375.7	217.6	128.6	1696	370.4	214.7
All	249.82	252.77	128.6	3418	590.1	502.5	128.6	3413	590.0	506.5
			Height A (mm)				Height B (mm)			
Highest Particle			99.9605				99.9397			
Lowest Particle			20.0605				20.0605			

Table A. 230: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	24.08	128.6	3417	968.3	720.1	128.6	3364	958.3	718.4	-2.440	2.420	-0.040	0.770	-2.440	2.440	0.030	0.840
40-60mm	55.67	128.6	3417	721.2	530.2	128.6	3394	714.9	526.8	-2.440	2.440	-0.040	0.680	-2.440	2.440	0.030	0.720
60-80mm	28.87	128.6	3401	578.4	368.9	128.6	3298	568.2	361.4	-2.440	2.440	-0.020	0.540	-2.440	2.440	0.010	0.600
80-100mm	11.46	128.6	1591	444.3	224.8	128.6	1696	439.6	223.0	-2.370	2.400	-0.050	0.330	-2.240	1.950	0.020	0.370
All	120.08	128.6	3417	710.0	544.2	128.6	3394	702.0	540.7	-2.440	2.440	-0.040	0.640	-2.440	2.440	0.020	0.700

Table A. 231: Matched Droplet Info

A.3.2.2 All Droplets for .LA Image

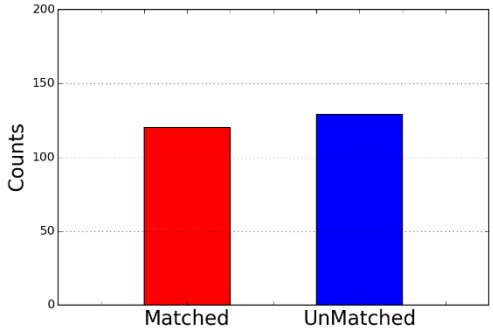


Figure A. 2181: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

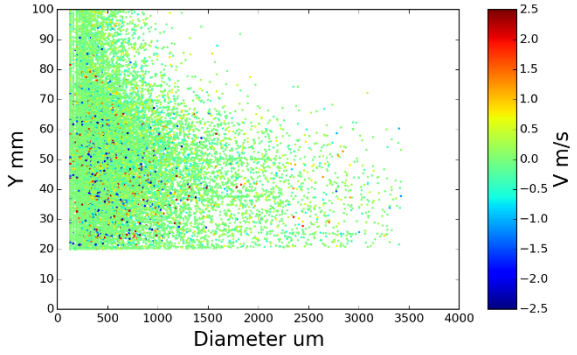


Figure A. 2184: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

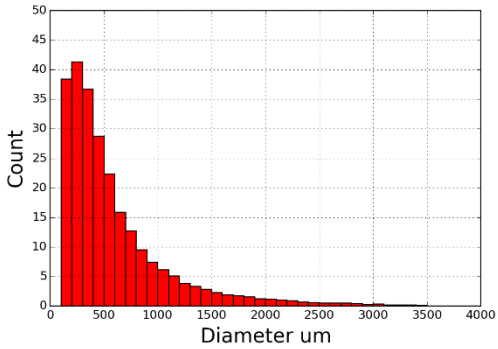


Figure A. 2182: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

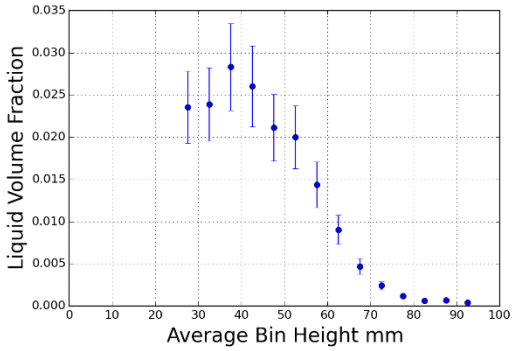


Figure A. 2185: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

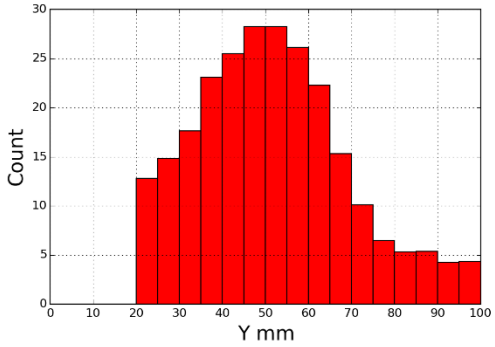


Figure A. 2183: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 All Droplets for .LB Image

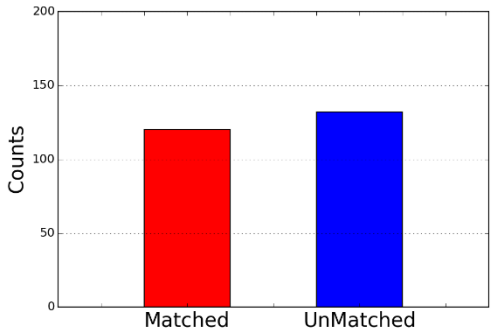


Figure A. 2186: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

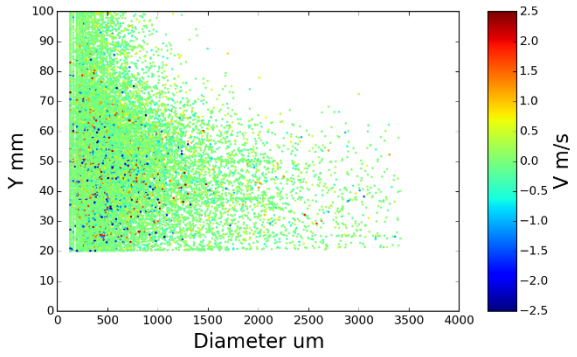


Figure A. 2189: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

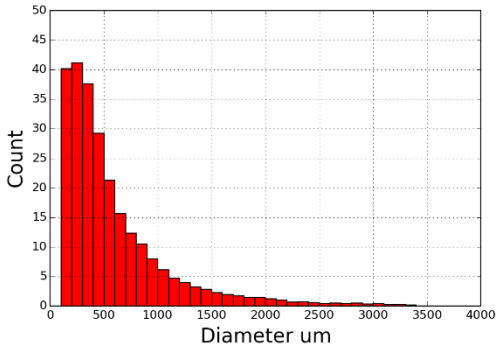


Figure A. 2187: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

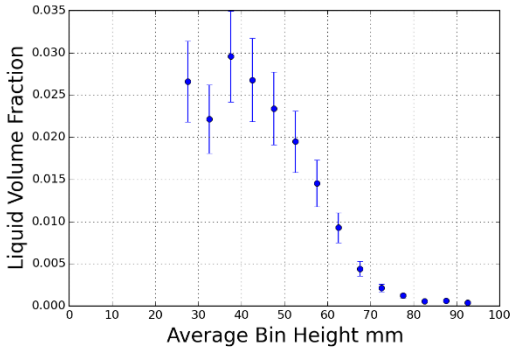


Figure A. 2190: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

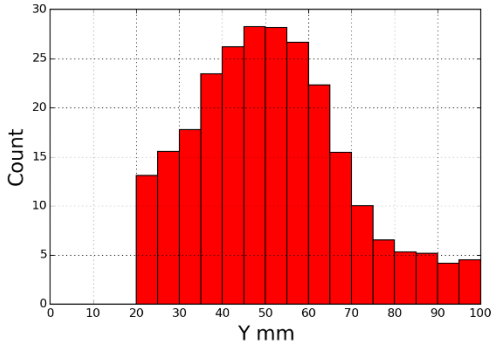


Figure A. 2188: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 Matched Only Droplets for .LA Image

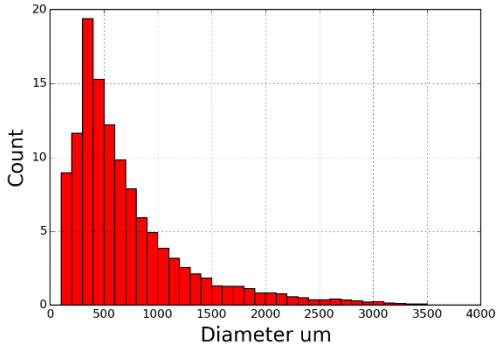


Figure A. 2191: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

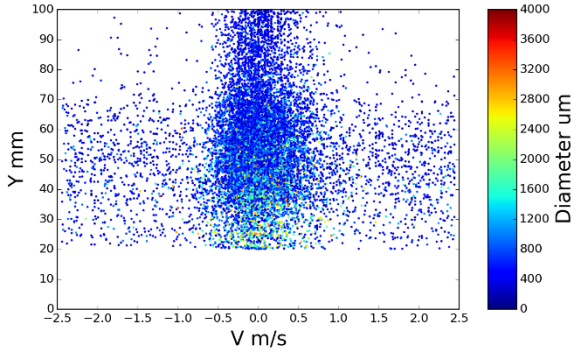


Figure A. 2194: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

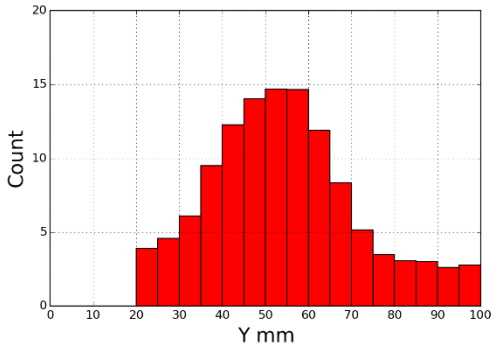


Figure A. 2192: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

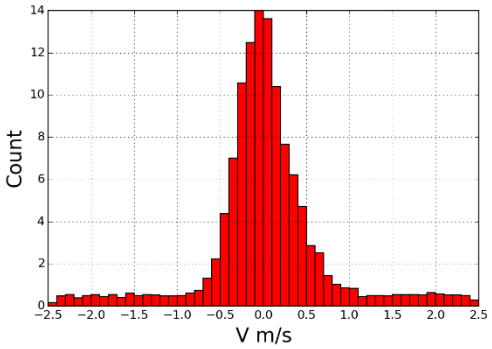


Figure A. 2195: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

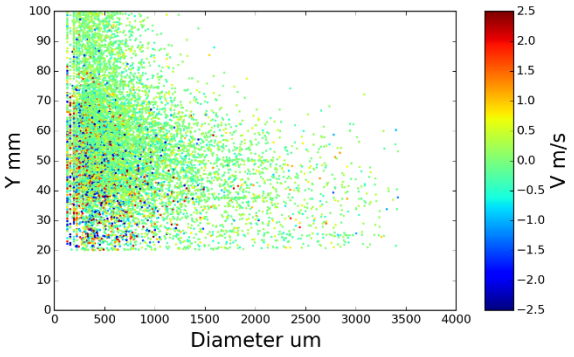


Figure A. 2193: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.2.2 Matched Only Droplets for .LB Image

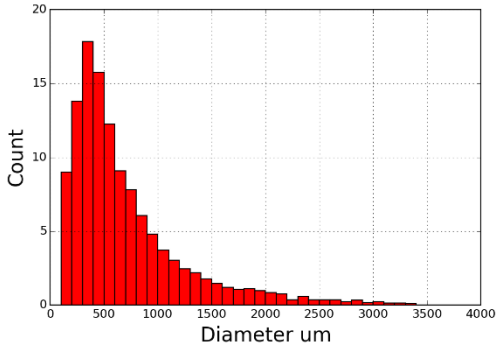


Figure A. 2196: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

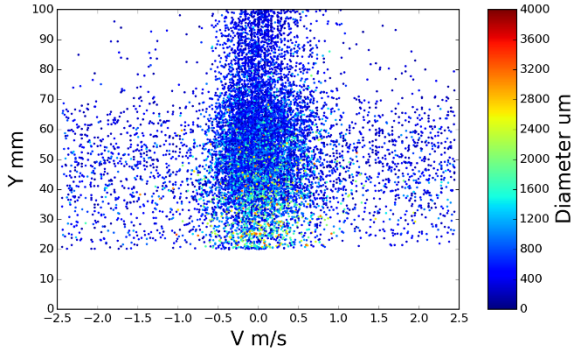


Figure A. 2199: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

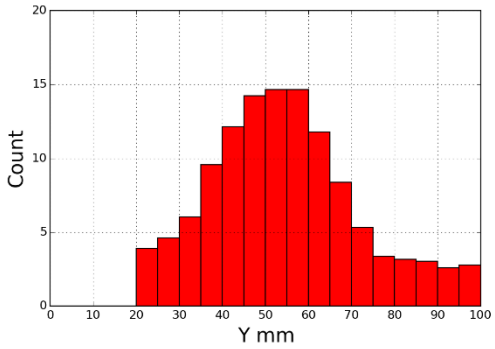


Figure A. 2197: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

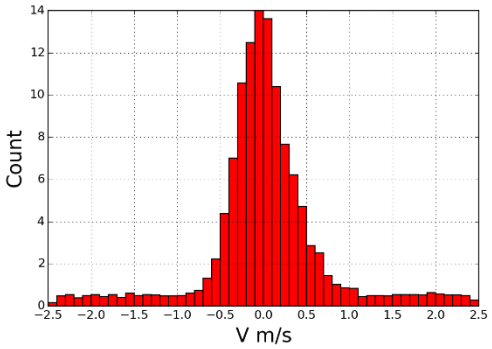


Figure A. 2200: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

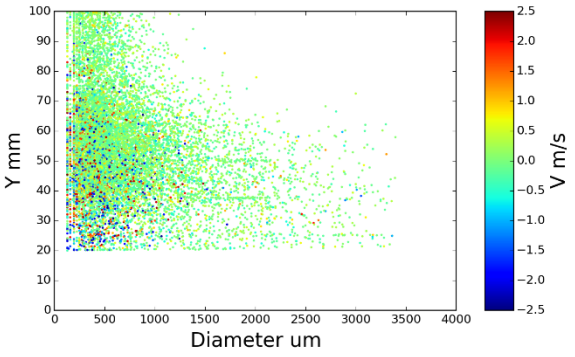


Figure A. 2198: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3 Liquid Level 3

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	17571 / 2.214
Ref Mass Flow (lb/hr) / (kg/s)	3205 / 0.404
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	29773 / 40.379
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4772 / 15.05
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	40.3 / 4.59
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.4 / 4.69
Total Bundle Q (Btu/hr) / (kW)	114561 / 33.57
Total Bundle & Preboiler Q (Btu/hr) / (kW)	290181 / 85.04
Top Two Rows HTC Ratio	1.076
Bundle Inlet Quality	0.57
Bundle Exit Quality	1.00

Table A. 232: Thermal Conditions

A.3.3.1 Lens 100mm Mag 0_29x

A.3.3.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	16.96	17.45	57.2	2886	416.9	413.2	57.2	2625	405.2	404.7
40-60mm	25.68	26.35	57.2	2496	333.4	333.2	57.2	2579	327.0	331.1
60-80mm	16.54	16.68	57.2	2004	274.4	255.9	57.2	1995	270.7	255.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	59.19	60.48	57.2	2886	340.9	344.0	57.2	2625	334.1	339.9
			Height A (mm)				Height B (mm)			
Highest Particle			76.0293				76.0293			
Lowest Particle			28.0709				28.0597			

Table A. 233: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	11.78	57.2	2620	519.1	431.0	57.2	2625	520.4	432.3	-2.240	2.450	-0.030	0.280	-2.540	2.520	0.070	0.430
40-60mm	18.92	57.2	2496	406.8	356.1	57.2	2579	405.3	355.9	-2.310	2.370	-0.040	0.200	-2.030	2.200	0.130	0.360
60-80mm	11.97	57.2	2004	331.2	276.4	57.2	1995	329.5	276.1	-2.450	1.860	-0.070	0.160	-2.160	2.460	0.150	0.320
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	42.67	57.2	2620	416.6	366.0	57.2	2625	415.7	366.4	-2.450	2.450	-0.050	0.220	-2.540	2.520	0.120	0.370

Table A. 234: Matched Droplet Info

A.3.3.1 All Droplets for .LA Image

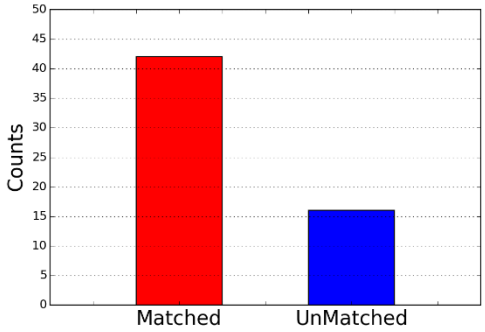


Figure A. 2201: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

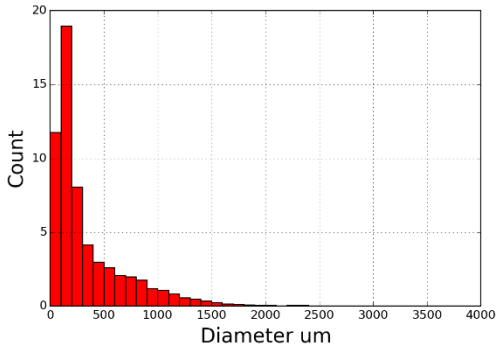


Figure A. 2202: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

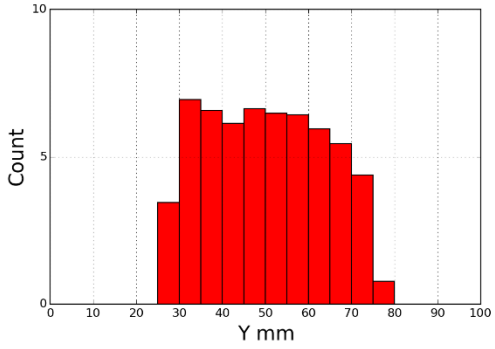


Figure A. 2203: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

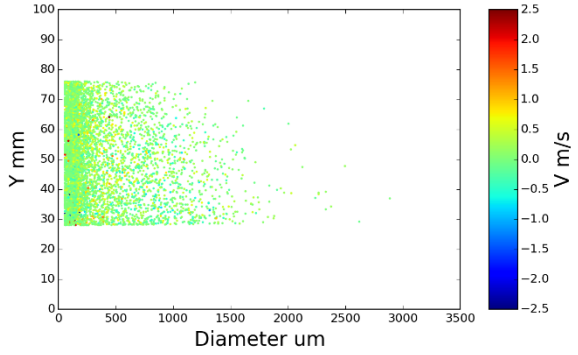


Figure A. 2204: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

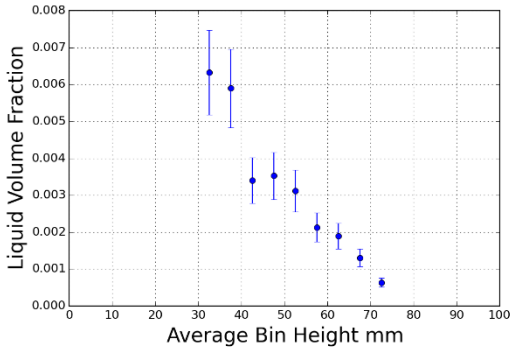


Figure A. 2205: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 All Droplets for .LB Image

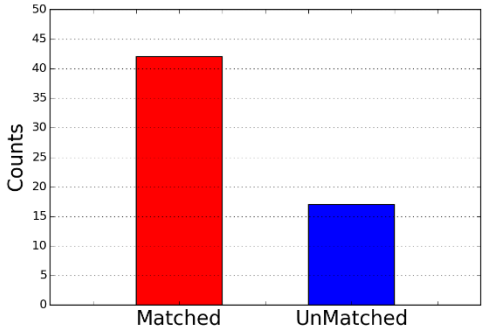


Figure A. 2206: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

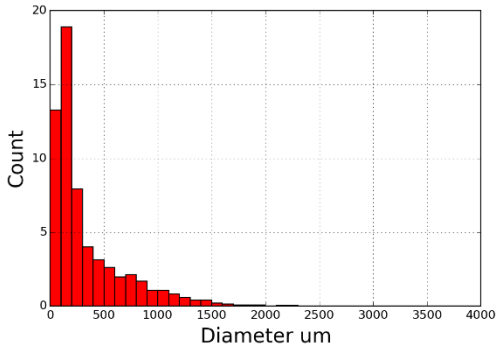


Figure A. 2207: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

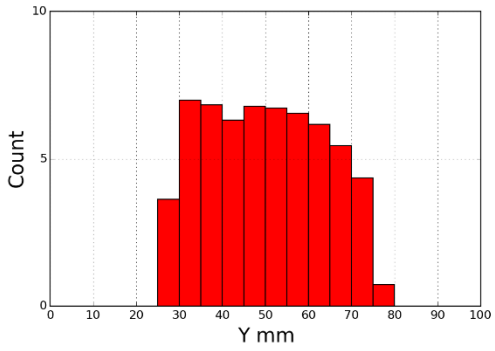


Figure A. 2208: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

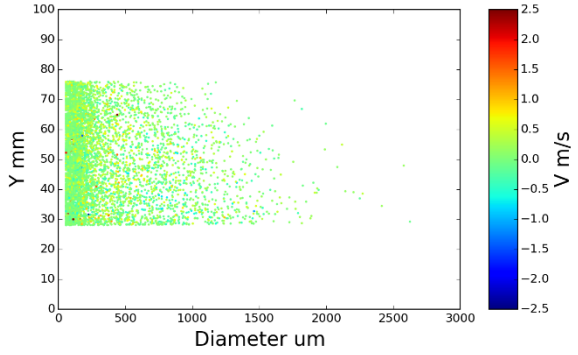


Figure A. 2209: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

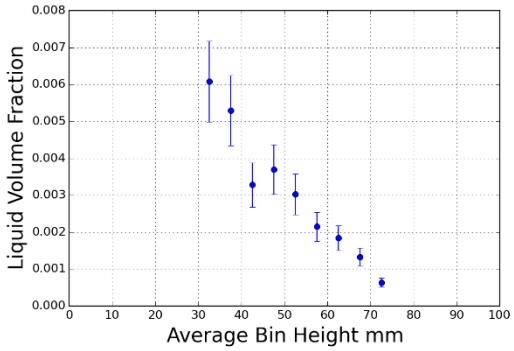


Figure A. 2210: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 Matched Only Droplets for .LA Image

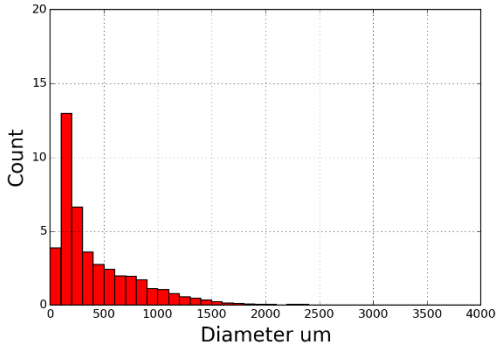


Figure A. 2211: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

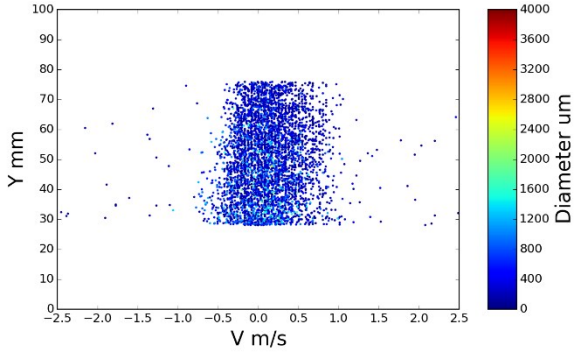


Figure A. 2214: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

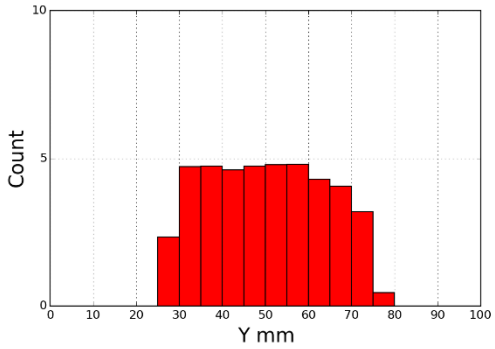


Figure A. 2212: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

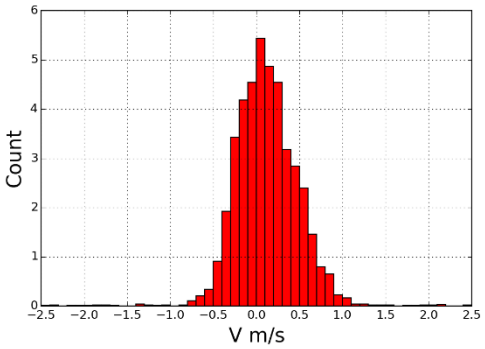


Figure A. 2215: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

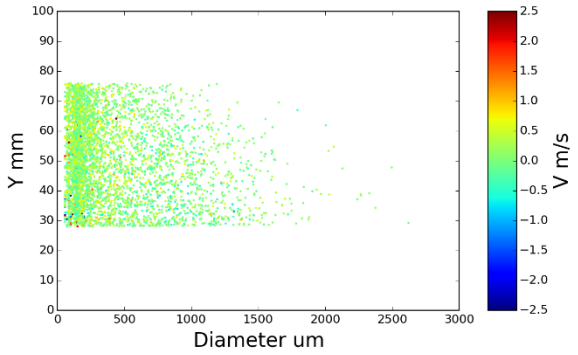


Figure A. 2213: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 Matched Only Droplets for .LB Image

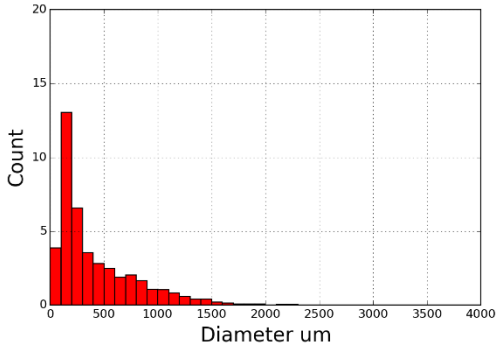


Figure A. 2216: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

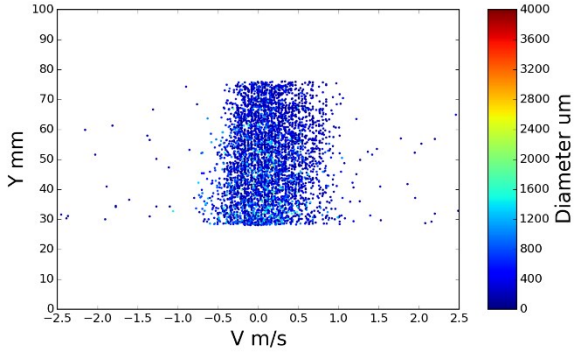


Figure A. 2219: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

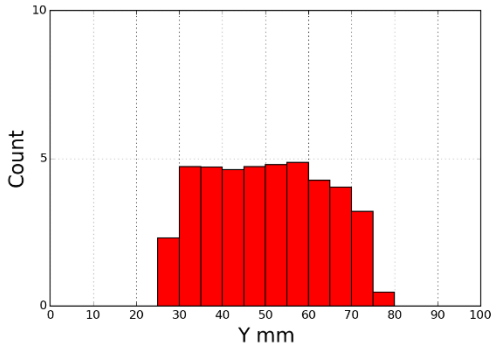


Figure A. 2217: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

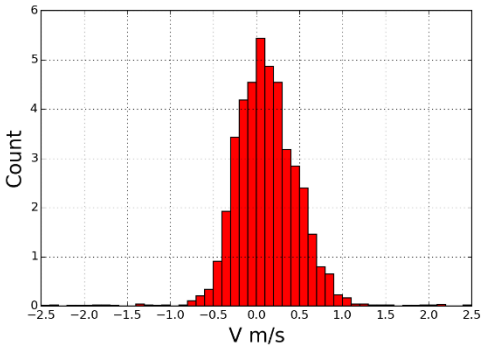


Figure A. 2220: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

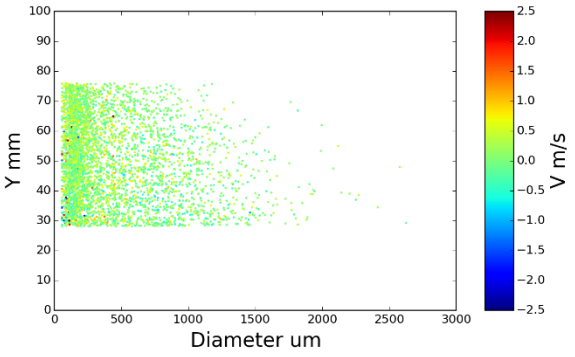


Figure A. 2218: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	37.66	39.6	57.2	2910	411.1	443.7	57.2	3043	399.8	447.0
40-60mm	50.57	53.04	57.2	2988	298.8	365.2	57.2	3022	289.1	358.2
60-80mm	24.85	25.97	57.2	2248	224.0	266.4	57.2	2287	215.5	258.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	113.08	118.61	57.2	2988	319.8	381.8	57.2	3043	309.9	378.9
			Height A (mm)				Height B (mm)			
Highest Particle			75.9912				76.0293			
Lowest Particle			28.0482				28.0482			

Table A. 235: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	22.55	57.2	2910	545.3	495.9	57.2	2889	542.1	497.1	-2.540	2.480	-0.010	0.330	-2.530	2.450	-0.110	0.400
40-60mm	32.1	57.2	2988	384.3	416.8	57.2	3022	381.4	414.1	-2.540	2.450	-0.050	0.280	-2.290	2.450	-0.150	0.340
60-80mm	15.79	57.2	2248	275.3	306.1	57.2	2287	273.4	305.1	-2.540	2.450	-0.090	0.230	-2.030	2.180	-0.140	0.250
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	70.44	57.2	2988	411.4	434.9	57.2	3022	408.6	433.9	-2.540	2.480	-0.050	0.290	-2.530	2.450	-0.130	0.350

Table A. 236: Matched Droplet Info

A.3.3.1 All Droplets for .LA Image

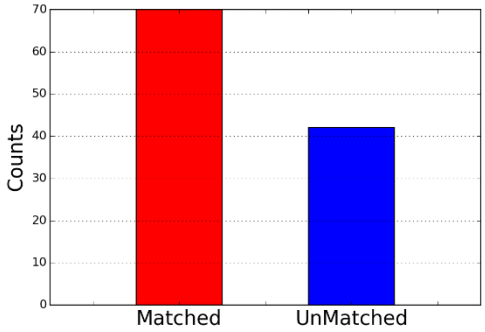


Figure A. 2221: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

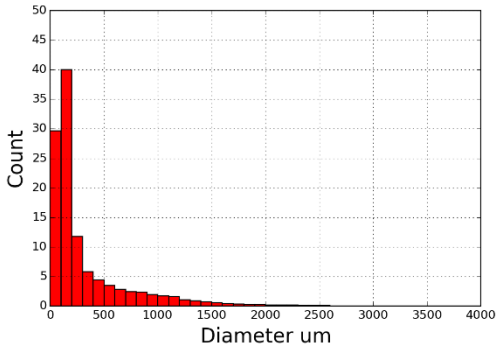


Figure A. 2222: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

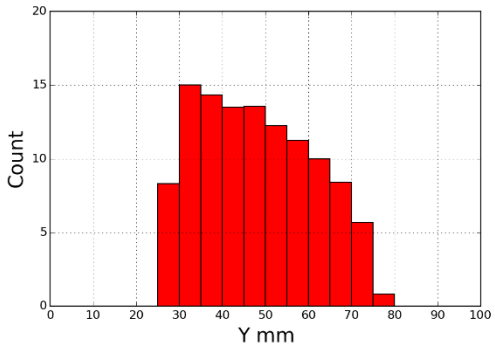


Figure A. 2223: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

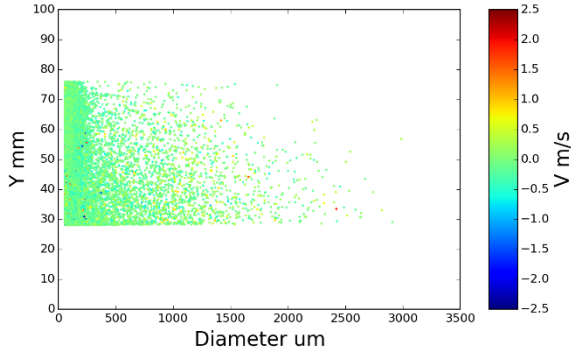


Figure A. 2224: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

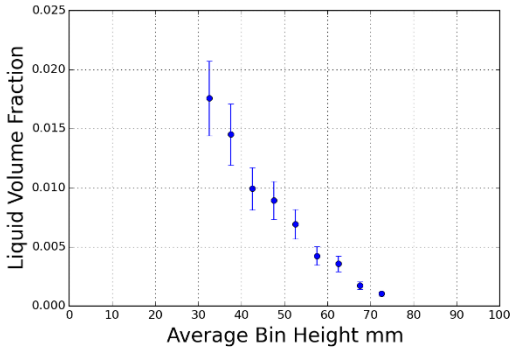


Figure A. 2225: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 All Droplets for .LB Image

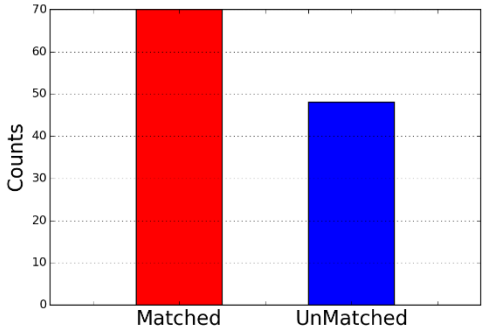


Figure A. 2226: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

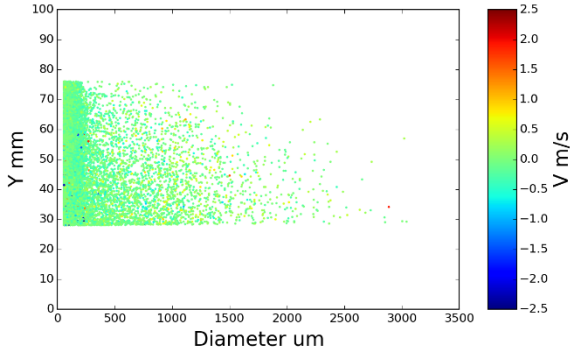


Figure A. 2229: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

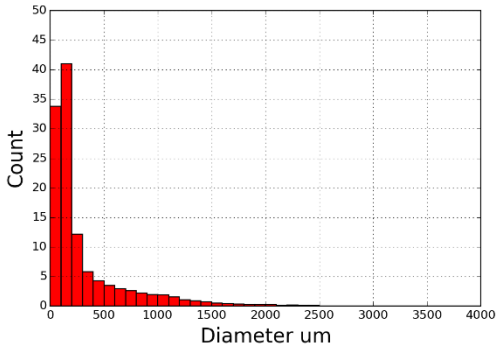


Figure A. 2227: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

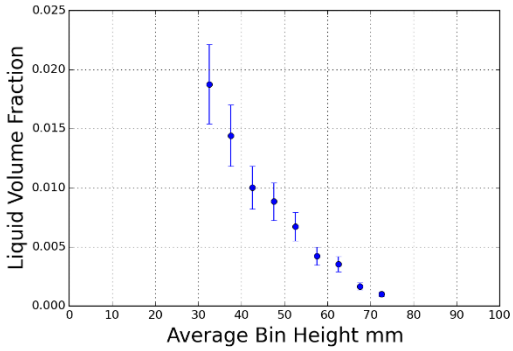


Figure A. 2230: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

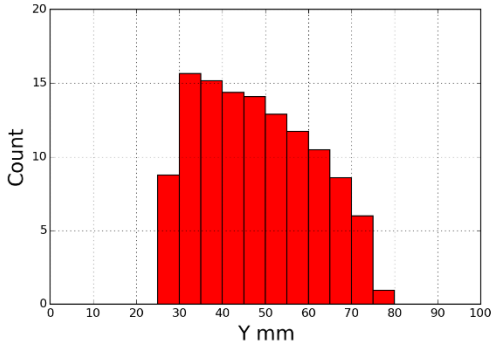


Figure A. 2228: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 Matched Only Droplets for .LA Image

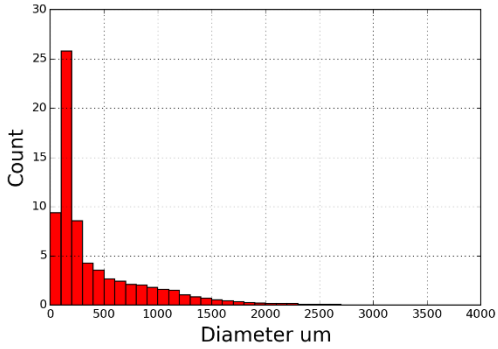


Figure A. 2231: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

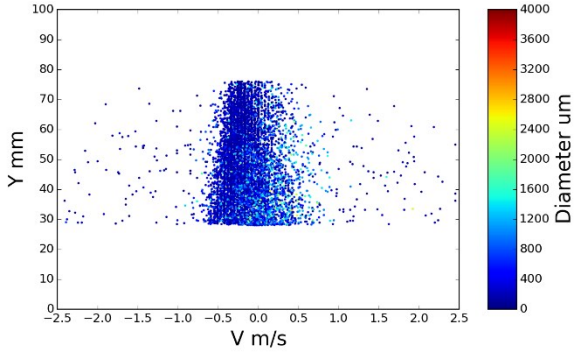


Figure A. 2234: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

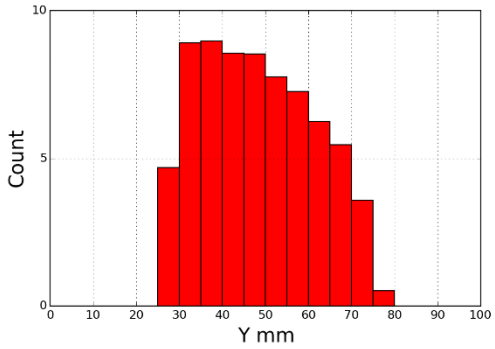


Figure A. 2232: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

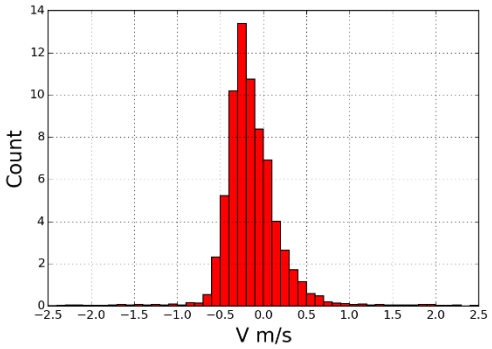


Figure A. 2235: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

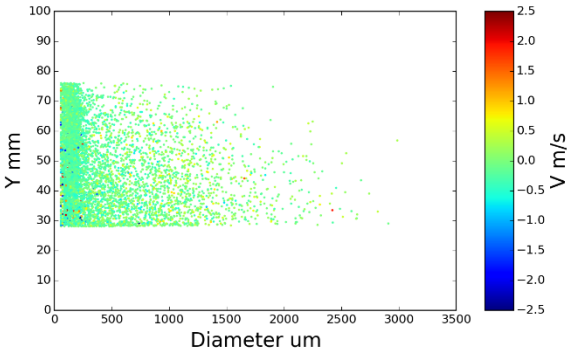


Figure A. 2233: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 Matched Only Droplets for .LB Image

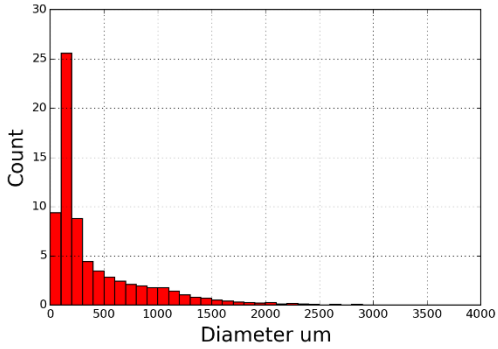


Figure A. 2236: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

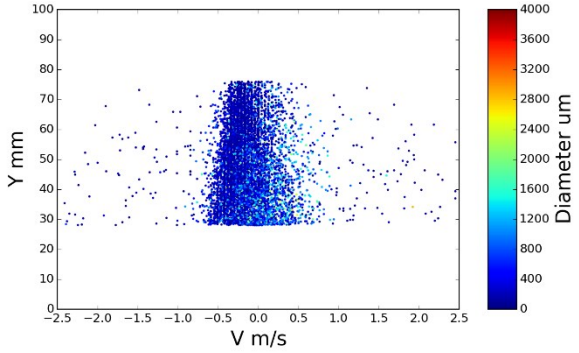


Figure A. 2239: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

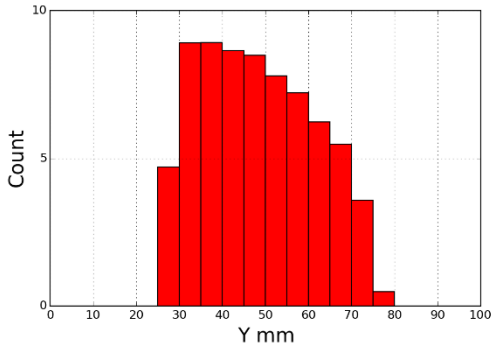


Figure A. 2237: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

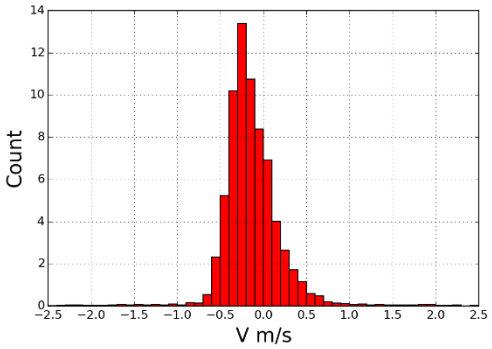


Figure A. 2240: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

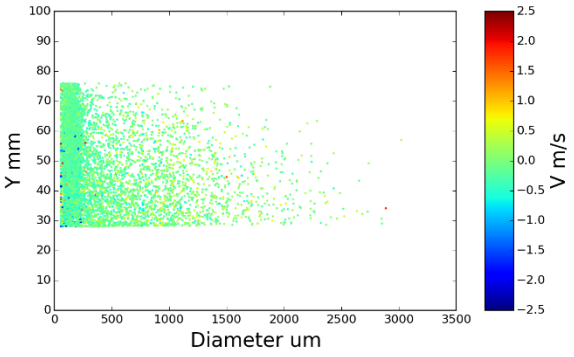


Figure A. 2238: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	35.98	39.08	57.2	3036	384.4	417.4	57.2	3027	370.2	417.4
40-60mm	48.1	51.2	57.2	3023	271.9	359.6	57.2	3036	262.5	350.9
60-80mm	18.65	19.35	57.2	2430	185.7	232.7	57.2	2436	180.1	224.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	102.76	109.65	57.2	3036	295.6	369.6	57.2	3036	286.4	365.1
			Height A (mm)				Height B (mm)			
Highest Particle			76.0166				76.0057			
Lowest Particle			28.0482				28.0592			

Table A. 237: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	20.03	57.2	3036	514.3	462.9	57.2	3027	515.8	464.4	-2.540	2.490	-0.000	0.380	-2.540	2.510	-0.050	0.460
40-60mm	27.29	57.2	3023	354.3	417.7	57.2	3036	352.5	417.7	-2.540	2.540	-0.020	0.390	-2.510	2.490	-0.150	0.440
60-80mm	10.48	57.2	2430	237.1	279.6	57.2	2436	233.7	274.5	-2.470	2.270	-0.050	0.270	-2.420	2.450	-0.150	0.340
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	57.8	57.2	3036	388.5	425.4	57.2	3036	387.6	425.9	-2.540	2.540	-0.020	0.370	-2.540	2.510	-0.110	0.440

Table A. 238: Matched Droplet Info

A.3.3.1 All Droplets for .LA Image

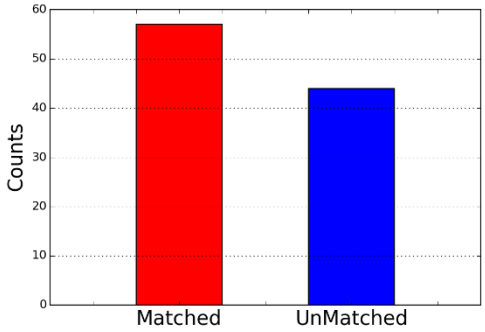


Figure A. 2241: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

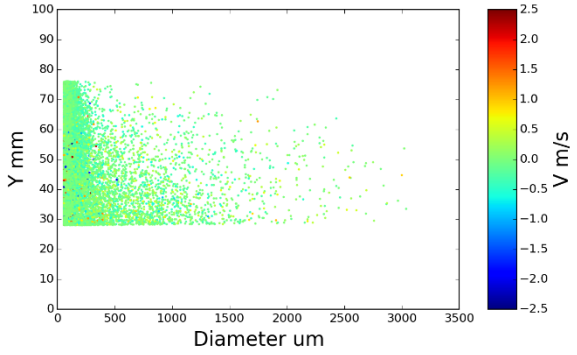


Figure A. 2244: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

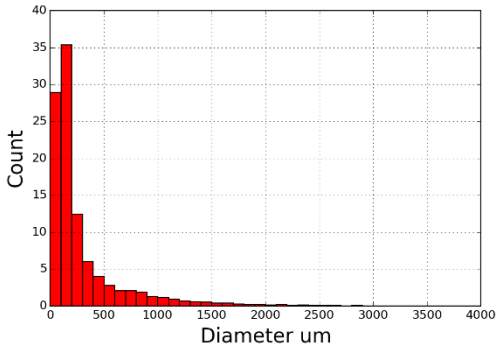


Figure A. 2242: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

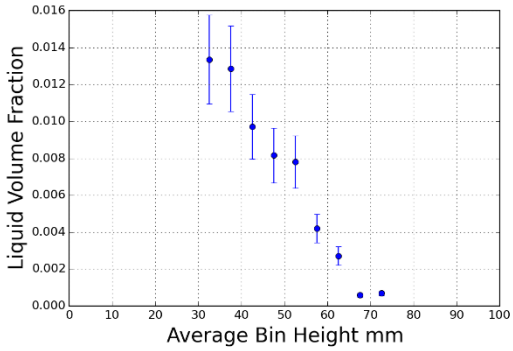


Figure A. 2245: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

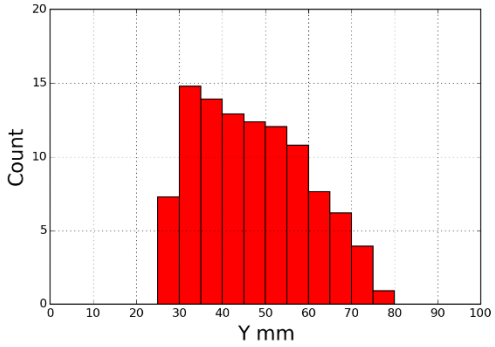


Figure A. 2243: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 All Droplets for .LB Image

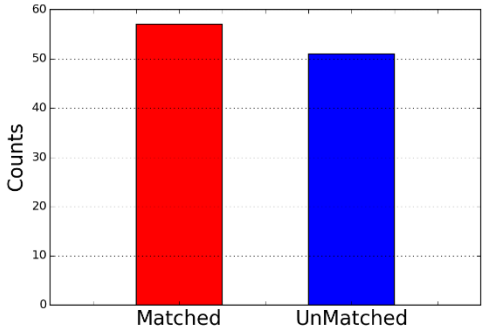


Figure A. 2246: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

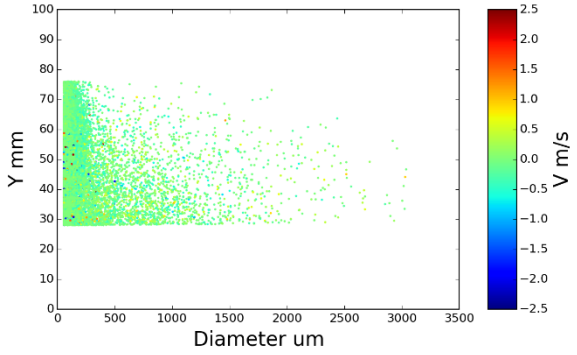


Figure A. 2249: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

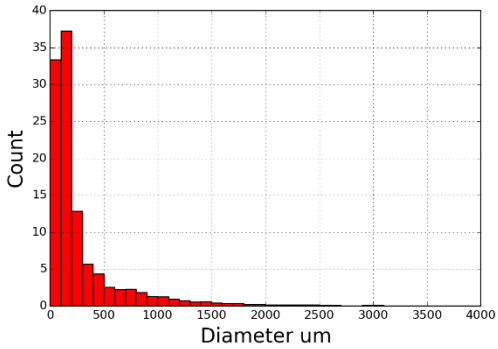


Figure A. 2247: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

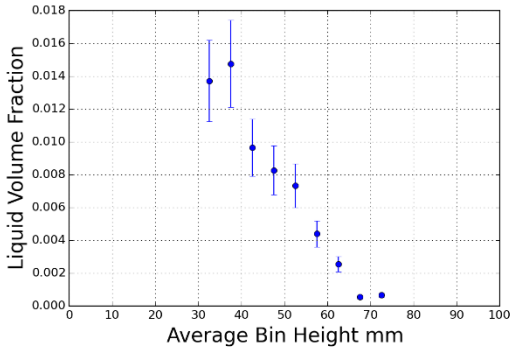


Figure A. 2250: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

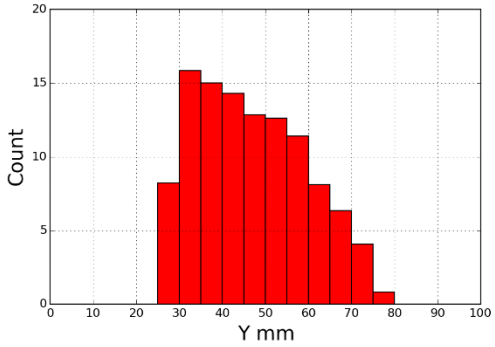


Figure A. 2248: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 Matched Only Droplets for .LA Image

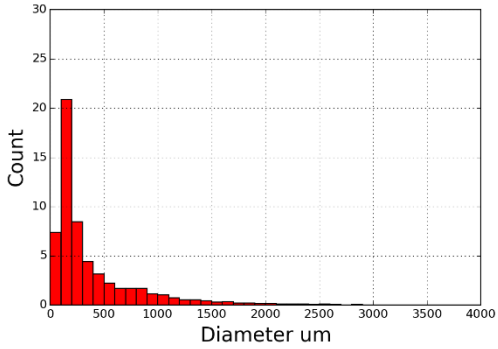


Figure A. 2251: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

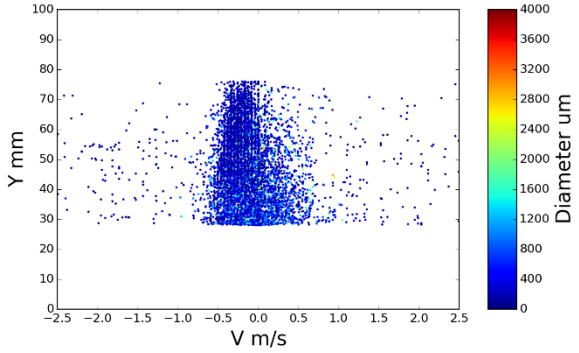


Figure A. 2254: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

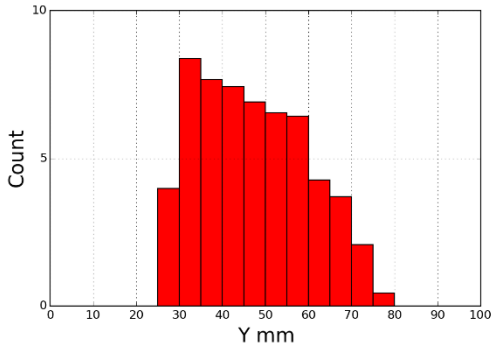


Figure A. 2252: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

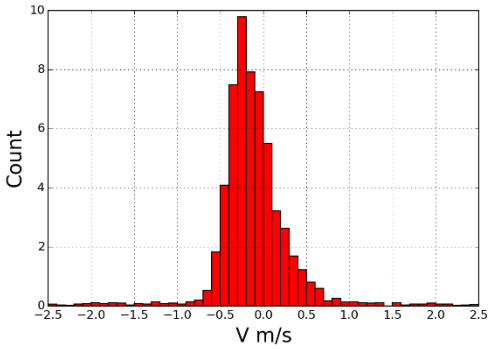


Figure A. 2255: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

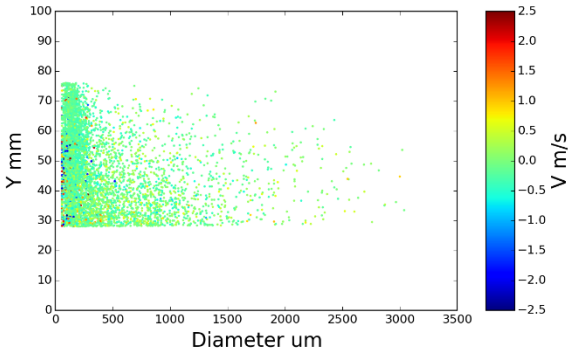


Figure A. 2253: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 Matched Only Droplets for .LB Image

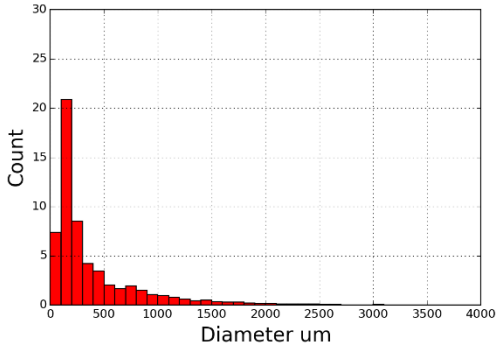


Figure A. 2256: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

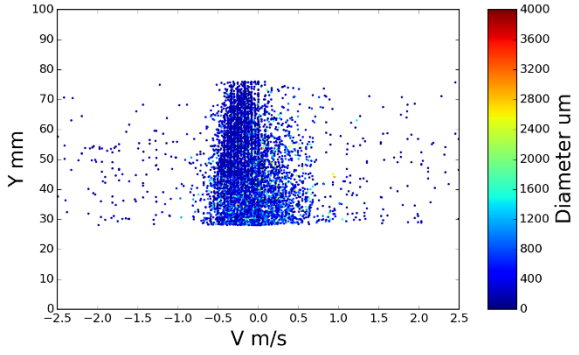


Figure A. 2259: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

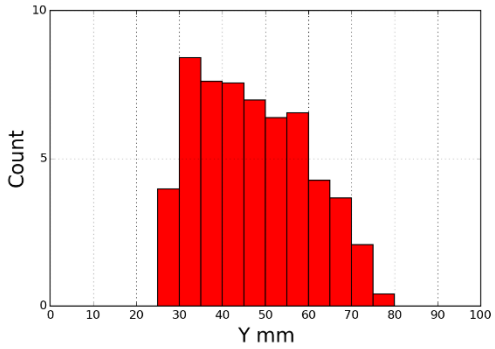


Figure A. 2257: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

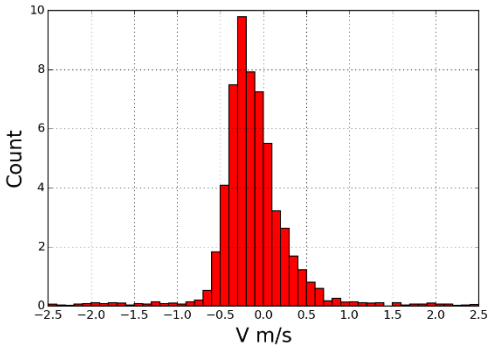


Figure A. 2260: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

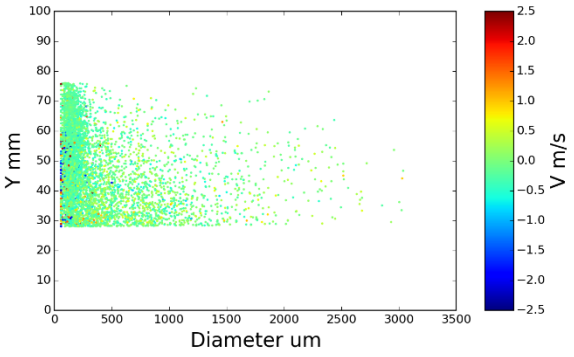


Figure A. 2258: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	40.77	43.03	57.2	2983	383.4	383.8	57.2	3031	374.6	380.0
40-60mm	50.1	52.81	57.2	3024	278.9	301.3	57.2	2961	270.3	295.8
60-80mm	18.95	19.61	57.2	2382	187.5	190.9	57.2	2485	184.5	185.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	109.82	115.46	57.2	3024	301.9	327.7	57.2	3031	294.6	323.1
			Height A (mm)				Height B (mm)			
Highest Particle			76.0166				76.0166			
Lowest Particle			28.0482				28.0482			

Table A. 239: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	23.49	57.2	2983	508.2	413.2	57.2	3031	510.9	416.3	-2.530	2.500	-0.010	0.380	-2.540	2.540	0.030	0.450
40-60mm	30.6	57.2	3024	357.2	334.9	57.2	2961	356.5	336.6	-2.540	2.450	-0.000	0.350	-2.540	2.540	-0.010	0.410
60-80mm	11.42	57.2	2382	230.9	219.1	57.2	2485	228.8	215.7	-2.460	2.500	-0.010	0.310	-2.200	2.540	-0.020	0.340
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	65.51	57.2	3024	389.4	363.2	57.2	3031	389.8	365.4	-2.540	2.500	-0.010	0.350	-2.540	2.540	0.000	0.420

Table A. 240: Matched Droplet Info

A.3.3.1 All Droplets for .LA Image

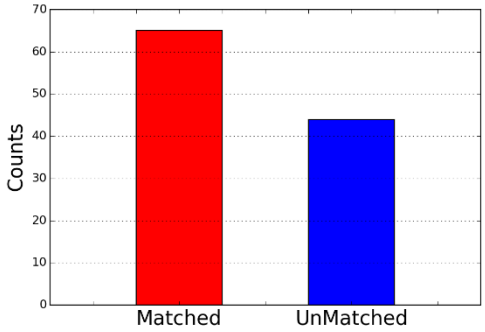


Figure A. 2261: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

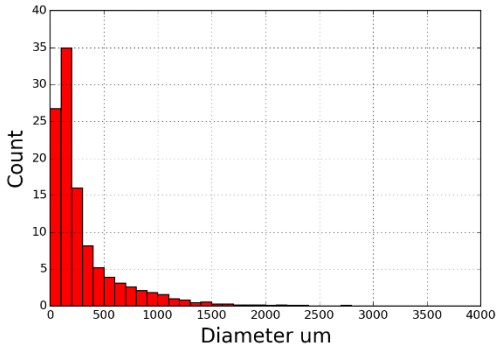


Figure A. 2262: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

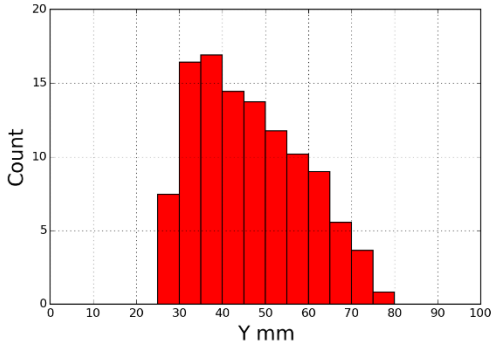


Figure A. 2263: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

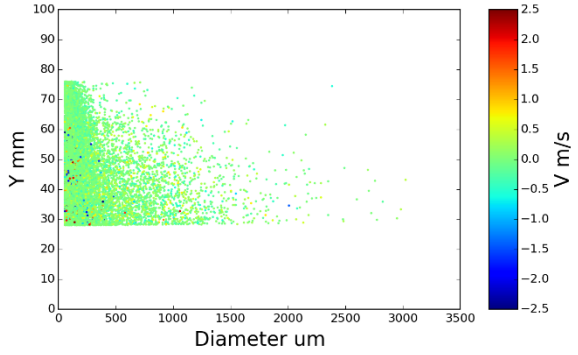


Figure A. 2264: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

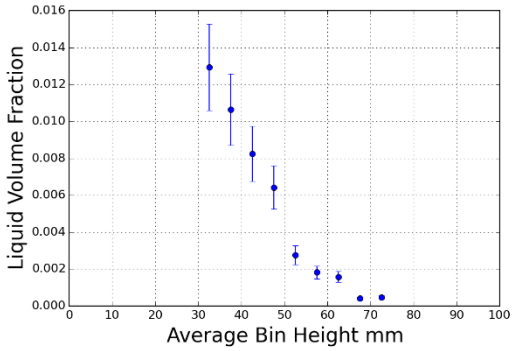


Figure A. 2265: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 All Droplets for .LB Image

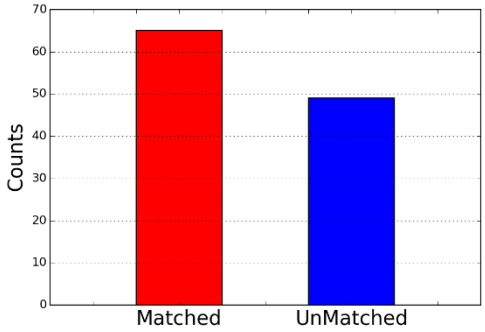


Figure A. 2266: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

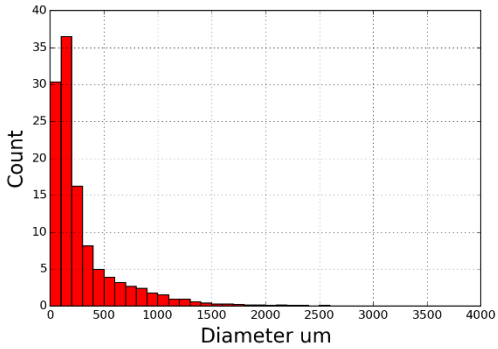


Figure A. 2267: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

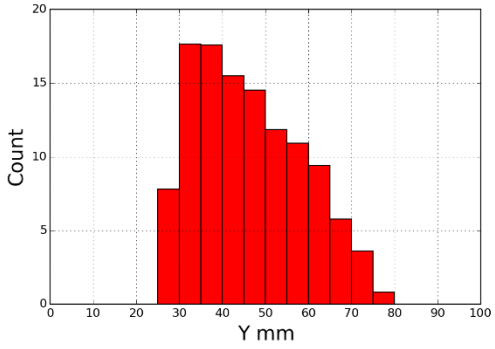


Figure A. 2268: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

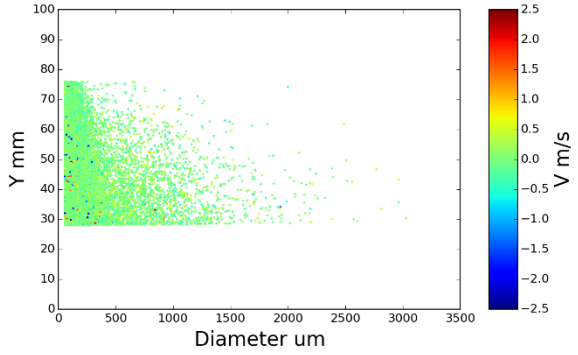


Figure A. 2269: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

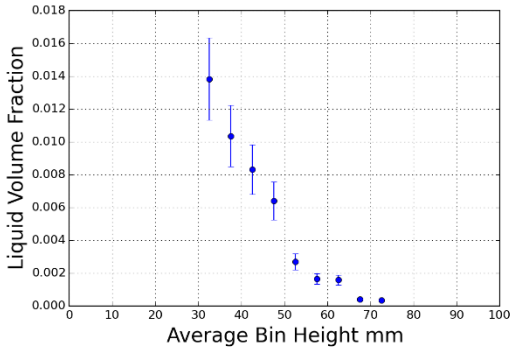


Figure A. 2270: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 Matched Only Droplets for .LA Image

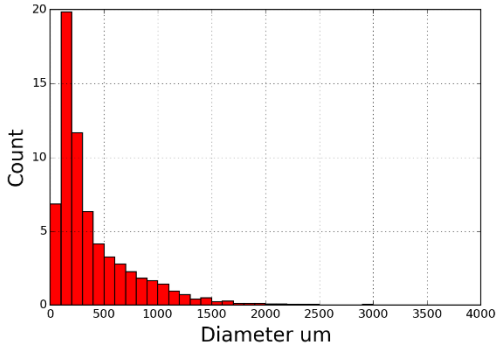


Figure A. 2271: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

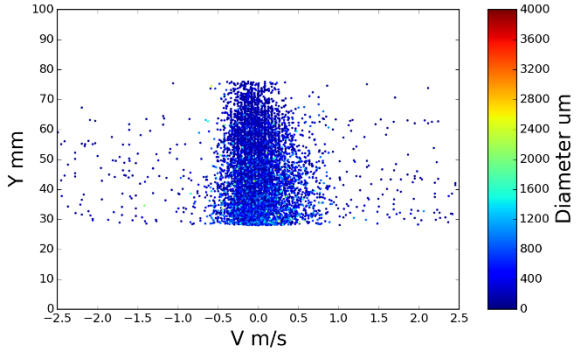


Figure A. 2274: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

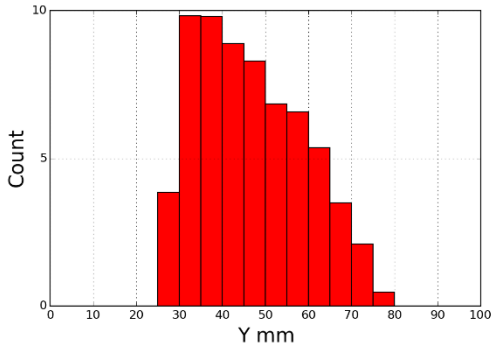


Figure A. 2272: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

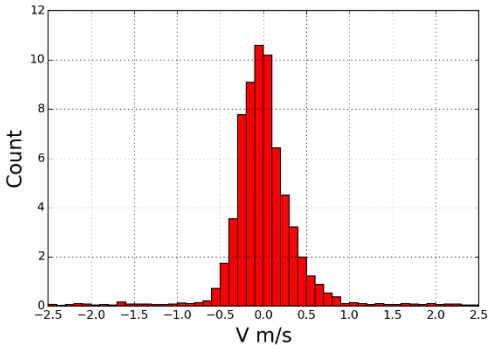


Figure A. 2275: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

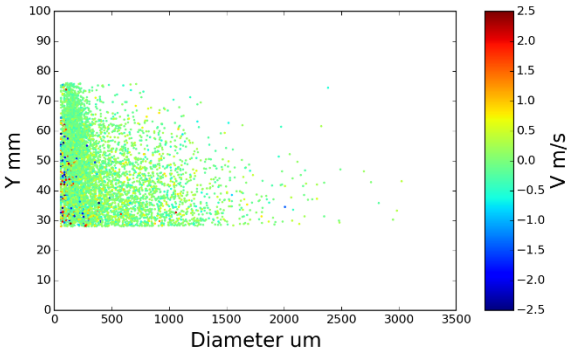


Figure A. 2273: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 Matched Only Droplets for .LB Image

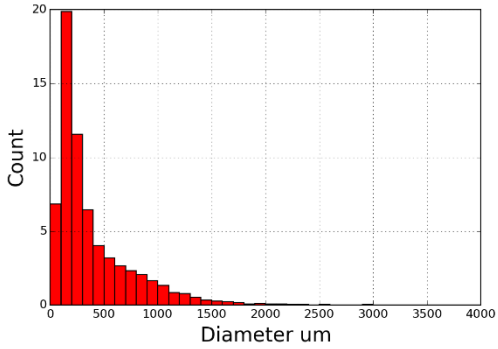


Figure A. 2276: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

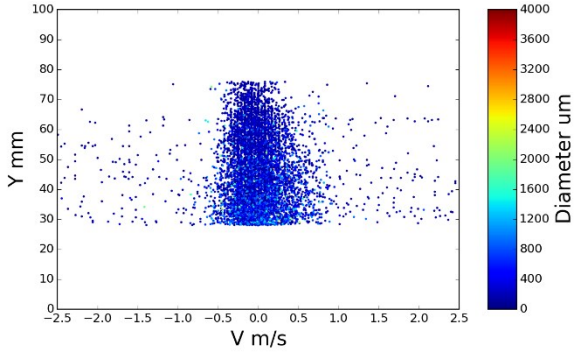


Figure A. 2279: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

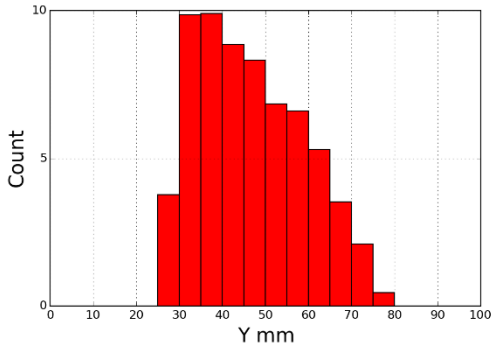


Figure A. 2277: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

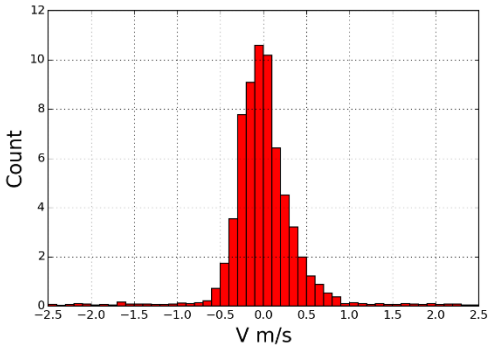


Figure A. 2280: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

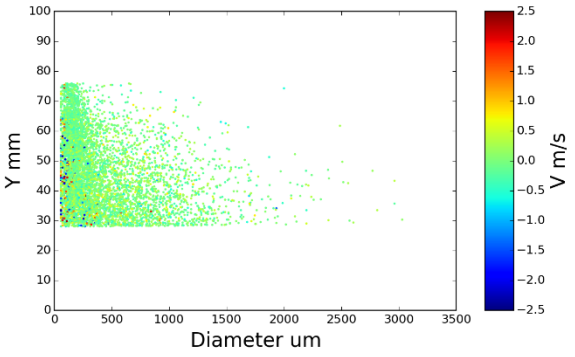


Figure A. 2278: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	26.18	27.79	57.2	2751	393.2	346.7	57.2	2715	382.5	342.0
40-60mm	36.44	38.06	57.2	2421	260.4	256.8	57.2	2912	254.3	250.1
60-80mm	13.9	14.47	57.2	1932	188.4	173.5	57.2	2017	185.1	170.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	76.53	80.32	57.2	2751	292.8	289.7	57.2	2912	286.2	284.4
			Height A (mm)				Height B (mm)			
Highest Particle			76.0166				75.9912			
Lowest Particle			28.0482				28.0482			

Table A. 241: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	16.25	57.2	2607	491.3	358.2	57.2	2715	492.1	360.6	-2.330	2.440	0.000	0.320	-2.490	2.450	0.090	0.380
40-60mm	22.06	57.2	2421	330.2	277.4	57.2	2912	330.9	280.4	-2.510	2.530	-0.000	0.350	-2.530	2.490	0.080	0.440
60-80mm	8.08	57.2	1932	235.5	198.0	57.2	2017	236.1	201.5	-2.450	2.130	0.010	0.240	-2.120	2.490	0.050	0.290
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	46.39	57.2	2607	370.1	312.1	57.2	2912	370.9	314.8	-2.510	2.530	0.000	0.320	-2.530	2.490	0.080	0.400

Table A. 242: Matched Droplet Info

A.3.3.1 All Droplets for .LA Image

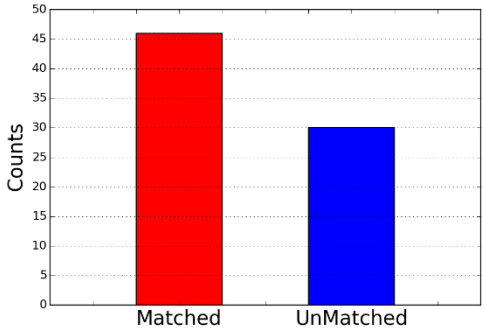


Figure A. 2281: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

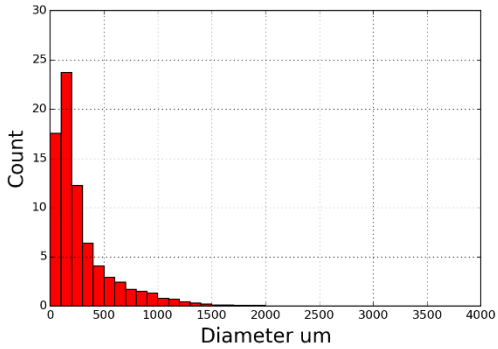


Figure A. 2282: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

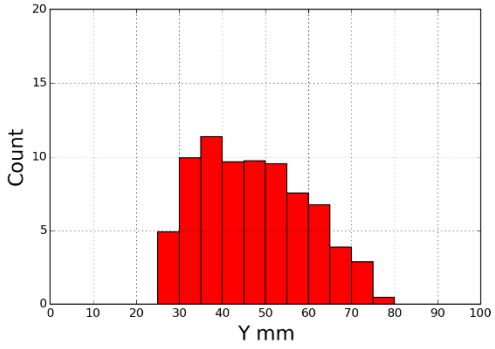


Figure A. 2283: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

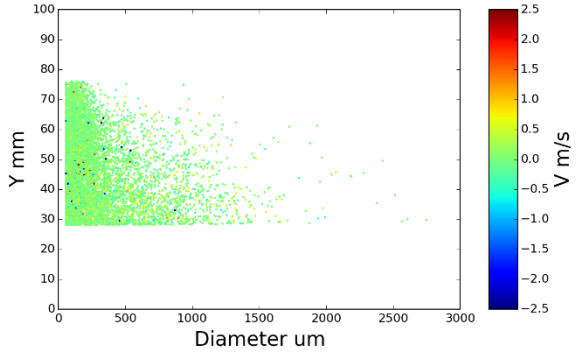


Figure A. 2284: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

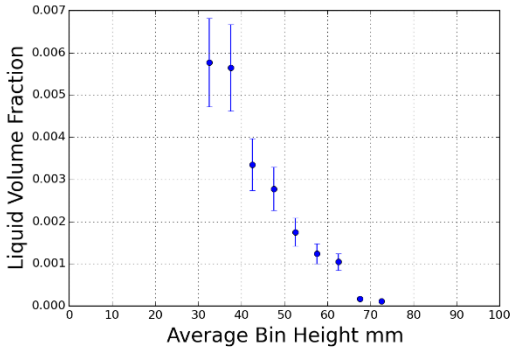


Figure A. 2285: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 All Droplets for .LB Image

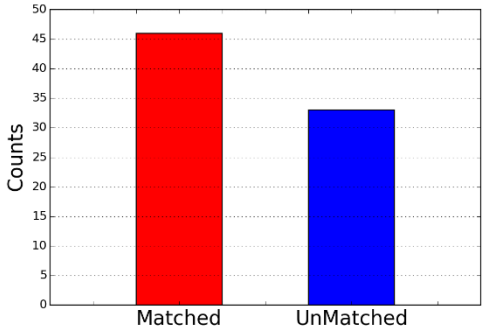


Figure A. 2286: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

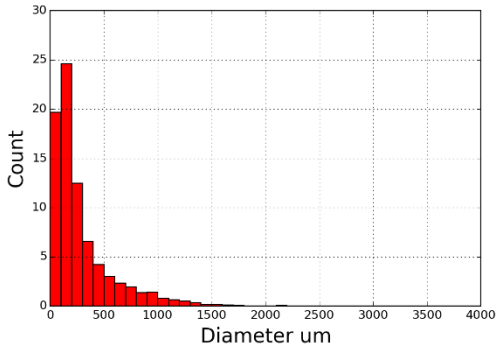


Figure A. 2287: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

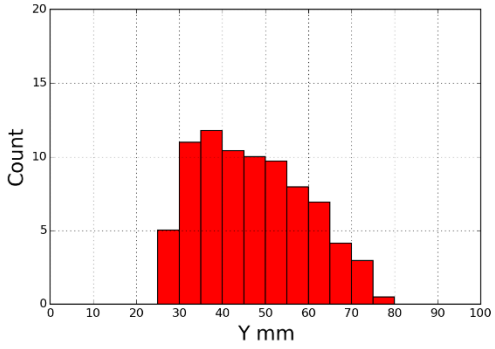


Figure A. 2288: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

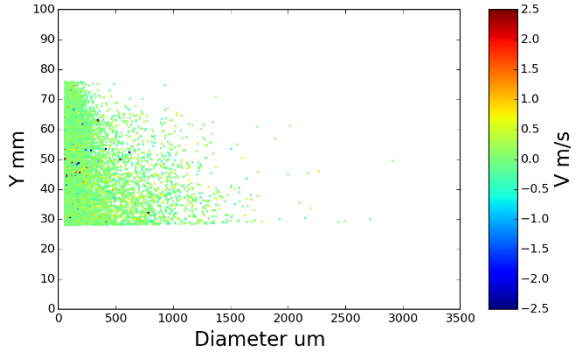


Figure A. 2289: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

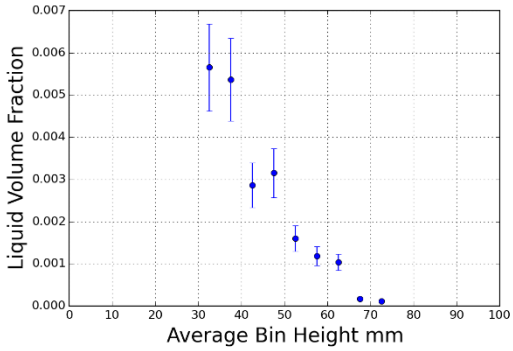


Figure A. 2290: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 Matched Only Droplets for .LA Image

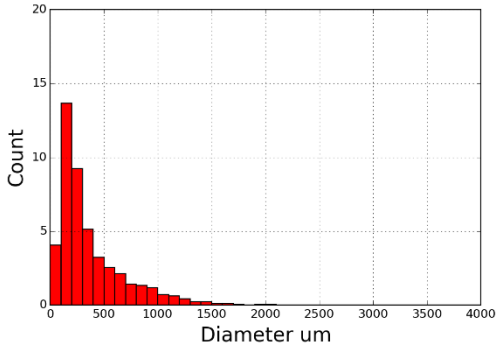


Figure A. 2291: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

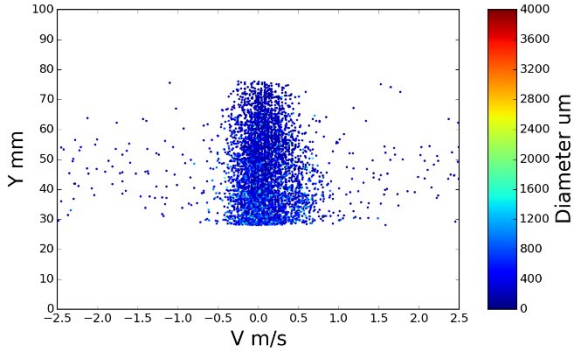


Figure A. 2294: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

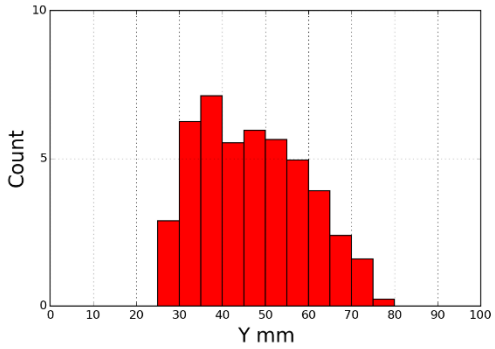


Figure A. 2292: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

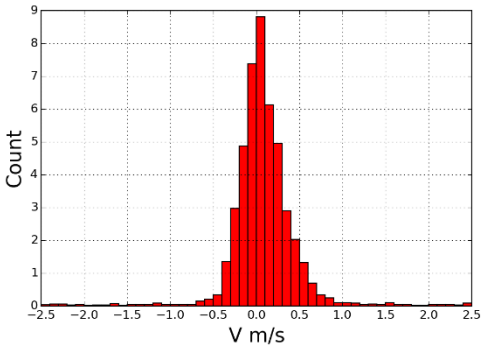


Figure A. 2295: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

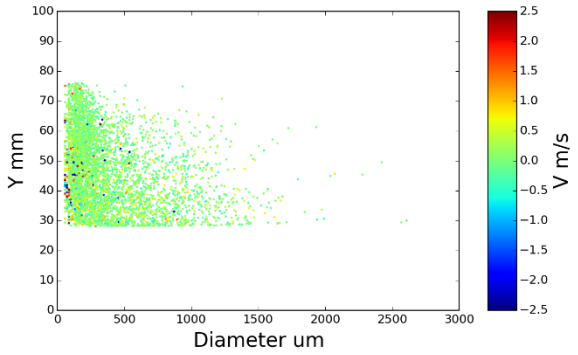


Figure A. 2293: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.1 Matched Only Droplets for .LB Image

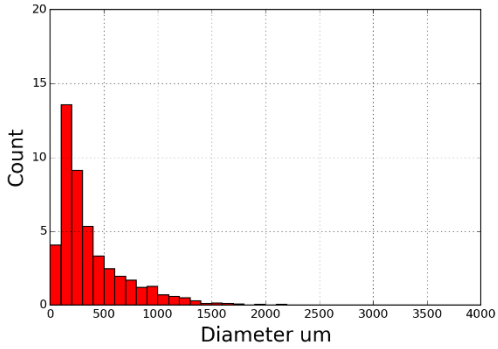


Figure A. 2296: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

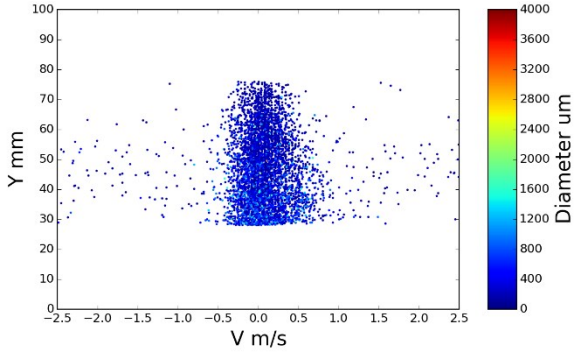


Figure A. 2299: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

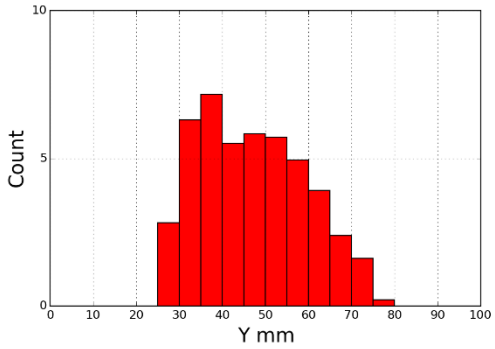


Figure A. 2297: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

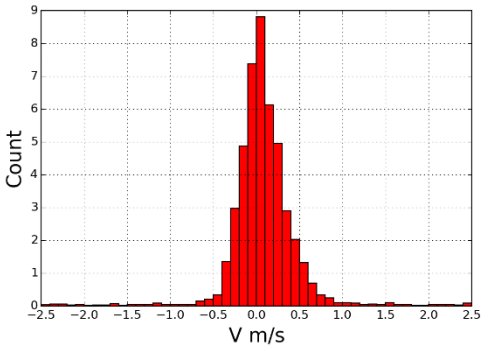


Figure A. 2300: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

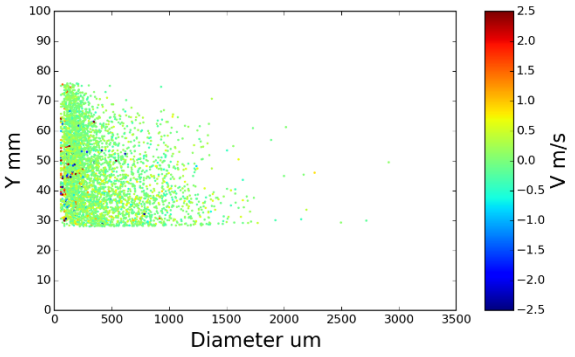


Figure A. 2298: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 Lens 50mm Mag 0_13x

A.3.3.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	63.57	63.86	128.6	3360	745.6	607.0	128.6	3411	737.6	605.5
20-40mm	90.89	91.05	128.6	3407	647.4	475.8	128.6	3395	646.8	477.4
40-60mm	50.92	51.25	128.6	3292	508.2	334.3	128.6	3194	505.4	329.2
60-80mm	18.9	18.81	128.6	1835	395.6	236.4	128.6	1901	392.0	237.4
80-100mm	4.97	4.99	128.6	1061	324.4	177.7	128.6	990.0	327.3	178.1
All	229.25	229.97	128.6	3407	616.0	485.3	128.6	3411	612.7	484.4
			Height A (mm)				Height B (mm)			
Highest Particle			99.9035				99.8750			
Lowest Particle			10.0302				10.0302			

Table A. 243: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	30.31	128.6	3322	909.6	638.4	128.6	3304	907.4	636.7	-2.440	2.440	-0.060	0.700	-2.420	2.440	0.090	0.730
20-40mm	55.74	128.6	3372	745.0	480.9	128.6	3395	738.4	478.5	-2.430	2.440	-0.060	0.500	-2.440	2.440	0.040	0.570
40-60mm	35.42	128.6	3292	581.0	332.4	128.6	3194	577.6	328.8	-2.440	2.440	-0.040	0.340	-2.440	2.440	0.050	0.420
60-80mm	12.68	128.6	1835	469.5	244.6	128.6	1901	464.2	244.8	-2.040	2.280	-0.020	0.260	-2.280	2.360	0.060	0.370
80-100mm	3.33	128.6	1061	386.4	184.6	128.6	990.0	385.3	186.5	-0.320	0.160	-0.040	0.090	-0.530	0.980	0.060	0.210
All	137.48	128.6	3372	704.9	489.7	128.6	3395	700.1	487.4	-2.440	2.440	-0.050	0.490	-2.440	2.440	0.060	0.550

Table A. 244: Matched Droplet Info

A.3.3.2 All Droplets for .LA Image

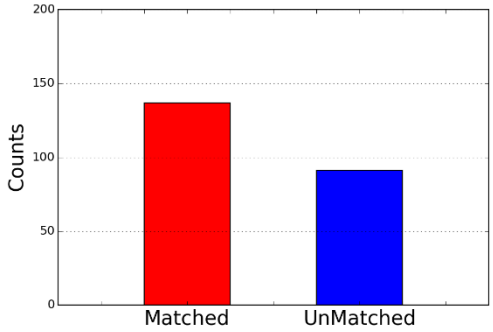


Figure A. 2301: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

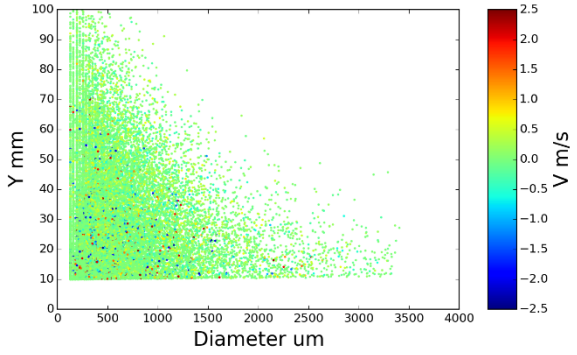


Figure A. 2304: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

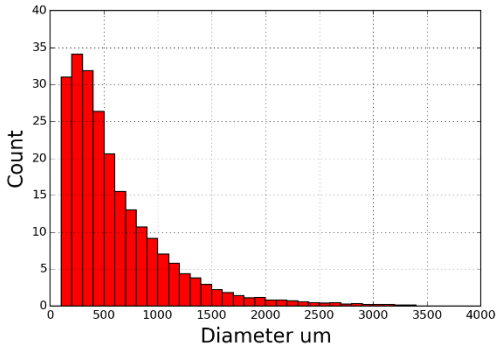


Figure A. 2302: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

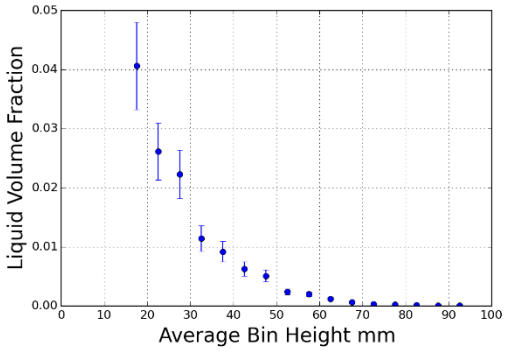


Figure A. 2305: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

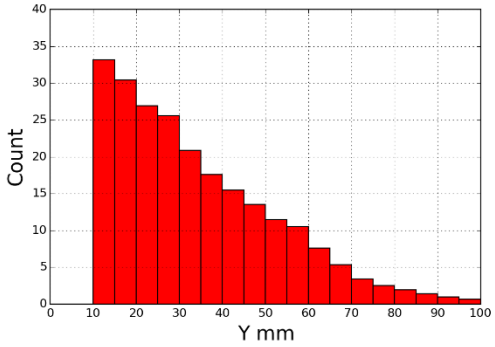


Figure A. 2303: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 All Droplets for .LB Image

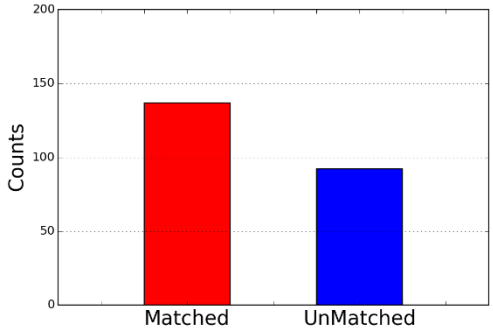


Figure A. 2306: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

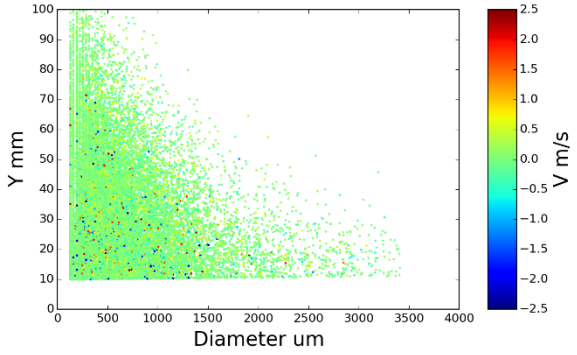


Figure A. 2309: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

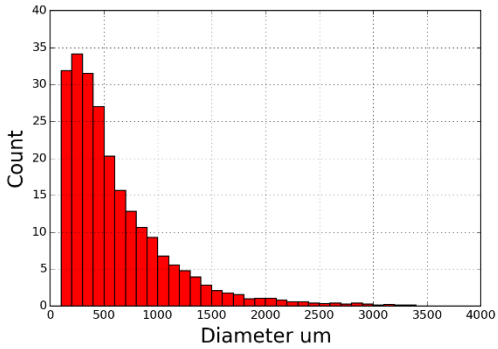


Figure A. 2307: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

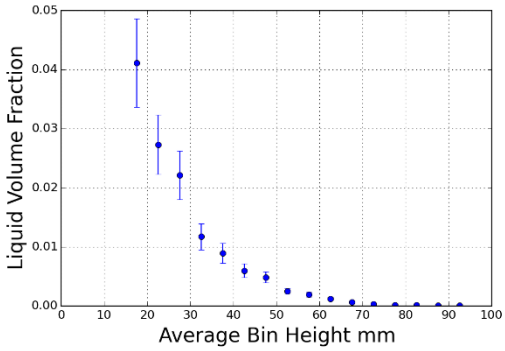


Figure A. 2310: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

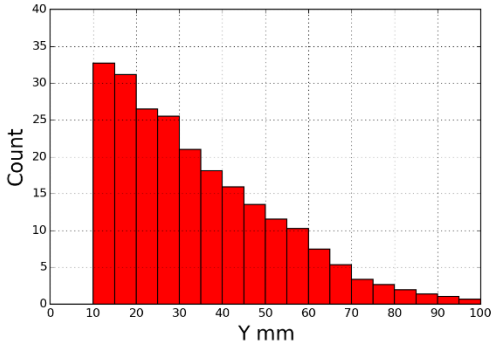


Figure A. 2308: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 Matched Only Droplets for .LA Image

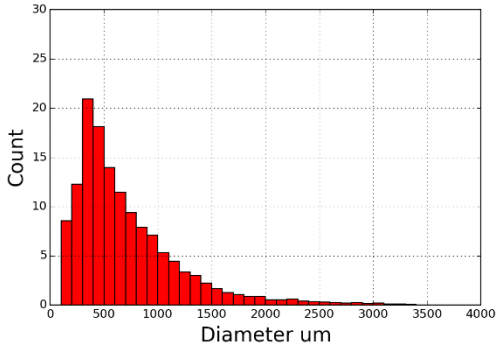


Figure A. 2311: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

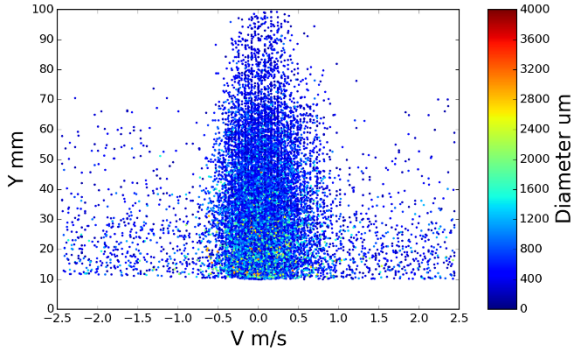


Figure A. 2314: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

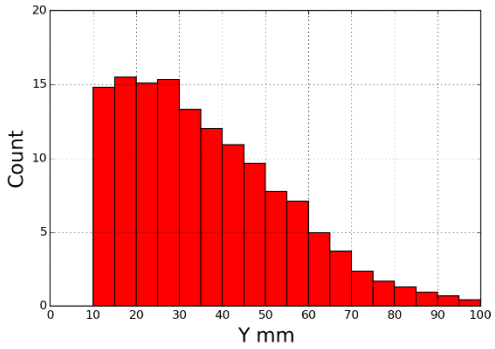


Figure A. 2312: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

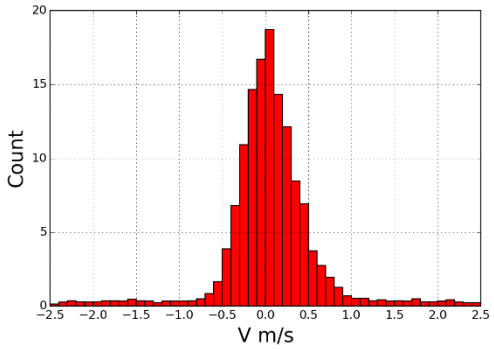


Figure A. 2315: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

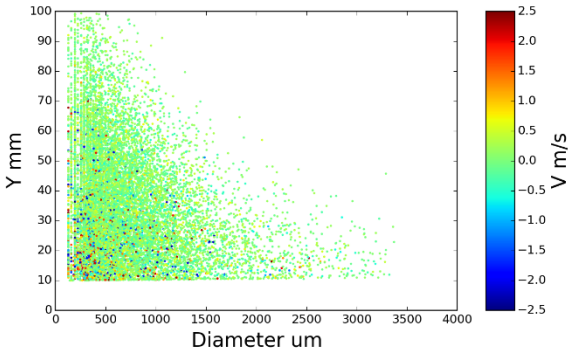


Figure A. 2313: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 Matched Only Droplets for .LB Image

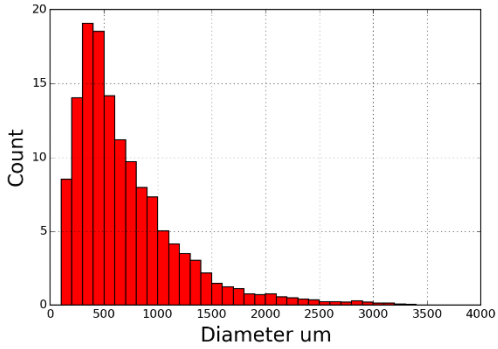


Figure A. 2316: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

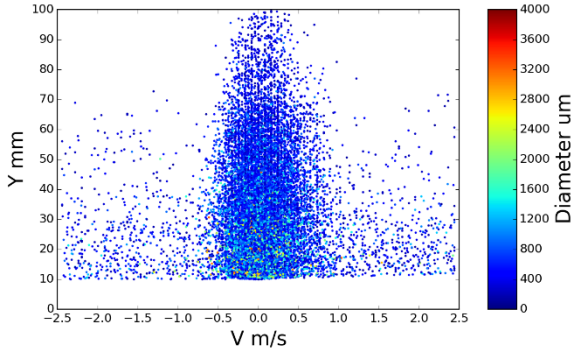


Figure A. 2319: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

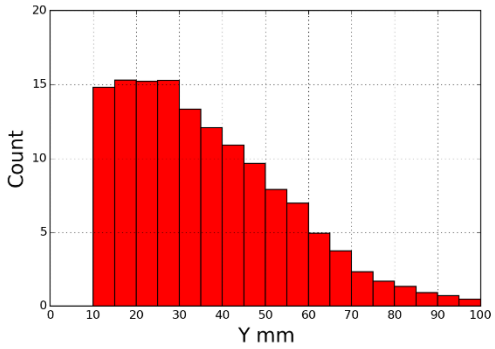


Figure A. 2317: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

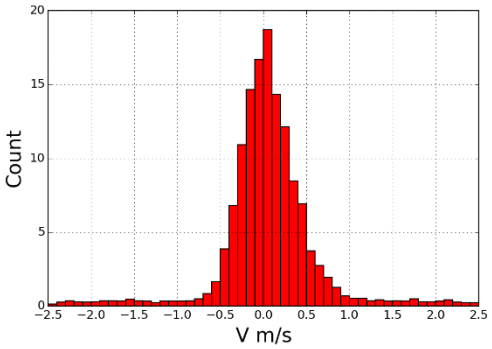


Figure A. 2320: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

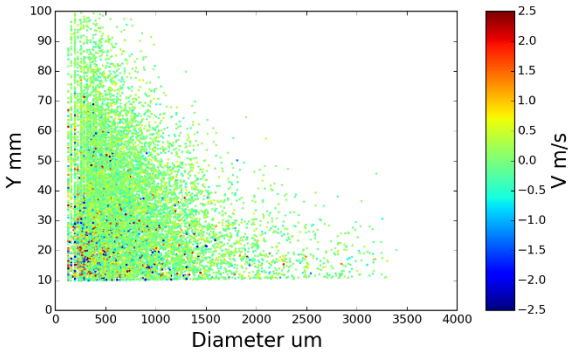


Figure A. 2318: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	53.63	54.37	128.6	3412	787.1	613.7	128.6	3408	797.8	627.3
20-40mm	85.02	85.72	128.6	3418	703.8	513.8	128.6	3313	707.4	524.0
40-60mm	42.86	43.2	128.6	3113	565.0	408.8	128.6	3229	561.1	407.1
60-80mm	12.82	12.9	128.6	2389	472.4	326.2	128.6	2417	467.4	324.3
80-100mm	2.42	2.27	128.6	1312	416.4	260.2	128.6	1272	434.1	258.3
All	196.75	198.46	128.6	3418	677.7	520.4	128.6	3408	681.6	530.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.8180				99.8465			
Lowest Particle			10.0302				10.0302			

Table A. 245: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	23.9	128.6	3406	995.2	645.2	128.6	3408	988.9	647.5	-2.440	2.440	-0.050	0.700	-2.410	2.430	0.060	0.760
20-40mm	49.36	128.6	3418	832.2	528.0	128.6	3310	826.8	525.4	-2.440	2.440	-0.030	0.500	-2.440	2.440	-0.010	0.590
40-60mm	27.96	128.6	3113	676.2	421.5	128.6	3229	672.0	422.1	-2.410	2.400	-0.020	0.330	-2.400	2.440	-0.020	0.410
60-80mm	8.38	128.6	2389	575.3	342.1	128.6	2417	573.4	339.6	-2.320	2.320	-0.020	0.250	-2.440	2.400	-0.020	0.370
80-100mm	1.55	128.6	1312	524.9	260.6	128.6	1272	519.7	262.8	-0.330	0.320	-0.040	0.100	-0.490	0.890	-0.000	0.250
All	111.15	128.6	3418	804.4	534.0	128.6	3408	799.4	533.2	-2.440	2.440	-0.030	0.500	-2.440	2.440	0.000	0.580

Table A. 246: Matched Droplet Info

A.3.3.2 All Droplets for .LA Image

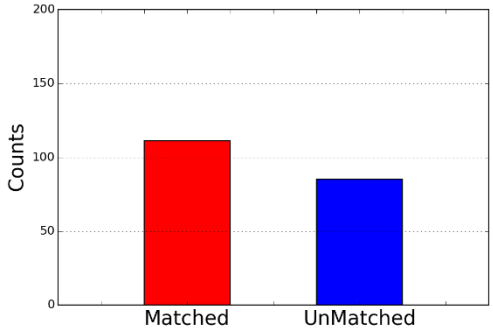


Figure A. 2321: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

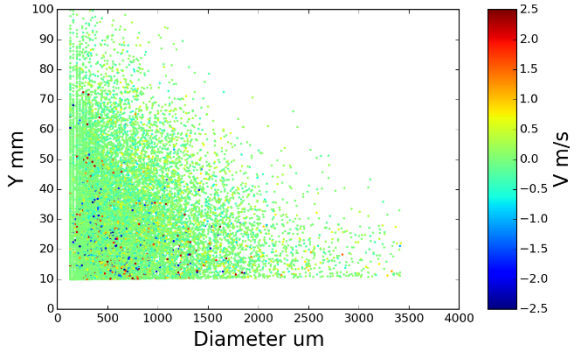


Figure A. 2324: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

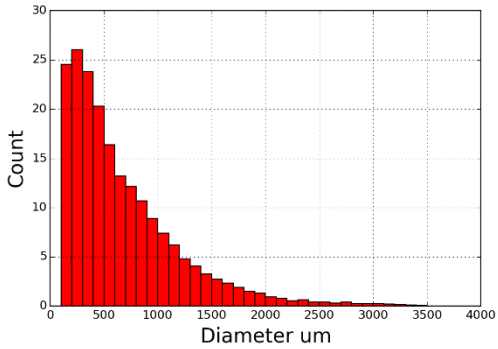


Figure A. 2322: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

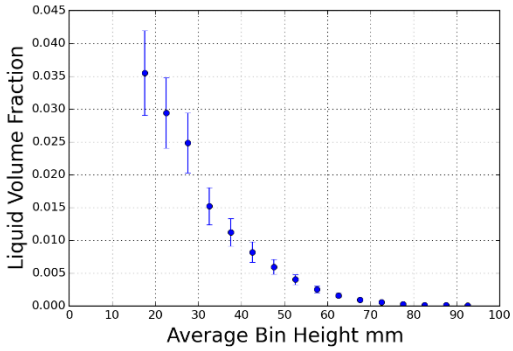


Figure A. 2325: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

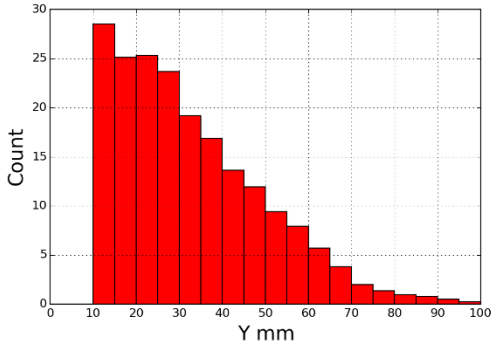


Figure A. 2323: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 All Droplets for .LB Image

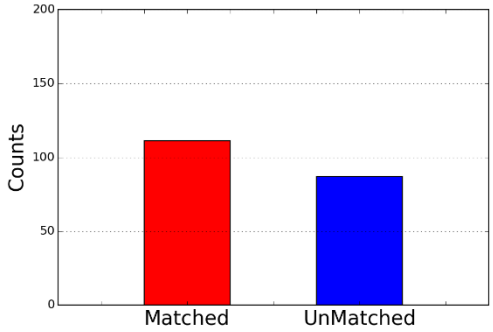


Figure A. 2326: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

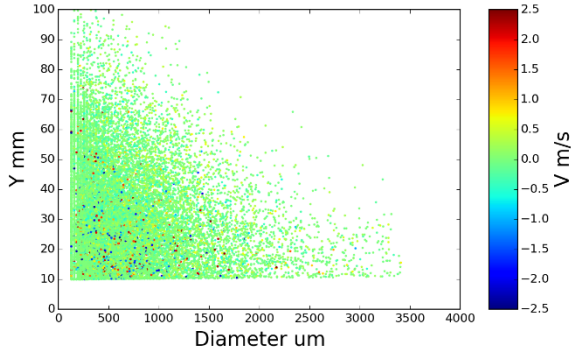


Figure A. 2329: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

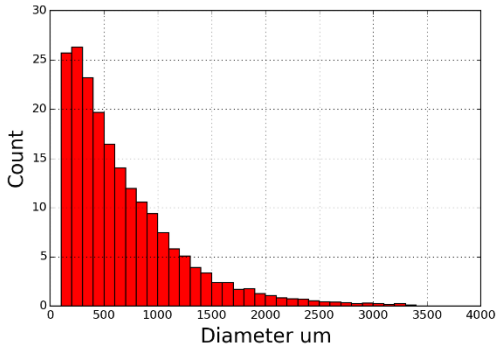


Figure A. 2327: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

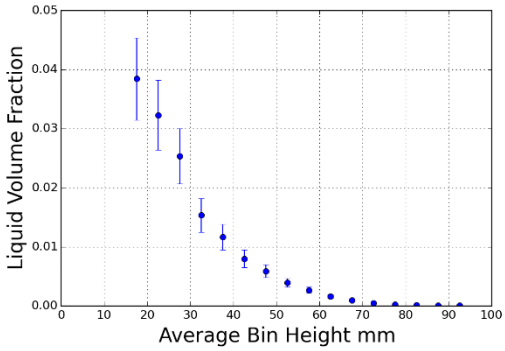


Figure A. 2330: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

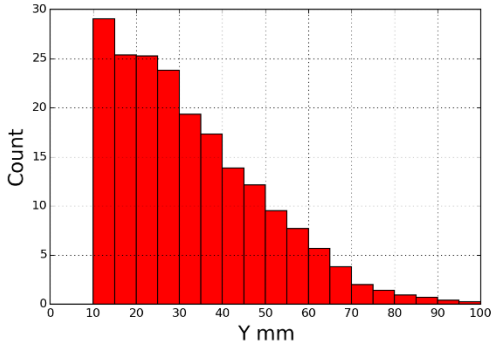


Figure A. 2328: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 Matched Only Droplets for .LA Image

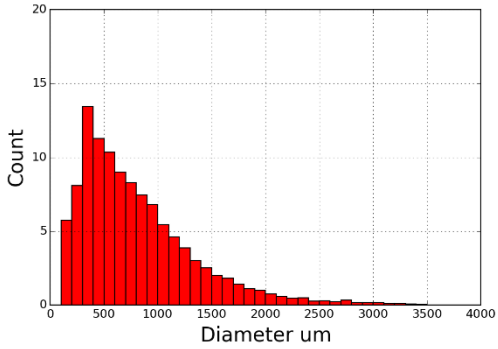


Figure A. 2331: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

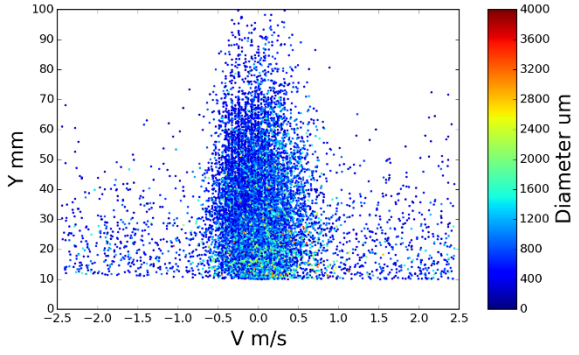


Figure A. 2334: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

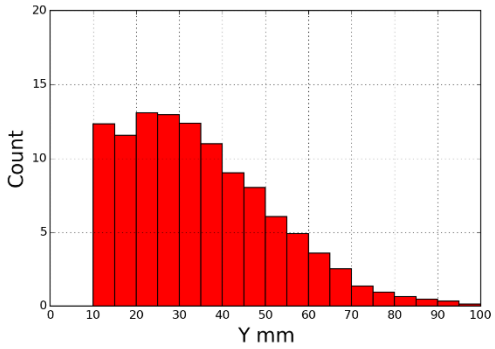


Figure A. 2332: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

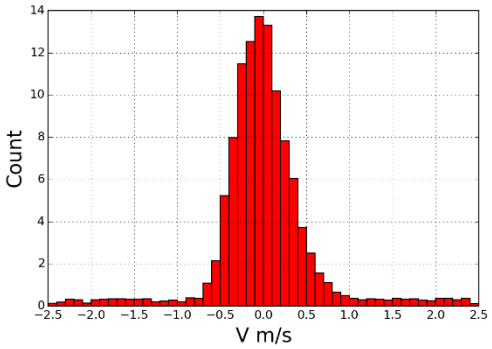


Figure A. 2335: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

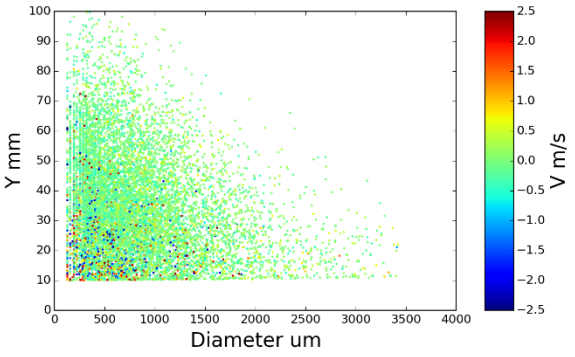


Figure A. 2333: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 Matched Only Droplets for .LB Image

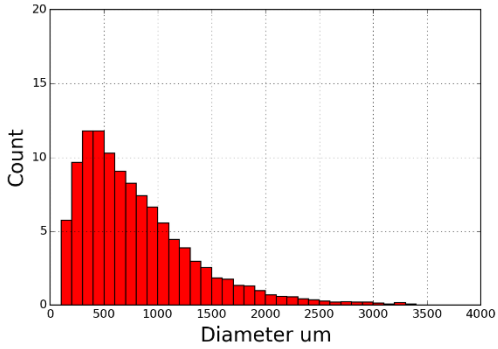


Figure A. 2336: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

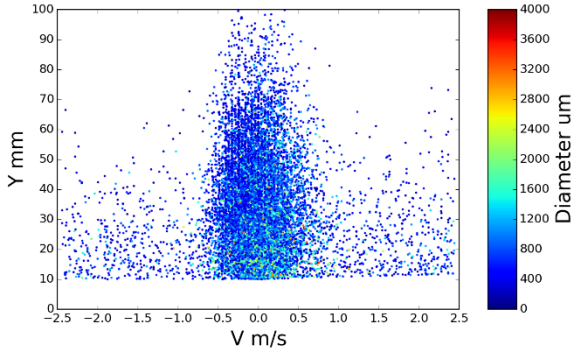


Figure A. 2339: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

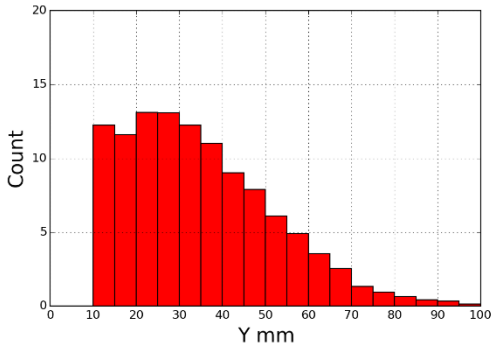


Figure A. 2337: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

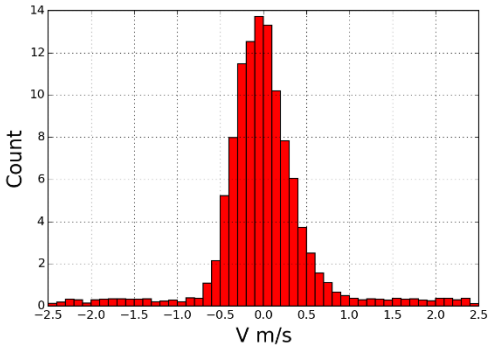


Figure A. 2340: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

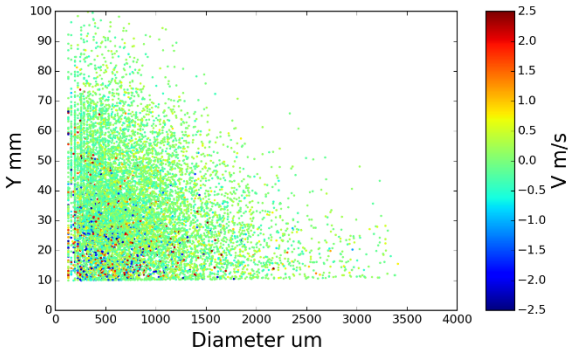


Figure A. 2338: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	45.15	45.62	128.6	3416	825.7	670.2	128.6	3408	816.2	669.7
20-40mm	82.09	83.08	128.6	3398	705.1	542.6	128.6	3411	701.1	538.8
40-60mm	40.72	41.19	128.6	3286	583.9	431.1	128.6	3378	581.9	431.4
60-80mm	8.84	8.68	128.6	2376	506.0	356.1	128.6	2274	512.0	358.4
80-100mm	1.1	1.04	128.6	1644	445.9	268.2	128.6	1666	463.2	270.2
All	177.9	179.61	128.6	3416	696.5	555.4	128.6	3411	692.5	553.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.8774				99.6616			
Lowest Particle			10.0302				10.0302			

Table A. 247: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	17.24	128.6	3416	1090	739.8	128.6	3396	1079	738.7	-2.440	2.440	-0.060	0.780	-2.440	2.440	0.020	0.780
20-40mm	42.18	128.6	3397	858.9	567.9	128.6	3411	850.7	567.8	-2.440	2.440	-0.020	0.560	-2.440	2.440	-0.030	0.620
40-60mm	24.77	128.6	3286	702.6	453.5	128.6	3378	698.0	452.3	-2.400	2.430	-0.010	0.370	-2.440	2.440	-0.010	0.450
60-80mm	5.29	128.6	2376	638.6	371.9	128.6	2274	637.6	368.8	-2.360	1.470	-0.040	0.250	-2.360	2.380	-0.040	0.330
80-100mm	0.72	192.9	1644	551.5	266.3	181.9	1666	546.2	266.0	-0.370	0.230	-0.050	0.110	-0.510	0.760	-0.070	0.250
All	90.2	128.6	3416	844.8	583.9	128.6	3411	837.3	582.4	-2.440	2.440	-0.030	0.550	-2.440	2.440	-0.020	0.600

Table A. 248: Matched Droplet Info

A.3.3.2 All Droplets for .LA Image

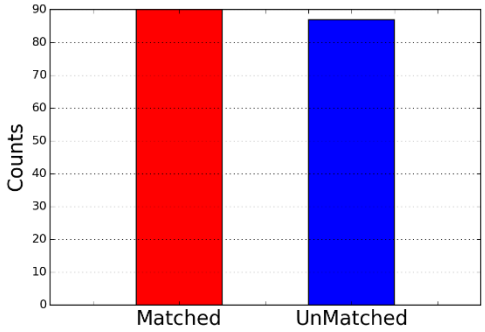


Figure A. 2341: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

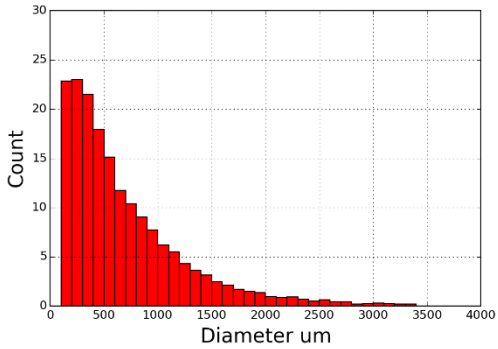


Figure A. 2342: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

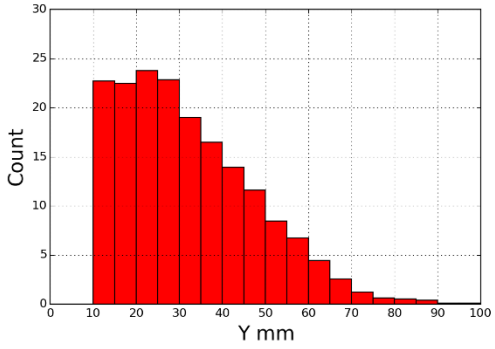


Figure A. 2343: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

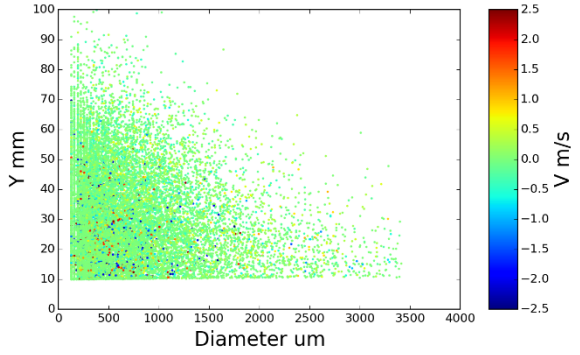


Figure A. 2344: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

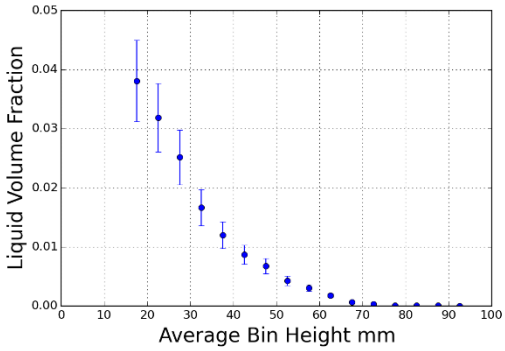


Figure A. 2345: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 All Droplets for .LB Image

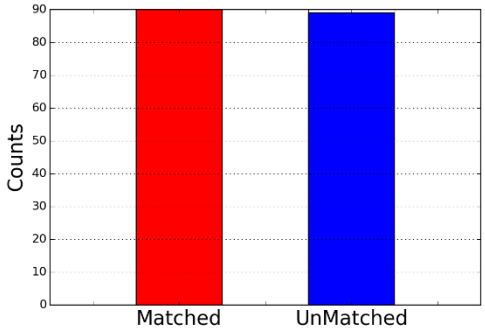


Figure A. 2346: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

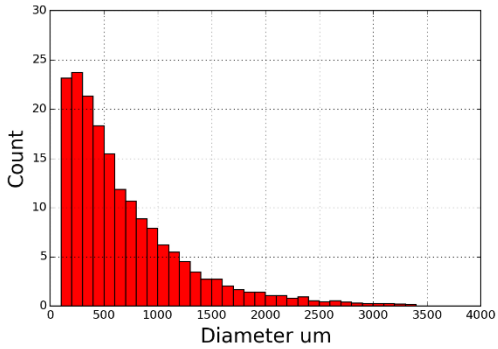


Figure A. 2347: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

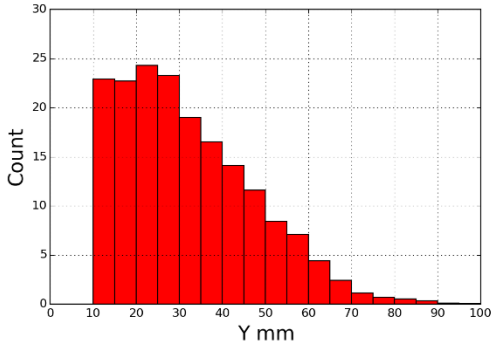


Figure A. 2348: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

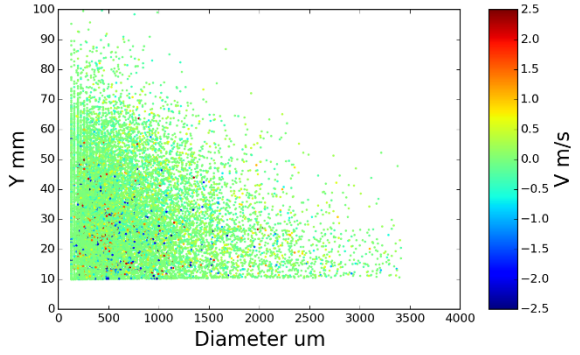


Figure A. 2349: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

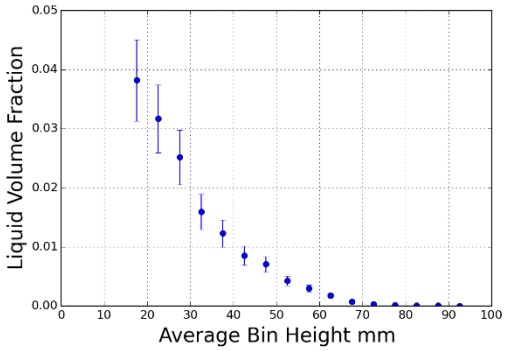


Figure A. 2350: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 Matched Only Droplets for .LA Image

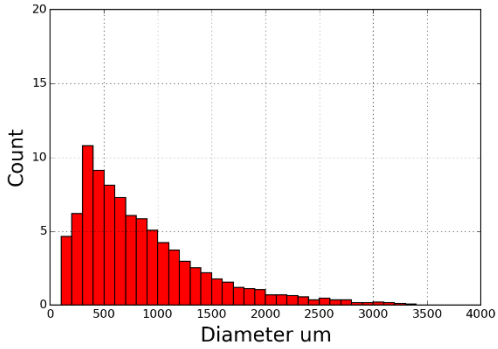


Figure A. 2351: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

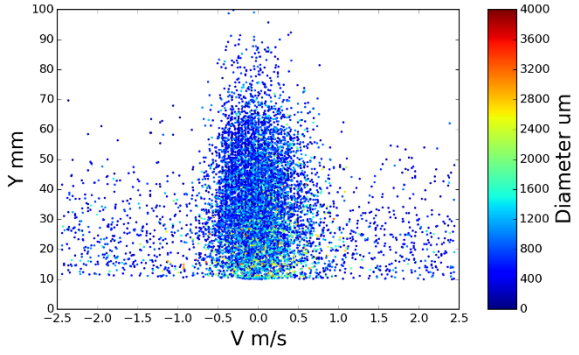


Figure A. 2354: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

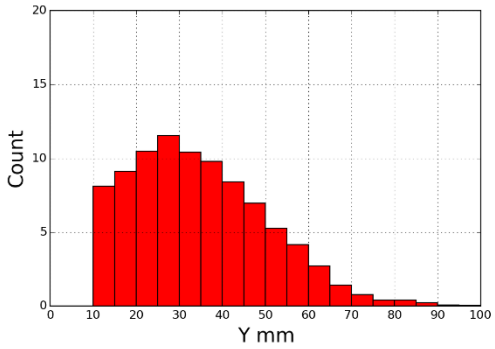


Figure A. 2352: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

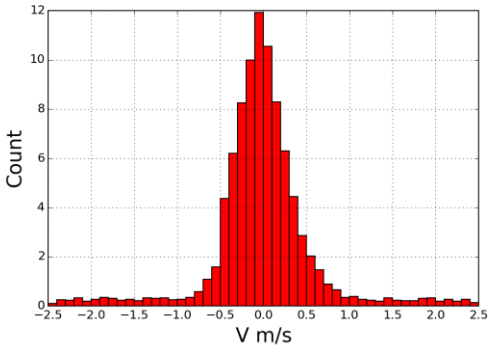


Figure A. 2355: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

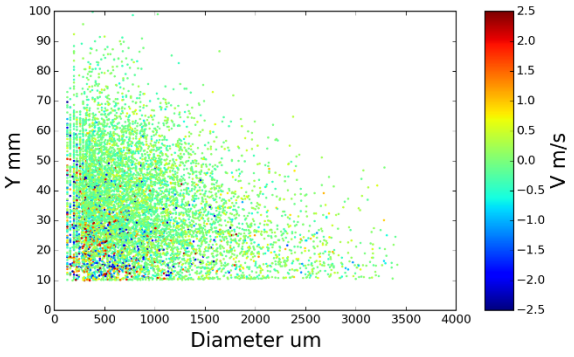


Figure A. 2353: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 Matched Only Droplets for .LB Image

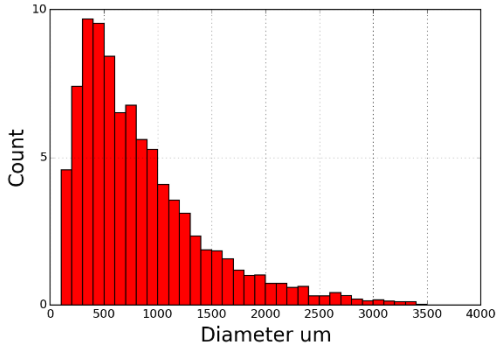


Figure A. 2356: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

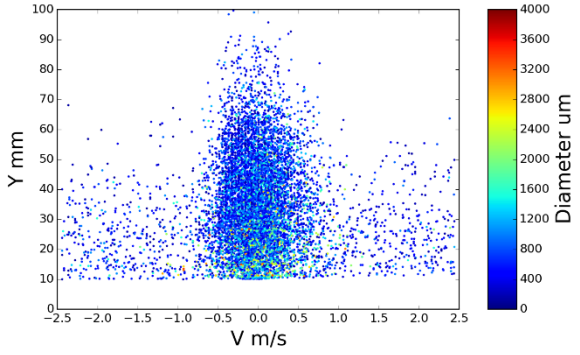


Figure A. 2359: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

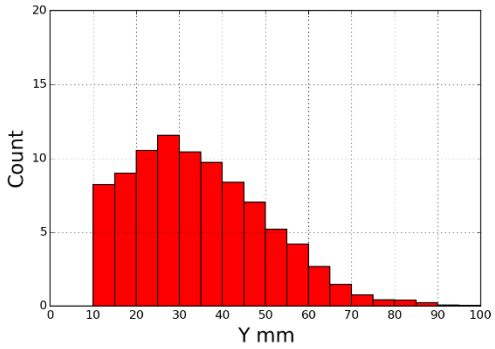


Figure A. 2357: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

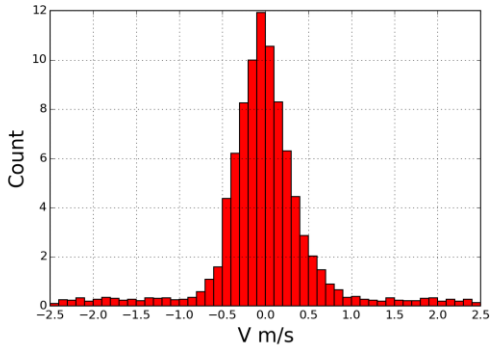


Figure A. 2360: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

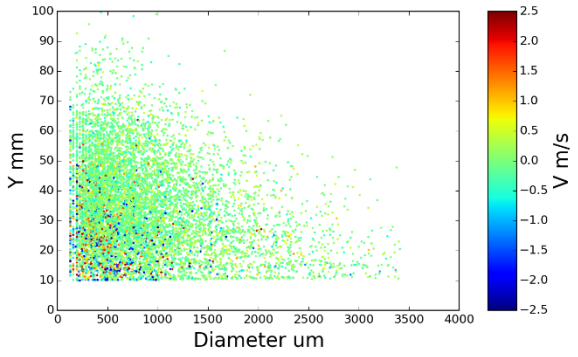


Figure A. 2358: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	38.03	37.48	128.6	3405	796.8	665.2	128.6	3418	796.2	667.1
20-40mm	71.97	73.11	128.6	3413	696.0	548.5	128.6	3416	689.0	544.8
40-60mm	39.28	39.71	128.6	3278	533.1	398.1	128.6	3232	528.5	404.6
60-80mm	8.49	8.56	128.6	2539	469.1	330.3	128.6	2342	458.2	325.8
80-100mm	0.92	1.06	128.6	1064	392.3	230.4	128.6	1267	373.2	231.8
All	158.7	159.92	128.6	3413	665.9	547.0	128.6	3418	659.8	546.2
			Height A (mm)				Height B (mm)			
Highest Particle			99.8180				99.4476			
Lowest Particle			10.0302				10.0302			

Table A. 249: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	13.31	128.6	3378	1043	712.6	128.6	3406	1037	717.2	-2.440	2.410	-0.070	0.780	-2.440	2.430	0.040	0.820
20-40mm	35.78	128.6	3341	844.0	576.5	128.6	3374	834.0	573.5	-2.440	2.440	-0.040	0.580	-2.440	2.440	-0.020	0.650
40-60mm	23.76	128.6	3156	630.5	418.6	128.6	3232	629.2	421.8	-2.440	2.360	-0.010	0.410	-2.440	2.440	-0.020	0.480
60-80mm	5.05	128.6	2539	577.8	354.1	128.6	2342	567.1	340.5	-2.200	0.790	-0.020	0.200	-2.070	2.260	-0.010	0.340
80-100mm	0.58	128.6	1064	464.4	229.8	128.6	911.7	464.9	219.2	-0.250	0.160	-0.010	0.080	-0.390	0.710	-0.000	0.230
All	78.48	128.6	3378	793.2	568.1	128.6	3406	786.8	567.5	-2.440	2.440	-0.030	0.550	-2.440	2.440	-0.010	0.620

Table A. 250: Matched Droplet Info

A.3.3.2 All Droplets for .LA Image

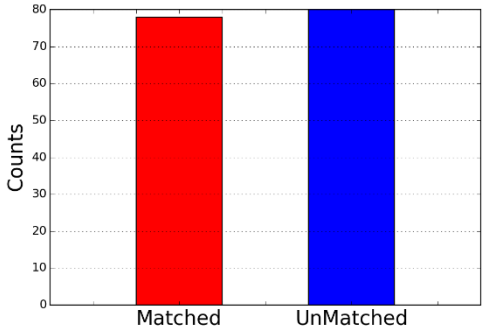


Figure A. 2361: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

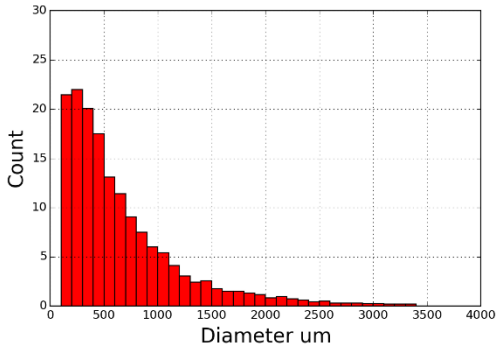


Figure A. 2362: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

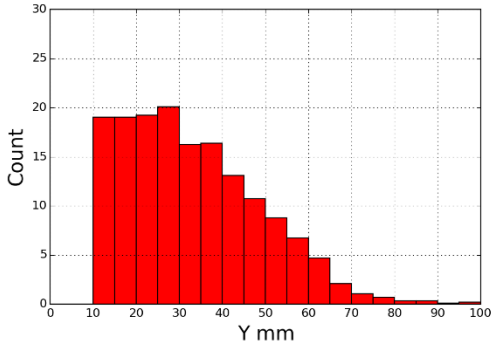


Figure A. 2363: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

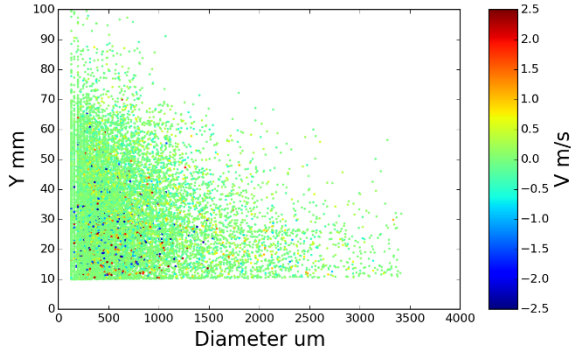


Figure A. 2364: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

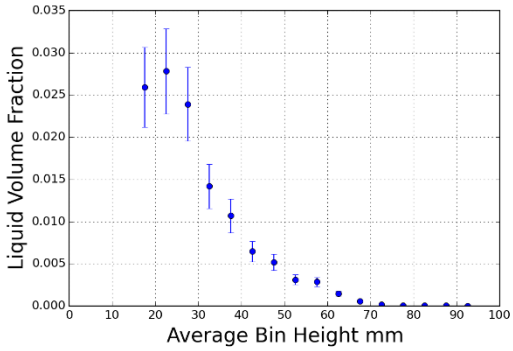


Figure A. 2365: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 All Droplets for .LB Image

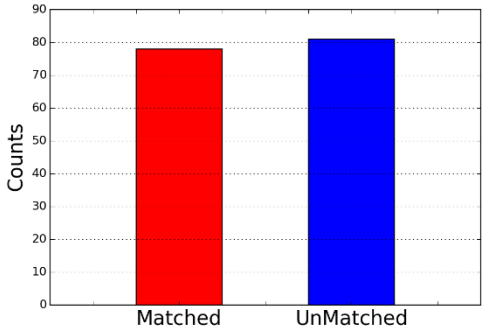


Figure A. 2366: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

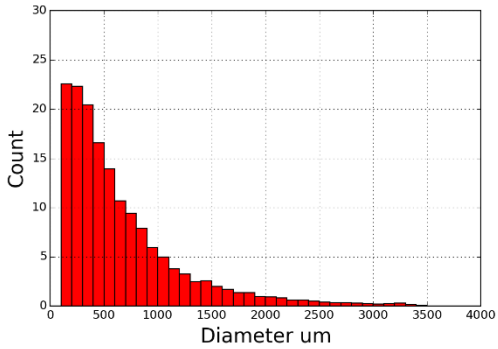


Figure A. 2367: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

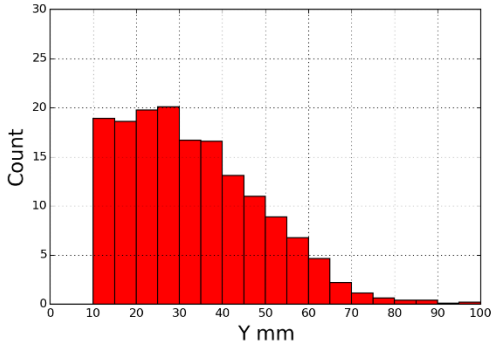


Figure A. 2368: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

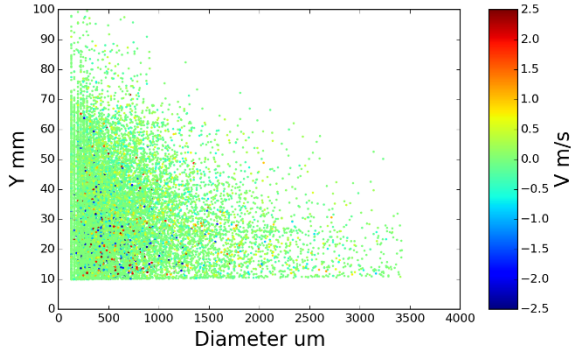


Figure A. 2369: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

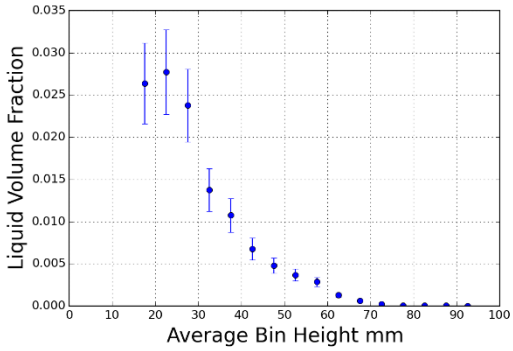


Figure A. 2370: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 Matched Only Droplets for .LA Image

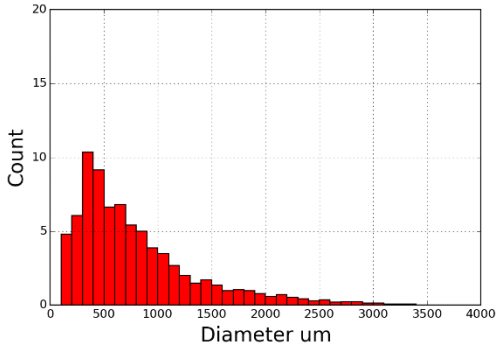


Figure A. 2371: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

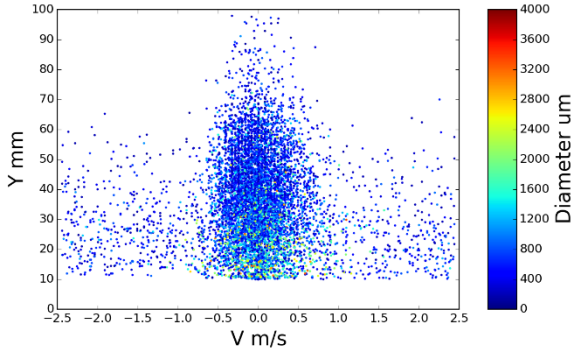


Figure A. 2374: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

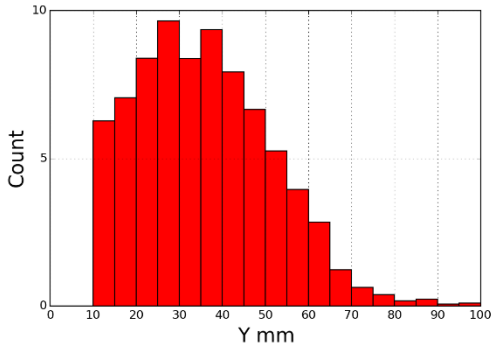


Figure A. 2372: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

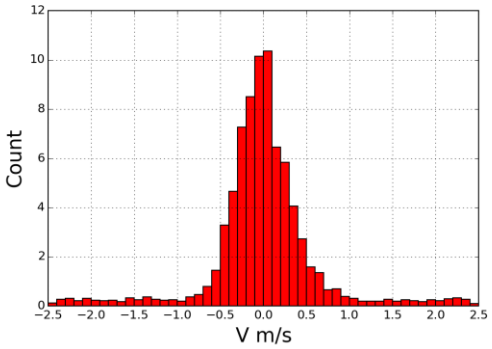


Figure A. 2375: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

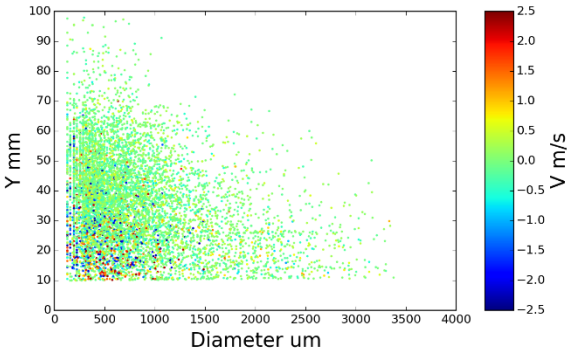


Figure A. 2373: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 Matched Only Droplets for .LB Image

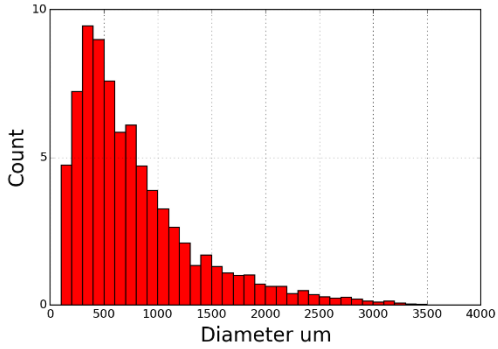


Figure A. 2376: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

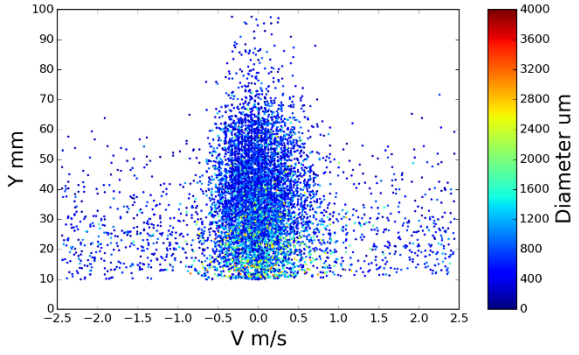


Figure A. 2379: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

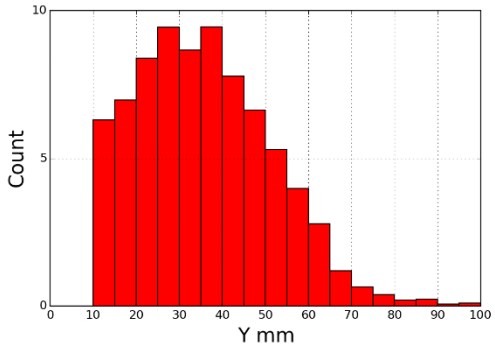


Figure A. 2377: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

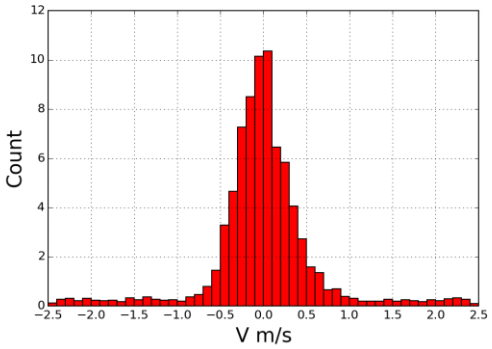


Figure A. 2380: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

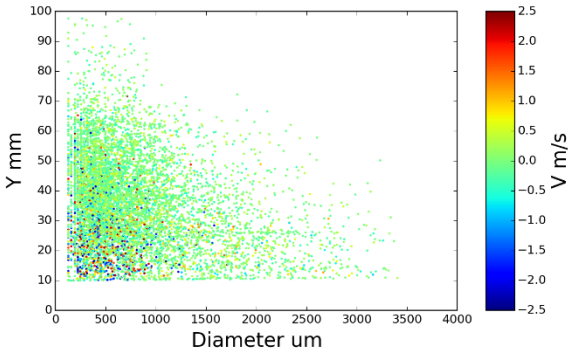


Figure A. 2378: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	31.84	31.95	128.6	3412	822.7	668.5	128.6	3416	807.5	660.3
20-40mm	61.43	62.41	128.6	3403	670.6	517.2	128.6	3416	667.5	518.5
40-60mm	35.44	35.27	128.6	3302	484.0	375.3	128.6	3266	485.9	376.6
60-80mm	7.59	7.66	128.6	3023	431.5	325.5	128.6	2771	433.9	338.2
80-100mm	0.56	0.55	128.6	1119	350.4	213.0	128.6	1089	339.6	217.8
All	136.86	137.84	128.6	3412	643.1	532.7	128.6	3416	639.2	530.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.0381				99.7610			
Lowest Particle			10.0302				10.0302			

Table A. 251: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	11.25	128.6	3366	1107	749.9	128.6	3389	1085	737.0	-2.430	2.440	-0.040	0.700	-2.380	2.410	0.060	0.730
20-40mm	29.91	128.6	3317	816.7	554.3	128.6	3416	810.8	553.1	-2.440	2.440	-0.030	0.600	-2.440	2.440	0.030	0.650
40-60mm	20.81	128.6	3182	587.8	398.1	128.6	3252	583.5	394.9	-2.440	2.440	-0.010	0.400	-2.400	2.440	0.030	0.450
60-80mm	4.38	128.6	2247	533.1	324.7	128.6	2282	532.7	328.4	-2.160	2.240	0.000	0.260	-2.310	1.780	0.030	0.340
80-100mm	0.35	128.6	1119	429.6	224.3	128.6	1089	422.2	223.8	-0.240	0.160	-0.030	0.090	-0.580	0.260	-0.030	0.210
All	66.7	128.6	3366	773.5	569.2	128.6	3416	765.5	563.1	-2.440	2.440	-0.020	0.550	-2.440	2.440	0.040	0.590

Table A. 252: Matched Droplet Info

A.3.3.2 All Droplets for .LA Image

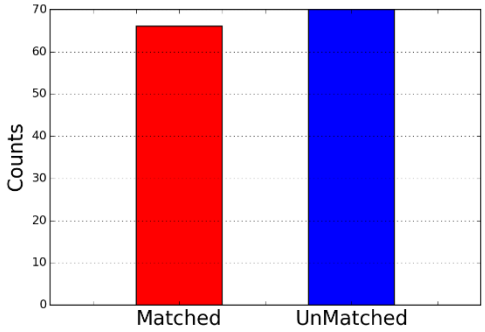


Figure A. 2381: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

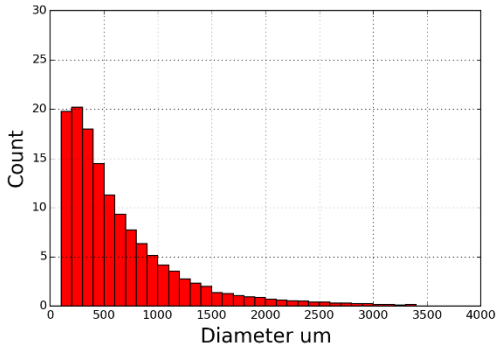


Figure A. 2382: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

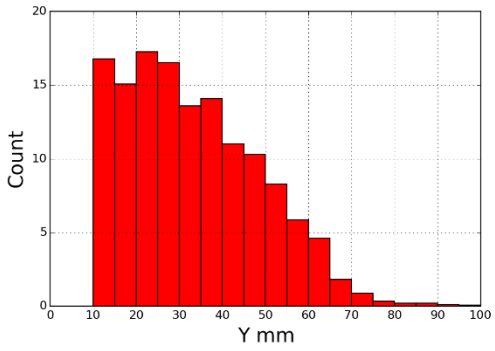


Figure A. 2383: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

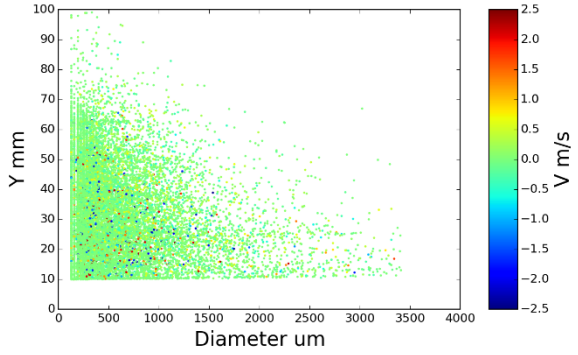


Figure A. 2384: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

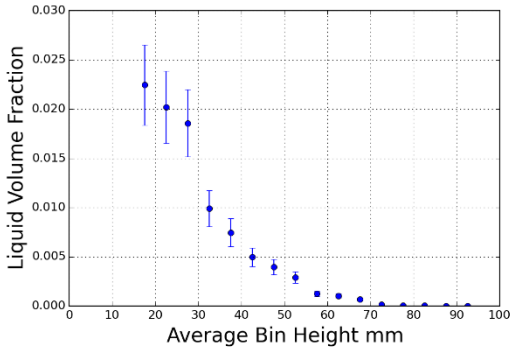


Figure A. 2385: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 All Droplets for .LB Image

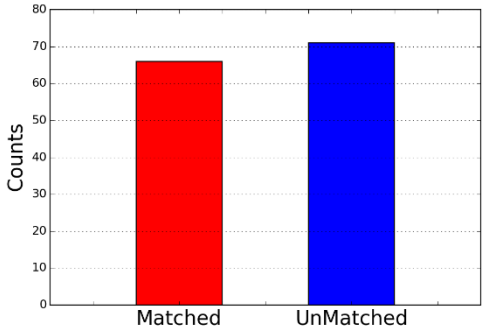


Figure A. 2386: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

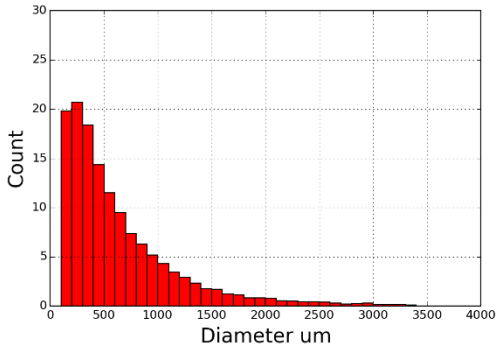


Figure A. 2387: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

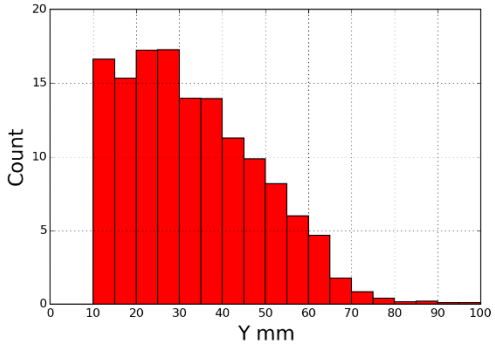


Figure A. 2388: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

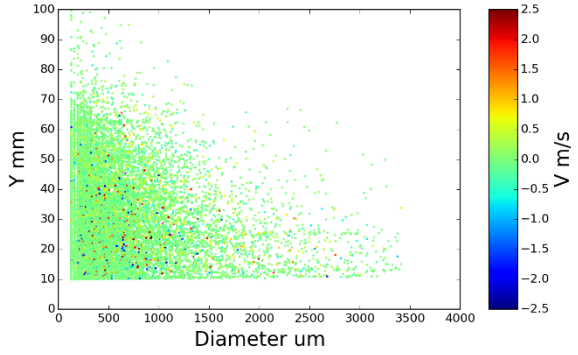


Figure A. 2389: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

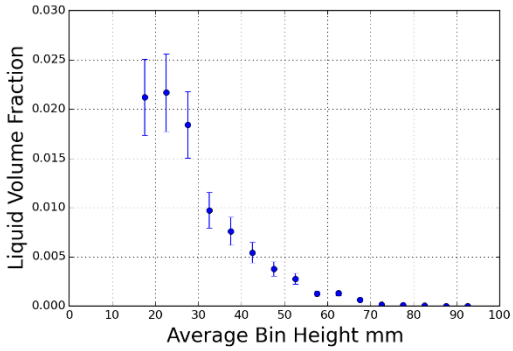


Figure A. 2390: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 Matched Only Droplets for .LA Image

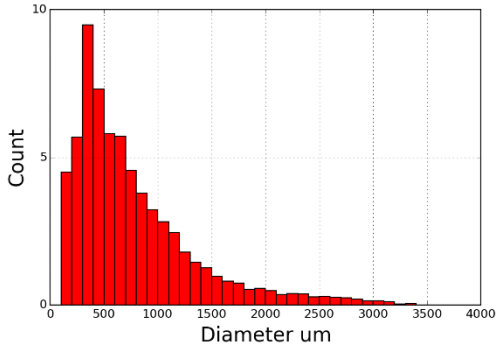


Figure A. 2391: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

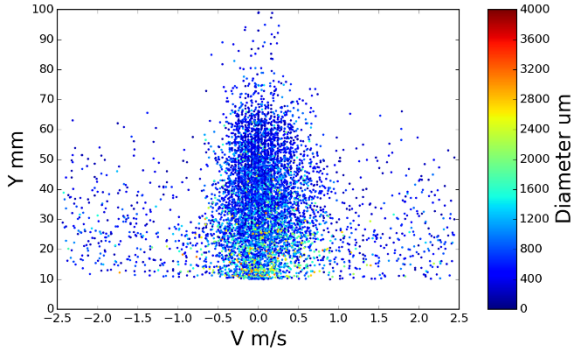


Figure A. 2394: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

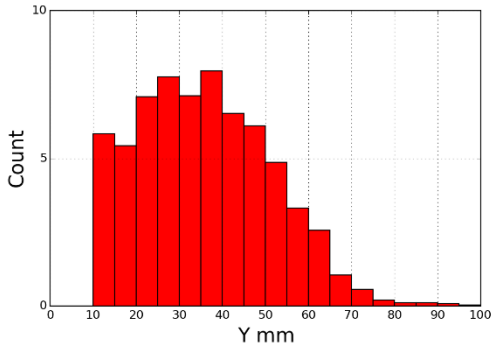


Figure A. 2392: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

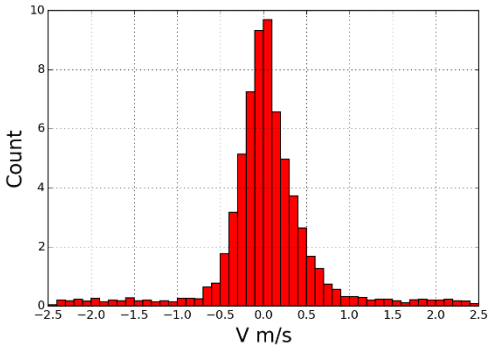


Figure A. 2395: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

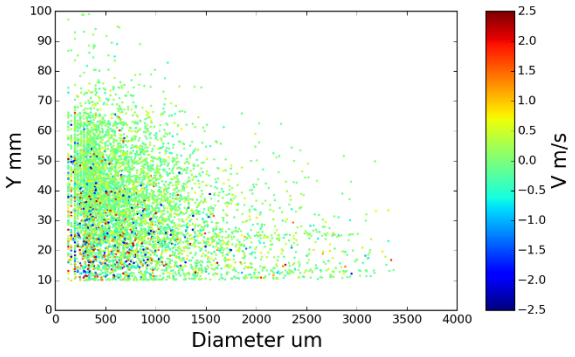


Figure A. 2393: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.3.2 Matched Only Droplets for .LB Image

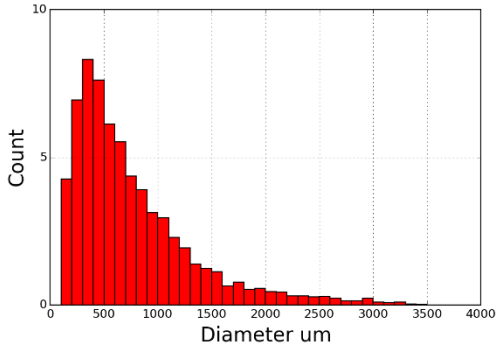


Figure A. 2396: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

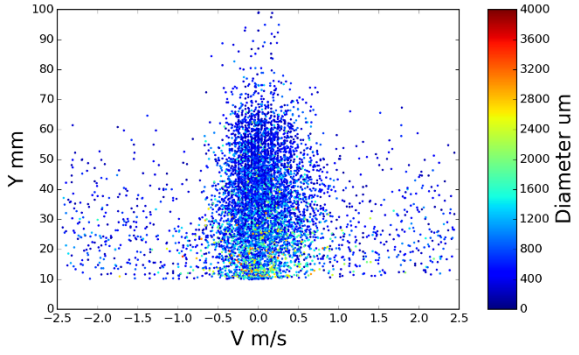


Figure A. 2399: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

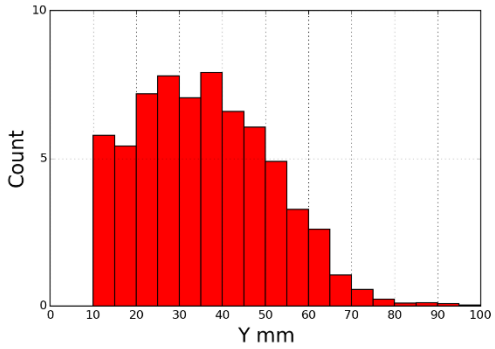


Figure A. 2397: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

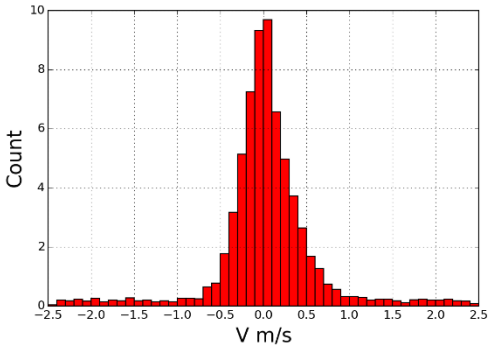


Figure A. 2400: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

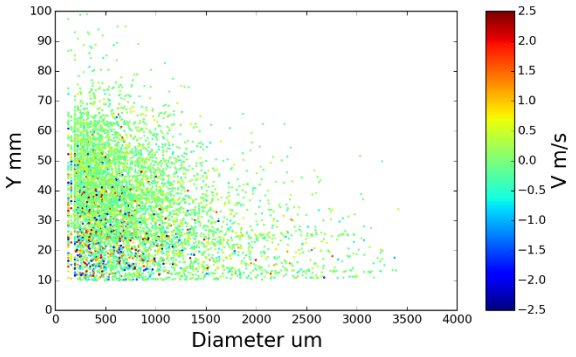


Figure A. 2398: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4 Liquid Level 4

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	17794 / 2.242
Ref Mass Flow (lb/hr) / (kg/s)	3205 / 0.404
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	29769 / 40.373
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4762 / 15.02
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	40.5 / 4.73
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.7 / 4.83
Total Bundle Q (Btu/hr) / (kW)	115425 / 33.83
Total Bundle & Preboiler Q (Btu/hr) / (kW)	289825 / 84.94
Top Two Rows HTC Ratio	1.055
Bundle Inlet Quality	0.56
Bundle Exit Quality	1.00

Table A. 253: Thermal Conditions

A.3.4.1 Lens 100mm Mag 0_29x

A.3.4.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	13.76	14.24	57.2	2491	369.7	365.7	57.2	2490	364.8	360.7
40-60mm	23.1	23.94	57.2	2105	308.3	310.4	57.2	2071	302.6	308.4
60-80mm	14.33	14.59	57.2	1880	259.6	238.4	57.2	1916	257.3	238.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	51.19	52.77	57.2	2491	311.2	311.5	57.2	2490	306.9	309.2
			Height A (mm)				Height B (mm)			
Highest Particle			76.0293				76.0293			
Lowest Particle			28.0596				28.0608			

Table A. 254: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	9.73	57.2	2491	461.4	387.4	57.2	2490	464.1	387.6	-1.940	1.910	-0.040	0.230	-2.370	2.280	0.070	0.390
40-60mm	16.81	57.2	2105	378.8	333.6	57.2	2071	378.3	334.8	-2.420	2.490	-0.060	0.220	-2.490	2.310	0.100	0.380
60-80mm	10.68	57.2	1880	307.9	255.9	57.2	1916	307.5	257.3	-2.460	0.420	-0.080	0.160	-2.400	1.730	0.120	0.310
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	37.22	57.2	2491	380.1	333.9	57.2	2490	380.3	334.9	-2.460	2.490	-0.060	0.210	-2.490	2.310	0.100	0.360

Table A. 255: Matched Droplet Info

A.3.4.1 All Droplets for .LA Image

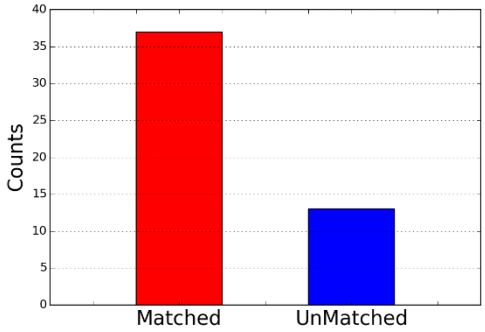


Figure A. 2401: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

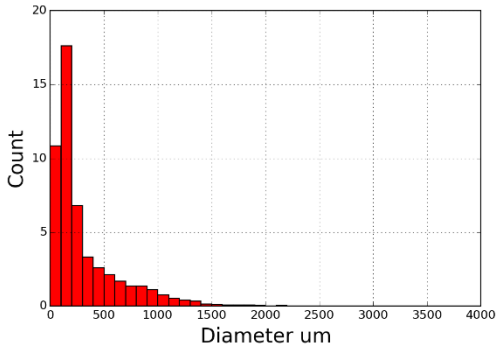


Figure A. 2402: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

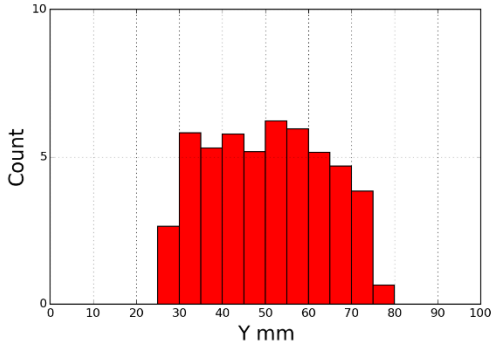


Figure A. 2403: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

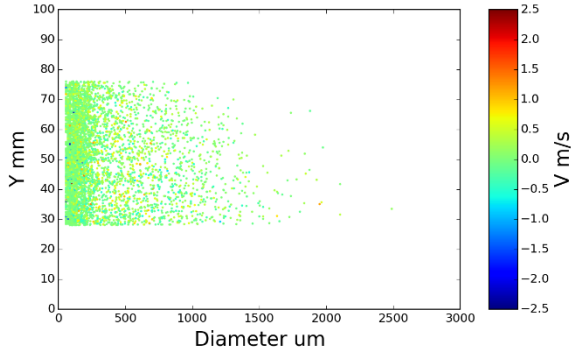


Figure A. 2404: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

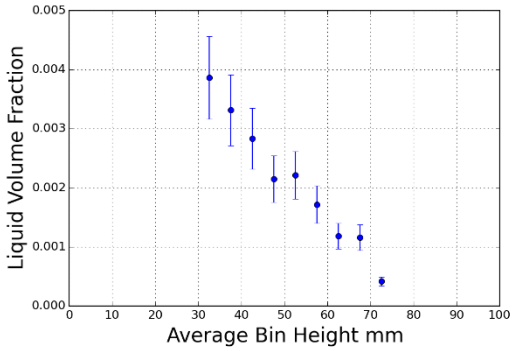


Figure A. 2405: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 All Droplets for .LB Image

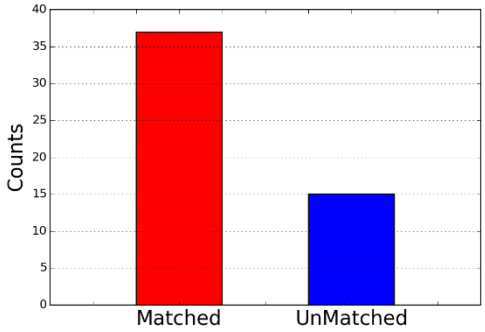


Figure A. 2406: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

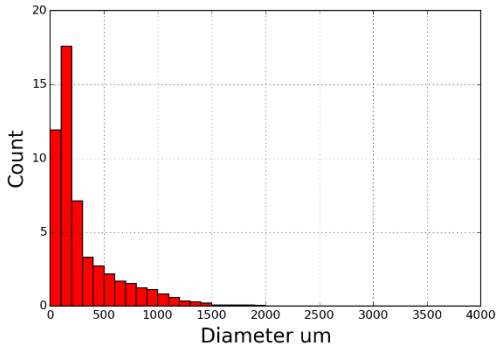


Figure A. 2407: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

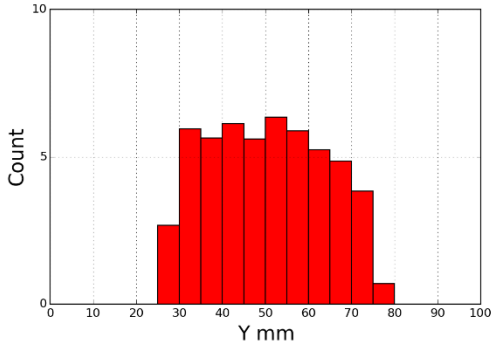


Figure A. 2408: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

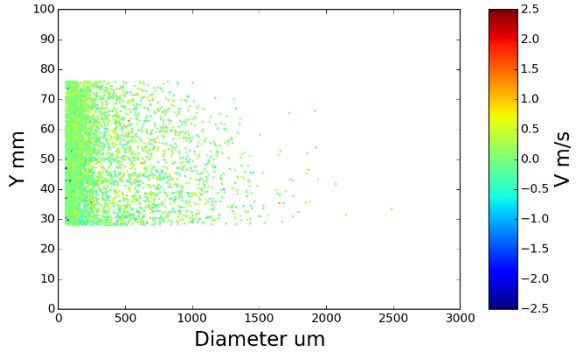


Figure A. 2409: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

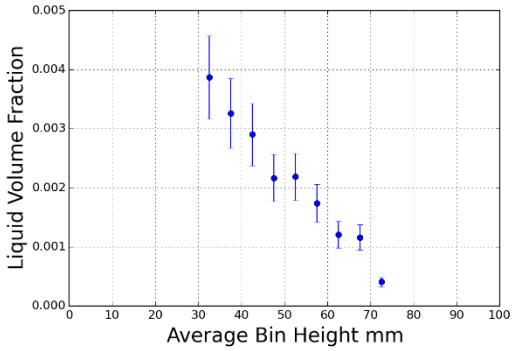


Figure A. 2410: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 Matched Only Droplets for .LA Image

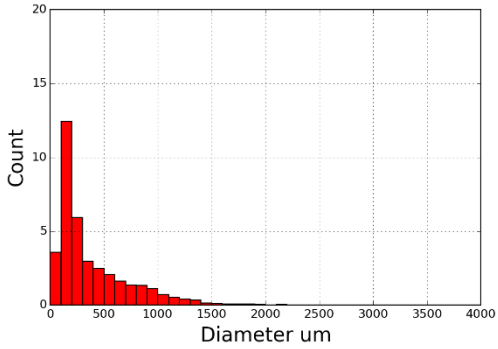


Figure A. 2411: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

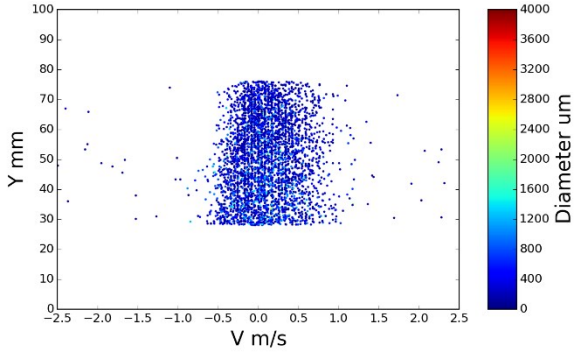


Figure A. 2414: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

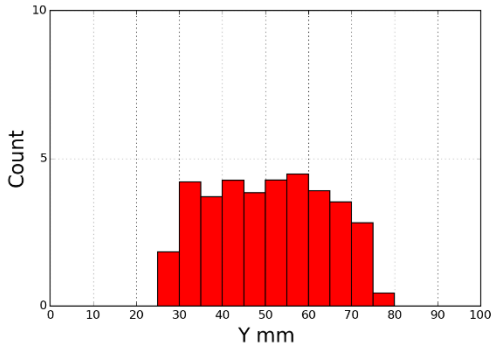


Figure A. 2412: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

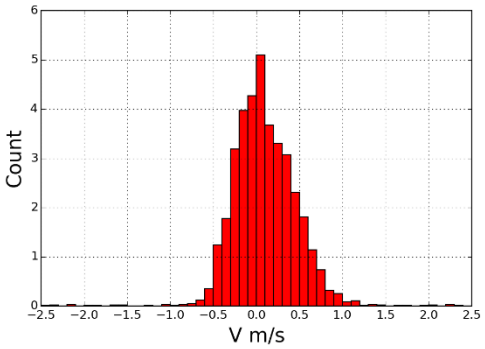


Figure A. 2415: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

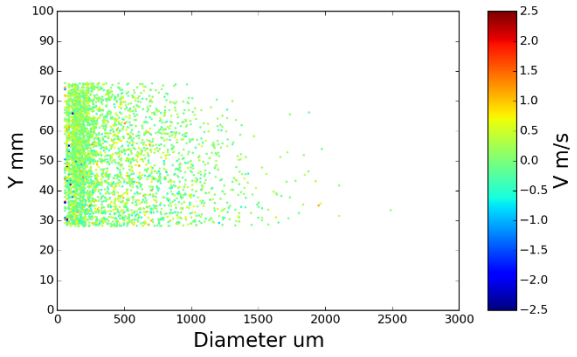


Figure A. 2413: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 Matched Only Droplets for .LB Image

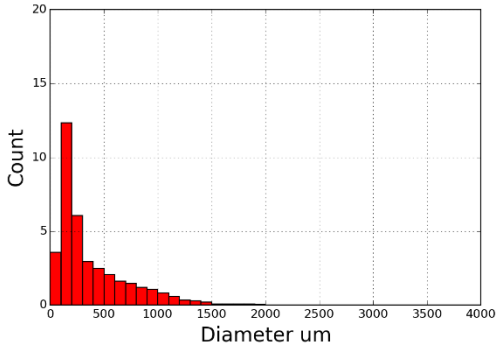


Figure A. 2416: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

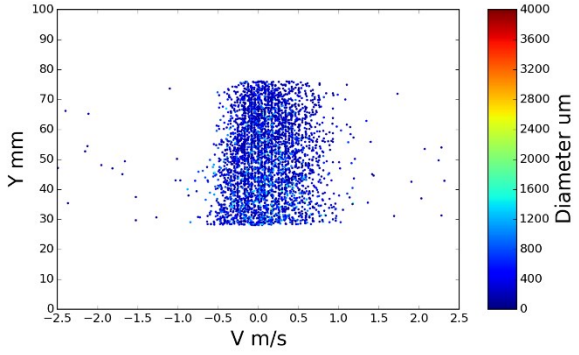


Figure A. 2419: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

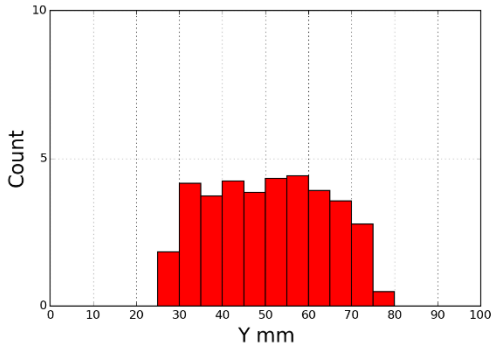


Figure A. 2417: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

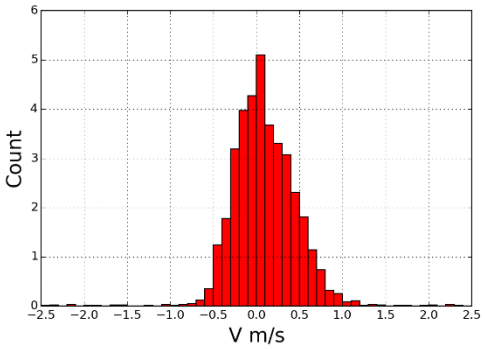


Figure A. 2420: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

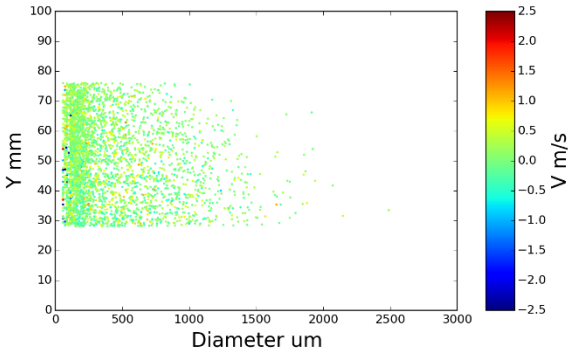


Figure A. 2418: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	18.26	19.83	57.2	2794	330.2	385.4	57.2	2753	315.2	377.1
40-60mm	29.6	31.24	57.2	2738	246.1	327.3	57.2	2613	240.1	320.2
60-80mm	14.17	14.97	57.2	1580	187.9	211.3	57.2	1646	183.4	207.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	62.03	66.04	57.2	2794	257.6	328.3	57.2	2753	249.8	321.3
			Height A (mm)				Height B (mm)			
Highest Particle			76.0293				76.0166			
Lowest Particle			28.0696				28.0596			

Table A. 256: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	11.15	57.2	2794	434.3	438.6	57.2	2753	431.3	437.5	-2.280	2.290	-0.050	0.280	-2.370	2.370	-0.200	0.360
40-60mm	18.51	57.2	2738	318.8	385.6	57.2	2613	318.7	385.5	-2.540	2.460	-0.060	0.260	-2.370	2.540	-0.200	0.320
60-80mm	8.78	57.2	1580	238.1	251.5	57.2	1646	236.2	250.1	-2.320	2.370	-0.100	0.210	-2.290	2.200	-0.150	0.240
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	38.44	57.2	2794	333.9	383.4	57.2	2753	332.6	382.6	-2.540	2.460	-0.060	0.260	-2.370	2.540	-0.190	0.320

Table A. 257: Matched Droplet Info

A.3.4.1 All Droplets for .LA Image

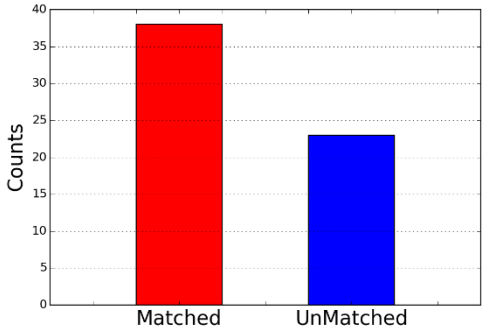


Figure A. 2421: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

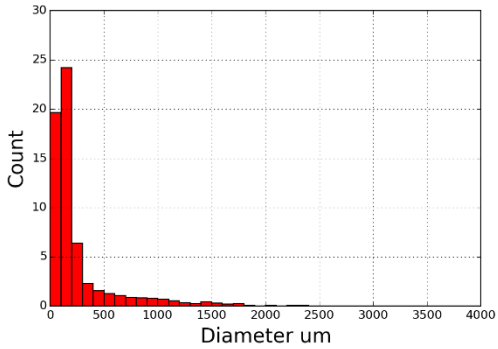


Figure A. 2422: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

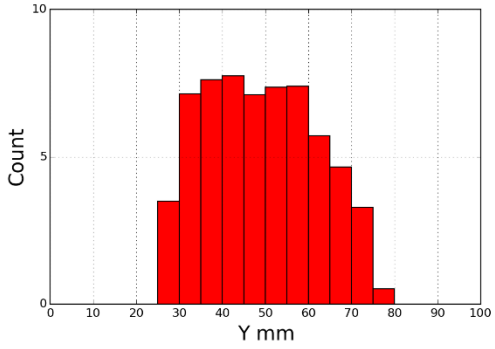


Figure A. 2423: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

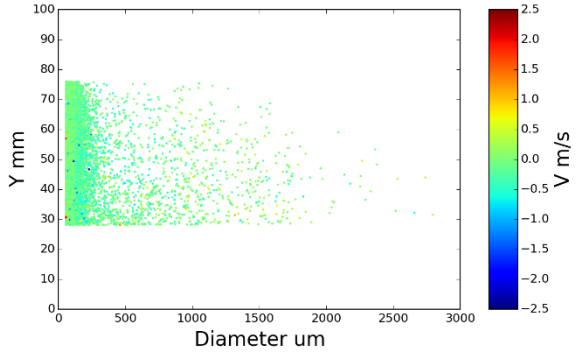


Figure A. 2424: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

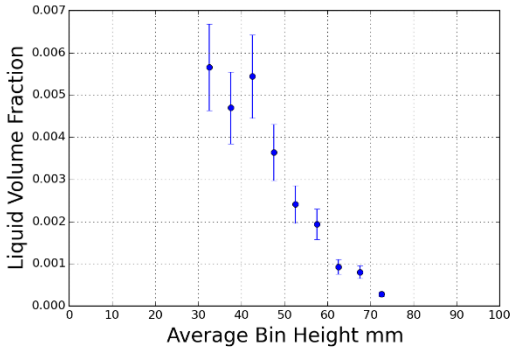


Figure A. 2425: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 All Droplets for .LB Image

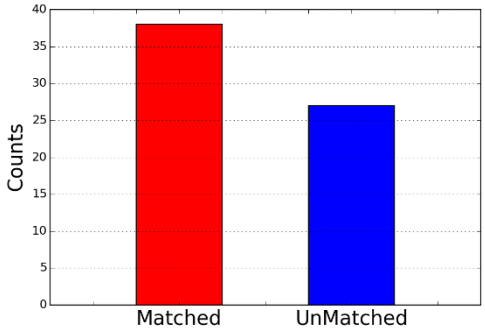


Figure A. 2426: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

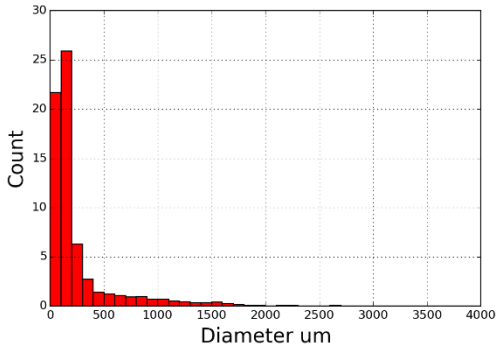


Figure A. 2427: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

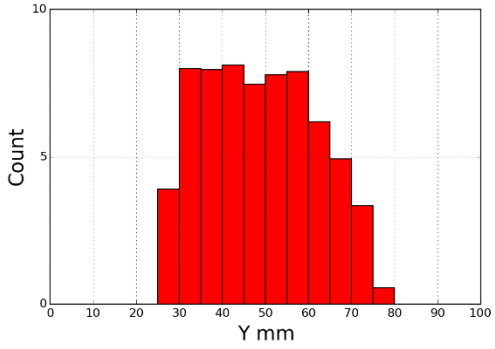


Figure A. 2428: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

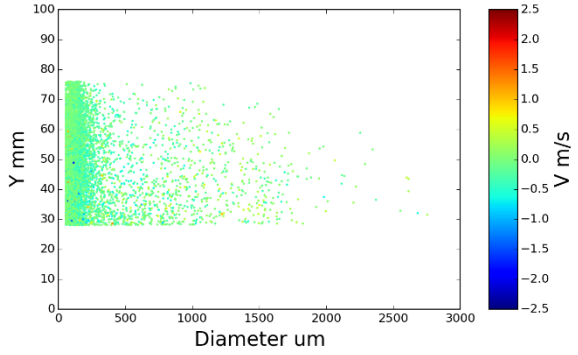


Figure A. 2429: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

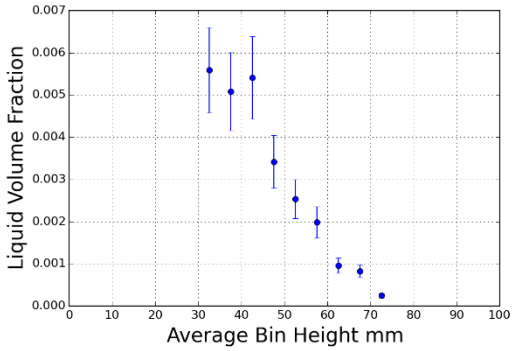


Figure A. 2430: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 Matched Only Droplets for .LA Image

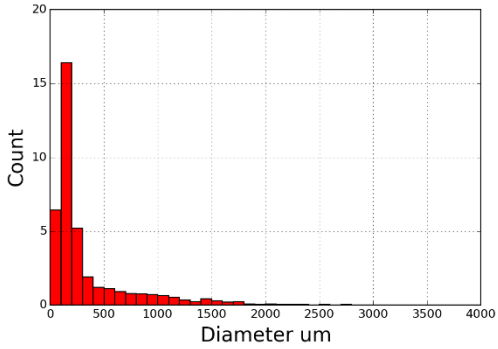


Figure A. 2431: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

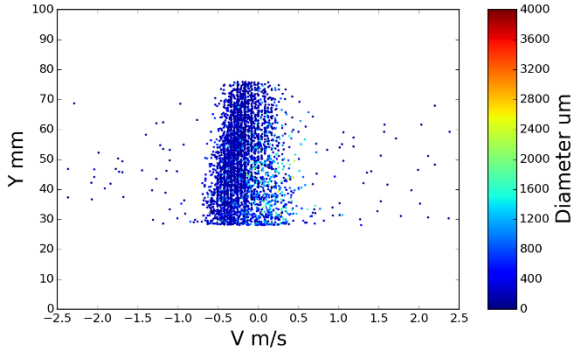


Figure A. 2434: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

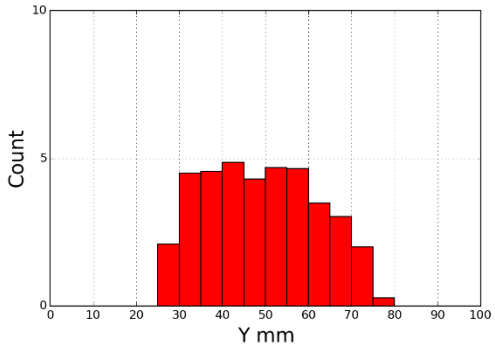


Figure A. 2432: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

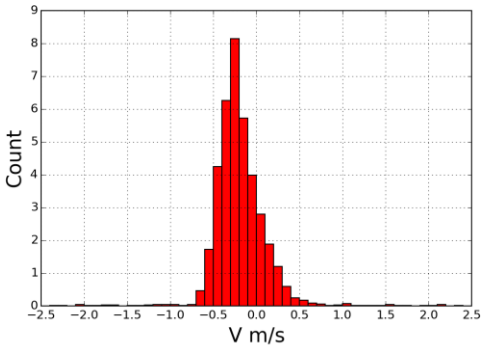


Figure A. 2435: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

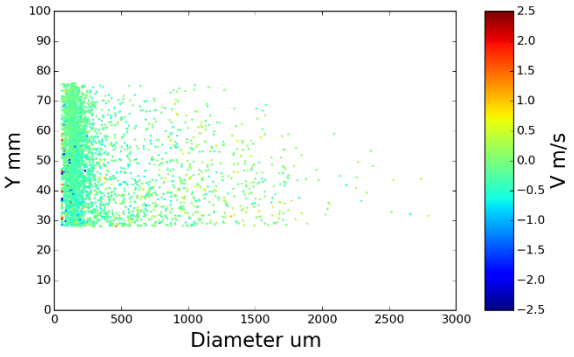


Figure A. 2433: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 Matched Only Droplets for .LB Image

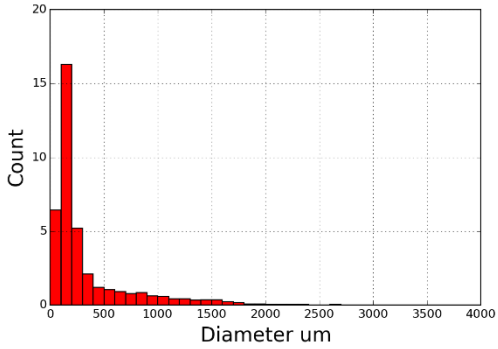


Figure A. 2436: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

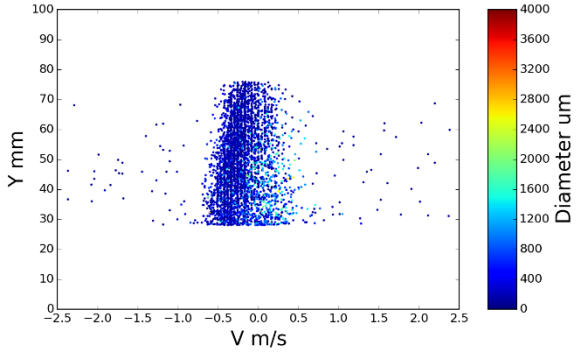


Figure A. 2439: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

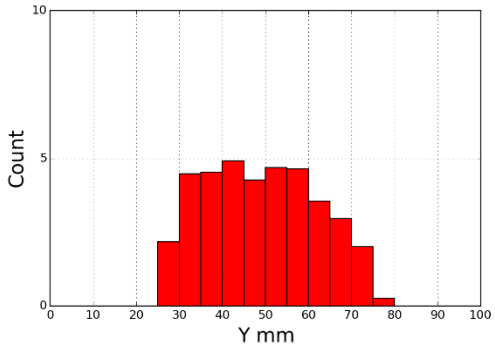


Figure A. 2437: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

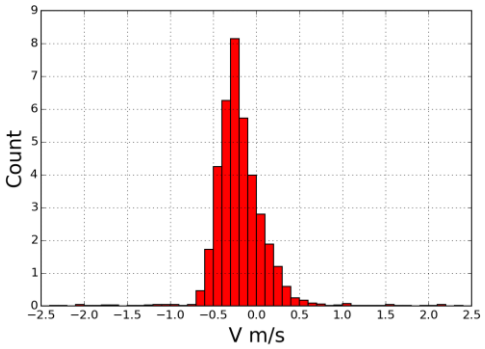


Figure A. 2440: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

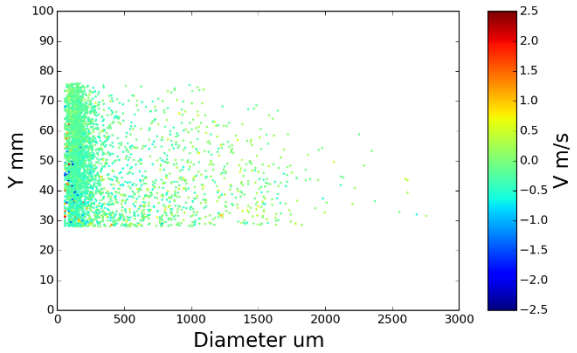


Figure A. 2438: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	22.53	24.38	57.2	3006	336.2	374.1	57.2	2967	326.1	372.2
40-60mm	31.47	34.84	57.2	2995	239.8	333.7	57.2	2941	230.5	322.6
60-80mm	13.46	14.0	57.2	2226	151.5	154.4	57.2	2194	153.4	174.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	67.47	73.23	57.2	3006	254.4	328.5	57.2	2967	247.6	324.6
			Height A (mm)				Height B (mm)			
Highest Particle			75.9912				76.0293			
Lowest Particle			28.0482				28.0482			

Table A. 258: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	12.41	57.2	2718	459.2	419.4	57.2	2656	458.5	421.1	-2.370	2.450	0.020	0.360	-2.540	2.450	-0.090	0.480
40-60mm	17.18	57.2	2995	319.9	404.5	57.2	2941	320.2	406.6	-2.540	2.280	-0.030	0.400	-2.450	2.540	-0.180	0.430
60-80mm	7.18	57.2	2226	180.0	175.1	57.2	2113	180.2	180.6	-2.200	1.780	-0.070	0.230	-2.450	2.320	-0.210	0.250
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	36.77	57.2	2995	339.6	389.6	57.2	2941	339.8	391.7	-2.540	2.450	-0.020	0.360	-2.540	2.540	-0.150	0.420

Table A. 259: Matched Droplet Info

A.3.4.1 All Droplets for .LA Image

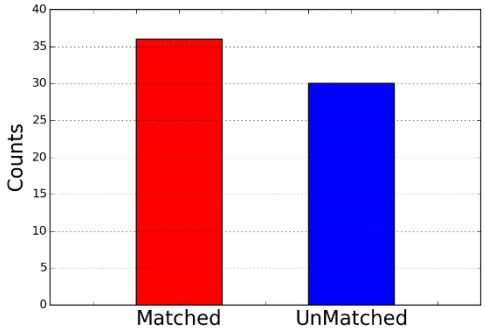


Figure A. 2441: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

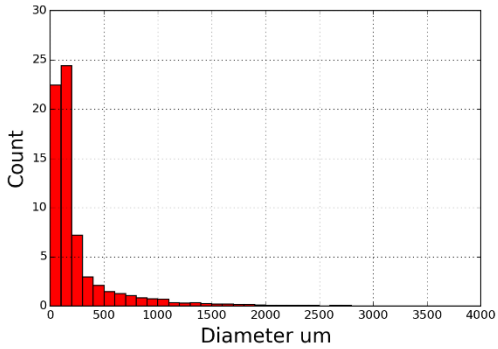


Figure A. 2442: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

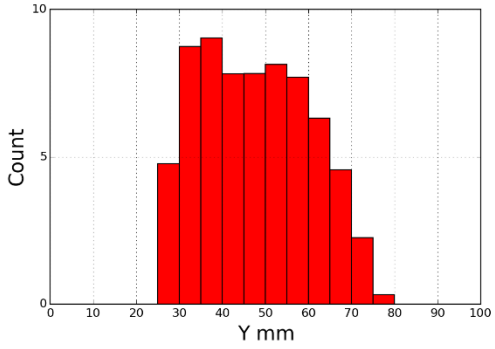


Figure A. 2443: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

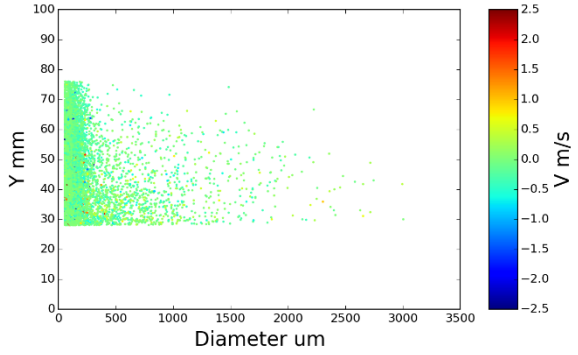


Figure A. 2444: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

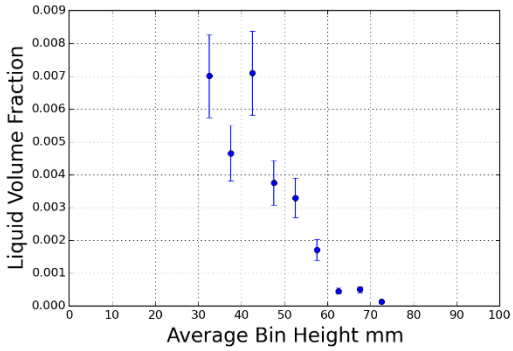


Figure A. 2445: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 All Droplets for .LB Image

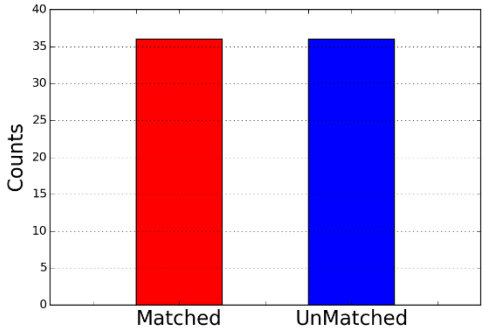


Figure A. 2446: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

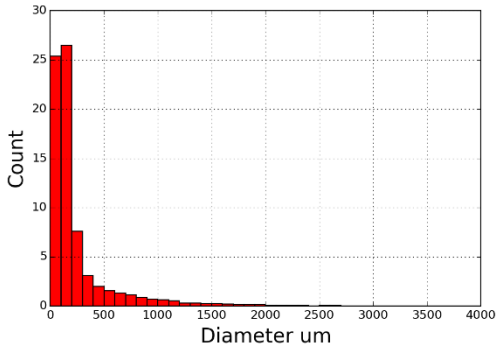


Figure A. 2447: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

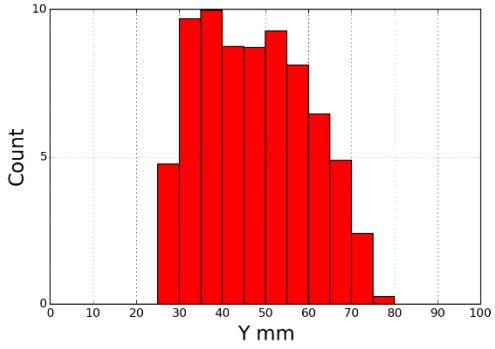


Figure A. 2448: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

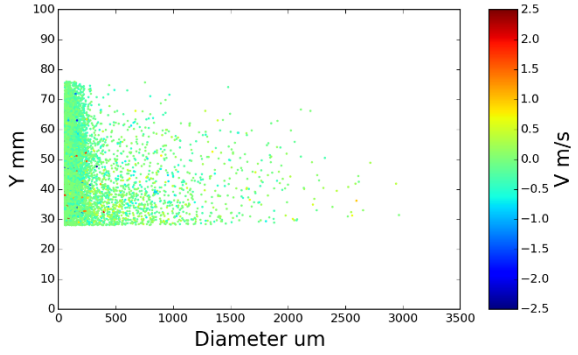


Figure A. 2449: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

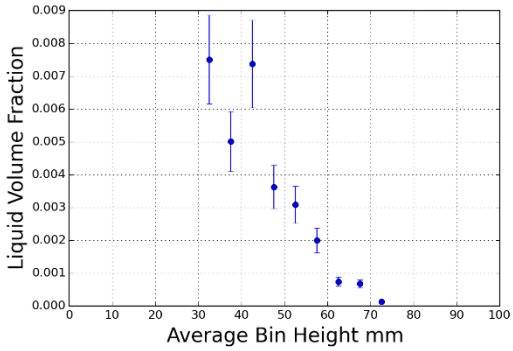


Figure A. 2450: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 Matched Only Droplets for .LA Image

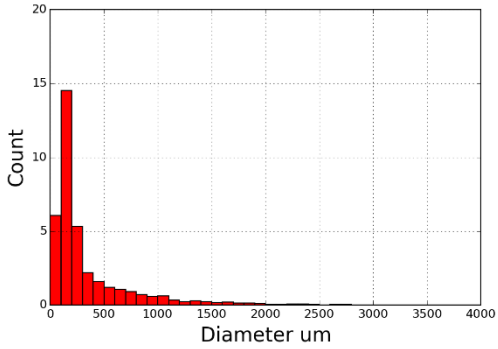


Figure A. 2451: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

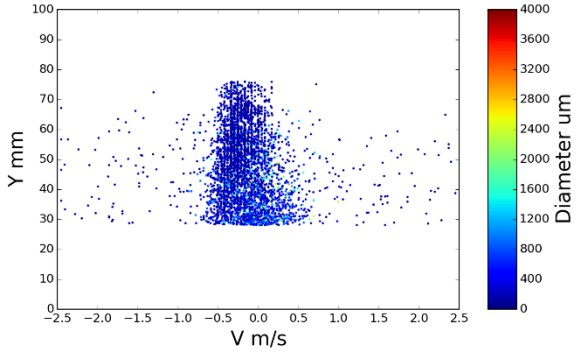


Figure A. 2454: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

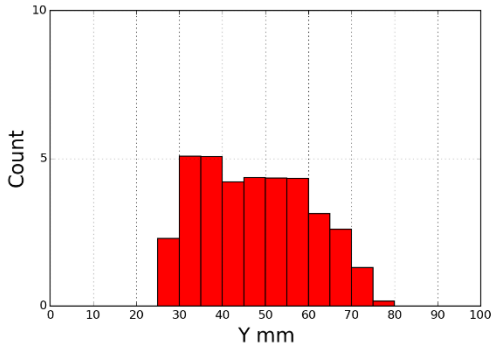


Figure A. 2452: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

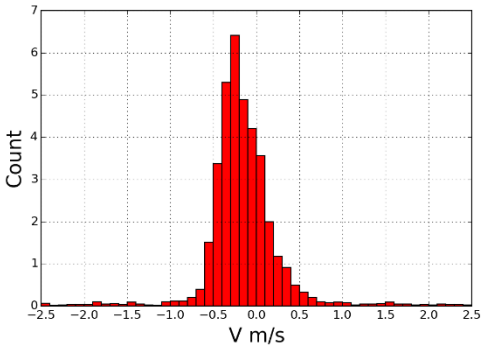


Figure A. 2455: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

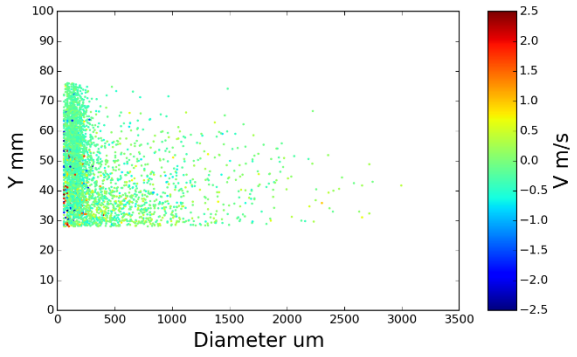


Figure A. 2453: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 Matched Only Droplets for .LB Image

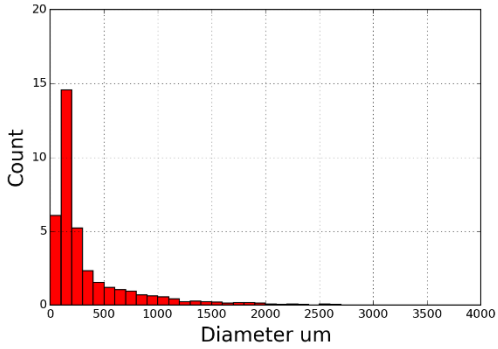


Figure A. 2456: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

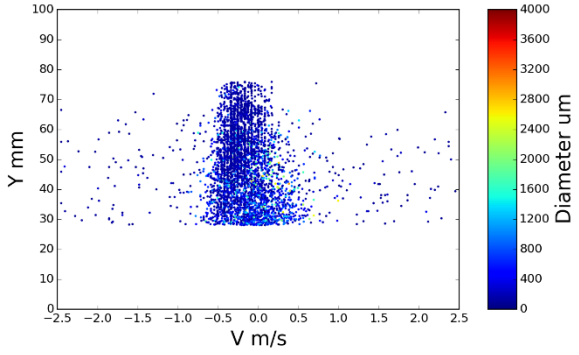


Figure A. 2459: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

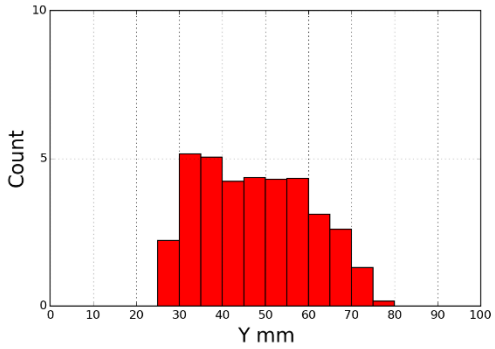


Figure A. 2457: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

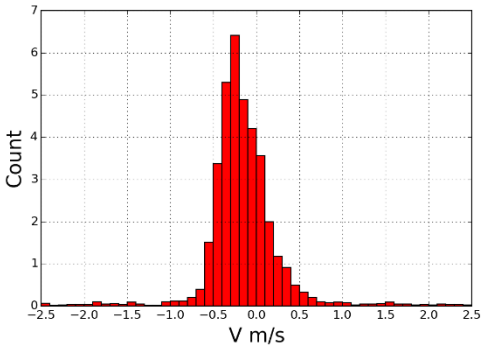


Figure A. 2460: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

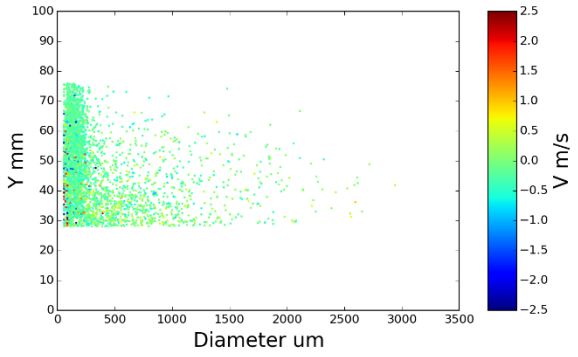


Figure A. 2458: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	23.44	24.37	57.2	2766	351.7	352.1	57.2	2810	344.8	348.0
40-60mm	30.71	33.06	57.2	2786	235.0	267.7	57.2	2950	227.2	253.8
60-80mm	10.18	11.31	57.2	2298	170.3	183.0	57.2	2426	162.9	173.7
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	64.34	68.74	57.2	2786	267.3	298.8	57.2	2950	258.3	288.9
			Height A (mm)				Height B (mm)			
Highest Particle			75.9743				76.0166			
Lowest Particle			28.0482				28.0608			

Table A. 260: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	14.48	57.2	2766	461.4	384.1	57.2	2810	461.6	385.0	-2.450	2.240	0.000	0.290	-2.450	2.460	0.050	0.410
40-60mm	19.32	57.2	2786	294.0	296.9	57.2	2950	292.8	295.2	-2.540	2.490	-0.000	0.320	-2.540	2.360	0.010	0.400
60-80mm	6.04	57.2	2298	209.1	210.1	57.2	2426	208.4	214.9	-2.280	2.240	-0.010	0.240	-2.410	1.650	-0.060	0.290
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	39.84	57.2	2786	342.0	334.7	57.2	2950	341.3	335.0	-2.540	2.490	-0.000	0.300	-2.540	2.460	0.010	0.390

Table A. 261: Matched Droplet Info

A.3.4.1 All Droplets for .LA Image

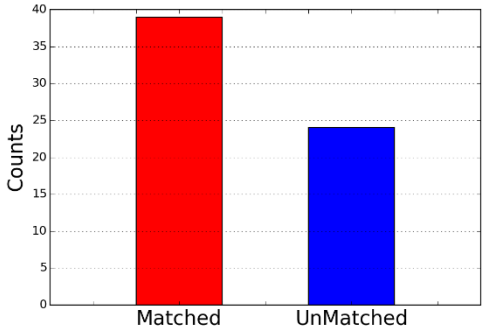


Figure A. 2461: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

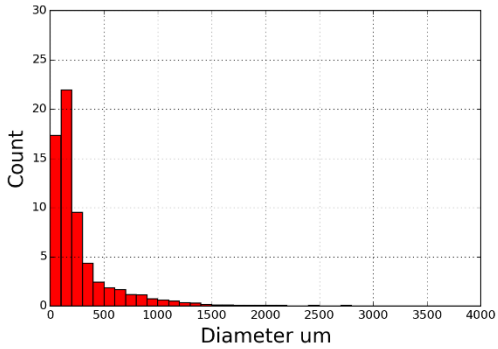


Figure A. 2462: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

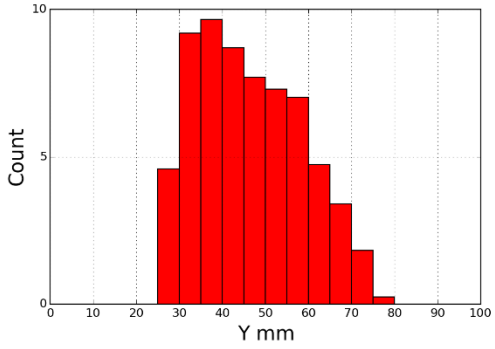


Figure A. 2463: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

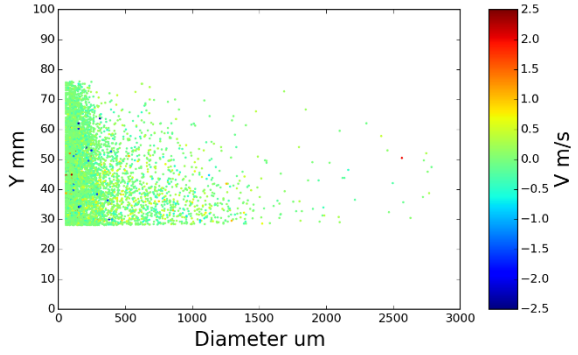


Figure A. 2464: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

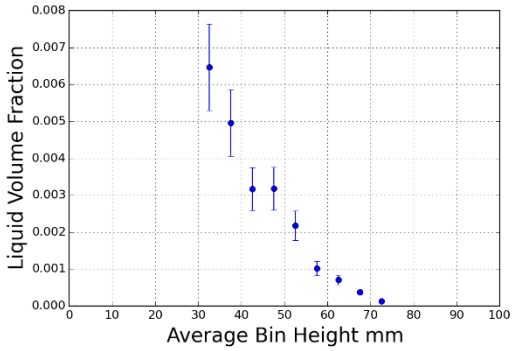


Figure A. 2465: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 All Droplets for .LB Image

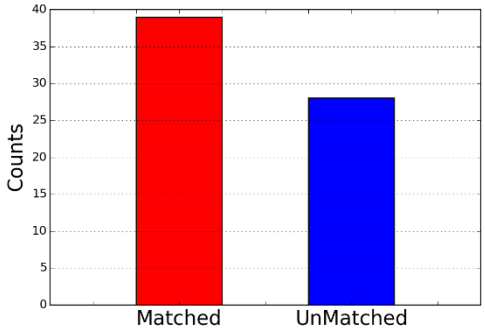


Figure A. 2466: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

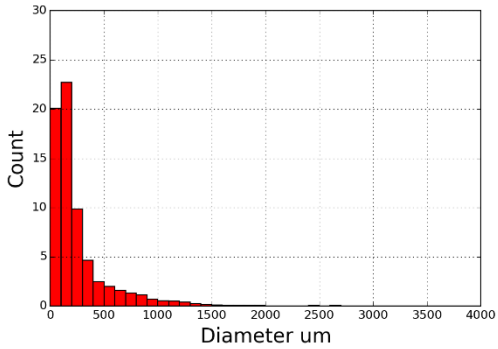


Figure A. 2467: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

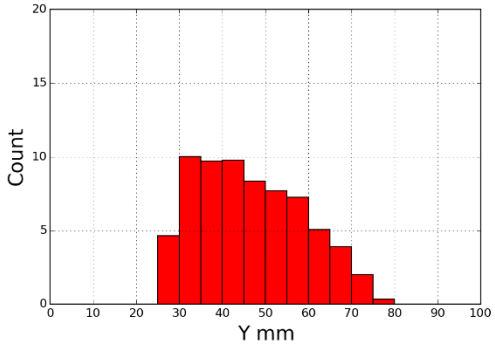


Figure A. 2468: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

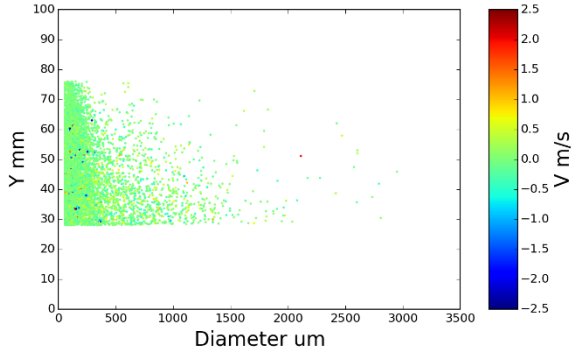


Figure A. 2469: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

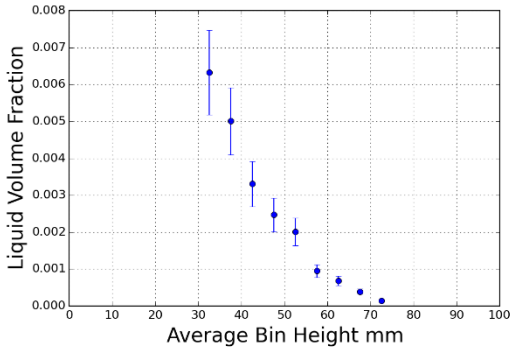


Figure A. 2470: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 Matched Only Droplets for .LA Image

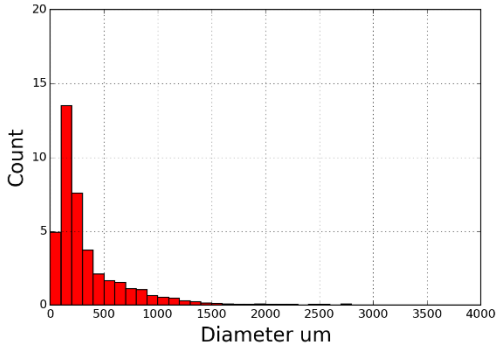


Figure A. 2471: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

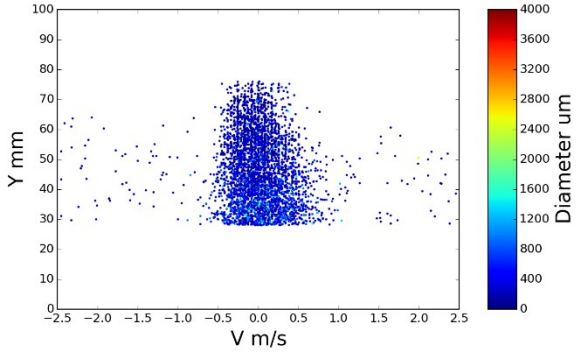


Figure A. 2474: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

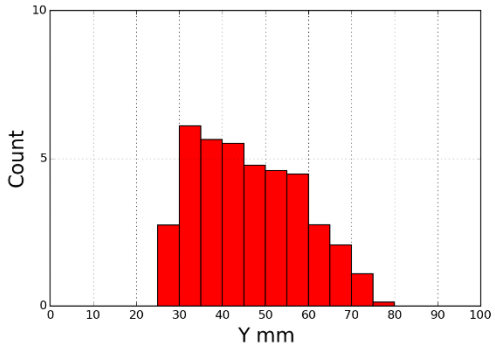


Figure A. 2472: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

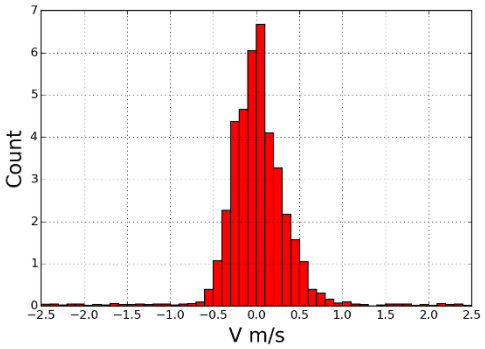


Figure A. 2475: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

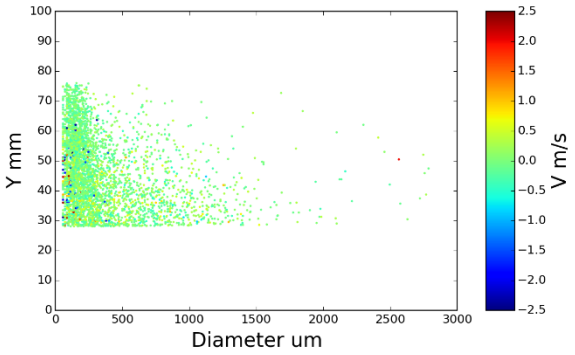


Figure A. 2473: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 Matched Only Droplets for .LB Image

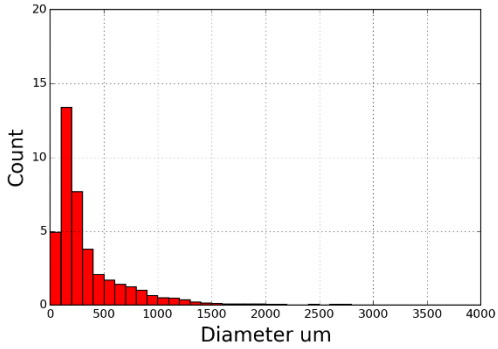


Figure A. 2476: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

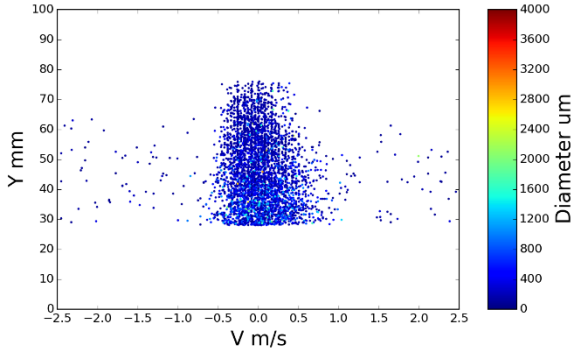


Figure A. 2479: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

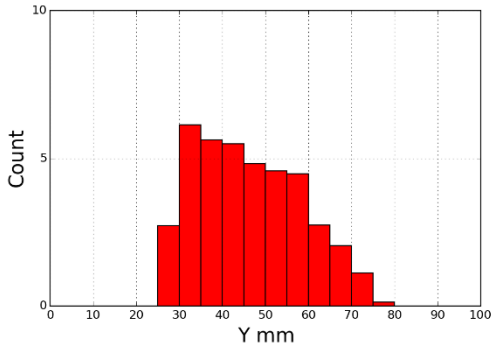


Figure A. 2477: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

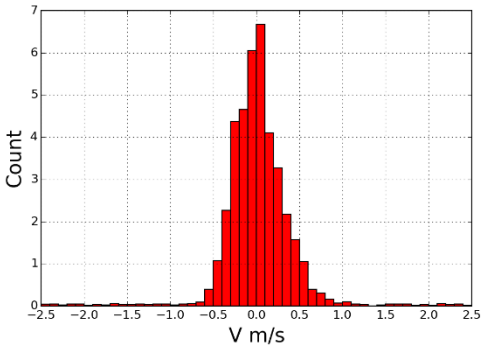


Figure A. 2480: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

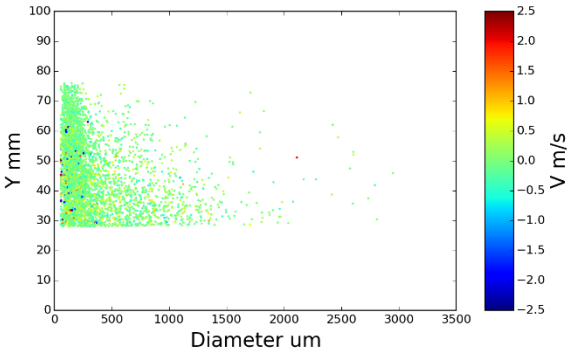


Figure A. 2478: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	21.09	22.24	57.2	2545	359.5	330.7	57.2	2552	351.2	327.6
40-60mm	27.51	29.52	57.2	2029	256.8	237.4	57.2	1956	246.3	234.6
60-80mm	8.87	9.31	57.2	1247	186.6	155.7	57.2	1195	186.5	160.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	57.47	61.07	57.2	2545	283.6	273.4	57.2	2552	275.4	270.8
			Height A (mm)				Height B (mm)			
Highest Particle			75.9474				76.0039			
Lowest Particle			28.0600				28.0482			

Table A. 262: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	12.77	57.2	2545	465.2	357.3	57.2	2552	464.2	355.5	-2.490	1.950	0.010	0.260	-2.420	2.250	0.070	0.340
40-60mm	17.2	57.2	2029	323.4	264.3	57.2	1956	322.9	266.9	-2.490	2.490	0.010	0.270	-2.290	2.540	0.080	0.330
60-80mm	5.05	57.2	1247	238.5	182.7	57.2	1195	237.4	184.7	-1.100	2.200	0.020	0.170	-1.270	1.280	0.040	0.230
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	35.02	57.2	2545	362.8	304.1	57.2	2552	361.9	304.5	-2.490	2.490	0.010	0.260	-2.420	2.540	0.070	0.320

Table A. 263: Matched Droplet Info

A.3.4.1 All Droplets for .LA Image

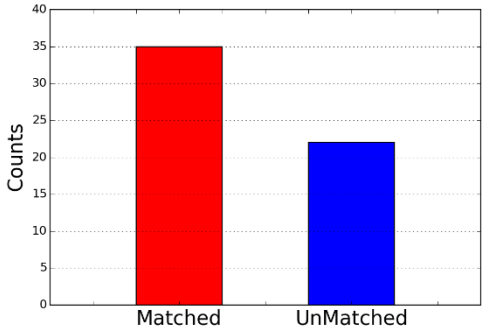


Figure A. 2481: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

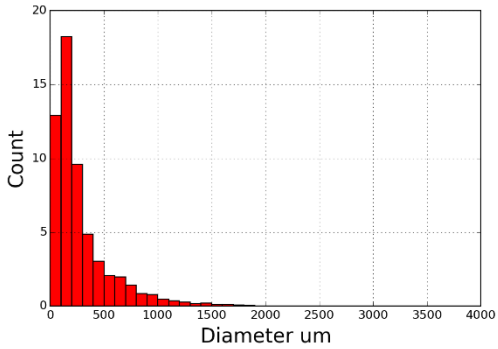


Figure A. 2482: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

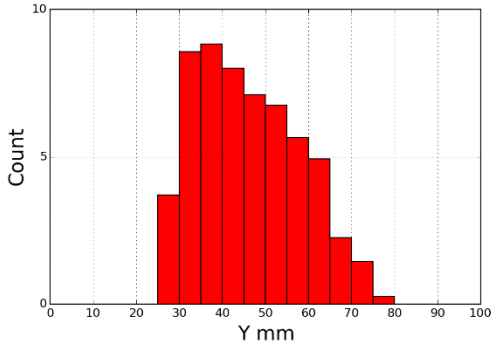


Figure A. 2483: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

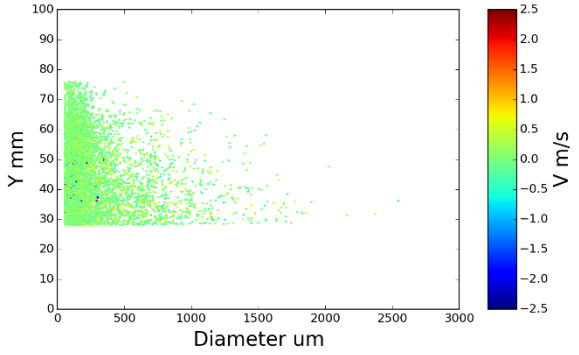


Figure A. 2484: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

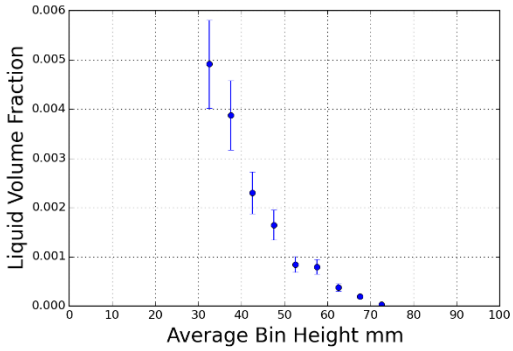


Figure A. 2485: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 All Droplets for .LB Image

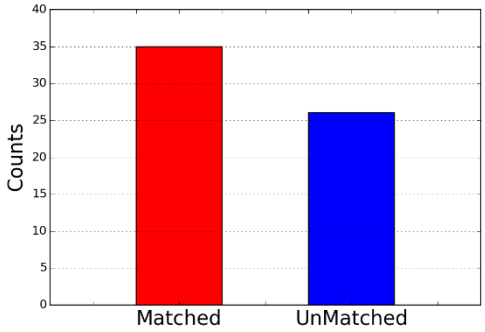


Figure A. 2486: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

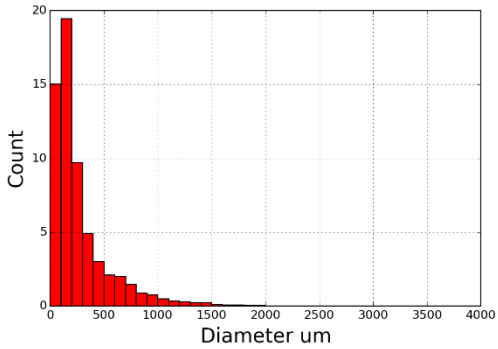


Figure A. 2487: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

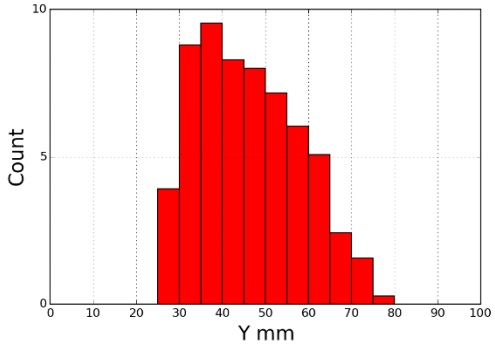


Figure A. 2488: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

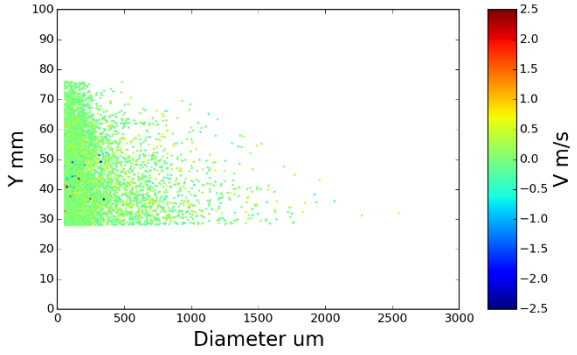


Figure A. 2489: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

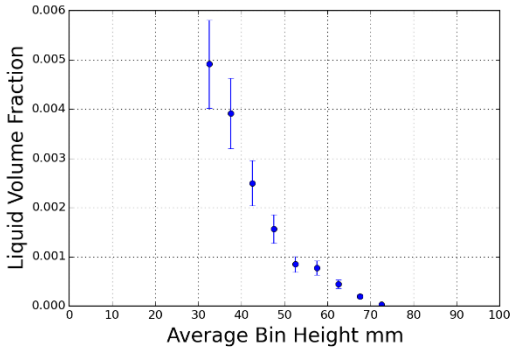


Figure A. 2490: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 Matched Only Droplets for .LA Image

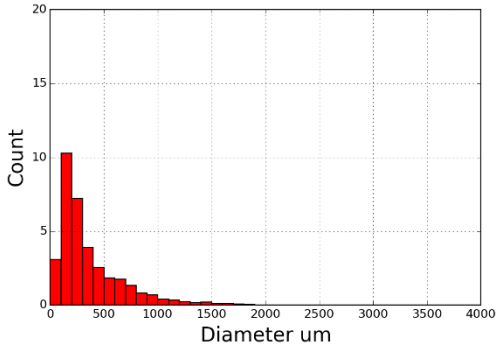


Figure A. 2491: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

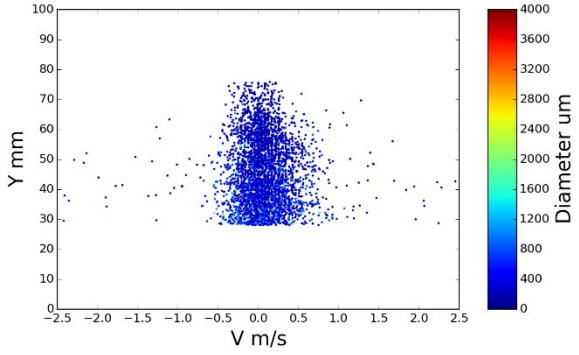


Figure A. 2494: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

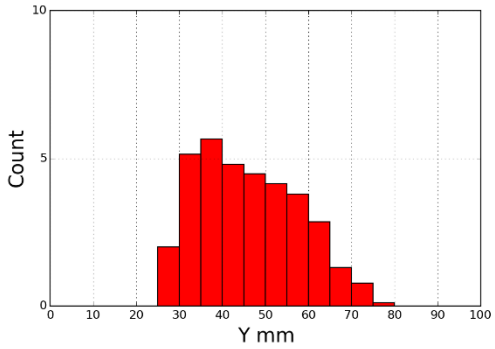


Figure A. 2492: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

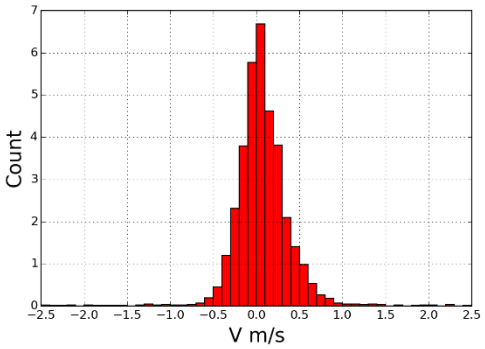


Figure A. 2495: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

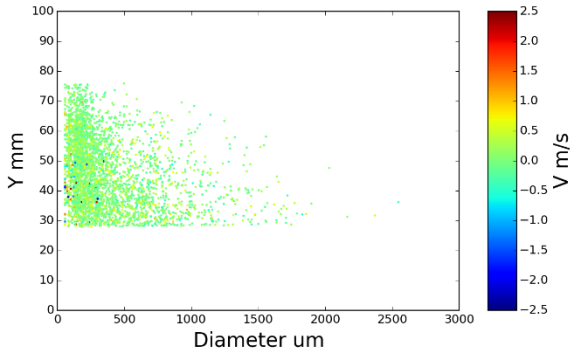


Figure A. 2493: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.1 Matched Only Droplets for .LB Image

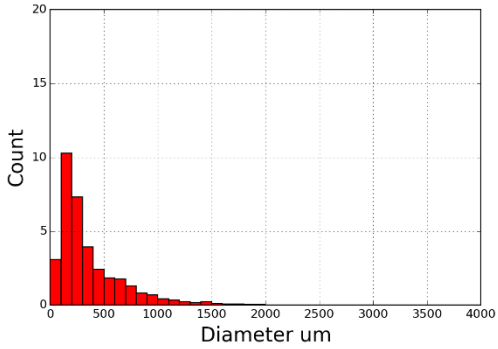


Figure A. 2496: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

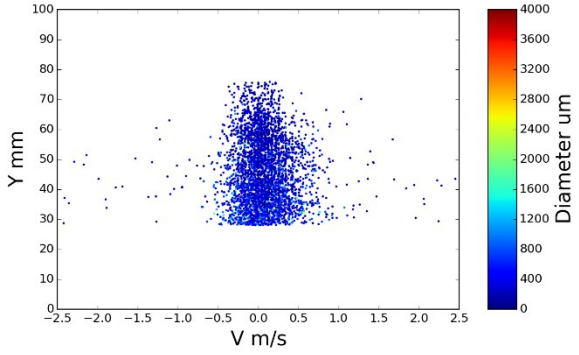


Figure A. 2499: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

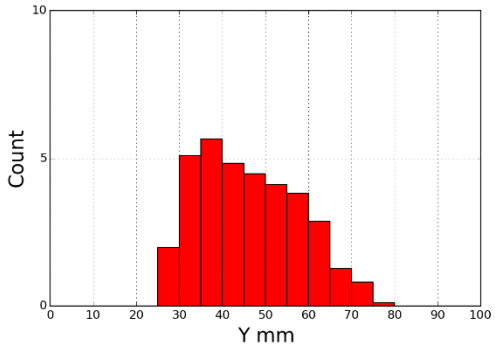


Figure A. 2497: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

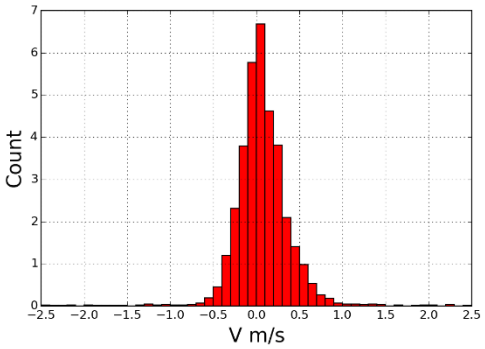


Figure A. 2500: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

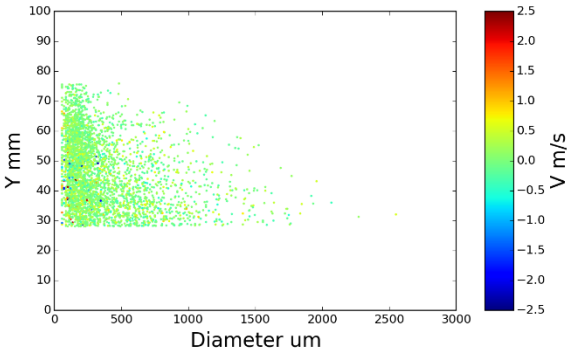


Figure A. 2498: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 Lens 50mm Mag 0_13x

A.3.4.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	26.36	26.39	128.6	3412	724.6	546.7	128.6	3411	741.7	557.8
20-40mm	12.55	12.68	128.6	2604	578.0	391.0	128.6	2298	572.0	385.7
40-60mm	8.39	8.37	128.6	1897	453.2	269.8	128.6	1912	453.9	268.3
60-80mm	5.33	5.29	128.6	1089	390.3	195.8	128.6	1108	387.0	194.5
80-100mm	1.94	1.96	128.6	1200	294.1	129.7	128.6	1213	290.2	131.7
All	54.57	54.69	128.6	3412	601.2	462.2	128.6	3411	607.8	470.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.6470				99.7278			
Lowest Particle			5.1006				5.1006			

Table A. 264: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	14.38	128.6	3389	896.7	569.9	128.6	3411	894.6	570.2	-2.410	2.440	-0.030	0.430	-2.410	2.240	0.030	0.480
20-40mm	8.88	128.6	2539	646.8	386.0	128.6	2298	644.1	388.3	-2.070	2.180	-0.030	0.220	-1.990	1.950	0.020	0.370
40-60mm	6.22	128.6	1897	523.8	270.4	128.6	1912	521.1	267.4	-1.910	0.490	-0.030	0.160	-1.790	1.060	0.050	0.330
60-80mm	4.1	128.6	1089	439.7	192.9	128.6	1108	433.5	193.2	-2.080	0.260	-0.040	0.180	-0.450	1.830	0.080	0.260
80-100mm	1.24	157.5	1200	339.4	136.8	128.6	1213	336.3	139.1	-0.370	2.360	-0.010	0.240	-0.410	0.490	0.050	0.200
All	34.82	128.6	3389	692.7	474.4	128.6	3411	690.1	475.3	-2.410	2.440	-0.030	0.320	-2.410	2.240	0.040	0.400

Table A. 265: Matched Droplet Info

A.3.4.2 All Droplets for .LA Image

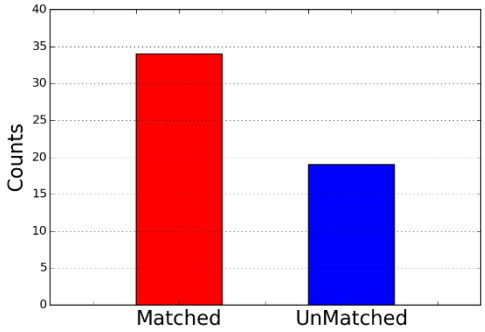


Figure A. 2501: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

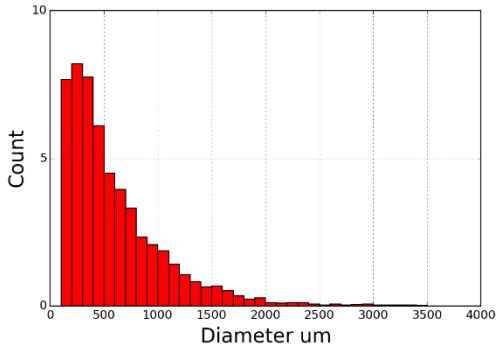


Figure A. 2502: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

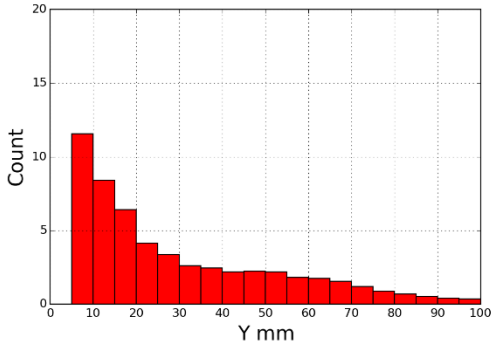


Figure A. 2503: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

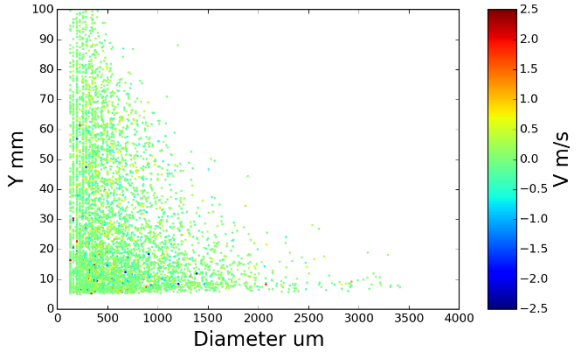


Figure A. 2504: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

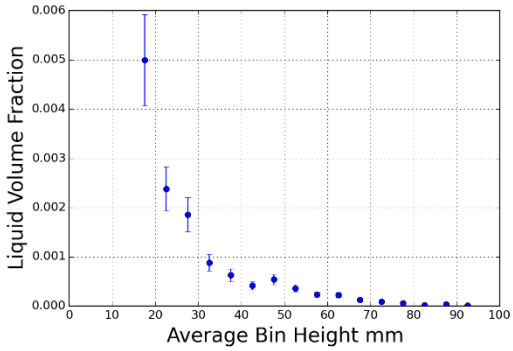


Figure A. 2505: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 All Droplets for .LB Image

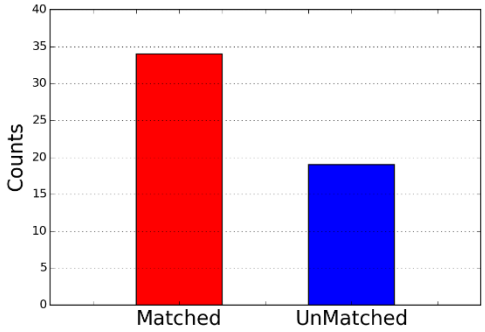


Figure A. 2506: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

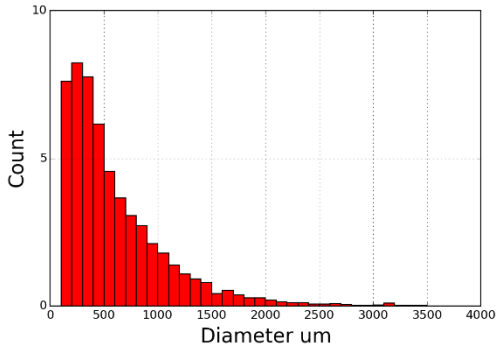


Figure A. 2507: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

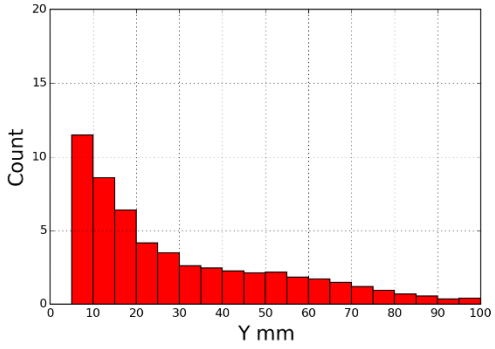


Figure A. 2508: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

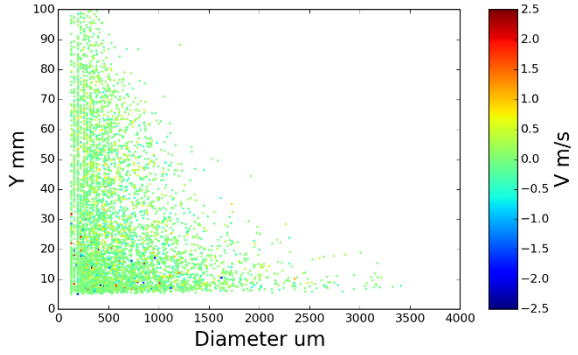


Figure A. 2509: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

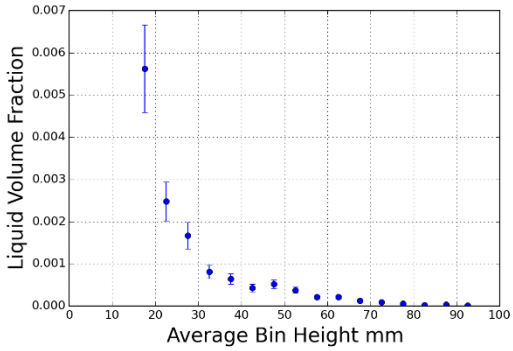


Figure A. 2510: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 Matched Only Droplets for .LA Image

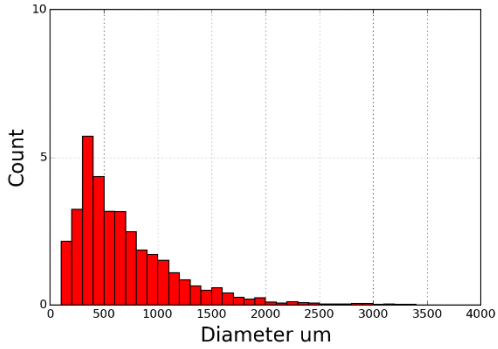


Figure A. 2511: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

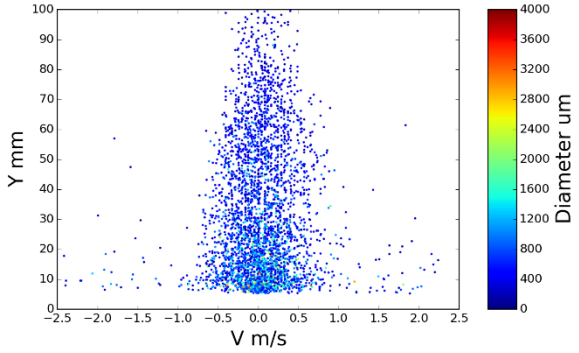


Figure A. 2514: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

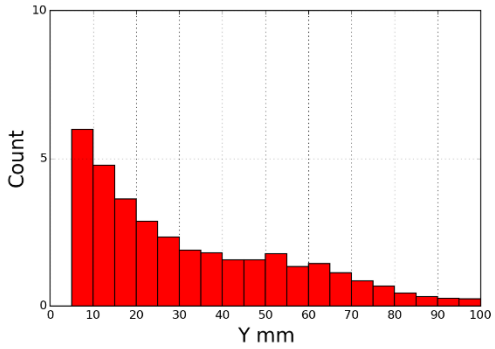


Figure A. 2512: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

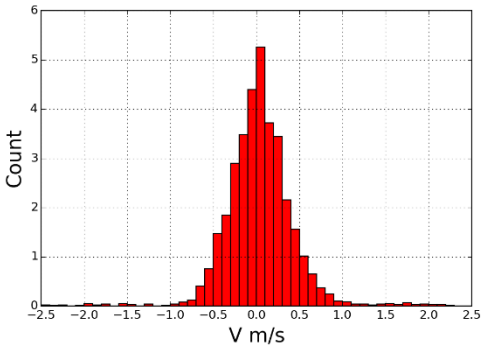


Figure A. 2515: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

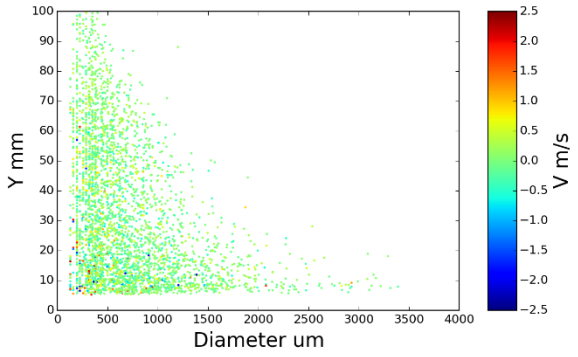


Figure A. 2513: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 Matched Only Droplets for .LB Image

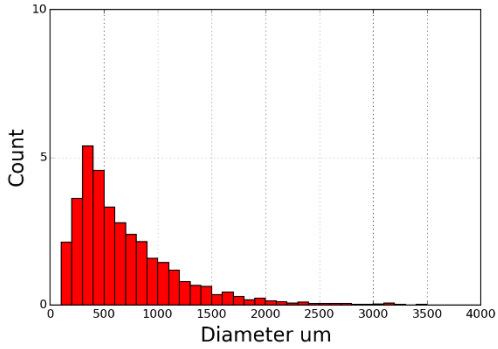


Figure A. 2516: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

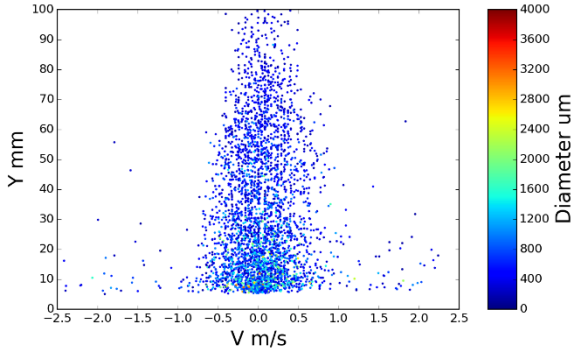


Figure A. 2519: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

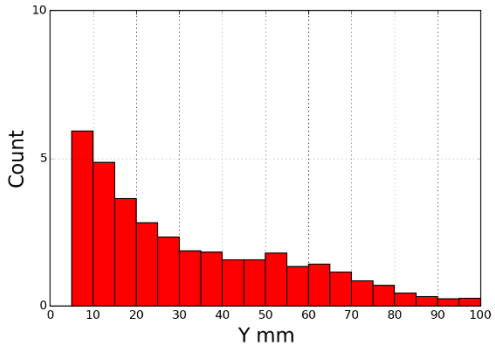


Figure A. 2517: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

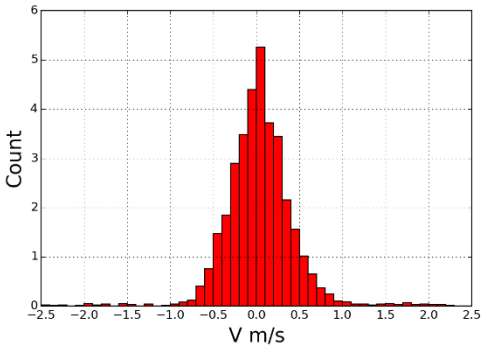


Figure A. 2520: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

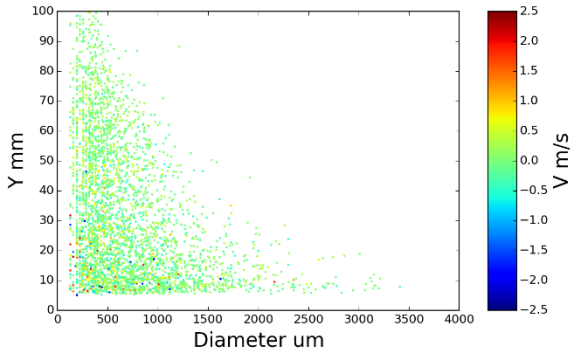


Figure A. 2518: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	39.27	39.98	128.6	3397	757.5	568.7	128.6	3383	751.3	568.3
20-40mm	19.31	19.15	128.6	3069	606.3	424.1	128.6	2649	606.6	419.6
40-60mm	10.34	10.41	128.6	2676	509.5	394.9	128.6	2630	508.8	395.3
60-80mm	3.79	3.65	128.6	1850	424.5	298.5	128.6	1791	423.8	289.7
80-100mm	0.69	0.68	128.6	821.0	321.7	153.3	128.6	1338	332.5	197.8
All	73.4	73.87	128.6	3397	661.5	510.0	128.6	3383	659.6	509.1
			Height A (mm)				Height B (mm)			
Highest Particle			99.8781				99.3621			
Lowest Particle			5.0721				5.0721			

Table A. 266: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	21.69	128.6	3372	917.8	587.9	128.6	3357	908.8	585.3	-2.400	2.430	-0.040	0.480	-2.440	2.420	-0.010	0.550
20-40mm	12.37	128.6	2593	705.0	419.4	128.6	2649	705.0	423.9	-2.320	2.150	-0.030	0.260	-2.150	2.340	-0.050	0.390
40-60mm	6.8	128.6	2676	632.4	416.0	128.6	2630	630.4	417.4	-2.120	0.730	-0.030	0.150	-2.440	1.220	-0.070	0.330
60-80mm	2.44	128.6	1850	513.0	319.7	128.6	1791	505.4	312.5	-1.640	0.450	-0.050	0.160	-2.430	0.740	-0.110	0.290
80-100mm	0.42	157.5	821.0	386.5	154.6	157.5	1338	404.9	213.3	-0.240	0.160	-0.030	0.100	-0.330	0.660	-0.010	0.210
All	43.72	128.6	3372	785.5	523.4	128.6	3357	780.8	522.5	-2.400	2.430	-0.030	0.370	-2.440	2.420	-0.040	0.460

Table A. 267: Matched Droplet Info

A.3.4.2 All Droplets for .LA Image

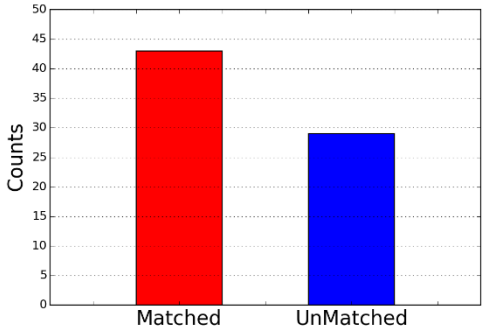


Figure A. 2521: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

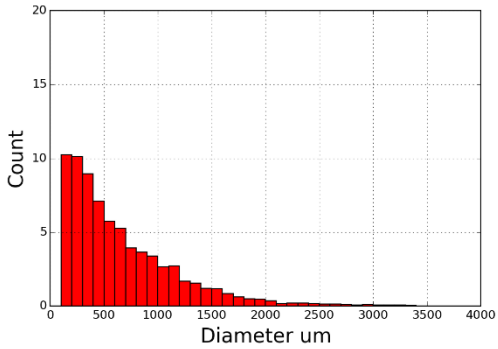


Figure A. 2522: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

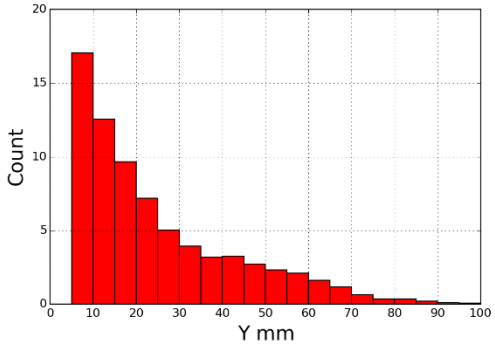


Figure A. 2523: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

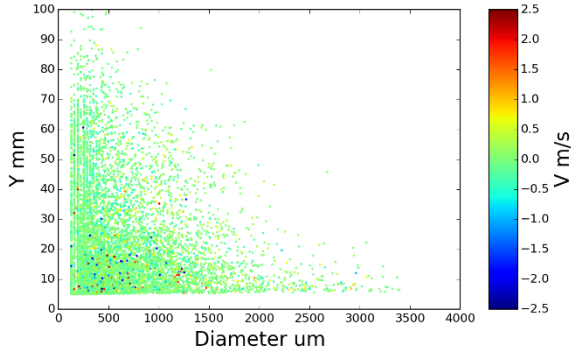


Figure A. 2524: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

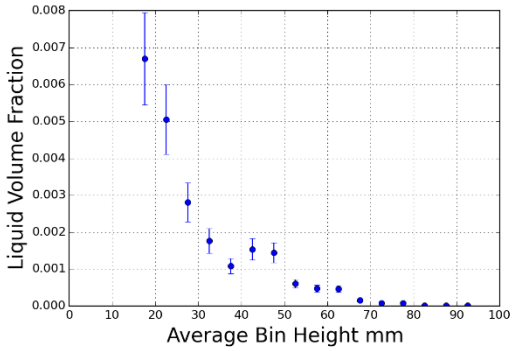


Figure A. 2525: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 All Droplets for .LB Image

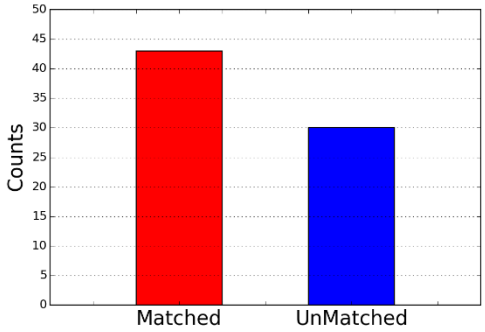


Figure A. 2526: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

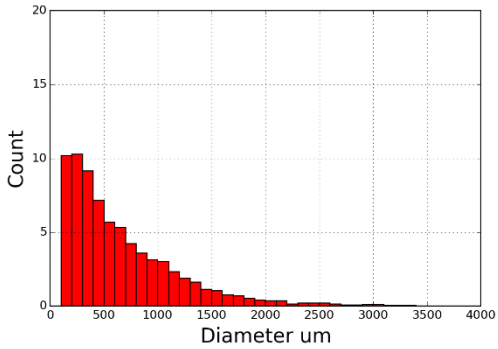


Figure A. 2527: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

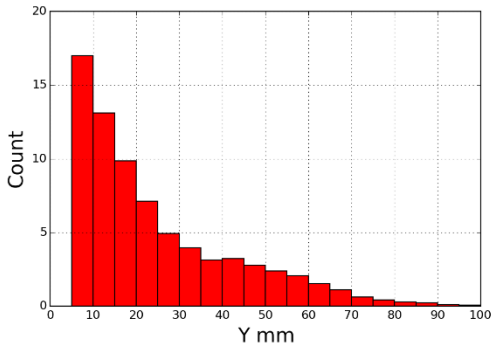


Figure A. 2528: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

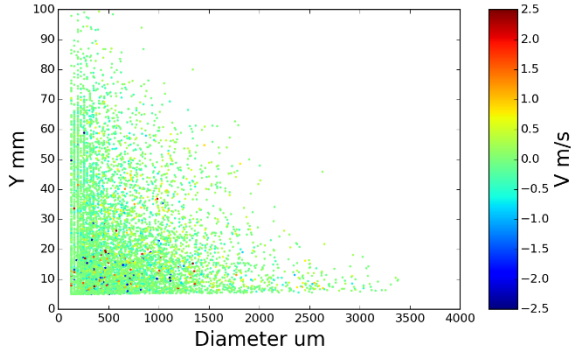


Figure A. 2529: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

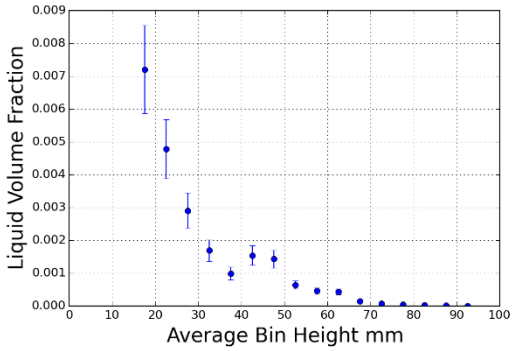


Figure A. 2530: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 Matched Only Droplets for .LA Image

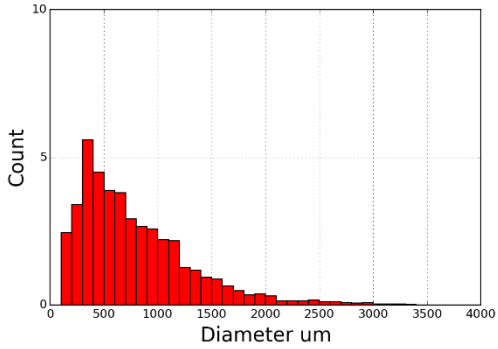


Figure A. 2531: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

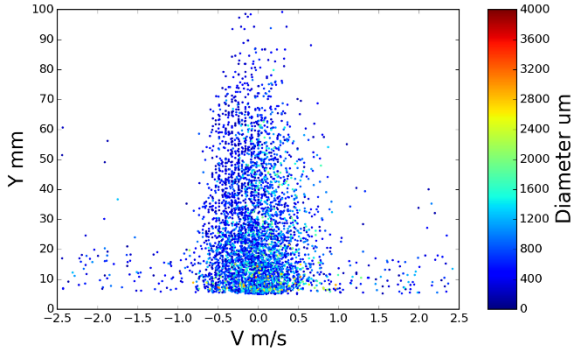


Figure A. 2534: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

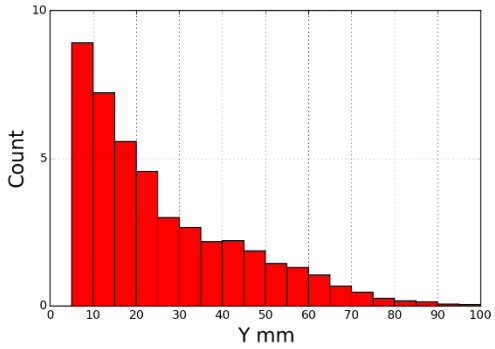


Figure A. 2532: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

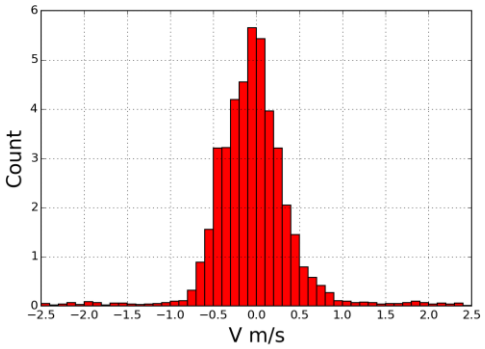


Figure A. 2535: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

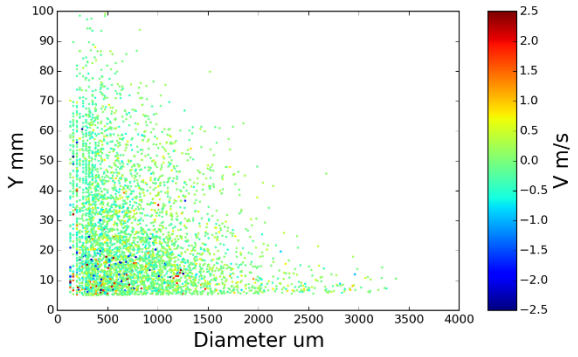


Figure A. 2533: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 Matched Only Droplets for .LB Image

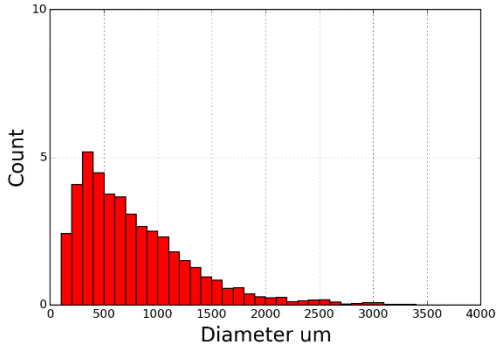


Figure A. 2536: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

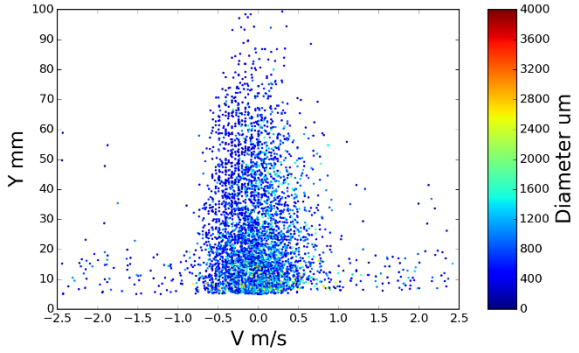


Figure A. 2539: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

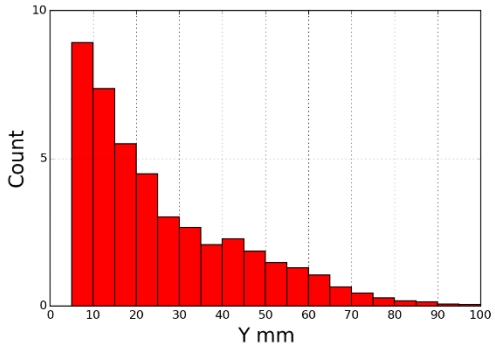


Figure A. 2537: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

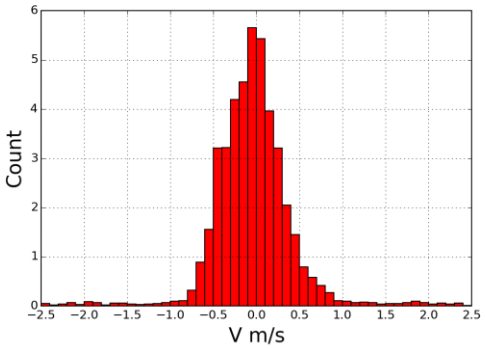


Figure A. 2540: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

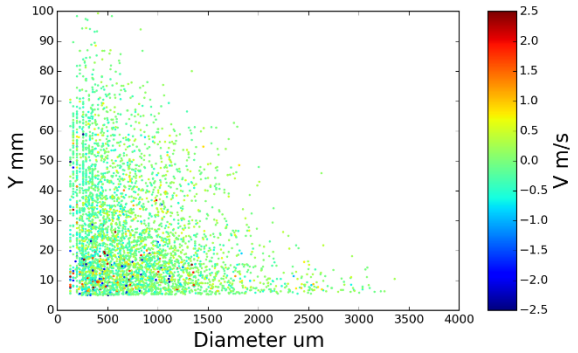


Figure A. 2538: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	40.42	40.51	128.6	3412	734.8	542.0	128.6	3367	736.6	543.3
20-40mm	20.39	20.69	128.6	3136	594.2	416.0	128.6	3195	597.4	422.3
40-60mm	7.7	7.99	128.6	2374	542.8	447.6	128.6	2345	541.0	447.9
60-80mm	1.73	1.85	128.6	1887	449.6	361.5	128.6	1736	455.9	371.4
80-100mm	0.2	0.24	128.6	792.8	355.4	162.8	128.6	810.9	324.1	172.2
All	70.44	71.28	128.6	3412	665.0	501.2	128.6	3367	665.6	503.2
			Height A (mm)				Height B (mm)			
Highest Particle			99.4191				99.1341			
Lowest Particle			5.0721				5.0721			

Table A. 268: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	21.05	128.6	3309	910.6	555.2	128.6	3367	907.7	557.3	-2.430	2.440	-0.020	0.480	-2.440	2.440	0.010	0.530
20-40mm	12.75	128.6	3136	698.8	429.1	128.6	3195	700.0	432.1	-2.430	2.350	-0.020	0.340	-2.430	2.420	-0.040	0.420
40-60mm	4.85	128.6	2374	672.0	478.4	128.6	2345	674.3	482.3	-2.290	2.290	-0.020	0.320	-2.120	2.280	-0.110	0.380
60-80mm	0.83	157.5	1887	665.2	409.4	128.6	1736	677.9	432.3	-0.420	1.220	-0.040	0.190	-1.380	0.610	-0.160	0.270
80-100mm	0.11	192.9	792.8	393.5	166.9	192.9	810.9	398.8	175.6	-0.310	0.280	-0.010	0.140	-0.410	0.550	-0.070	0.300
All	39.59	128.6	3309	806.6	517.1	128.6	3367	806.2	519.6	-2.430	2.440	-0.020	0.410	-2.440	2.440	-0.020	0.480

Table A. 269: Matched Droplet Info

A.3.4.2 All Droplets for .LA Image

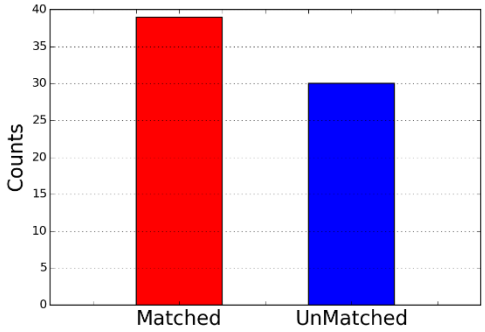


Figure A. 2541: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

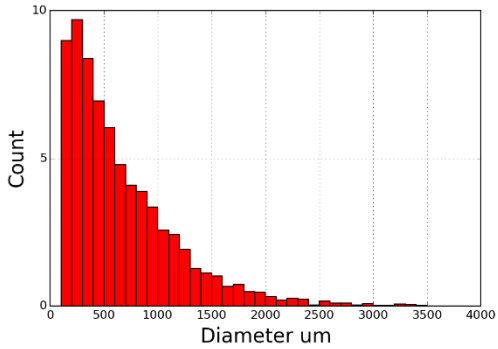


Figure A. 2542: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

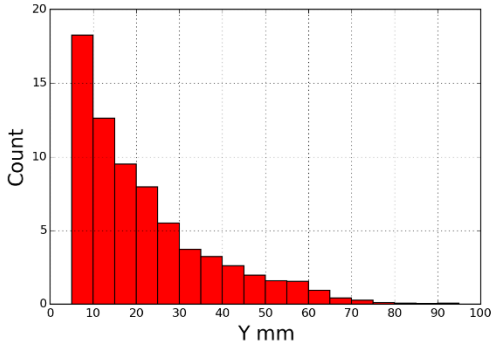


Figure A. 2543: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

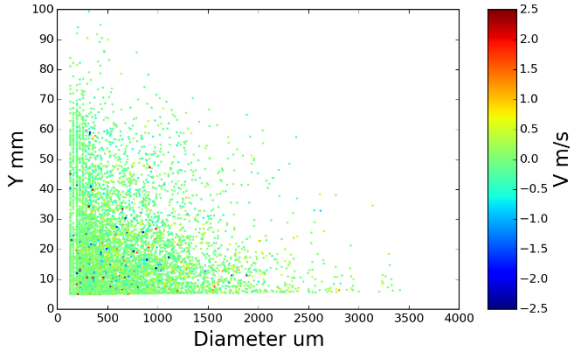


Figure A. 2544: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

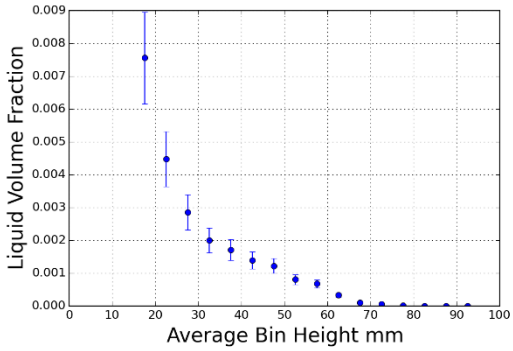


Figure A. 2545: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 All Droplets for .LB Image

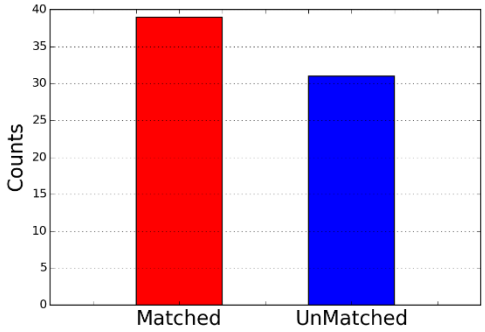


Figure A. 2546: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

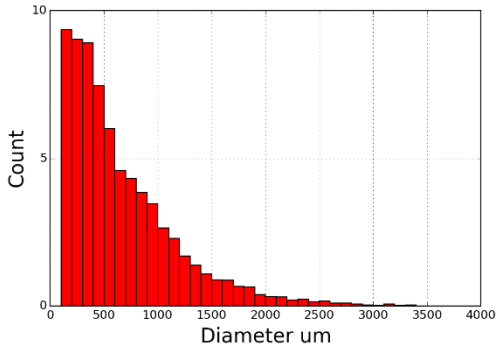


Figure A. 2547: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

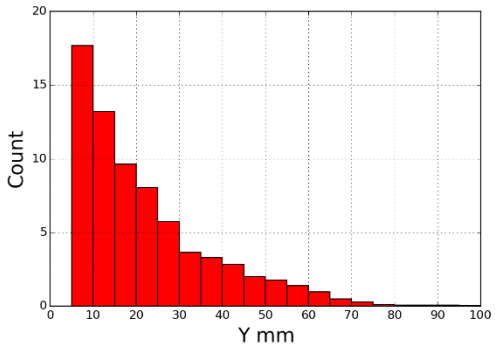


Figure A. 2548: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

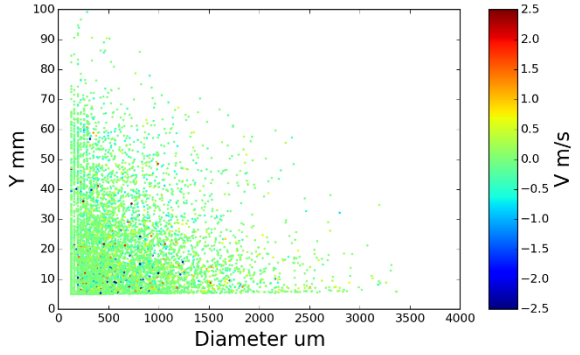


Figure A. 2549: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

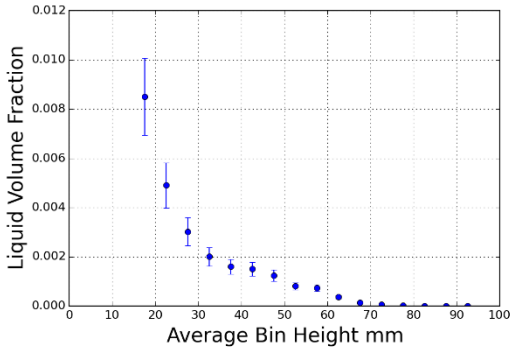


Figure A. 2550: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 Matched Only Droplets for .LA Image

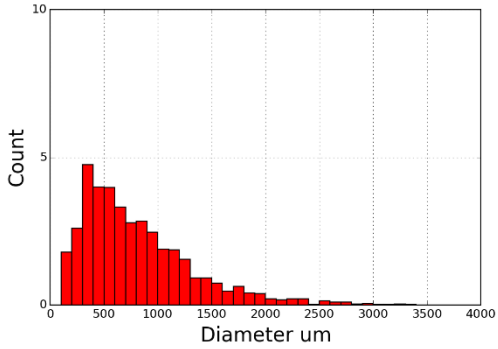


Figure A. 2551: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

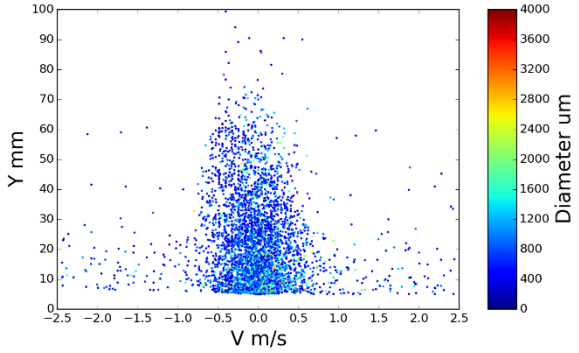


Figure A. 2554: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

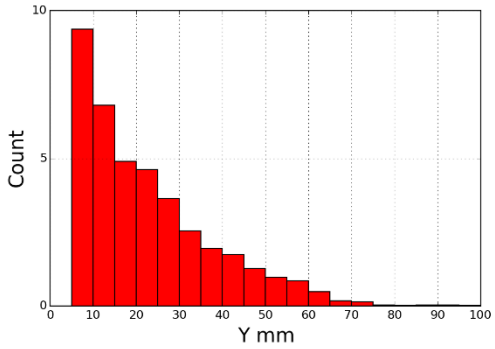


Figure A. 2552: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

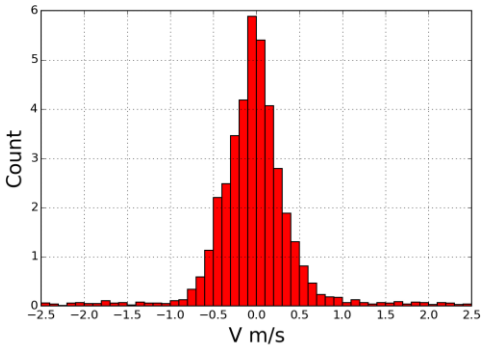


Figure A. 2555: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

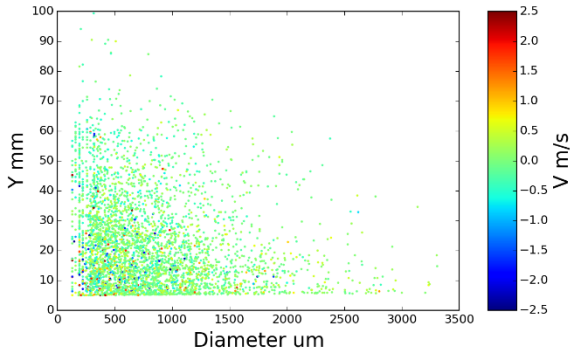


Figure A. 2553: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 Matched Only Droplets for .LB Image

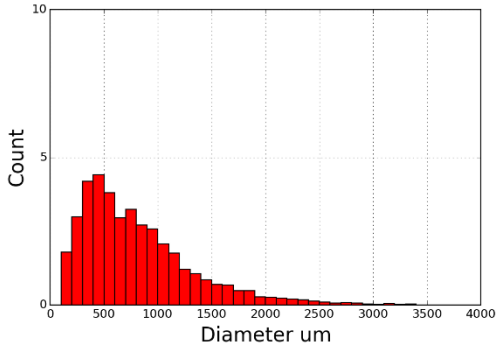


Figure A. 2556: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

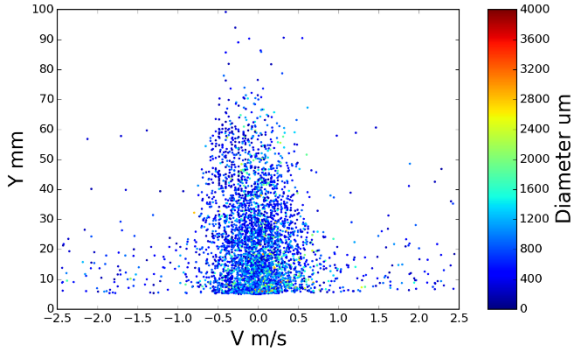


Figure A. 2559: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

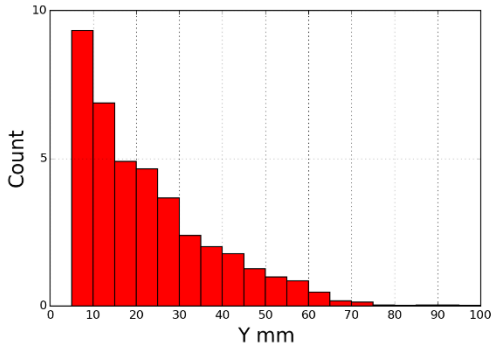


Figure A. 2557: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

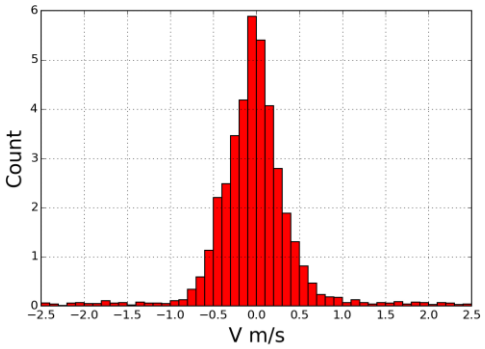


Figure A. 2560: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

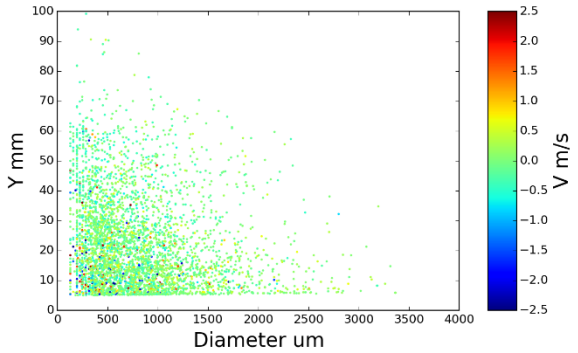


Figure A. 2558: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	38.89	39.78	128.6	3419	718.0	521.5	128.6	3381	710.5	525.1
20-40mm	21.62	22.0	128.6	3188	575.6	405.3	128.6	3002	573.4	407.7
40-60mm	7.55	7.75	128.6	2870	460.7	378.9	128.6	2637	448.2	366.4
60-80mm	0.92	0.87	128.6	1422	371.7	240.5	128.6	1312	380.5	230.0
80-100mm	0.03	0.05	128.6	902.6	563.4	323.1	128.6	938.5	445.1	313.0
All	69.01	70.45	128.6	3419	640.5	480.1	128.6	3381	634.6	481.8
			Height A (mm)				Height B (mm)			
Highest Particle			90.8706				90.6141			
Lowest Particle			5.0721				5.0721			

Table A. 270: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	19.94	128.6	3419	887.0	552.4	128.6	3381	885.5	555.5	-2.430	2.430	-0.010	0.490	-2.440	2.420	0.010	0.560
20-40mm	13.2	128.6	3188	692.6	420.8	128.6	3002	686.6	417.0	-2.250	2.400	-0.020	0.290	-2.380	2.440	0.040	0.400
40-60mm	4.69	128.6	2870	555.0	402.9	128.6	2637	545.4	389.9	-2.300	1.990	-0.010	0.260	-2.120	1.590	-0.010	0.330
60-80mm	0.55	128.6	1422	465.3	256.0	157.5	1312	457.0	235.8	-0.260	1.750	0.030	0.260	-0.900	0.480	-0.030	0.270
80-100mm	0.02	658.9	902.6	780.8	121.8	222.8	938.5	616.0	296.4	-0.030	0.050	0.010	0.040	0.010	0.580	0.300	0.280
All	38.4	128.6	3419	773.5	506.2	128.6	3381	769.0	506.0	-2.430	2.430	-0.010	0.400	-2.440	2.440	0.020	0.480

Table A. 271: Matched Droplet Info

A.3.4.2 All Droplets for .LA Image

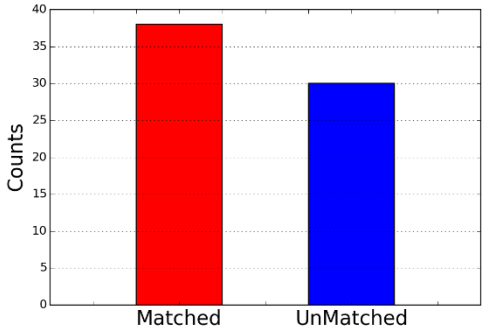


Figure A. 2561: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

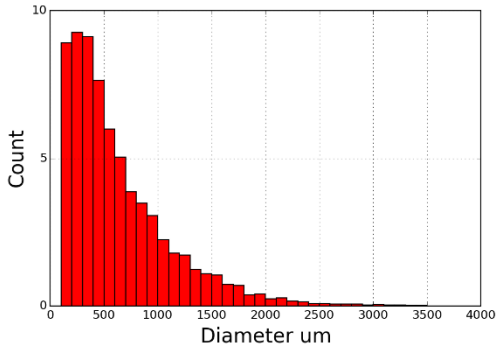


Figure A. 2562: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

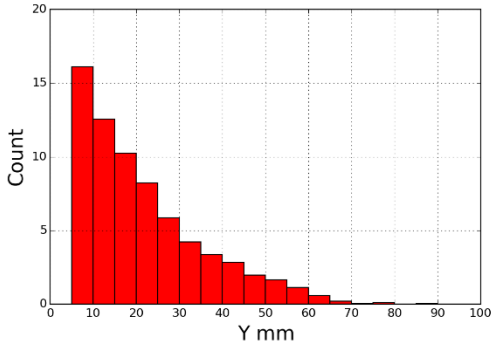


Figure A. 2563: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

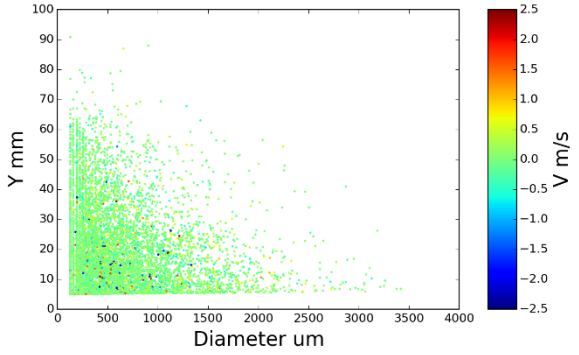


Figure A. 2564: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

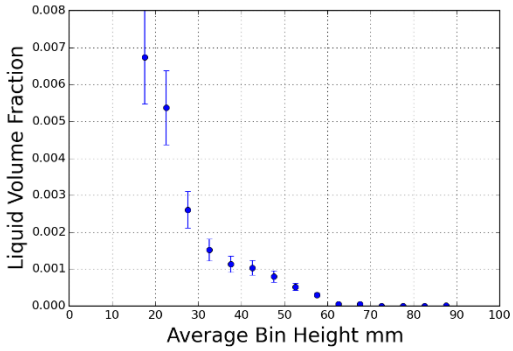


Figure A. 2565: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 All Droplets for .LB Image

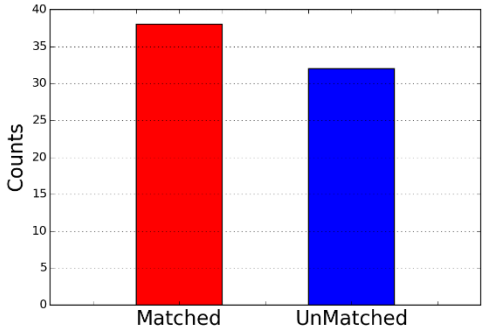


Figure A. 2566: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

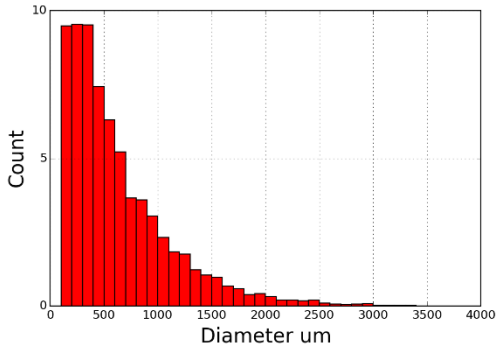


Figure A. 2567: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

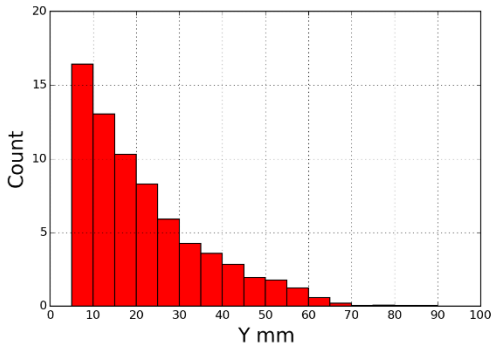


Figure A. 2568: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

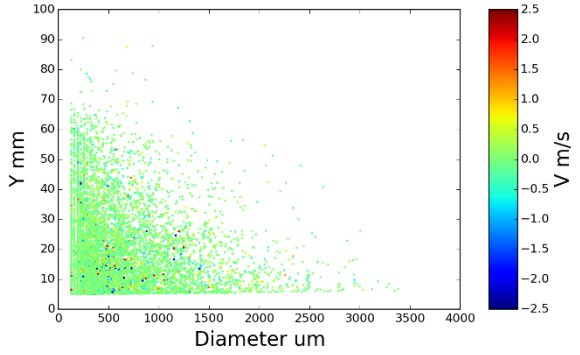


Figure A. 2569: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

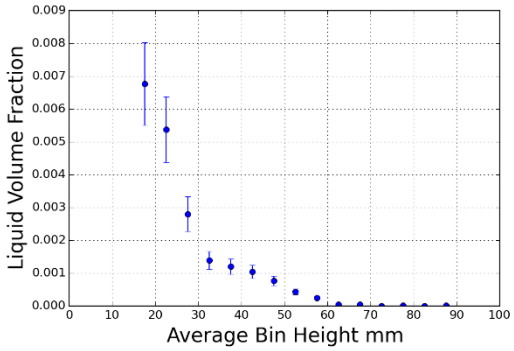


Figure A. 2570: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 Matched Only Droplets for .LA Image

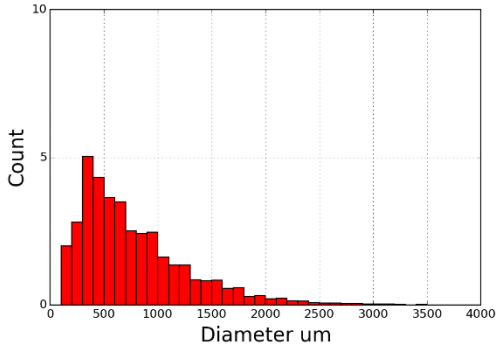


Figure A. 2571: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

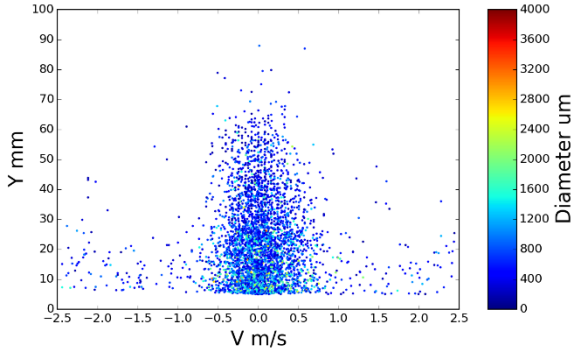


Figure A. 2574: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

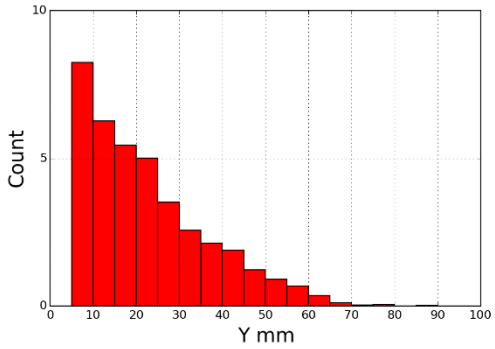


Figure A. 2572: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

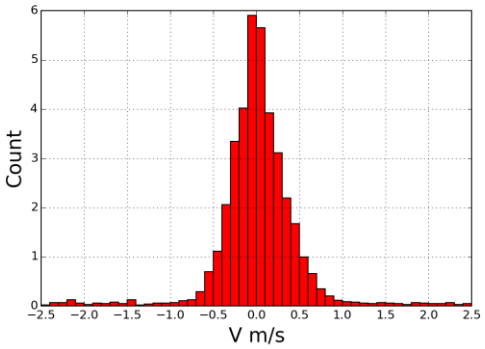


Figure A. 2575: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

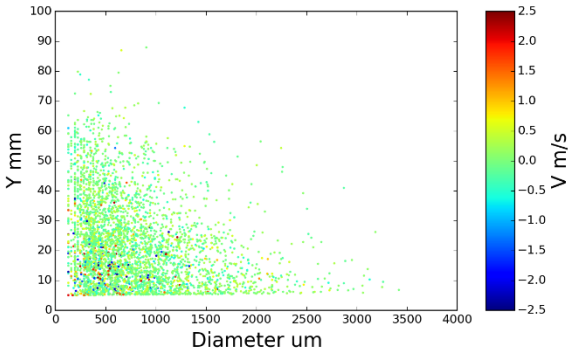


Figure A. 2573: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 Matched Only Droplets for .LB Image

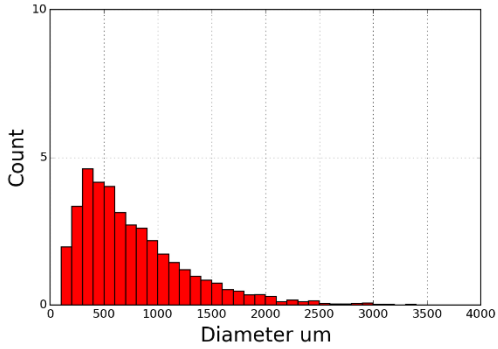


Figure A. 2576: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

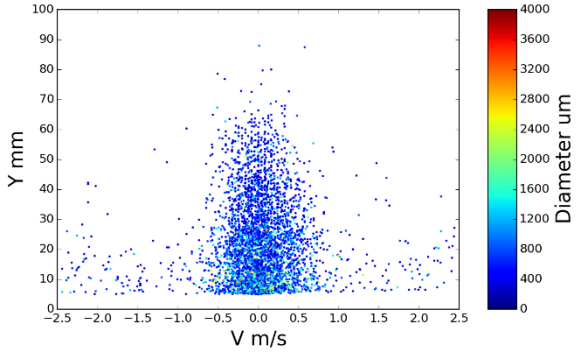


Figure A. 2579: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

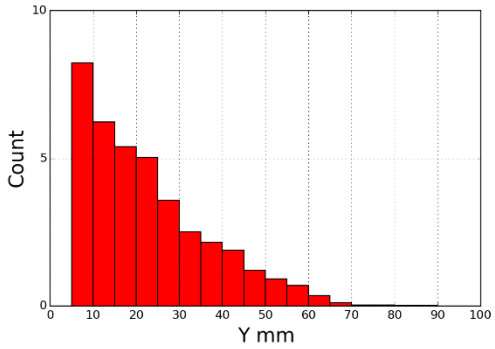


Figure A. 2577: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

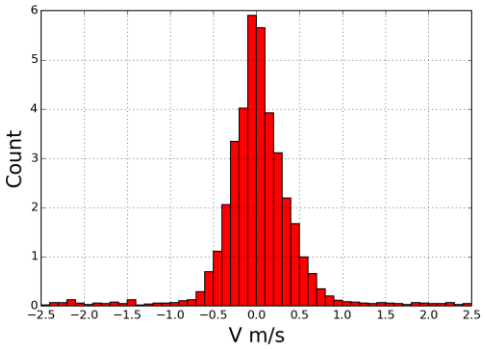


Figure A. 2580: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

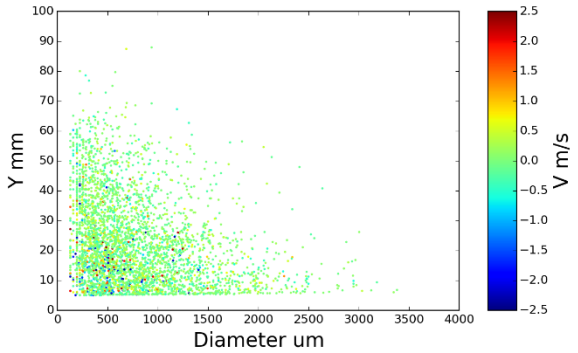


Figure A. 2578: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	31.38	31.78	128.6	3364	698.4	500.6	128.6	3218	700.2	504.1
20-40mm	18.02	18.13	128.6	2682	538.4	372.8	128.6	2855	536.7	372.9
40-60mm	6.68	6.83	128.6	3260	393.2	300.5	128.6	3079	388.0	295.9
60-80mm	1.37	1.26	128.6	1849	373.3	279.2	128.6	1877	373.3	254.9
80-100mm	0.0	0.01	-	-	-	-	192.9	192.9	192.9	0.0
All	57.45	58.01	128.6	3364	605.0	453.3	128.6	3218	605.2	455.6
			Height A (mm)				Height B (mm)			
Highest Particle			75.9830				93.8055			
Lowest Particle			5.0721				5.0721			

Table A. 272: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	14.1	128.6	3123	887.6	538.8	128.6	3149	884.5	536.8	-2.440	2.440	-0.020	0.510	-2.440	2.410	0.020	0.580
20-40mm	10.33	128.6	2682	652.3	393.1	128.6	2855	646.9	395.5	-2.400	2.360	-0.030	0.320	-2.290	2.330	0.040	0.400
40-60mm	3.78	128.6	3260	495.5	342.6	128.6	3079	489.4	335.5	-1.920	1.220	-0.010	0.200	-1.790	2.080	0.040	0.300
60-80mm	0.71	128.6	1849	435.0	286.5	128.6	1877	433.8	286.2	-1.930	0.850	-0.040	0.310	-1.050	2.330	0.010	0.350
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	28.92	128.6	3260	741.2	487.4	128.6	3149	736.4	486.4	-2.440	2.440	-0.020	0.410	-2.440	2.410	0.030	0.490

Table A. 273: Matched Droplet Info

A.3.4.2 All Droplets for .LA Image

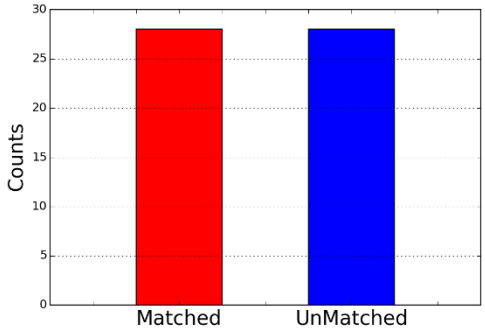


Figure A. 2581: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

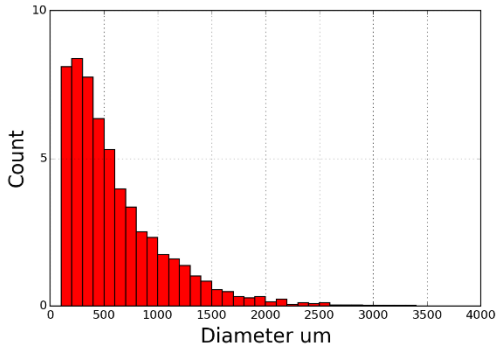


Figure A. 2582: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

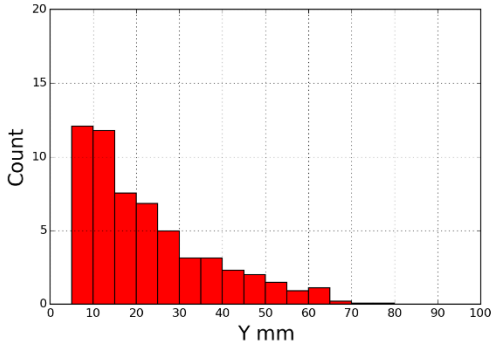


Figure A. 2583: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

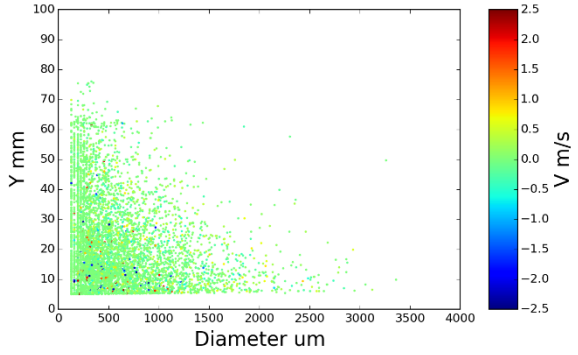


Figure A. 2584: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

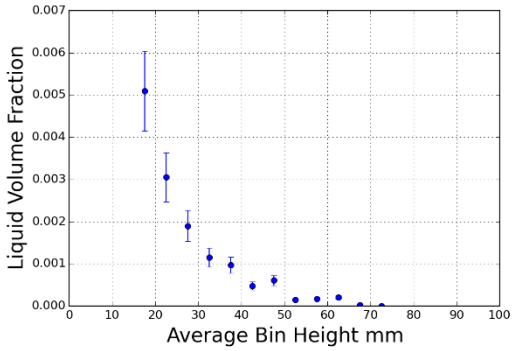


Figure A. 2585: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 All Droplets for .LB Image

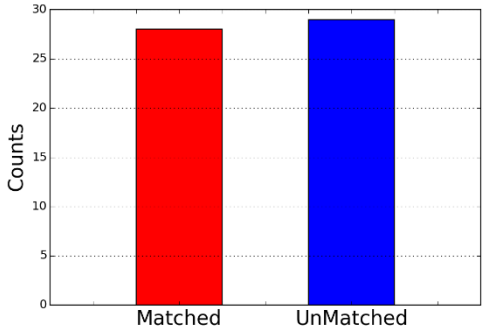


Figure A. 2586: CHC Count Comparison R-134a 40F 5000Btu 30000Lb Tri

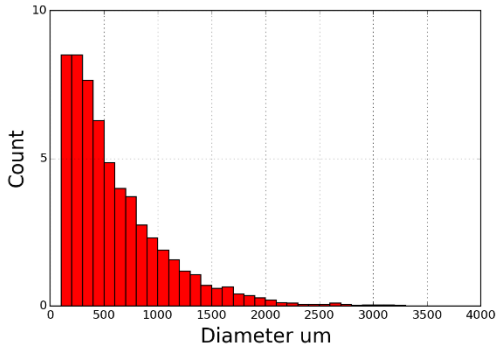


Figure A. 2587: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

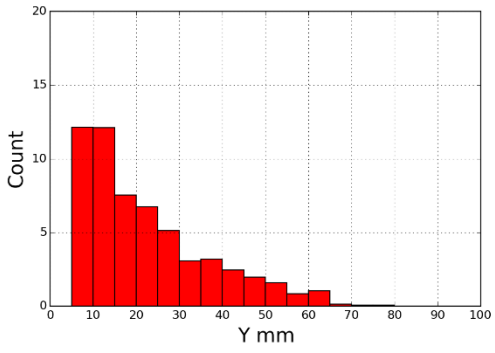


Figure A. 2588: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

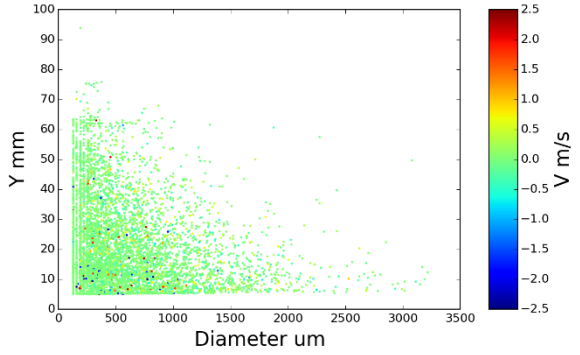


Figure A. 2589: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

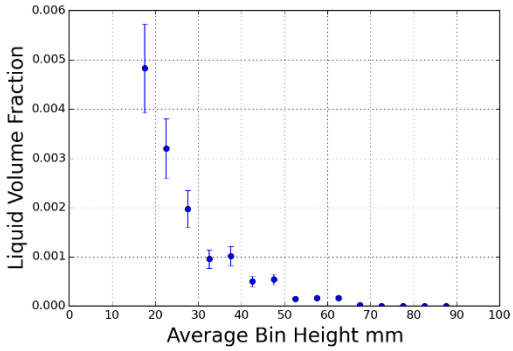


Figure A. 2590: Void Fraction R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 Matched Only Droplets for .LA Image

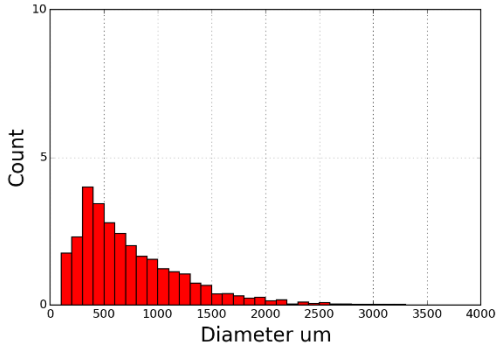


Figure A. 2591: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

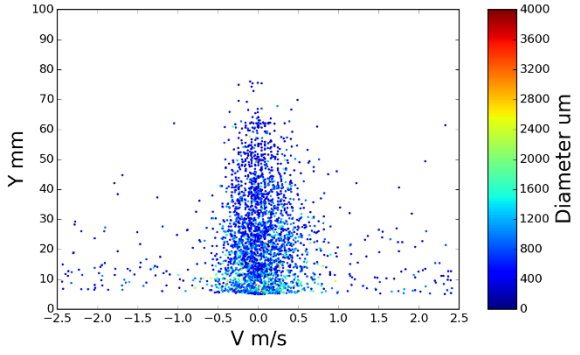


Figure A. 2594: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

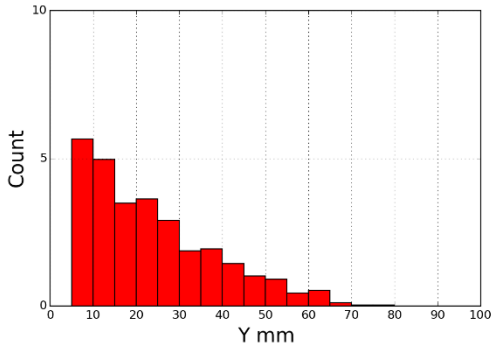


Figure A. 2592: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

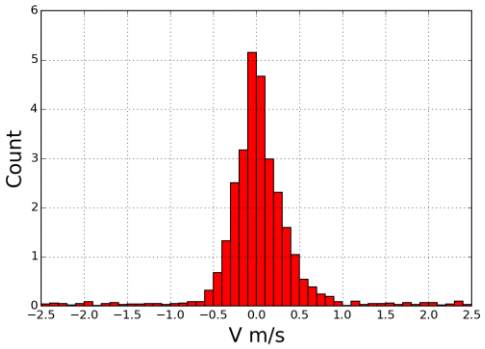


Figure A. 2595: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

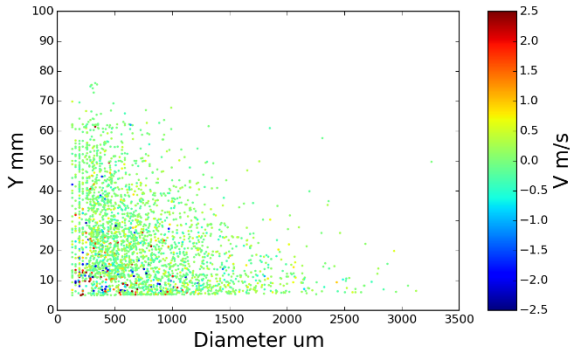


Figure A. 2593: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.3.4.2 Matched Only Droplets for .LB Image

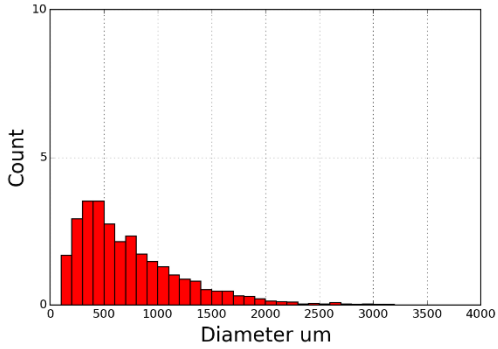


Figure A. 2596: Droplet Diameter Histogram R-134a 40F 5000Btu 30000Lb Tri

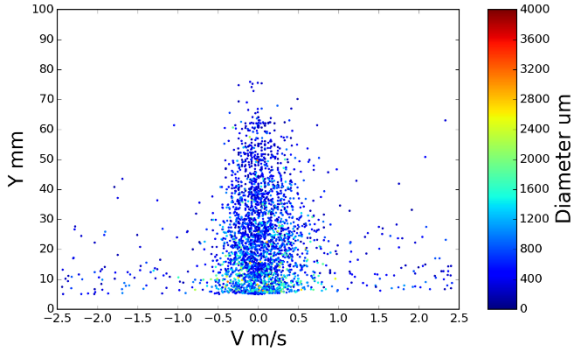


Figure A. 2599: Droplet Height vs Vertical Velocity R-134a 40F 5000Btu 30000Lb Tri

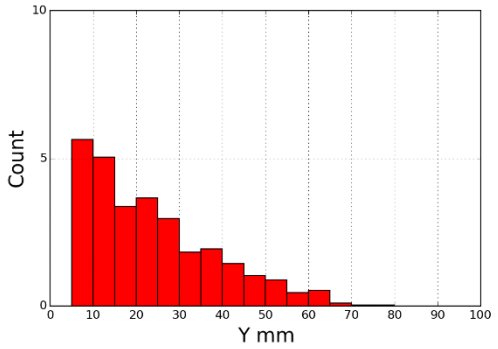


Figure A. 2597: Droplet Height Histogram R-134a 40F 5000Btu 30000Lb Tri

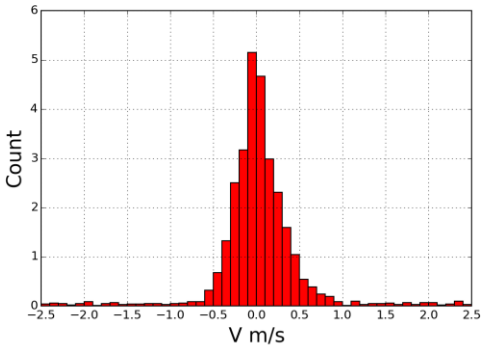


Figure A. 2600: Droplet Vertical Velocity Histogram R-134a 40F 5000Btu 30000Lb Tri

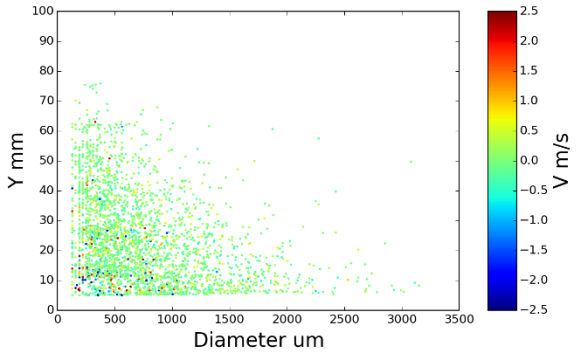


Figure A. 2598: Droplet Height vs Diameter R-134a 40F 5000Btu 30000Lb Tri

A.4 - 1556 R-134a 40F 10000Btu 30000Lb Tri

A.4.1 Liquid Level 1

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	13387 / 1.687
Ref Mass Flow (lb/hr) / (kg/s)	3230 / 0.407
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	30001 / 40.688
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	9952 / 31.40
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	40.3 / 4.60
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.5 / 4.72
Total Bundle Q (Btu/hr) / (kW)	289542 / 84.86
Total Bundle & Preboiler Q (Btu/hr) / (kW)	289542 / 84.86
Top Two Rows HTC Ratio	1.115
Bundle Inlet Quality	-0.07
Bundle Exit Quality	1.00

Table A. 274: Thermal Conditions

A.4.1.1 Lens 100mm Mag 0_29x

A.4.1.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	189.45	192.11	57.2	3044	457.2	472.0	57.2	3043	452.3	467.3
40-60mm	289.84	294.02	57.2	3005	377.1	357.2	57.2	3032	372.8	353.5
60-80mm	159.22	156.52	57.2	2885	266.5	232.6	57.2	2393	266.3	228.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	638.53	642.68	57.2	3044	373.3	377.4	57.2	3043	370.6	373.9
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 275: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	123.99	57.2	3019	560.1	497.7	57.2	3040	557.0	496.9	-2.540	2.540	-0.050	0.480	-2.540	2.540	0.070	0.550
40-60mm	215.7	57.2	3005	433.5	370.4	57.2	3032	432.0	369.8	-2.540	2.540	-0.050	0.340	-2.540	2.540	0.060	0.420
60-80mm	116.33	57.2	2346	303.9	239.7	57.2	2393	303.5	241.6	-2.540	2.540	-0.070	0.300	-2.540	2.530	0.040	0.350
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	456.02	57.2	3019	434.9	394.4	57.2	3040	433.1	393.8	-2.540	2.540	-0.060	0.370	-2.540	2.540	0.060	0.440

Table A. 276: Matched Droplet Info

A.4.1.1 All Droplets for .LA Image

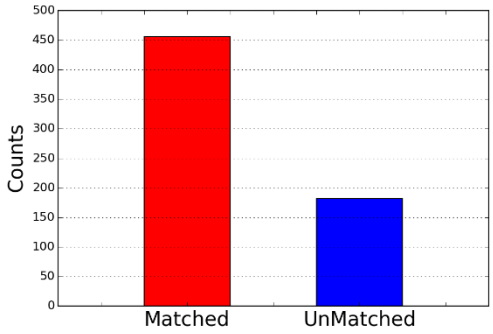


Figure A. 2601: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

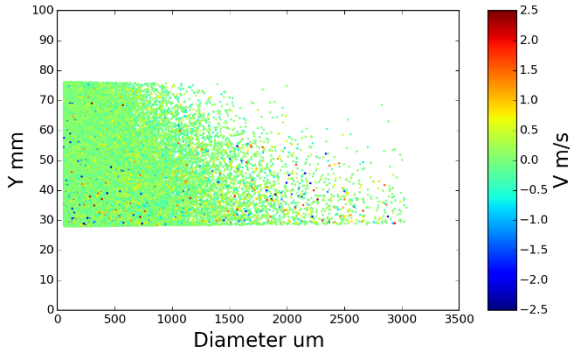


Figure A. 2604: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

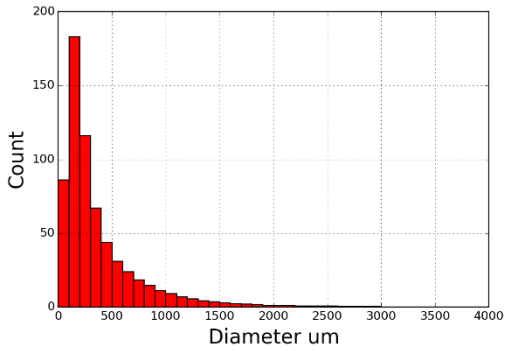


Figure A. 2602: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

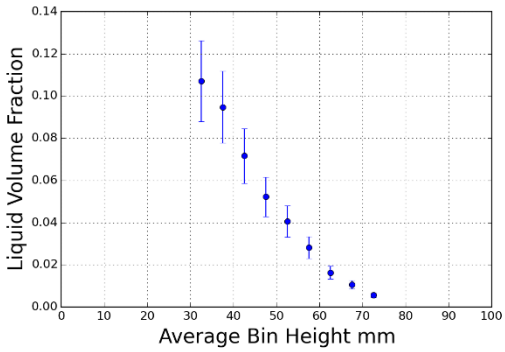


Figure A. 2605: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

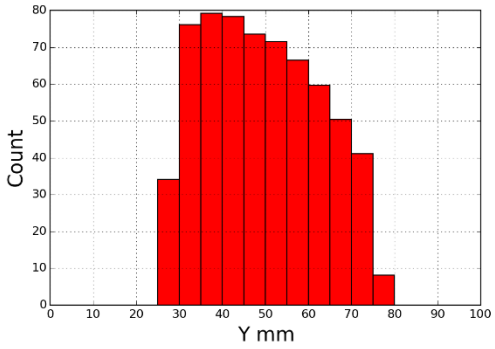


Figure A. 2603: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 All Droplets for .LB Image

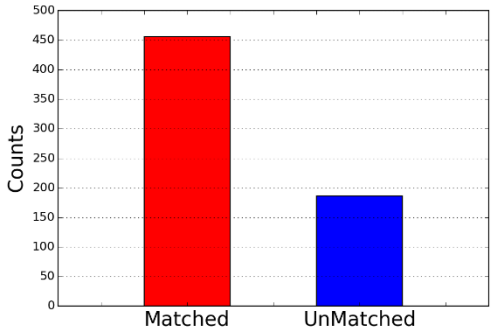


Figure A. 2606: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

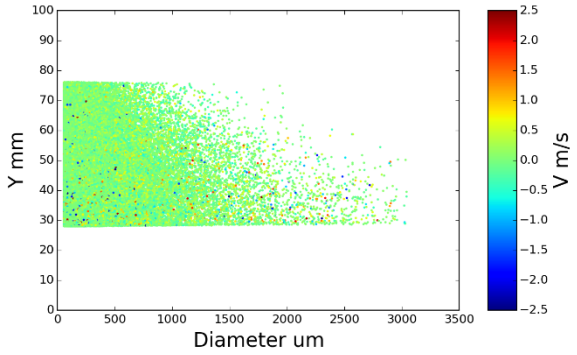


Figure A. 2609: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

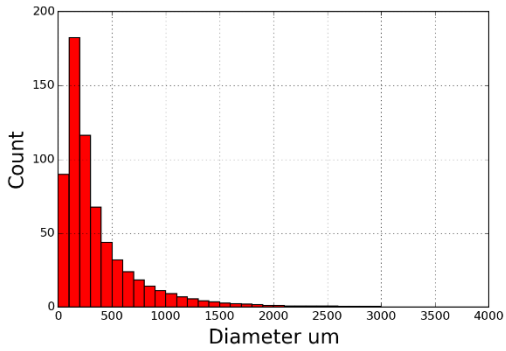


Figure A. 2607: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

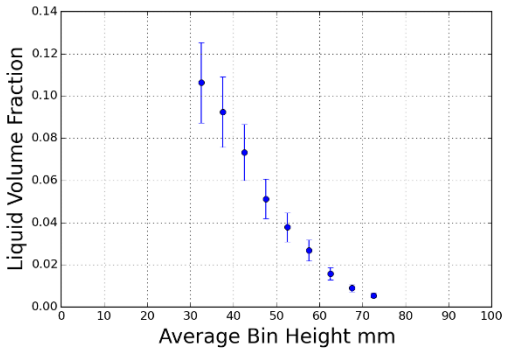


Figure A. 2610: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

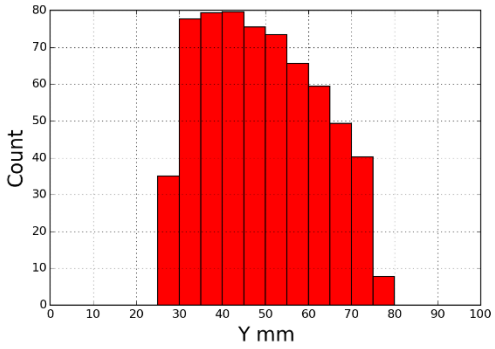


Figure A. 2608: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 Matched Only Droplets for .LA Image

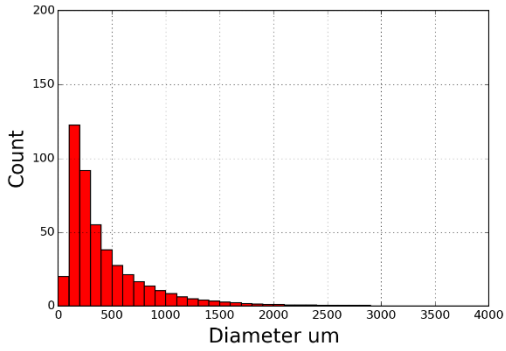


Figure A. 2611: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

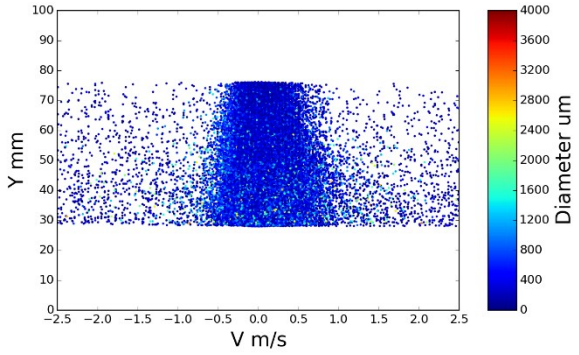


Figure A. 2614: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

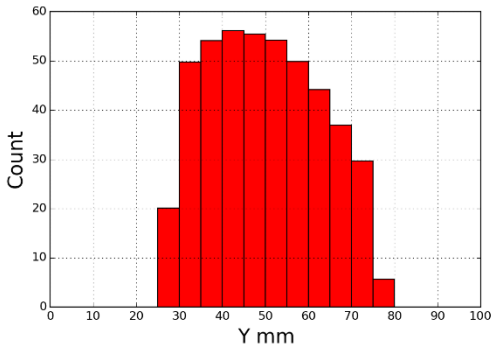


Figure A. 2612: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

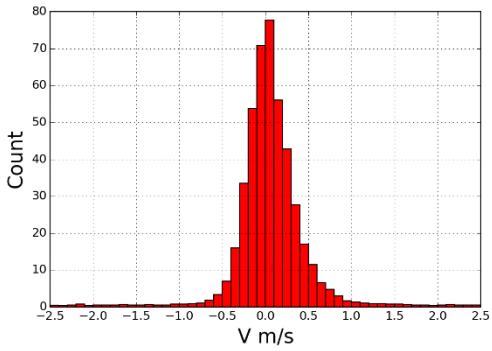


Figure A. 2615: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

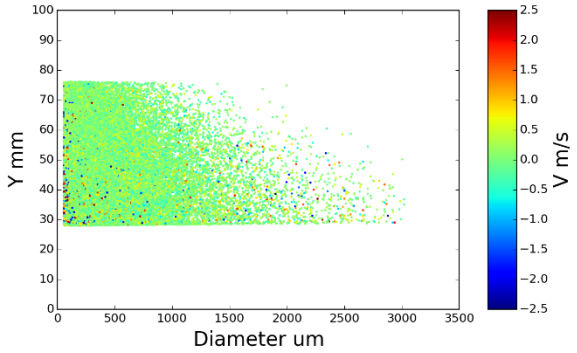


Figure A. 2613: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 Matched Only Droplets for .LB Image

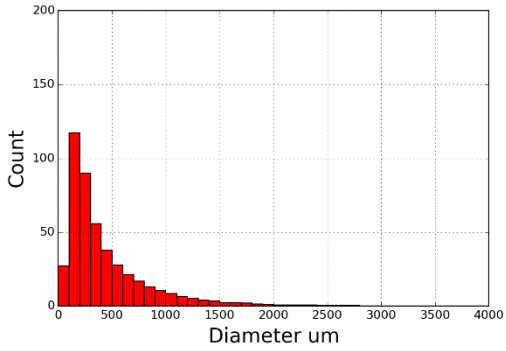


Figure A. 2616: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

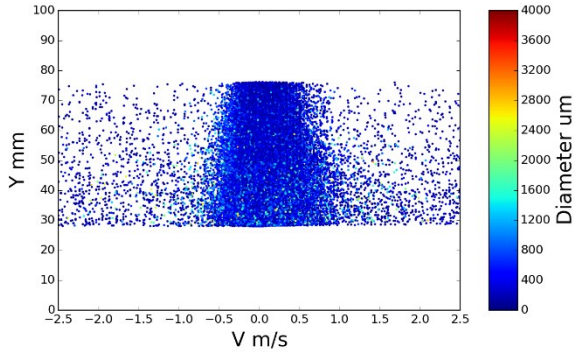


Figure A. 2619: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

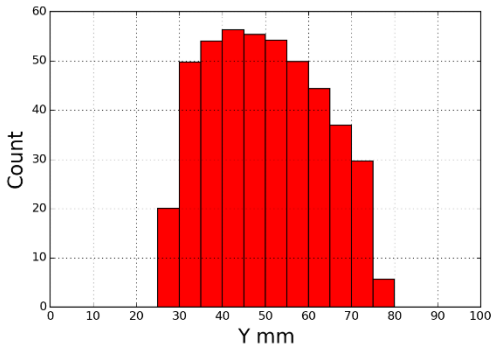


Figure A. 2617: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

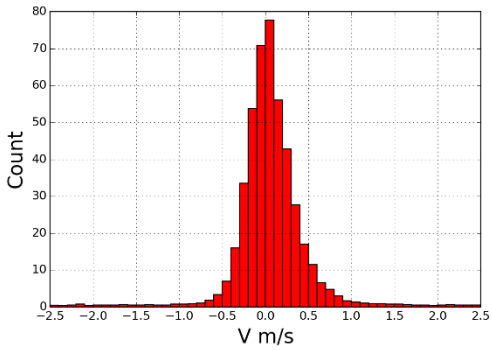


Figure A. 2620: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

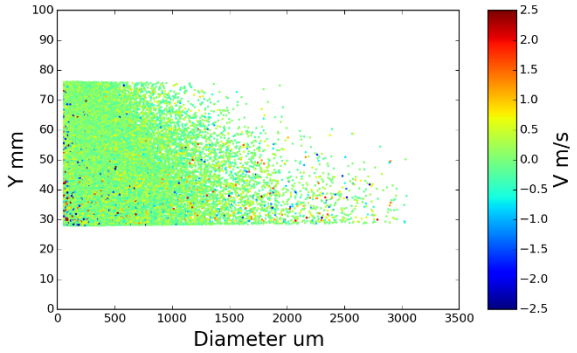


Figure A. 2618: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	143.01	146.39	57.2	3037	498.8	515.2	57.2	3042	492.8	519.1
40-60mm	256.73	263.35	57.2	3040	381.2	405.3	57.2	3019	374.2	403.4
60-80mm	132.29	135.57	57.2	2653	257.3	266.7	57.2	2670	251.4	263.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	532.07	545.37	57.2	3040	382.0	419.3	57.2	3042	375.5	419.1
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 277: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	92.25	57.2	3037	619.8	546.0	57.2	3042	614.5	545.2	-2.540	2.540	-0.030	0.450	-2.530	2.540	0.010	0.510
40-60mm	182.64	57.2	3040	453.7	432.3	57.2	3000	451.1	431.5	-2.540	2.540	-0.050	0.370	-2.540	2.540	-0.020	0.440
60-80mm	95.21	57.2	2653	301.7	292.2	57.2	2670	297.8	291.5	-2.540	2.540	-0.090	0.310	-2.540	2.530	-0.050	0.360
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	370.1	57.2	3040	456.0	448.7	57.2	3042	452.4	447.8	-2.540	2.540	-0.060	0.380	-2.540	2.540	-0.020	0.440

Table A. 278: Matched Droplet Info

A.4.1.1 All Droplets for .LA Image

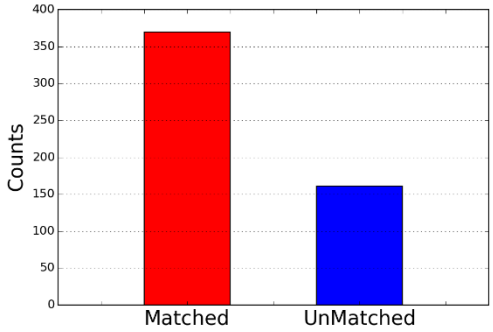


Figure A. 2621: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

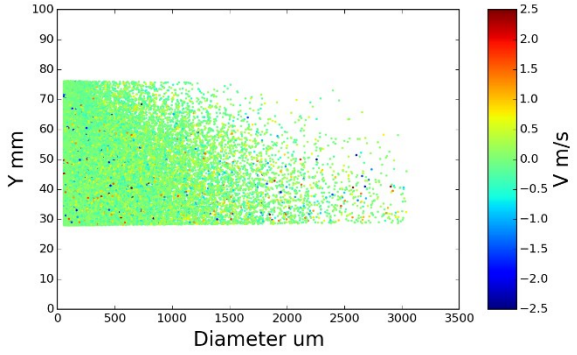


Figure A. 2624: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

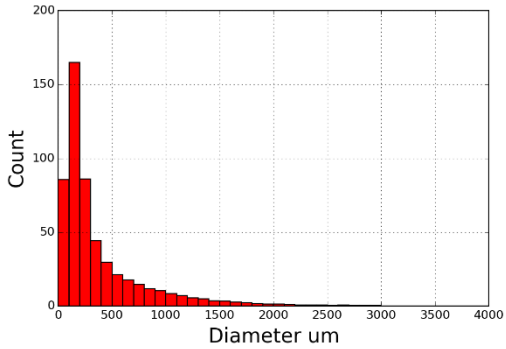


Figure A. 2622: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

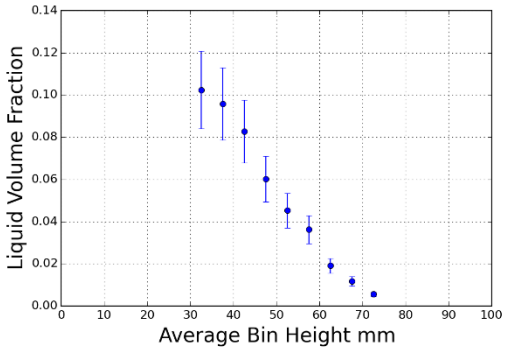


Figure A. 2625: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

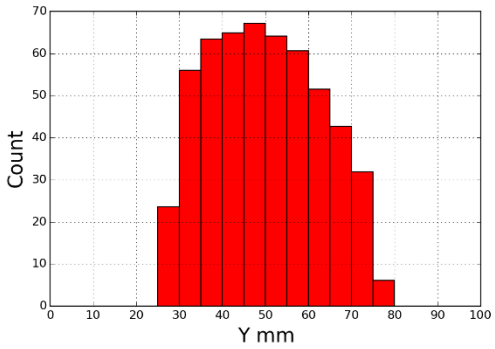


Figure A. 2623: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 All Droplets for .LB Image

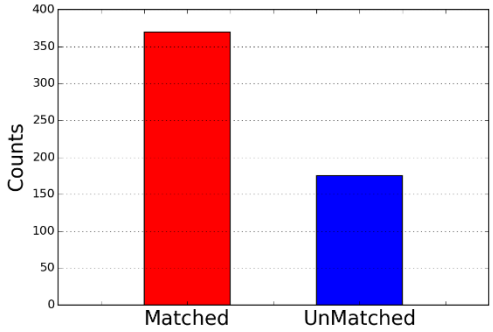


Figure A. 2626: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

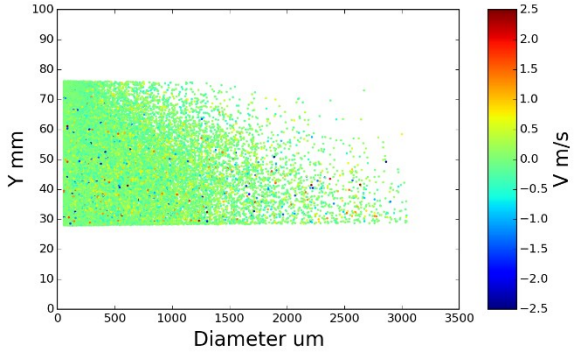


Figure A. 2629: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

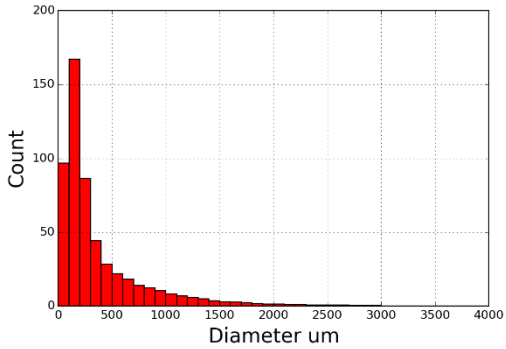


Figure A. 2627: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

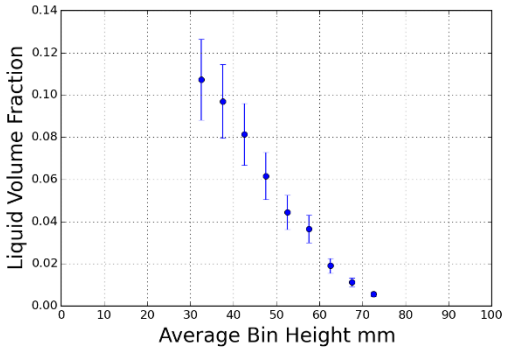


Figure A. 2630: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

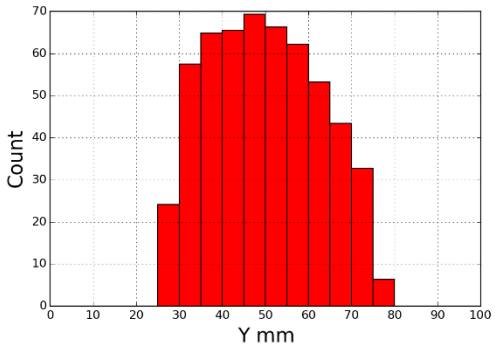


Figure A. 2628: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 Matched Only Droplets for .LA Image

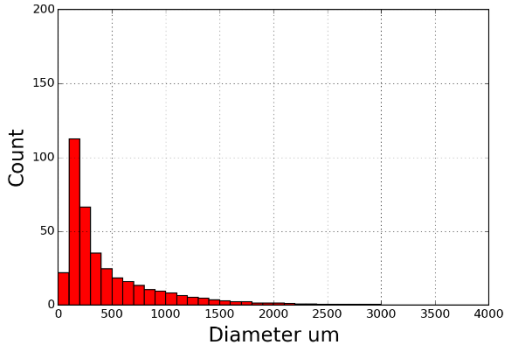


Figure A. 2631: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

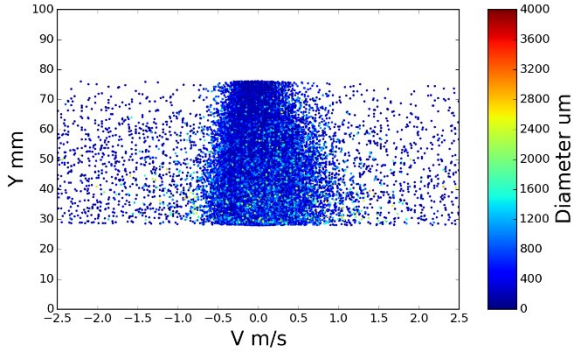


Figure A. 2634: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

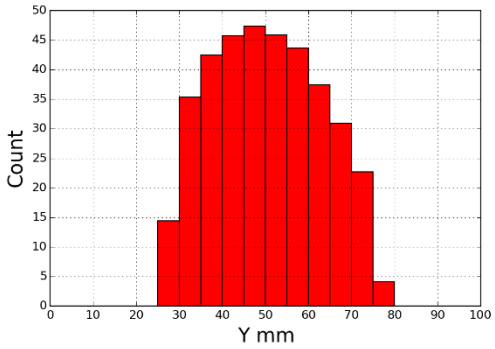


Figure A. 2632: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

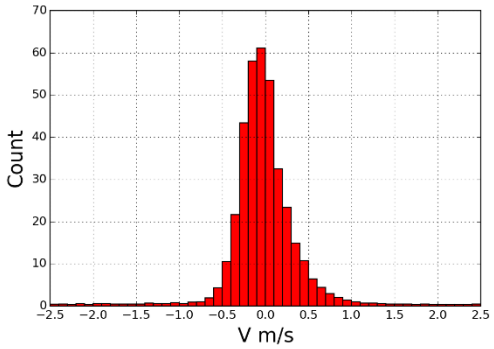


Figure A. 2635: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

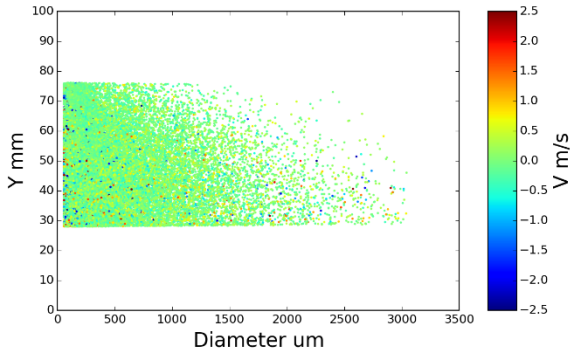


Figure A. 2633: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 Matched Only Droplets for .LB Image

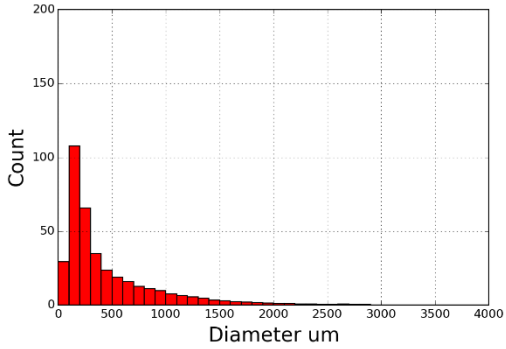


Figure A. 2636: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

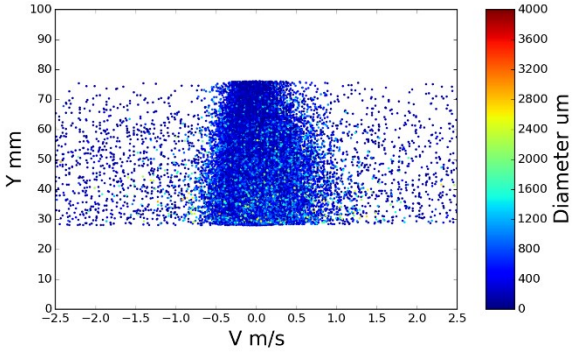


Figure A. 2639: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

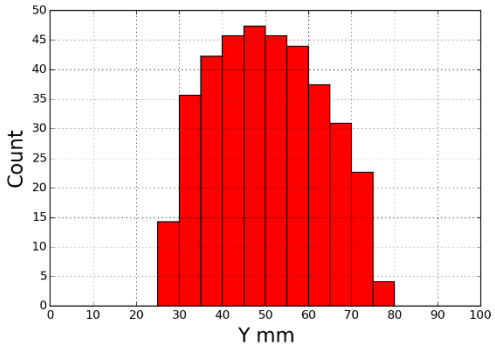


Figure A. 2637: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

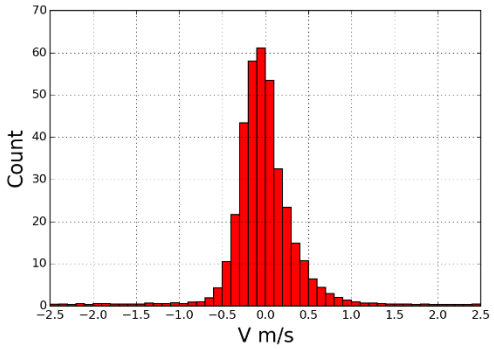


Figure A. 2640: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

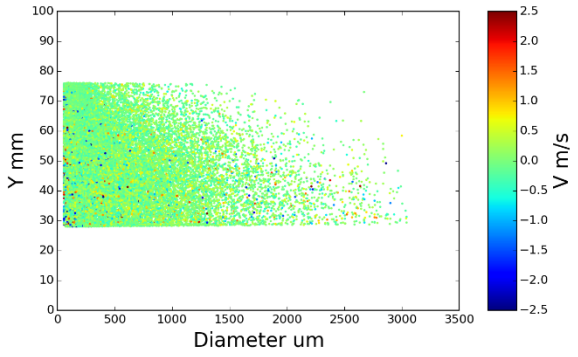


Figure A. 2638: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	114.81	119.12	57.2	3044	512.7	546.3	57.2	3031	500.5	549.0
40-60mm	227.6	235.1	57.2	3039	369.7	422.3	57.2	3023	360.5	418.7
60-80mm	106.65	110.64	57.2	2760	243.8	268.3	57.2	2853	239.6	268.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	449.13	464.95	57.2	3044	376.4	439.0	57.2	3031	367.6	437.7
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 279: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	66.97	57.2	3044	670.7	586.3	57.2	3018	667.3	590.0	-2.540	2.540	-0.030	0.490	-2.540	2.530	-0.010	0.540
40-60mm	152.83	57.2	3018	456.5	460.9	57.2	3008	453.0	460.2	-2.540	2.540	-0.050	0.410	-2.540	2.540	-0.050	0.470
60-80mm	72.55	57.2	2760	291.9	299.2	57.2	2805	290.2	299.4	-2.530	2.540	-0.080	0.360	-2.540	2.540	-0.090	0.400
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	292.35	57.2	3044	464.7	478.7	57.2	3018	462.0	479.5	-2.540	2.540	-0.050	0.420	-2.540	2.540	-0.050	0.470

Table A. 280: Matched Droplet Info

A.4.1.1 All Droplets for .LA Image

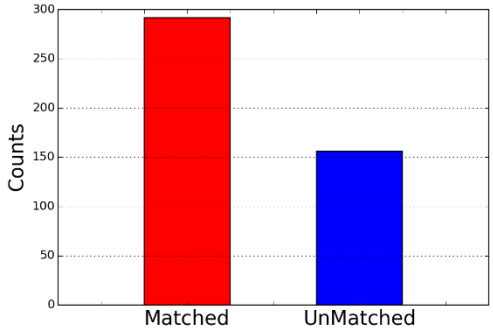


Figure A. 2641: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

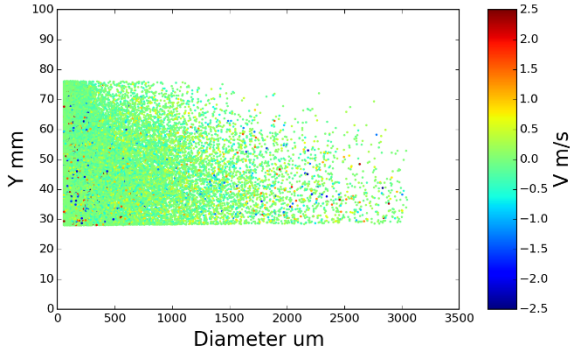


Figure A. 2644: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

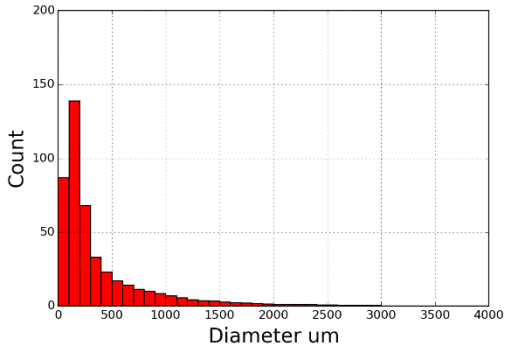


Figure A. 2642: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

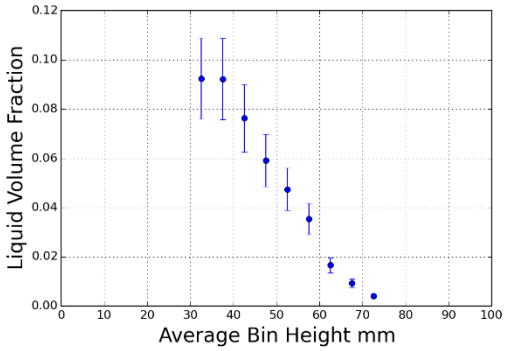


Figure A. 2645: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

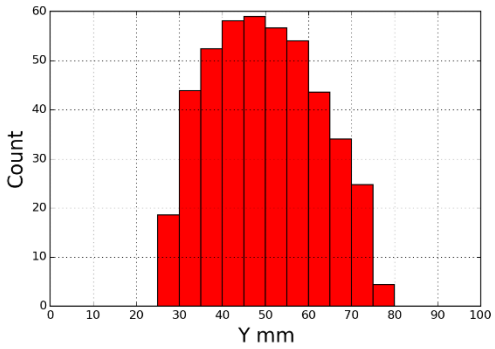


Figure A. 2643: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 All Droplets for .LB Image

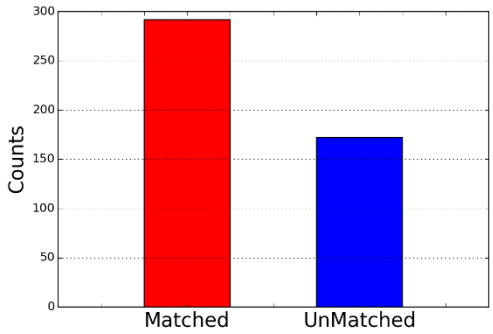


Figure A. 2646: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

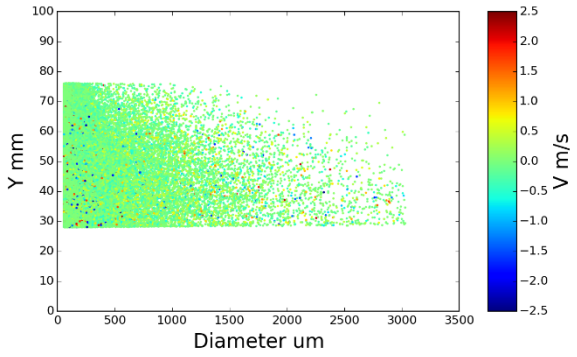


Figure A. 2649: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

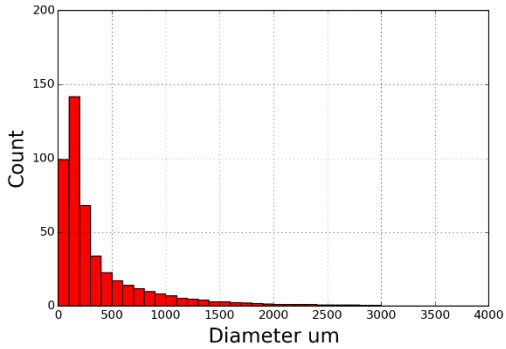


Figure A. 2647: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

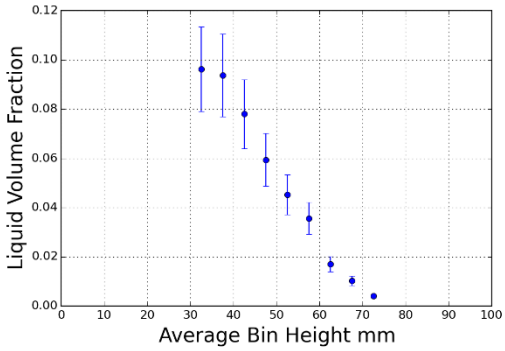


Figure A. 2650: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

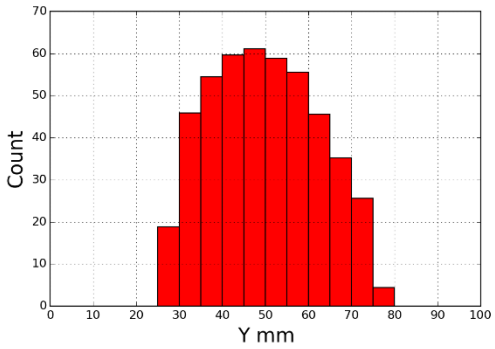


Figure A. 2648: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 Matched Only Droplets for .LA Image

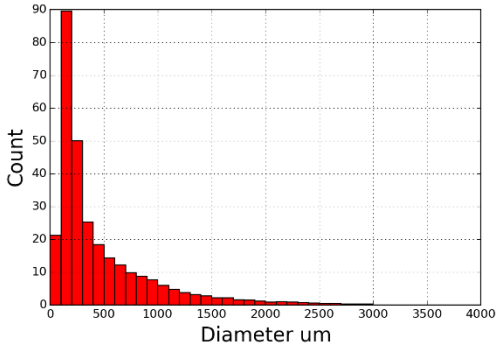


Figure A. 2651: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

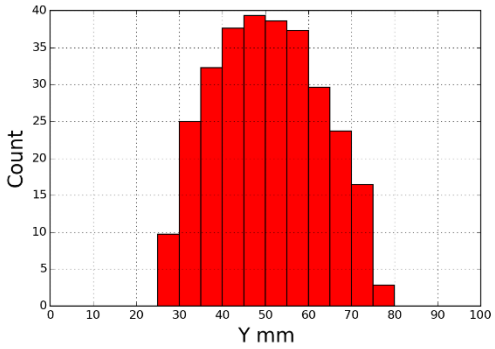


Figure A. 2652: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

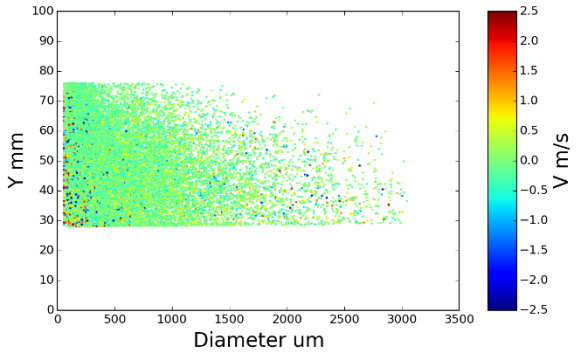


Figure A. 2653: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

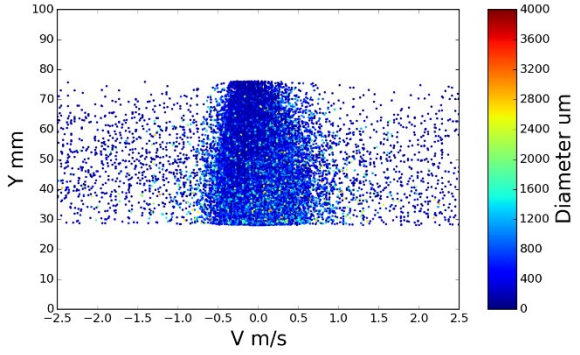


Figure A. 2654: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

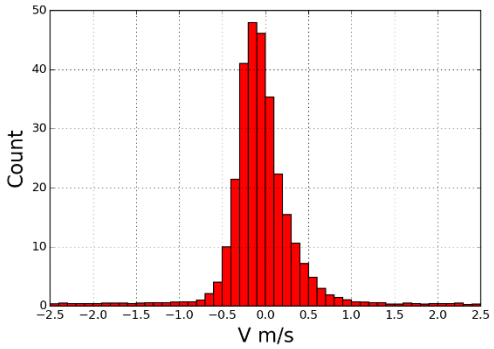


Figure A. 2655: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 Matched Only Droplets for .LB Image

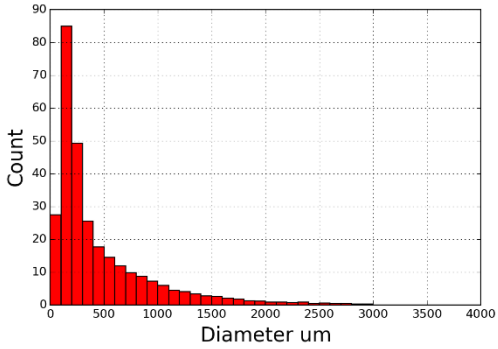


Figure A. 2656: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

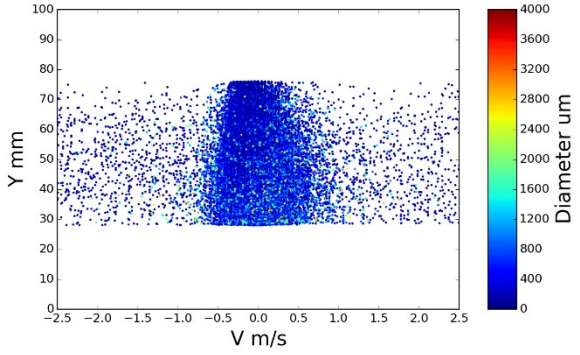


Figure A. 2659: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

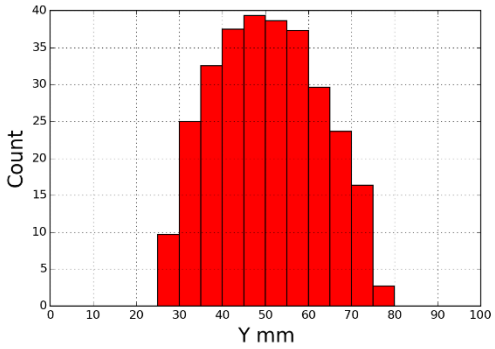


Figure A. 2657: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

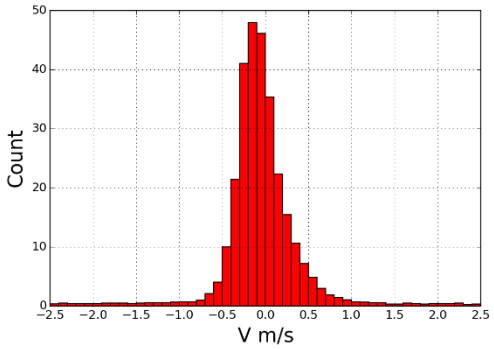


Figure A. 2660: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

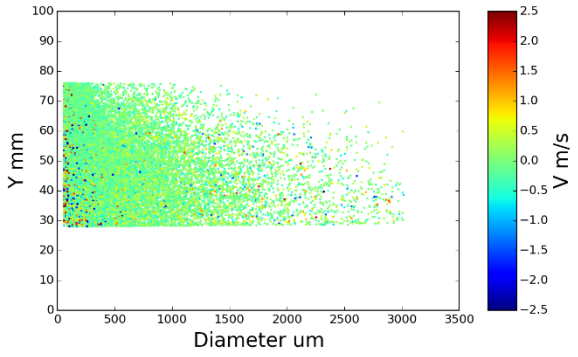


Figure A. 2658: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	95.51	99.47	57.2	3039	495.4	530.1	57.2	3034	477.1	525.9
40-60mm	206.6	216.34	57.2	3042	357.5	405.2	57.2	3040	347.4	396.5
60-80mm	103.84	105.92	57.2	2898	237.7	259.0	57.2	2947	233.5	256.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	406.09	421.84	57.2	3042	359.3	418.3	57.2	3040	349.4	411.9
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 281: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	50.81	57.2	3014	680.5	581.3	57.2	3034	675.7	580.0	-2.540	2.530	-0.030	0.520	-2.540	2.540	-0.020	0.580
40-60mm	132.94	57.2	3042	450.8	443.8	57.2	3036	446.9	440.1	-2.540	2.540	-0.040	0.430	-2.540	2.540	-0.040	0.510
60-80mm	68.46	57.2	2898	289.3	291.2	57.2	2924	286.3	290.1	-2.530	2.540	-0.060	0.380	-2.540	2.540	-0.060	0.430
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	252.21	57.2	3042	453.2	461.1	57.2	3036	449.4	458.6	-2.540	2.540	-0.040	0.440	-2.540	2.540	-0.040	0.500

Table A. 282: Matched Droplet Info

A.4.1.1 All Droplets for .LA Image

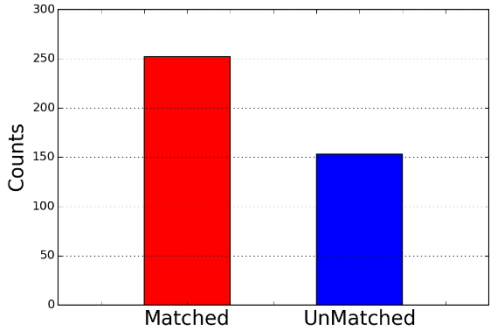


Figure A. 2661: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

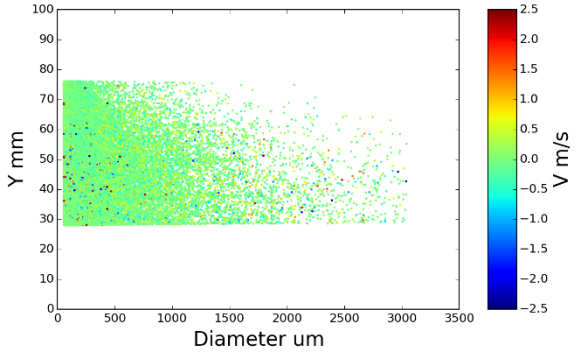


Figure A. 2664: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

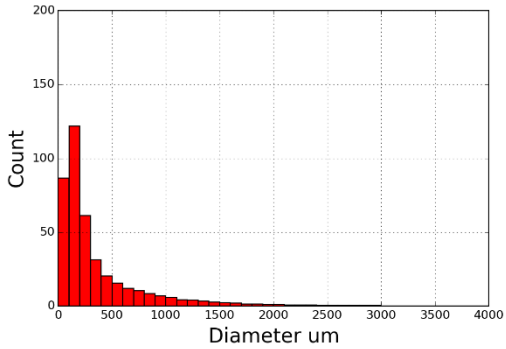


Figure A. 2662: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

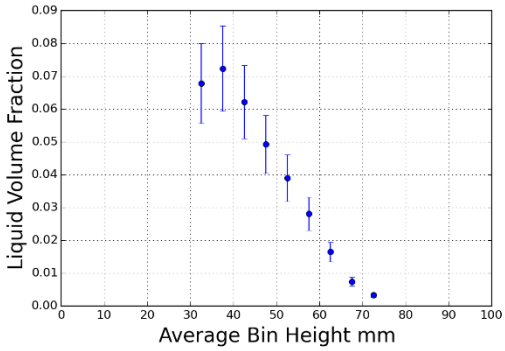


Figure A. 2665: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

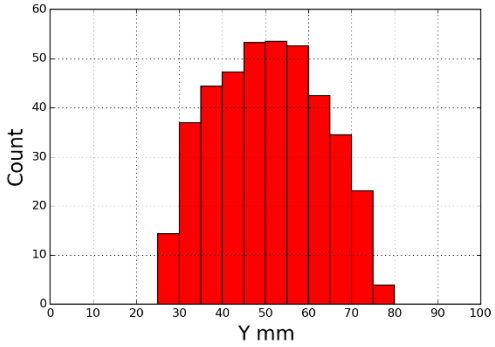


Figure A. 2663: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 All Droplets for .LB Image

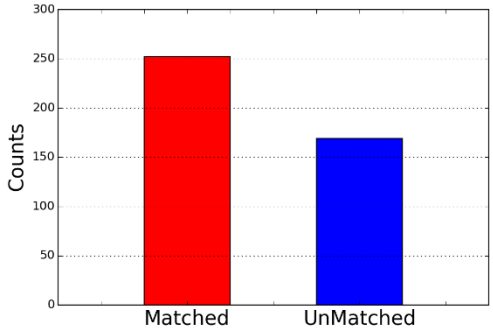


Figure A. 2666: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

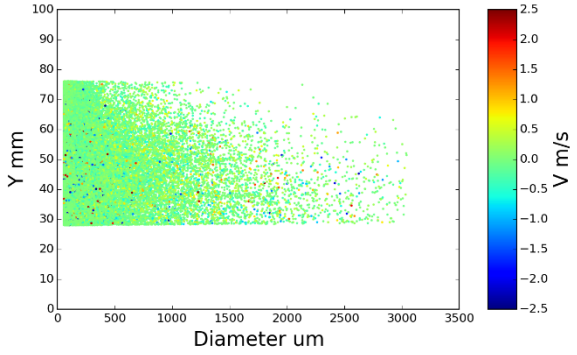


Figure A. 2669: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

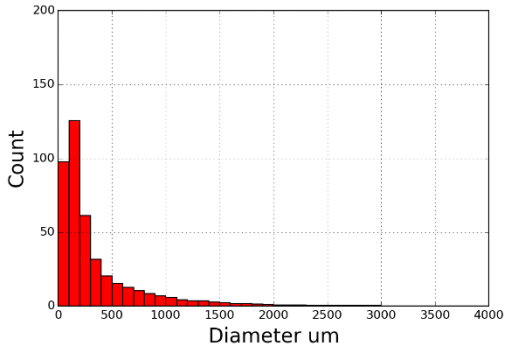


Figure A. 2667: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

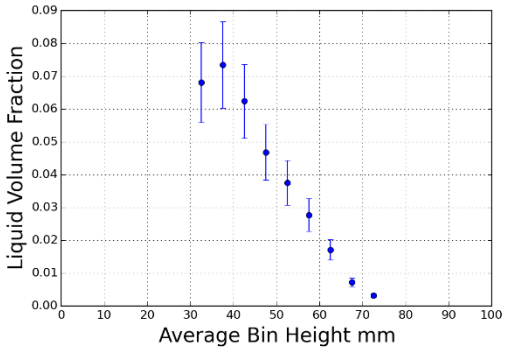


Figure A. 2670: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

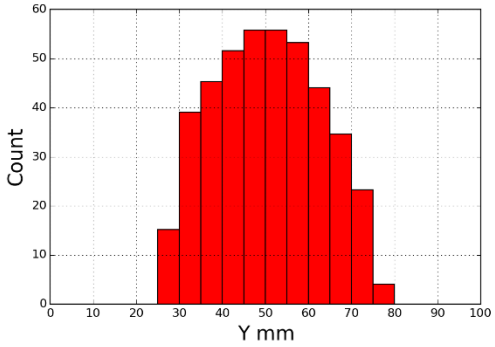


Figure A. 2668: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 Matched Only Droplets for .LA Image

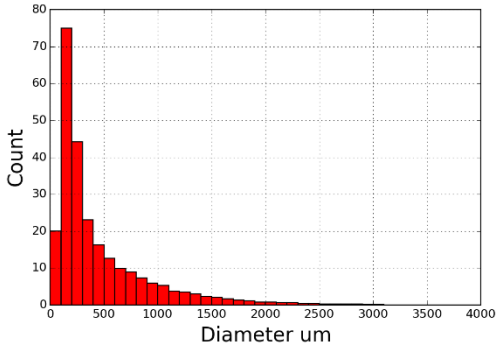


Figure A. 2671: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

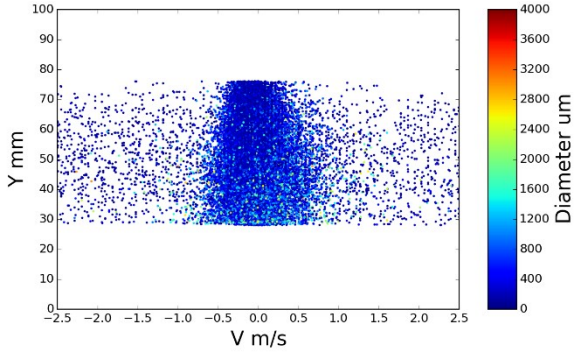


Figure A. 2674: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

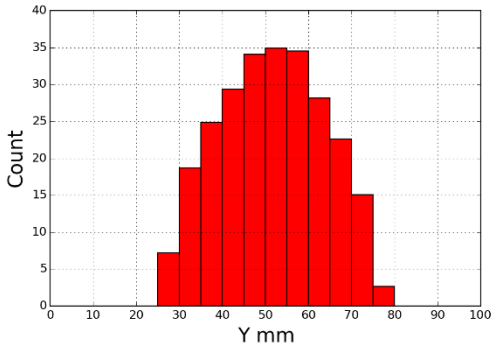


Figure A. 2672: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

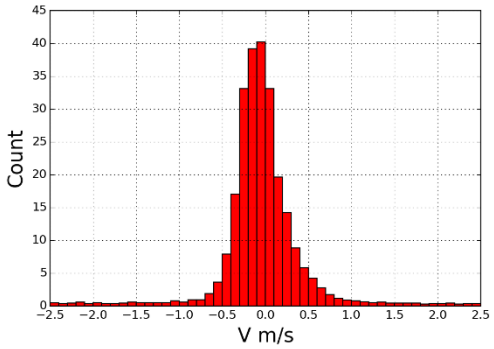


Figure A. 2675: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

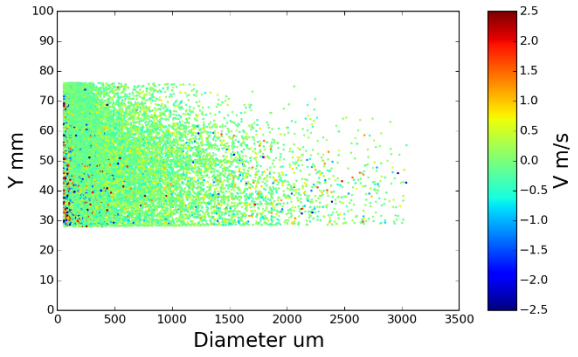


Figure A. 2673: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 Matched Only Droplets for .LB Image

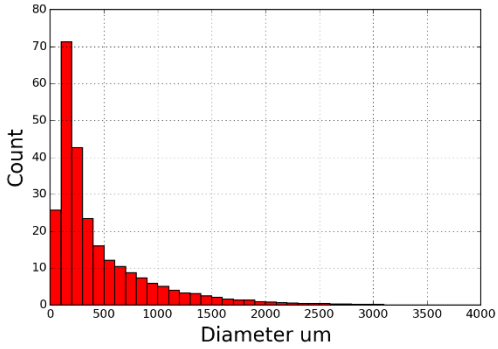


Figure A. 2676: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

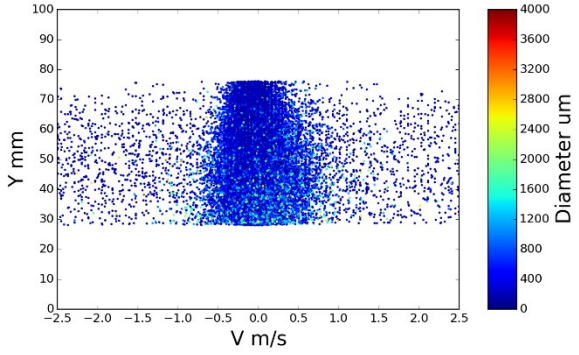


Figure A. 2679: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

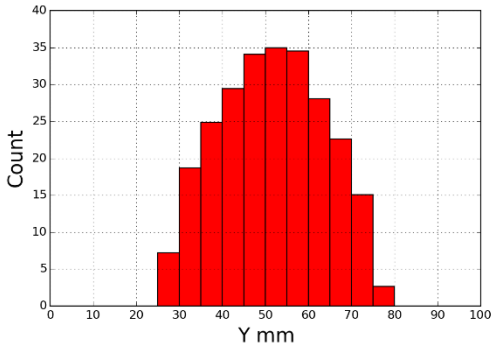


Figure A. 2677: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

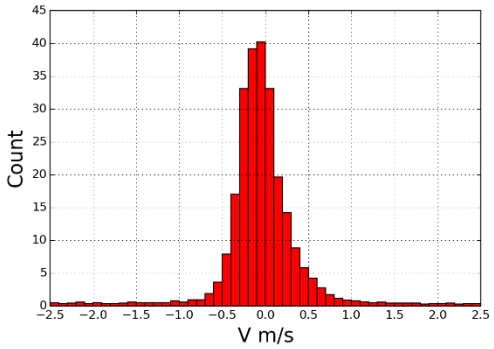


Figure A. 2680: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

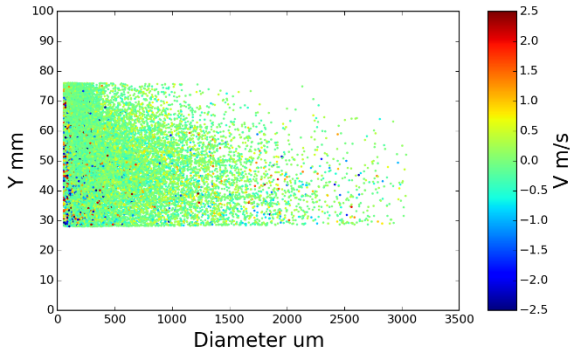


Figure A. 2678: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	78.56	85.08	57.2	3040	479.6	527.5	57.2	3039	451.3	519.0
40-60mm	179.08	189.07	57.2	3016	363.1	392.4	57.2	3016	349.9	386.9
60-80mm	93.36	96.87	57.2	2617	252.6	248.9	57.2	2902	247.1	248.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	351.06	371.1	57.2	3040	359.8	404.4	57.2	3039	346.3	399.1
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0466			
Lowest Particle			28.0846				28.0846			

Table A. 283: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	38.5	57.2	3033	677.5	578.3	57.2	3022	676.6	584.5	-2.540	2.540	-0.030	0.580	-2.540	2.540	0.030	0.630
40-60mm	112.98	57.2	2988	461.0	427.5	57.2	2990	458.6	426.5	-2.540	2.540	-0.040	0.460	-2.540	2.540	0.020	0.510
60-80mm	63.21	57.2	2617	303.2	271.3	57.2	2674	300.1	269.4	-2.540	2.540	-0.040	0.360	-2.540	2.540	-0.000	0.400
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	214.69	57.2	3033	453.4	439.9	57.2	3022	451.1	440.8	-2.540	2.540	-0.040	0.460	-2.540	2.540	0.010	0.510

Table A. 284: Matched Droplet Info

A.4.1.1 All Droplets for .LA Image

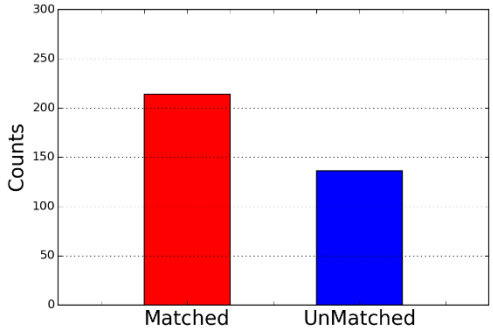


Figure A. 2681: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

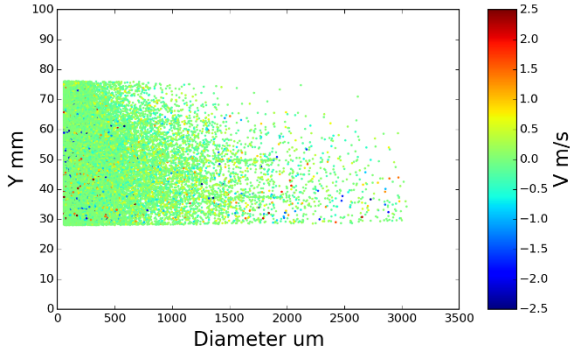


Figure A. 2684: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

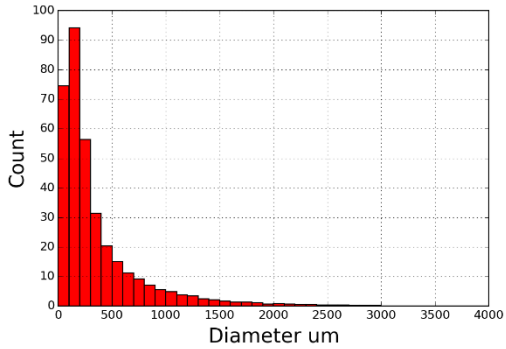


Figure A. 2682: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

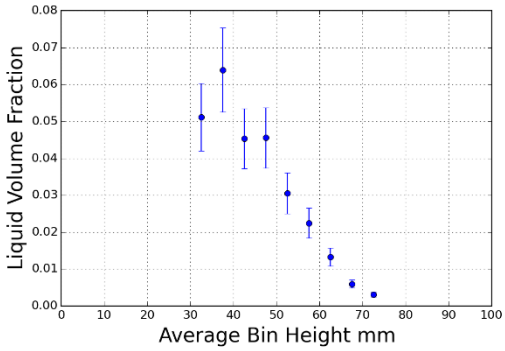


Figure A. 2685: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

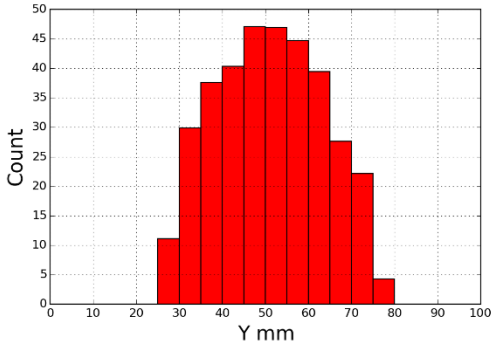


Figure A. 2683: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 All Droplets for .LB Image

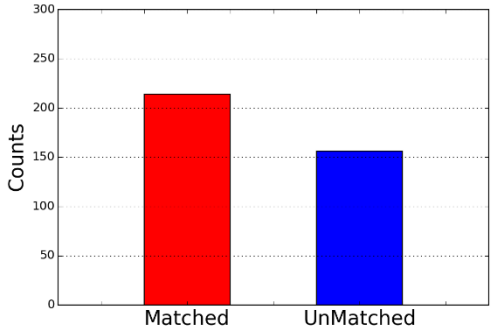


Figure A. 2686: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

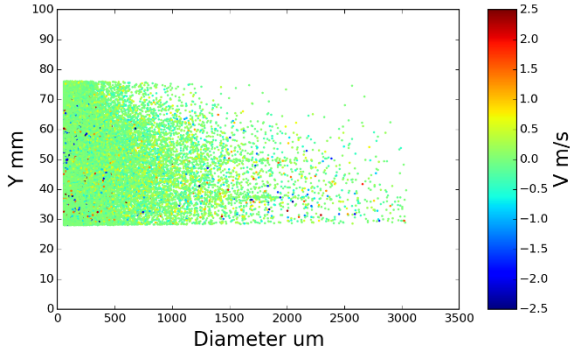


Figure A. 2689: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

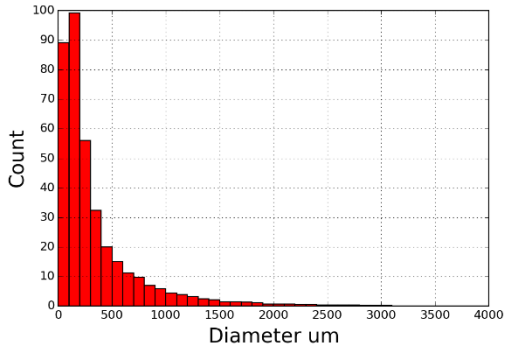


Figure A. 2687: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

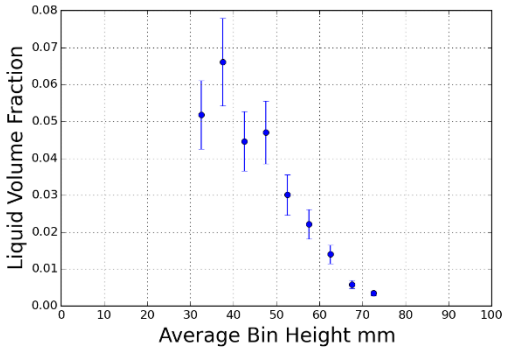


Figure A. 2690: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

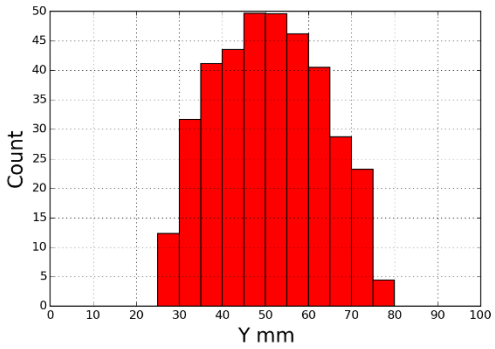


Figure A. 2688: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 Matched Only Droplets for .LA Image

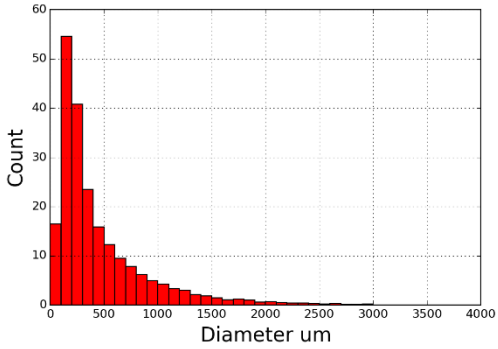


Figure A. 2691: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

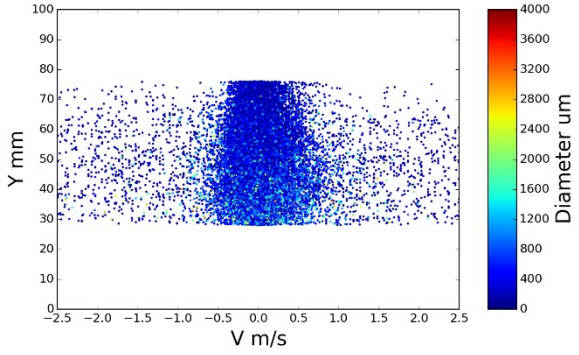


Figure A. 2694: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

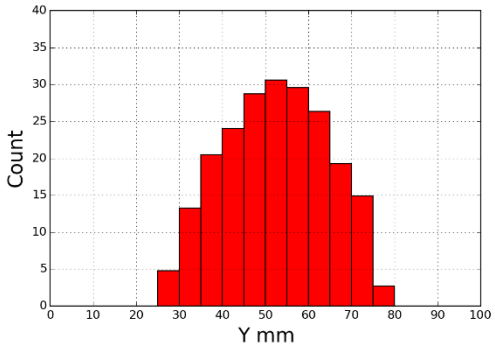


Figure A. 2692: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

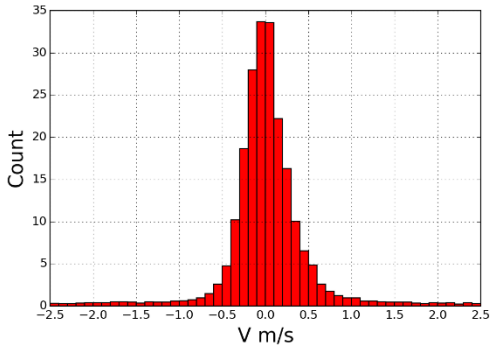


Figure A. 2695: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

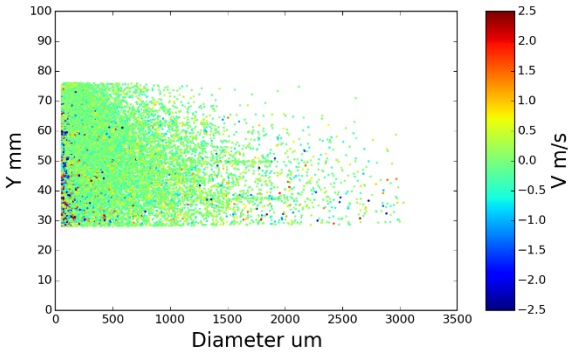


Figure A. 2693: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.1 Matched Only Droplets for .LB Image

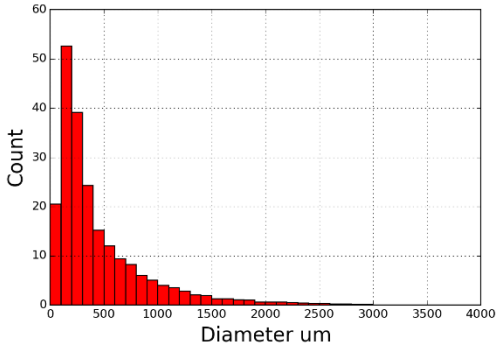


Figure A. 2696: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

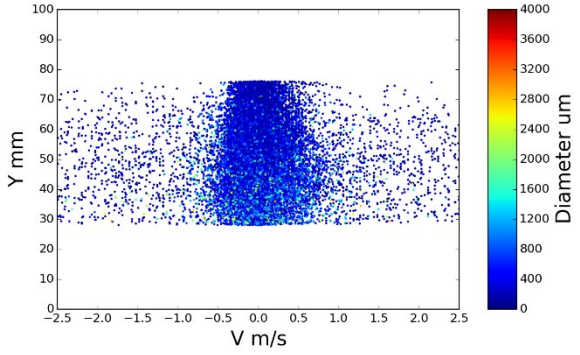


Figure A. 2699: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

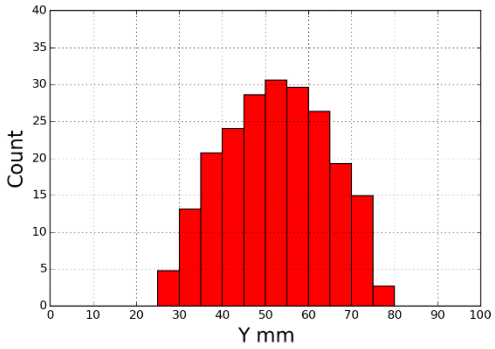


Figure A. 2697: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

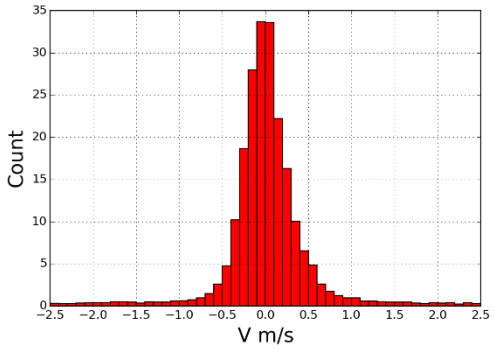


Figure A. 2700: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

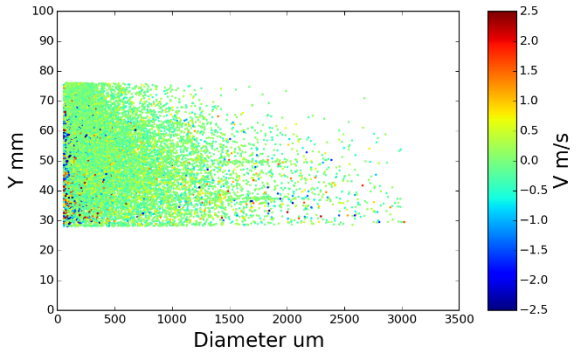


Figure A. 2698: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 Lens 50mm Mag 0_13x

A.4.1.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	100.38	100.26	128.7	3420	633.0	534.5	128.7	3403	631.8	535.3
40-60mm	208.42	209.06	128.7	3365	534.6	421.9	128.7	3401	531.1	418.8
60-80mm	111.87	111.17	128.7	3183	416.0	285.8	128.7	3081	412.8	283.7
80-100mm	25.78	25.73	128.7	1718	342.2	209.4	128.7	1694	341.0	210.1
All	446.45	446.22	128.7	3420	515.9	421.7	128.7	3403	513.3	420.4
			Height A (mm)				Height B (mm)			
Highest Particle			99.9276				99.9561			
Lowest Particle			30.0495				30.0495			

Table A. 285: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	56.96	128.7	3416	740.6	568.6	128.7	3363	727.4	560.1	-2.440	2.440	-0.070	0.780	-2.440	2.440	0.040	0.830
40-60mm	127.48	128.7	3300	622.4	452.9	128.7	3318	613.5	446.9	-2.440	2.440	-0.070	0.700	-2.440	2.440	0.000	0.750
60-80mm	70.07	128.7	3183	488.6	310.8	128.7	3081	481.3	304.8	-2.440	2.440	-0.080	0.580	-2.440	2.440	-0.020	0.630
80-100mm	17.06	128.7	1718	402.8	222.9	128.7	1694	397.4	224.4	-2.440	2.440	-0.090	0.360	-2.440	2.440	0.010	0.420
All	271.57	128.7	3416	598.9	449.6	128.7	3363	589.6	443.0	-2.440	2.440	-0.080	0.670	-2.440	2.440	0.010	0.720

Table A. 286: Matched Droplet Info

A.4.1.2 All Droplets for .LA Image

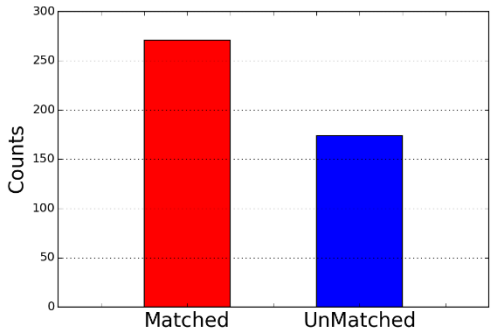


Figure A. 2701: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

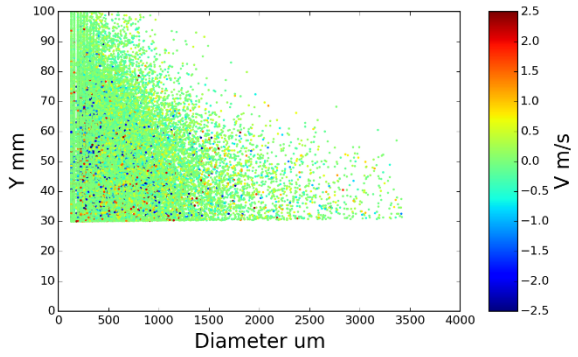


Figure A. 2704: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

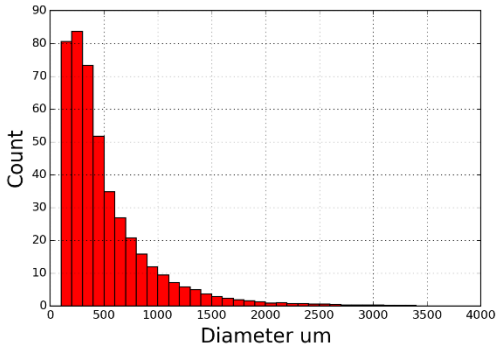


Figure A. 2702: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

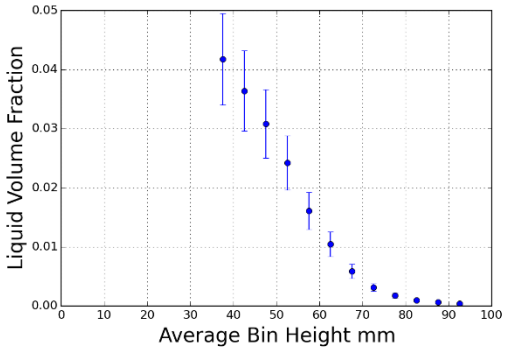


Figure A. 2705: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

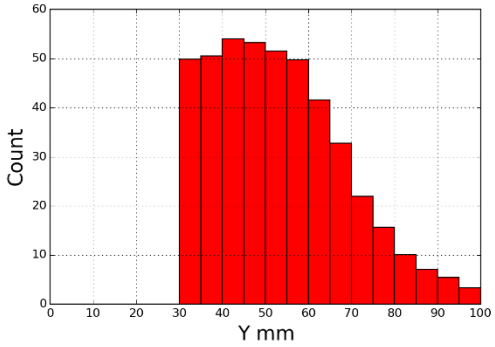


Figure A. 2703: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 All Droplets for .LB Image

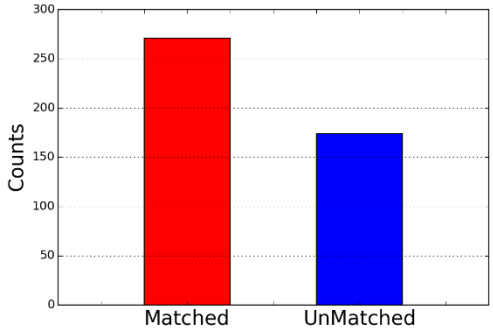


Figure A. 2706: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

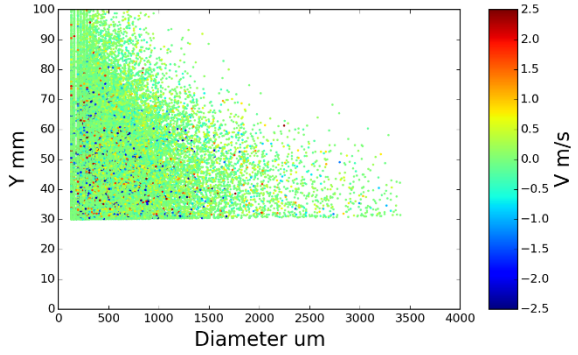


Figure A. 2709: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

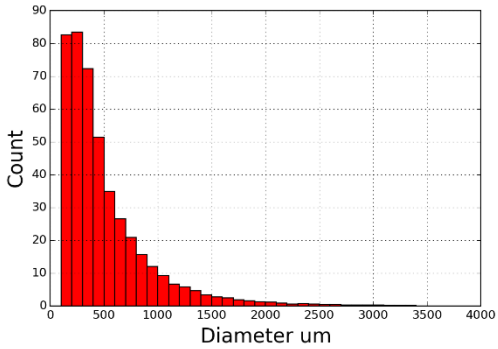


Figure A. 2707: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

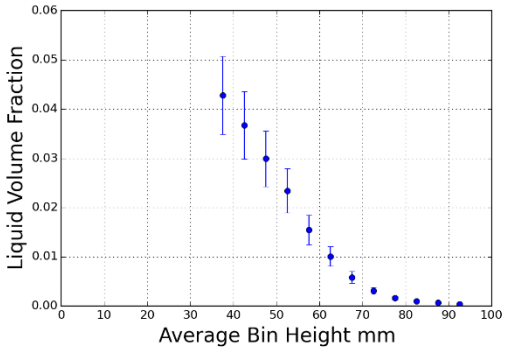


Figure A. 2710: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

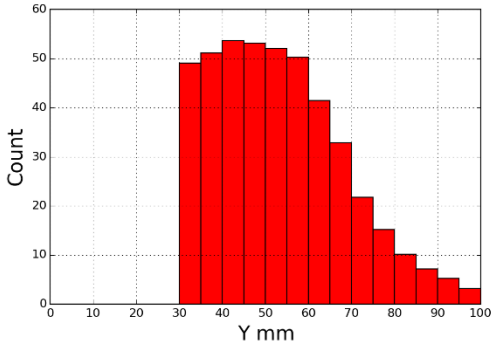


Figure A. 2708: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 Matched Only Droplets for .LA Image

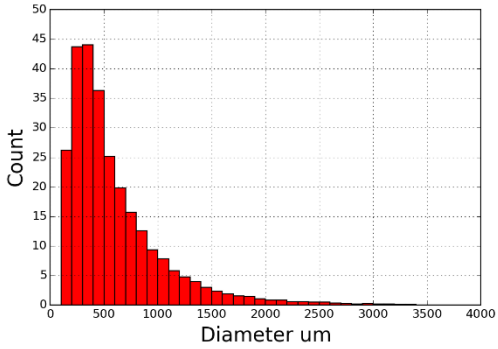


Figure A. 2711: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

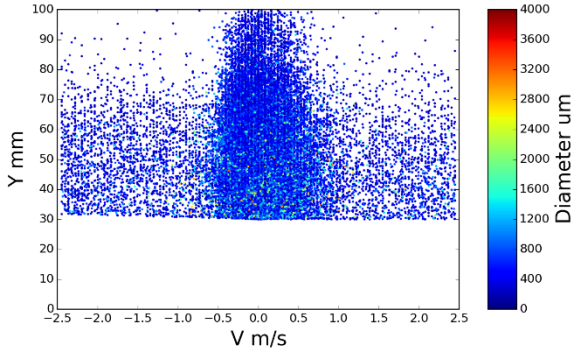


Figure A. 2714: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

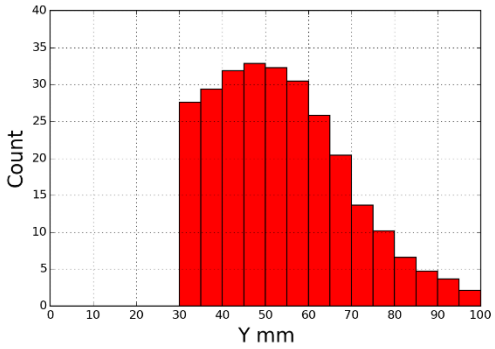


Figure A. 2712: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

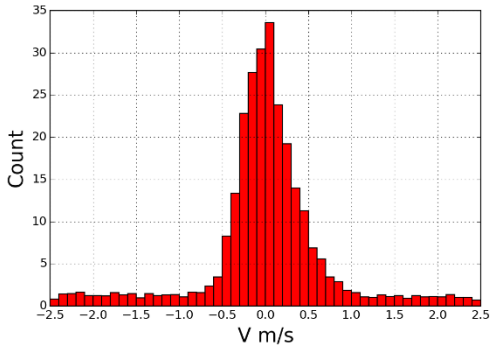


Figure A. 2715: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

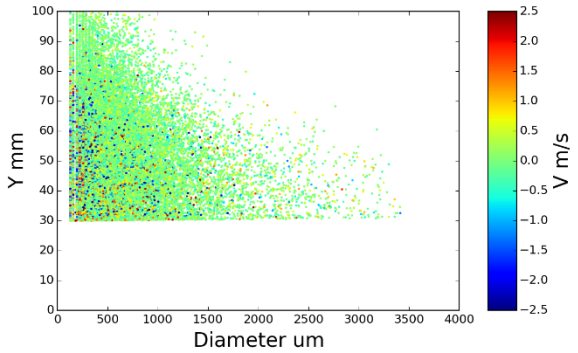


Figure A. 2713: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 Matched Only Droplets for .LB Image

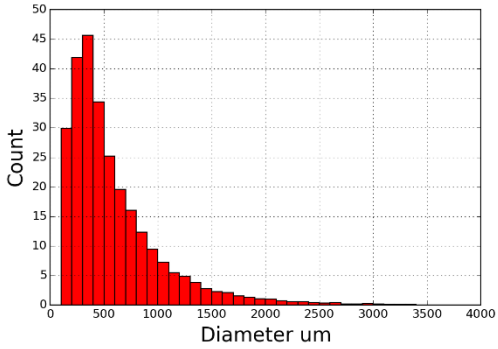


Figure A. 2716: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

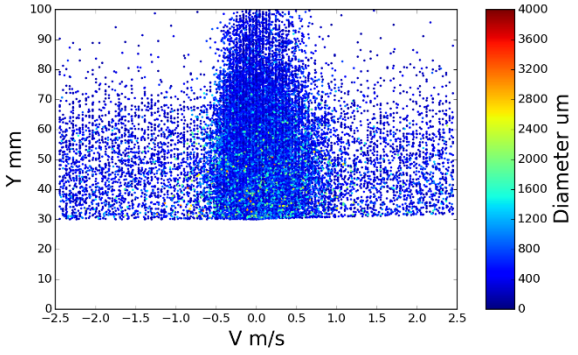


Figure A. 2719: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

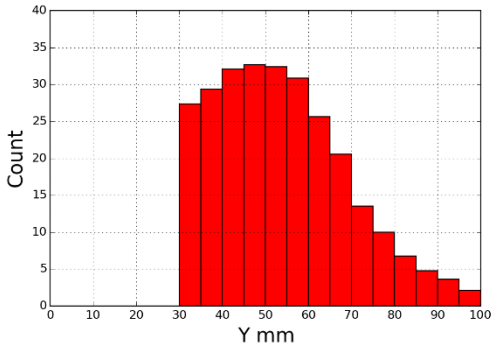


Figure A. 2717: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

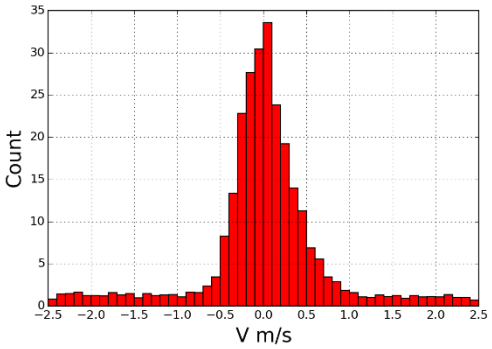


Figure A. 2720: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

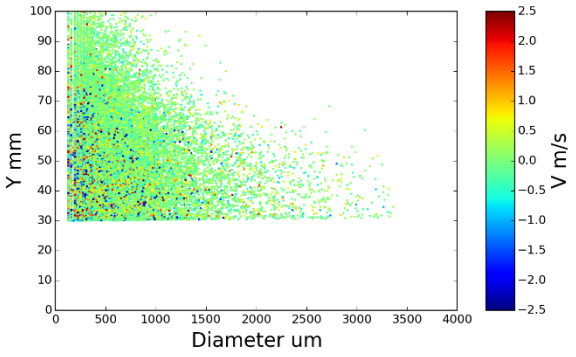


Figure A. 2718: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	85.1	84.89	128.7	3391	703.5	575.5	128.7	3420	706.0	574.8
40-60mm	185.43	184.83	128.7	3407	593.6	475.9	128.7	3420	590.7	473.4
60-80mm	91.15	91.37	128.7	3375	461.5	322.0	128.7	3300	456.1	320.1
80-100mm	17.21	17.14	128.7	1655	407.9	246.8	128.7	1569	405.8	247.4
All	378.89	378.23	128.7	3407	578.1	470.3	128.7	3420	575.7	468.9
			Height A (mm)				Height B (mm)			
Highest Particle			99.9561				99.9292			
Lowest Particle			30.0495				30.0495			

Table A. 287: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	47.17	128.7	3391	854.5	606.6	128.7	3420	836.8	594.1	-2.440	2.440	-0.090	0.760	-2.440	2.440	0.000	0.780
40-60mm	111.93	128.7	3384	695.8	500.1	128.7	3380	688.7	499.0	-2.440	2.440	-0.080	0.690	-2.440	2.440	-0.020	0.740
60-80mm	57.81	128.7	3375	545.3	338.6	128.7	3300	537.3	334.4	-2.440	2.440	-0.090	0.550	-2.440	2.440	-0.060	0.600
80-100mm	12.06	128.7	1655	481.1	249.2	128.7	1569	474.6	249.9	-2.400	1.920	-0.120	0.250	-2.440	2.440	-0.050	0.380
All	228.97	128.7	3391	679.2	493.3	128.7	3420	669.8	488.2	-2.440	2.440	-0.080	0.650	-2.440	2.440	-0.030	0.700

Table A. 288: Matched Droplet Info

A.4.1.2 All Droplets for .LA Image

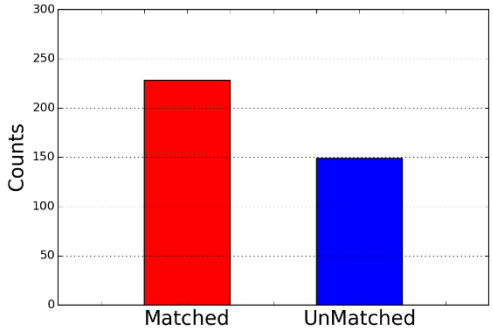


Figure A. 2721: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

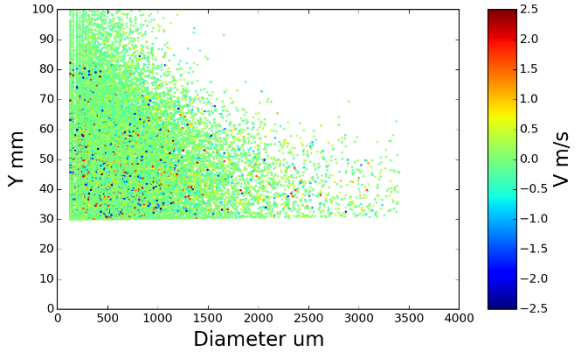


Figure A. 2724: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

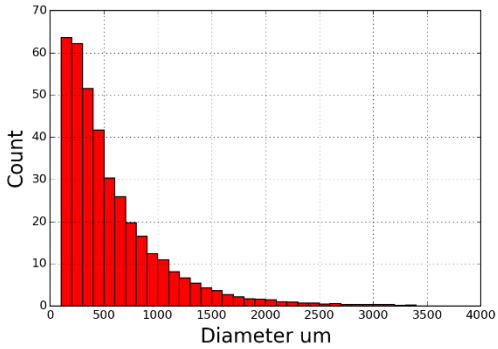


Figure A. 2722: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

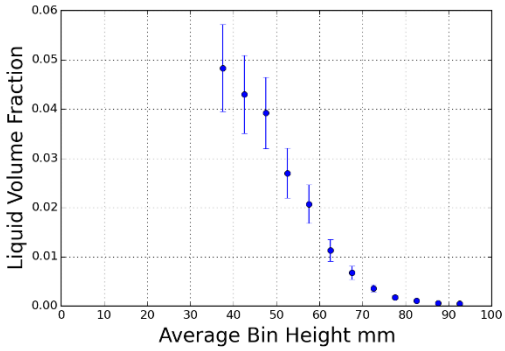


Figure A. 2725: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

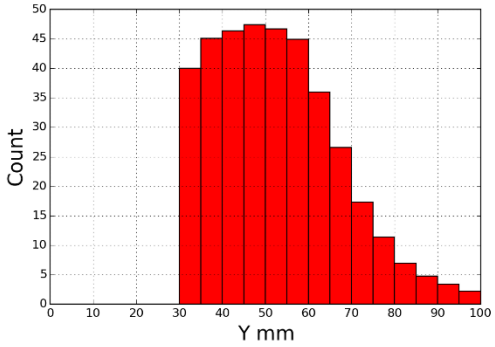


Figure A. 2723: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 All Droplets for .LB Image

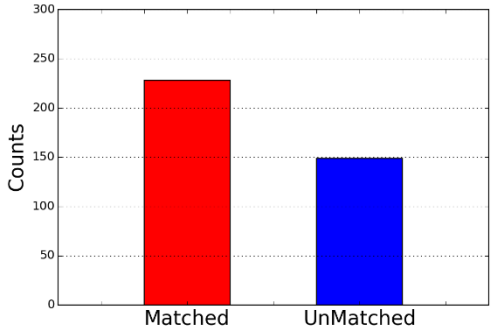


Figure A. 2726: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

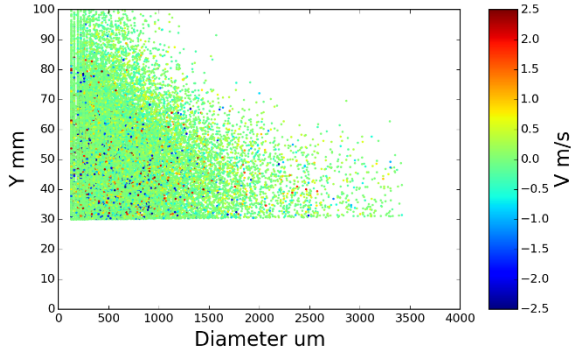


Figure A. 2729: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

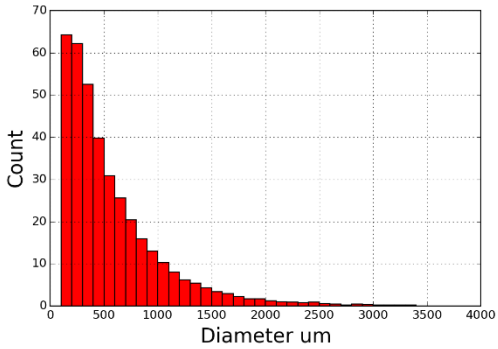


Figure A. 2727: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

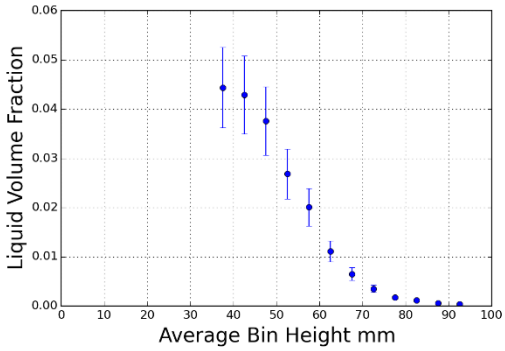


Figure A. 2730: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

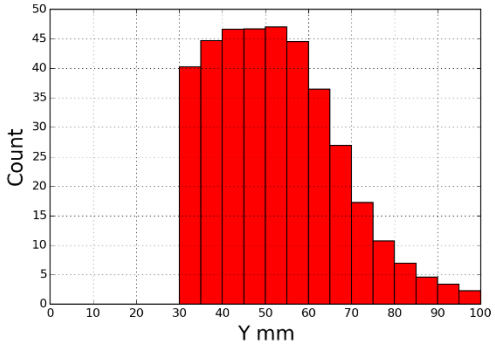


Figure A. 2728: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 Matched Only Droplets for .LA Image

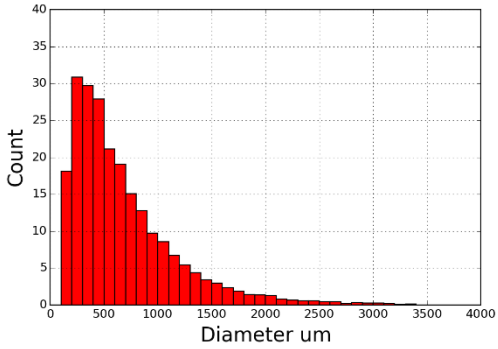


Figure A. 2731: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

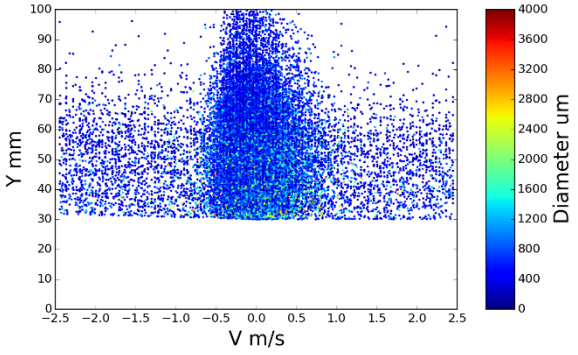


Figure A. 2734: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

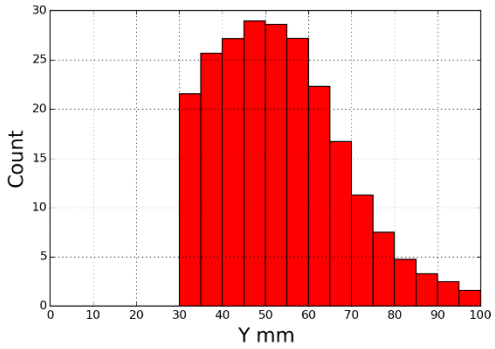


Figure A. 2732: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

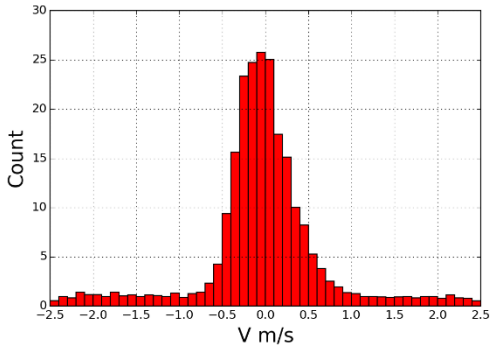


Figure A. 2735: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

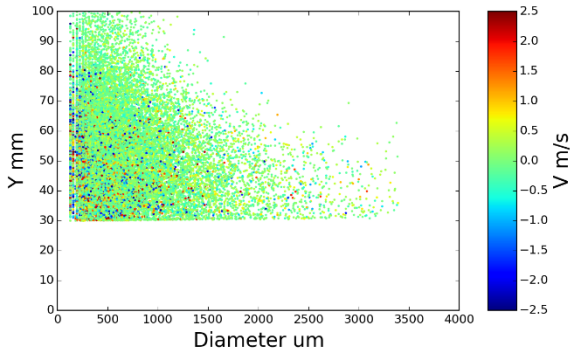


Figure A. 2733: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 Matched Only Droplets for .LB Image

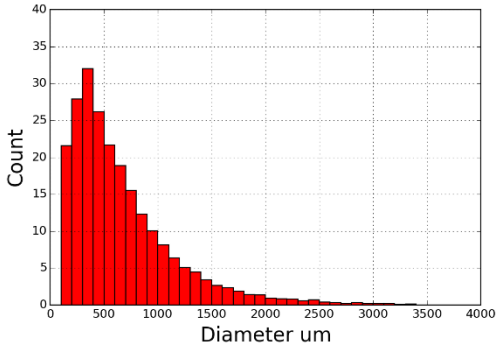


Figure A. 2736: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

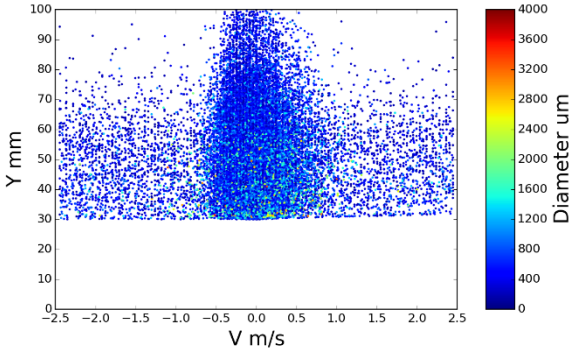


Figure A. 2739: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

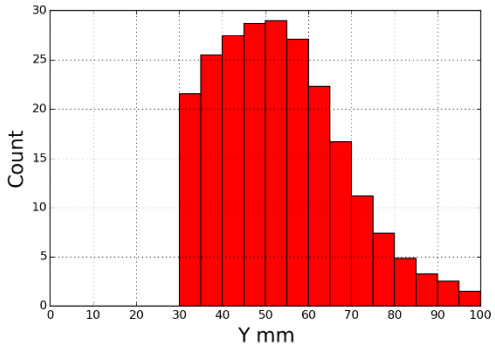


Figure A. 2737: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

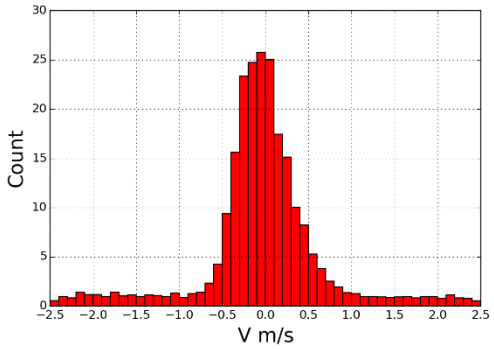


Figure A. 2740: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

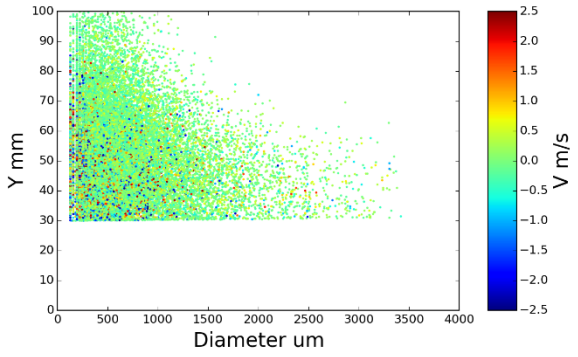


Figure A. 2738: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	67.63	67.0	128.7	3405	769.7	627.7	128.7	3420	767.1	636.0
40-60mm	142.01	141.39	128.7	3389	636.7	528.7	128.7	3421	636.6	530.5
60-80mm	65.93	65.42	128.7	3161	510.6	377.8	128.7	3057	515.3	384.5
80-100mm	10.95	10.9	128.7	1802	467.1	292.4	128.7	1999	465.6	295.2
All	286.52	284.72	128.7	3405	632.6	525.9	128.7	3421	632.9	529.9
			Height A (mm)				Height B (mm)			
Highest Particle			99.8824				99.8526			
Lowest Particle			30.0495				30.0495			

Table A. 289: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	35.58	128.7	3405	943.0	663.6	128.7	3420	927.9	661.9	-2.440	2.440	-0.070	0.730	-2.440	2.440	0.010	0.790
40-60mm	84.76	128.7	3389	759.9	558.2	128.7	3417	747.5	551.4	-2.440	2.440	-0.090	0.660	-2.440	2.440	-0.030	0.710
60-80mm	40.7	128.7	3138	614.9	398.2	128.7	3025	608.3	397.7	-2.440	2.440	-0.090	0.540	-2.440	2.440	-0.040	0.590
80-100mm	7.33	128.7	1802	563.0	294.4	128.7	1834	556.8	298.0	-2.390	2.280	-0.110	0.370	-2.360	2.400	-0.050	0.410
All	168.37	128.7	3405	755.0	553.0	128.7	3420	743.9	548.7	-2.440	2.440	-0.090	0.640	-2.440	2.440	-0.020	0.690

Table A. 290: Matched Droplet Info

A.4.1.2 All Droplets for .LA Image

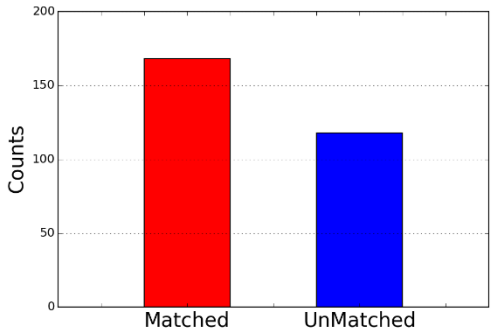


Figure A. 2741: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

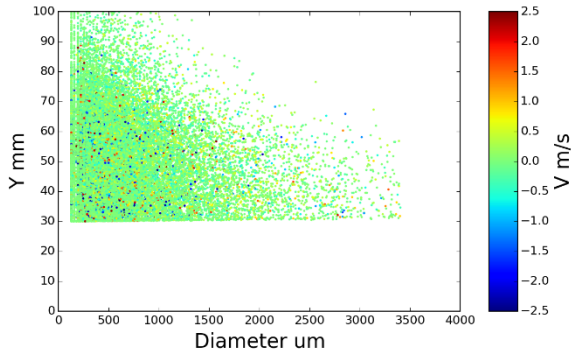


Figure A. 2744: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

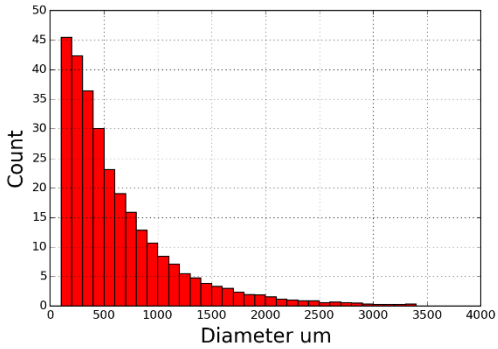


Figure A. 2742: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

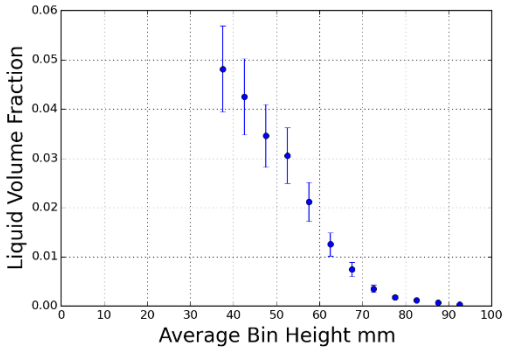


Figure A. 2745: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

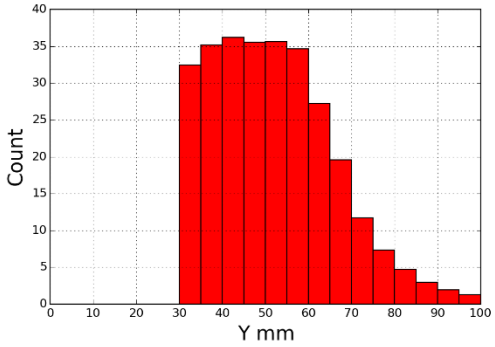


Figure A. 2743: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 All Droplets for .LB Image

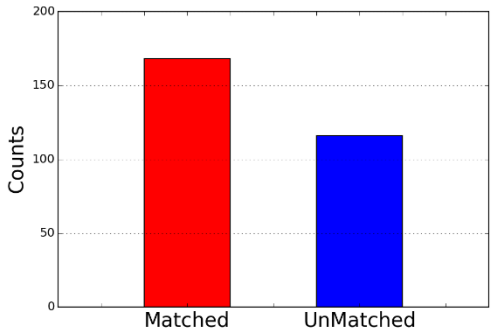


Figure A. 2746: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

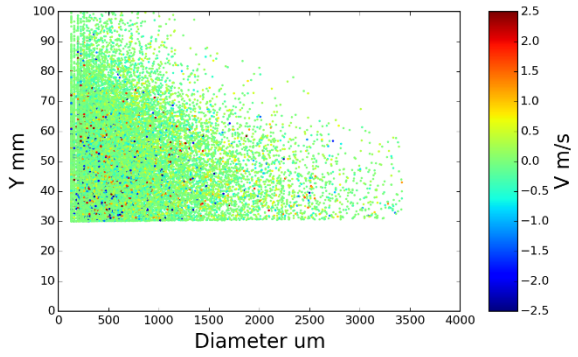


Figure A. 2749: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

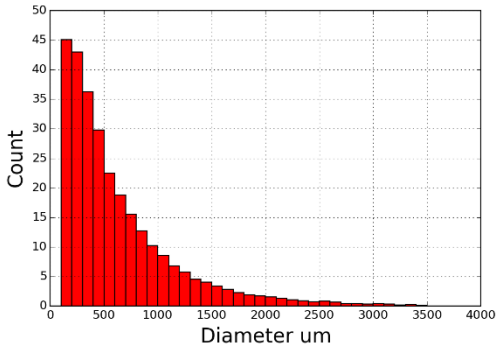


Figure A. 2747: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

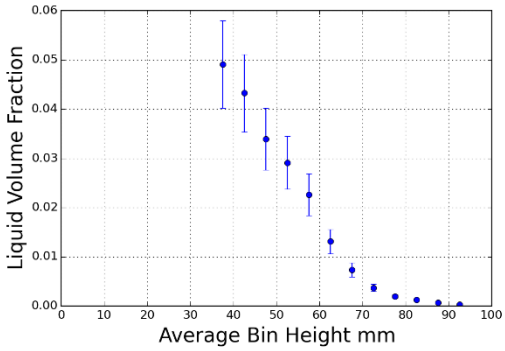


Figure A. 2750: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

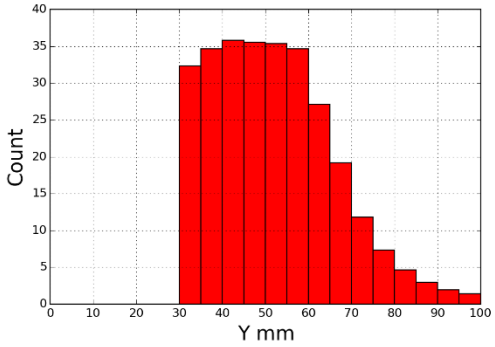


Figure A. 2748: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 Matched Only Droplets for .LA Image

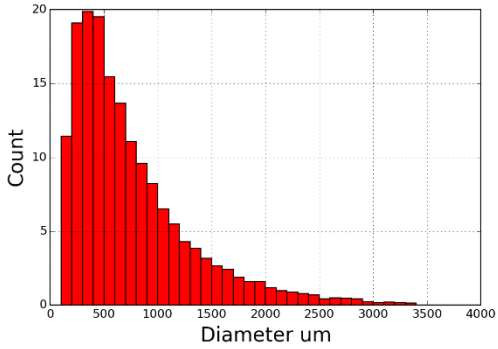


Figure A. 2751: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

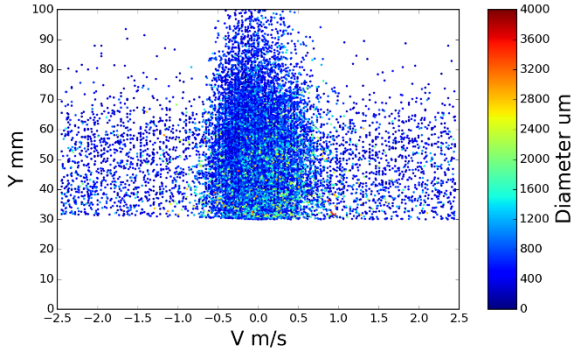


Figure A. 2754: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

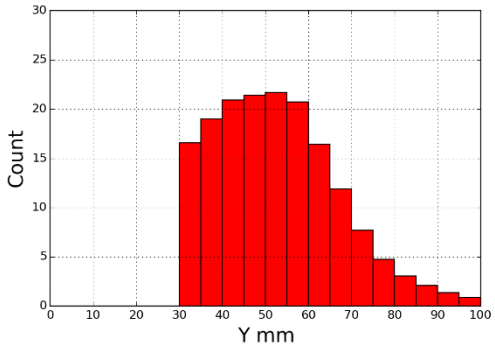


Figure A. 2752: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

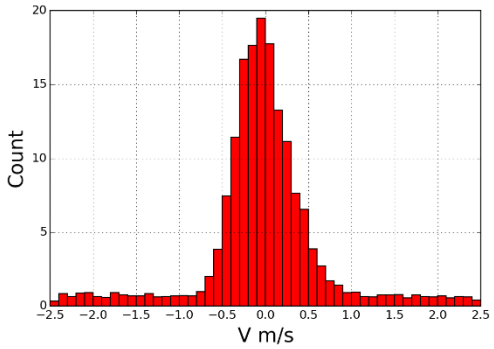


Figure A. 2755: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

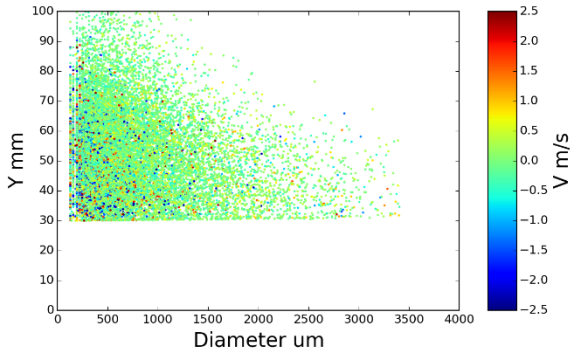


Figure A. 2753: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 Matched Only Droplets for .LB Image

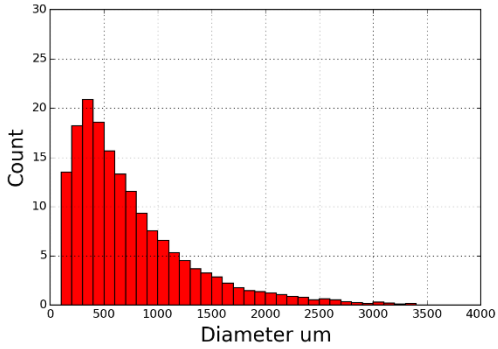


Figure A. 2756: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

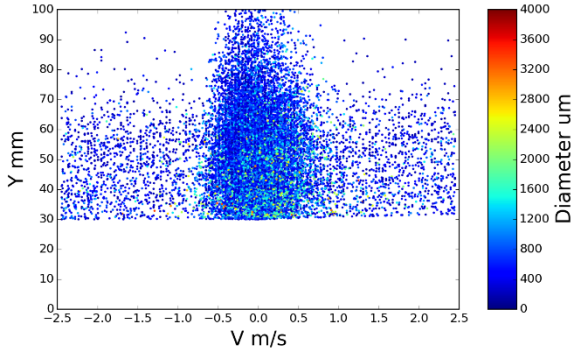


Figure A. 2759: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

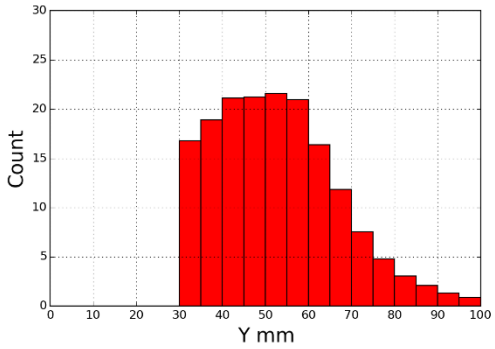


Figure A. 2757: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

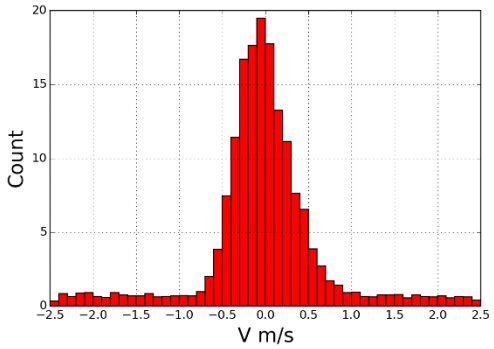


Figure A. 2760: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

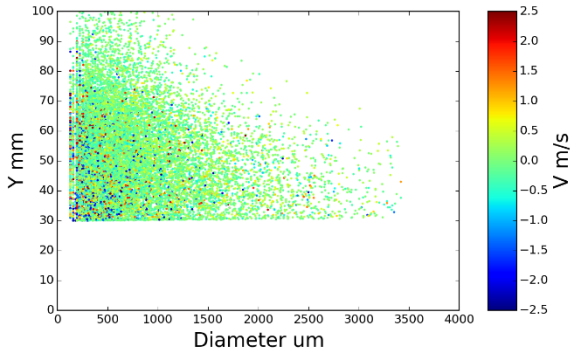


Figure A. 2758: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	52.87	53.38	128.7	3420	772.7	635.9	128.7	3412	769.1	626.7
40-60mm	113.86	115.37	128.7	3418	634.0	524.2	128.7	3400	638.4	531.1
60-80mm	51.22	50.19	128.7	3104	509.9	399.9	128.7	3186	504.1	394.3
80-100mm	10.41	11.61	128.7	2304	419.2	299.9	128.7	2267	402.6	290.3
All	228.59	230.75	128.7	3420	628.5	529.7	128.7	3412	627.6	529.9
			Height A (mm)				Height B (mm)			
Highest Particle			99.9276				99.9561			
Lowest Particle			30.0495				30.0495			

Table A. 291: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	26.97	128.7	3392	963.9	673.1	128.7	3412	946.5	666.9	-2.440	2.440	-0.070	0.730	-2.440	2.440	0.000	0.750
40-60mm	65.8	128.7	3418	754.1	548.0	128.7	3338	747.7	546.1	-2.440	2.440	-0.070	0.640	-2.440	2.440	-0.040	0.690
60-80mm	28.85	128.7	2955	612.6	414.1	128.7	3014	605.2	409.9	-2.440	2.440	-0.050	0.560	-2.440	2.440	-0.050	0.610
80-100mm	5.08	128.7	2304	502.4	299.1	128.7	2267	494.1	289.2	-2.320	2.440	-0.080	0.490	-2.280	2.410	-0.060	0.530
All	126.7	128.7	3418	756.5	558.1	128.7	3412	747.7	554.1	-2.440	2.440	-0.060	0.640	-2.440	2.440	-0.030	0.680

Table A. 292: Matched Droplet Info

A.4.1.2 All Droplets for .LA Image

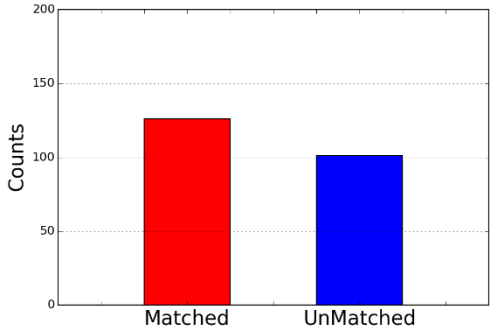


Figure A. 2761: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

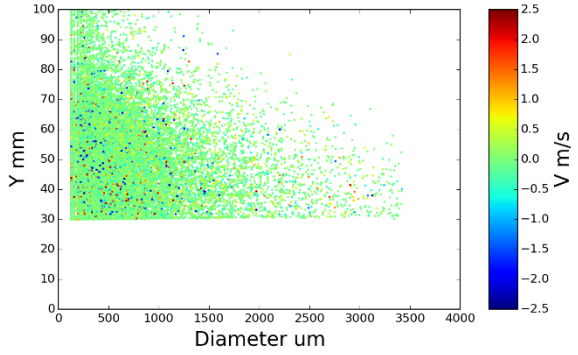


Figure A. 2764: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

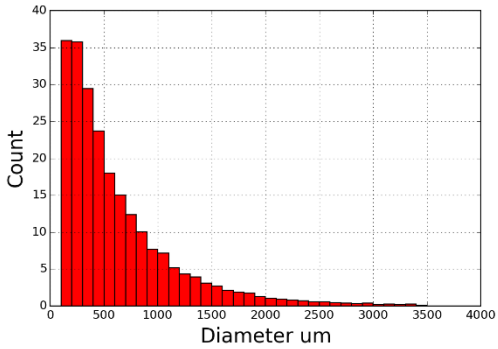


Figure A. 2762: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

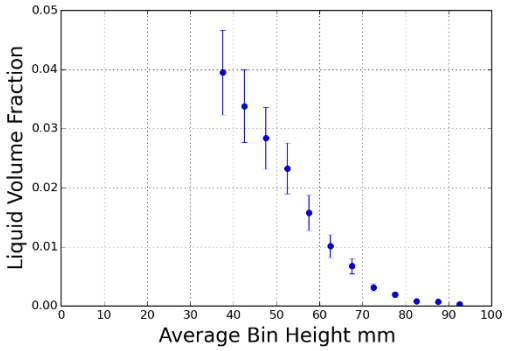


Figure A. 2765: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

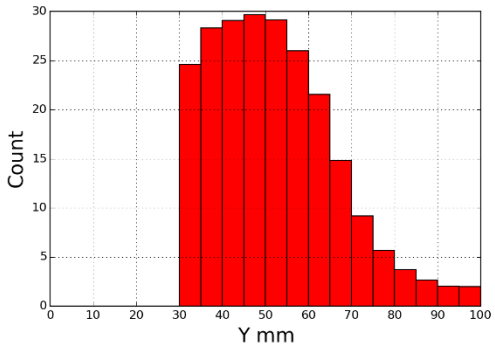


Figure A. 2763: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 All Droplets for .LB Image

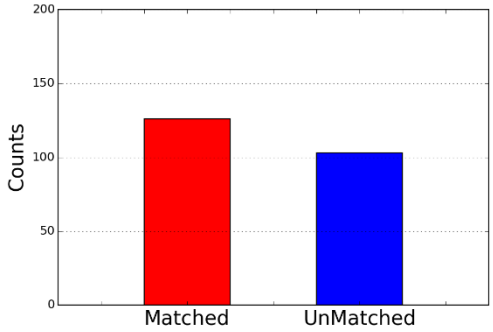


Figure A. 2766: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

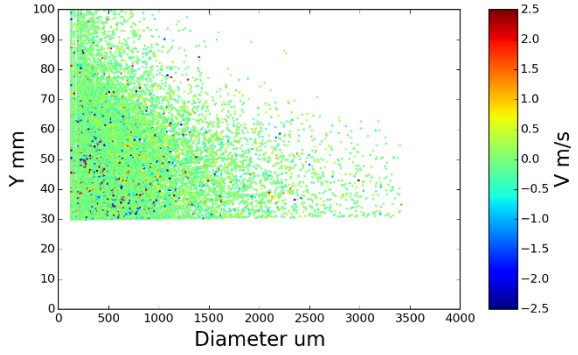


Figure A. 2769: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

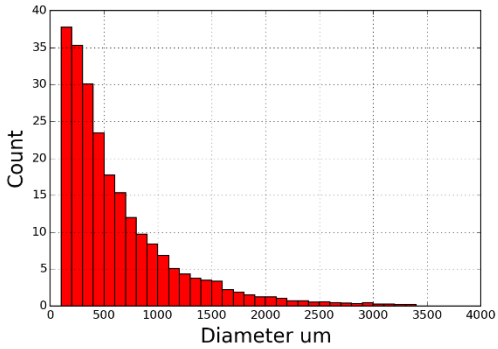


Figure A. 2767: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

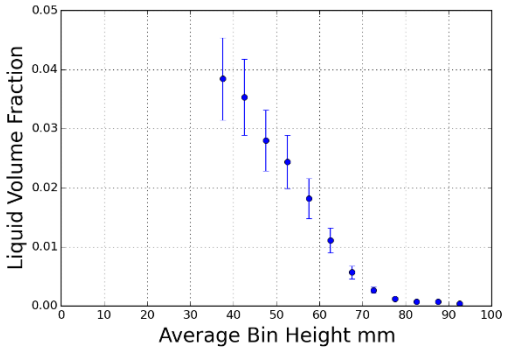


Figure A. 2770: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

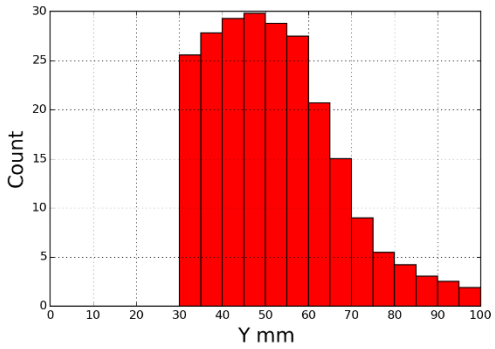


Figure A. 2768: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 Matched Only Droplets for .LA Image

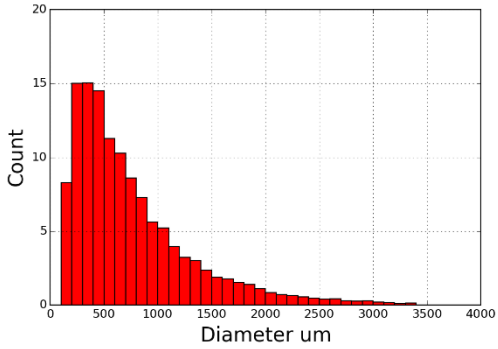


Figure A. 2771: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

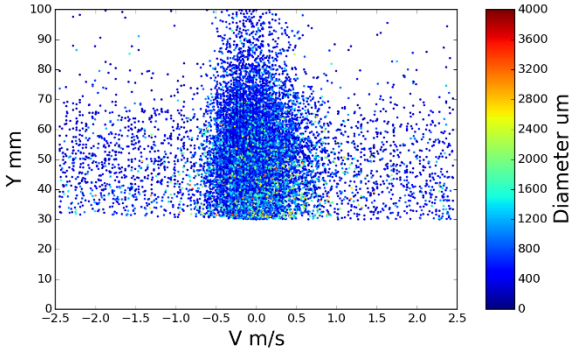


Figure A. 2774: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

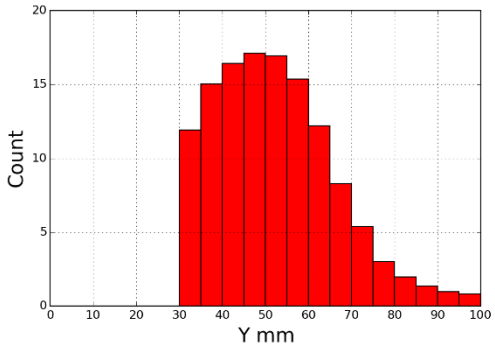


Figure A. 2772: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

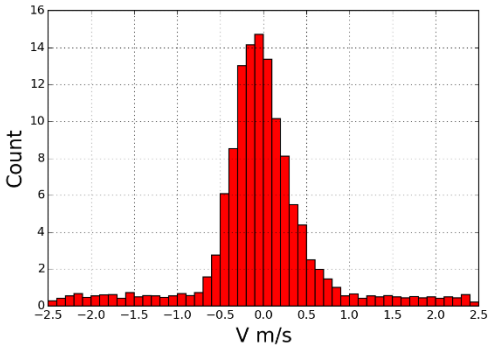


Figure A. 2775: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

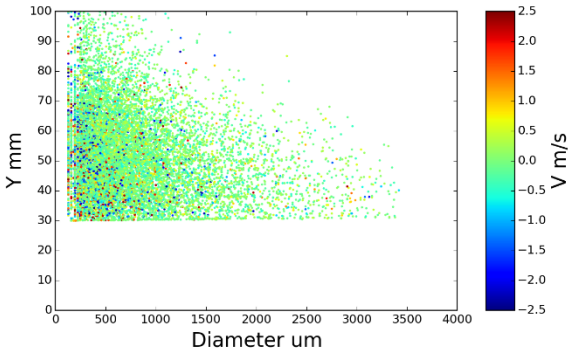


Figure A. 2773: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 Matched Only Droplets for .LB Image

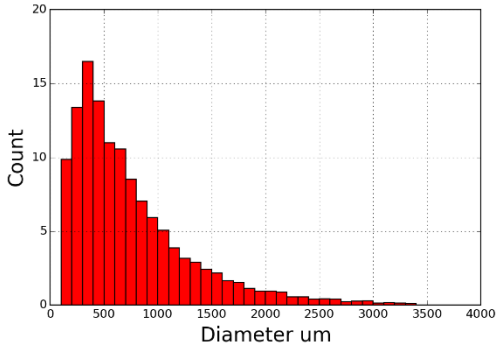


Figure A. 2776: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

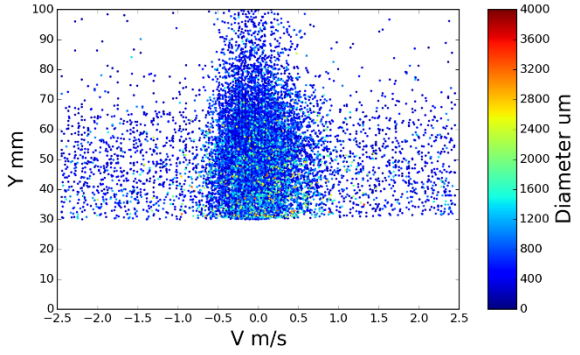


Figure A. 2779: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

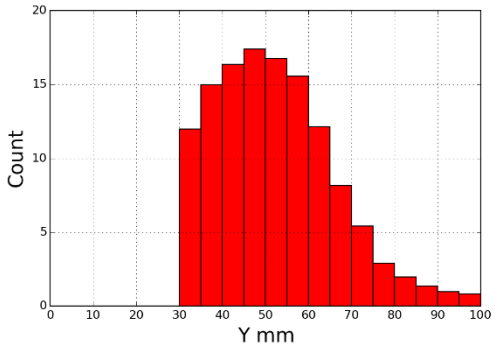


Figure A. 2777: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

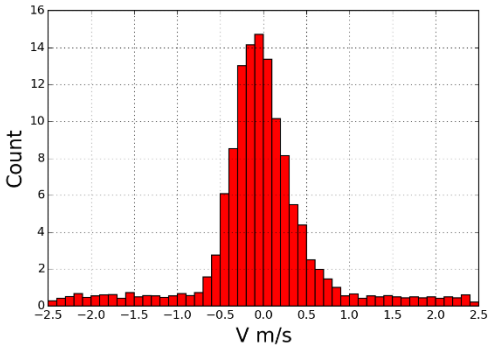


Figure A. 2780: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

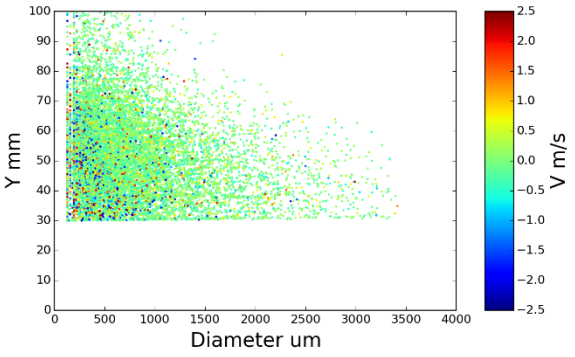


Figure A. 2778: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	38.66	39.11	128.7	3417	795.6	657.5	128.7	3403	775.2	654.4
40-60mm	99.82	98.85	128.7	3420	603.5	511.2	128.7	3420	605.9	519.6
60-80mm	49.9	51.33	128.7	3407	463.5	375.2	128.7	3373	467.4	396.3
80-100mm	11.82	14.63	128.7	3190	364.8	273.7	128.7	2708	365.1	266.8
All	200.47	204.14	128.7	3420	591.6	518.2	128.7	3420	586.2	521.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.9561				99.9561			
Lowest Particle			30.0495				30.0495			

Table A. 293: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	17.4	128.7	3323	1006	700.4	128.7	3403	981.8	694.1	-2.430	2.440	-0.100	0.750	-2.440	2.440	0.050	0.750
40-60mm	52.46	128.7	3408	727.9	542.0	128.7	3420	718.4	538.6	-2.440	2.440	-0.070	0.680	-2.440	2.440	-0.020	0.730
60-80mm	24.37	128.7	3407	567.5	388.3	128.7	3315	560.1	385.8	-2.440	2.440	-0.050	0.650	-2.440	2.440	-0.060	0.680
80-100mm	5.04	128.7	1966	454.6	262.4	128.7	2131	447.8	268.4	-2.440	2.320	-0.090	0.610	-2.440	2.360	0.010	0.650
All	99.27	128.7	3408	723.3	552.6	128.7	3420	712.1	547.8	-2.440	2.440	-0.070	0.690	-2.440	2.440	-0.020	0.720

Table A. 294: Matched Droplet Info

A.4.1.2 All Droplets for .LA Image

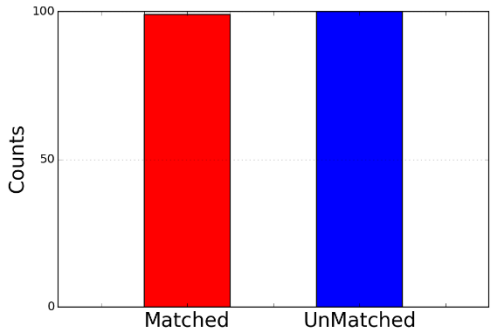


Figure A. 2781: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

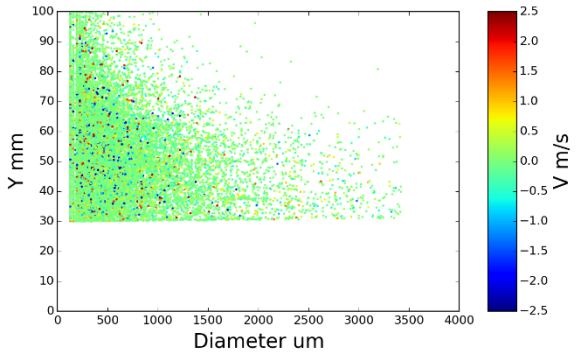


Figure A. 2784: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

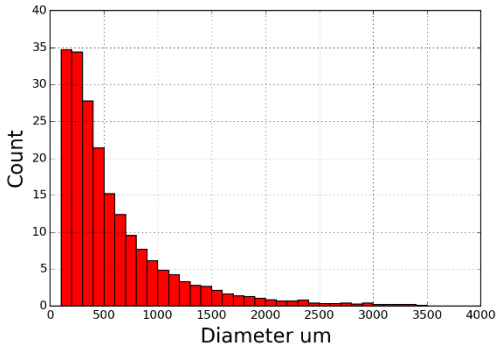


Figure A. 2782: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

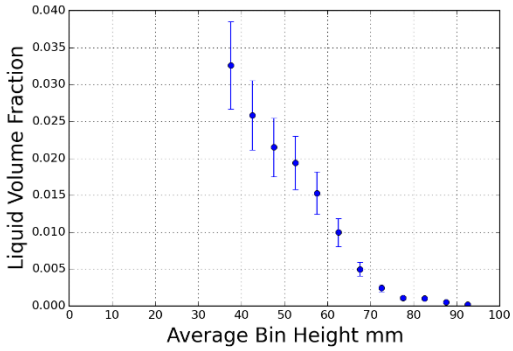


Figure A. 2785: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

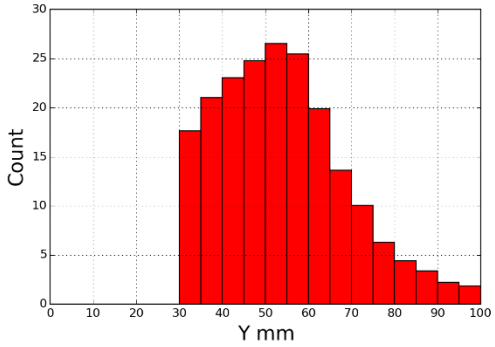


Figure A. 2783: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 All Droplets for .LB Image

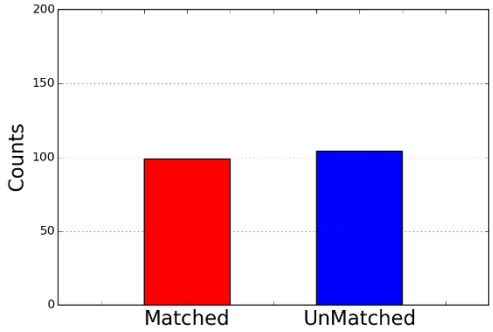


Figure A. 2786: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

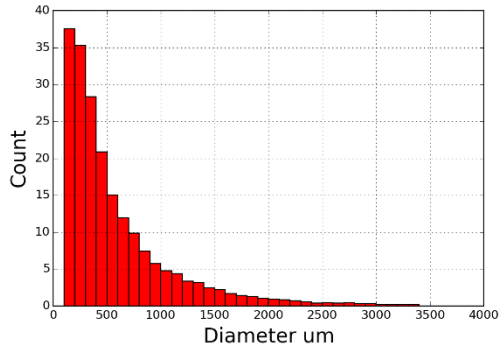


Figure A. 2787: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

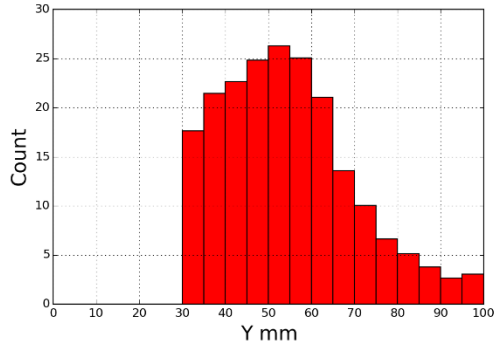


Figure A. 2788: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

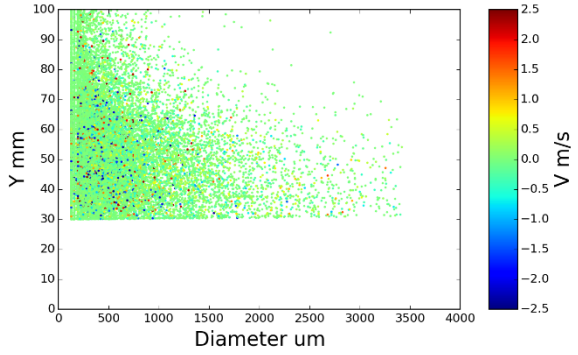


Figure A. 2789: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

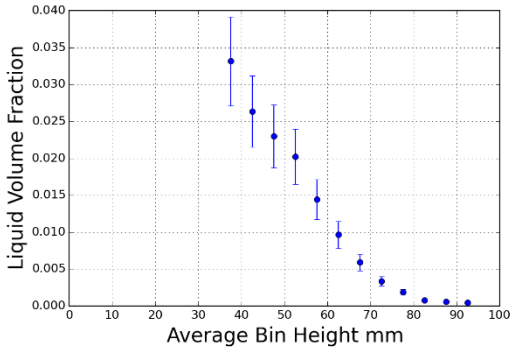


Figure A. 2790: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 Matched Only Droplets for .LA Image

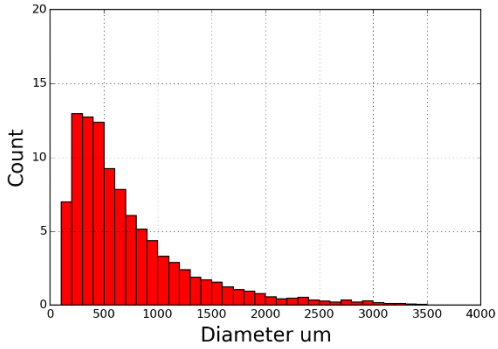


Figure A. 2791: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

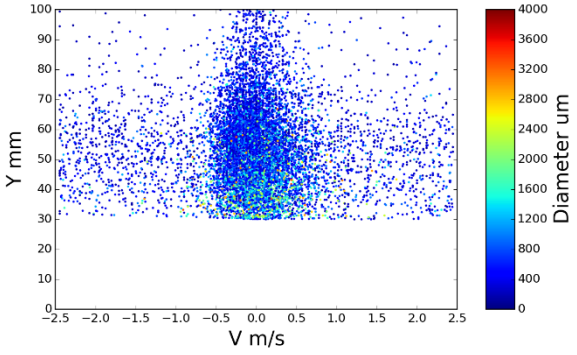


Figure A. 2794: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

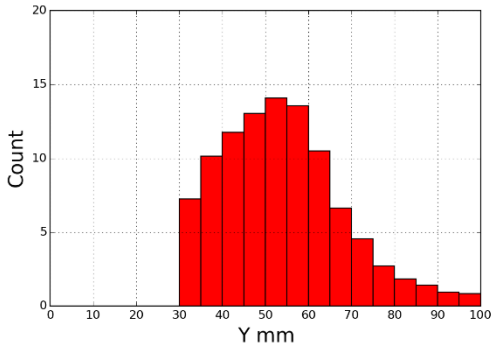


Figure A. 2792: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

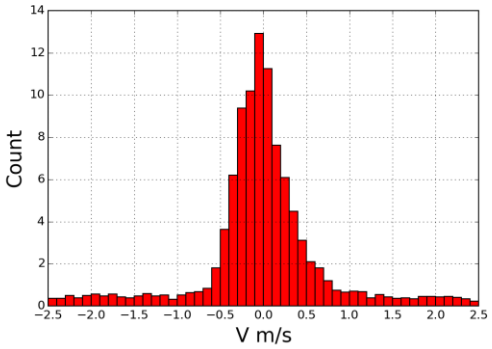


Figure A. 2795: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

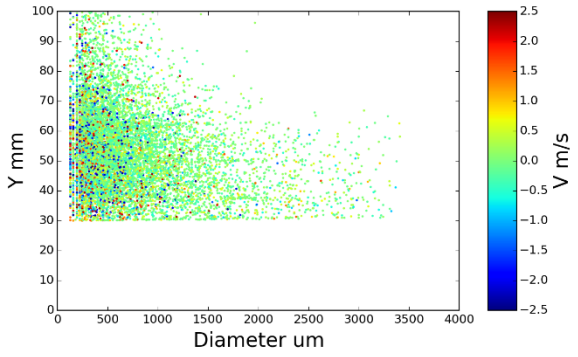


Figure A. 2793: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.1.2 Matched Only Droplets for .LB Image

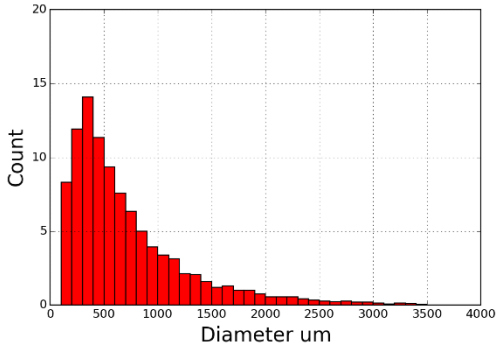


Figure A. 2796: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

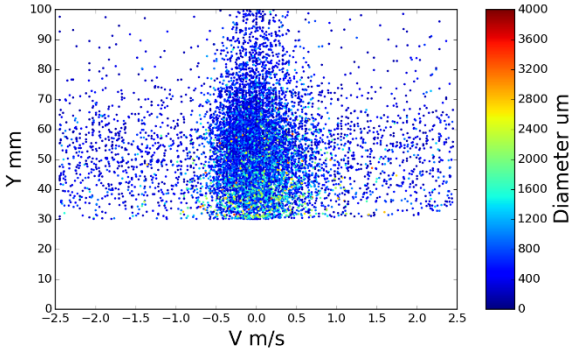


Figure A. 2799: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

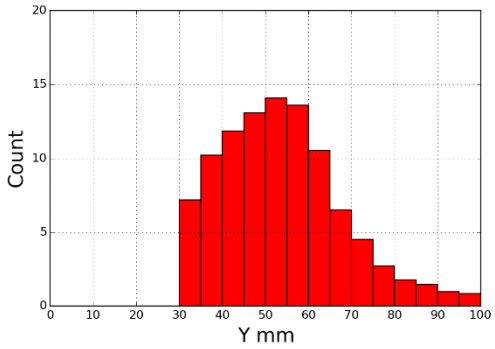


Figure A. 2797: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

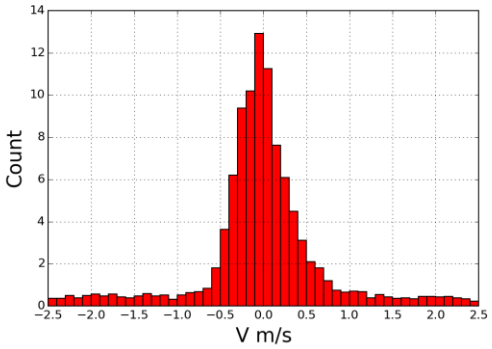


Figure A. 2800: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

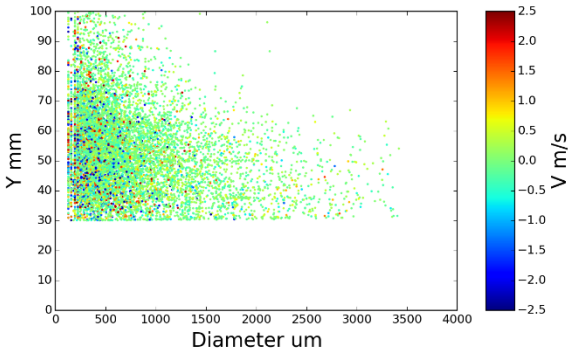


Figure A. 2798: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2 Liquid Level 2

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	13389 / 1.687
Ref Mass Flow (lb/hr) / (kg/s)	3227 / 0.407
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	29973 / 40.650
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	9715 / 30.65
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	40.3 / 4.60
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.5 / 4.71
Total Bundle Q (Btu/hr) / (kW)	289171 / 84.75
Total Bundle & Preboiler Q (Btu/hr) / (kW)	289171 / 84.75
Top Two Rows HTC Ratio	1.104
Bundle Inlet Quality	-0.07
Bundle Exit Quality	1.00

Table A. 295: Thermal Conditions

A.4.2.1 Lens 100mm Mag 0_29x

A.4.2.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	76.42	75.52	57.2	2977	442.1	437.8	57.2	2933	448.9	441.3
40-60mm	101.25	100.63	57.2	2714	382.1	355.7	57.2	2722	383.6	355.1
60-80mm	56.28	56.47	57.2	2602	299.2	244.9	57.2	2551	298.0	242.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	233.96	232.63	57.2	2977	381.8	366.9	57.2	2933	384.0	367.7
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 296: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	53.04	57.2	2977	545.4	457.5	57.2	2930	546.3	461.1	-2.490	2.490	-0.080	0.380	-2.540	2.540	0.100	0.500
40-60mm	78.77	57.2	2714	446.4	368.5	57.2	2722	444.8	367.8	-2.540	2.490	-0.090	0.260	-2.410	2.490	0.140	0.400
60-80mm	45.51	57.2	2602	337.0	249.3	57.2	2551	334.0	248.0	-2.540	2.380	-0.100	0.210	-2.450	2.450	0.150	0.330
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	177.32	57.2	2977	447.9	380.6	57.2	2930	446.5	381.5	-2.540	2.490	-0.090	0.290	-2.540	2.540	0.130	0.420

Table A. 297: Matched Droplet Info

A.4.2.1 All Droplets for .LA Image

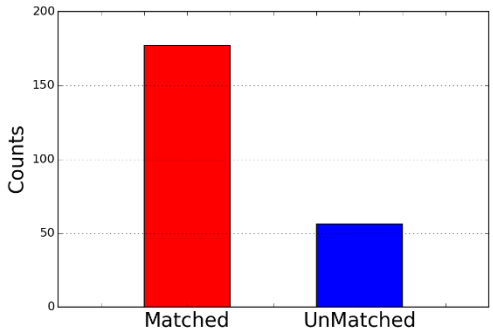


Figure A. 2801: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

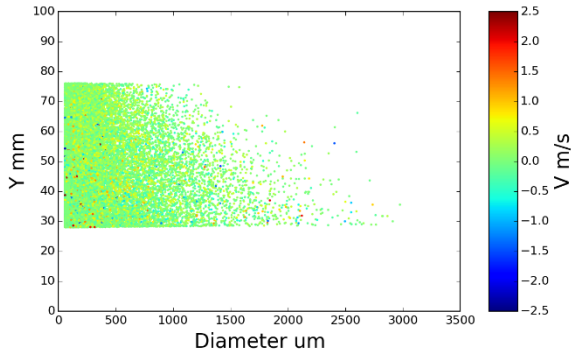


Figure A. 2804: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

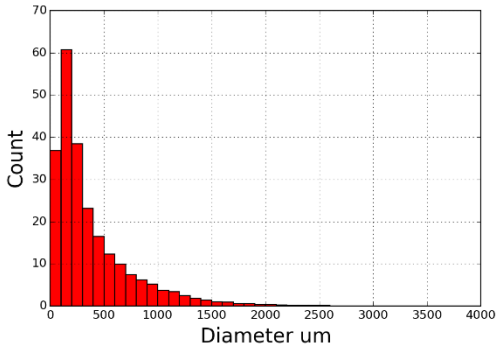


Figure A. 2802: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

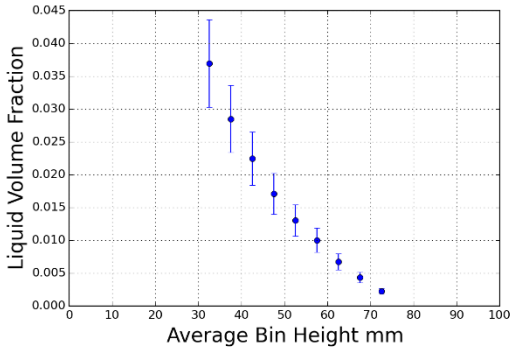


Figure A. 2805: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

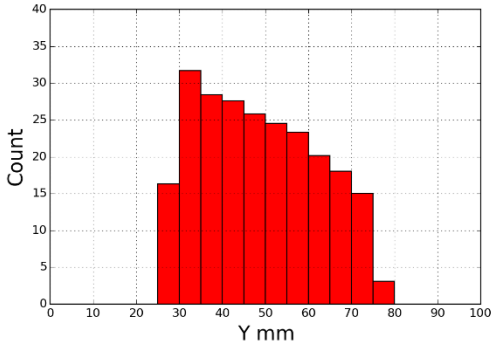


Figure A. 2803: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 All Droplets for .LB Image

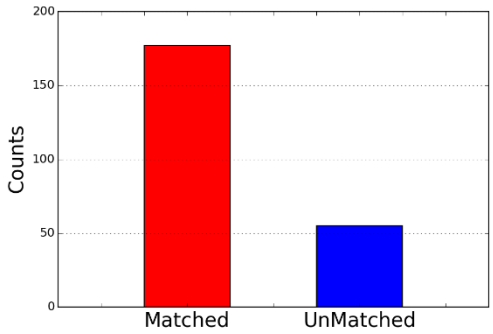


Figure A. 2806: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

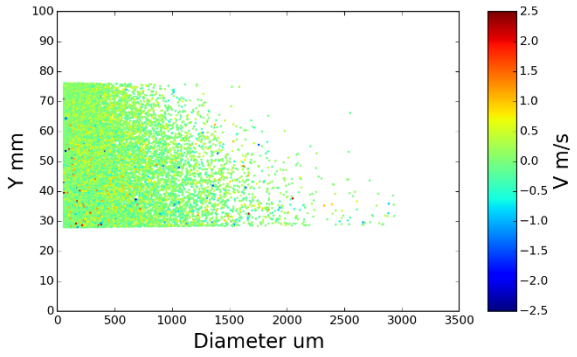


Figure A. 2809: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

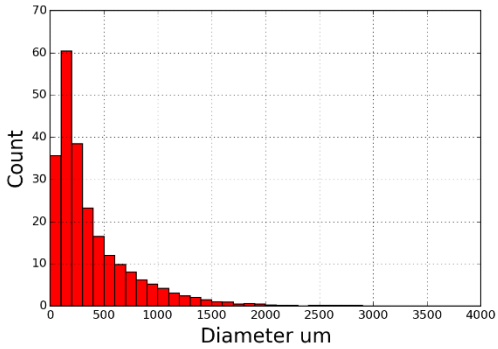


Figure A. 2807: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

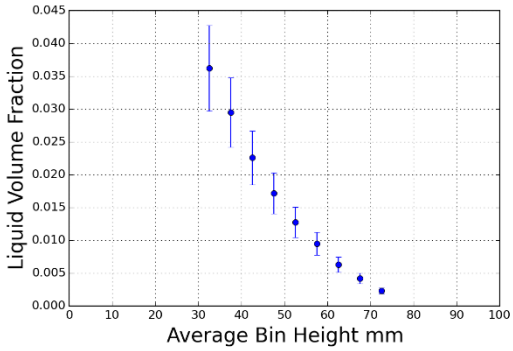


Figure A. 2810: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

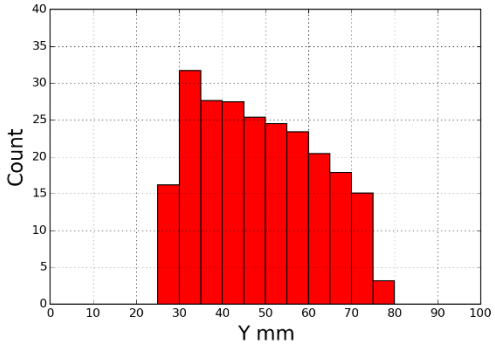


Figure A. 2808: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 Matched Only Droplets for .LA Image

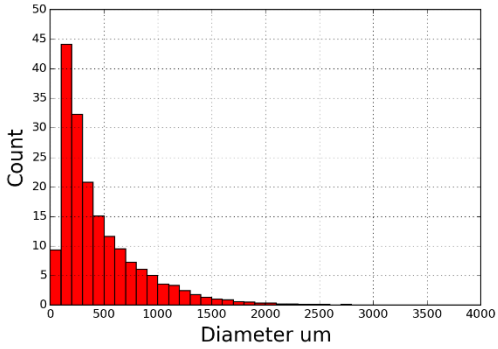


Figure A. 2811: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

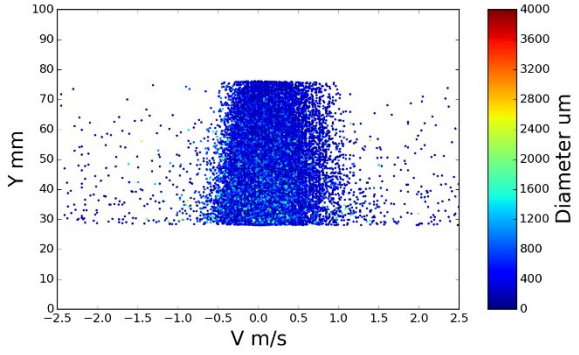


Figure A. 2814: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

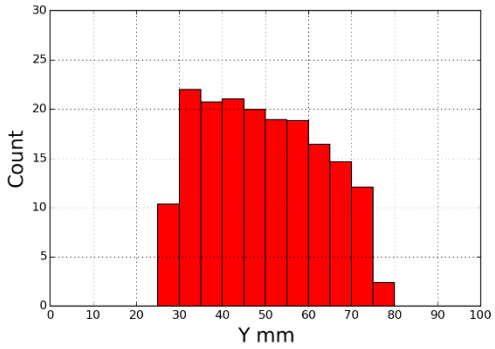


Figure A. 2812: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

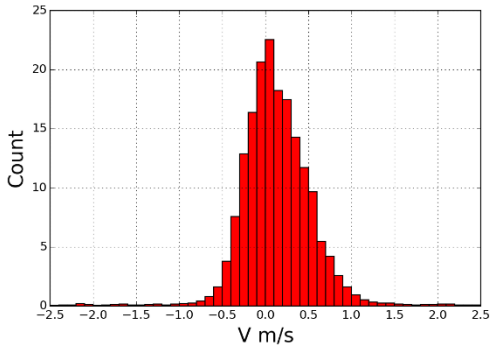


Figure A. 2815: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

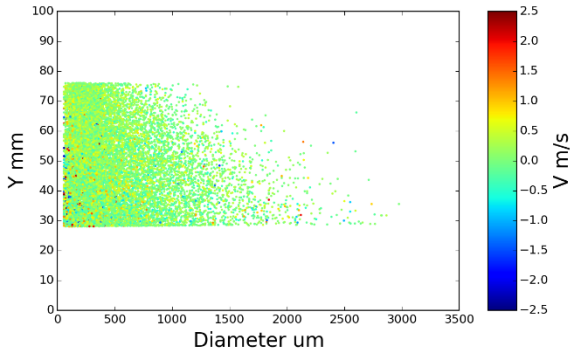


Figure A. 2813: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 Matched Only Droplets for .LB Image

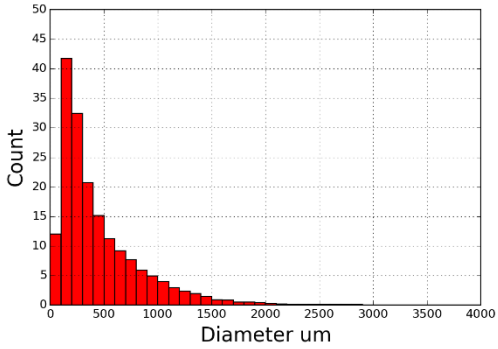


Figure A. 2816: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

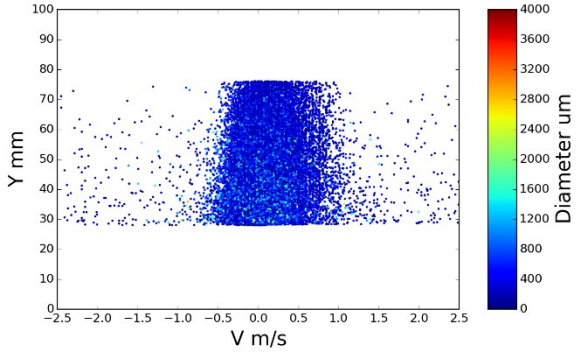


Figure A. 2819: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

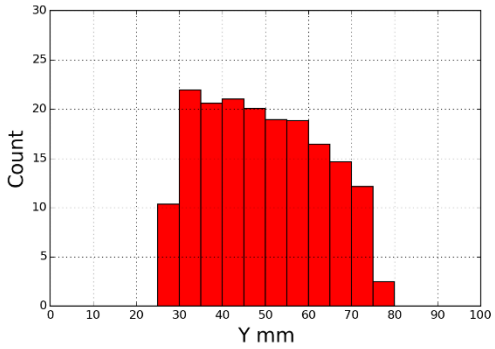


Figure A. 2817: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

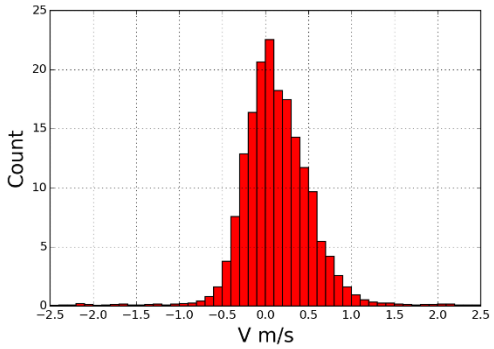


Figure A. 2820: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

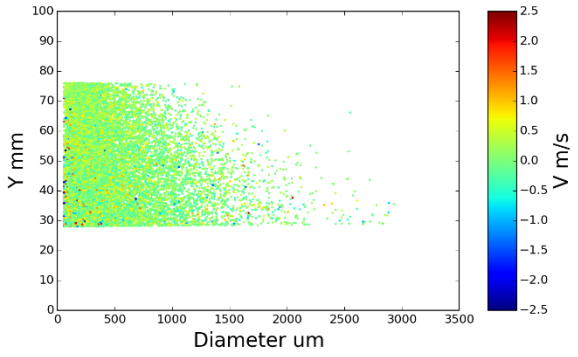


Figure A. 2818: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	75.79	75.07	57.2	2994	373.6	425.4	57.2	3025	380.9	432.2
40-60mm	104.82	102.83	57.2	2975	329.7	397.4	57.2	3016	334.1	398.8
60-80mm	55.03	54.05	57.2	2921	256.3	297.7	57.2	2973	257.9	299.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	235.64	232.0	57.2	2994	326.7	388.6	57.2	3025	331.5	392.2
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0474			
Lowest Particle			28.0846				28.0846			

Table A. 298: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	48.64	57.2	2994	483.9	475.6	57.2	3025	482.7	475.9	-2.510	2.540	-0.060	0.400	-2.540	2.540	-0.180	0.480
40-60mm	75.11	57.2	2975	404.0	438.0	57.2	3016	402.1	437.4	-2.490	2.540	-0.070	0.300	-2.490	2.540	-0.150	0.360
60-80mm	40.07	57.2	2921	306.4	329.4	57.2	2973	304.6	329.4	-2.540	2.400	-0.110	0.240	-2.450	2.540	-0.110	0.270
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	163.82	57.2	2994	403.8	431.1	57.2	3025	402.4	431.2	-2.540	2.540	-0.080	0.320	-2.540	2.540	-0.150	0.380

Table A. 299: Matched Droplet Info

A.4.2.1 All Droplets for .LA Image

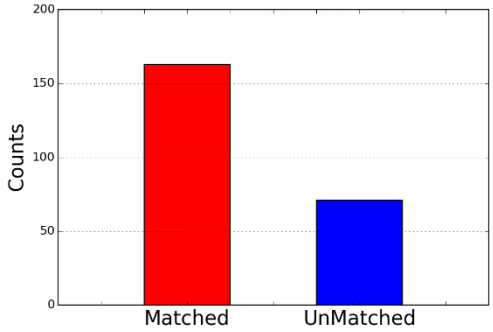


Figure A. 2821: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

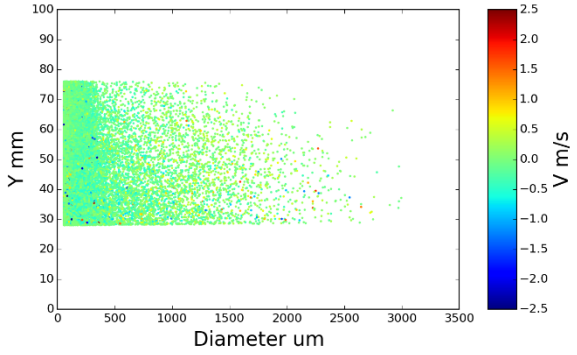


Figure A. 2824: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

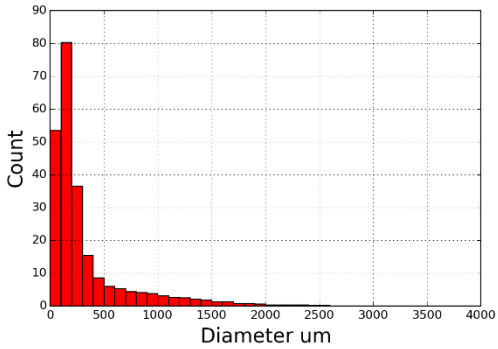


Figure A. 2822: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

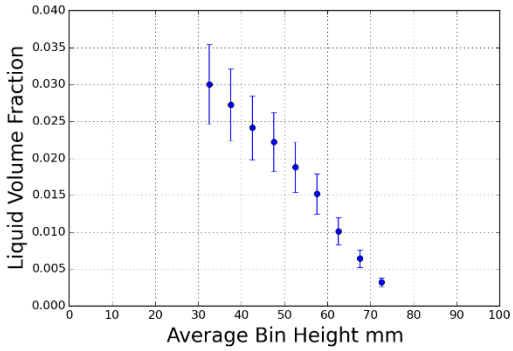


Figure A. 2825: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

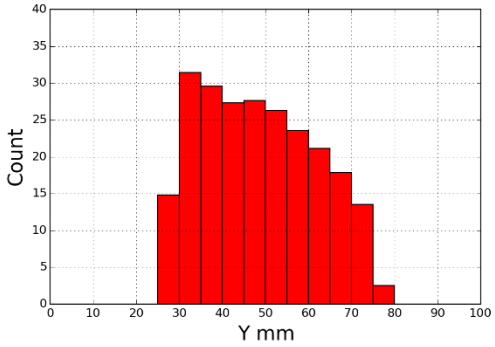


Figure A. 2823: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 All Droplets for .LB Image

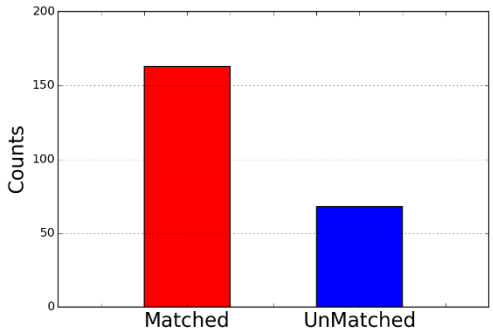


Figure A. 2826: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

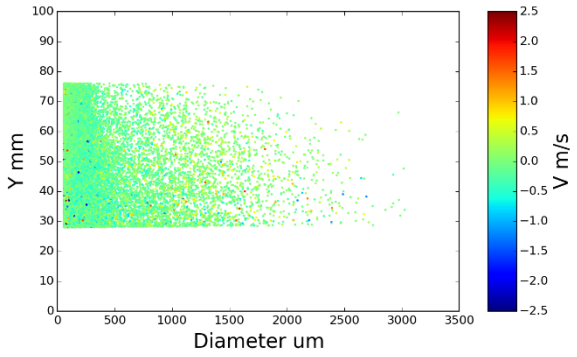


Figure A. 2829: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

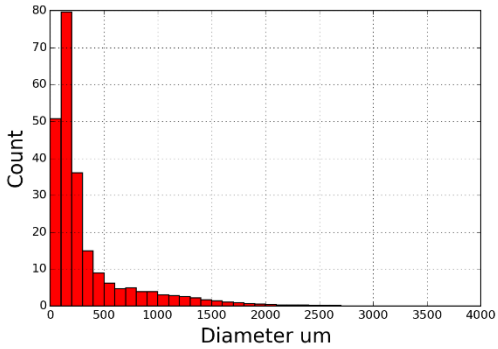


Figure A. 2827: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

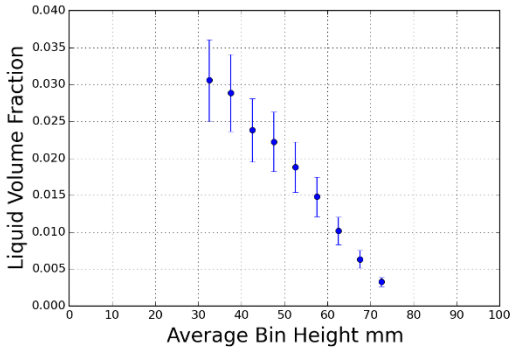


Figure A. 2830: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

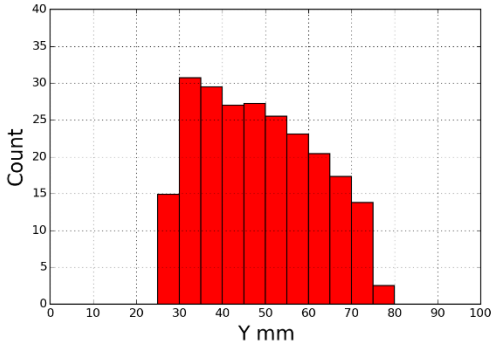


Figure A. 2828: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 Matched Only Droplets for .LA Image

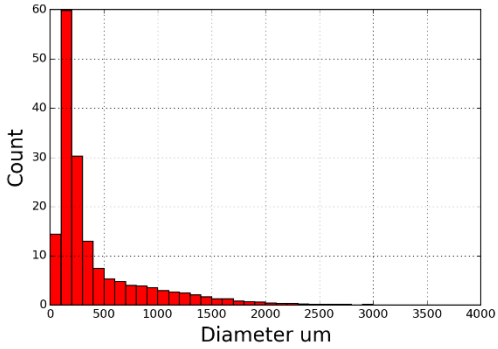


Figure A. 2831: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

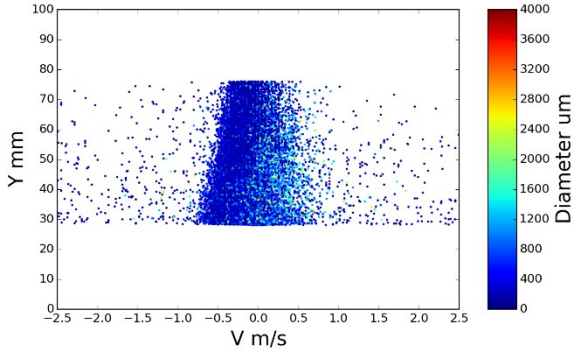


Figure A. 2834: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

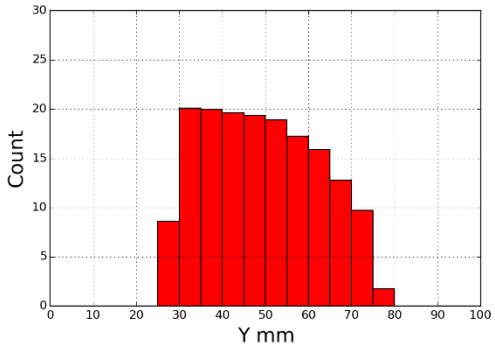


Figure A. 2832: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

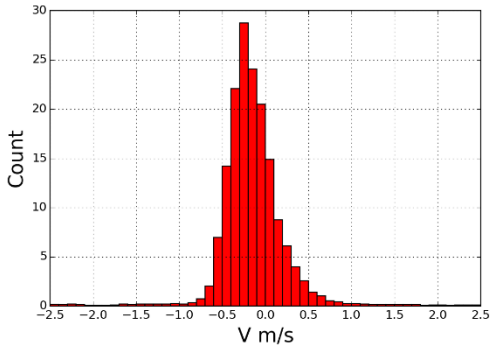


Figure A. 2835: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

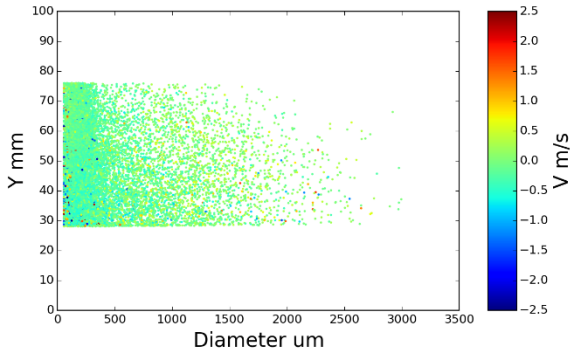


Figure A. 2833: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 Matched Only Droplets for .LB Image

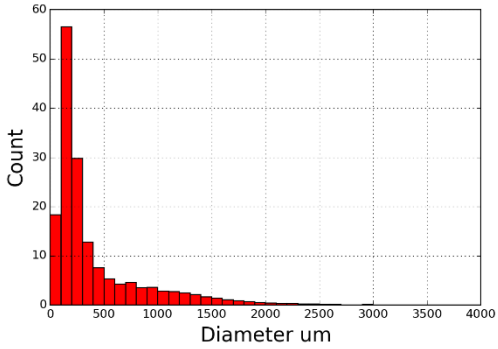


Figure A. 2836: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

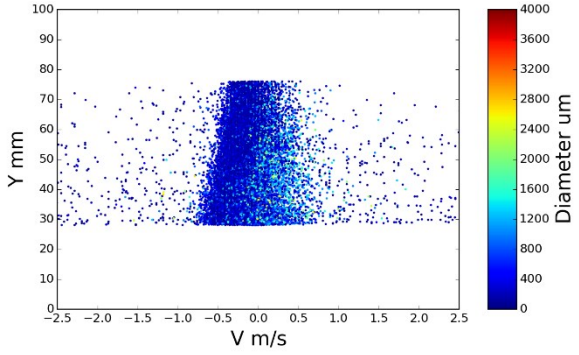


Figure A. 2839: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

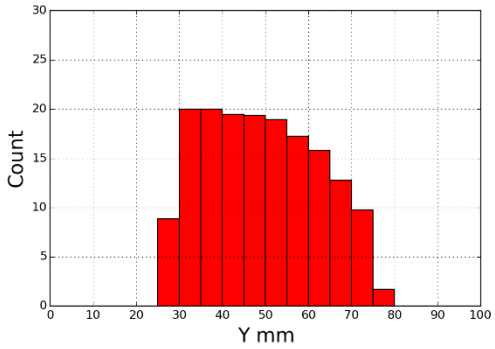


Figure A. 2837: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

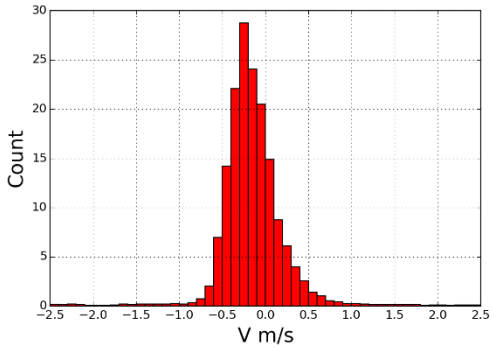


Figure A. 2840: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

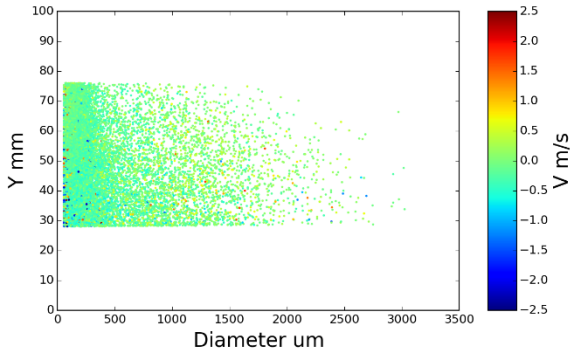


Figure A. 2838: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	57.81	59.45	57.2	2940	381.8	401.5	57.2	2978	380.4	401.7
40-60mm	87.71	85.1	57.2	2995	284.1	347.6	57.2	3034	290.9	353.6
60-80mm	41.48	40.98	57.2	2943	216.0	278.0	57.2	2934	215.0	275.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	187.01	185.55	57.2	2995	299.2	356.9	57.2	3034	302.8	359.9
			Height A (mm)				Height B (mm)			
Highest Particle			76.0466				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 300: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	37.56	57.2	2940	486.9	437.6	57.2	2978	487.1	439.7	-2.490	2.450	-0.050	0.370	-2.490	2.540	-0.040	0.460
40-60mm	56.62	57.2	2995	359.9	393.4	57.2	2991	357.7	391.2	-2.540	2.540	-0.060	0.370	-2.540	2.520	-0.090	0.440
60-80mm	27.15	57.2	2943	264.5	321.1	57.2	2934	261.2	318.4	-2.540	2.160	-0.100	0.290	-2.540	2.540	-0.120	0.360
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	121.33	57.2	2995	377.9	401.6	57.2	2991	376.3	401.2	-2.540	2.540	-0.060	0.360	-2.540	2.540	-0.080	0.430

Table A. 301: Matched Droplet Info

A.4.2.1 All Droplets for .LA Image

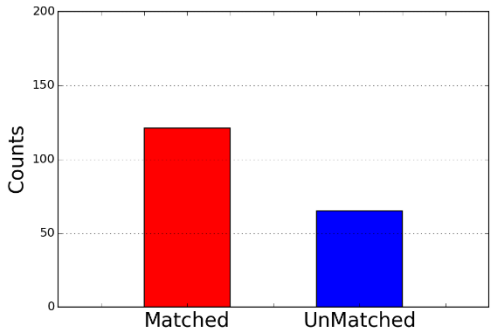


Figure A. 2841: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

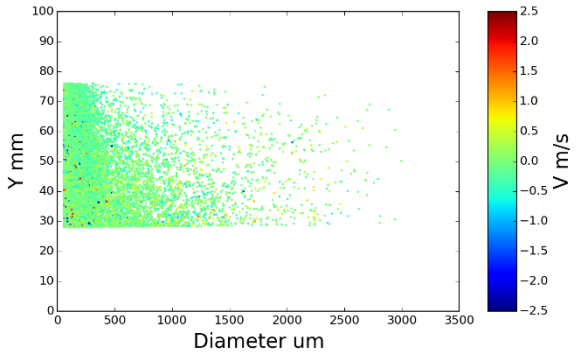


Figure A. 2844: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

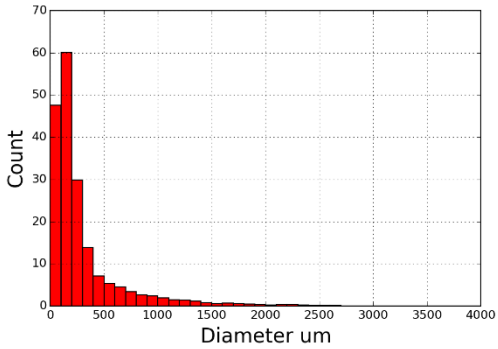


Figure A. 2842: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

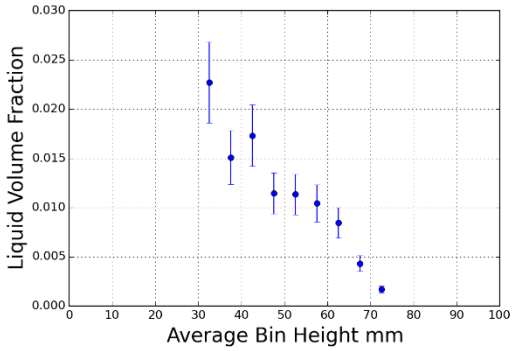


Figure A. 2845: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

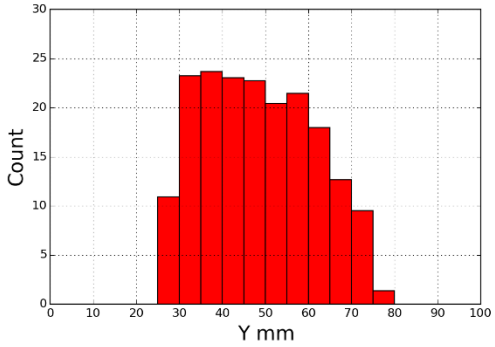


Figure A. 2843: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 All Droplets for .LB Image

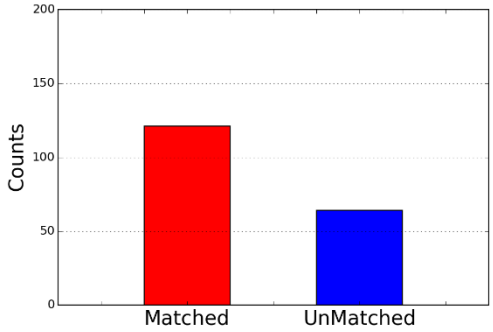


Figure A. 2846: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

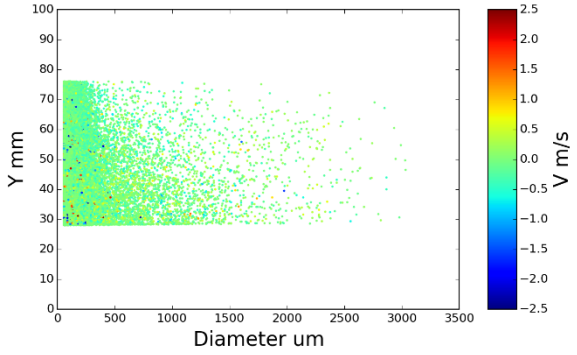


Figure A. 2849: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

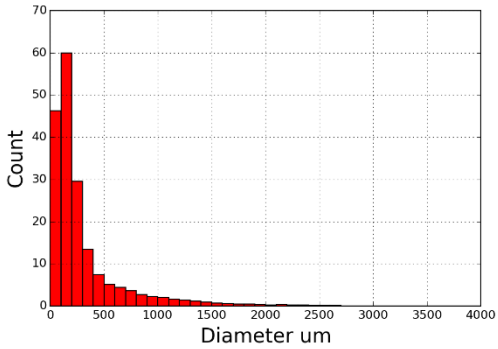


Figure A. 2847: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

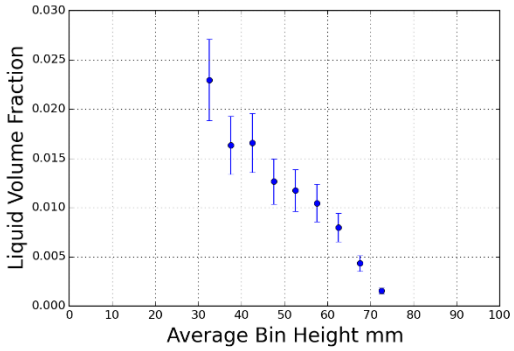


Figure A. 2850: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

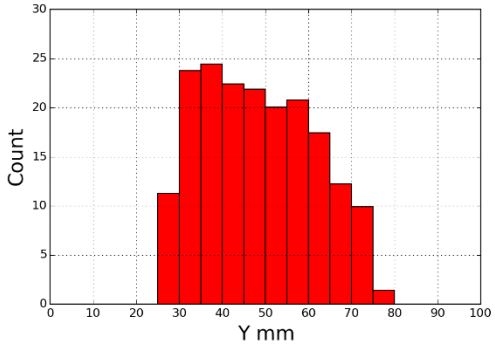


Figure A. 2848: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 Matched Only Droplets for .LA Image

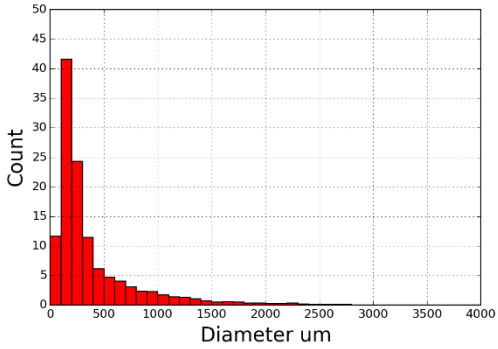


Figure A. 2851: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

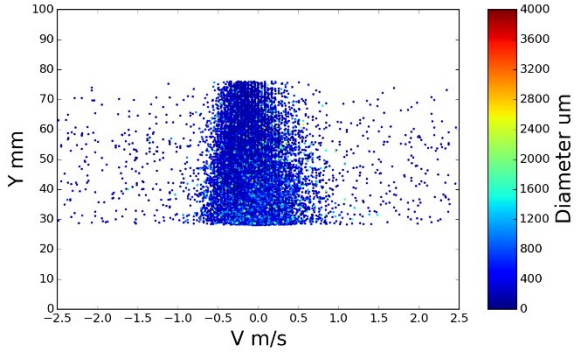


Figure A. 2854: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

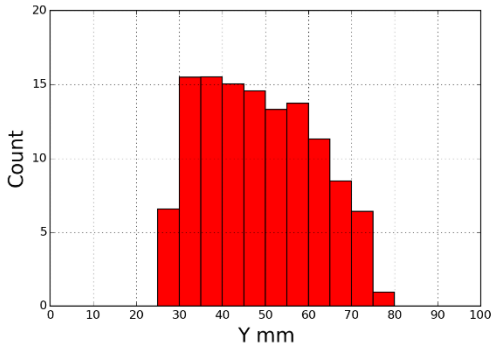


Figure A. 2852: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

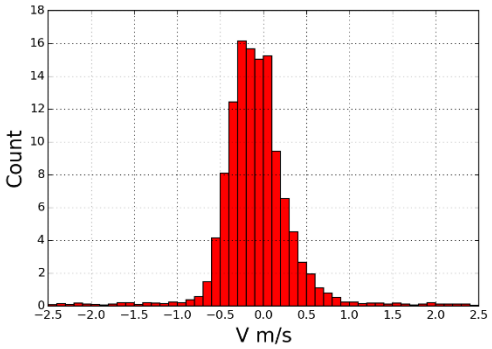


Figure A. 2855: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

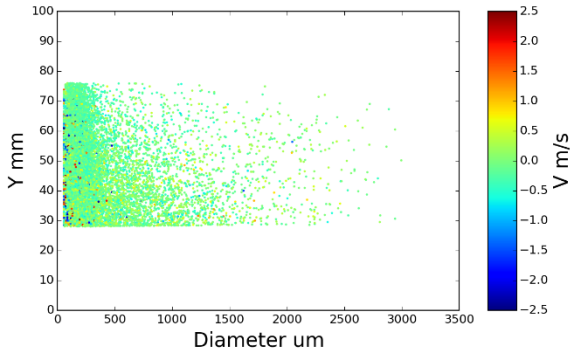


Figure A. 2853: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 Matched Only Droplets for .LB Image

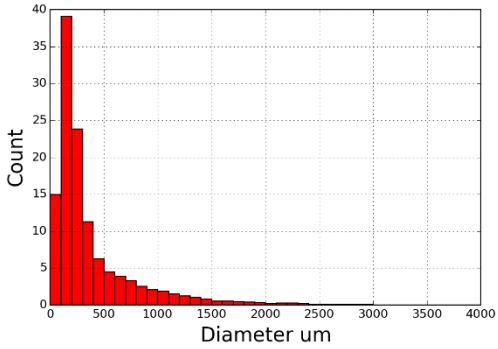


Figure A. 2856: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

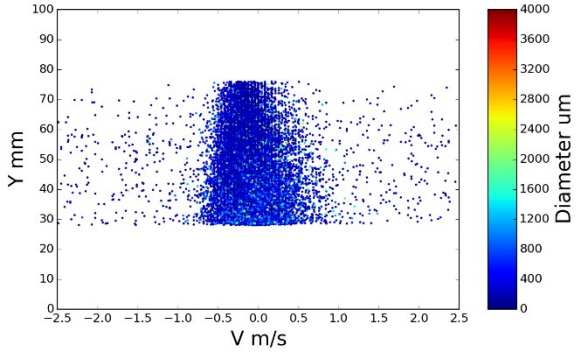


Figure A. 2859: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

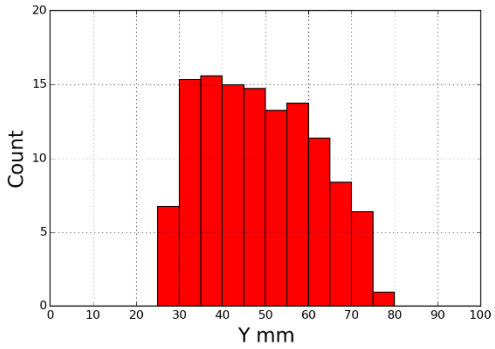


Figure A. 2857: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

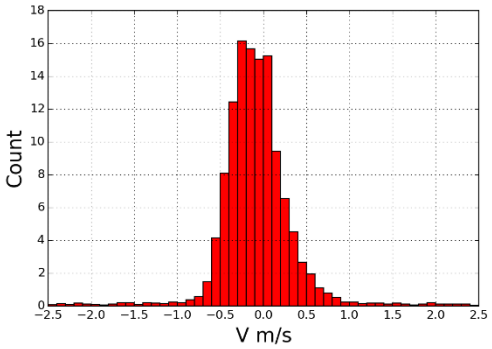


Figure A. 2860: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

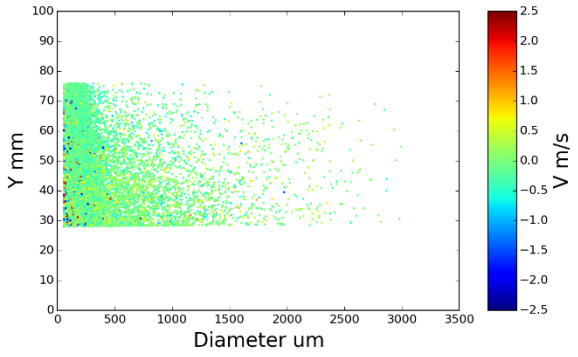


Figure A. 2858: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	53.9	54.97	57.2	2942	387.4	380.0	57.2	2922	389.5	381.2
40-60mm	78.74	78.44	57.2	2976	283.1	321.6	57.2	3033	284.6	326.4
60-80mm	31.1	31.06	57.2	2535	192.4	192.1	57.2	2788	191.8	198.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	163.76	164.51	57.2	2976	300.2	330.3	57.2	3033	302.1	334.4
			Height A (mm)				Height B (mm)			
Highest Particle			76.0200				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 302: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	35.46	57.2	2942	495.5	404.1	57.2	2922	495.5	403.3	-2.470	2.530	-0.040	0.360	-2.450	2.540	0.070	0.430
40-60mm	51.62	57.2	2976	354.9	349.7	57.2	3033	352.8	348.9	-2.540	2.530	-0.030	0.380	-2.540	2.540	0.030	0.450
60-80mm	20.94	57.2	2535	230.2	215.6	57.2	2737	228.0	214.5	-2.410	2.370	-0.050	0.290	-2.510	2.520	-0.030	0.370
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	108.02	57.2	2976	376.9	360.6	57.2	3033	375.4	360.1	-2.540	2.530	-0.040	0.360	-2.540	2.540	0.030	0.430

Table A. 303: Matched Droplet Info

A.4.2.1 All Droplets for .LA Image

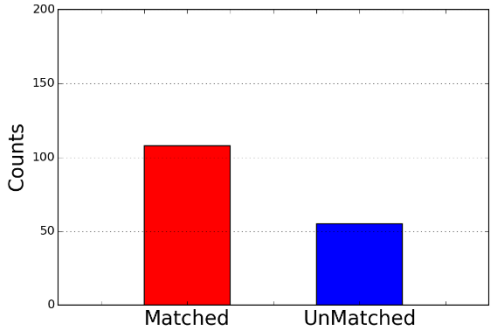


Figure A. 2861: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

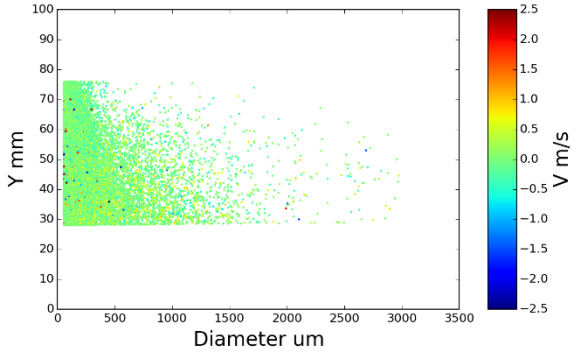


Figure A. 2864: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

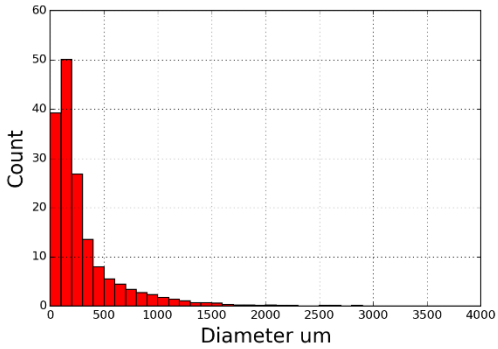


Figure A. 2862: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

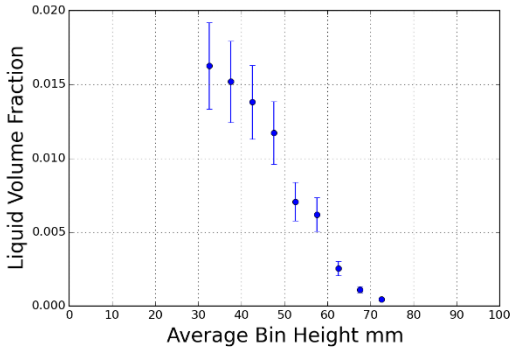


Figure A. 2865: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

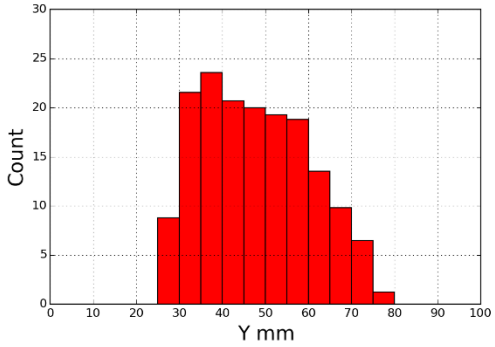


Figure A. 2863: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 All Droplets for .LB Image

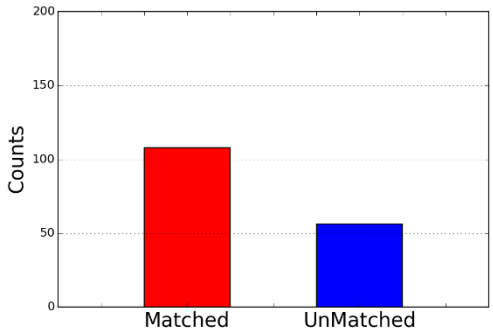


Figure A. 2866: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

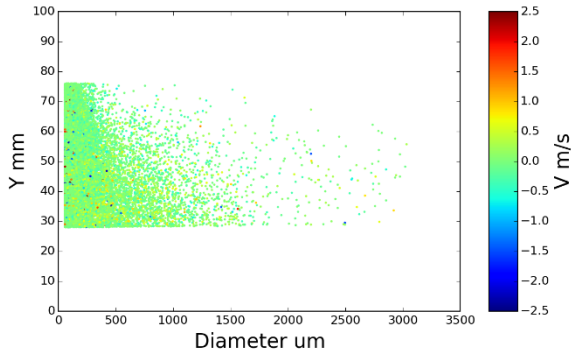


Figure A. 2869: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

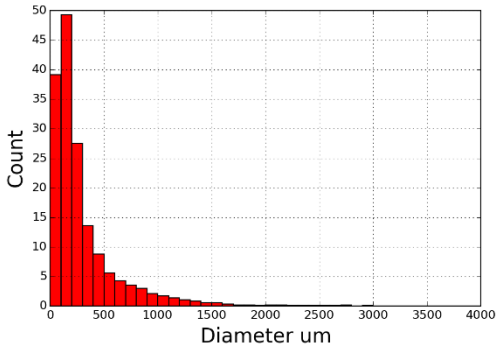


Figure A. 2867: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

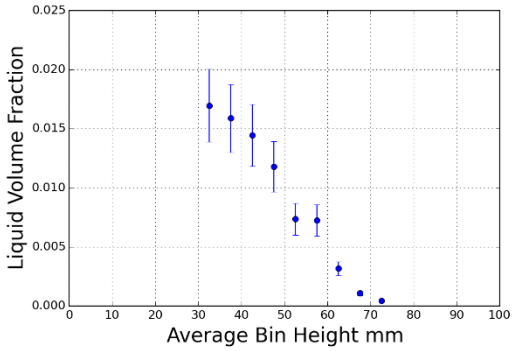


Figure A. 2870: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

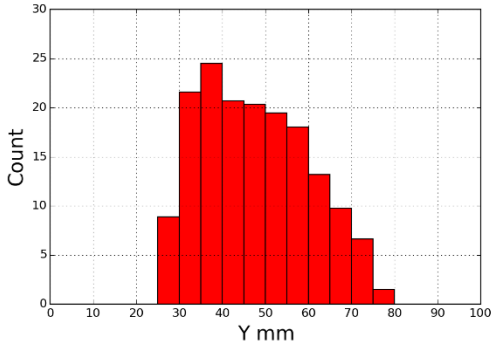


Figure A. 2868: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 Matched Only Droplets for .LA Image

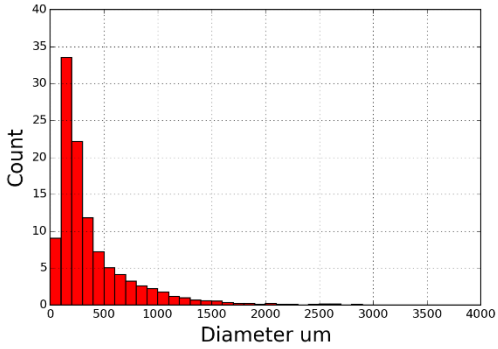


Figure A. 2871: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

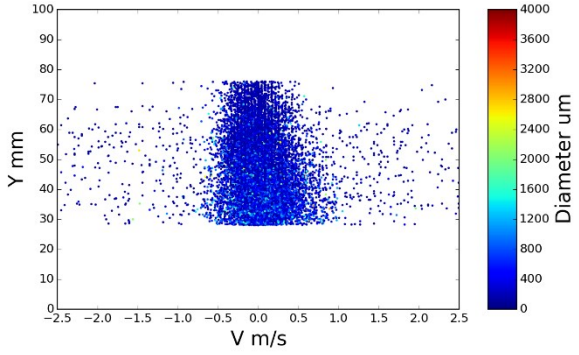


Figure A. 2874: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

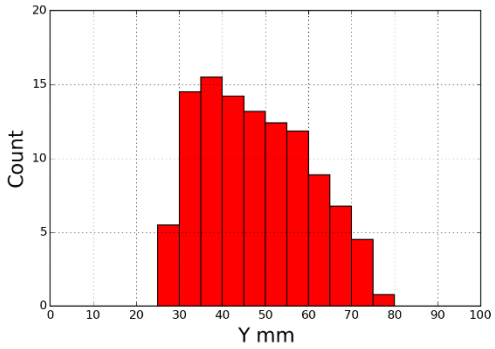


Figure A. 2872: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

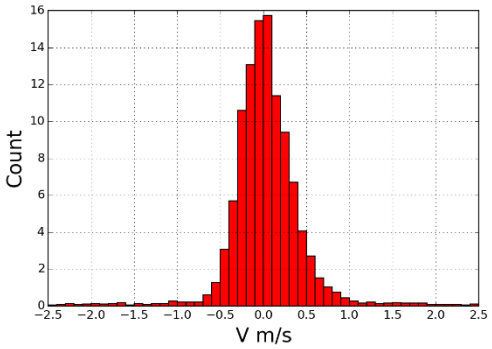


Figure A. 2875: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

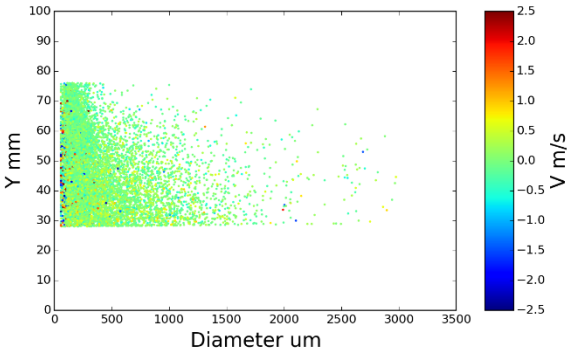


Figure A. 2873: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 Matched Only Droplets for .LB Image

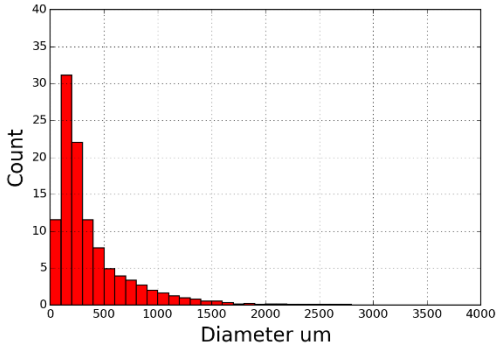


Figure A. 2876: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

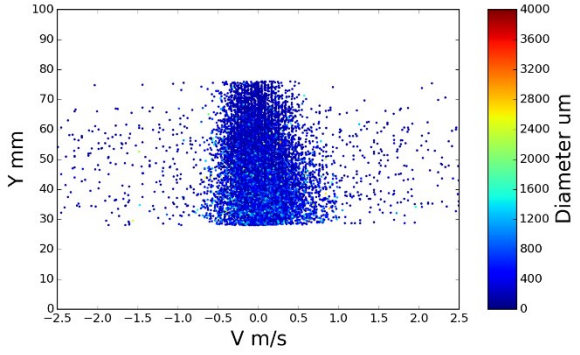


Figure A. 2879: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

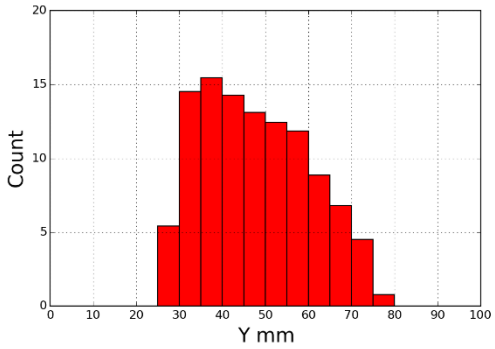


Figure A. 2877: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

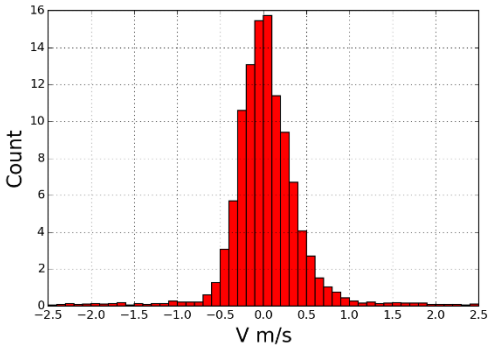


Figure A. 2880: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

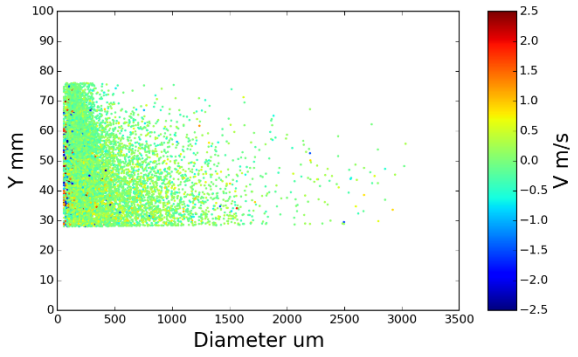


Figure A. 2878: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	41.7	42.65	57.2	2805	406.1	373.6	57.2	3028	403.7	370.9
40-60mm	65.56	65.33	57.2	2910	282.8	282.9	57.2	3010	284.6	281.2
60-80mm	26.68	27.04	57.2	2118	199.3	173.6	57.2	2659	198.4	181.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	133.94	135.04	57.2	2910	304.6	307.1	57.2	3028	305.0	306.3
			Height A (mm)				Height B (mm)			
Highest Particle			76.0339				76.0339			
Lowest Particle			28.0947				28.0846			

Table A. 304: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	28.43	57.2	2502	505.5	387.0	57.2	2681	505.4	387.9	-2.500	2.510	-0.040	0.360	-2.540	2.430	0.090	0.420
40-60mm	44.2	57.2	2910	350.8	306.8	57.2	2658	349.1	303.9	-2.540	2.530	-0.030	0.330	-2.520	2.540	0.060	0.400
60-80mm	17.89	57.2	2118	236.9	192.7	57.2	2163	234.0	193.9	-2.490	2.490	-0.050	0.270	-2.540	2.440	0.030	0.350
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	90.52	57.2	2910	376.9	331.3	57.2	2681	375.3	330.6	-2.540	2.530	-0.040	0.330	-2.540	2.540	0.060	0.400

Table A. 305: Matched Droplet Info

A.4.2.1 All Droplets for .LA Image

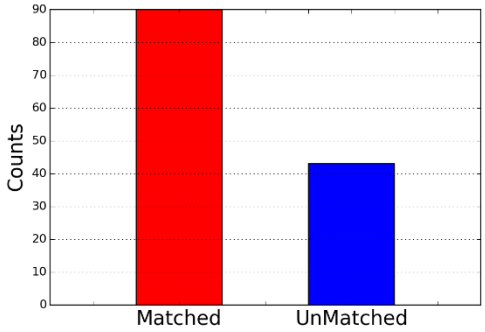


Figure A. 2881: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

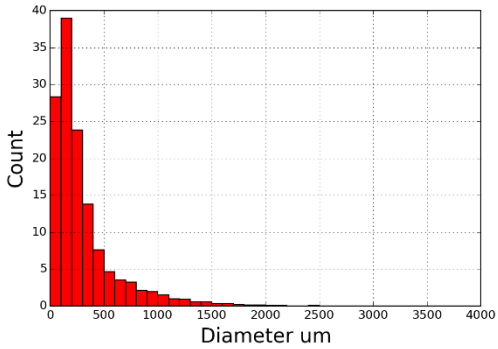


Figure A. 2882: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

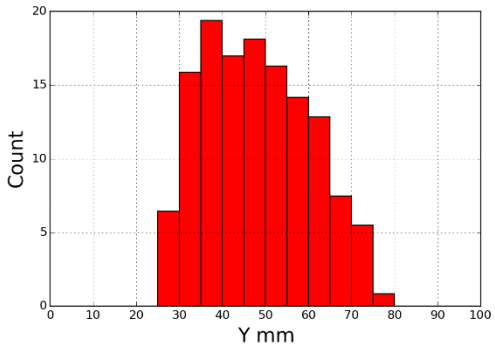


Figure A. 2883: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

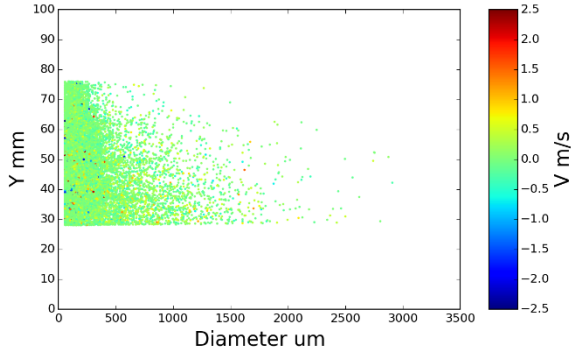


Figure A. 2884: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

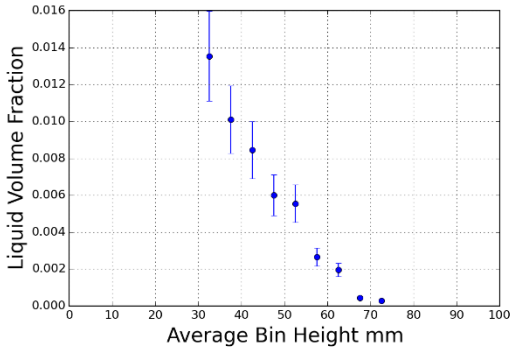


Figure A. 2885: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 All Droplets for .LB Image

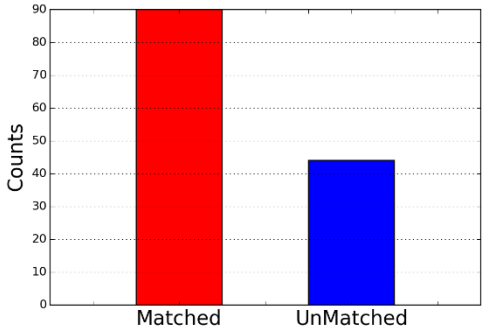


Figure A. 2886: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

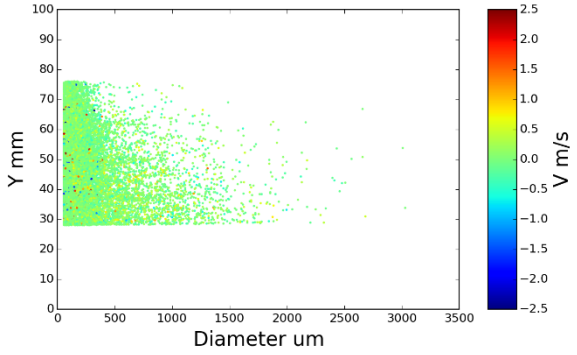


Figure A. 2889: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

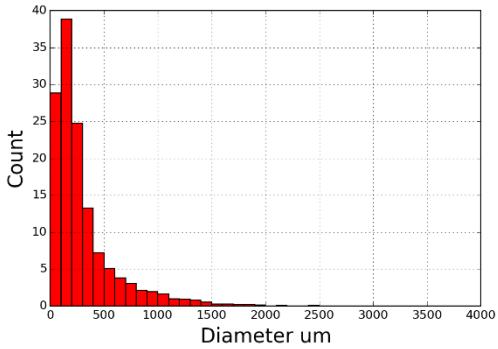


Figure A. 2887: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

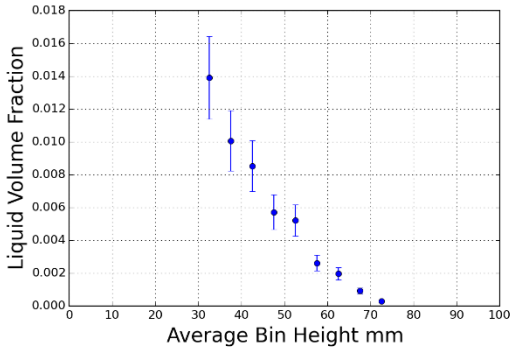


Figure A. 2890: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

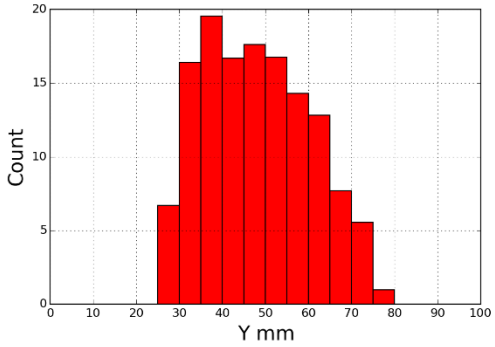


Figure A. 2888: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 Matched Only Droplets for .LA Image

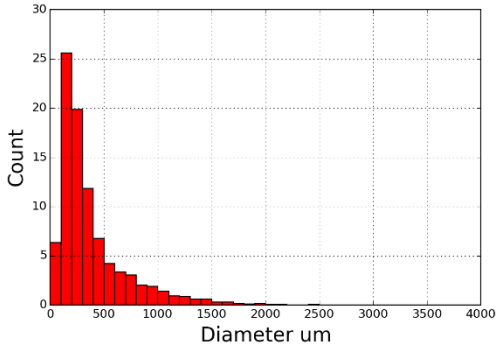


Figure A. 2891: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

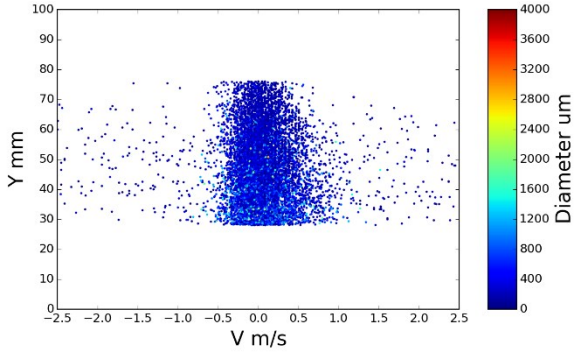


Figure A. 2894: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

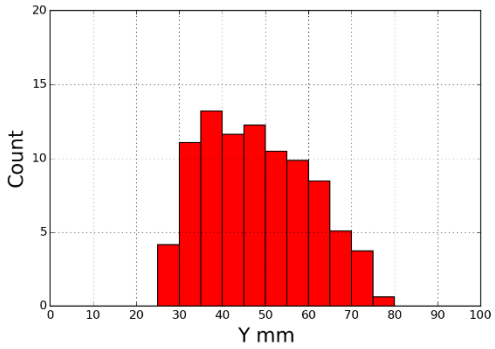


Figure A. 2892: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

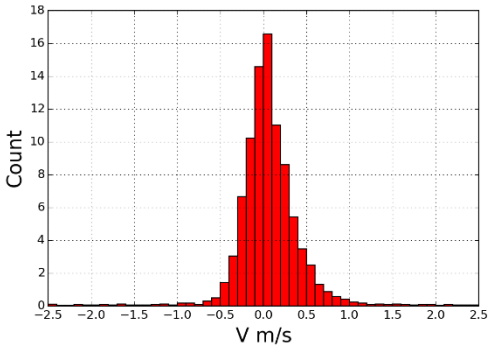


Figure A. 2895: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

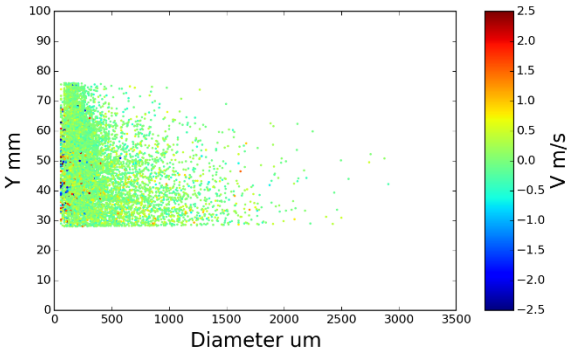


Figure A. 2893: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.1 Matched Only Droplets for .LB Image

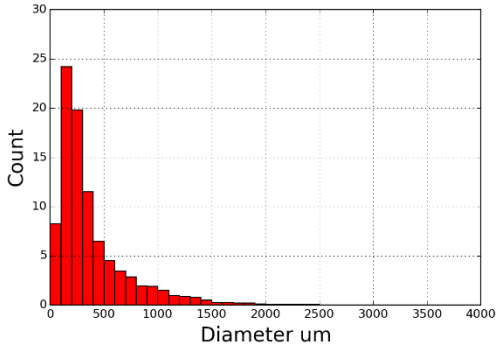


Figure A. 2896: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

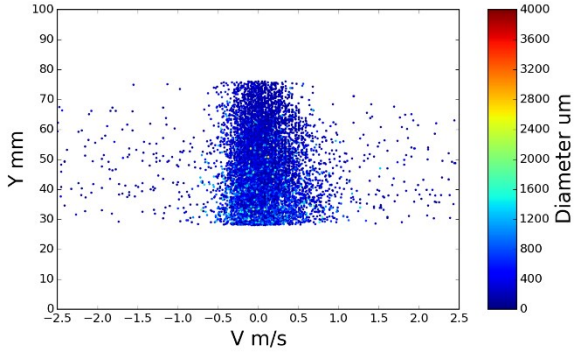


Figure A. 2899: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

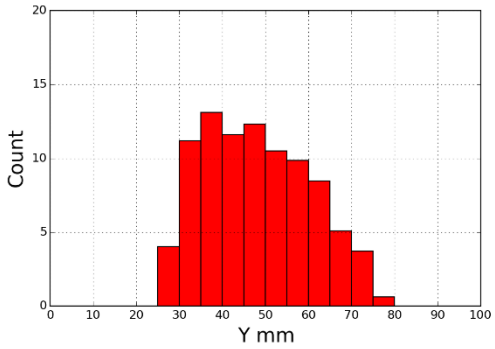


Figure A. 2897: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

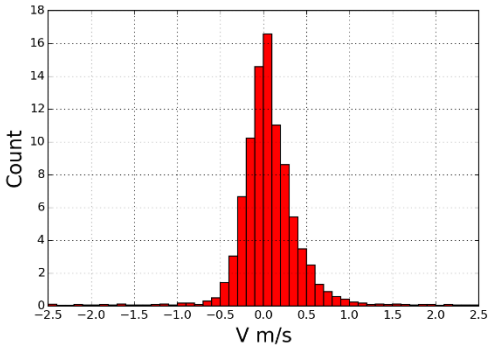


Figure A. 2900: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

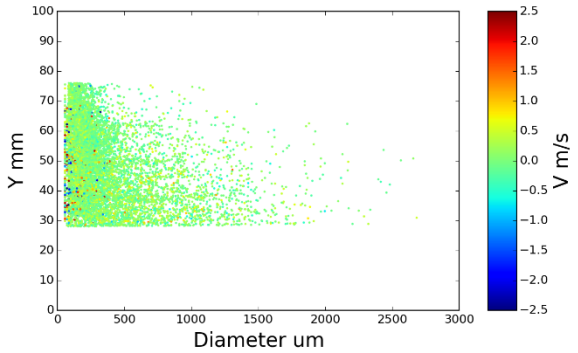


Figure A. 2898: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 Lens 50mm Mag 0_13x

A.4.2.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	131.81	130.43	128.7	3421	677.6	533.1	128.7	3397	683.7	531.6
40-60mm	95.03	94.91	128.7	3407	542.1	376.0	128.7	3321	543.5	378.0
60-80mm	50.17	49.4	128.7	2259	407.2	245.0	128.7	2169	409.3	246.8
80-100mm	17.29	17.09	128.7	1953	324.0	180.2	128.7	1979	323.8	176.2
All	294.3	291.83	128.7	3421	567.0	445.6	128.7	3397	570.5	445.9
			Height A (mm)				Height B (mm)			
Highest Particle			99.9561				99.9561			
Lowest Particle			20.0140				20.0140			

Table A. 306: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	81.56	128.7	3415	795.2	551.9	128.7	3396	787.4	546.3	-2.440	2.440	-0.080	0.600	-2.440	2.440	0.070	0.660
40-60mm	68.23	128.7	3407	618.0	386.6	128.7	3306	612.5	384.8	-2.440	2.420	-0.080	0.390	-2.440	2.440	0.070	0.490
60-80mm	35.92	128.7	2259	466.1	253.0	128.7	2169	462.6	254.9	-2.440	2.440	-0.090	0.380	-2.440	2.440	0.090	0.430
80-100mm	12.18	128.7	1953	373.5	188.2	128.7	1979	367.7	184.8	-2.320	2.080	-0.100	0.240	-2.440	2.440	0.110	0.330
All	197.89	128.7	3415	648.4	459.1	128.7	3396	642.1	455.3	-2.440	2.440	-0.080	0.480	-2.440	2.440	0.070	0.550

Table A. 307: Matched Droplet Info

A.4.2.2 All Droplets for .LA Image

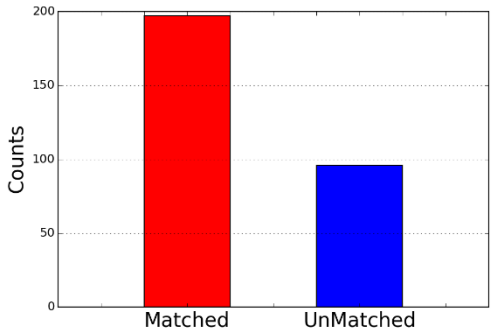


Figure A. 2901: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

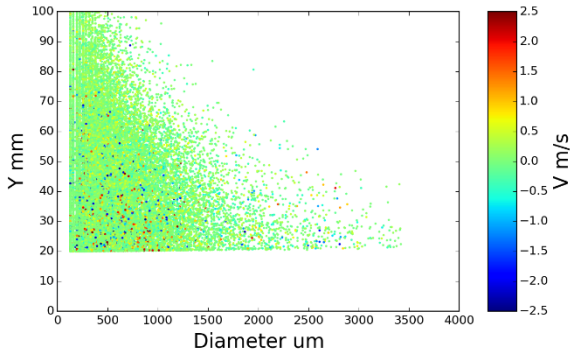


Figure A. 2904: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

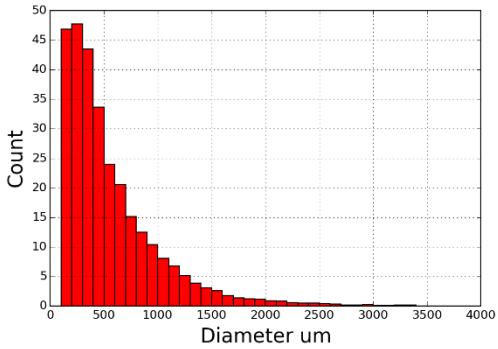


Figure A. 2902: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

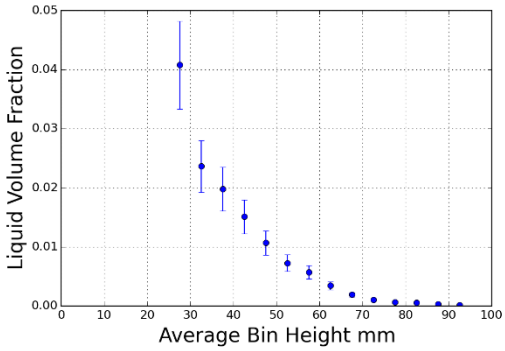


Figure A. 2905: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

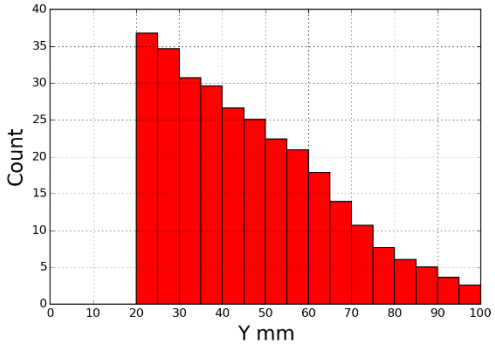


Figure A. 2903: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 All Droplets for .LB Image

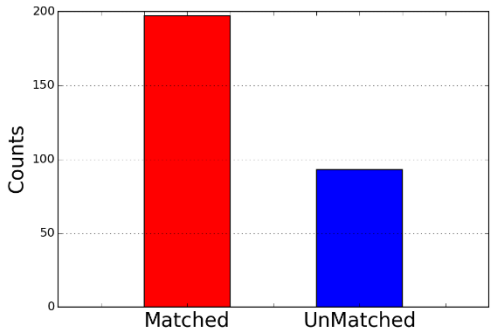


Figure A. 2906: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

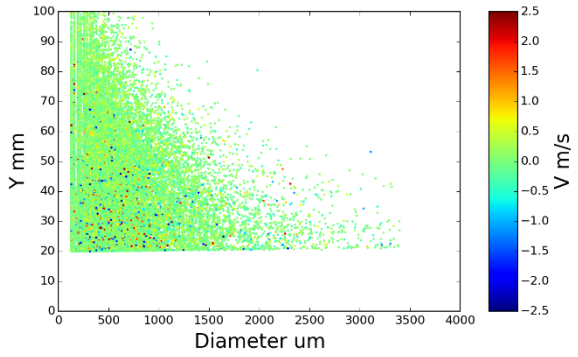


Figure A. 2909: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

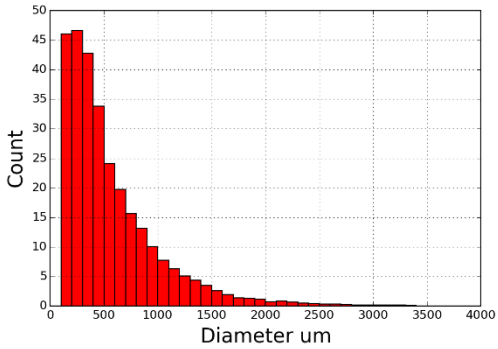


Figure A. 2907: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

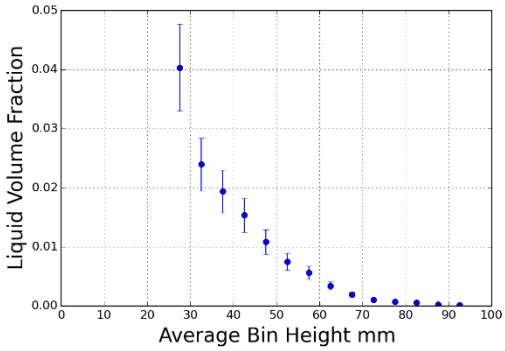


Figure A. 2910: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

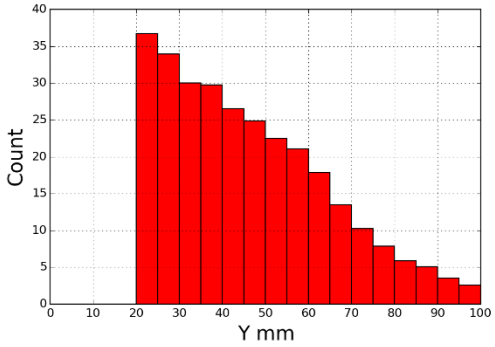


Figure A. 2908: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 Matched Only Droplets for .LA Image

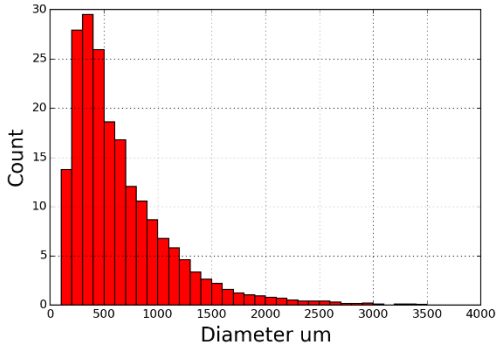


Figure A. 2911: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

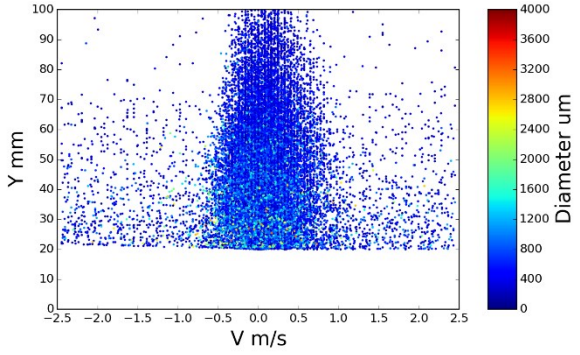


Figure A. 2914: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

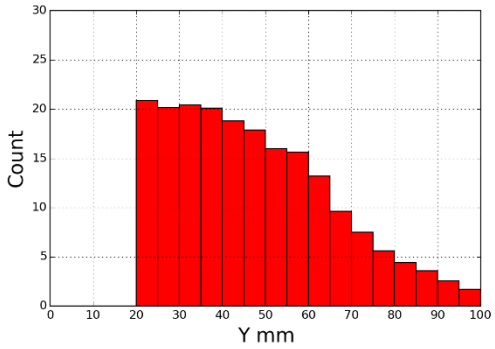


Figure A. 2912: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

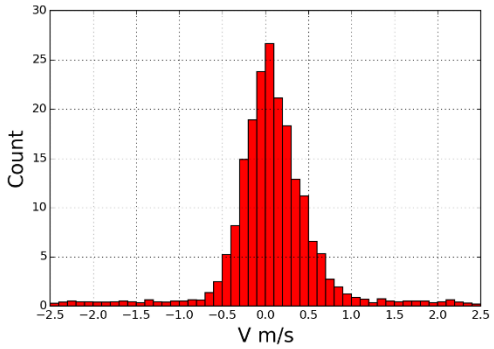


Figure A. 2915: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

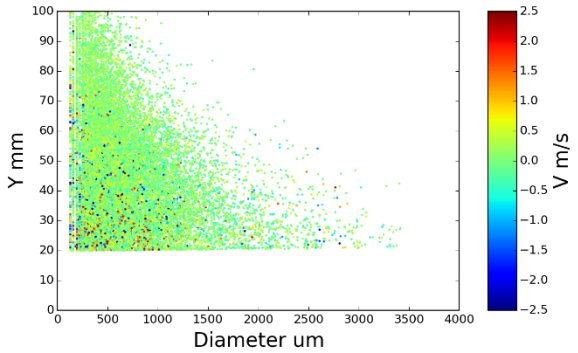


Figure A. 2913: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 Matched Only Droplets for .LB Image

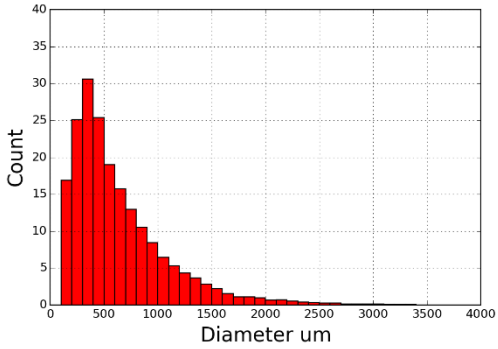


Figure A. 2916: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

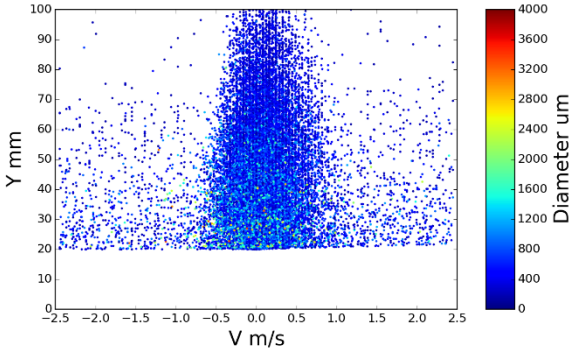


Figure A. 2919: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

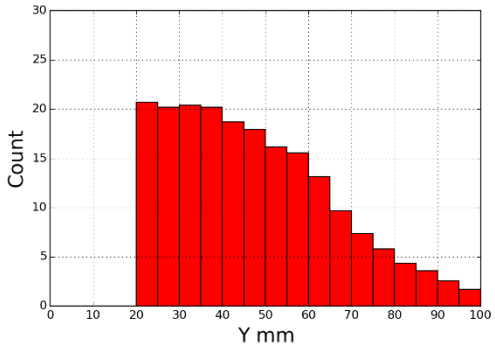


Figure A. 2917: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

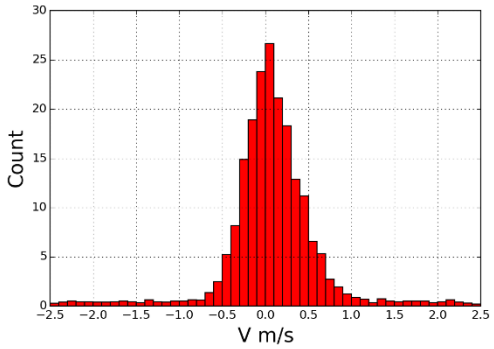


Figure A. 2920: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

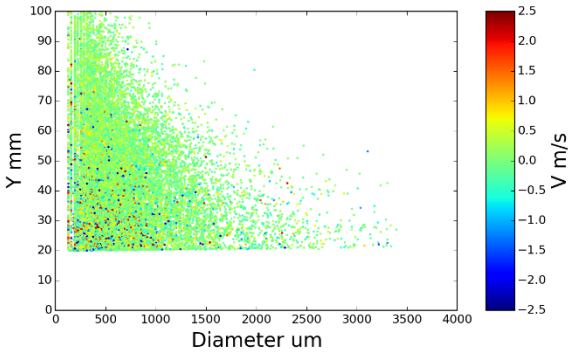


Figure A. 2918: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	134.52	134.72	128.7	3418	735.6	581.8	128.7	3420	735.2	582.5
40-60mm	108.92	108.4	128.7	3306	576.1	446.1	128.7	3396	576.8	444.6
60-80mm	44.76	44.12	128.7	2201	449.8	316.0	128.7	2168	450.7	317.7
80-100mm	9.09	9.02	128.7	1697	411.3	245.8	128.7	1658	403.9	245.9
All	297.3	296.26	128.7	3418	624.2	505.3	128.7	3420	624.8	505.8
			Height A (mm)				Height B (mm)			
Highest Particle			99.9561				99.9333			
Lowest Particle			20.0140				20.0140			

Table A. 308: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	80.34	128.7	3418	878.1	604.8	128.7	3420	863.6	597.5	-2.440	2.440	-0.080	0.650	-2.440	2.440	-0.000	0.690
40-60mm	71.57	128.7	3306	685.9	468.1	128.7	3396	679.8	467.0	-2.440	2.440	-0.080	0.520	-2.440	2.440	-0.030	0.560
60-80mm	30.04	128.7	2201	539.5	332.6	128.7	2168	534.2	333.2	-2.440	2.440	-0.090	0.380	-2.440	2.440	-0.010	0.440
80-100mm	6.36	128.7	1697	482.2	247.1	128.7	1658	476.5	247.8	-2.440	1.790	-0.100	0.210	-2.440	1.470	0.010	0.290
All	188.31	128.7	3418	737.7	526.2	128.7	3420	728.1	521.4	-2.440	2.440	-0.080	0.550	-2.440	2.440	-0.010	0.600

Table A. 309: Matched Droplet Info

A.4.2.2 All Droplets for .LA Image

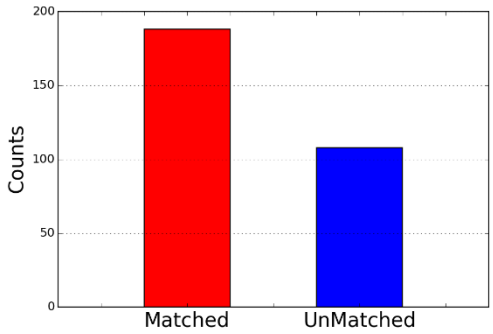


Figure A. 2921: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

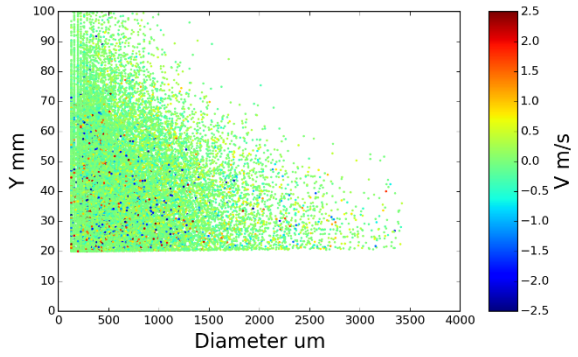


Figure A. 2924: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

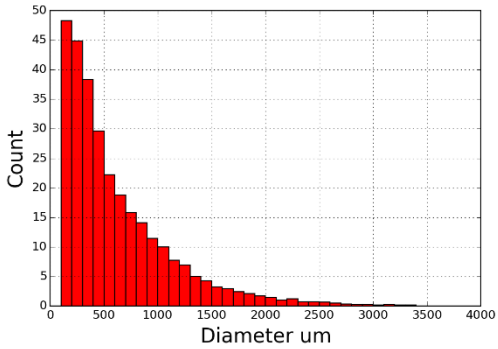


Figure A. 2922: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

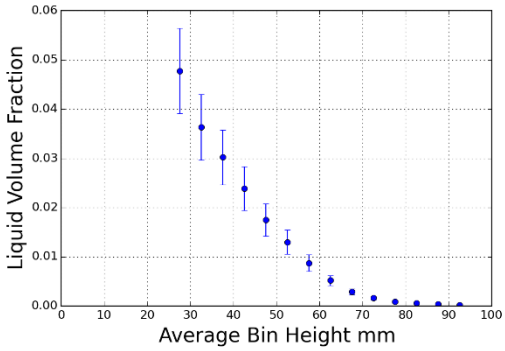


Figure A. 2925: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

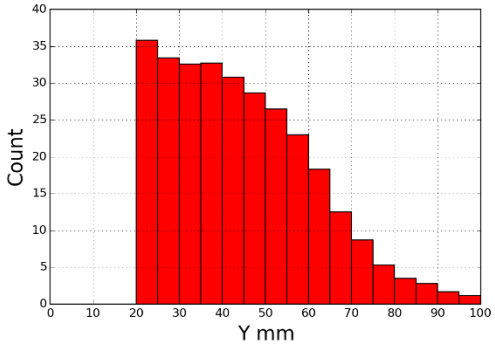


Figure A. 2923: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 All Droplets for .LB Image

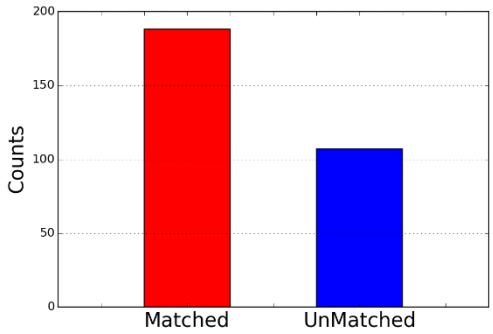


Figure A. 2926: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

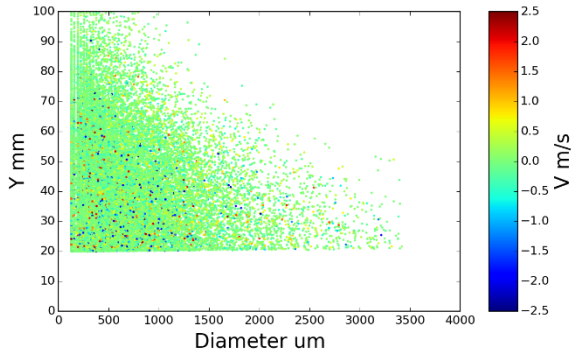


Figure A. 2929: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

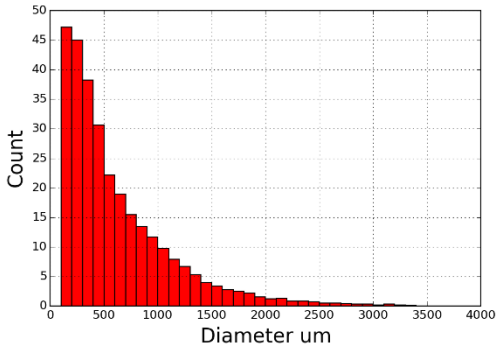


Figure A. 2927: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

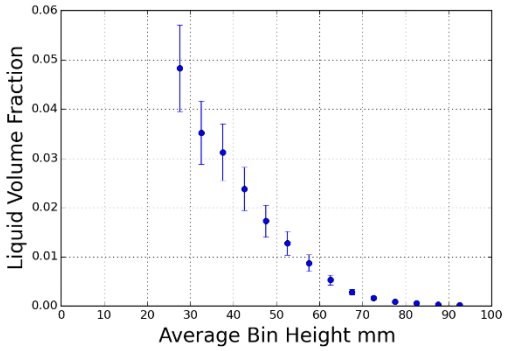


Figure A. 2930: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

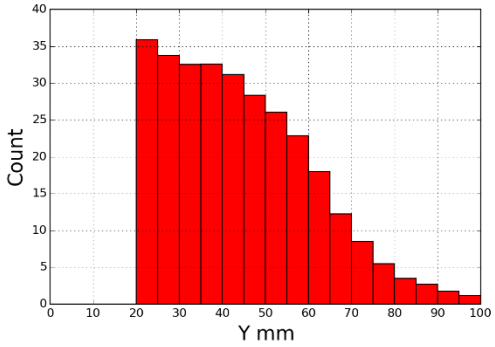


Figure A. 2928: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 Matched Only Droplets for .LA Image

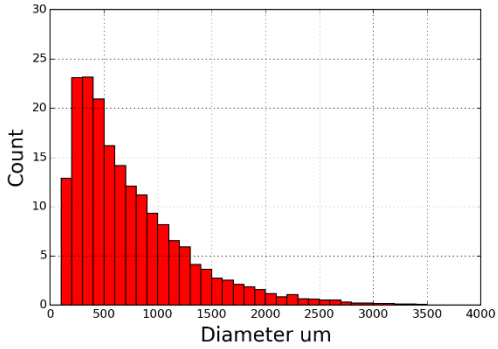


Figure A. 2931: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

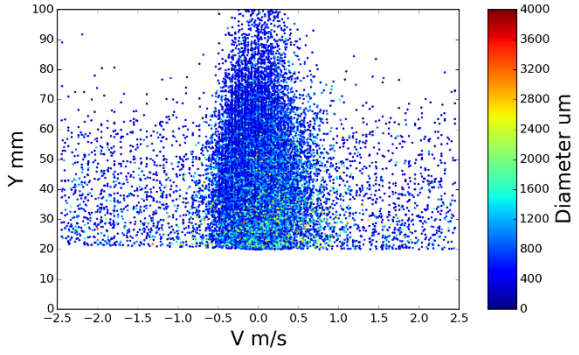


Figure A. 2934: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

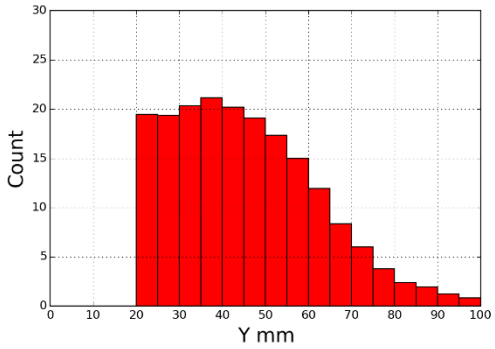


Figure A. 2932: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

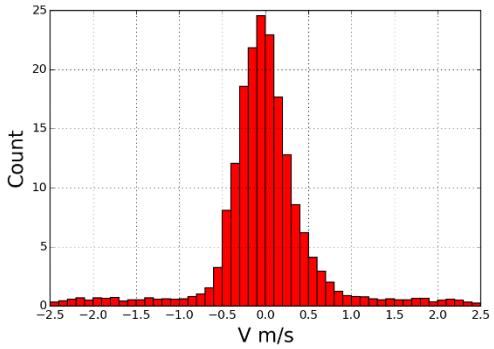


Figure A. 2935: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

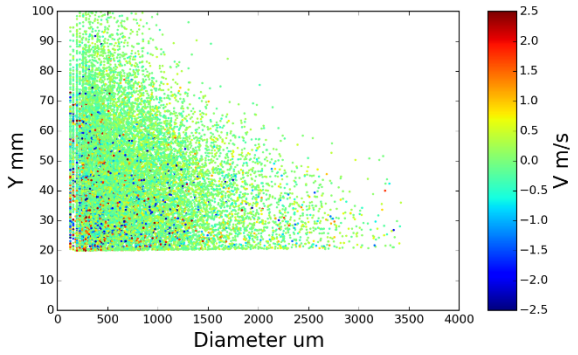


Figure A. 2933: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 Matched Only Droplets for .LB Image

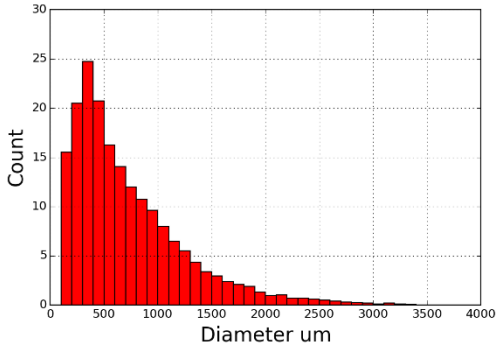


Figure A. 2936: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

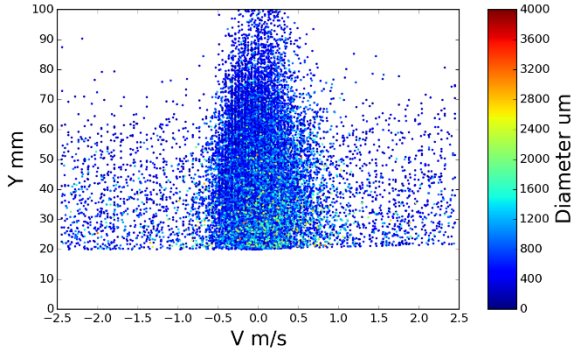


Figure A. 2939: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

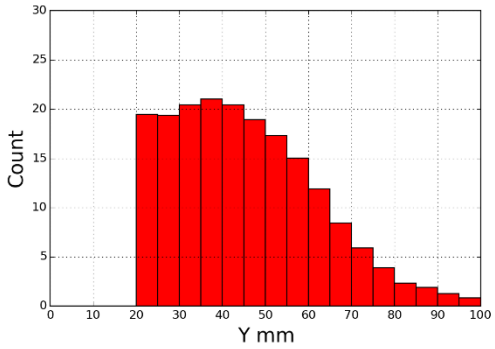


Figure A. 2937: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

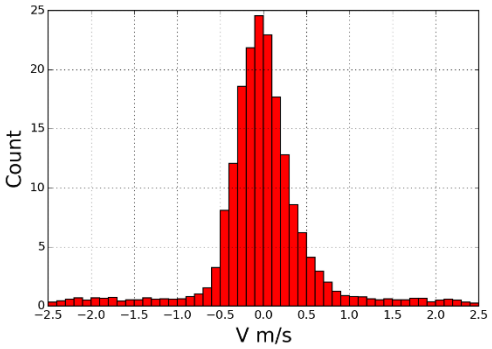


Figure A. 2940: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

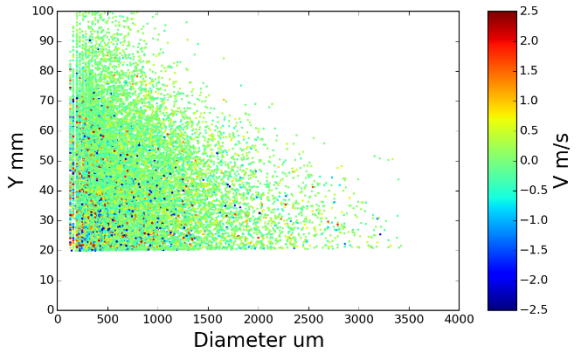


Figure A. 2938: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	121.77	121.6	128.7	3404	772.8	624.2	128.7	3417	779.4	636.5
40-60mm	105.11	106.14	128.7	3414	602.3	496.7	128.7	3419	600.6	494.9
60-80mm	34.72	33.93	128.7	2883	492.9	381.0	128.7	2715	494.1	378.7
80-100mm	4.33	4.29	128.7	1664	434.4	274.6	128.7	1704	428.1	272.2
All	265.95	265.96	128.7	3414	663.4	554.7	128.7	3419	666.0	561.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.8495				99.9031			
Lowest Particle			20.0140				20.0140			

Table A. 310: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	67.28	128.7	3403	946.1	657.0	128.7	3417	931.5	654.8	-2.440	2.440	-0.070	0.680	-2.440	2.440	-0.010	0.710
40-60mm	68.06	128.7	3371	726.0	528.4	128.7	3419	719.6	526.1	-2.440	2.440	-0.060	0.520	-2.440	2.440	-0.050	0.580
60-80mm	22.92	128.7	2883	601.2	405.9	128.7	2715	592.8	401.2	-2.350	2.410	-0.050	0.350	-2.440	2.440	-0.040	0.450
80-100mm	2.79	128.7	1664	532.9	282.1	128.7	1704	526.9	282.3	-0.370	1.710	-0.070	0.150	-1.300	0.780	-0.030	0.260
All	161.05	128.7	3403	796.9	584.1	128.7	3419	786.9	581.0	-2.440	2.440	-0.060	0.570	-2.440	2.440	-0.030	0.620

Table A. 311: Matched Droplet Info

A.4.2.2 All Droplets for .LA Image

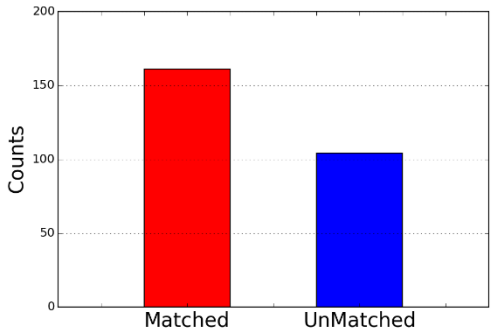


Figure A. 2941: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

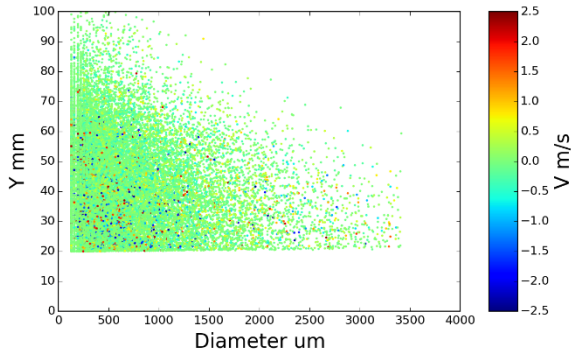


Figure A. 2944: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

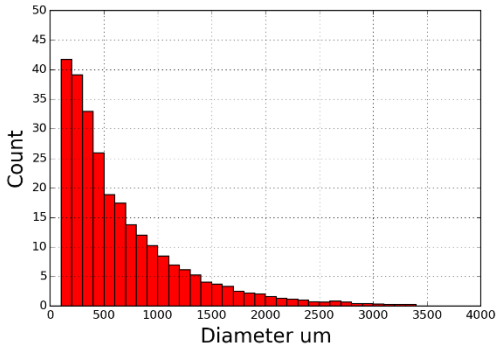


Figure A. 2942: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

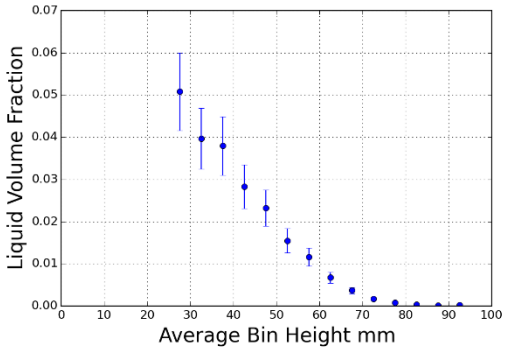


Figure A. 2945: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

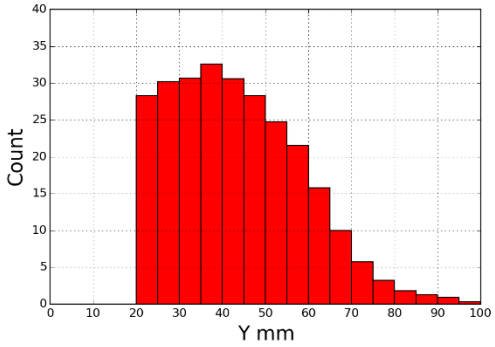


Figure A. 2943: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 All Droplets for .LB Image

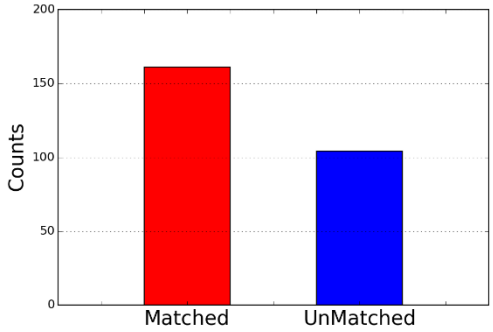


Figure A. 2946: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

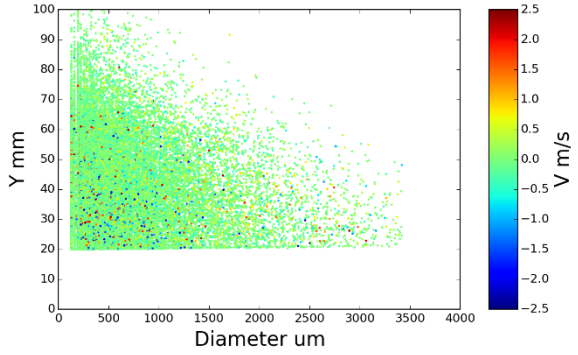


Figure A. 2949: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

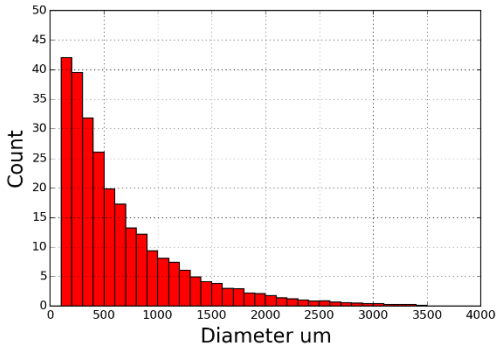


Figure A. 2947: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

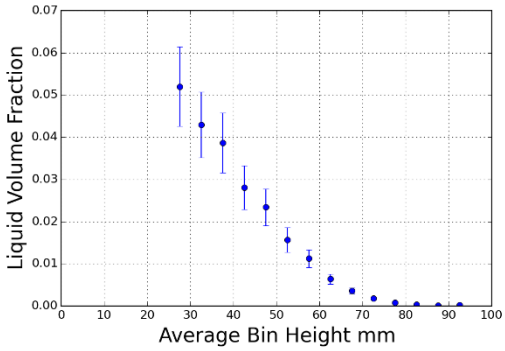


Figure A. 2950: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

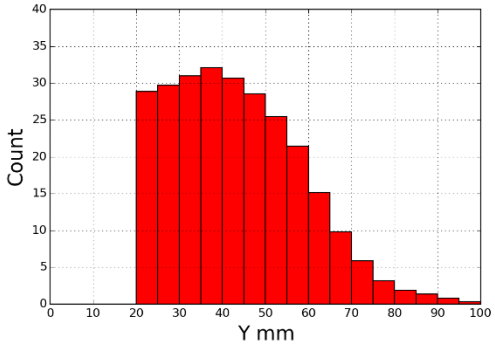


Figure A. 2948: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 Matched Only Droplets for .LA Image

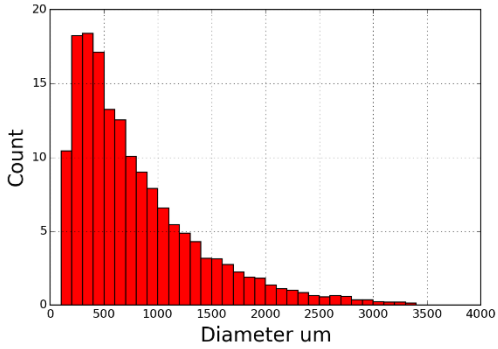


Figure A. 2951: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

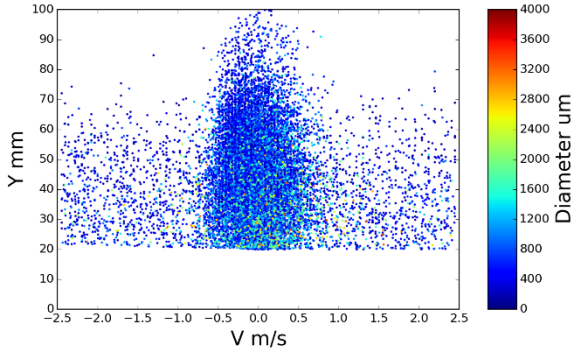


Figure A. 2954: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

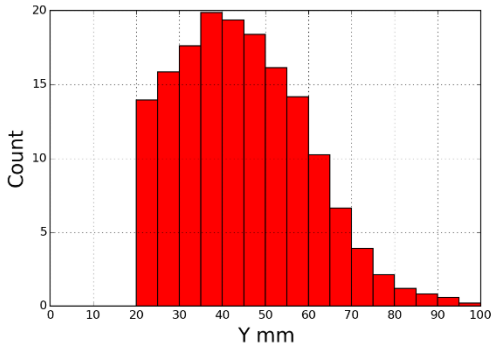


Figure A. 2952: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

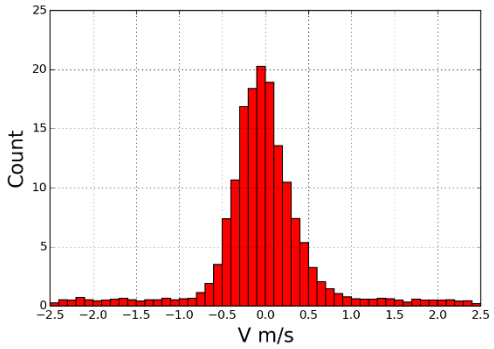


Figure A. 2955: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

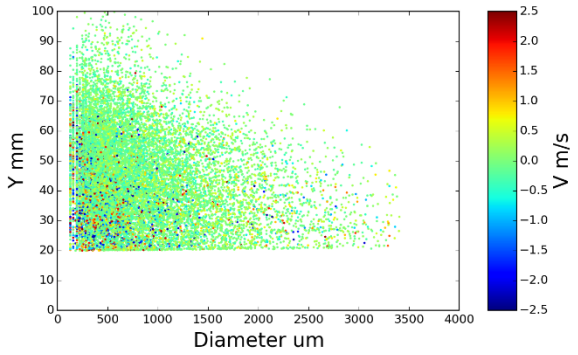


Figure A. 2953: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 Matched Only Droplets for .LB Image

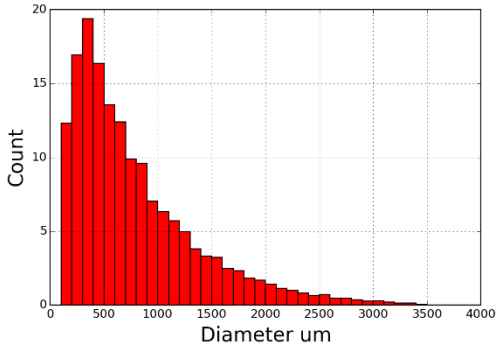


Figure A. 2956: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

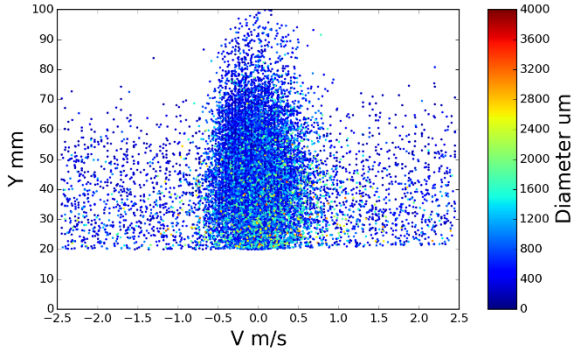


Figure A. 2959: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

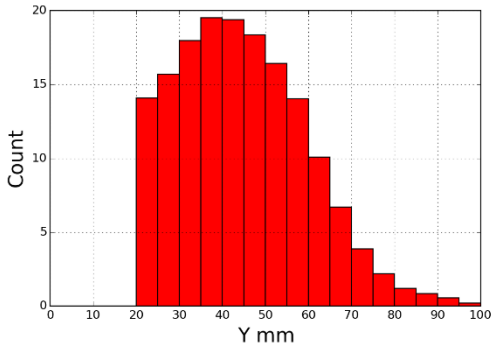


Figure A. 2957: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

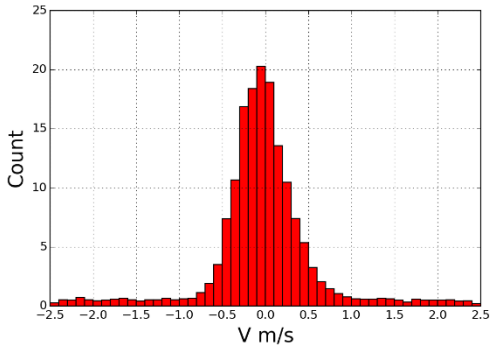


Figure A. 2960: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

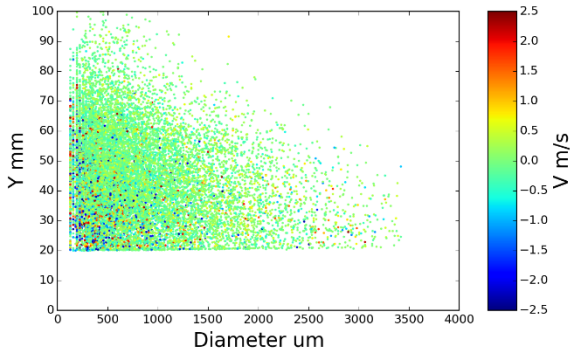


Figure A. 2958: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	101.2	100.93	128.7	3411	796.5	642.4	128.7	3418	793.0	643.5
40-60mm	100.64	100.51	128.7	3415	581.2	488.6	128.7	3409	581.5	488.2
60-80mm	30.61	30.36	128.7	3360	459.8	370.7	128.7	3010	458.9	371.7
80-100mm	3.01	3.05	128.7	1893	408.7	266.9	128.7	1973	410.8	259.3
All	235.46	234.86	128.7	3415	655.8	561.1	128.7	3418	654.3	561.2
			Height A (mm)				Height B (mm)			
Highest Particle			99.7565				99.3258			
Lowest Particle			20.0140				20.0140			

Table A. 312: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	54.51	128.7	3386	973.1	673.8	128.7	3418	959.9	671.0	-2.440	2.440	-0.050	0.660	-2.440	2.430	0.010	0.700
40-60mm	63.98	128.7	3415	698.3	525.3	128.7	3409	690.5	523.0	-2.440	2.440	-0.060	0.540	-2.440	2.440	0.000	0.600
60-80mm	19.31	128.7	3046	561.0	396.7	128.7	2994	555.7	403.4	-2.400	2.440	-0.050	0.390	-2.440	2.390	-0.040	0.440
80-100mm	2.05	128.7	1893	479.7	271.4	128.7	1973	474.4	270.7	-0.480	0.290	-0.070	0.120	-0.590	0.750	-0.030	0.250
All	139.85	128.7	3415	783.2	592.9	128.7	3418	774.1	590.8	-2.440	2.440	-0.060	0.570	-2.440	2.440	-0.000	0.620

Table A. 313: Matched Droplet Info

A.4.2.2 All Droplets for .LA Image

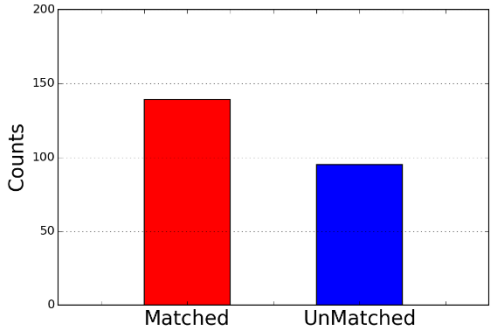


Figure A. 2961: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

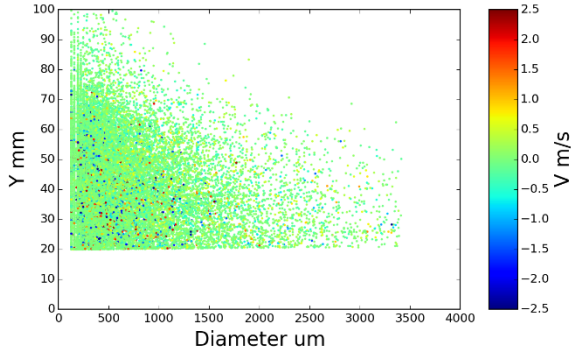


Figure A. 2964: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

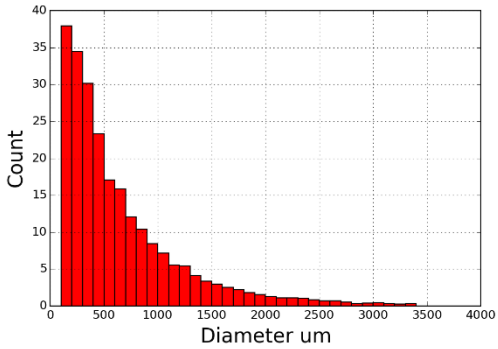


Figure A. 2962: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

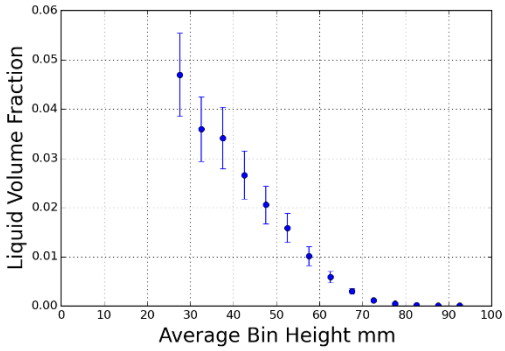


Figure A. 2965: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

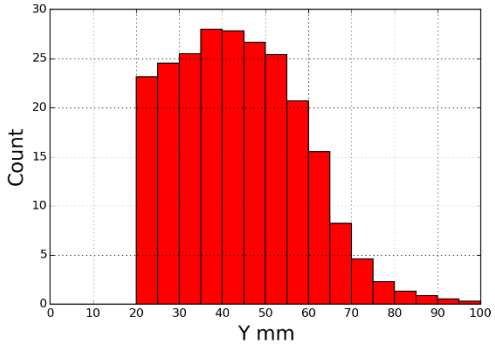


Figure A. 2963: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 All Droplets for .LB Image

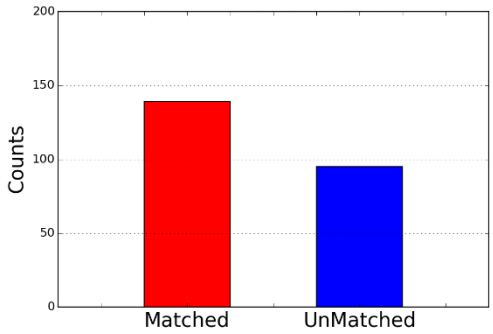


Figure A. 2966: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

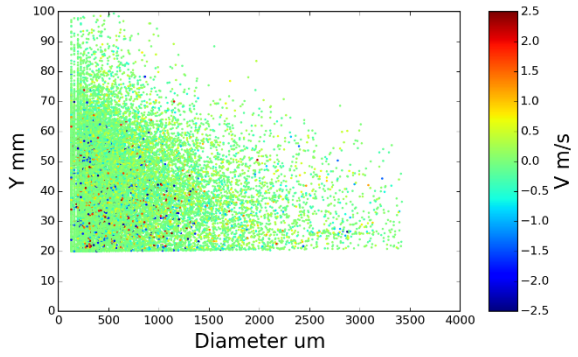


Figure A. 2969: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

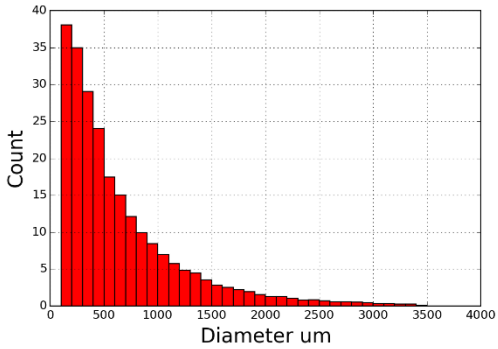


Figure A. 2967: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

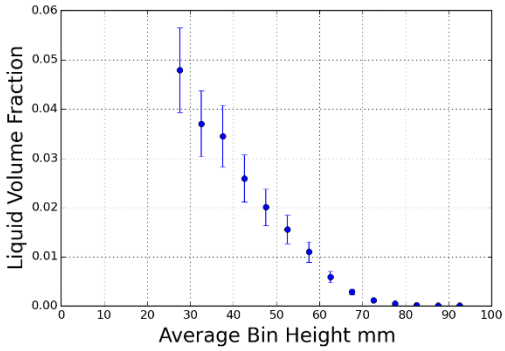


Figure A. 2970: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

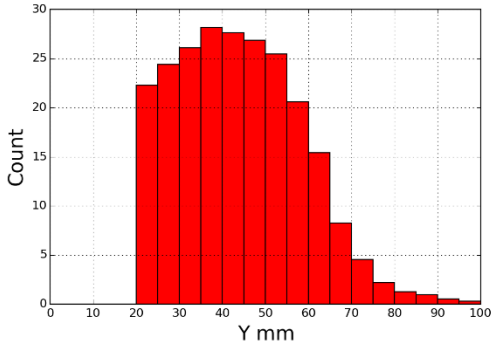


Figure A. 2968: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 Matched Only Droplets for .LA Image

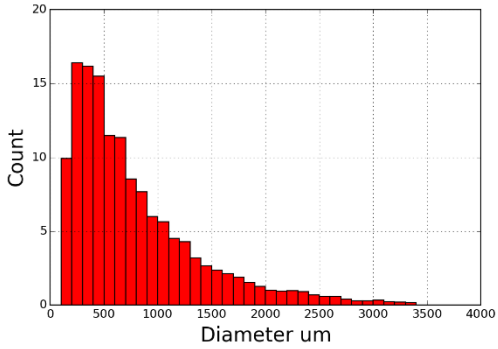


Figure A. 2971: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

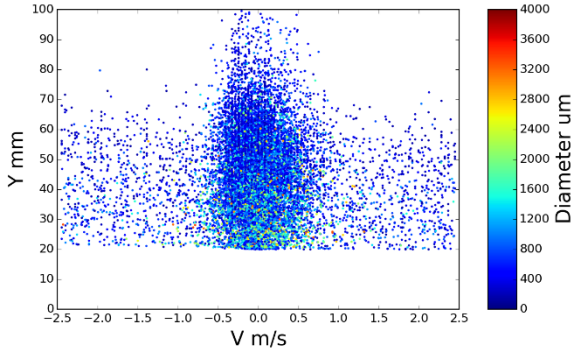


Figure A. 2974: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

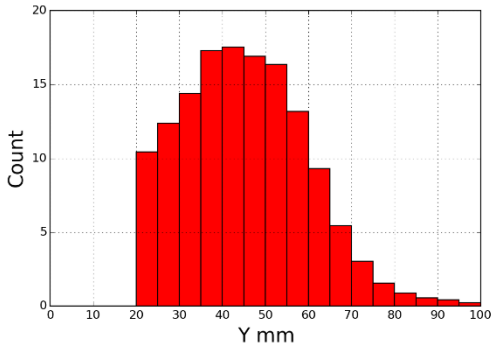


Figure A. 2972: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

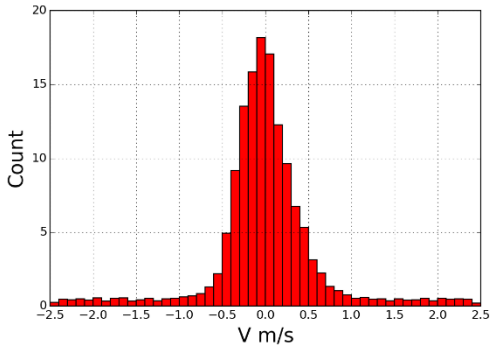


Figure A. 2975: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

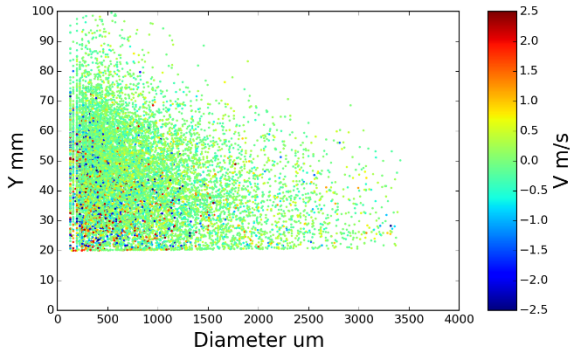


Figure A. 2973: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 Matched Only Droplets for .LB Image

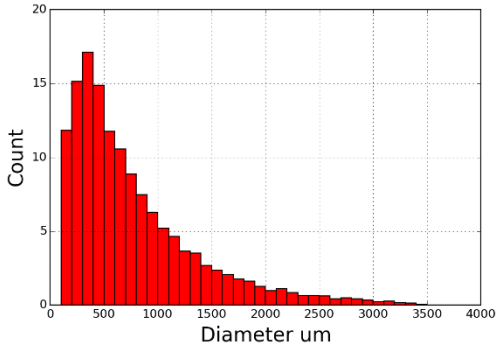


Figure A. 2976: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

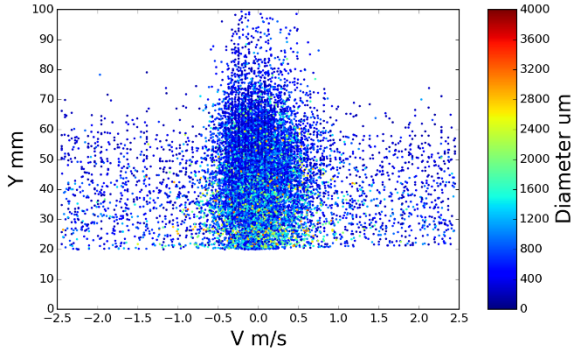


Figure A. 2979: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

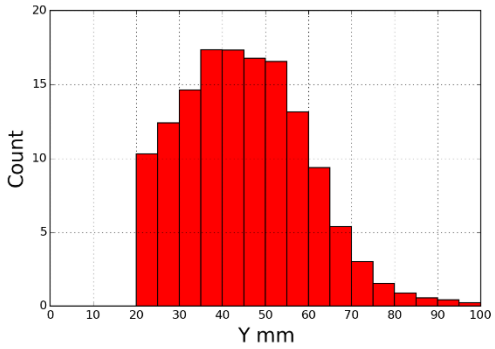


Figure A. 2977: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

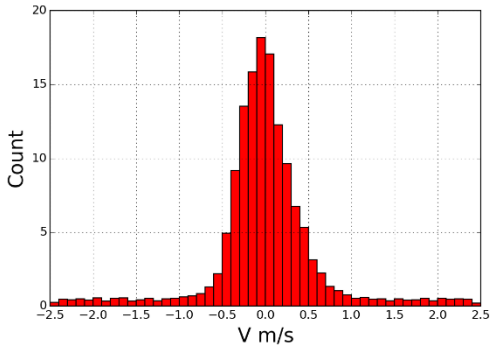


Figure A. 2980: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

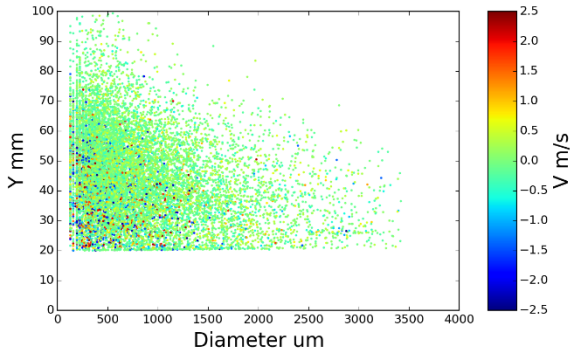


Figure A. 2978: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	84.61	85.45	128.7	3417	790.1	640.9	128.7	3417	795.5	650.3
40-60mm	92.89	93.06	128.7	3413	566.0	471.0	128.7	3421	565.7	471.5
60-80mm	29.23	28.87	128.7	2975	437.3	341.0	128.7	3072	432.4	335.8
80-100mm	3.07	2.92	128.7	1271	382.8	233.6	128.7	1485	387.7	235.0
All	209.8	210.3	128.7	3417	635.8	546.9	128.7	3421	638.3	552.8
			Height A (mm)				Height B (mm)			
Highest Particle			99.9561				99.9561			
Lowest Particle			20.0140				20.0140			

Table A. 314: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	43.89	128.7	3417	988.4	682.4	128.7	3417	973.0	682.3	-2.440	2.440	-0.050	0.650	-2.440	2.440	0.020	0.720
40-60mm	58.09	128.7	3360	681.8	502.7	128.7	3333	673.8	501.2	-2.440	2.440	-0.060	0.540	-2.440	2.440	0.020	0.600
60-80mm	18.18	128.7	2975	535.2	369.3	128.7	3072	526.1	368.1	-2.440	2.440	-0.050	0.430	-2.440	2.440	-0.010	0.480
80-100mm	2.03	128.7	1271	460.7	238.1	128.7	1485	457.1	242.9	-1.220	0.330	-0.030	0.130	-0.820	0.840	0.020	0.220
All	122.19	128.7	3417	766.4	582.5	128.7	3417	755.7	580.7	-2.440	2.440	-0.050	0.560	-2.440	2.440	0.010	0.630

Table A. 315: Matched Droplet Info

A.4.2.2 All Droplets for .LA Image

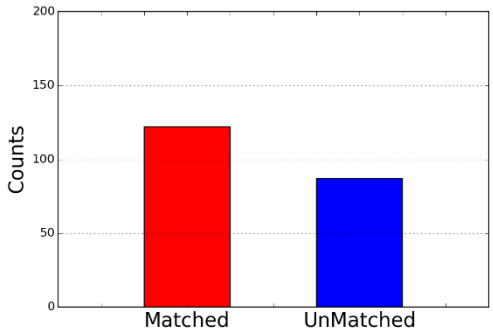


Figure A. 2981: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

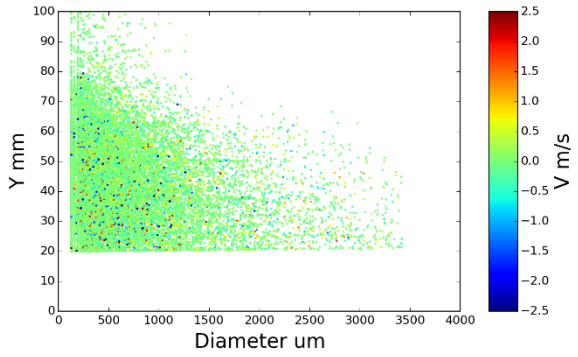


Figure A. 2984: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

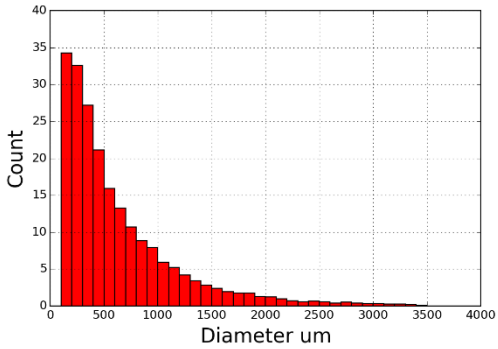


Figure A. 2982: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

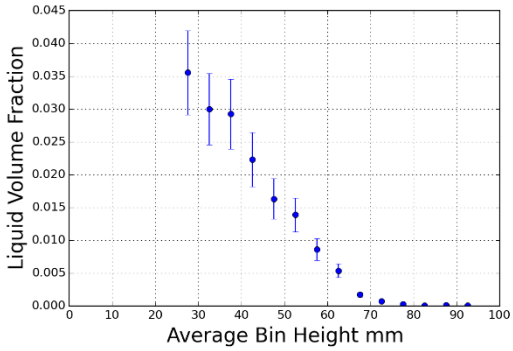


Figure A. 2985: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

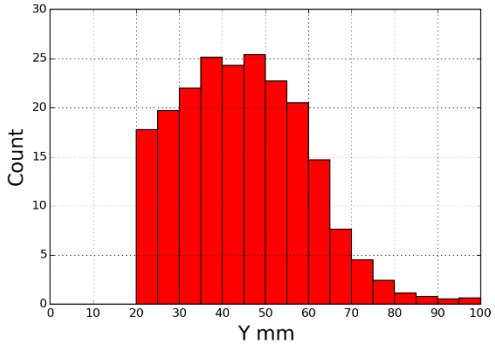


Figure A. 2983: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 All Droplets for .LB Image

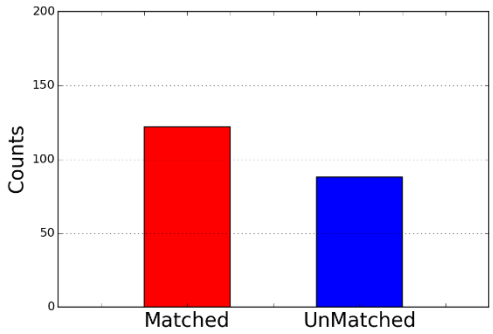


Figure A. 2986: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

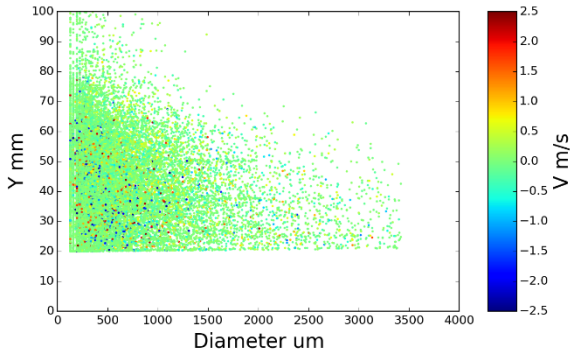


Figure A. 2989: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

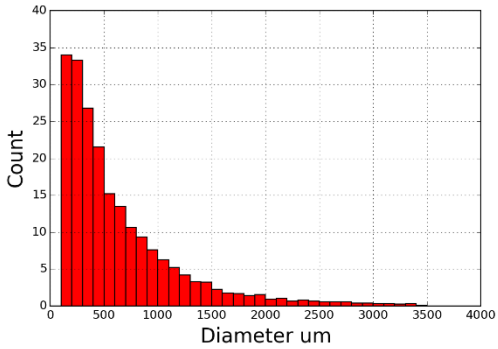


Figure A. 2987: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

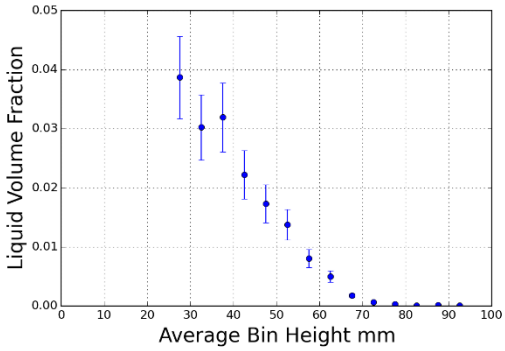


Figure A. 2990: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

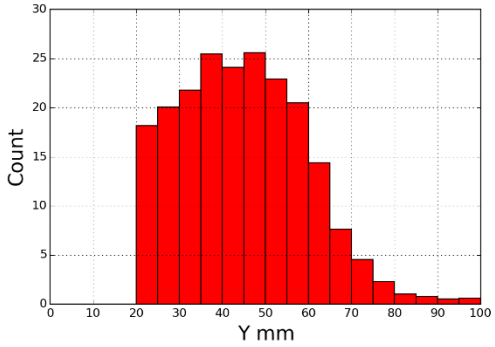


Figure A. 2988: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 Matched Only Droplets for .LA Image

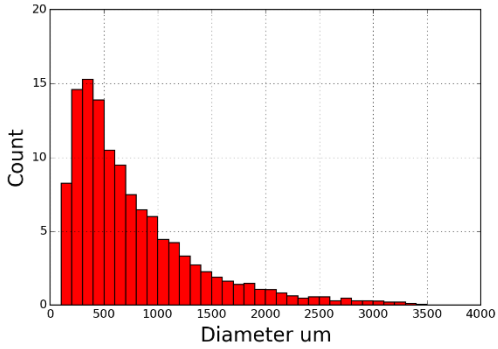


Figure A. 2991: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

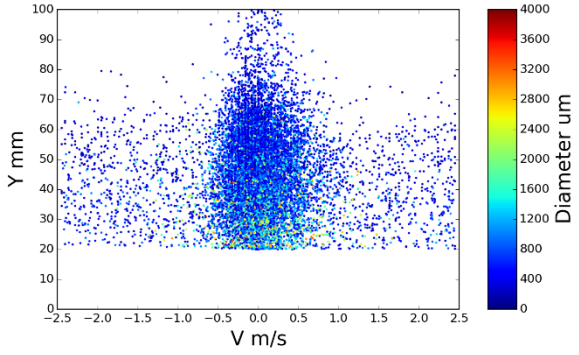


Figure A. 2994: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

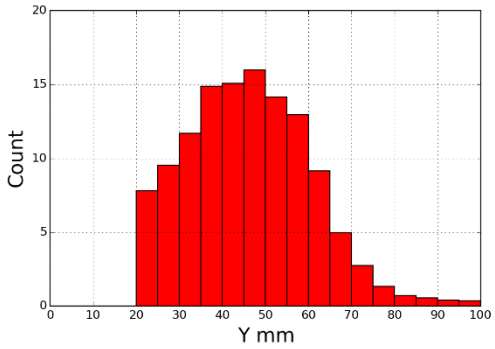


Figure A. 2992: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

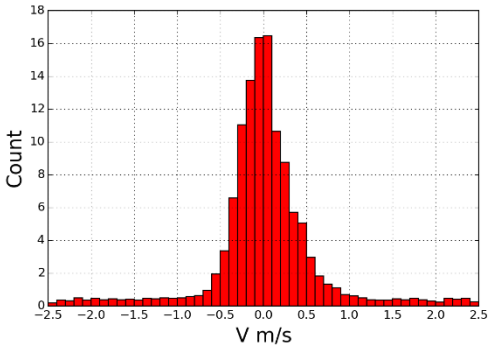


Figure A. 2995: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

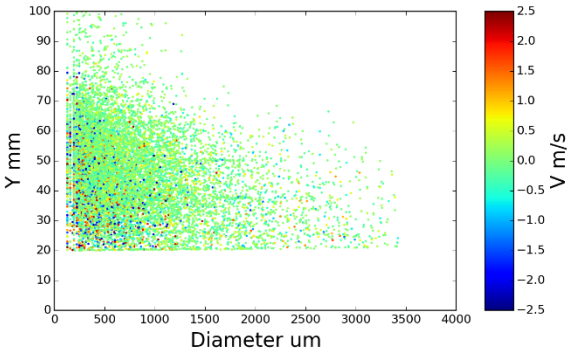


Figure A. 2993: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.2.2 Matched Only Droplets for .LB Image

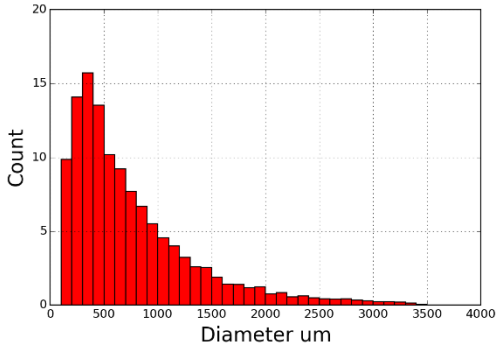


Figure A. 2996: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

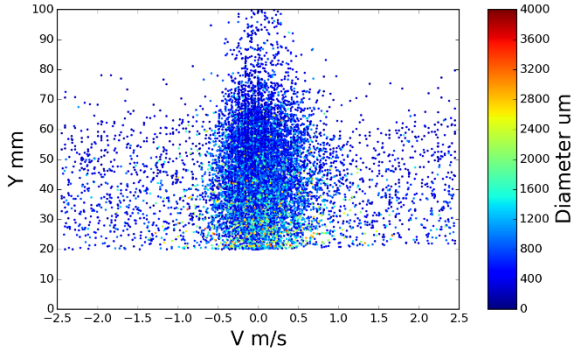


Figure A. 2999: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

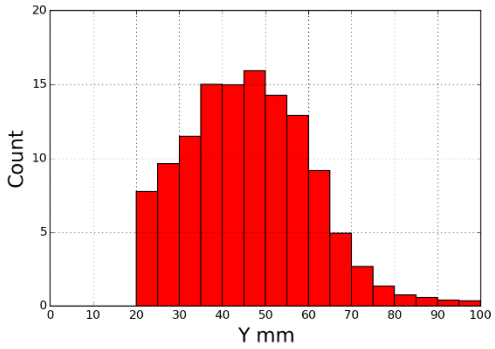


Figure A. 2997: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

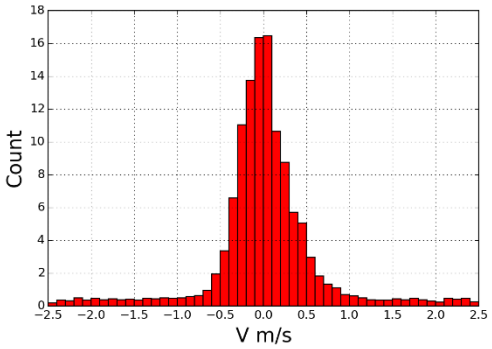


Figure A. 3000: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

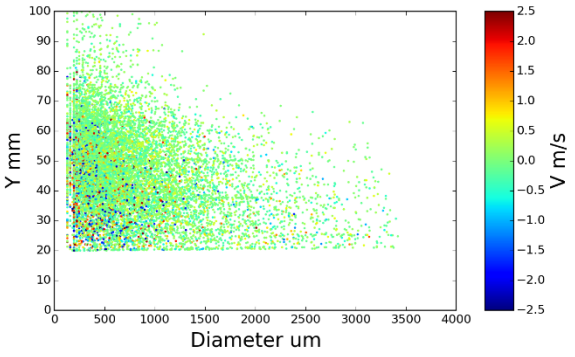


Figure A. 2998: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3 Liquid Level 3

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	13847 / 1.745
Ref Mass Flow (lb/hr) / (kg/s)	3213 / 0.405
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	29847 / 40.480
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	9942 / 31.36
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	40.0 / 4.45
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.2 / 4.56
Total Bundle Q (Btu/hr) / (kW)	288536 / 84.56
Total Bundle & Preboiler Q (Btu/hr) / (kW)	288536 / 84.56
Top Two Rows HTC Ratio	0.992
Bundle Inlet Quality	-0.07
Bundle Exit Quality	1.00

Table A. 316: Thermal Conditions

A.4.3.1 Lens 100mm Mag 0_29x

A.4.3.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	105.66	109.24	57.2	3014	470.9	454.5	57.2	3028	462.1	454.8
40-60mm	132.75	135.51	57.2	2992	399.3	370.5	57.2	2924	390.1	369.7
60-80mm	70.7	71.72	57.2	2127	301.3	249.0	57.2	2016	296.8	245.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	309.13	316.47	57.2	3014	401.4	384.3	57.2	3028	393.8	383.8
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0478			
Lowest Particle			28.0846				28.0846			

Table A. 317: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	75.14	57.2	3014	572.7	474.7	57.2	3028	570.8	473.8	-2.540	2.540	-0.050	0.380	-2.540	2.540	0.080	0.480
40-60mm	104.9	57.2	2992	460.8	383.9	57.2	2924	457.5	382.7	-2.540	2.540	-0.050	0.270	-2.540	2.530	0.100	0.380
60-80mm	57.69	57.2	1969	337.3	252.5	57.2	2016	333.9	251.4	-2.440	2.490	-0.060	0.200	-2.530	2.540	0.130	0.320
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	237.73	57.2	3014	466.2	399.2	57.2	3028	463.2	398.2	-2.540	2.540	-0.050	0.300	-2.540	2.540	0.100	0.400

Table A. 318: Matched Droplet Info

A.4.3.1 All Droplets for .LA Image

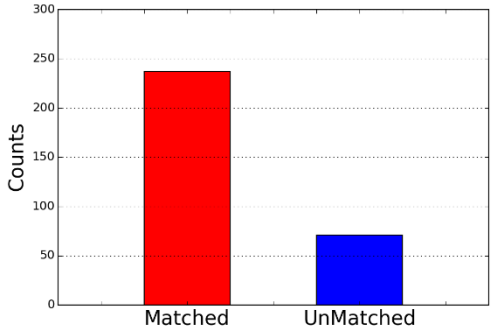


Figure A. 3001: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

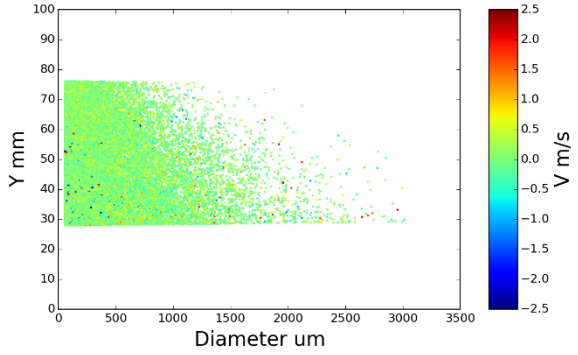


Figure A. 3004: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

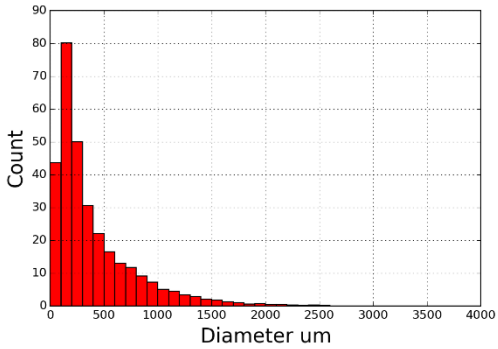


Figure A. 3002: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

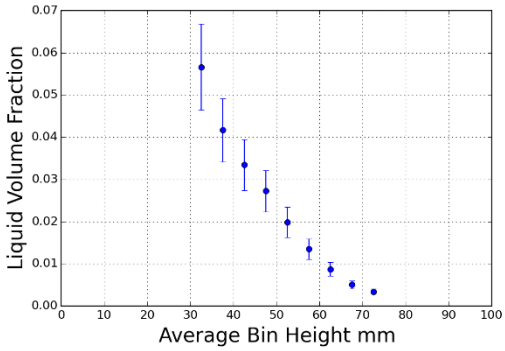


Figure A. 3005: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

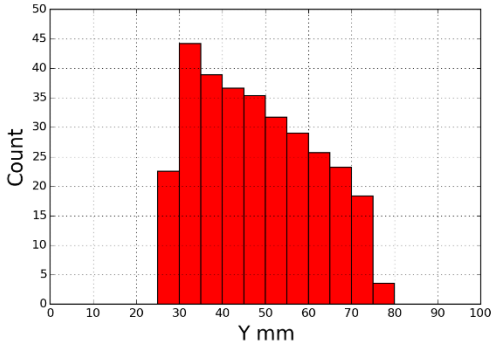


Figure A. 3003: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 All Droplets for .LB Image

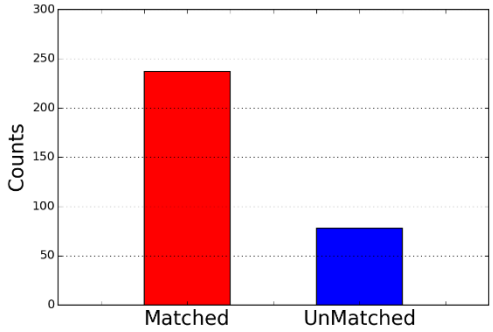


Figure A. 3006: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

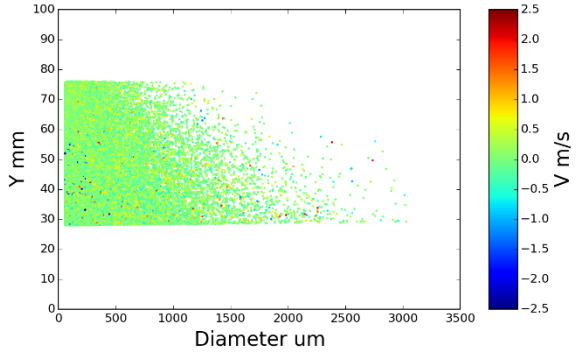


Figure A. 3009: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

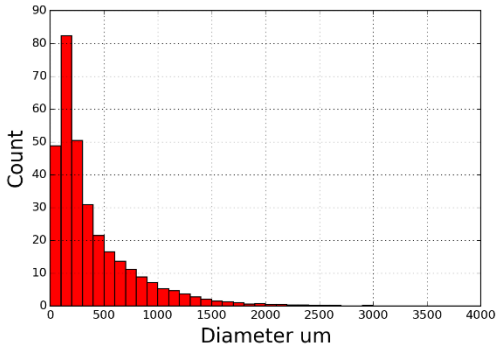


Figure A. 3007: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

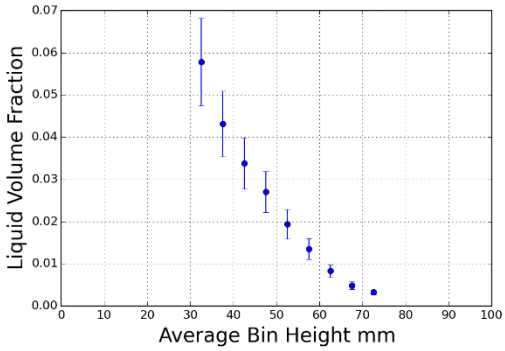


Figure A. 3010: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

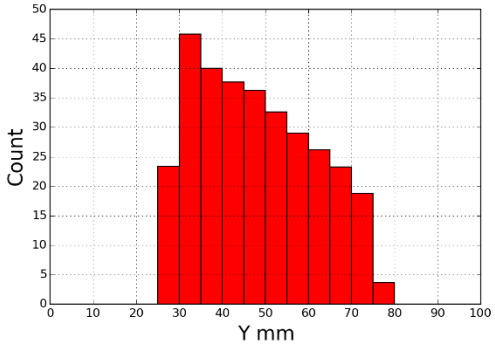


Figure A. 3008: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 Matched Only Droplets for .LA Image

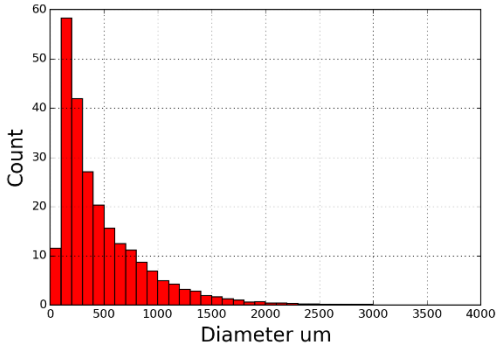


Figure A. 3011: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

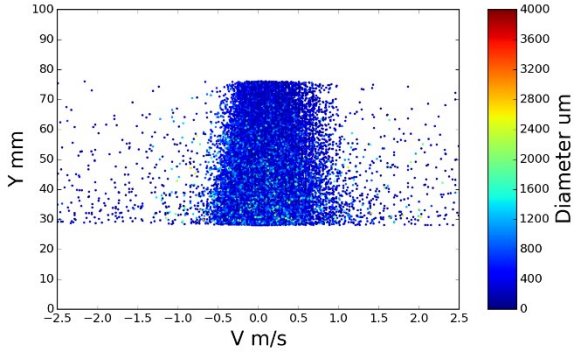


Figure A. 3014: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

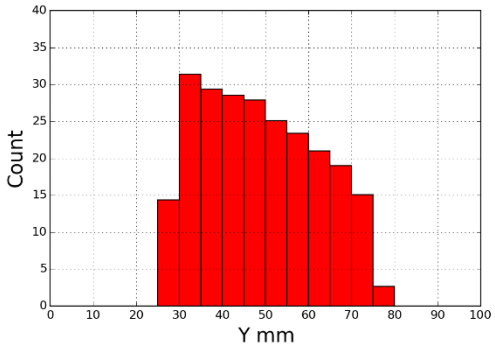


Figure A. 3012: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

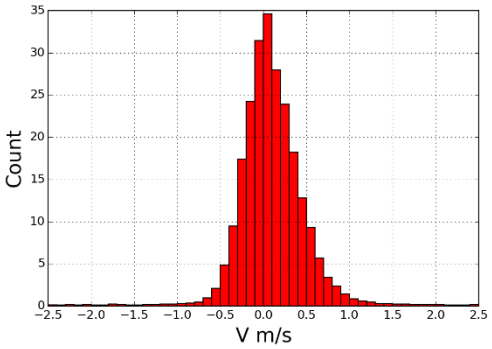


Figure A. 3015: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

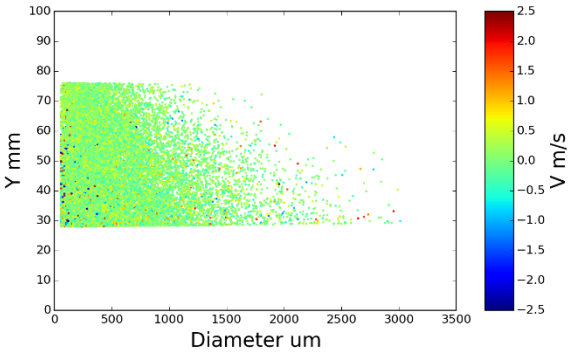


Figure A. 3013: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 Matched Only Droplets for .LB Image

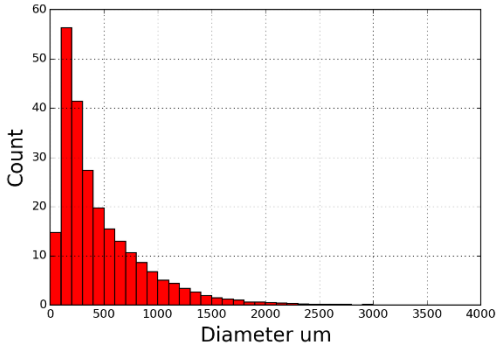


Figure A. 3016: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

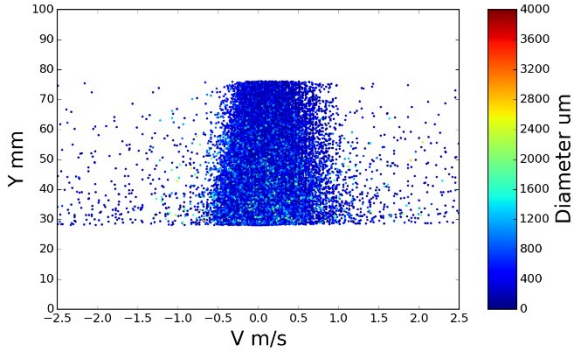


Figure A. 3019: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

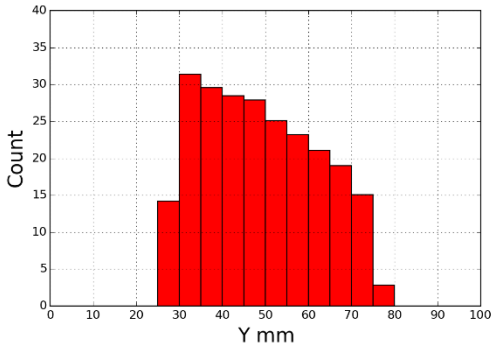


Figure A. 3017: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

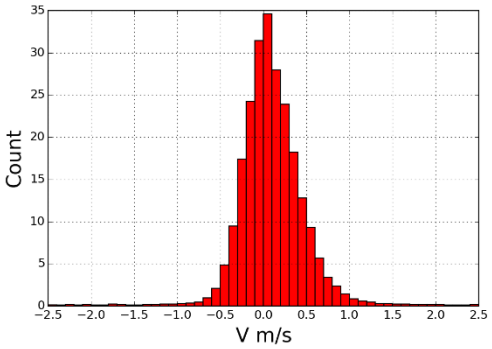


Figure A. 3020: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

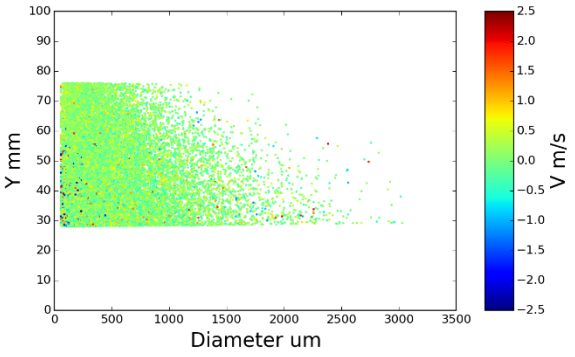


Figure A. 3018: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	85.54	89.66	57.2	3024	433.3	475.8	57.2	2981	422.5	468.7
40-60mm	120.14	124.64	57.2	2963	344.1	407.1	57.2	3001	335.0	401.1
60-80mm	58.61	60.01	57.2	2931	241.0	265.4	57.2	2865	235.3	260.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	264.32	274.33	57.2	3024	350.1	411.2	57.2	3001	341.8	405.5
			Height A (mm)				Height B (mm)			
Highest Particle			76.0466				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 319: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	56.61	57.2	2978	550.4	515.0	57.2	2981	548.2	515.2	-2.540	2.540	-0.030	0.370	-2.530	2.540	-0.110	0.470
40-60mm	86.29	57.2	2963	416.1	444.1	57.2	3001	412.6	441.7	-2.540	2.540	-0.030	0.320	-2.540	2.490	-0.140	0.390
60-80mm	42.91	57.2	2931	283.4	290.2	57.2	2865	280.1	289.3	-2.540	2.330	-0.070	0.260	-2.490	2.540	-0.120	0.290
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	185.81	57.2	2978	426.4	448.6	57.2	3001	423.6	447.8	-2.540	2.540	-0.040	0.330	-2.540	2.540	-0.130	0.400

Table A. 320: Matched Droplet Info

A.4.3.1 All Droplets for .LA Image

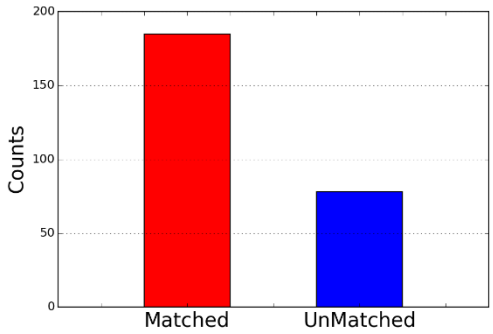


Figure A. 3021: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

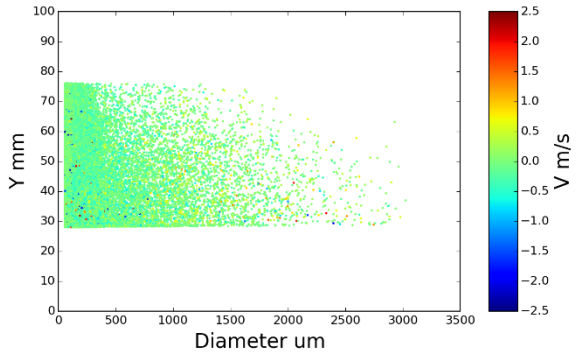


Figure A. 3024: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

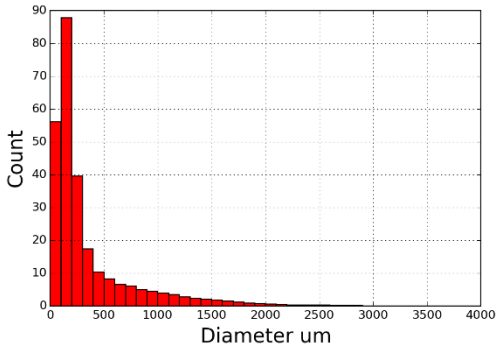


Figure A. 3022: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

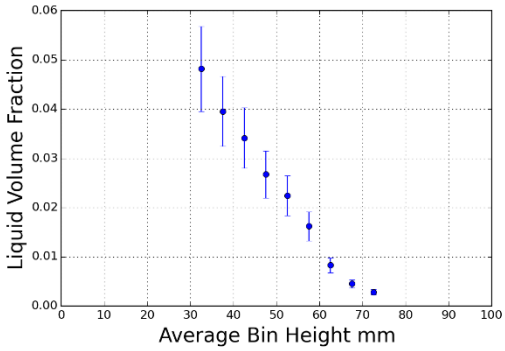


Figure A. 3025: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

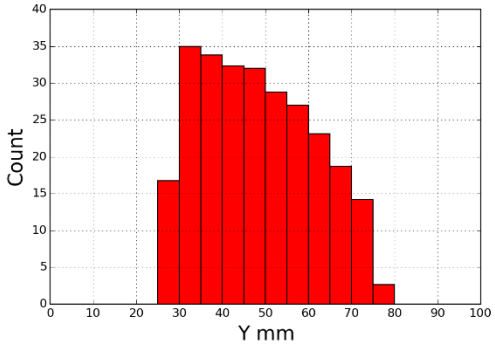


Figure A. 3023: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 All Droplets for .LB Image

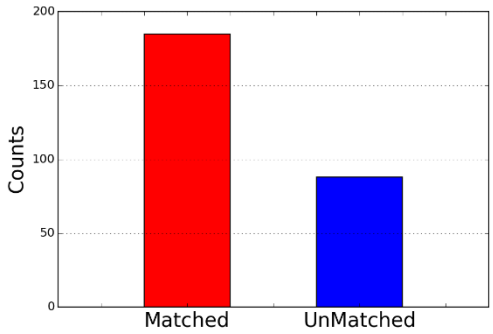


Figure A. 3026: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

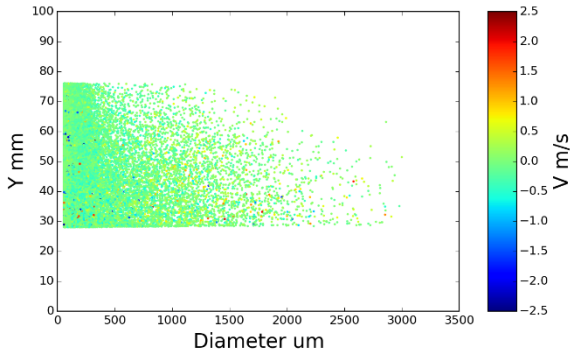


Figure A. 3029: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

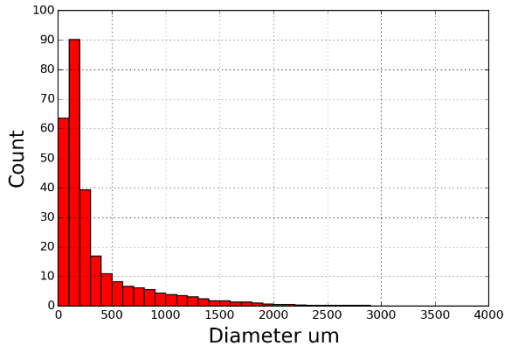


Figure A. 3027: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

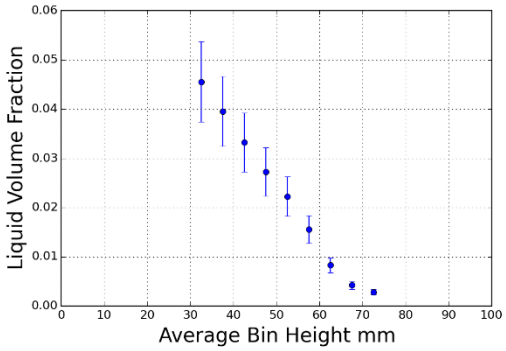


Figure A. 3030: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

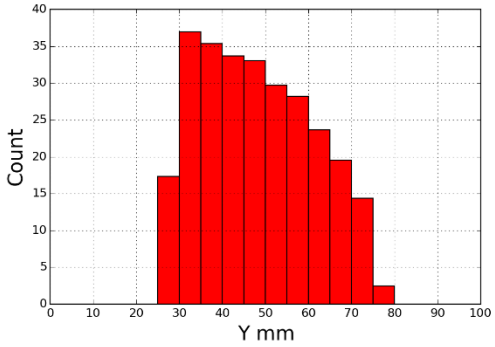


Figure A. 3028: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 Matched Only Droplets for .LA Image

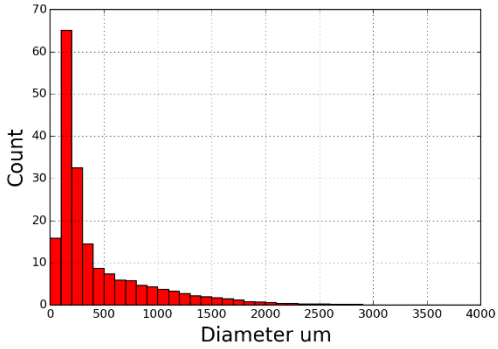


Figure A. 3031: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

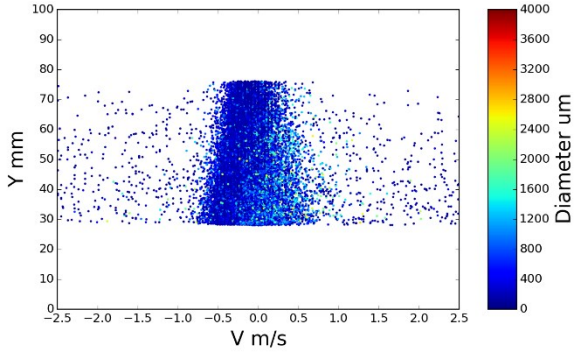


Figure A. 3034: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

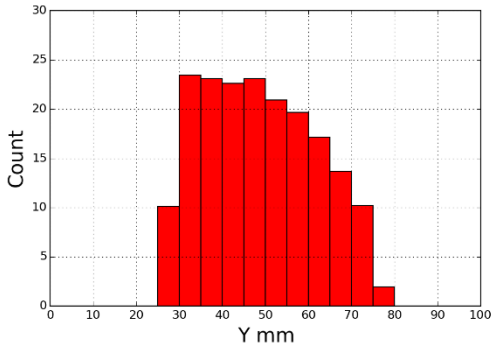


Figure A. 3032: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

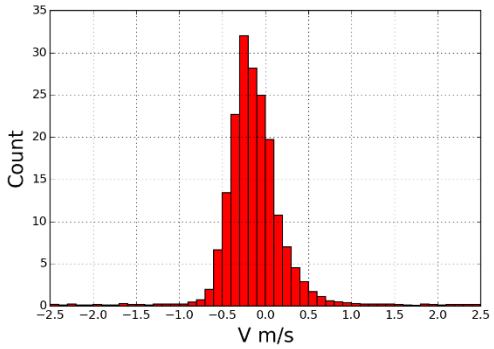


Figure A. 3035: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

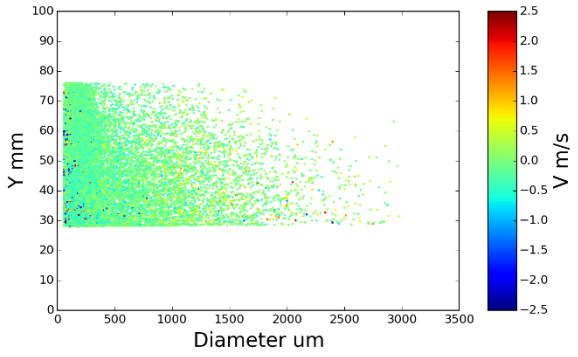


Figure A. 3033: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 Matched Only Droplets for .LB Image

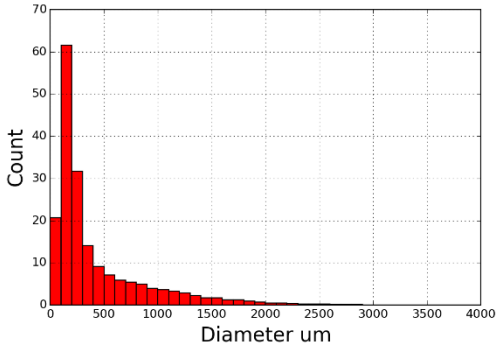


Figure A. 3036: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

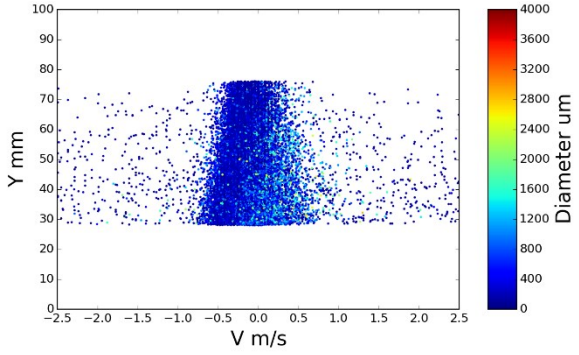


Figure A. 3039: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

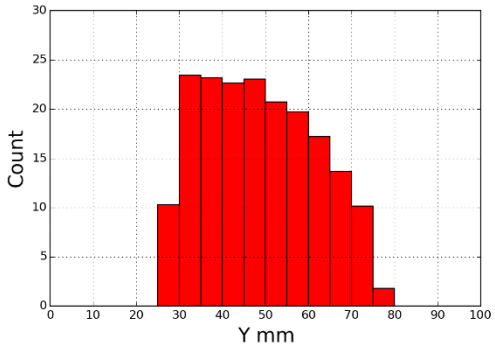


Figure A. 3037: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

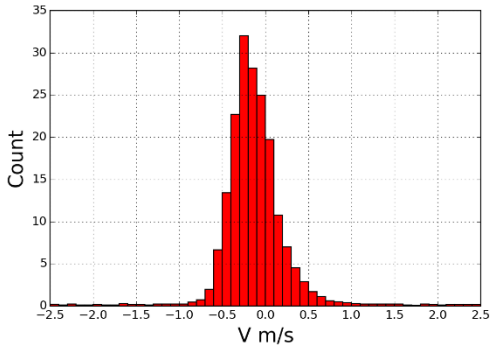


Figure A. 3040: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

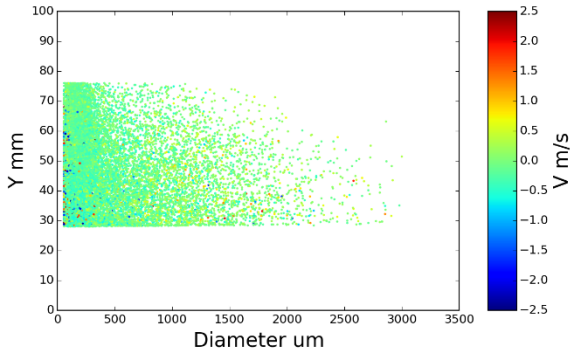


Figure A. 3038: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	78.12	83.1	57.2	3032	432.4	455.7	57.2	3034	415.3	450.3
40-60mm	110.58	117.46	57.2	3043	323.9	397.7	57.2	3000	310.5	388.9
60-80mm	46.95	49.02	57.2	2584	218.5	269.4	57.2	2442	212.0	261.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	235.7	249.62	57.2	3043	338.9	404.2	57.2	3034	326.1	396.7
			Height A (mm)				Height B (mm)			
Highest Particle			76.0515				76.0466			
Lowest Particle			28.0846				28.0846			

Table A. 321: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	49.39	57.2	3032	555.9	494.6	57.2	3034	552.6	493.0	-2.540	2.530	-0.020	0.450	-2.540	2.530	-0.020	0.510
40-60mm	72.2	57.2	3043	409.9	447.6	57.2	3000	405.7	444.9	-2.540	2.540	-0.020	0.400	-2.540	2.540	-0.060	0.480
60-80mm	30.79	57.2	2584	263.2	304.0	57.2	2442	260.2	301.4	-2.540	2.540	-0.050	0.360	-2.540	2.470	-0.120	0.380
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	152.38	57.2	3043	427.6	451.5	57.2	3034	424.0	449.3	-2.540	2.540	-0.030	0.410	-2.540	2.540	-0.060	0.470

Table A. 322: Matched Droplet Info

A.4.3.1 All Droplets for .LA Image

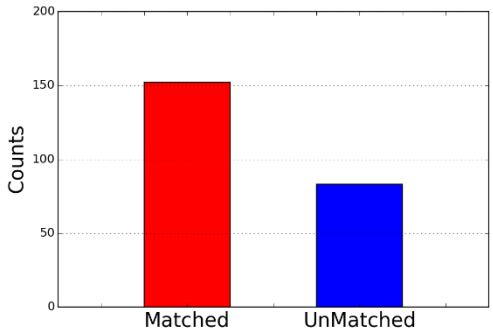


Figure A. 3041: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

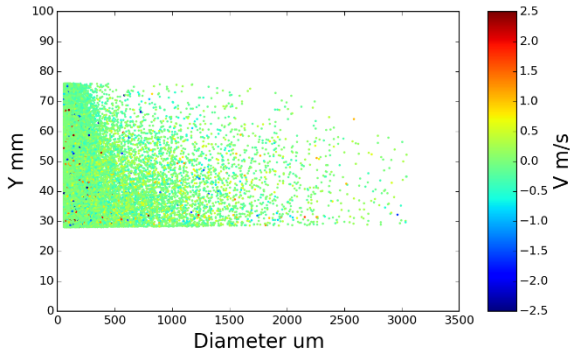


Figure A. 3044: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

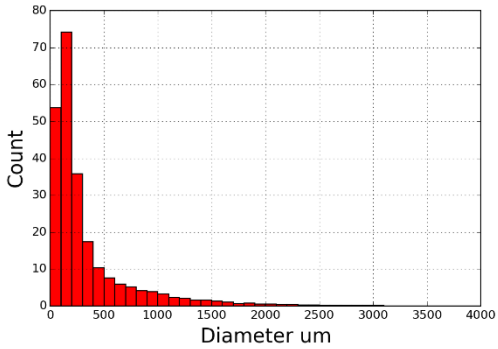


Figure A. 3042: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

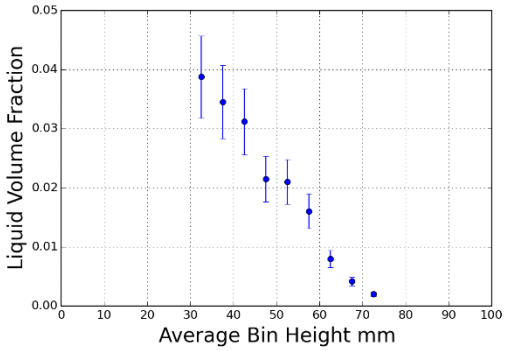


Figure A. 3045: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

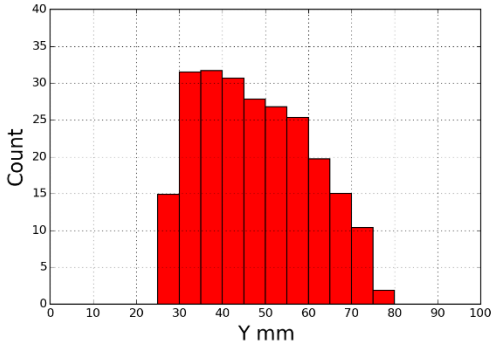


Figure A. 3043: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 All Droplets for .LB Image

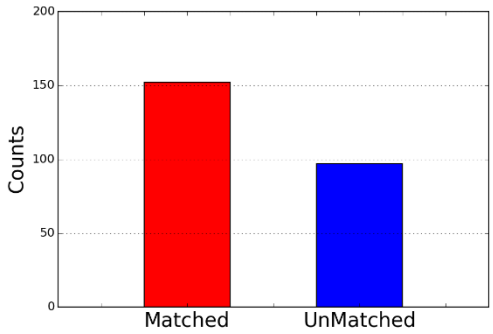


Figure A. 3046: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

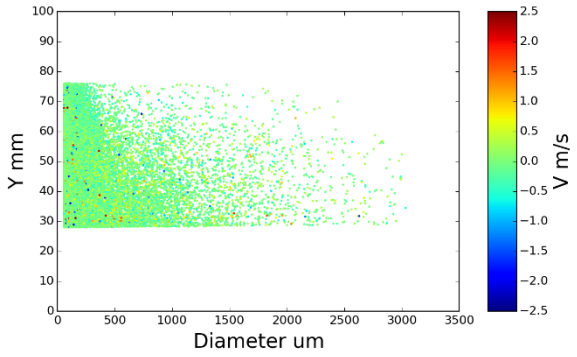


Figure A. 3049: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

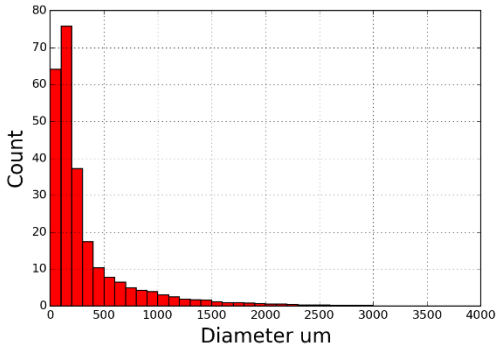


Figure A. 3047: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

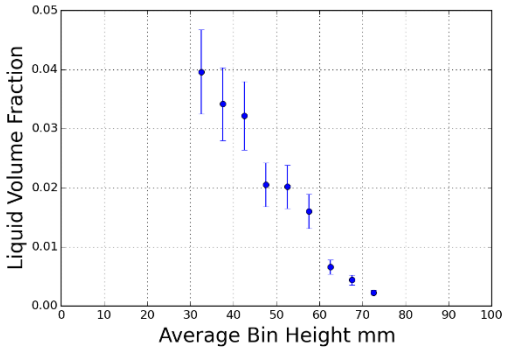


Figure A. 3050: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

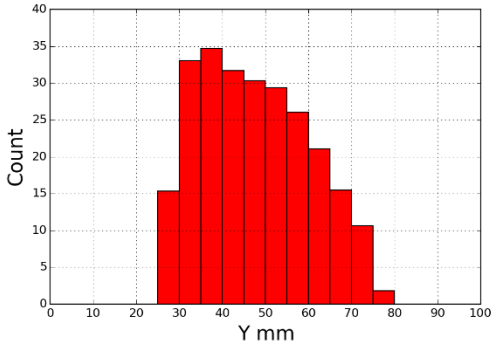


Figure A. 3048: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 Matched Only Droplets for .LA Image

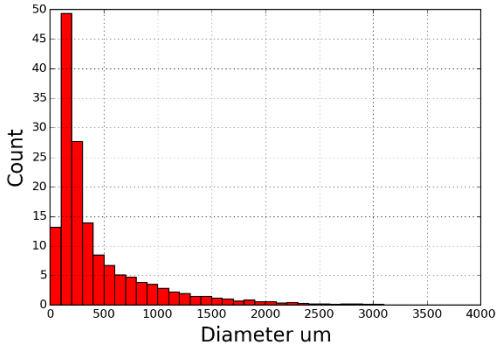


Figure A. 3051: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

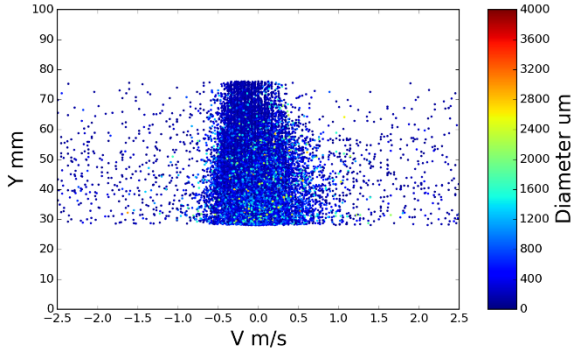


Figure A. 3054: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

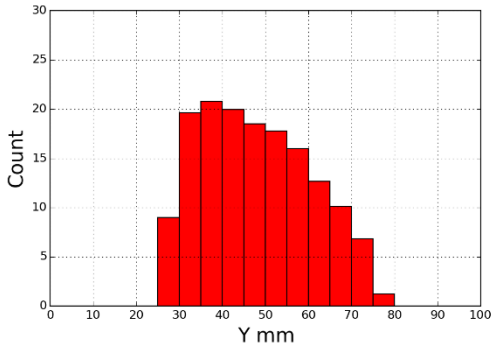


Figure A. 3052: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

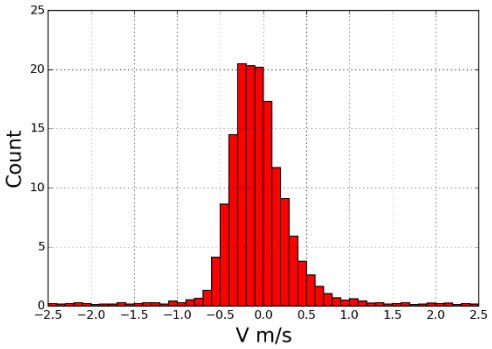


Figure A. 3055: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

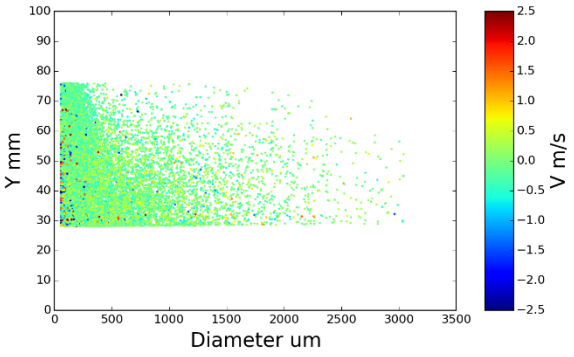


Figure A. 3053: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 Matched Only Droplets for .LB Image

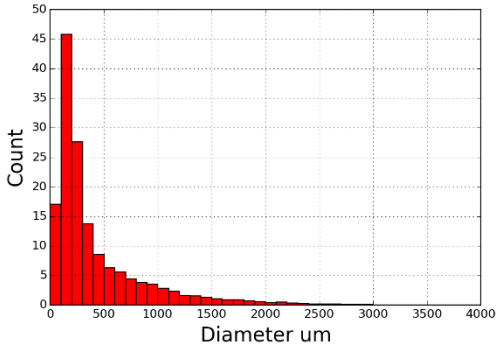


Figure A. 3056: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

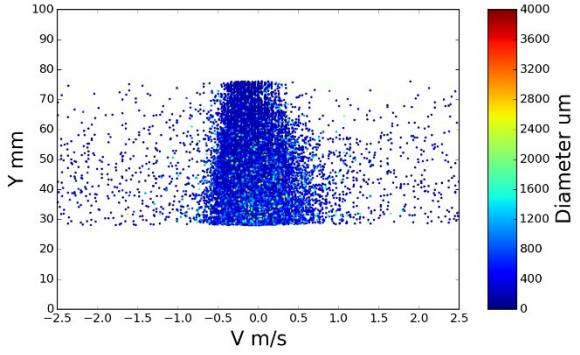


Figure A. 3059: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

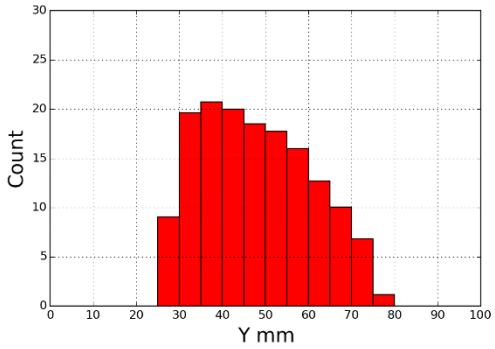


Figure A. 3057: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

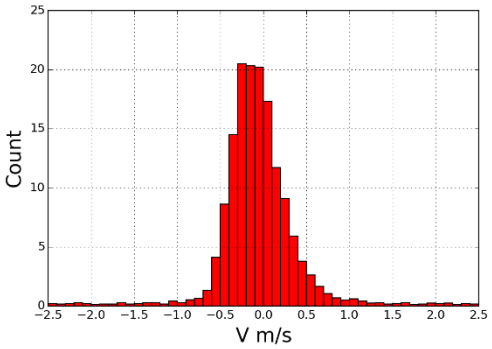


Figure A. 3060: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

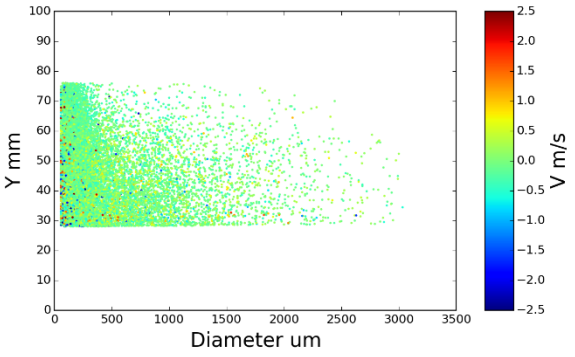


Figure A. 3058: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	88.51	95.42	57.2	3023	455.6	454.4	57.2	3033	432.0	449.4
40-60mm	132.84	142.06	57.2	3019	326.1	357.0	57.2	2990	312.7	353.6
60-80mm	53.79	54.49	57.2	2725	214.9	227.3	57.2	2899	212.6	226.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	275.16	292.01	57.2	3023	346.0	381.4	57.2	3033	333.0	377.5
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 323: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	55.65	57.2	3023	579.5	482.6	57.2	3033	579.0	484.4	-2.530	2.540	-0.040	0.430	-2.540	2.490	0.040	0.490
40-60mm	87.68	57.2	3006	405.9	389.4	57.2	2990	404.0	390.2	-2.540	2.540	-0.020	0.410	-2.540	2.540	0.000	0.460
60-80mm	35.35	57.2	2725	256.2	249.5	57.2	2654	252.7	246.5	-2.540	2.490	-0.040	0.370	-2.540	2.530	-0.030	0.400
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	178.68	57.2	3023	430.3	415.3	57.2	3033	428.5	416.2	-2.540	2.540	-0.030	0.410	-2.540	2.540	0.010	0.460

Table A. 324: Matched Droplet Info

A.4.3.1 All Droplets for .LA Image

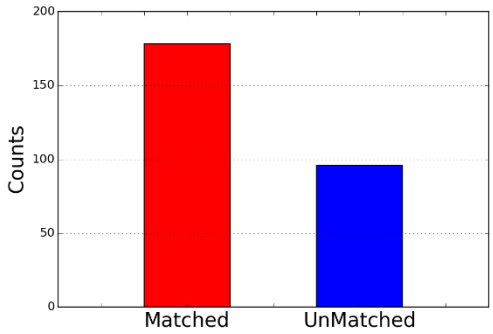


Figure A. 3061: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

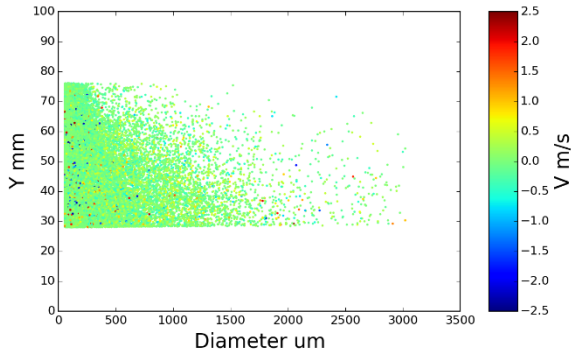


Figure A. 3064: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

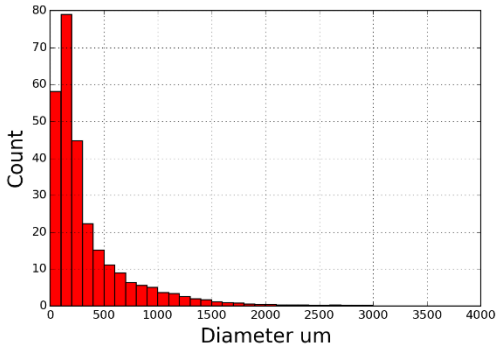


Figure A. 3062: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

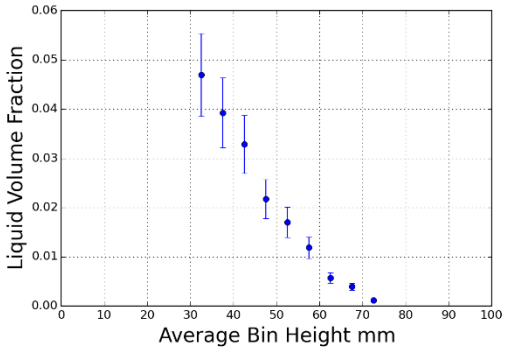


Figure A. 3065: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

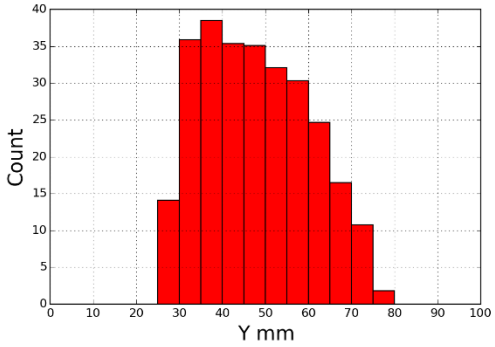


Figure A. 3063: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 All Droplets for .LB Image

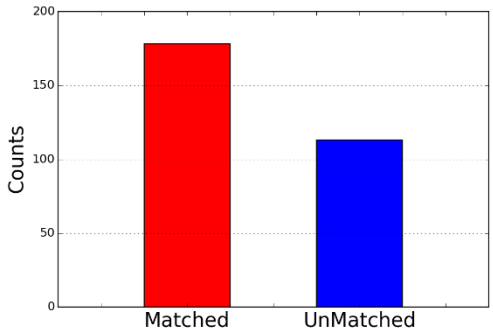


Figure A. 3066: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

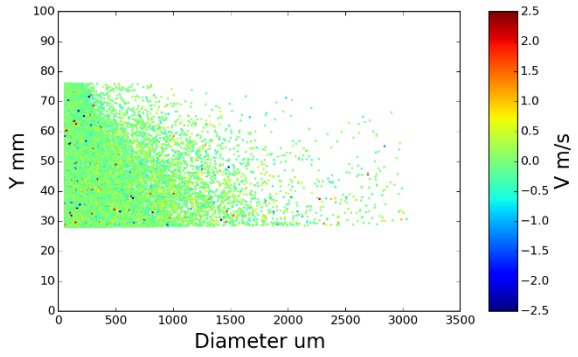


Figure A. 3069: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

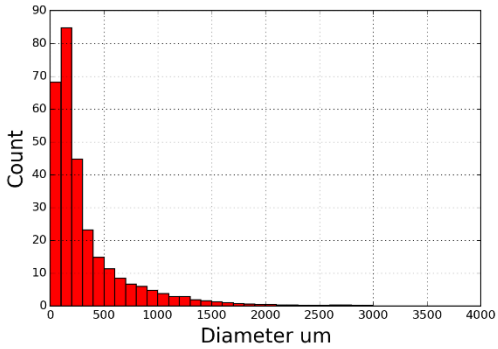


Figure A. 3067: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

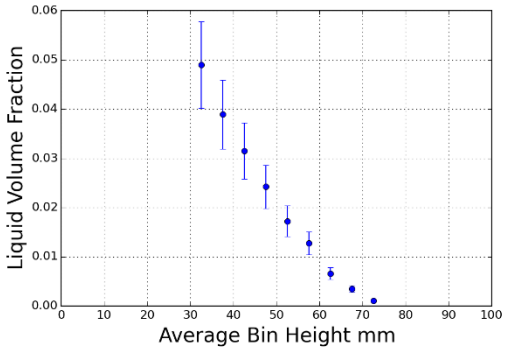


Figure A. 3070: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

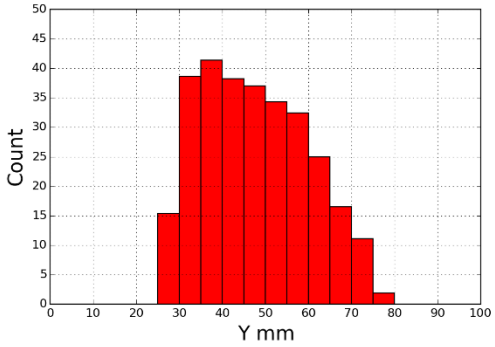


Figure A. 3068: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 Matched Only Droplets for .LA Image

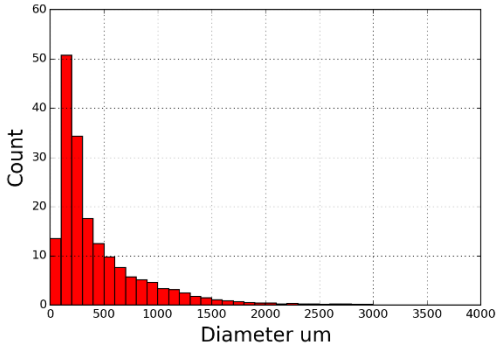


Figure A. 3071: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

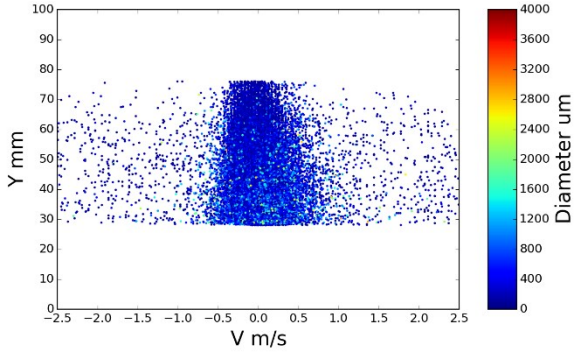


Figure A. 3074: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

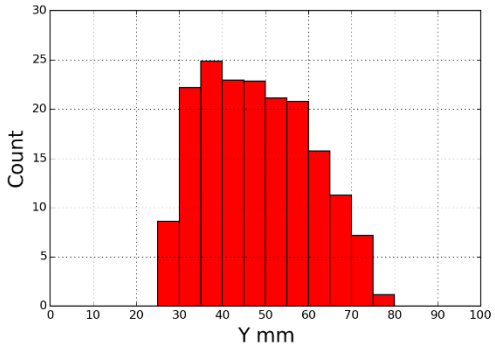


Figure A. 3072: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

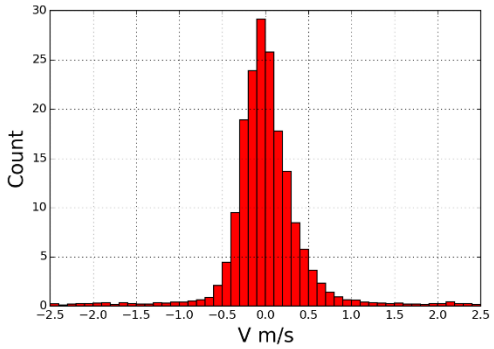


Figure A. 3075: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

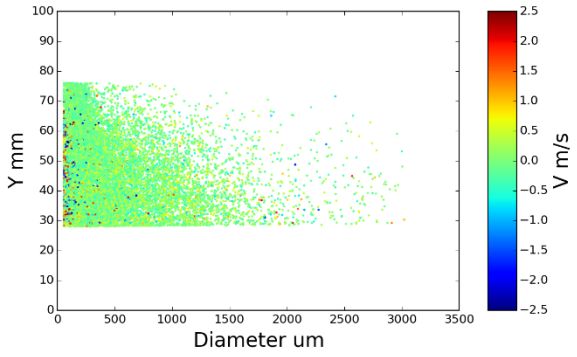


Figure A. 3073: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 Matched Only Droplets for .LB Image

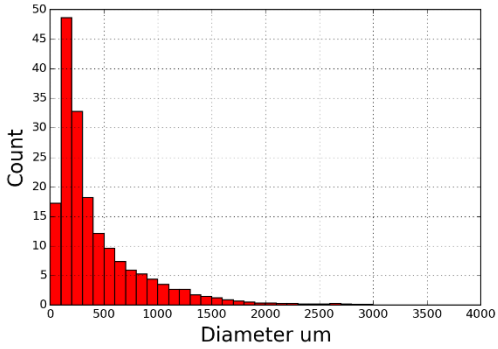


Figure A. 3076: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

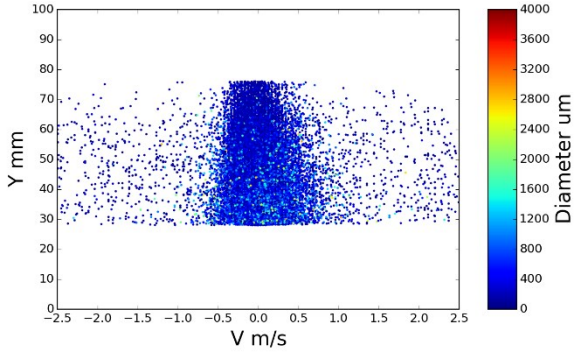


Figure A. 3079: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

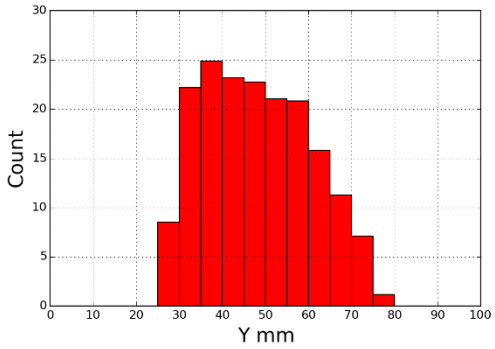


Figure A. 3077: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

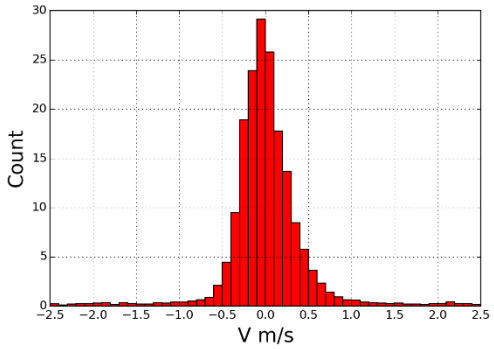


Figure A. 3080: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

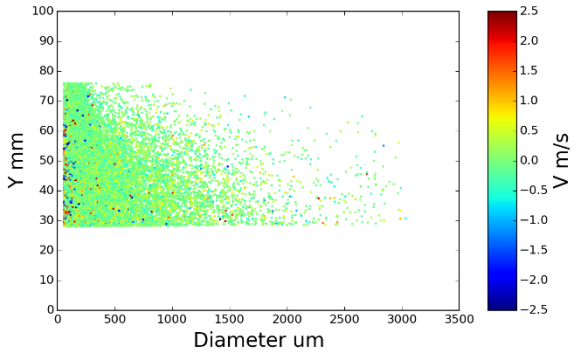


Figure A. 3078: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	75.12	81.95	57.2	3019	464.6	461.5	57.2	3003	442.4	459.2
40-60mm	124.68	130.68	57.2	3028	333.0	341.1	57.2	3036	322.6	336.2
60-80mm	53.86	55.6	57.2	2703	232.9	218.7	57.2	2854	227.7	217.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	253.69	268.29	57.2	3028	350.7	370.6	57.2	3036	339.5	367.9
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 325: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	45.08	57.2	2945	612.7	492.4	57.2	3003	612.3	494.4	-2.540	2.540	-0.030	0.460	-2.540	2.540	0.070	0.510
40-60mm	83.79	57.2	3028	410.2	367.2	57.2	3036	407.9	367.4	-2.510	2.540	-0.040	0.390	-2.540	2.540	0.060	0.460
60-80mm	37.55	57.2	2703	274.9	237.8	57.2	2854	273.3	239.9	-2.540	2.540	-0.020	0.300	-2.540	2.540	0.030	0.360
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	166.42	57.2	3028	434.5	401.2	57.2	3036	432.8	402.3	-2.540	2.540	-0.030	0.390	-2.540	2.540	0.050	0.460

Table A. 326: Matched Droplet Info

A.4.3.1 All Droplets for .LA Image

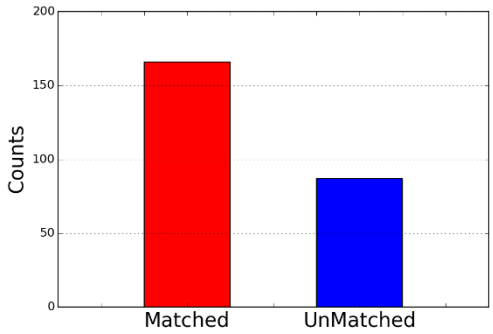


Figure A. 3081: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

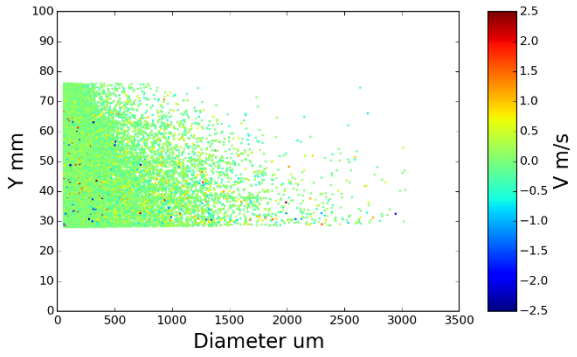


Figure A. 3084: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

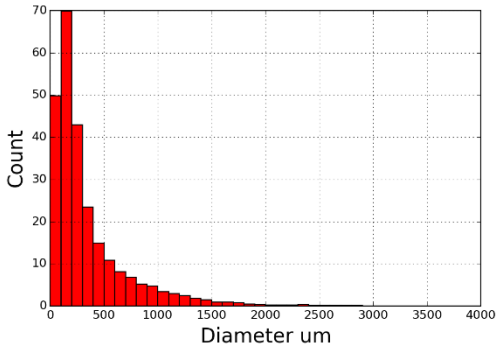


Figure A. 3082: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

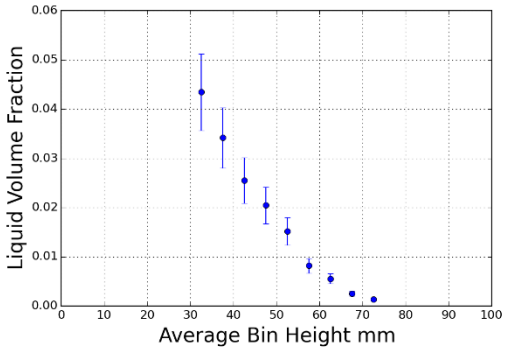


Figure A. 3085: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

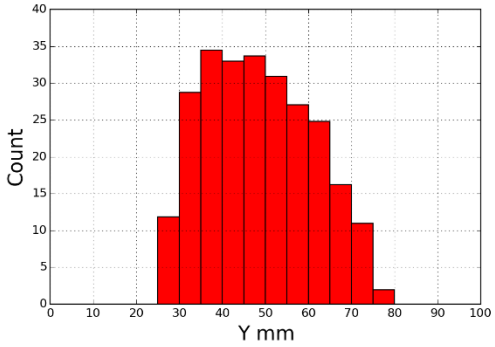


Figure A. 3083: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 All Droplets for .LB Image

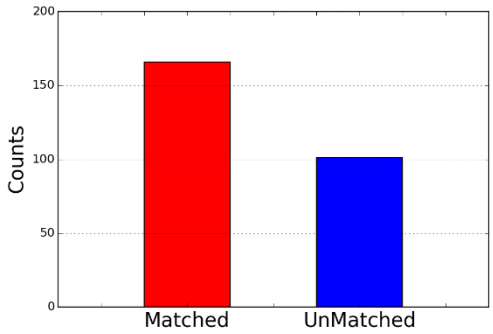


Figure A. 3086: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

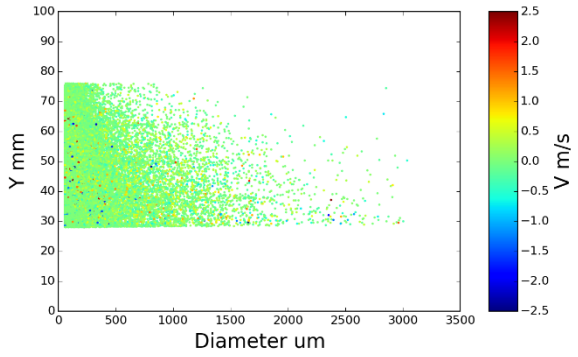


Figure A. 3089: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

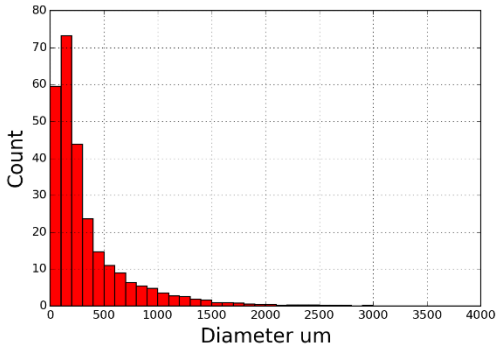


Figure A. 3087: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

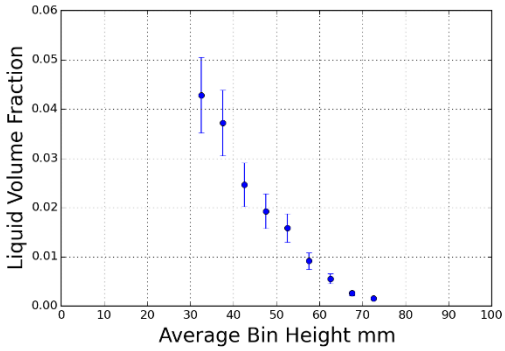


Figure A. 3090: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

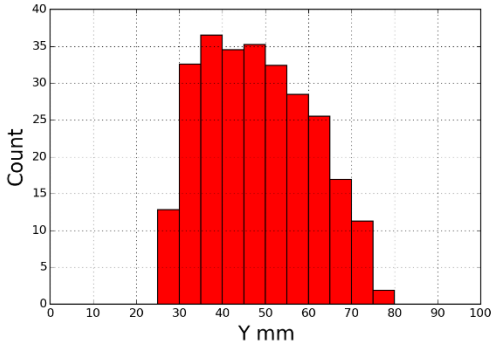


Figure A. 3088: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 Matched Only Droplets for .LA Image

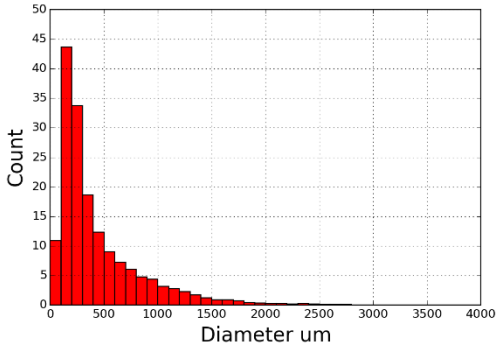


Figure A. 3091: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

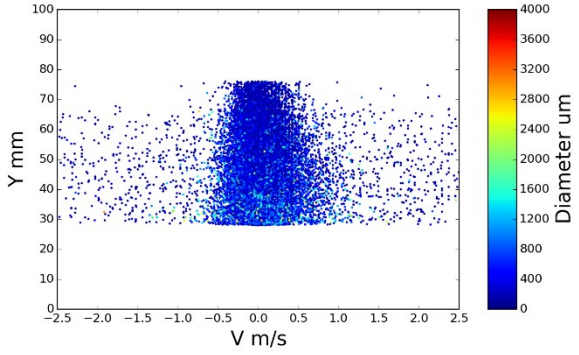


Figure A. 3094: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

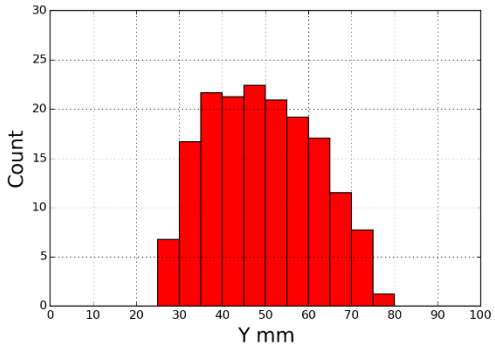


Figure A. 3092: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

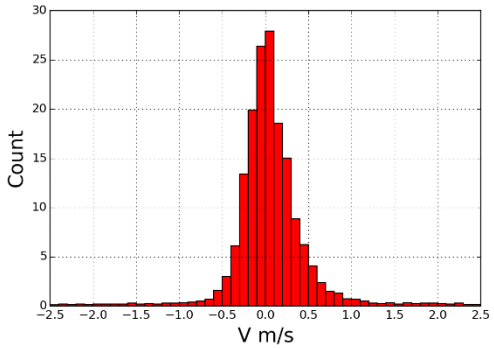


Figure A. 3095: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

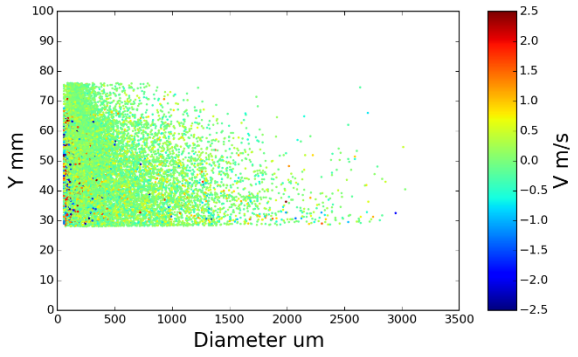


Figure A. 3093: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.1 Matched Only Droplets for .LB Image

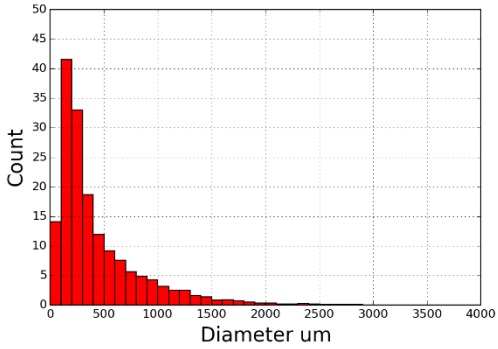


Figure A. 3096: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

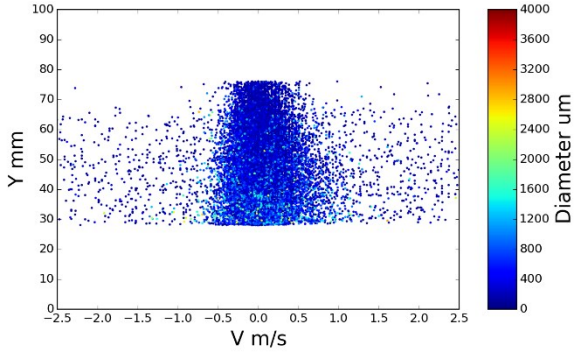


Figure A. 3099: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

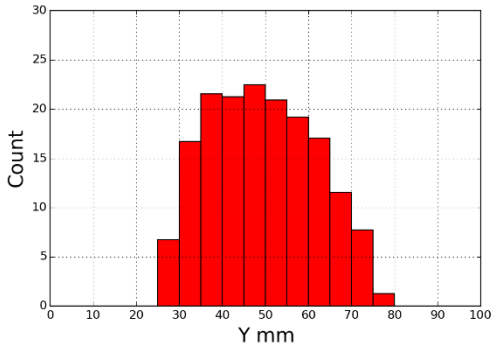


Figure A. 3097: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

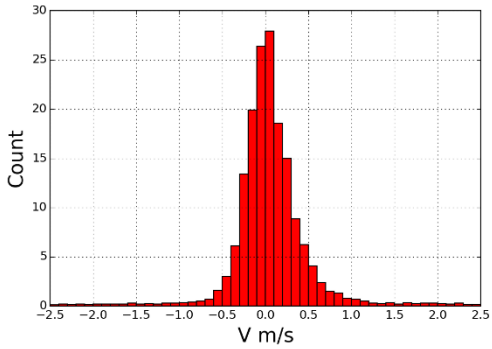


Figure A. 3100: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

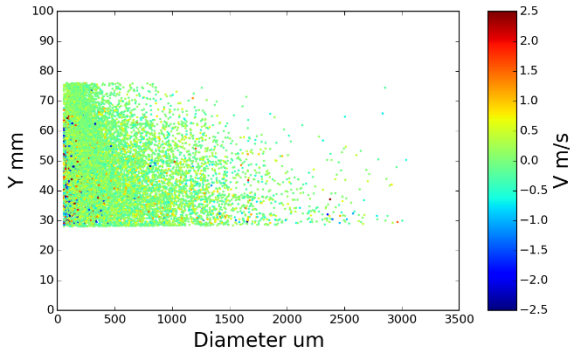


Figure A. 3098: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 Lens 50mm Mag 0_13x

A.4.3.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	64.25	63.33	128.7	3415	739.9	628.2	128.7	3415	752.5	642.2
20-40mm	89.83	90.62	128.7	3406	687.7	520.5	128.7	3367	685.3	524.0
40-60mm	62.64	62.55	128.7	3303	559.2	401.3	128.7	3051	557.5	399.4
60-80mm	35.32	35.31	128.7	1970	445.7	276.3	128.7	1940	442.4	274.1
80-100mm	14.65	14.42	128.7	1579	354.7	193.1	128.7	1484	356.2	193.3
All	266.69	266.23	128.7	3415	619.7	500.1	128.7	3415	621.2	505.5
			Height A (mm)				Height B (mm)			
Highest Particle			99.9276				99.9276			
Lowest Particle			10.0355				10.0355			

Table A. 327: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	33.7	128.7	3349	925.4	671.9	128.7	3396	909.2	666.5	-2.440	2.420	-0.080	0.740	-2.440	2.440	0.080	0.810
20-40mm	57.74	128.7	3406	796.0	535.8	128.7	3352	791.4	534.0	-2.440	2.440	-0.070	0.520	-2.440	2.440	0.070	0.610
40-60mm	46.73	128.7	3303	638.3	411.6	128.7	3051	631.8	408.9	-2.440	2.440	-0.070	0.350	-2.440	2.440	0.070	0.450
60-80mm	26.76	128.7	1970	505.2	281.3	128.7	1940	501.0	280.6	-2.440	2.400	-0.080	0.280	-2.440	2.360	0.090	0.400
80-100mm	10.93	128.7	1579	400.1	195.6	128.7	1484	396.2	196.4	-2.160	2.330	-0.070	0.200	-2.200	2.440	0.100	0.290
All	175.86	128.7	3406	710.0	515.0	128.7	3396	702.5	511.3	-2.440	2.440	-0.070	0.490	-2.440	2.440	0.080	0.580

Table A. 328: Matched Droplet Info

A.4.3.2 All Droplets for .LA Image

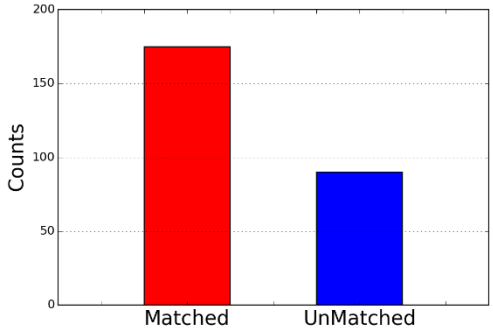


Figure A. 3101: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

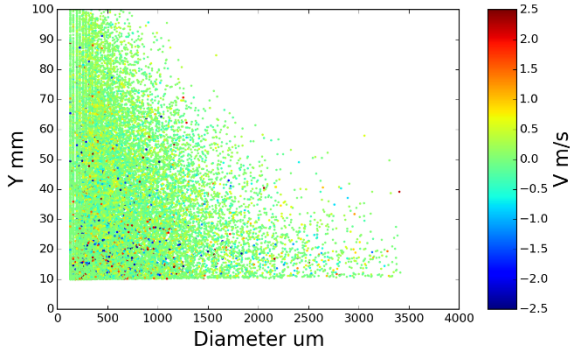


Figure A. 3104: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

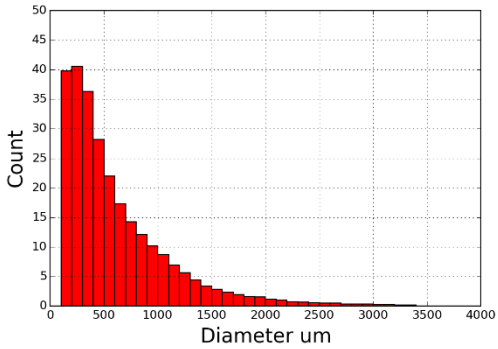


Figure A. 3102: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

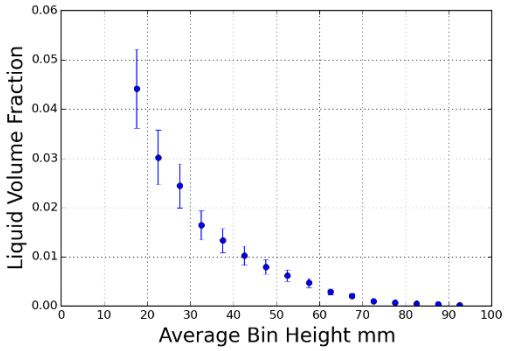


Figure A. 3105: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

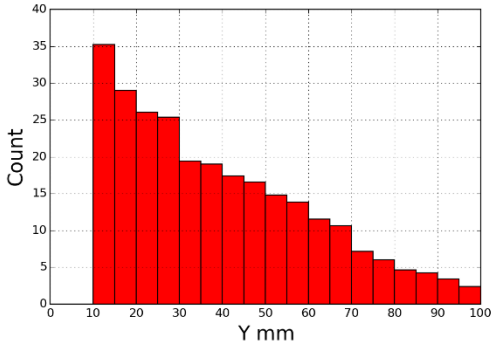


Figure A. 3103: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 All Droplets for .LB Image

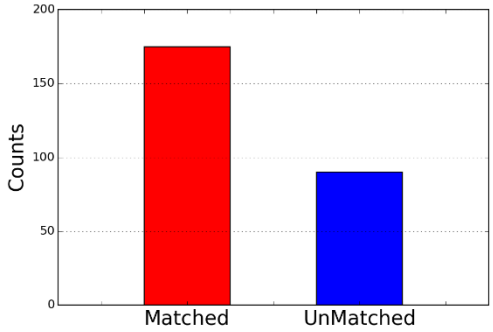


Figure A. 3106: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

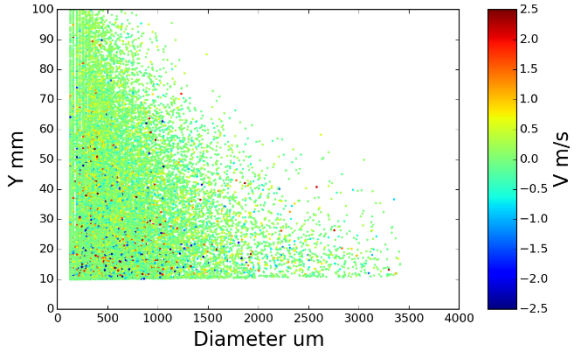


Figure A. 3109: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

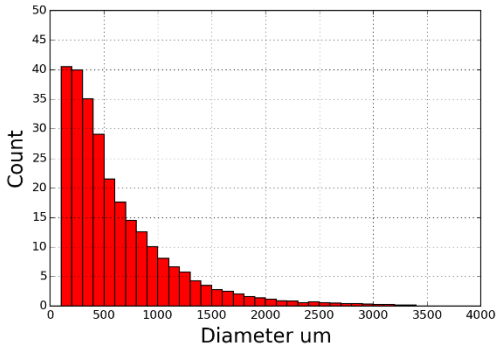


Figure A. 3107: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

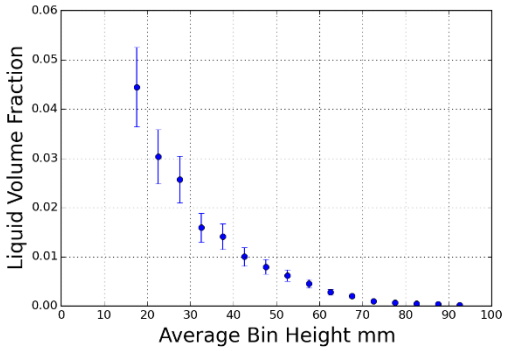


Figure A. 3110: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

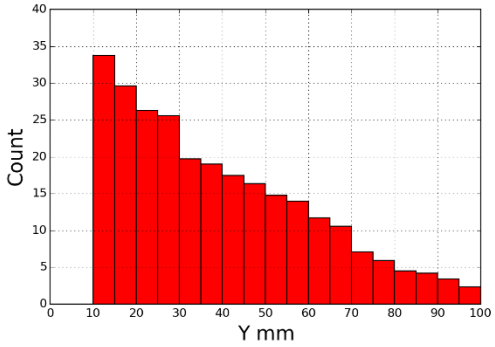


Figure A. 3108: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 Matched Only Droplets for .LA Image

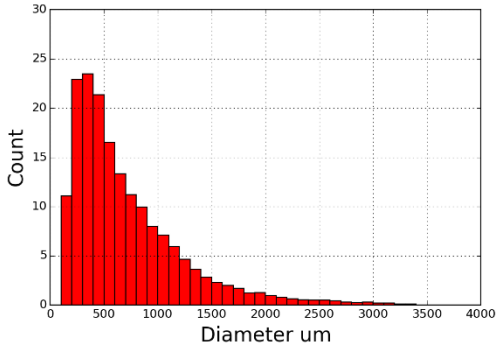


Figure A. 3111: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

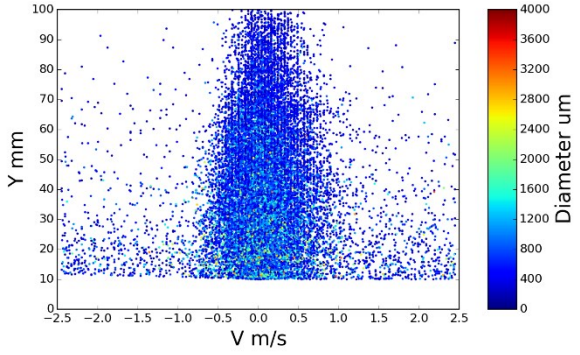


Figure A. 3114: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

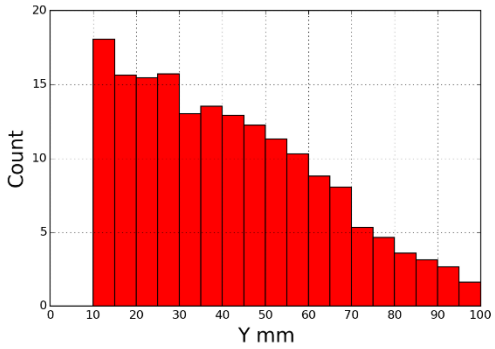


Figure A. 3112: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

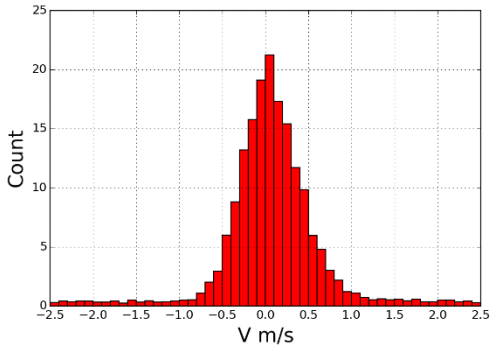


Figure A. 3115: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

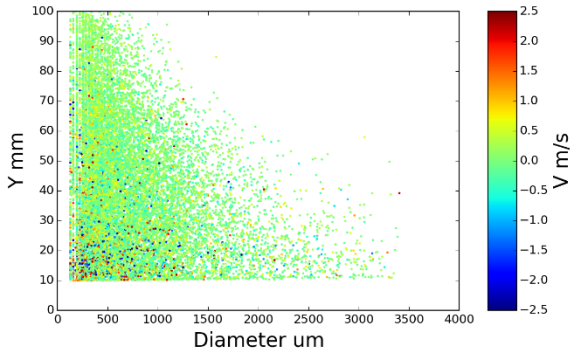


Figure A. 3113: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 Matched Only Droplets for .LB Image

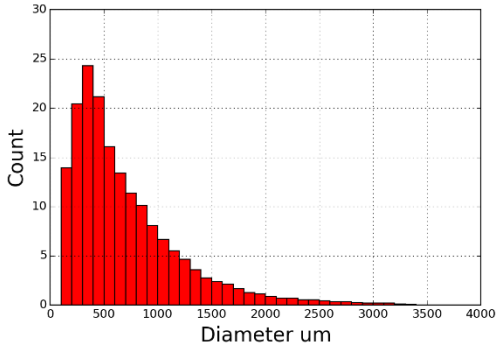


Figure A. 3116: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

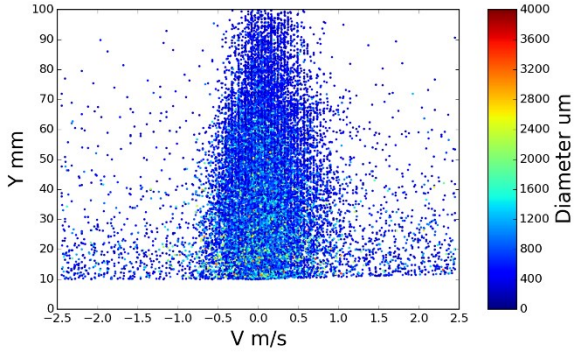


Figure A. 3119: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

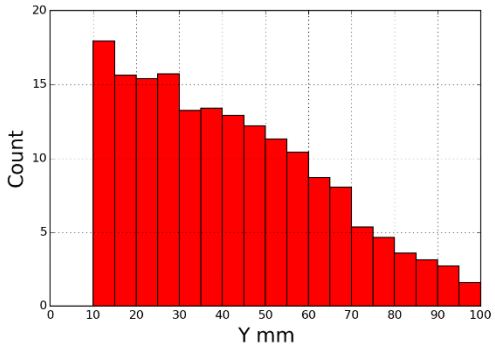


Figure A. 3117: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

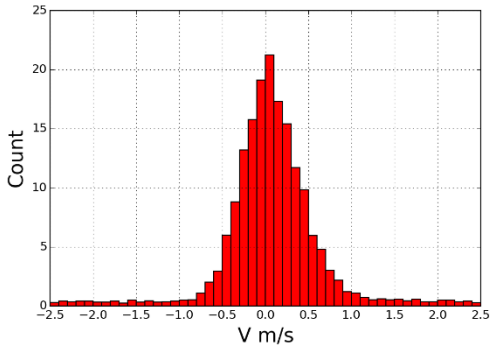


Figure A. 3120: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

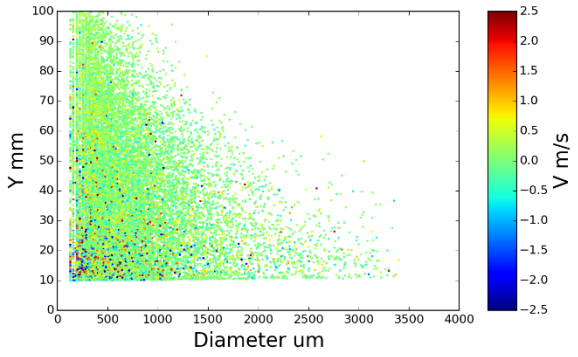


Figure A. 3118: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	57.44	56.74	128.7	3408	778.6	632.1	128.7	3399	783.7	641.4
20-40mm	87.7	87.27	128.7	3397	702.3	535.5	128.7	3416	704.1	536.6
40-60mm	59.74	59.55	128.7	3417	587.8	470.7	128.7	3273	589.9	471.9
60-80mm	29.1	29.29	128.7	2817	500.9	372.3	128.7	2799	495.8	370.0
80-100mm	8.84	8.69	128.7	1623	415.5	244.4	128.7	1650	414.4	240.3
All	242.82	241.55	128.7	3417	657.6	530.9	128.7	3416	659.0	534.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.9276				99.9276			
Lowest Particle			10.0355				10.0355			

Table A. 329: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	29.42	128.7	3395	977.4	674.5	128.7	3371	956.7	663.8	-2.440	2.430	-0.070	0.690	-2.440	2.440	-0.030	0.750
20-40mm	55.72	128.7	3397	838.0	554.2	128.7	3416	828.2	551.6	-2.440	2.440	-0.070	0.510	-2.440	2.440	-0.050	0.600
40-60mm	42.06	128.7	3417	699.0	493.3	128.7	3273	695.0	493.2	-2.440	2.440	-0.050	0.380	-2.440	2.440	-0.050	0.450
60-80mm	21.11	128.7	2817	594.5	388.1	128.7	2799	590.9	389.3	-2.440	2.360	-0.060	0.340	-2.320	2.360	-0.010	0.420
80-100mm	6.49	128.7	1623	484.5	242.3	128.7	1650	475.4	240.7	-2.120	1.330	-0.070	0.160	-2.200	1.710	0.020	0.280
All	154.8	128.7	3417	778.7	552.2	128.7	3416	769.6	547.8	-2.440	2.440	-0.060	0.490	-2.440	2.440	-0.040	0.560

Table A. 330: Matched Droplet Info

A.4.3.2 All Droplets for .LA Image

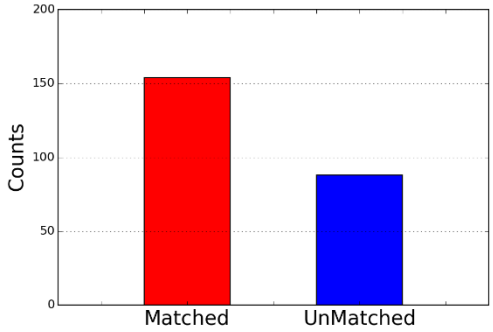


Figure A. 3121: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

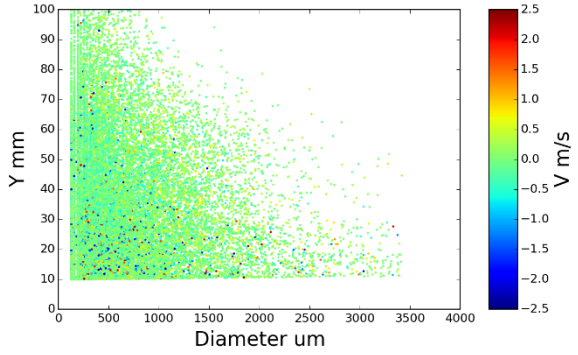


Figure A. 3124: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

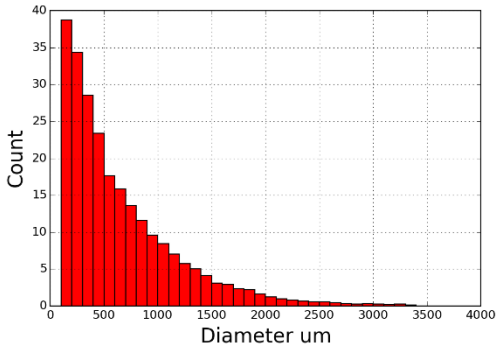


Figure A. 3122: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

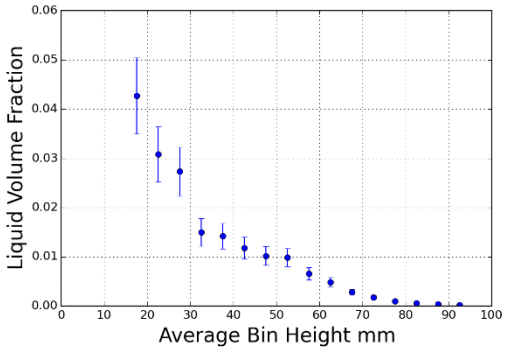


Figure A. 3125: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

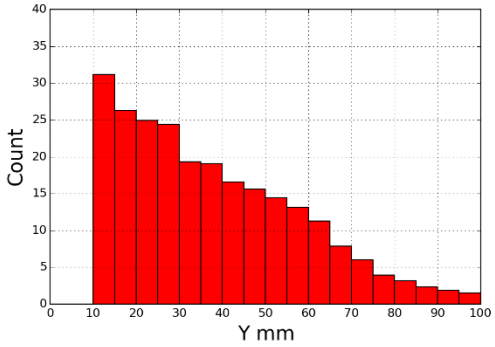


Figure A. 3123: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 All Droplets for .LB Image

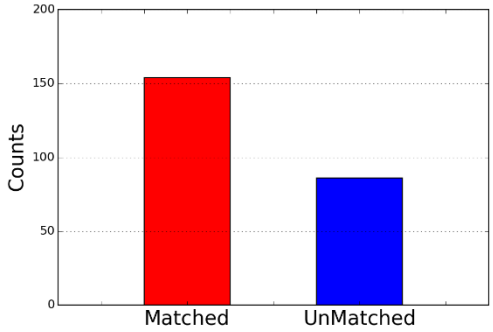


Figure A. 3126: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

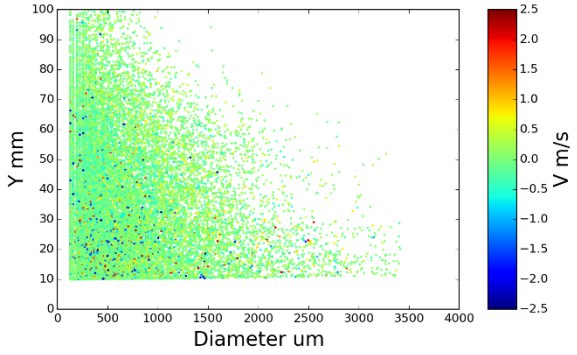


Figure A. 3129: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

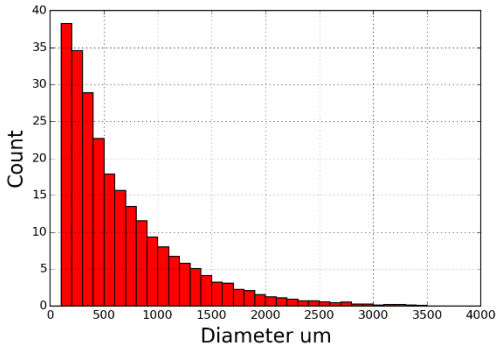


Figure A. 3127: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

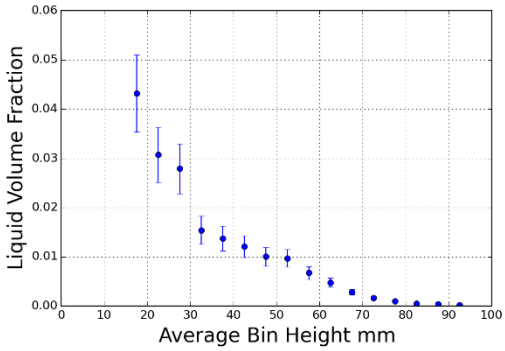


Figure A. 3130: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

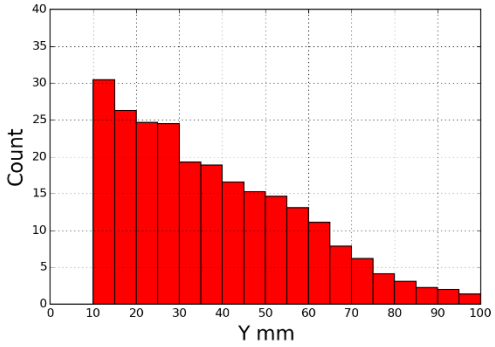


Figure A. 3128: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 Matched Only Droplets for .LA Image

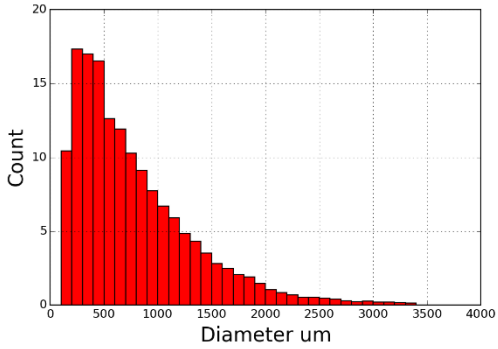


Figure A. 3131: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

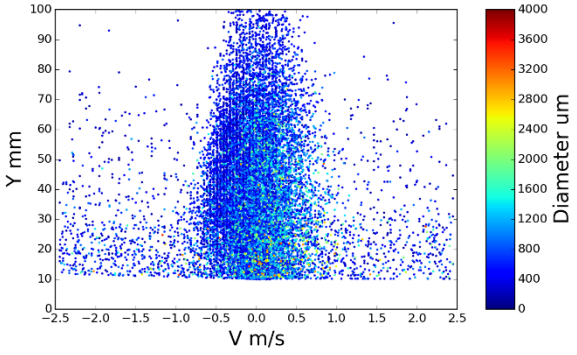


Figure A. 3134: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

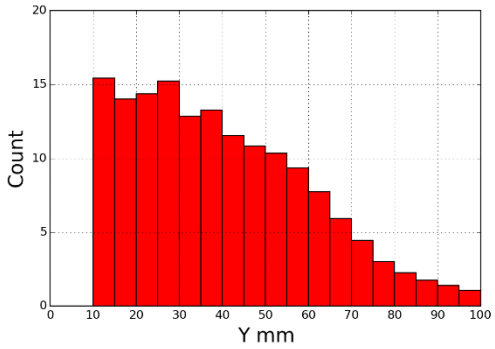


Figure A. 3132: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

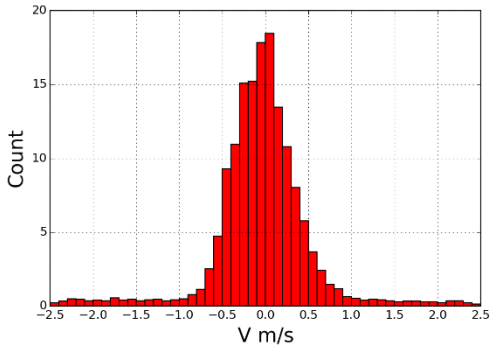


Figure A. 3135: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

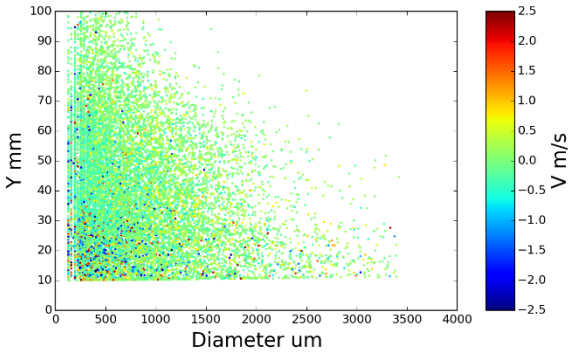


Figure A. 3133: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 Matched Only Droplets for .LB Image

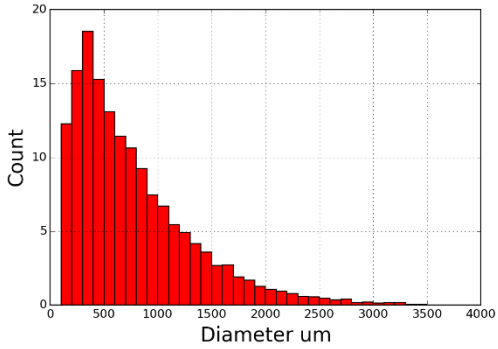


Figure A. 3136: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

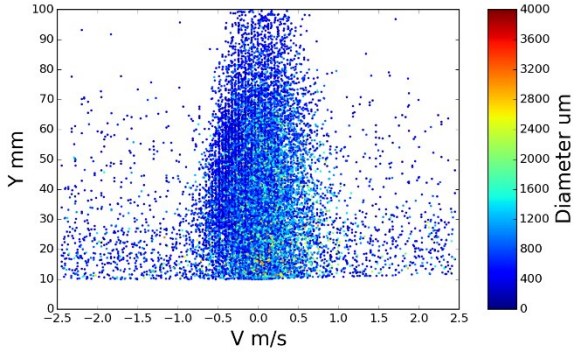


Figure A. 3139: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

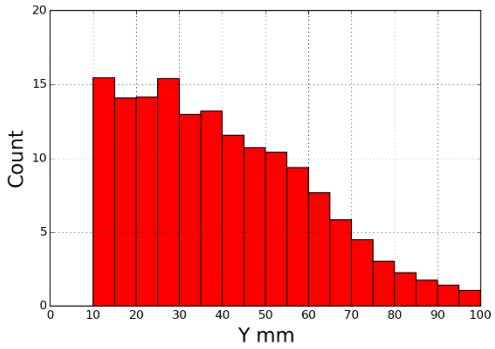


Figure A. 3137: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

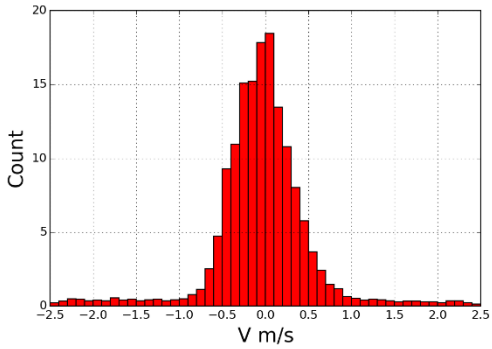


Figure A. 3140: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

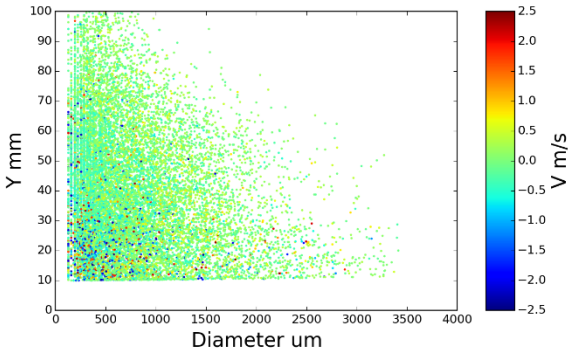


Figure A. 3138: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	54.39	54.92	128.7	3414	828.2	657.1	128.7	3412	827.1	676.0
20-40mm	101.53	102.74	128.7	3398	741.2	583.3	128.7	3414	736.0	582.9
40-60mm	74.29	74.93	128.7	3340	577.9	501.2	128.7	3308	572.9	493.8
60-80mm	28.22	27.51	128.7	3195	474.3	394.5	128.7	2919	461.7	382.9
80-100mm	4.74	4.35	128.7	2803	416.7	292.0	128.7	2777	417.6	287.3
All	263.22	264.49	128.7	3414	678.6	569.5	128.7	3414	674.9	572.4
			Height A (mm)				Height B (mm)			
Highest Particle			99.7850				99.7565			
Lowest Particle			10.0355				10.0355			

Table A. 331: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	26.51	128.7	3414	1053	698.9	128.7	3384	1035	696.2	-2.440	2.440	-0.050	0.740	-2.440	2.440	-0.010	0.790
20-40mm	62.39	128.7	3398	883.8	609.3	128.7	3414	873.5	605.7	-2.440	2.440	-0.050	0.590	-2.440	2.440	-0.030	0.650
40-60mm	48.85	128.7	3340	697.2	540.5	128.7	3195	685.1	530.5	-2.440	2.440	-0.050	0.460	-2.440	2.440	-0.050	0.540
60-80mm	16.3	128.7	2714	593.1	416.1	128.7	2733	581.9	411.3	-2.440	2.440	-0.040	0.490	-2.440	2.440	-0.070	0.530
80-100mm	2.89	128.7	2803	515.0	319.3	128.7	2777	506.4	306.9	-2.280	2.440	-0.150	0.520	-2.430	2.410	-0.070	0.590
All	156.94	128.7	3414	817.2	602.8	128.7	3414	805.6	597.5	-2.440	2.440	-0.050	0.570	-2.440	2.440	-0.040	0.630

Table A. 332: Matched Droplet Info

A.4.3.2 All Droplets for .LA Image

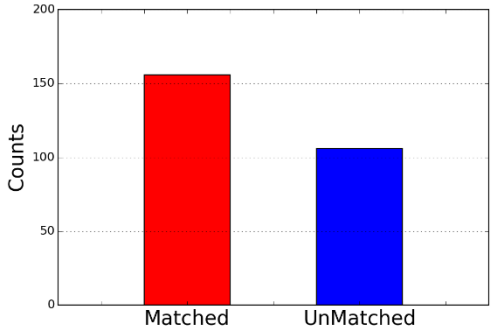


Figure A. 3141: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

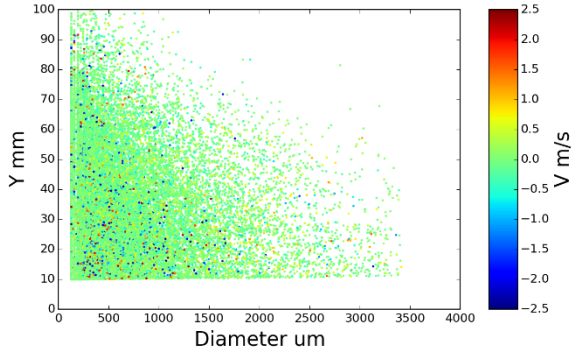


Figure A. 3144: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

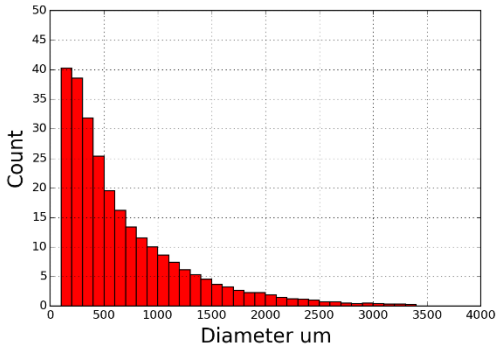


Figure A. 3142: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

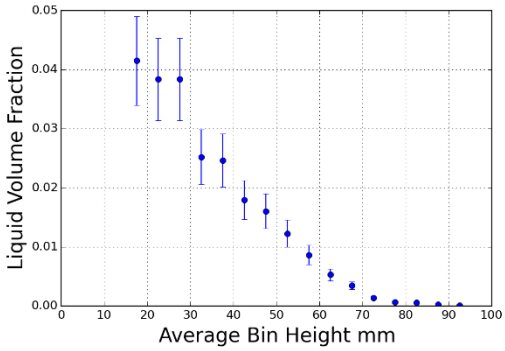


Figure A. 3145: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

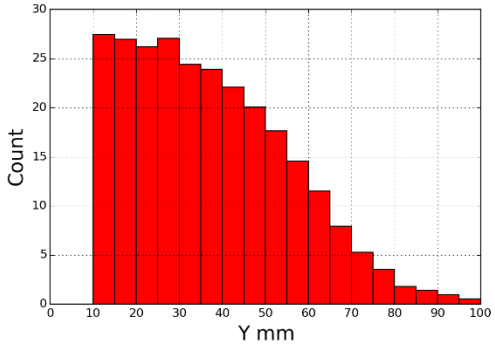


Figure A. 3143: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 All Droplets for .LB Image

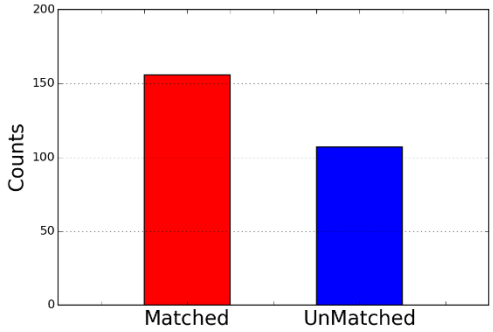


Figure A. 3146: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

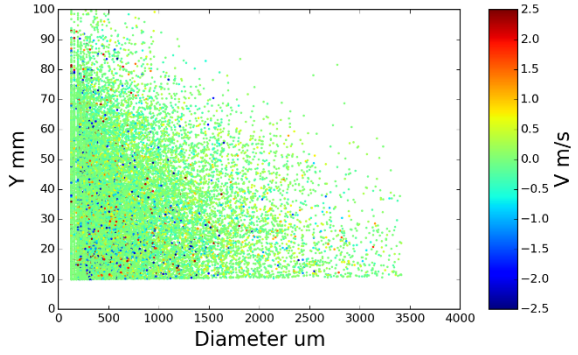


Figure A. 3149: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

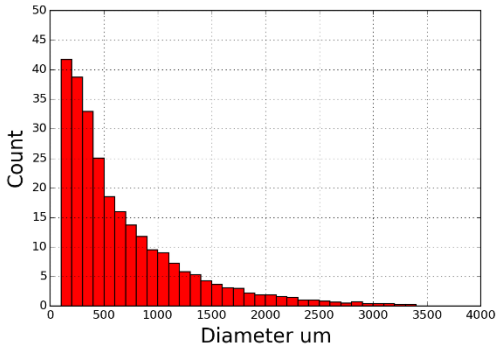


Figure A. 3147: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

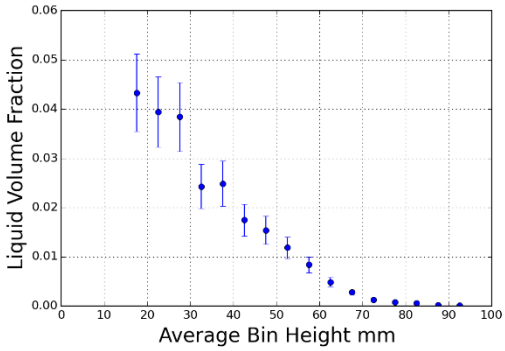


Figure A. 3150: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

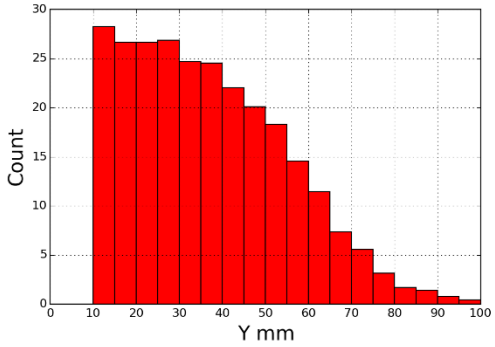


Figure A. 3148: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 Matched Only Droplets for .LA Image

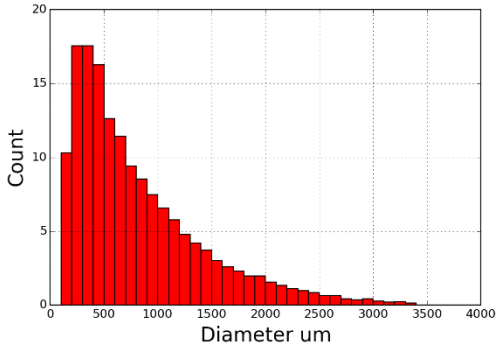


Figure A. 3151: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

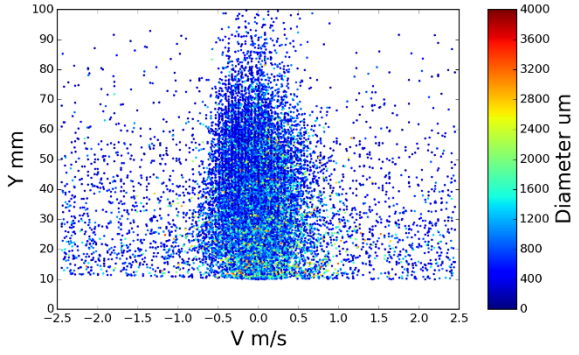


Figure A. 3154: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

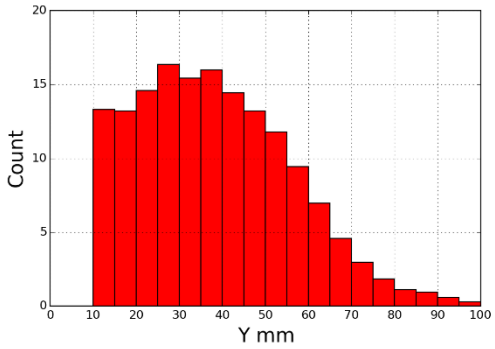


Figure A. 3152: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

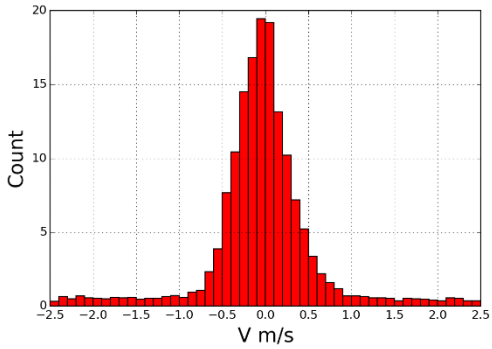


Figure A. 3155: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

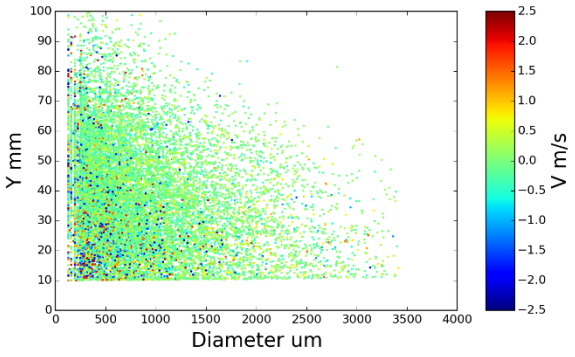


Figure A. 3153: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 Matched Only Droplets for .LB Image

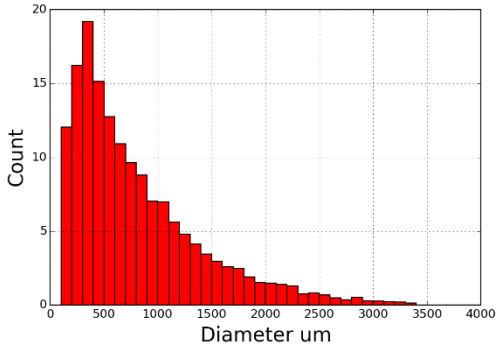


Figure A. 3156: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

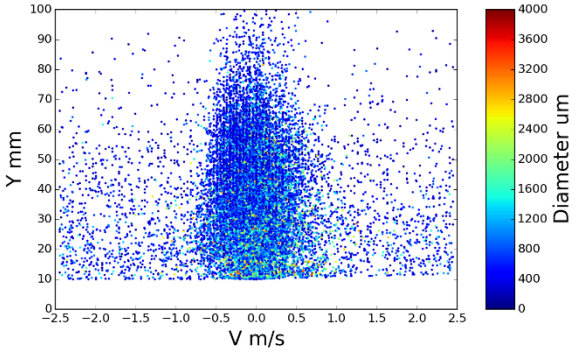


Figure A. 3159: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

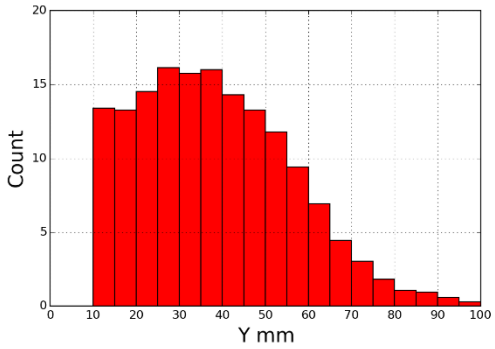


Figure A. 3157: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

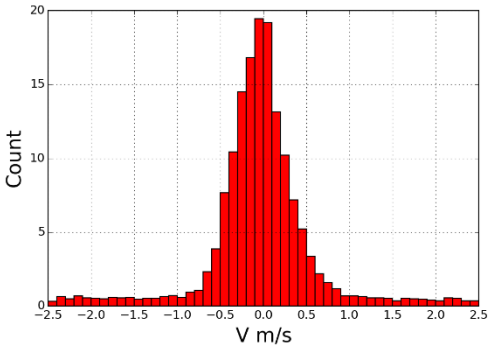


Figure A. 3160: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

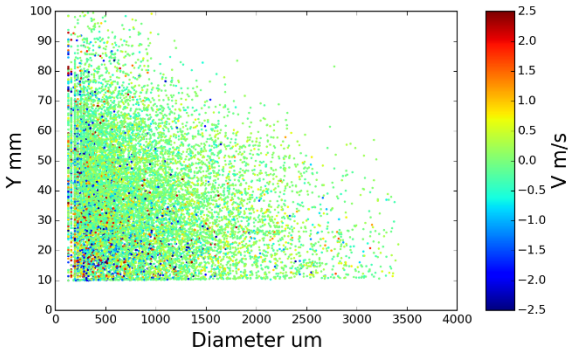


Figure A. 3158: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	46.86	47.58	128.7	3401	842.5	666.6	128.7	3420	840.8	662.0
20-40mm	95.22	95.43	128.7	3416	711.6	565.4	128.7	3405	719.0	573.1
40-60mm	70.2	70.37	128.7	3391	536.3	462.8	128.7	3384	532.4	456.2
60-80mm	19.02	18.75	128.7	3313	453.6	389.8	128.7	2663	445.2	374.1
80-100mm	1.88	1.95	128.7	2217	418.6	278.4	128.7	2109	381.9	257.6
All	233.18	234.08	128.7	3416	661.7	560.1	128.7	3420	662.9	560.9
			Height A (mm)				Height B (mm)			
Highest Particle			99.9276				99.9276			
Lowest Particle			10.0355				10.0355			

Table A. 333: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	22.86	128.7	3386	1094	706.4	128.7	3403	1076	703.8	-2.430	2.440	-0.060	0.750	-2.440	2.440	0.060	0.800
20-40mm	57.74	128.7	3414	845.5	589.8	128.7	3400	838.5	591.3	-2.440	2.430	-0.060	0.560	-2.440	2.440	0.010	0.630
40-60mm	45.39	128.7	3391	638.1	493.1	128.7	3233	633.1	490.8	-2.440	2.440	-0.040	0.460	-2.440	2.440	-0.000	0.520
60-80mm	11.66	128.7	3078	557.5	421.2	128.7	2663	547.0	413.6	-2.310	2.440	-0.030	0.390	-2.440	2.440	-0.050	0.440
80-100mm	1.13	128.7	2217	515.7	290.6	128.7	2109	488.4	273.2	-0.580	0.210	-0.040	0.120	-0.510	0.570	-0.020	0.240
All	138.78	128.7	3414	791.7	592.7	128.7	3403	783.3	590.9	-2.440	2.440	-0.050	0.550	-2.440	2.440	0.010	0.610

Table A. 334: Matched Droplet Info

A.4.3.2 All Droplets for .LA Image

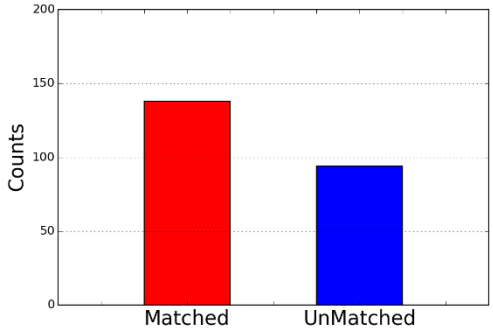


Figure A. 3161: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

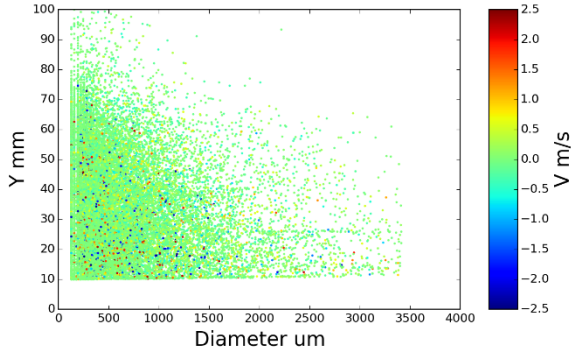


Figure A. 3164: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

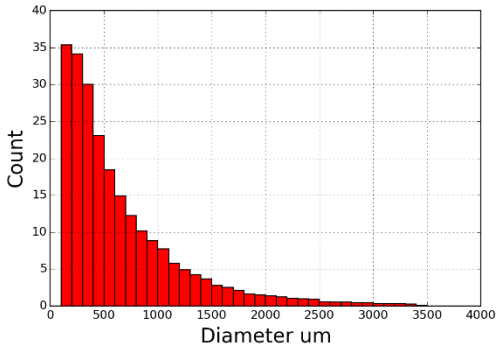


Figure A. 3162: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

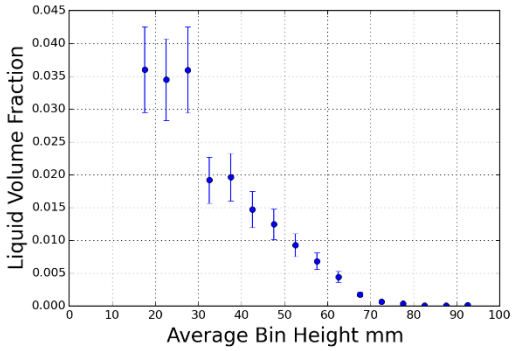


Figure A. 3165: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

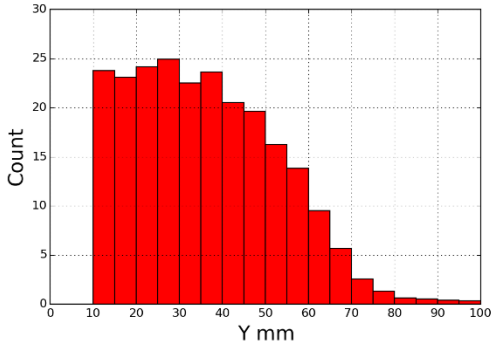


Figure A. 3163: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 All Droplets for .LB Image

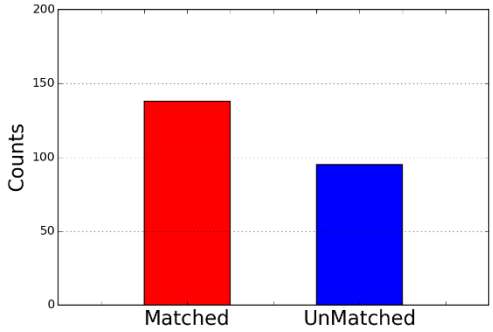


Figure A. 3166: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

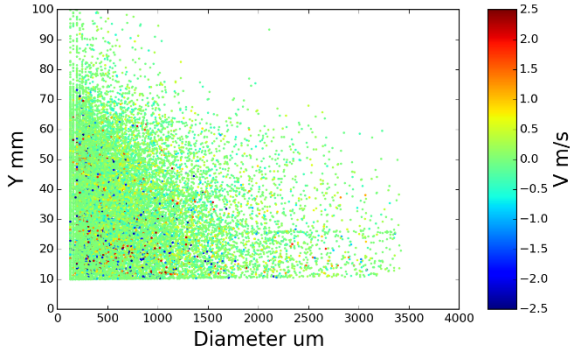


Figure A. 3169: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

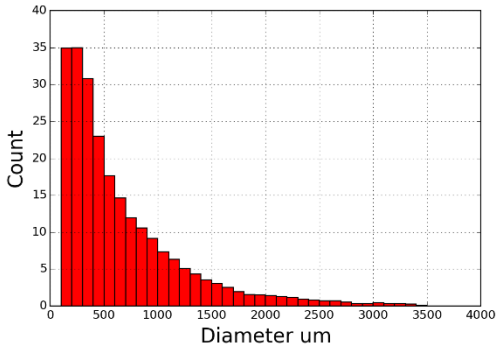


Figure A. 3167: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

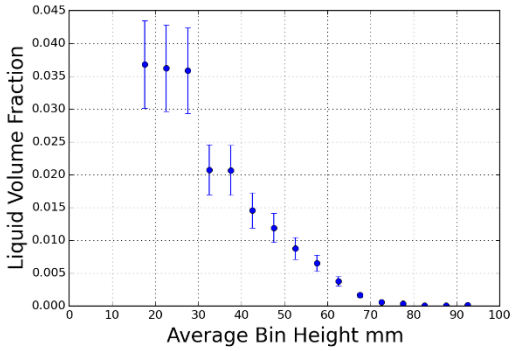


Figure A. 3170: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

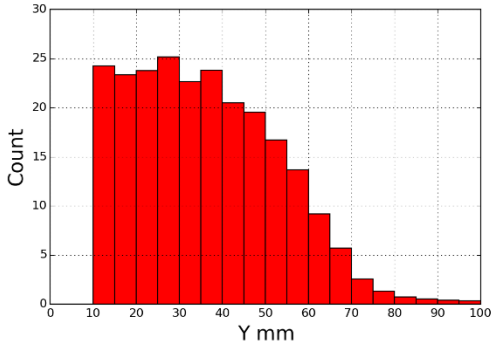


Figure A. 3168: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 Matched Only Droplets for .LA Image

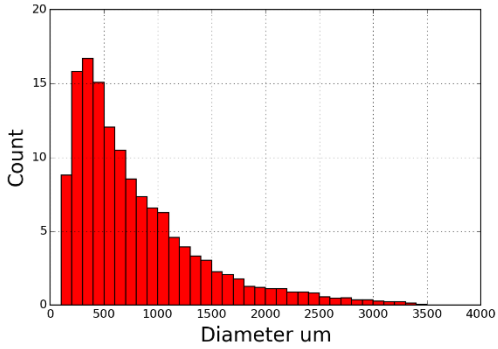


Figure A. 3171: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

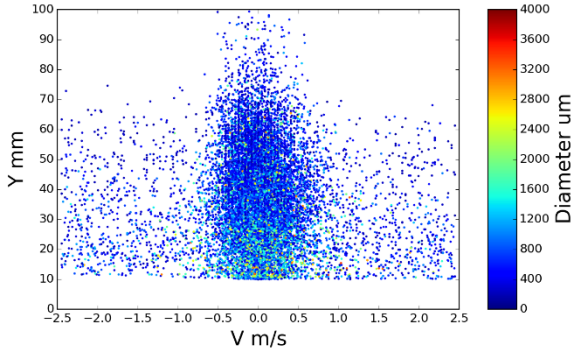


Figure A. 3174: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

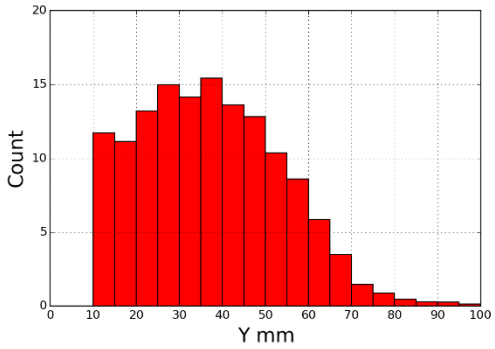


Figure A. 3172: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

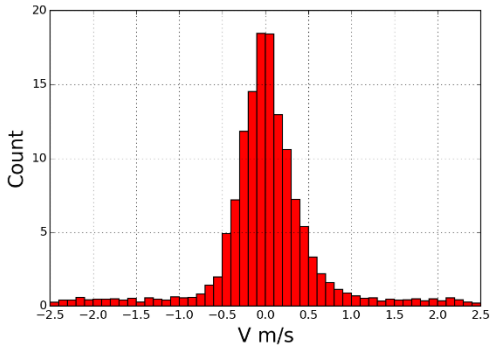


Figure A. 3175: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

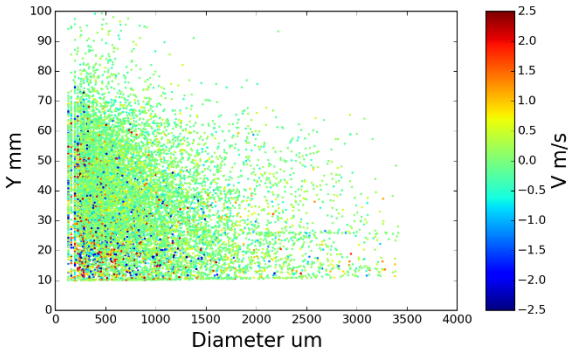


Figure A. 3173: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 Matched Only Droplets for .LB Image

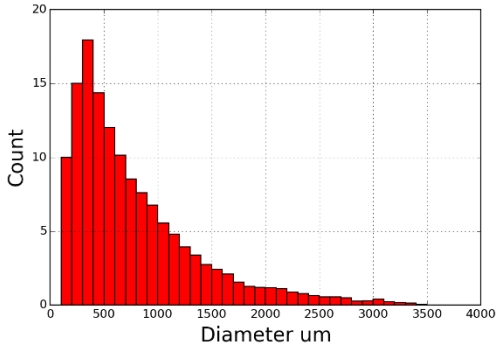


Figure A. 3176: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

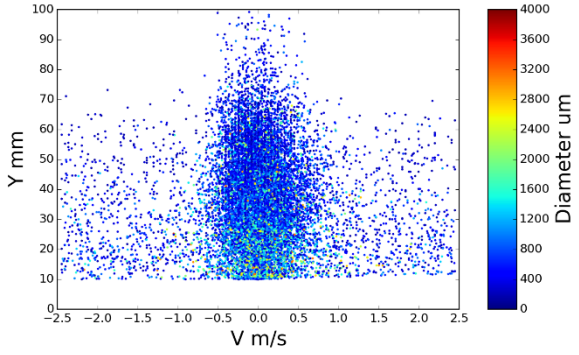


Figure A. 3179: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

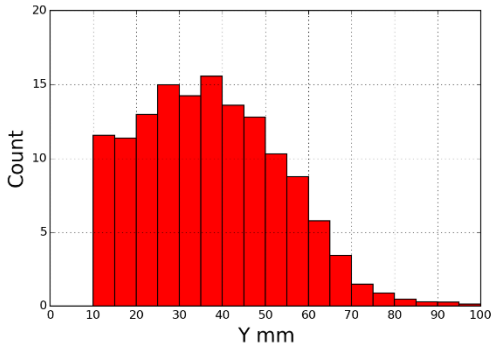


Figure A. 3177: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

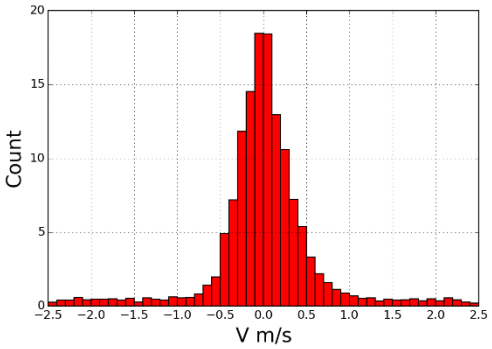


Figure A. 3180: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

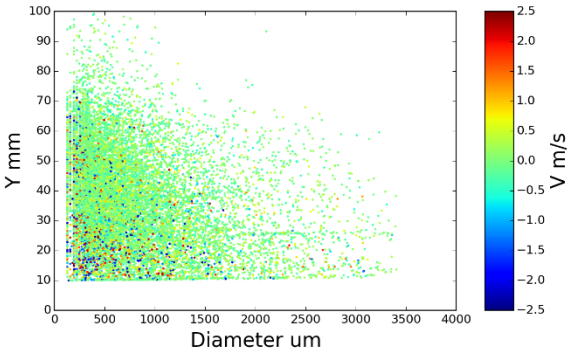


Figure A. 3178: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	37.95	36.75	128.7	3413	837.5	646.5	128.7	3416	851.6	637.2
20-40mm	79.14	79.34	128.7	3389	697.3	542.1	128.7	3414	700.2	542.5
40-60mm	62.26	61.48	128.7	3420	506.3	433.1	128.7	3396	497.2	417.7
60-80mm	27.29	22.38	128.7	3212	415.9	375.4	128.7	3380	437.0	407.0
80-100mm	8.6	5.55	128.7	2244	314.4	258.0	128.7	2330	320.6	254.2
All	215.43	205.9	128.7	3420	615.8	529.0	128.7	3416	627.6	530.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.9276				99.9341			
Lowest Particle			10.0355				10.0355			

Table A. 335: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	17.57	128.7	3398	1099	687.9	128.7	3416	1079	676.5	-2.440	2.440	-0.070	0.710	-2.430	2.410	0.040	0.740
20-40mm	43.43	128.7	3389	848.2	564.4	128.7	3337	832.7	557.4	-2.440	2.440	-0.060	0.590	-2.440	2.440	0.040	0.660
40-60mm	33.21	128.7	3420	591.4	427.8	128.7	3302	583.3	418.7	-2.420	2.440	-0.040	0.550	-2.440	2.440	0.030	0.590
60-80mm	9.46	128.7	3212	515.5	384.7	128.7	3236	508.1	383.9	-2.420	2.440	-0.040	0.660	-2.410	2.410	0.000	0.670
80-100mm	1.59	128.7	1949	413.1	287.1	128.7	2317	402.4	290.8	-2.440	2.420	-0.210	0.960	-2.270	2.440	-0.010	0.910
All	105.26	128.7	3420	772.6	566.6	128.7	3416	759.1	557.5	-2.440	2.440	-0.050	0.610	-2.440	2.440	0.030	0.660

Table A. 336: Matched Droplet Info

A.4.3.2 All Droplets for .LA Image

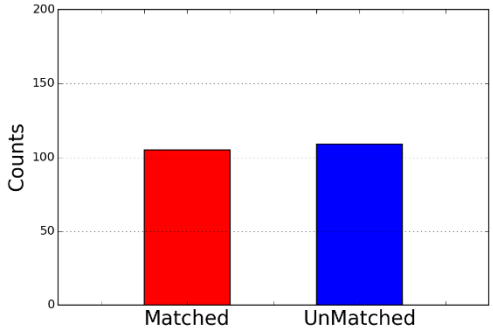


Figure A. 3181: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

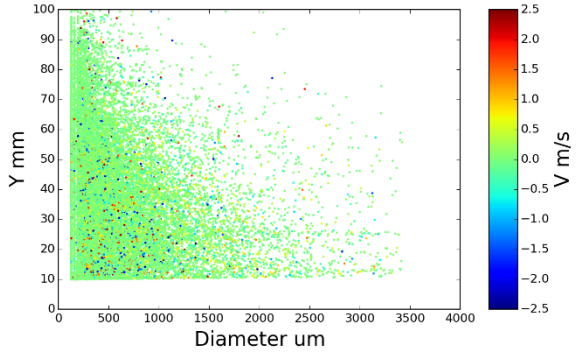


Figure A. 3184: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

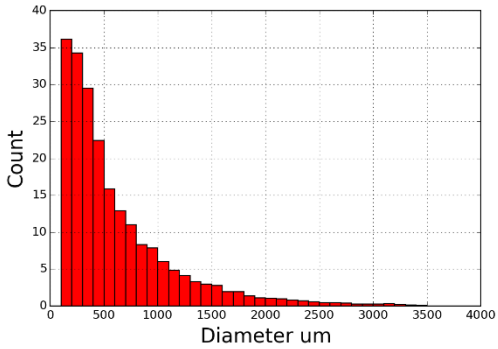


Figure A. 3182: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

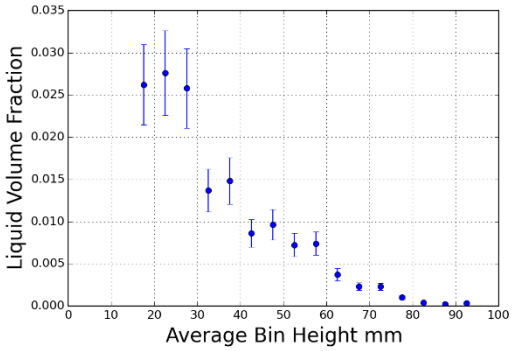


Figure A. 3185: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

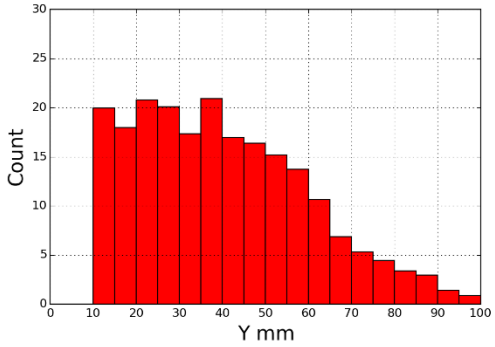


Figure A. 3183: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 All Droplets for .LB Image

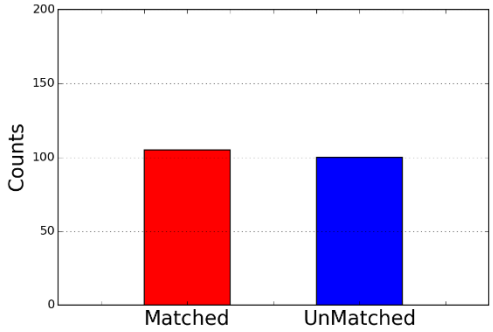


Figure A. 3186: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

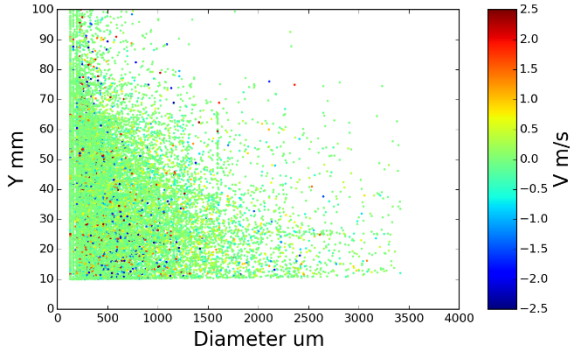


Figure A. 3189: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

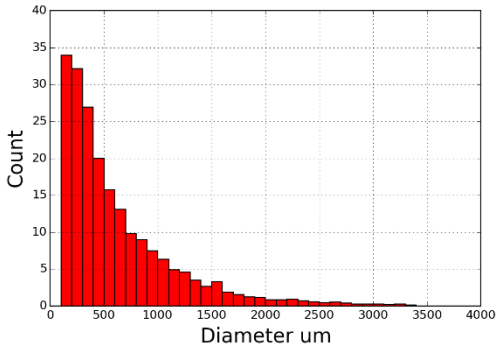


Figure A. 3187: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

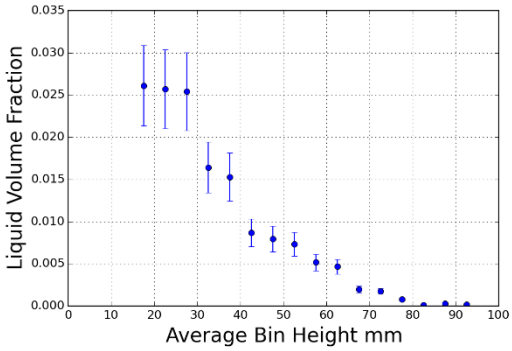


Figure A. 3190: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

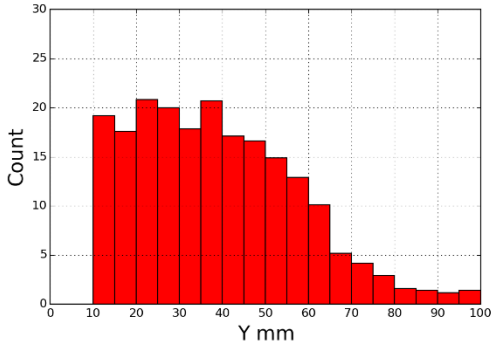


Figure A. 3188: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 Matched Only Droplets for .LA Image

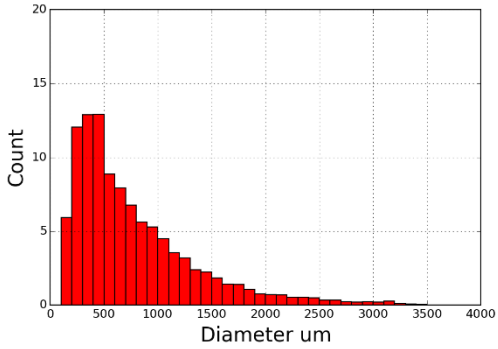


Figure A. 3191: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

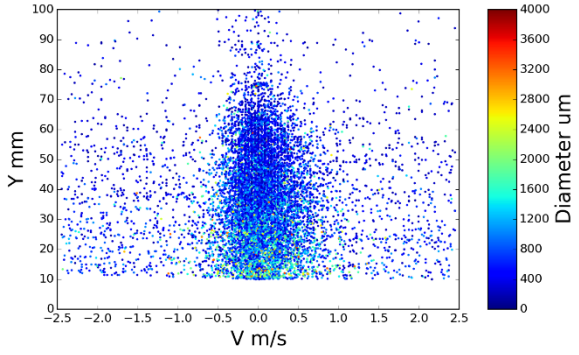


Figure A. 3194: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

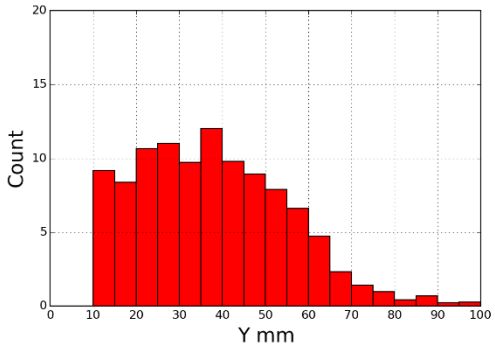


Figure A. 3192: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

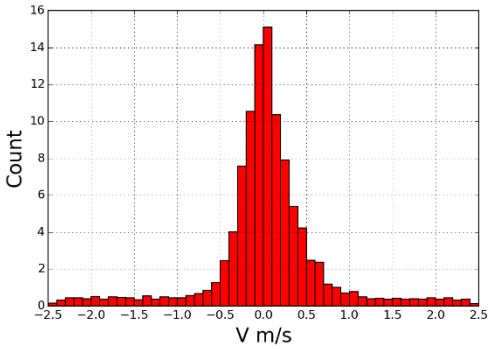


Figure A. 3195: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

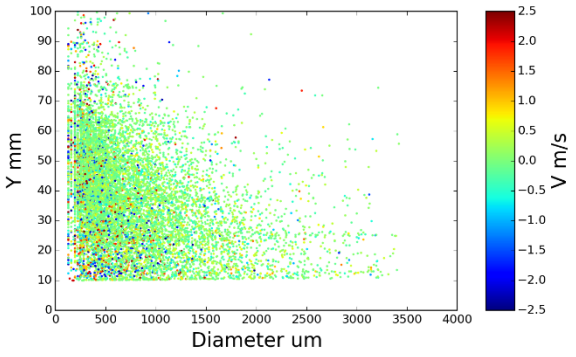


Figure A. 3193: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.3.2 Matched Only Droplets for .LB Image

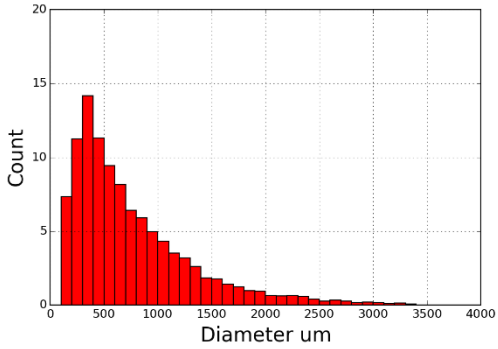


Figure A. 3196: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

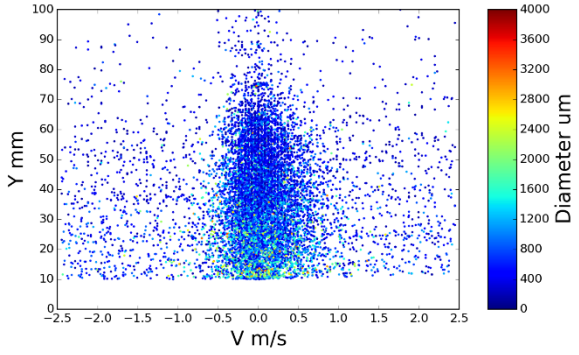


Figure A. 3199: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

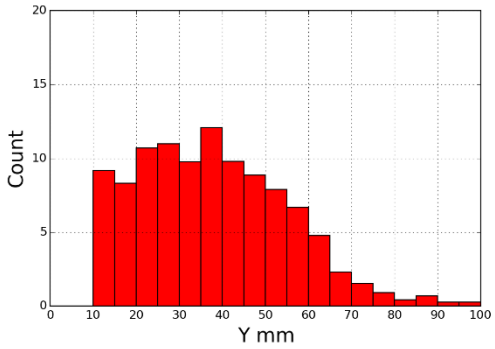


Figure A. 3197: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

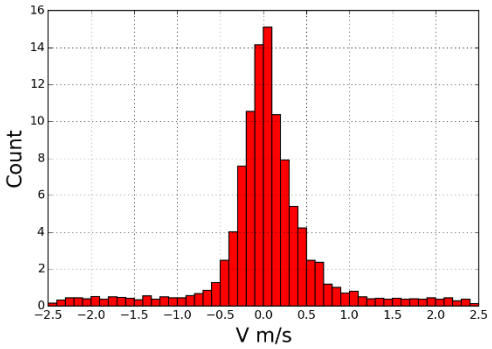


Figure A. 3200: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

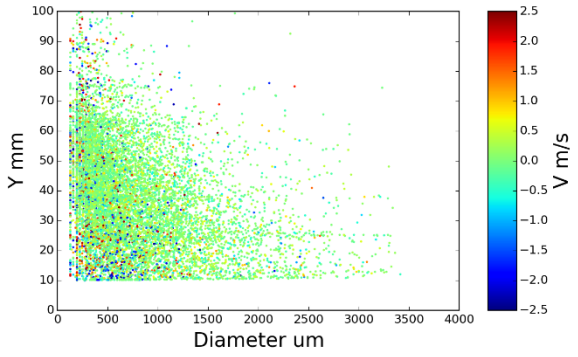


Figure A. 3198: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4 Liquid Level 4

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	13854 / 1.746
Ref Mass Flow (lb/hr) / (kg/s)	3214 / 0.405
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	29856 / 40.492
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	9740 / 30.73
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	40.0 / 4.44
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.2 / 4.55
Total Bundle Q (Btu/hr) / (kW)	288660 / 84.60
Total Bundle & Preboiler Q (Btu/hr) / (kW)	288660 / 84.60
Top Two Rows HTC Ratio	0.952
Bundle Inlet Quality	-0.07
Bundle Exit Quality	1.00

Table A. 337: Thermal Conditions

A.4.4.1 Lens 100mm Mag 0_29x

A.4.4.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	44.73	46.78	57.2	2988	407.6	405.3	57.2	2736	397.8	402.7
40-60mm	64.58	67.47	57.2	2796	377.9	368.9	57.2	2808	367.3	365.9
60-80mm	38.53	38.61	57.2	3034	318.6	288.5	57.2	3044	317.1	289.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	147.84	152.86	57.2	3034	371.4	363.3	57.2	3044	364.0	361.6
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 338: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	31.66	57.2	2808	500.2	429.8	57.2	2736	501.3	428.8	-2.540	2.480	-0.070	0.360	-2.520	2.540	0.010	0.480
40-60mm	50.88	57.2	2796	441.8	385.2	57.2	2808	440.7	386.1	-2.530	2.370	-0.070	0.270	-2.460	2.440	0.080	0.390
60-80mm	30.65	57.2	3034	368.1	300.1	57.2	3044	366.1	299.9	-2.450	1.960	-0.070	0.170	-2.280	2.280	0.140	0.330
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	113.19	57.2	3034	438.1	381.0	57.2	3044	437.4	381.2	-2.540	2.480	-0.070	0.280	-2.520	2.540	0.080	0.410

Table A. 339: Matched Droplet Info

A.4.4.1 All Droplets for .LA Image

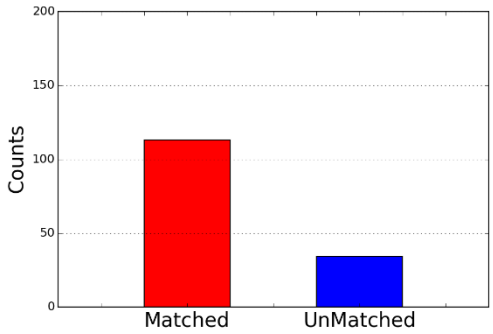


Figure A. 3201: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

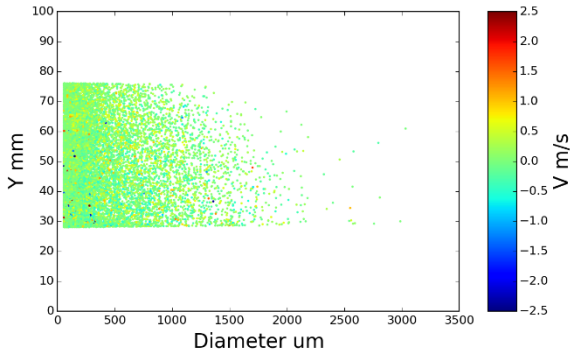


Figure A. 3204: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

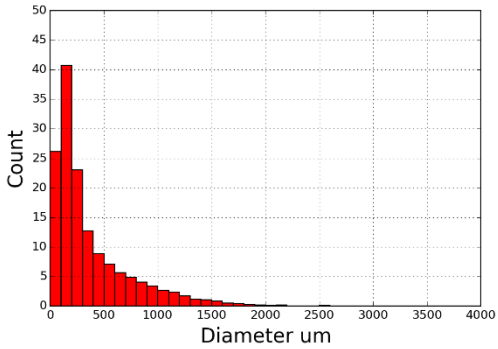


Figure A. 3202: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

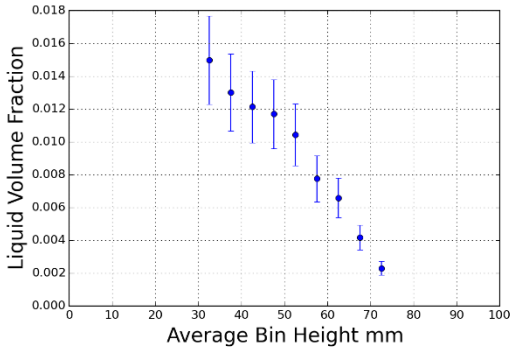


Figure A. 3205: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

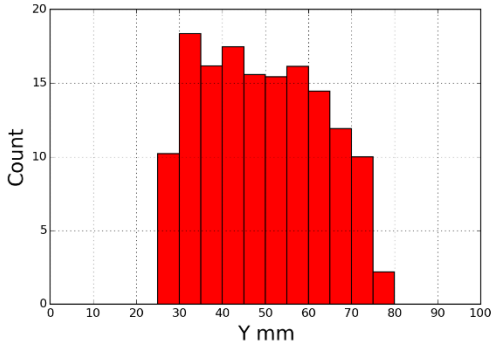


Figure A. 3203: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 All Droplets for .LB Image

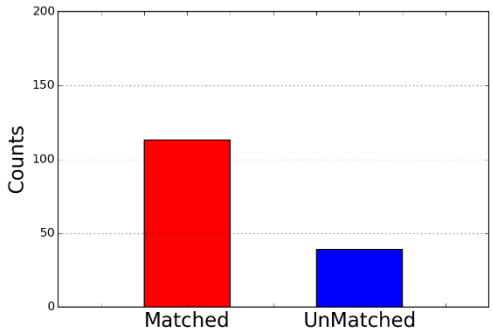


Figure A. 3206: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

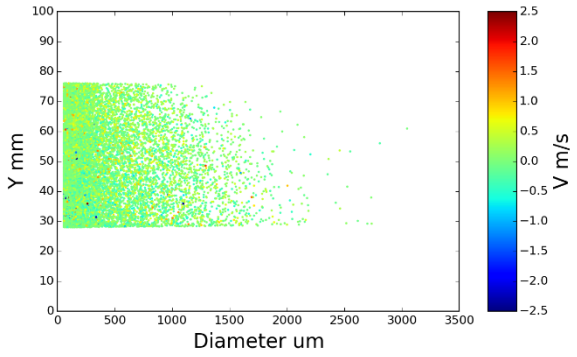


Figure A. 3209: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

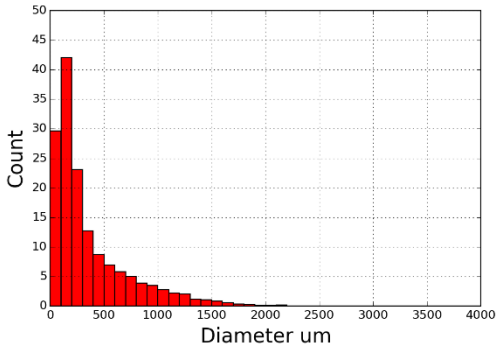


Figure A. 3207: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

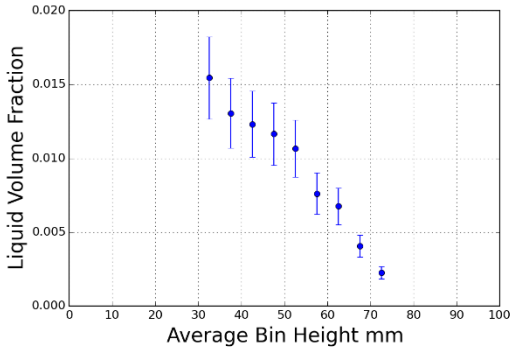


Figure A. 3210: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

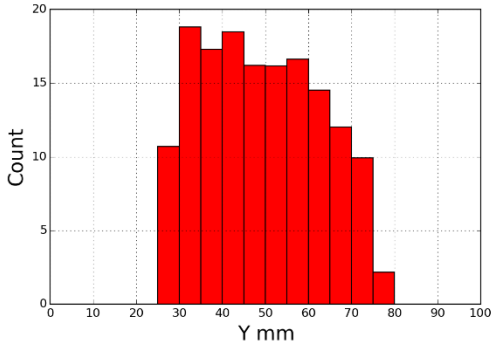


Figure A. 3208: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 Matched Only Droplets for .LA Image

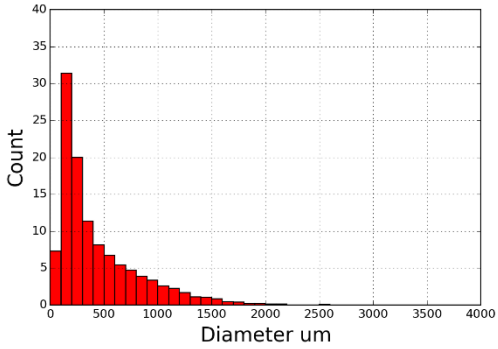


Figure A. 3211: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

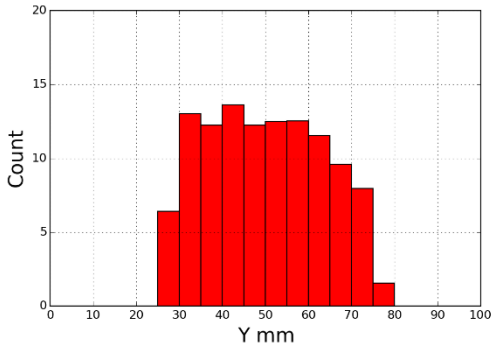


Figure A. 3212: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

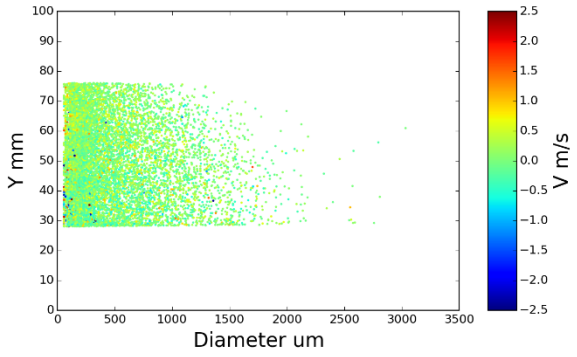


Figure A. 3213: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

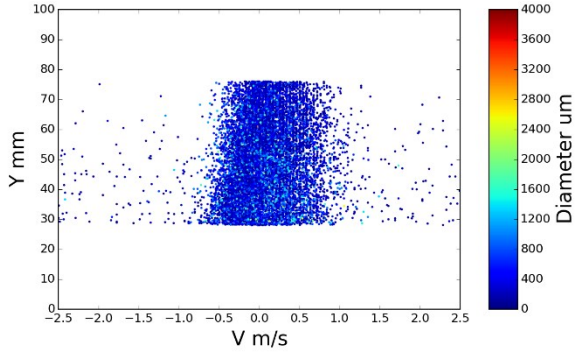


Figure A. 3214: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

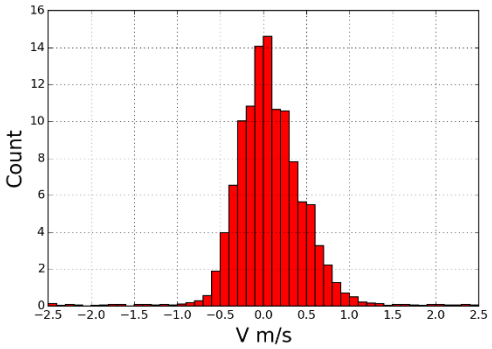


Figure A. 3215: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 Matched Only Droplets for .LB Image

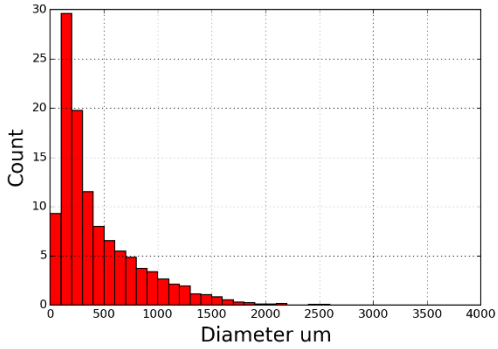


Figure A. 3216: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

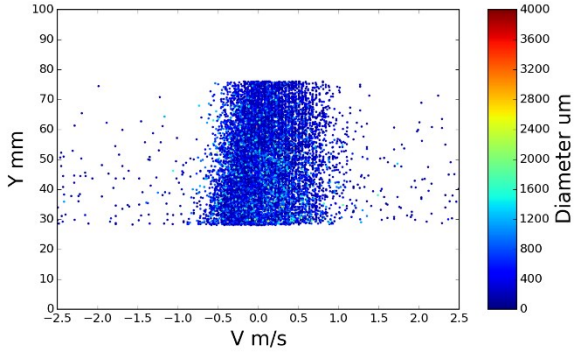


Figure A. 3219: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

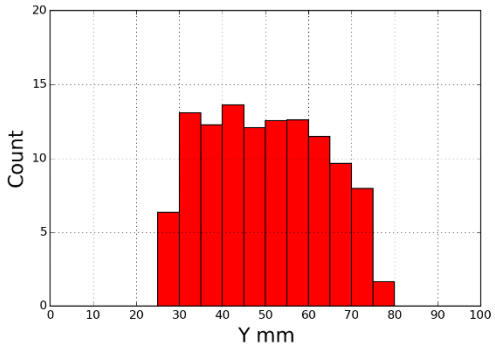


Figure A. 3217: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

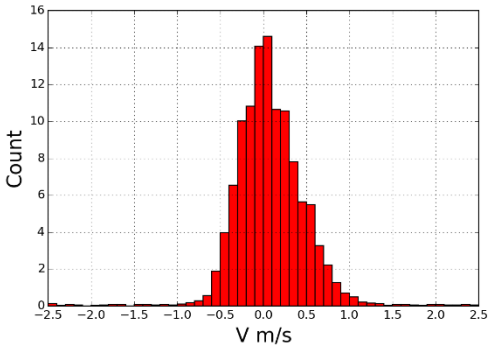


Figure A. 3220: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

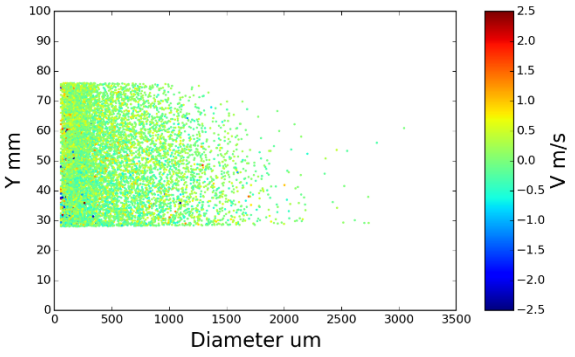


Figure A. 3218: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	64.69	68.53	57.2	2909	402.1	442.9	57.2	2937	388.5	438.5
40-60mm	93.06	98.15	57.2	2917	346.5	414.7	57.2	2956	332.2	405.6
60-80mm	50.57	51.53	57.2	3029	258.1	306.4	57.2	2711	255.1	302.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	208.34	218.25	57.2	3029	342.3	404.2	57.2	2956	331.7	398.0
			Height A (mm)				Height B (mm)			
Highest Particle			76.0484				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 340: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	42.98	57.2	2909	511.9	486.9	57.2	2937	507.4	487.4	-2.540	2.490	-0.050	0.400	-2.540	2.540	-0.130	0.470
40-60mm	67.82	57.2	2917	418.3	452.3	57.2	2956	414.8	450.3	-2.460	2.540	-0.060	0.290	-2.540	2.540	-0.130	0.360
60-80mm	35.62	57.2	2858	313.2	339.2	57.2	2711	310.4	339.3	-2.470	2.540	-0.090	0.250	-2.520	2.540	-0.110	0.320
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	146.42	57.2	2917	420.2	444.5	57.2	2956	416.8	443.8	-2.540	2.540	-0.060	0.320	-2.540	2.540	-0.130	0.390

Table A. 341: Matched Droplet Info

A.4.4.1 All Droplets for .LA Image

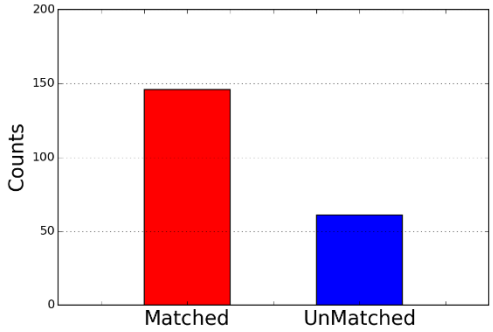


Figure A. 3221: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

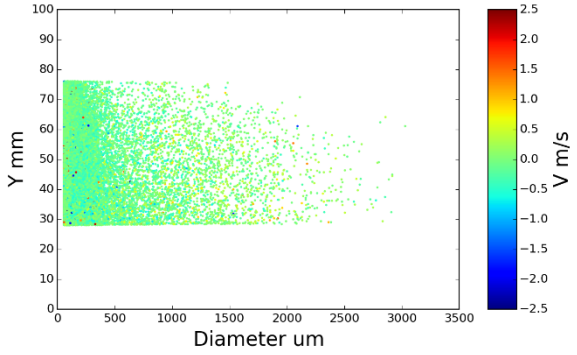


Figure A. 3224: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

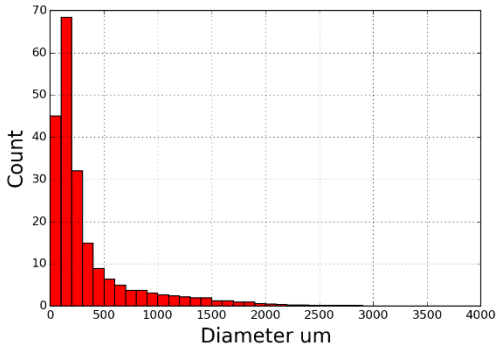


Figure A. 3222: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

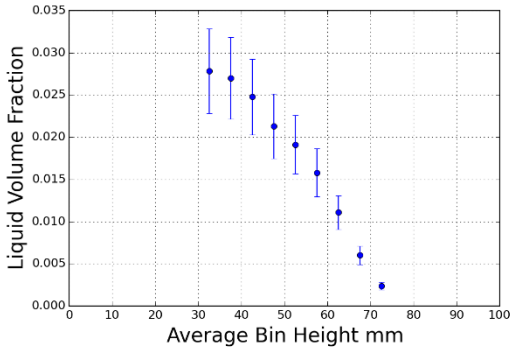


Figure A. 3225: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

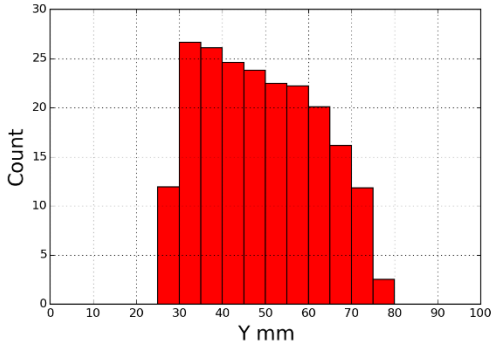


Figure A. 3223: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 All Droplets for .LB Image

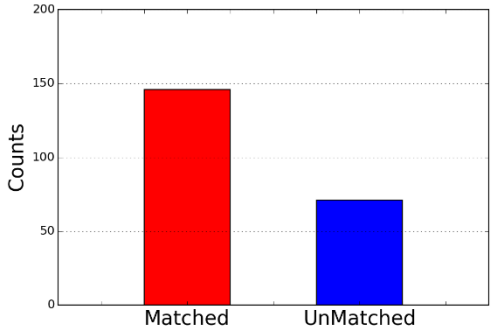


Figure A. 3226: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

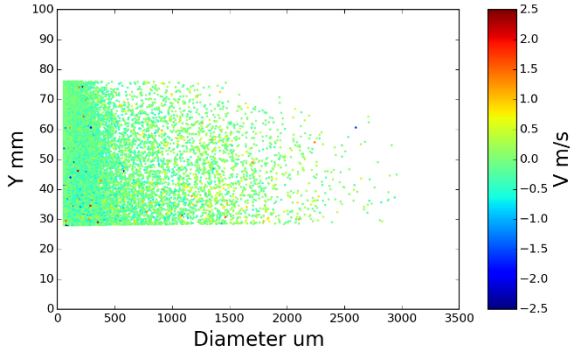


Figure A. 3229: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

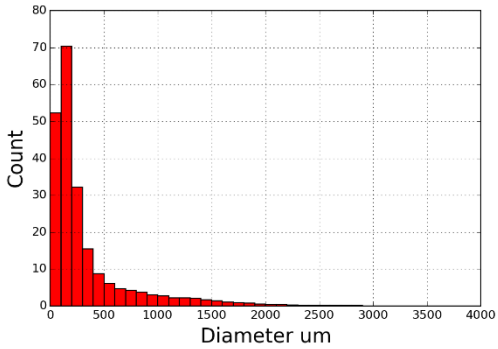


Figure A. 3227: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

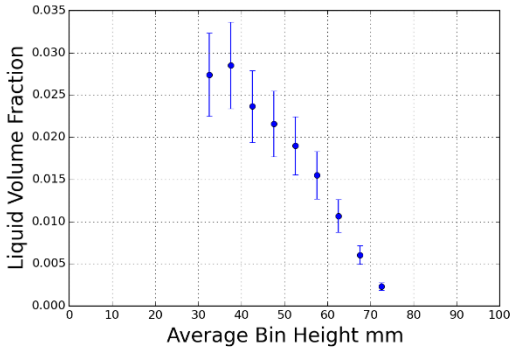


Figure A. 3230: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

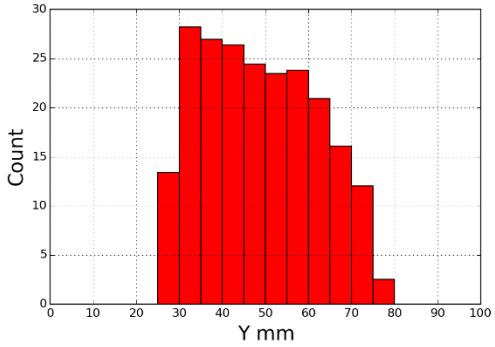


Figure A. 3228: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 Matched Only Droplets for .LA Image

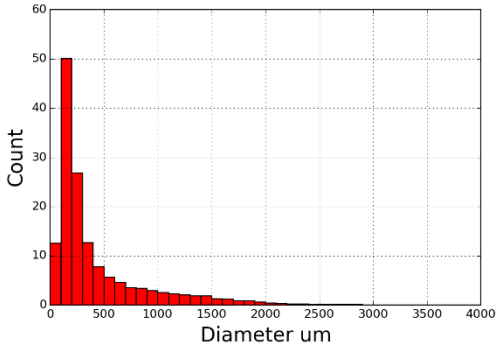


Figure A. 3231: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

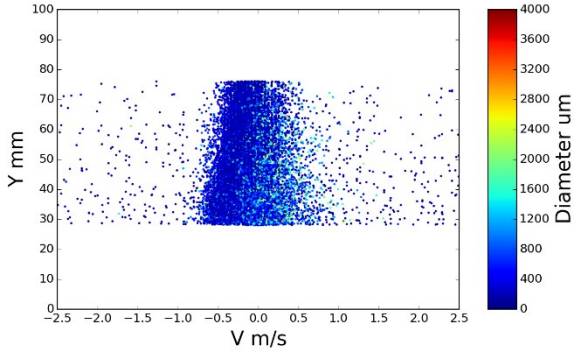


Figure A. 3234: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

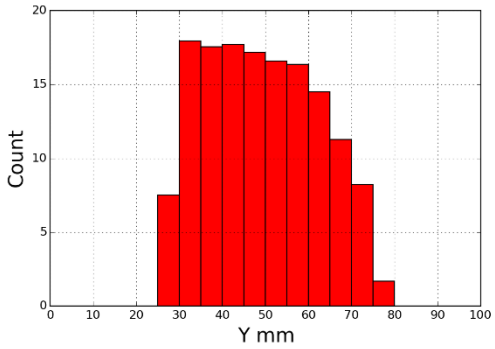


Figure A. 3232: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

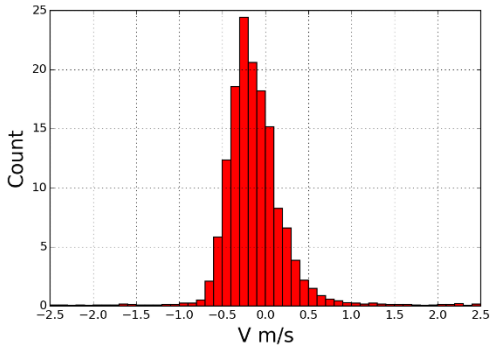


Figure A. 3235: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

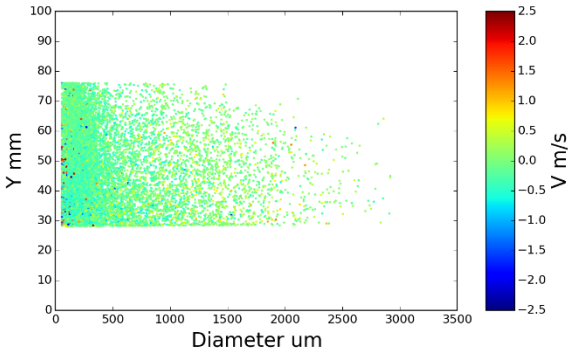


Figure A. 3233: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 Matched Only Droplets for .LB Image

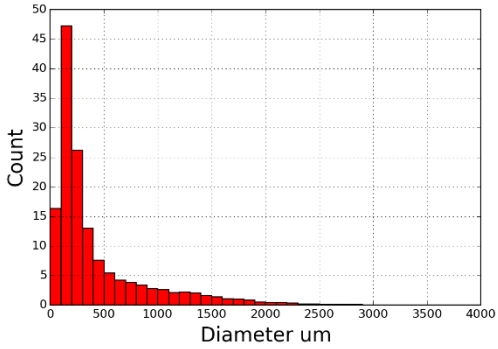


Figure A. 3236: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

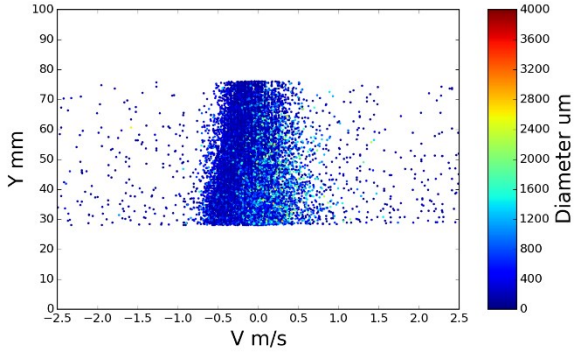


Figure A. 3239: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

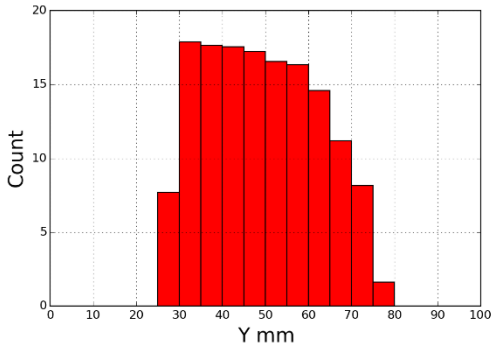


Figure A. 3237: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

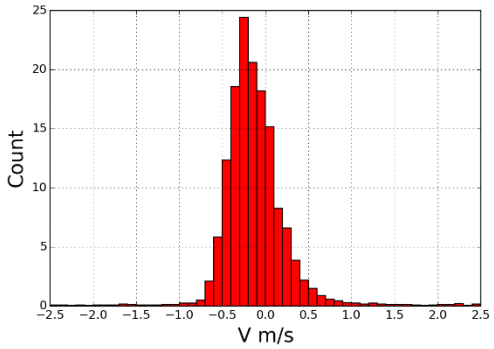


Figure A. 3240: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

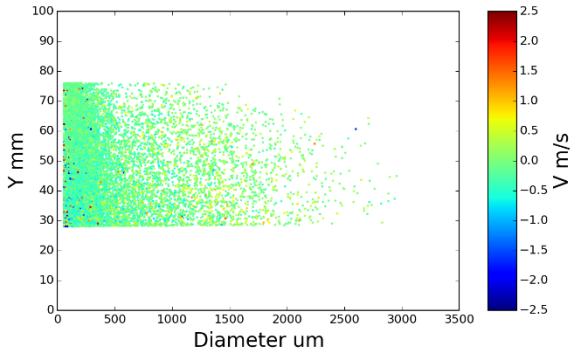


Figure A. 3238: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	57.01	59.79	57.2	2996	399.1	419.1	57.2	3016	387.6	419.0
40-60mm	81.01	85.08	57.2	3028	292.0	357.3	57.2	3041	284.4	354.9
60-80mm	38.82	41.11	57.2	3024	212.4	276.3	57.2	2677	205.8	269.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	176.84	186.0	57.2	3028	309.0	369.7	57.2	3041	300.2	366.9
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0478			
Lowest Particle			28.0846				28.0846			

Table A. 342: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	36.5	57.2	2996	511.4	454.3	57.2	3016	511.2	459.2	-2.500	2.540	-0.020	0.370	-2.540	2.520	-0.030	0.490
40-60mm	53.45	57.2	3028	364.2	398.7	57.2	2964	362.4	398.6	-2.540	2.540	-0.030	0.380	-2.540	2.500	-0.110	0.450
60-80mm	25.78	57.2	3024	255.8	316.2	57.2	2677	254.2	314.8	-2.540	2.450	-0.060	0.310	-2.540	2.490	-0.140	0.370
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	115.73	57.2	3028	386.5	412.0	57.2	3016	385.3	413.6	-2.540	2.540	-0.040	0.370	-2.540	2.520	-0.090	0.450

Table A. 343: Matched Droplet Info

A.4.4.1 All Droplets for .LA Image

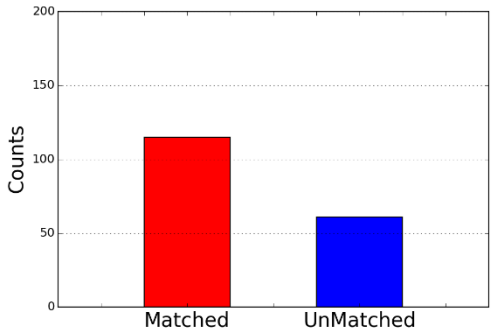


Figure A. 3241: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

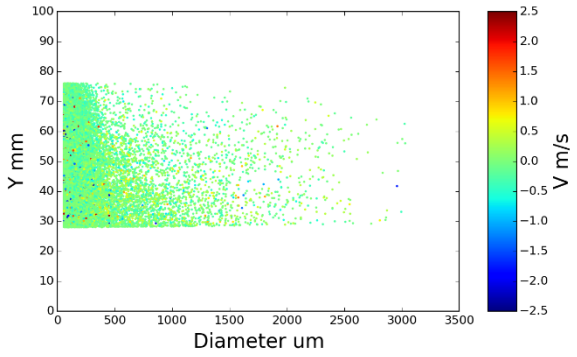


Figure A. 3244: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

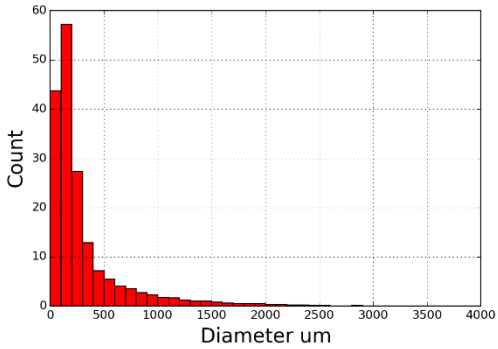


Figure A. 3242: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

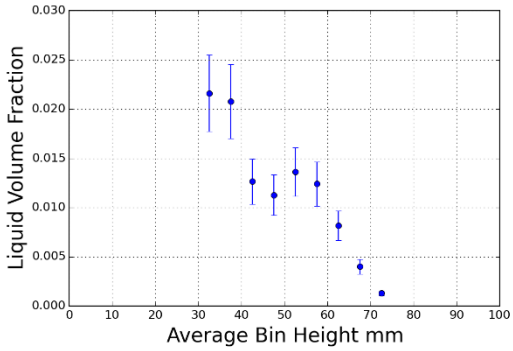


Figure A. 3245: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

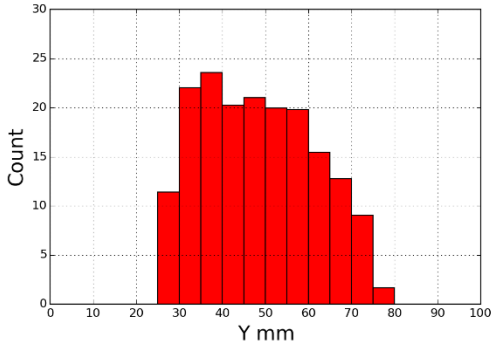


Figure A. 3243: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 All Droplets for .LB Image

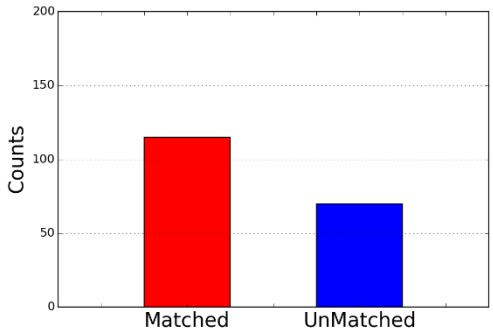


Figure A. 3246: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

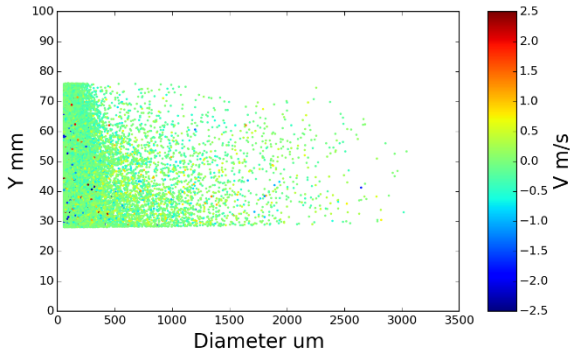


Figure A. 3249: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

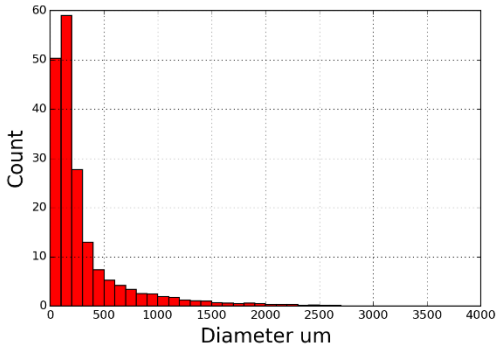


Figure A. 3247: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

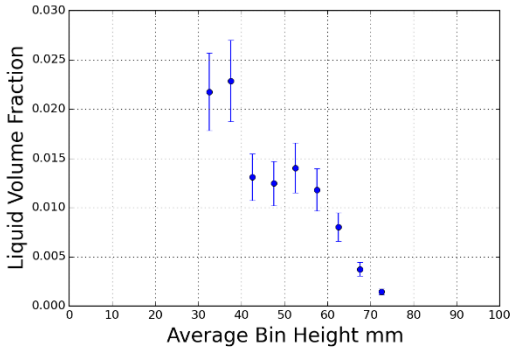


Figure A. 3250: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

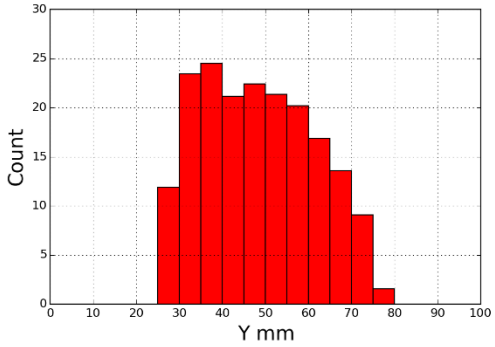


Figure A. 3248: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 Matched Only Droplets for .LA Image

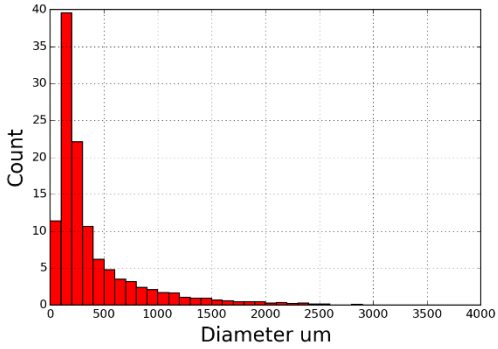


Figure A. 3251: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

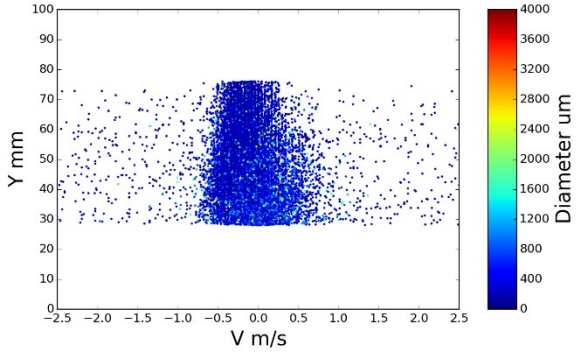


Figure A. 3254: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

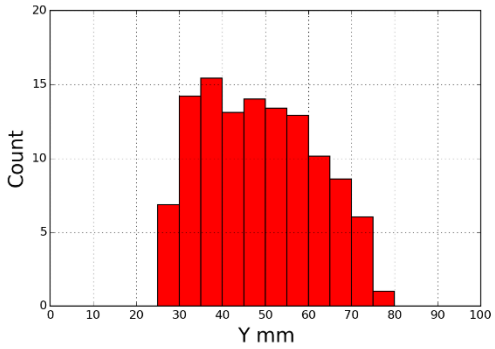


Figure A. 3252: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

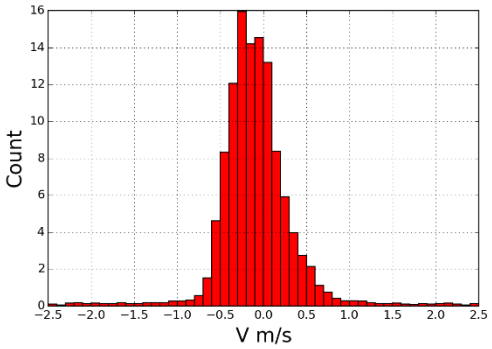


Figure A. 3255: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

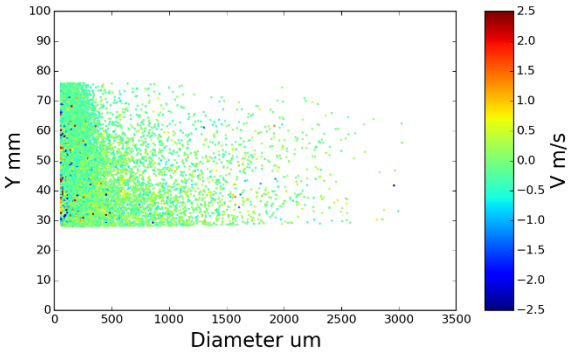


Figure A. 3253: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 Matched Only Droplets for .LB Image

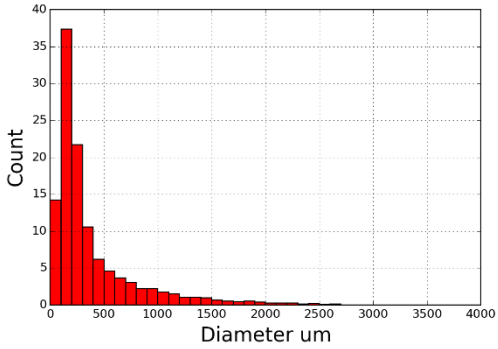


Figure A. 3256: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

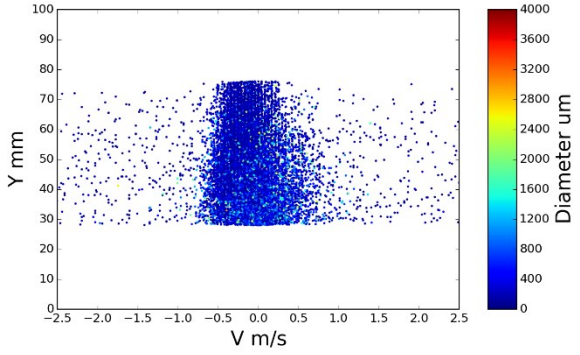


Figure A. 3259: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

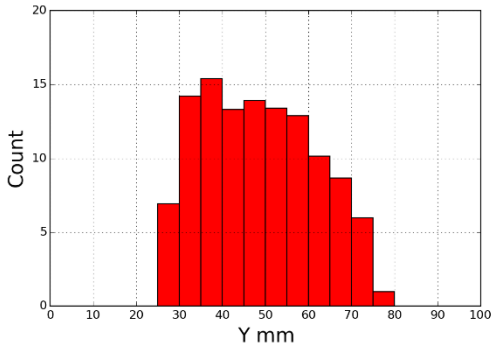


Figure A. 3257: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

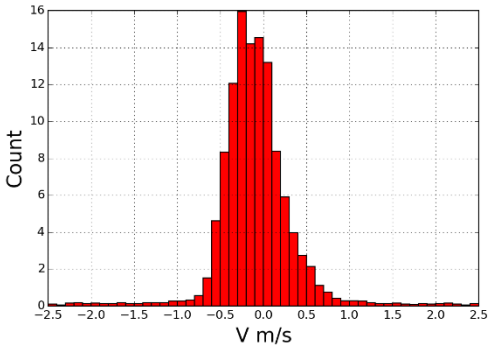


Figure A. 3260: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

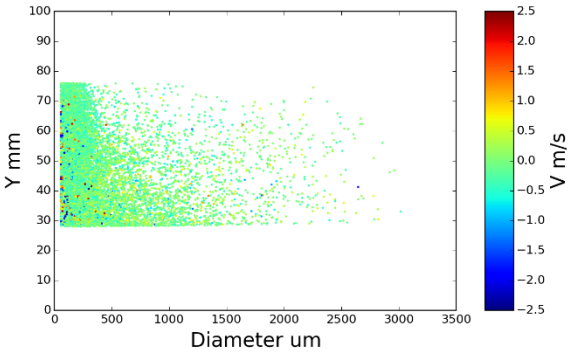


Figure A. 3258: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	54.05	56.66	57.2	2957	409.6	388.0	57.2	2770	395.8	382.3
40-60mm	81.13	85.12	57.2	2866	286.7	302.8	57.2	2994	280.2	304.5
60-80mm	32.21	32.35	57.2	2767	204.1	204.1	57.2	2756	201.4	206.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	167.42	174.17	57.2	2957	310.5	326.6	57.2	2994	303.2	325.2
			Height A (mm)				Height B (mm)			
Highest Particle			76.0593				76.0466			
Lowest Particle			28.0846				28.0846			

Table A. 344: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	36.43	57.2	2957	509.8	408.0	57.2	2770	509.0	409.3	-2.540	2.450	-0.030	0.350	-2.540	2.540	0.070	0.440
40-60mm	53.76	57.2	2866	356.7	331.6	57.2	2969	355.0	332.3	-2.540	2.540	-0.020	0.390	-2.540	2.540	0.040	0.440
60-80mm	21.39	57.2	2767	244.2	223.6	57.2	2756	241.6	226.6	-2.500	2.280	-0.030	0.270	-2.530	2.370	-0.020	0.310
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	111.58	57.2	2957	385.1	355.2	57.2	2969	383.4	356.5	-2.540	2.540	-0.020	0.360	-2.540	2.540	0.040	0.420

Table A. 345: Matched Droplet Info

A.4.4.1 All Droplets for .LA Image

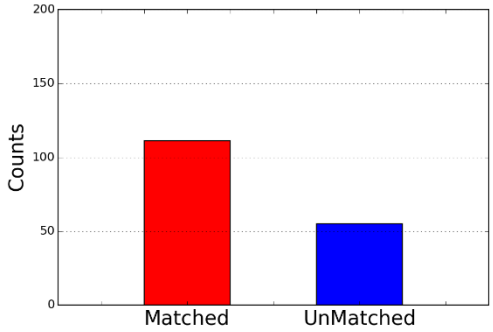


Figure A. 3261: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

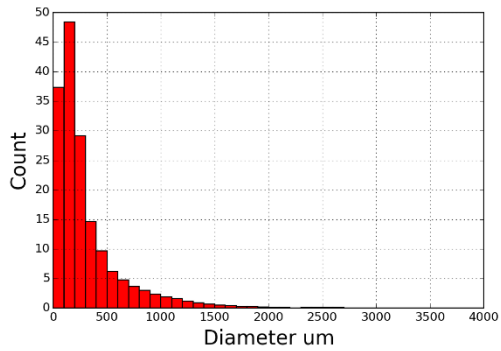


Figure A. 3262: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

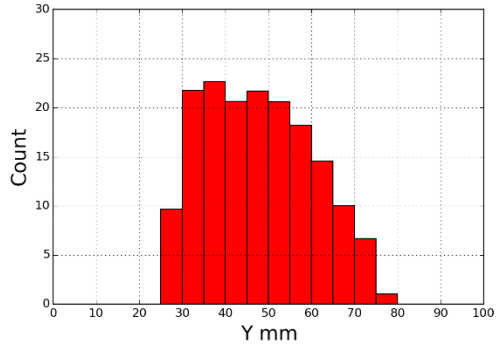


Figure A. 3263: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

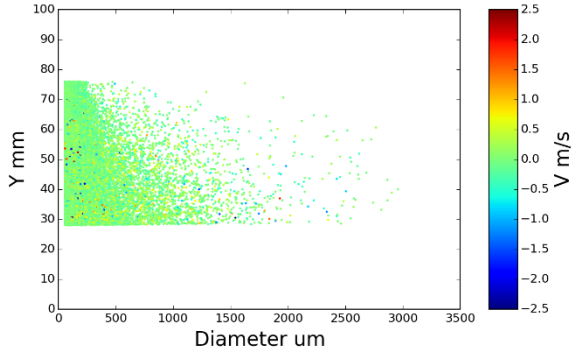


Figure A. 3264: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

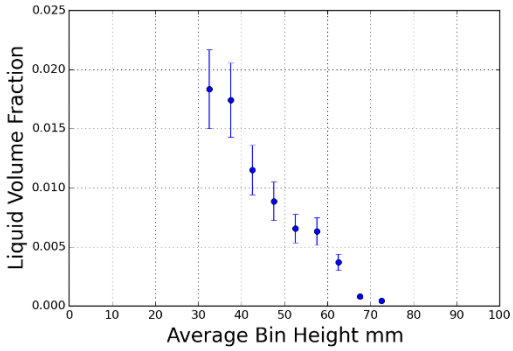


Figure A. 3265: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 All Droplets for .LB Image

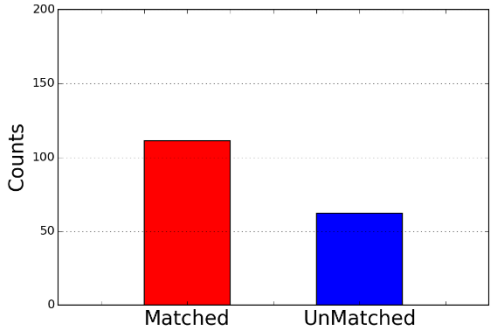


Figure A. 3266: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

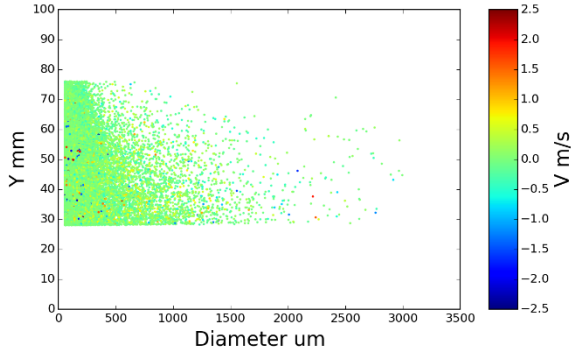


Figure A. 3269: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

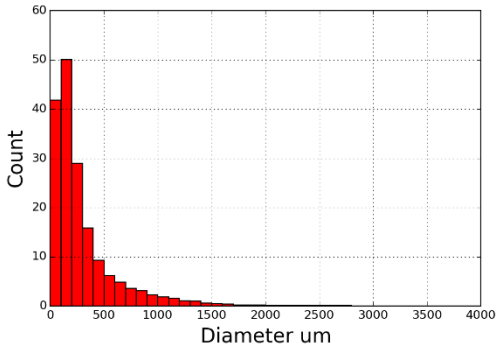


Figure A. 3267: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

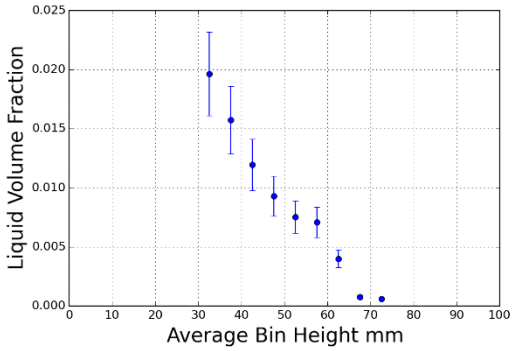


Figure A. 3270: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

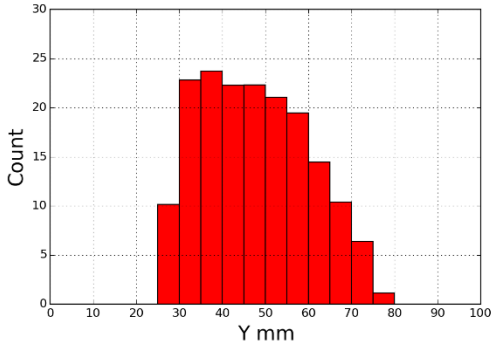


Figure A. 3268: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 Matched Only Droplets for .LA Image

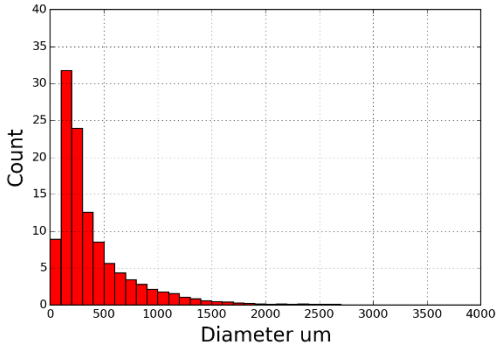


Figure A. 3271: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

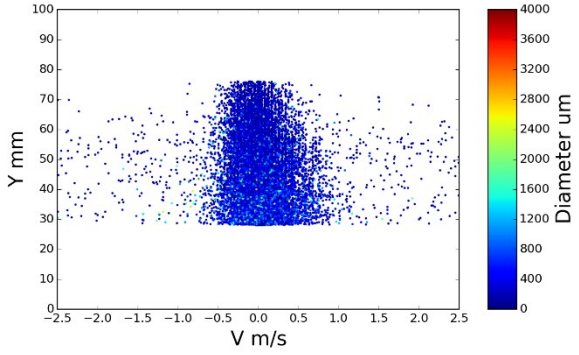


Figure A. 3274: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

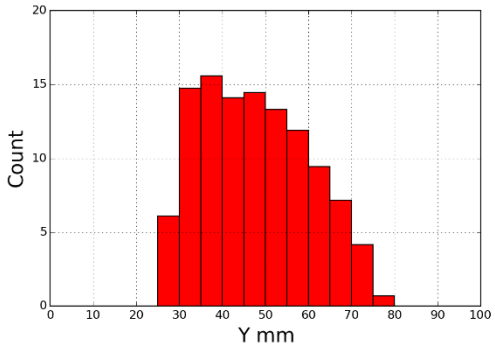


Figure A. 3272: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

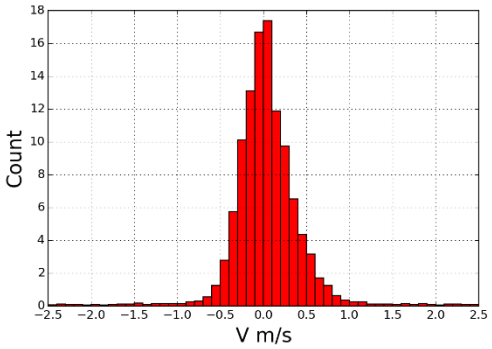


Figure A. 3275: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

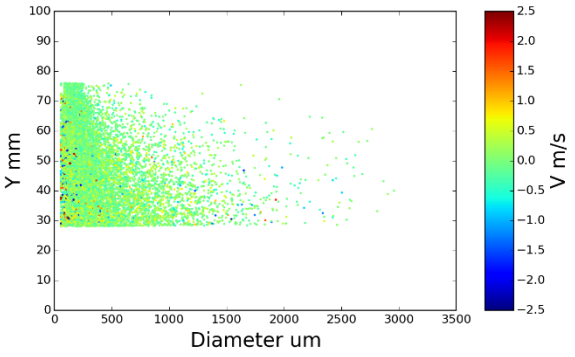


Figure A. 3273: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 Matched Only Droplets for .LB Image

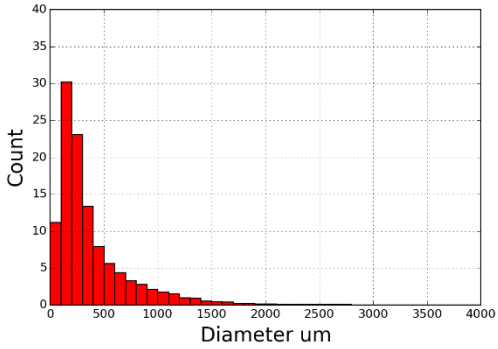


Figure A. 3276: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

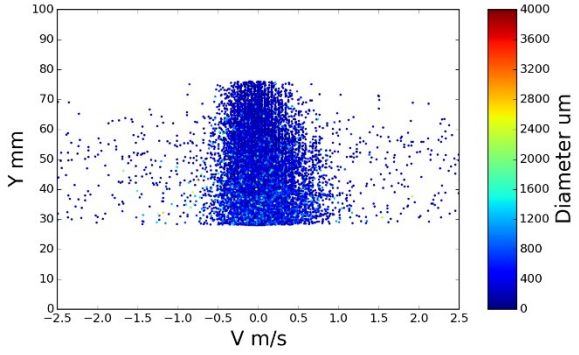


Figure A. 3279: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

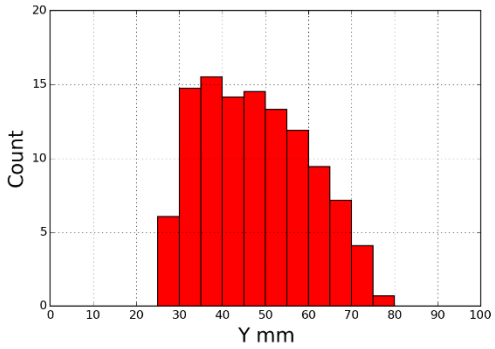


Figure A. 3277: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

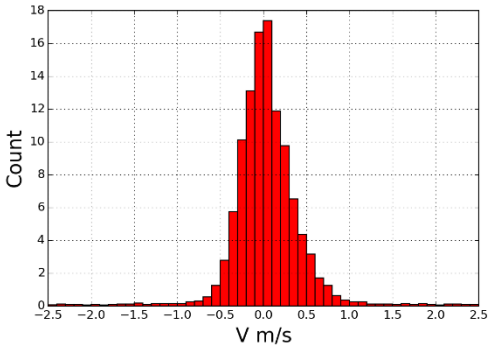


Figure A. 3280: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

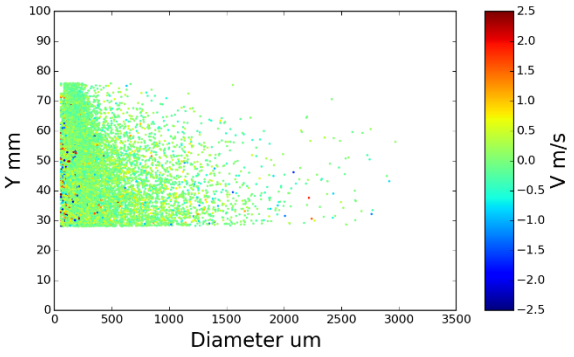


Figure A. 3278: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	42.75	45.9	57.2	2942	430.5	391.2	57.2	2982	411.7	391.6
40-60mm	66.95	70.16	57.2	3039	295.2	281.1	57.2	3001	288.2	280.2
60-80mm	27.69	29.16	57.2	2580	214.2	196.8	57.2	2584	207.9	191.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	137.39	145.22	57.2	3039	321.0	316.7	57.2	3001	311.1	315.2
			Height A (mm)				Height B (mm)			
Highest Particle			76.0212				76.0593			
Lowest Particle			28.0846				28.0846			

Table A. 346: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	29.71	57.2	2942	538.1	412.0	57.2	2919	538.6	414.8	-2.490	2.540	-0.020	0.320	-2.490	2.410	0.080	0.400
40-60mm	46.4	57.2	3039	360.2	295.6	57.2	3001	360.0	297.0	-2.520	2.520	-0.020	0.350	-2.540	2.450	0.090	0.430
60-80mm	19.04	57.2	2580	254.5	218.0	57.2	2584	249.4	212.5	-2.540	2.460	-0.010	0.330	-2.370	2.540	0.090	0.390
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	95.15	57.2	3039	394.6	340.7	57.2	3001	393.5	342.0	-2.540	2.540	-0.020	0.340	-2.540	2.540	0.080	0.410

Table A. 347: Matched Droplet Info

A.4.4.1 All Droplets for .LA Image

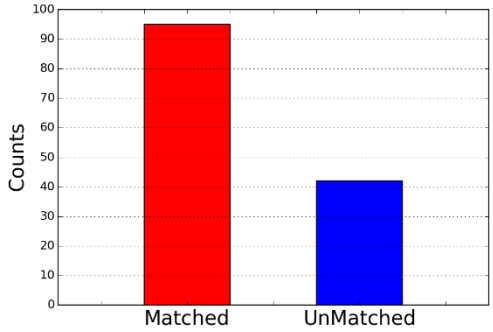


Figure A. 3281: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

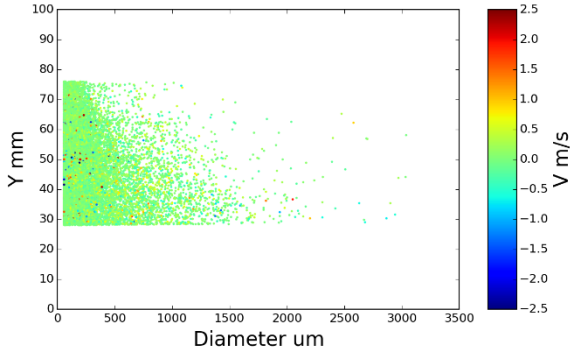


Figure A. 3284: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

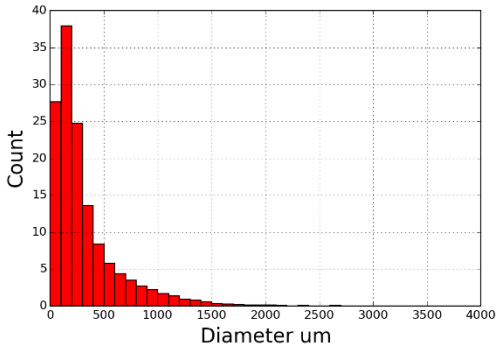


Figure A. 3282: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

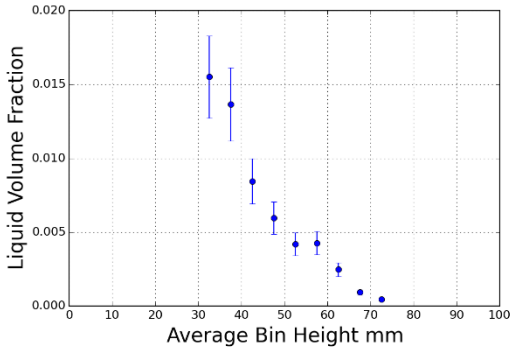


Figure A. 3285: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

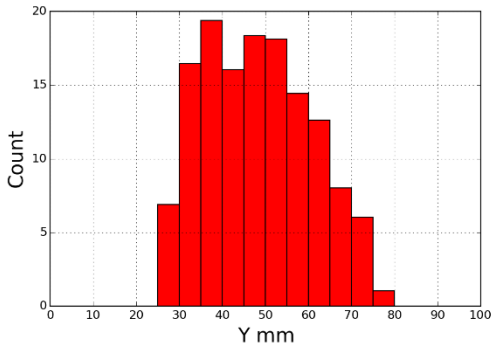


Figure A. 3283: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 All Droplets for .LB Image

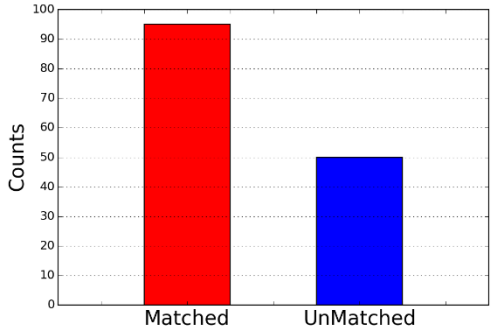


Figure A. 3286: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

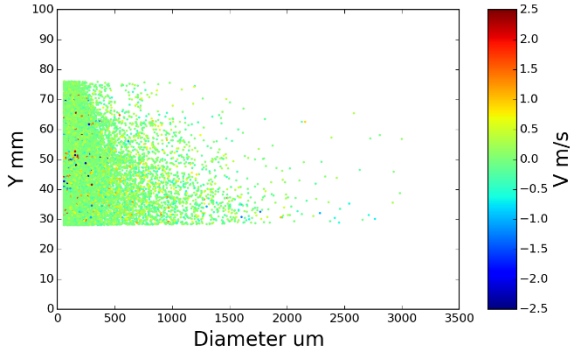


Figure A. 3289: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

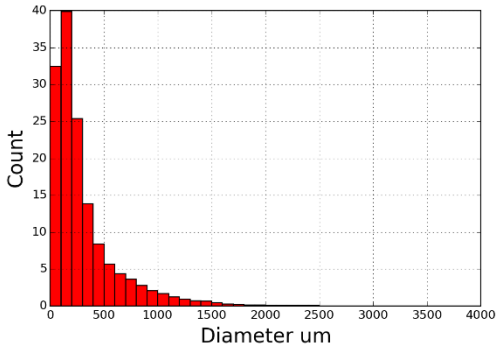


Figure A. 3287: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

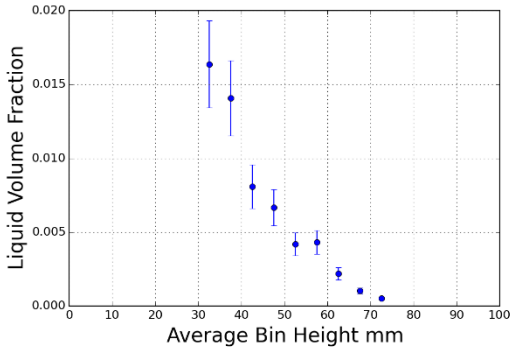


Figure A. 3290: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

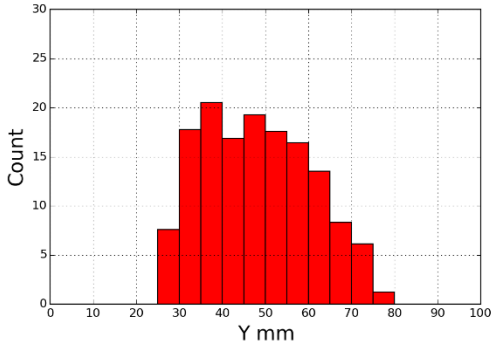


Figure A. 3288: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 Matched Only Droplets for .LA Image

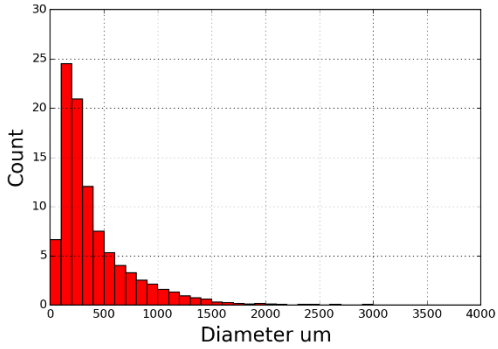


Figure A. 3291: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

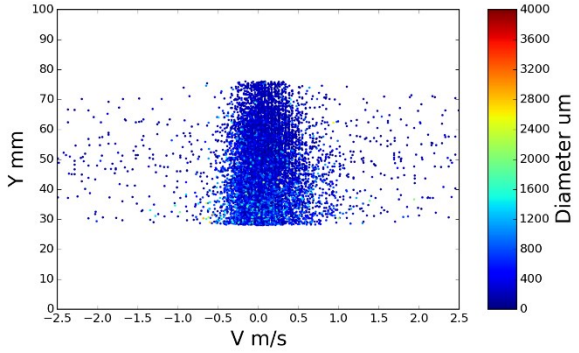


Figure A. 3294: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

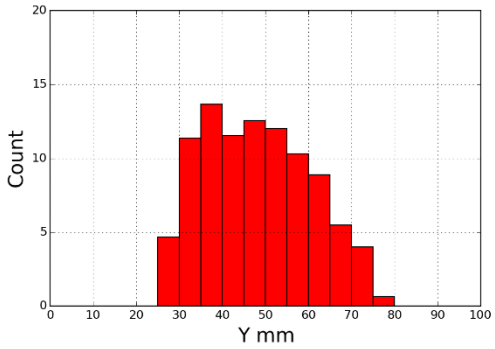


Figure A. 3292: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

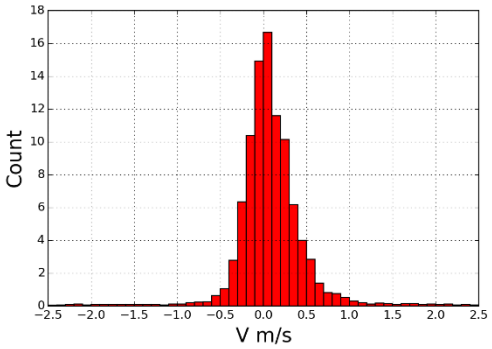


Figure A. 3295: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

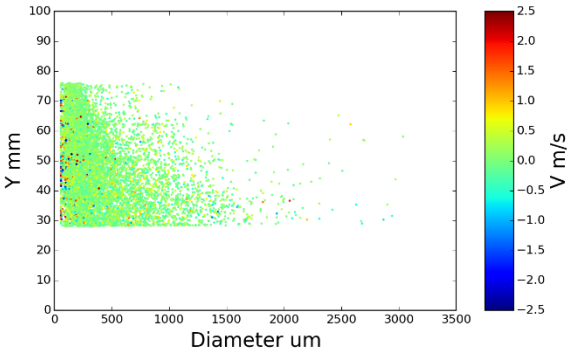


Figure A. 3293: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.1 Matched Only Droplets for .LB Image

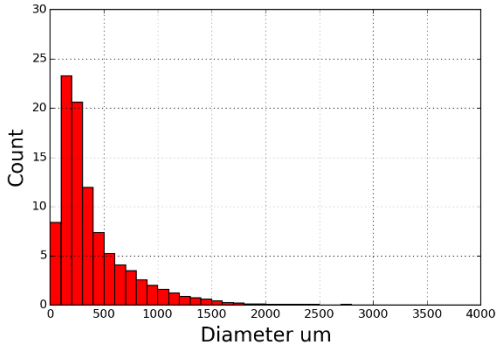


Figure A. 3296: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

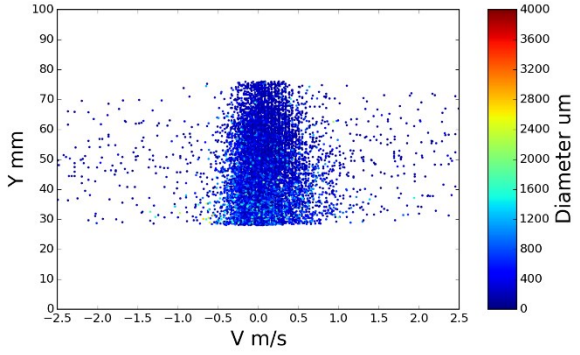


Figure A. 3299: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

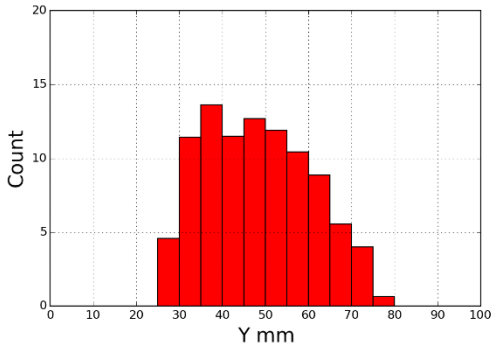


Figure A. 3297: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

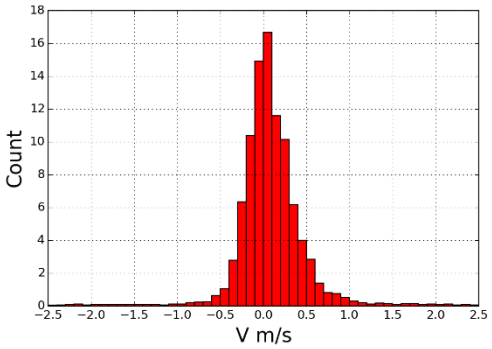


Figure A. 3300: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

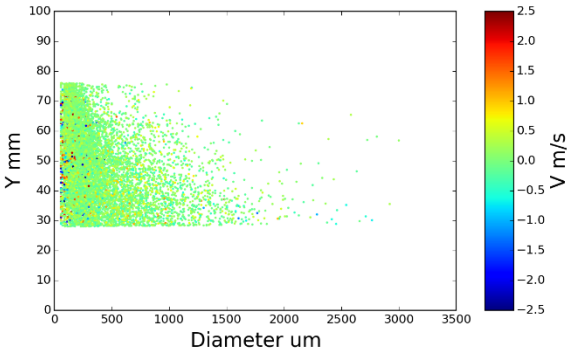


Figure A. 3298: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 Lens 50mm Mag 0_13x

A.4.4.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	53.01	54.14	128.7	3403	764.3	613.3	128.7	3405	760.5	614.8
20-40mm	36.83	36.98	128.7	2857	590.4	419.6	128.7	3019	590.6	421.4
40-60mm	26.9	26.97	128.7	2278	471.7	316.8	128.7	2369	469.0	316.7
60-80mm	17.7	17.78	128.7	1668	445.2	255.2	128.7	1712	442.3	255.7
80-100mm	10.7	10.58	128.7	1216	365.3	173.9	128.7	1138	367.6	172.5
All	145.14	146.45	128.7	3403	597.6	480.4	128.7	3405	596.9	482.4
			Height A (mm)				Height B (mm)			
Highest Particle			99.9024				99.9276			
Lowest Particle			5.0178				5.0422			

Table A. 348: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	31.63	128.7	3392	940.1	646.7	128.7	3405	928.3	647.9	-2.440	2.440	-0.060	0.570	-2.440	2.440	-0.000	0.630
20-40mm	26.05	128.7	2857	669.7	427.9	128.7	3019	662.5	425.9	-2.440	2.410	-0.030	0.370	-2.440	2.440	0.020	0.490
40-60mm	20.43	128.7	2278	541.2	322.6	128.7	2369	537.4	323.4	-2.390	2.360	-0.020	0.280	-2.400	2.360	0.070	0.430
60-80mm	13.96	128.7	1668	500.7	252.3	128.7	1712	496.7	254.0	-2.160	2.280	-0.040	0.200	-2.280	2.320	0.110	0.360
80-100mm	8.54	128.7	1216	403.0	169.3	128.7	1138	400.1	170.3	-2.440	2.360	-0.070	0.240	-2.170	2.400	0.080	0.320
All	100.61	128.7	3392	682.5	497.5	128.7	3405	675.1	496.2	-2.440	2.440	-0.040	0.400	-2.440	2.440	0.040	0.500

Table A. 349: Matched Droplet Info

A.4.4.2 All Droplets for .LA Image

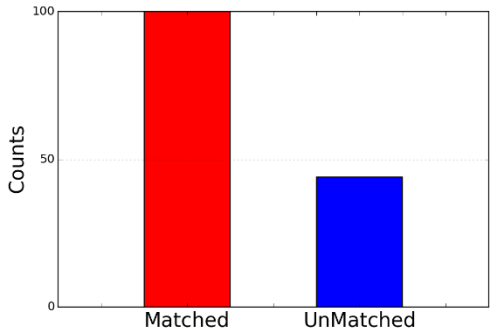


Figure A. 3301: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

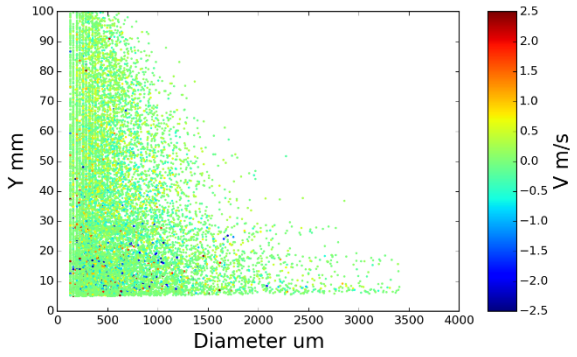


Figure A. 3304: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

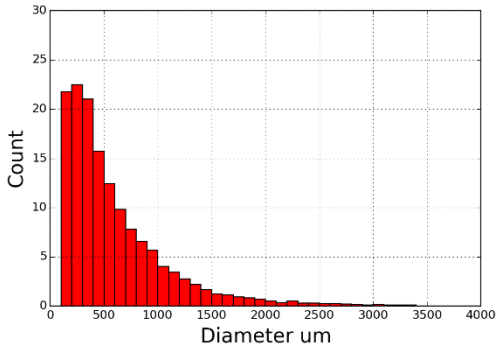


Figure A. 3302: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

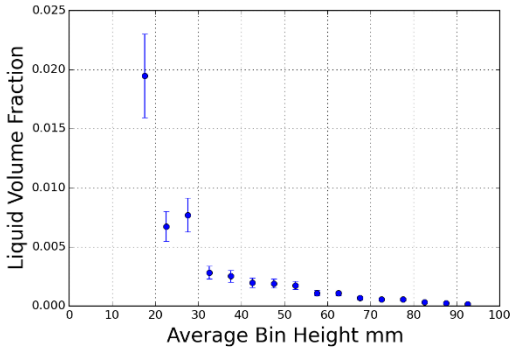


Figure A. 3305: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

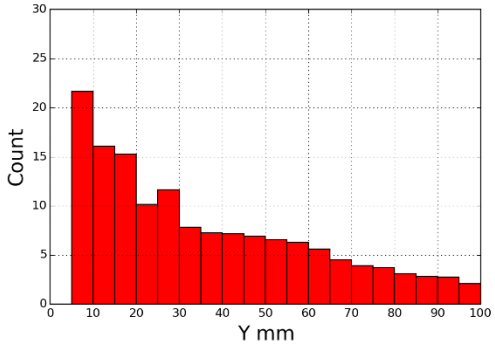


Figure A. 3303: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 All Droplets for .LB Image

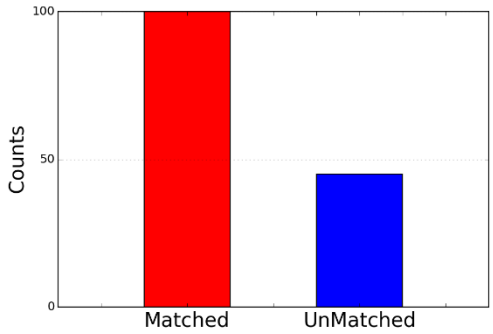


Figure A. 3306: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

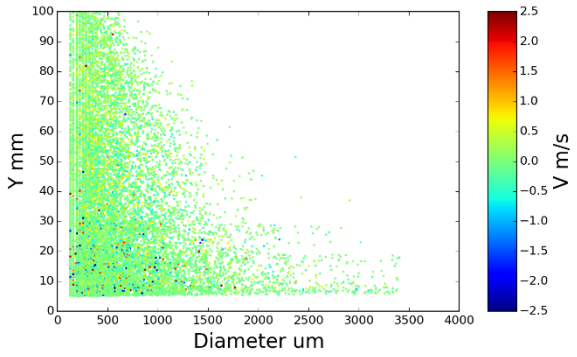


Figure A. 3309: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

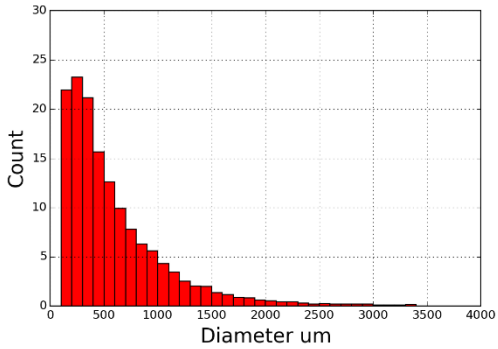


Figure A. 3307: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

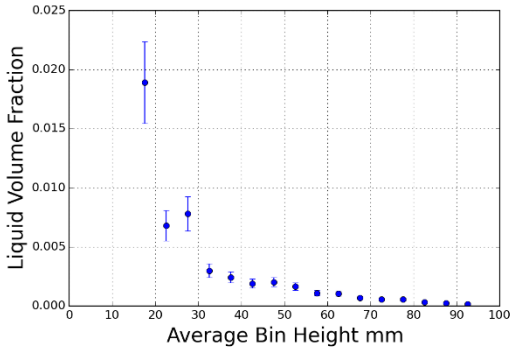


Figure A. 3310: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

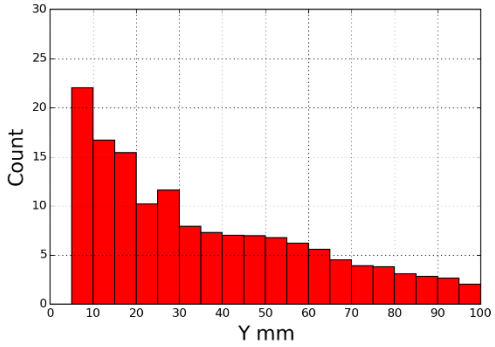


Figure A. 3308: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 Matched Only Droplets for .LA Image

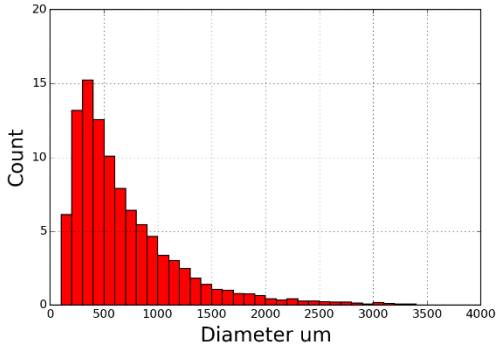


Figure A. 3311: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

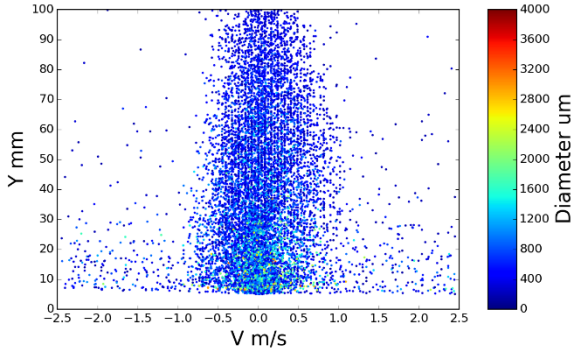


Figure A. 3314: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

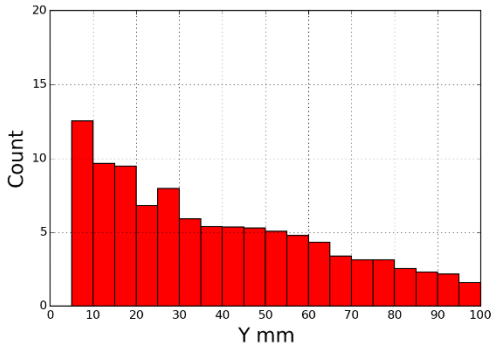


Figure A. 3312: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

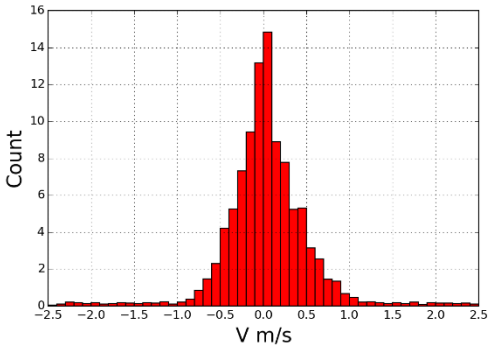


Figure A. 3315: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

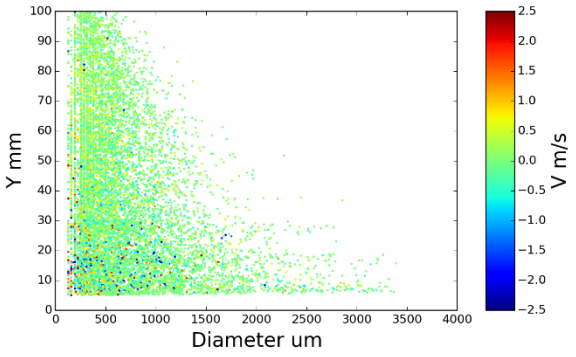


Figure A. 3313: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 Matched Only Droplets for .LB Image

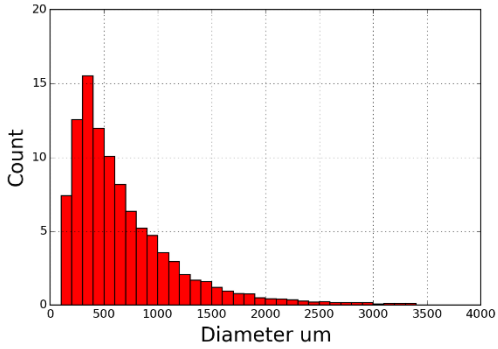


Figure A. 3316: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

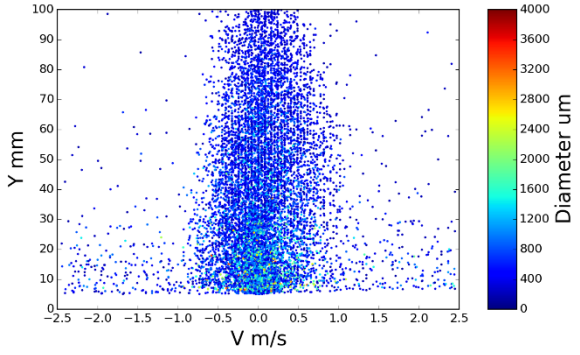


Figure A. 3319: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

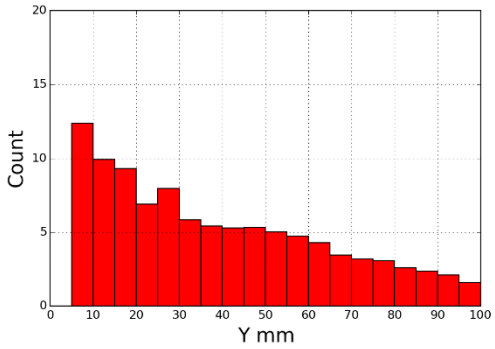


Figure A. 3317: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

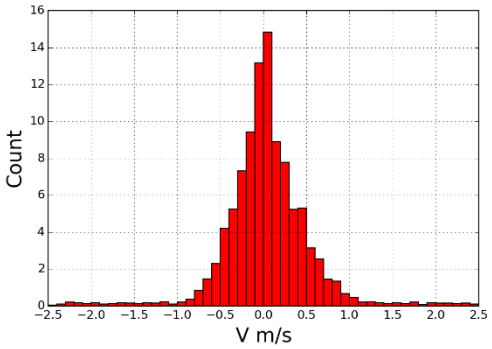


Figure A. 3320: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

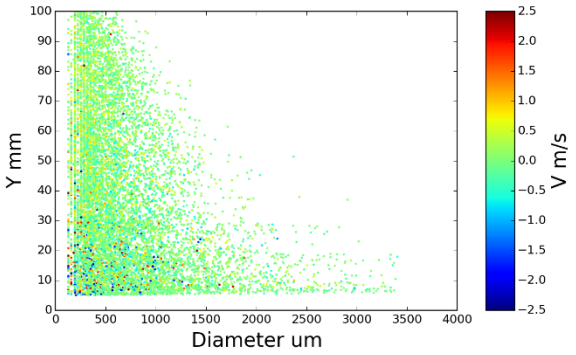


Figure A. 3318: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	60.03	59.61	128.7	3411	765.6	606.0	128.7	3412	764.4	604.2
20-40mm	48.28	48.32	128.7	3191	591.7	430.2	128.7	3232	591.0	429.7
40-60mm	32.7	33.07	128.7	2902	490.7	377.0	128.7	2367	486.6	371.1
60-80mm	17.33	17.21	128.7	2087	466.0	330.5	128.7	2058	466.5	328.9
80-100mm	8.09	8.0	128.7	1337	392.8	217.7	128.7	1372	393.7	217.1
All	166.43	166.21	128.7	3411	611.8	493.8	128.7	3412	610.0	491.5
			Height A (mm)				Height B (mm)			
Highest Particle			99.9276				99.8990			
Lowest Particle			5.0178				5.0178			

Table A. 350: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	36.04	128.7	3411	933.0	626.2	128.7	3412	923.1	626.6	-2.430	2.390	-0.060	0.490	-2.440	2.440	-0.020	0.590
20-40mm	33.51	128.7	3191	687.3	445.0	128.7	3232	679.7	444.3	-2.420	2.440	-0.040	0.370	-2.440	2.430	-0.070	0.500
40-60mm	24.12	128.7	2902	575.5	395.6	128.7	2367	568.2	390.4	-2.440	2.410	-0.020	0.300	-2.440	2.400	-0.080	0.420
60-80mm	12.92	128.7	2087	545.2	340.3	128.7	2058	541.6	340.6	-2.320	2.340	-0.060	0.260	-2.360	2.280	-0.040	0.370
80-100mm	6.13	128.7	1337	450.0	216.2	128.7	1372	445.1	217.8	-1.510	0.570	-0.080	0.170	-1.470	0.670	-0.050	0.270
All	112.72	128.7	3411	712.8	510.2	128.7	3412	705.6	509.3	-2.440	2.440	-0.040	0.380	-2.440	2.440	-0.050	0.490

Table A. 351: Matched Droplet Info

A.4.4.2 All Droplets for .LA Image

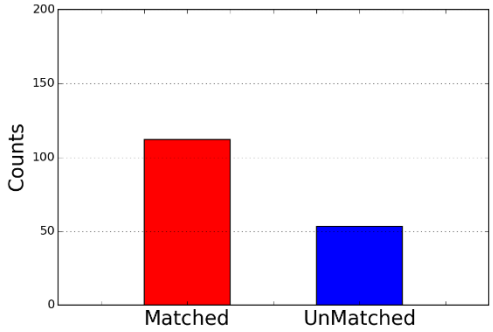


Figure A. 3321: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

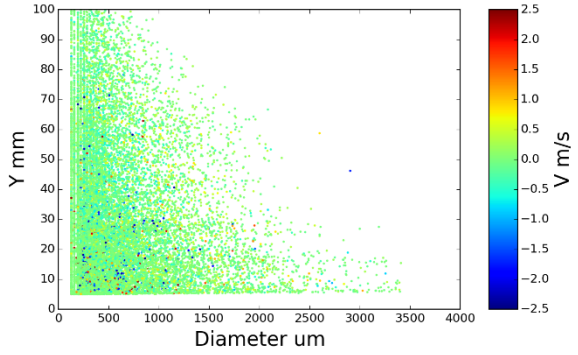


Figure A. 3324: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

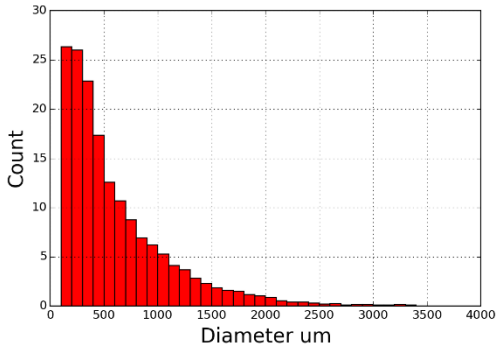


Figure A. 3322: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

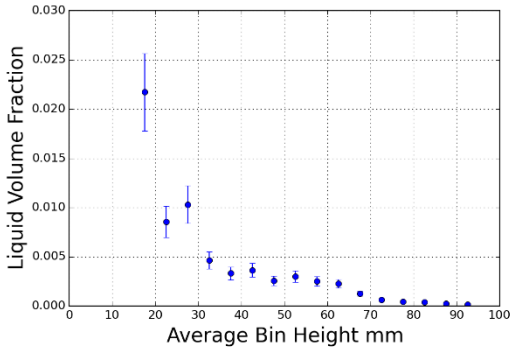


Figure A. 3325: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

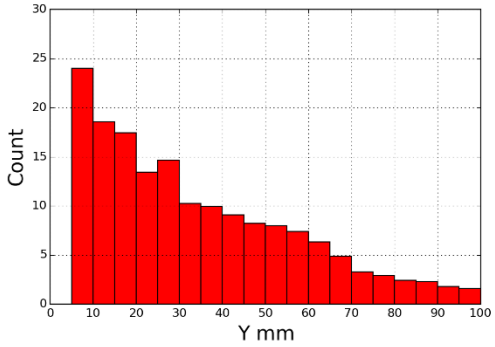


Figure A. 3323: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 All Droplets for .LB Image

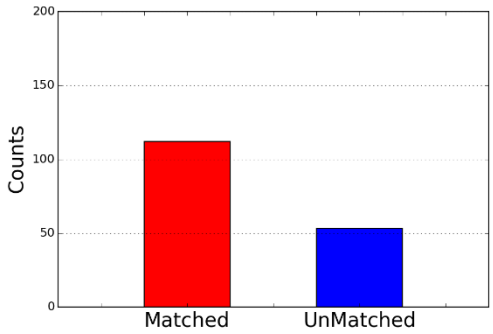


Figure A. 3326: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

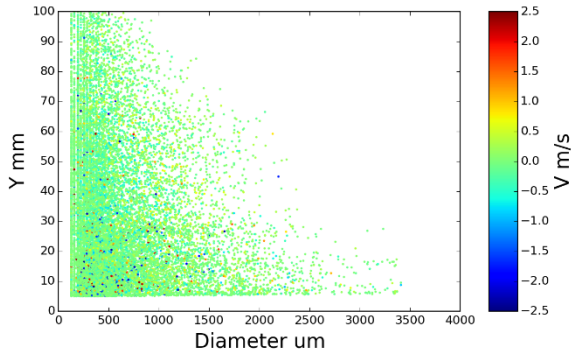


Figure A. 3329: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

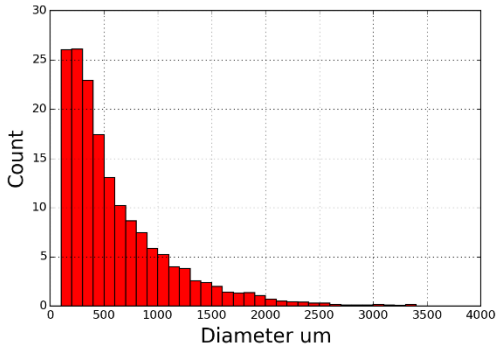


Figure A. 3327: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

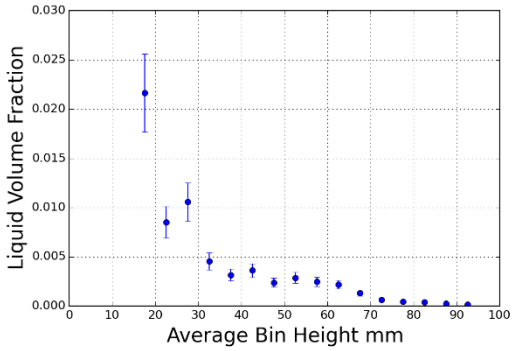


Figure A. 3330: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

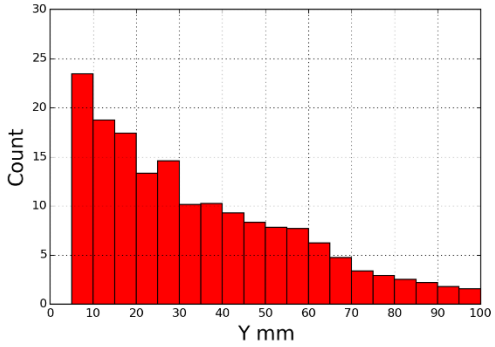


Figure A. 3328: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 Matched Only Droplets for .LA Image

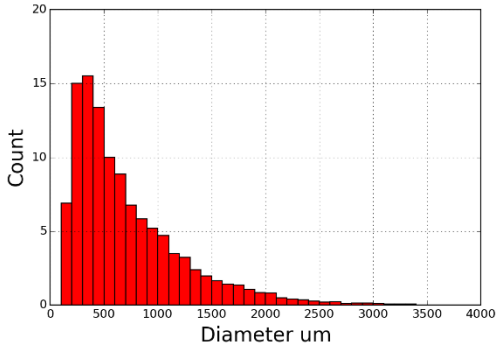


Figure A. 3331: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

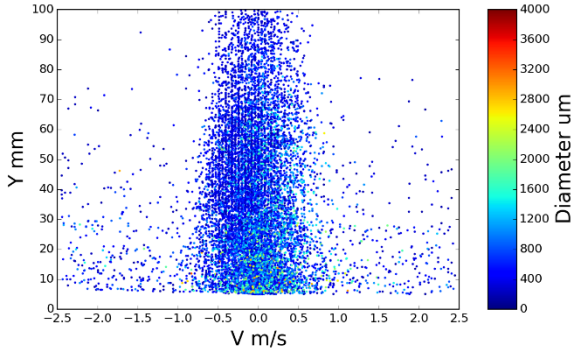


Figure A. 3334: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

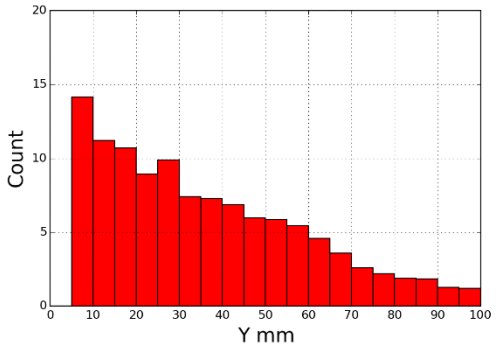


Figure A. 3332: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

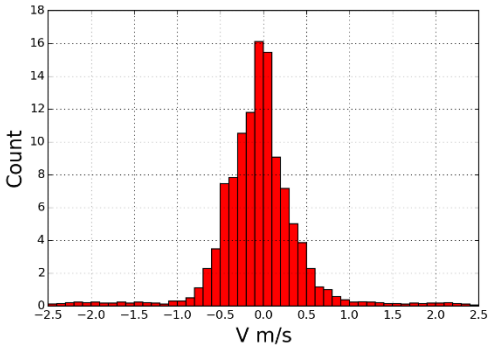


Figure A. 3335: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

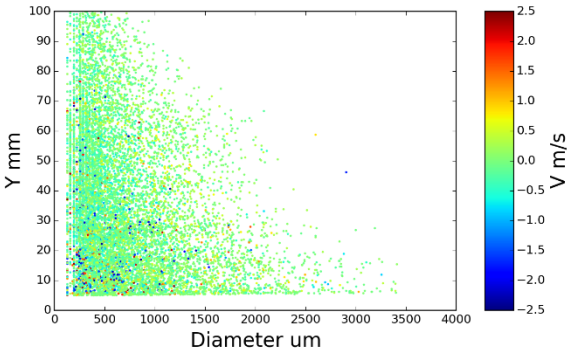


Figure A. 3333: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 Matched Only Droplets for .LB Image

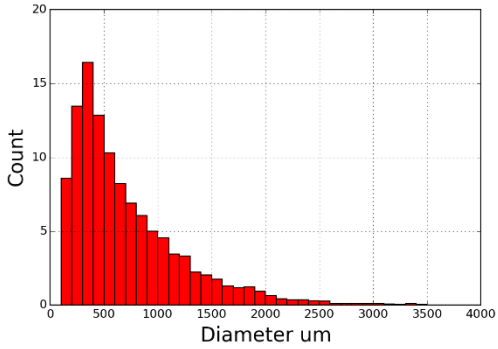


Figure A. 3336: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

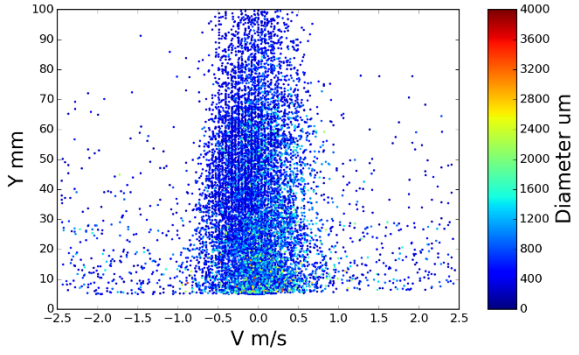


Figure A. 3339: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

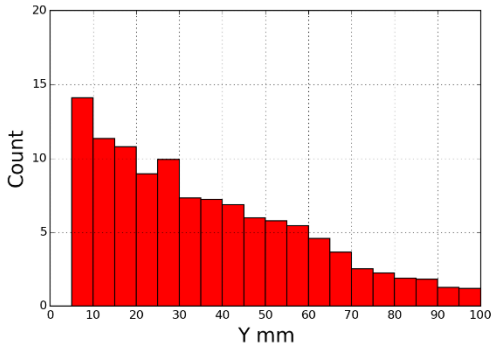


Figure A. 3337: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

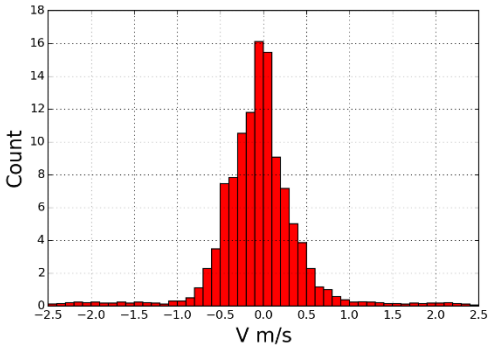


Figure A. 3340: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

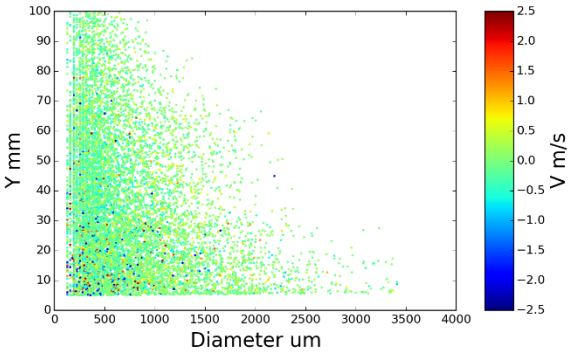


Figure A. 3338: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	63.44	64.36	128.7	3410	783.5	599.5	128.7	3416	776.1	595.8
20-40mm	54.91	55.2	128.7	3321	637.6	456.8	128.7	3320	635.0	458.1
40-60mm	33.16	33.31	128.7	2824	514.0	434.0	128.7	3370	513.2	434.4
60-80mm	11.42	11.77	128.7	2314	459.2	368.4	128.7	2219	448.8	365.4
80-100mm	2.86	2.8	128.7	1743	408.7	297.8	128.7	1577	409.3	293.3
All	165.79	167.44	128.7	3410	652.5	519.0	128.7	3416	648.2	517.4
			Height A (mm)				Height B (mm)			
Highest Particle			99.9276				99.4630			
Lowest Particle			5.0178				5.0178			

Table A. 352: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	35.96	128.7	3395	966.1	628.4	128.7	3343	953.5	626.8	-2.440	2.400	-0.070	0.590	-2.440	2.440	0.000	0.670
20-40mm	36.08	128.7	3321	747.7	466.1	128.7	3320	742.4	473.0	-2.440	2.440	-0.050	0.430	-2.440	2.400	-0.030	0.520
40-60mm	22.07	128.7	2824	624.3	468.6	128.7	2947	617.2	466.0	-2.290	2.400	-0.050	0.300	-2.440	2.360	-0.100	0.420
60-80mm	7.52	128.7	2314	560.8	398.3	128.7	2219	553.2	401.4	-2.220	1.750	-0.080	0.250	-2.300	2.150	-0.140	0.370
80-100mm	1.75	128.7	1743	511.9	322.0	128.7	1577	498.8	318.0	-1.590	0.220	-0.120	0.200	-1.780	0.510	-0.150	0.290
All	103.38	128.7	3395	779.7	543.7	128.7	3343	771.5	544.4	-2.440	2.440	-0.060	0.460	-2.440	2.440	-0.040	0.550

Table A. 353: Matched Droplet Info

A.4.4.2 All Droplets for .LA Image

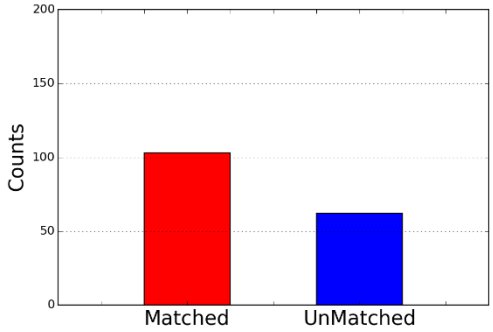


Figure A. 3341: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

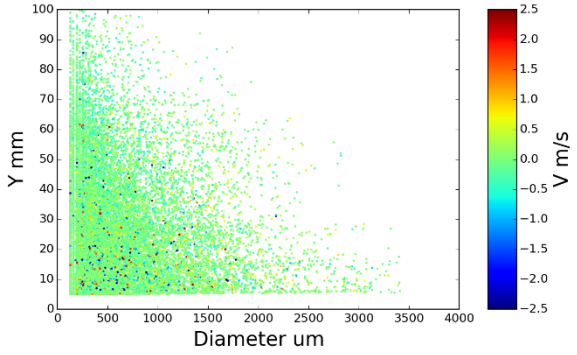


Figure A. 3344: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

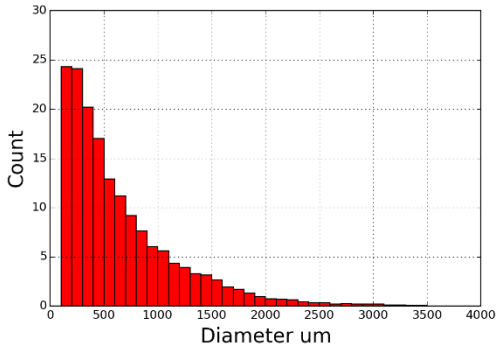


Figure A. 3342: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

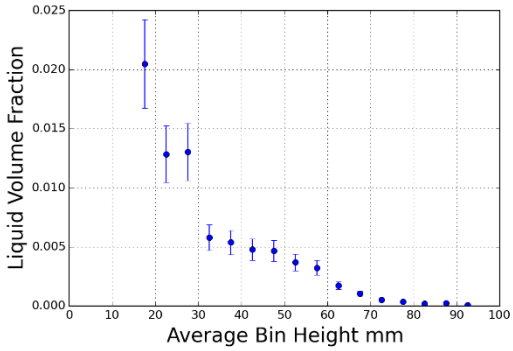


Figure A. 3345: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

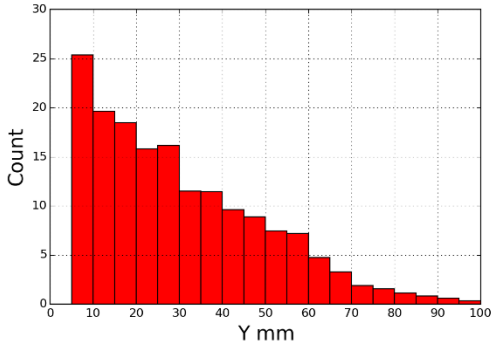


Figure A. 3343: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 All Droplets for .LB Image

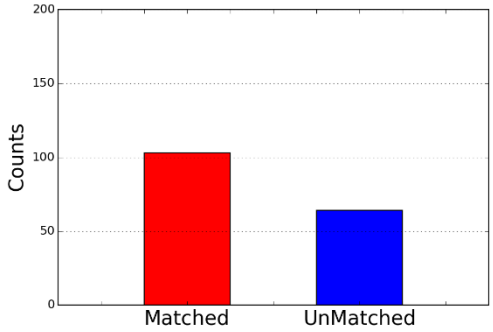


Figure A. 3346: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

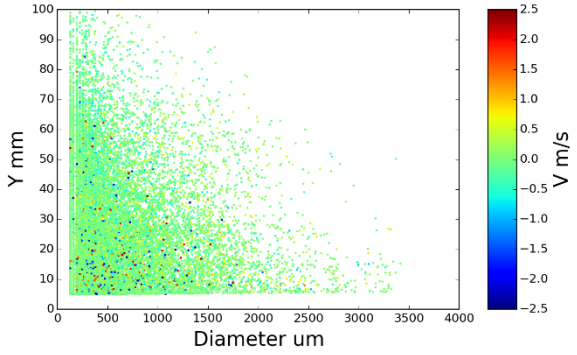


Figure A. 3349: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

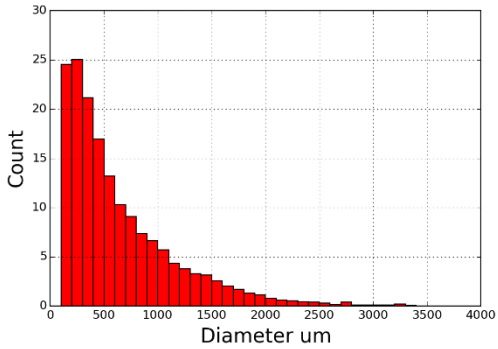


Figure A. 3347: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

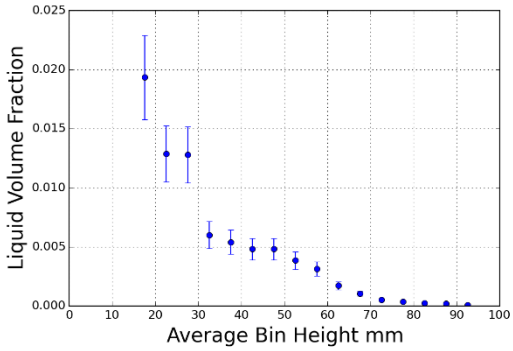


Figure A. 3350: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

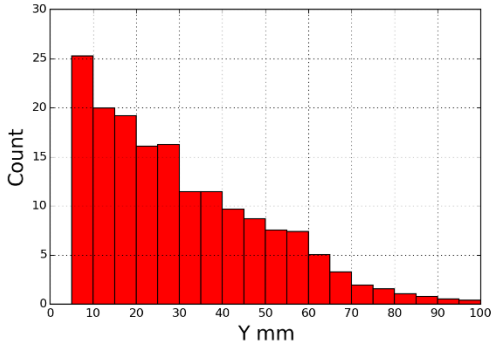


Figure A. 3348: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 Matched Only Droplets for .LA Image

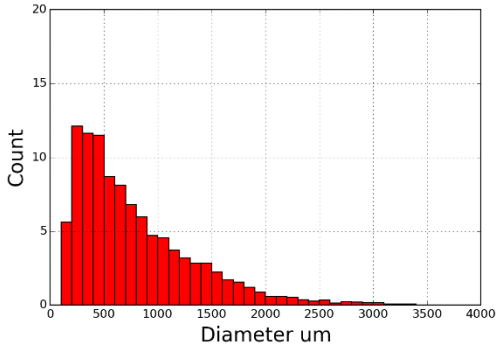


Figure A. 3351: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

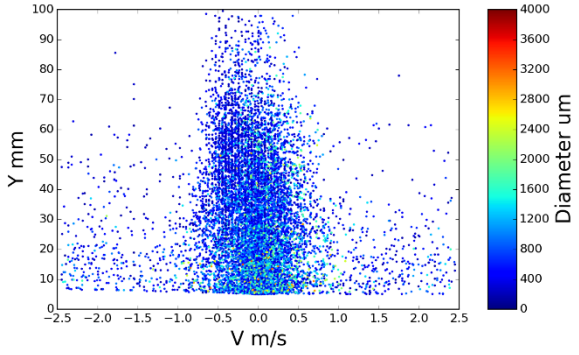


Figure A. 3354: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

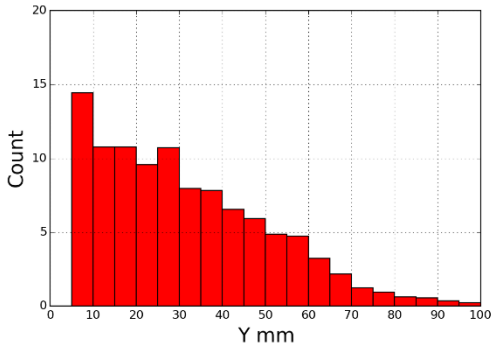


Figure A. 3352: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

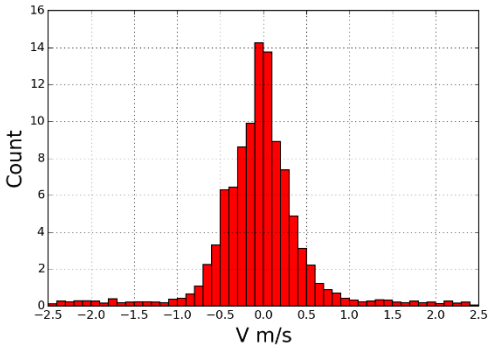


Figure A. 3355: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

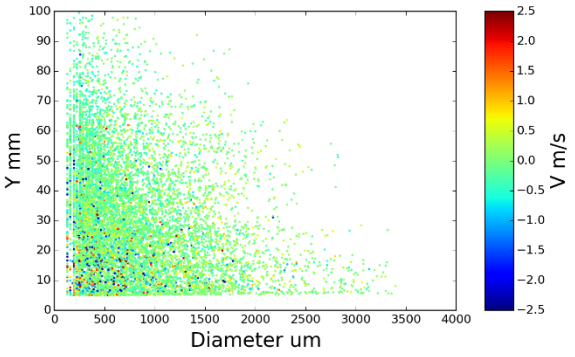


Figure A. 3353: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 Matched Only Droplets for .LB Image

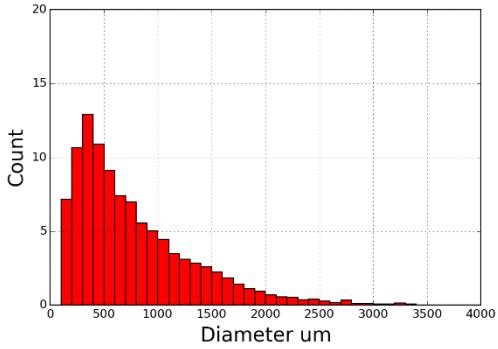


Figure A. 3356: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

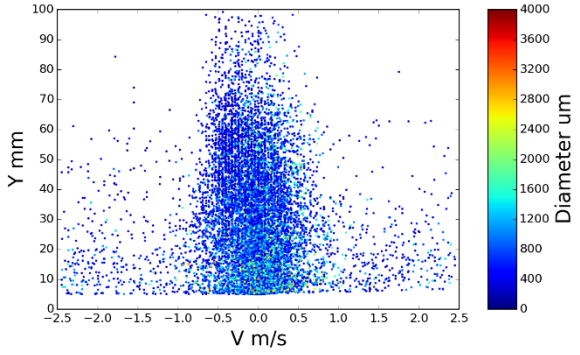


Figure A. 3359: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

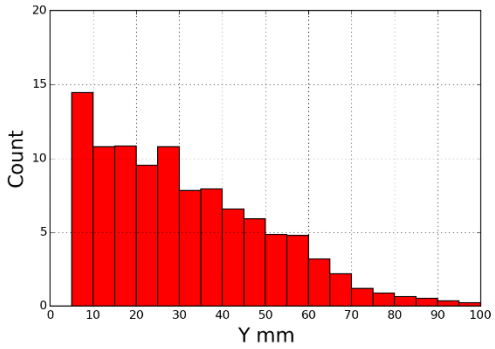


Figure A. 3357: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

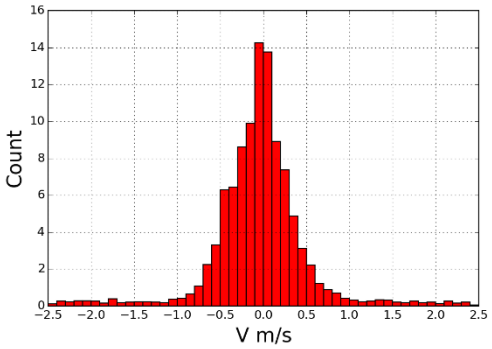


Figure A. 3360: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

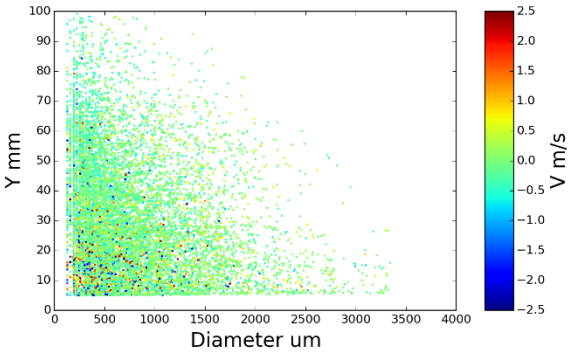


Figure A. 3358: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	58.34	57.5	128.7	3420	830.0	636.8	128.7	3413	834.4	652.6
20-40mm	62.46	62.97	128.7	3373	635.3	457.0	128.7	3393	632.4	455.7
40-60mm	38.26	38.91	128.7	3047	496.8	417.5	128.7	3033	493.9	418.1
60-80mm	10.59	10.61	128.7	3128	460.3	415.0	128.7	2943	465.2	416.3
80-100mm	1.2	1.34	128.7	1632	382.3	258.1	128.7	1506	355.1	267.1
All	170.85	171.33	128.7	3420	658.1	533.0	128.7	3413	656.2	538.6
			Height A (mm)				Height B (mm)			
Highest Particle			99.2718				99.8420			
Lowest Particle			5.0178				5.0178			

Table A. 354: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	30.88	128.7	3407	1043	665.9	128.7	3411	1034	673.2	-2.440	2.440	-0.060	0.620	-2.440	2.440	0.030	0.680
20-40mm	40.16	128.7	3373	750.5	475.1	128.7	3169	741.0	469.9	-2.400	2.430	-0.050	0.430	-2.440	2.440	0.040	0.530
40-60mm	25.63	128.7	3047	586.1	449.7	128.7	3033	580.2	448.6	-2.440	2.440	-0.030	0.380	-2.440	2.440	0.020	0.470
60-80mm	6.59	128.7	3128	570.2	462.7	128.7	2943	564.1	460.7	-2.000	2.220	-0.030	0.280	-2.150	2.080	-0.050	0.390
80-100mm	0.63	128.7	1632	493.3	284.9	128.7	1506	491.4	281.7	-0.330	0.320	-0.040	0.130	-0.770	0.520	-0.100	0.260
All	103.89	128.7	3407	783.9	562.6	128.7	3411	775.5	562.8	-2.440	2.440	-0.050	0.480	-2.440	2.440	0.030	0.560

Table A. 355: Matched Droplet Info

A.4.4.2 All Droplets for .LA Image

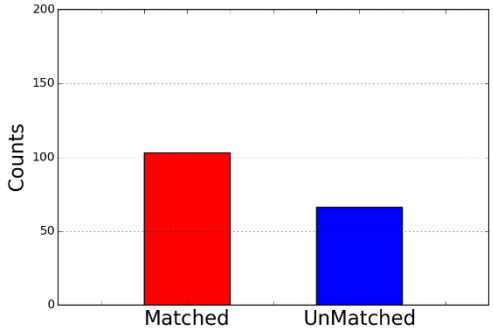


Figure A. 3361: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

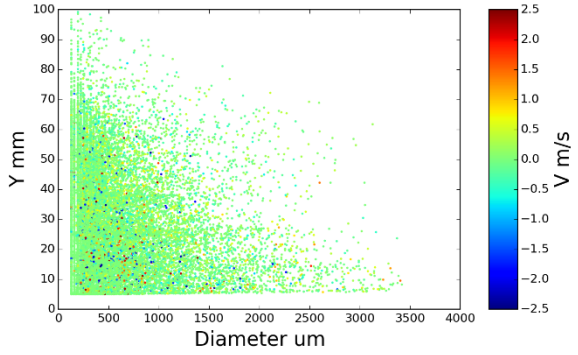


Figure A. 3364: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

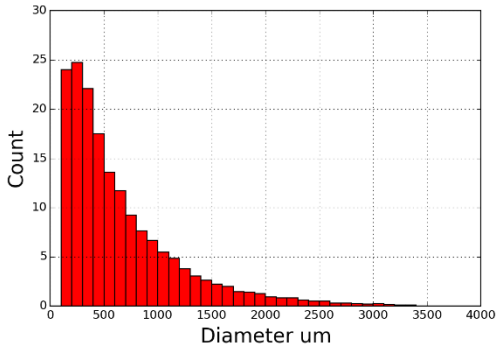


Figure A. 3362: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

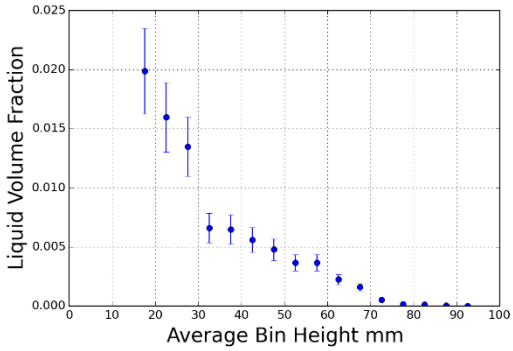


Figure A. 3365: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

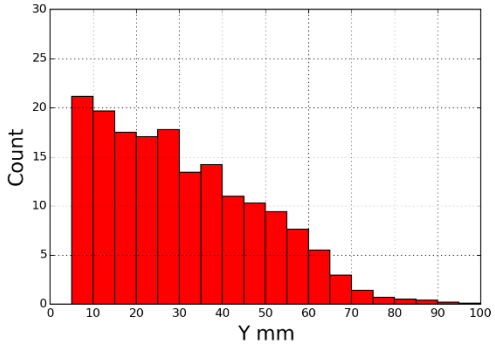


Figure A. 3363: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 All Droplets for .LB Image

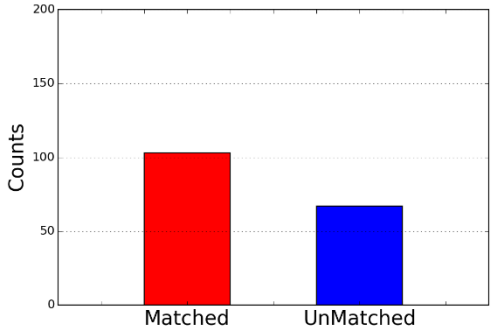


Figure A. 3366: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

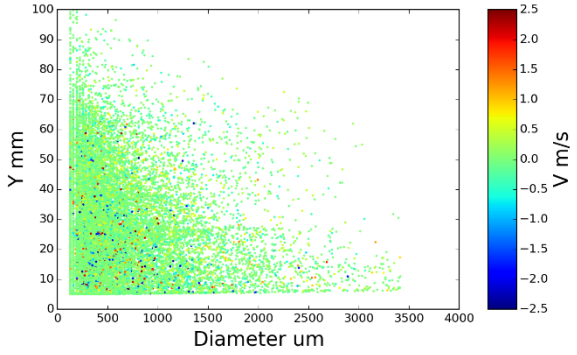


Figure A. 3369: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

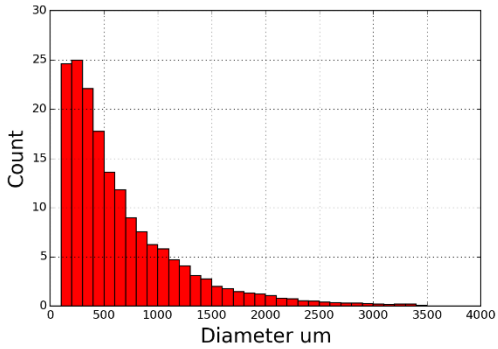


Figure A. 3367: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

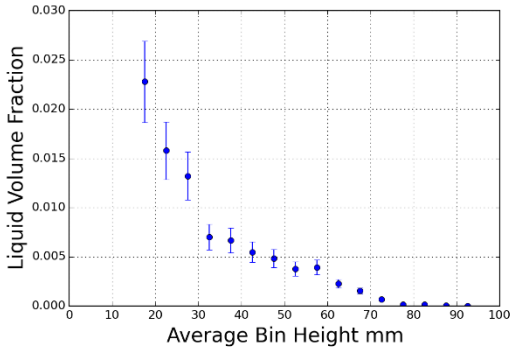


Figure A. 3370: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

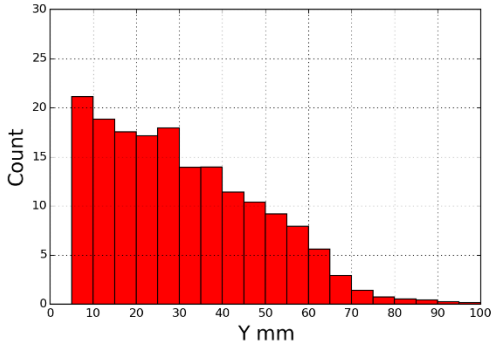


Figure A. 3368: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 Matched Only Droplets for .LA Image

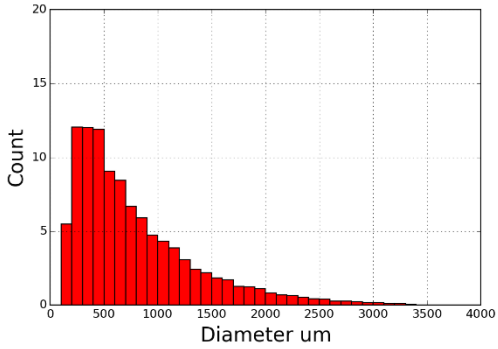


Figure A. 3371: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

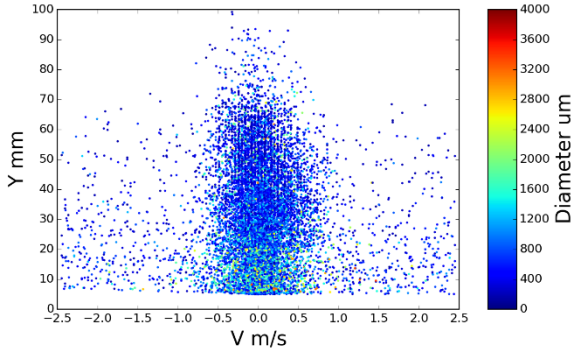


Figure A. 3374: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

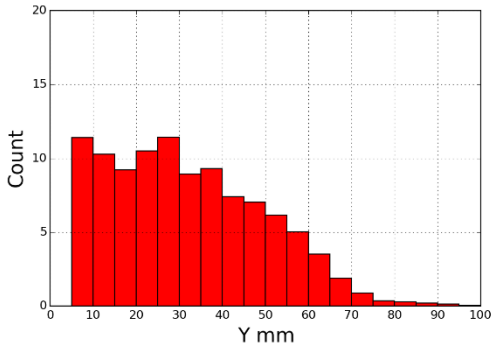


Figure A. 3372: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

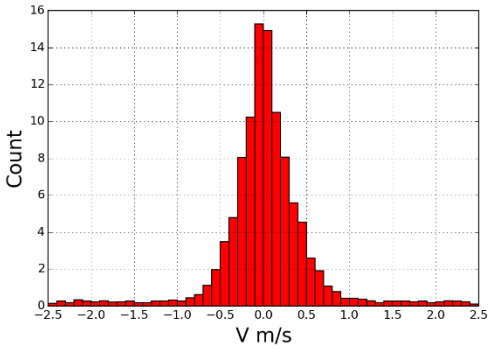


Figure A. 3375: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

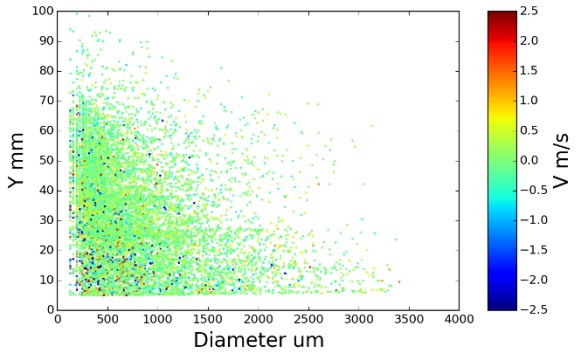


Figure A. 3373: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 Matched Only Droplets for .LB Image

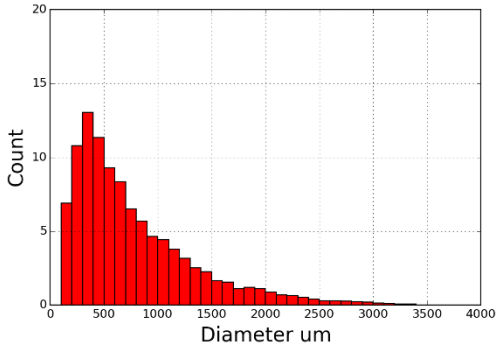


Figure A. 3376: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

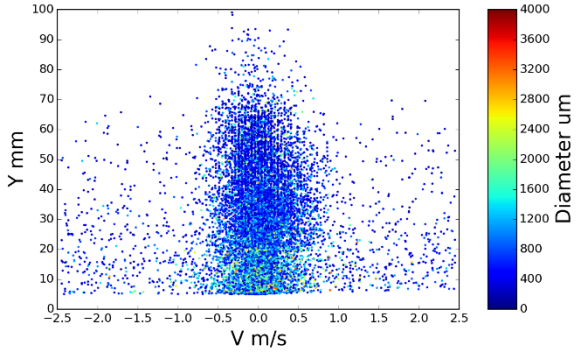


Figure A. 3379: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

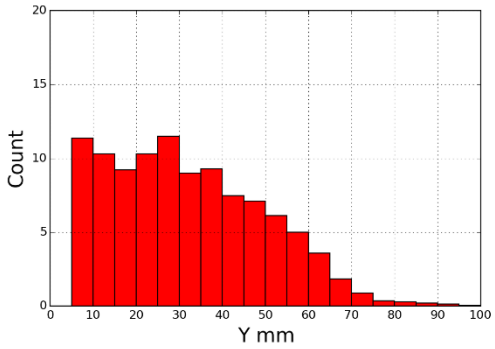


Figure A. 3377: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

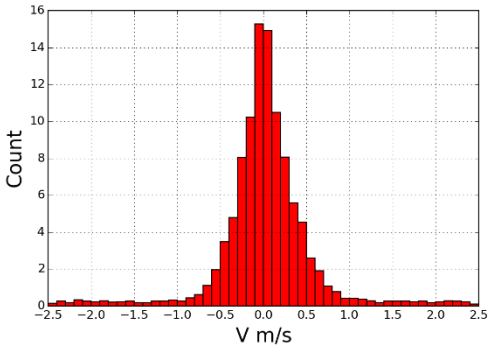


Figure A. 3380: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

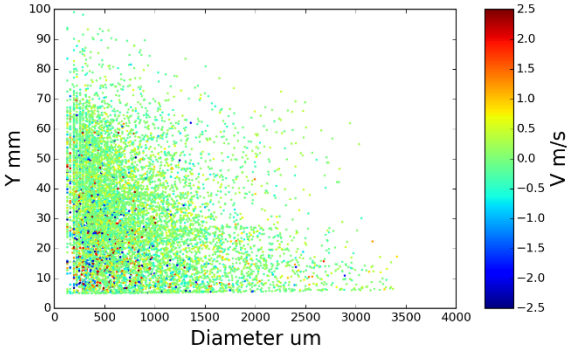


Figure A. 3378: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	45.42	44.81	128.7	3387	833.5	631.0	128.7	3417	848.9	640.0
20-40mm	52.52	53.31	128.7	3391	649.9	470.1	128.7	3402	649.2	479.5
40-60mm	35.66	36.32	128.7	3340	474.2	398.7	128.7	3343	470.0	394.8
60-80mm	8.95	9.53	128.7	2919	413.8	349.6	128.7	3104	397.4	343.9
80-100mm	0.9	0.76	128.7	1167	335.2	223.2	128.7	1195	361.4	235.0
All	143.45	144.74	128.7	3391	647.6	526.2	128.7	3417	648.0	532.7
			Height A (mm)				Height B (mm)			
Highest Particle			99.1293				99.3859			
Lowest Particle			5.0178				5.0178			

Table A. 356: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	23.25	128.7	3363	1086	668.7	128.7	3417	1074	675.5	-2.440	2.440	-0.040	0.590	-2.420	2.440	0.040	0.640
20-40mm	33.13	128.7	3391	770.8	488.9	128.7	3402	763.8	487.9	-2.440	2.440	-0.050	0.440	-2.440	2.410	0.060	0.520
40-60mm	23.97	128.7	3340	557.1	423.1	128.7	3343	552.4	424.6	-2.440	2.440	-0.020	0.350	-2.410	2.410	0.040	0.410
60-80mm	5.42	128.7	2919	497.7	369.1	128.7	2584	489.9	356.7	-2.420	2.400	-0.020	0.340	-2.210	2.320	-0.000	0.460
80-100mm	0.51	128.7	1167	424.2	252.0	128.7	1195	421.0	252.1	-0.450	0.150	-0.050	0.130	-1.910	0.470	-0.040	0.370
All	86.28	128.7	3391	777.2	562.0	128.7	3417	768.9	562.3	-2.440	2.440	-0.040	0.460	-2.440	2.440	0.040	0.520

Table A. 357: Matched Droplet Info

A.4.4.2 All Droplets for .LA Image

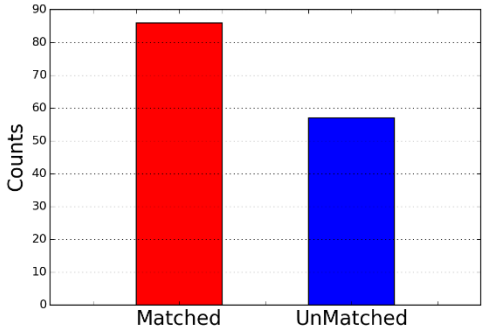


Figure A. 3381: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

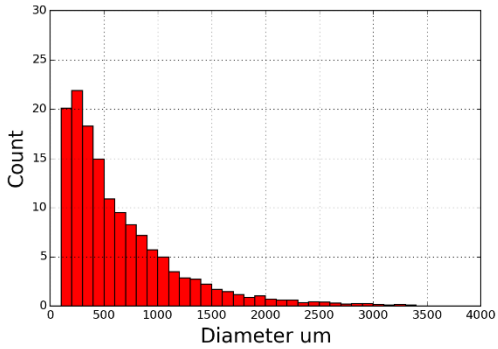


Figure A. 3382: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

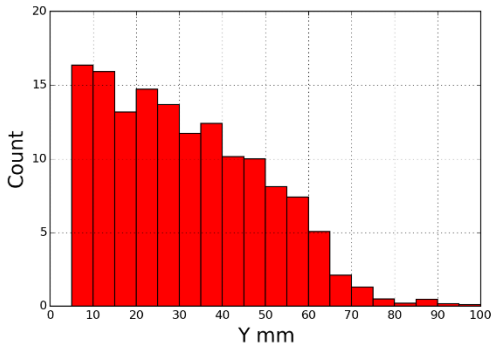


Figure A. 3383: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

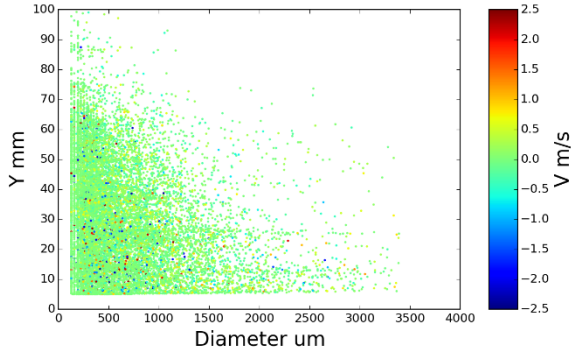


Figure A. 3384: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

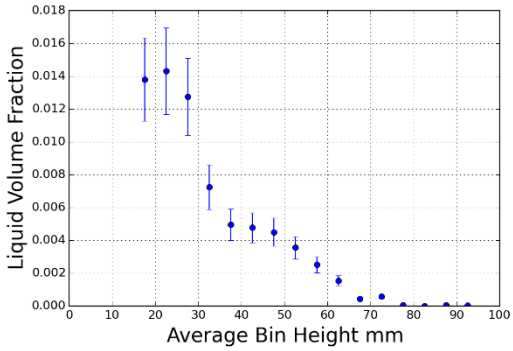


Figure A. 3385: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 All Droplets for .LB Image

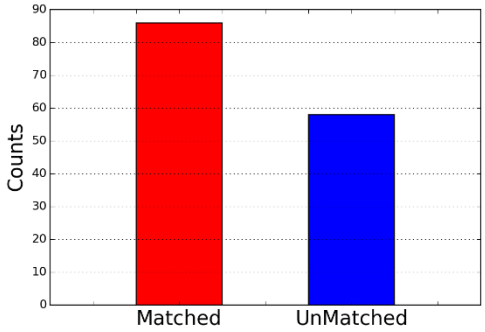


Figure A. 3386: CHC Count Comparison R-134a 40F 10000Btu 30000Lb Tri

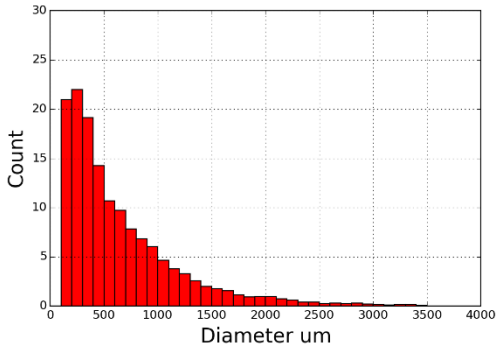


Figure A. 3387: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

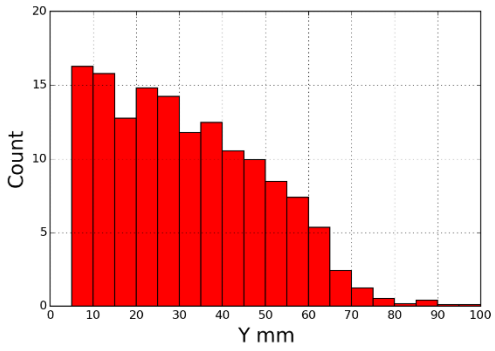


Figure A. 3388: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

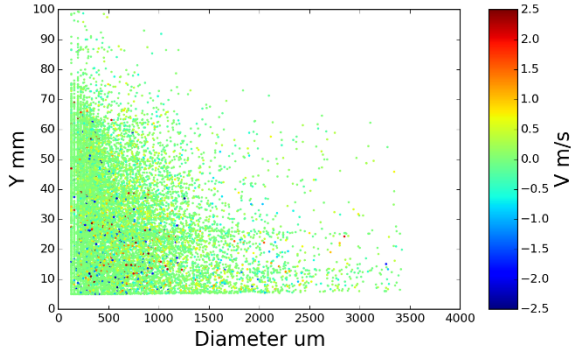


Figure A. 3389: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

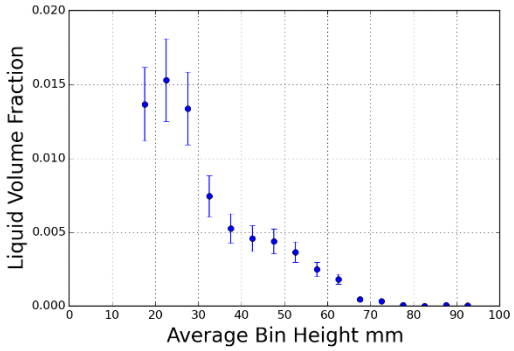


Figure A. 3390: Void Fraction R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 Matched Only Droplets for .LA Image

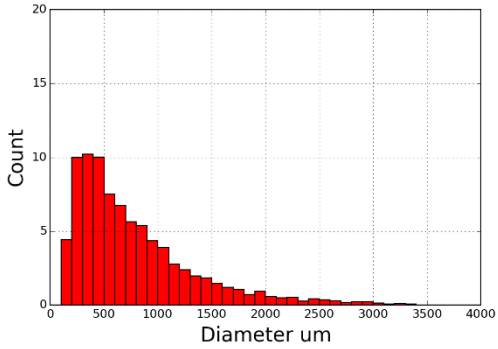


Figure A. 3391: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

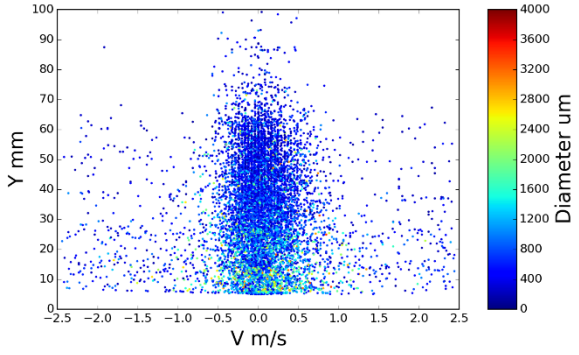


Figure A. 3394: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

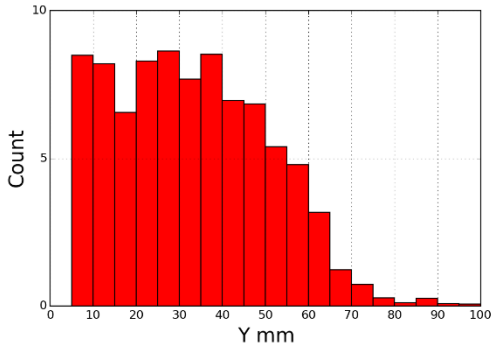


Figure A. 3392: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

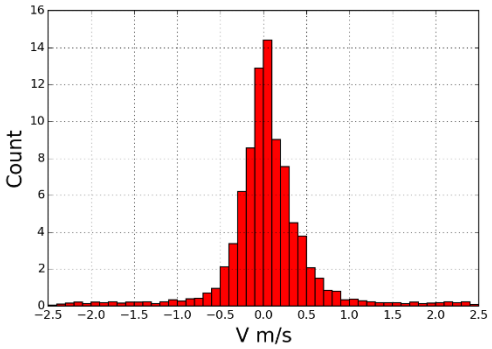


Figure A. 3395: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

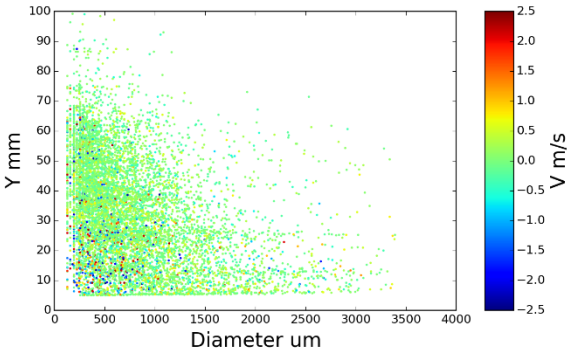


Figure A. 3393: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri

A.4.4.2 Matched Only Droplets for .LB Image

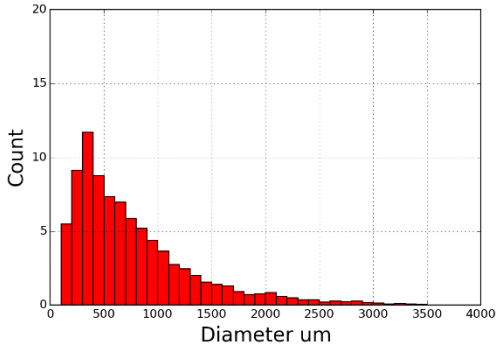


Figure A. 3396: Droplet Diameter Histogram R-134a 40F 10000Btu 30000Lb Tri

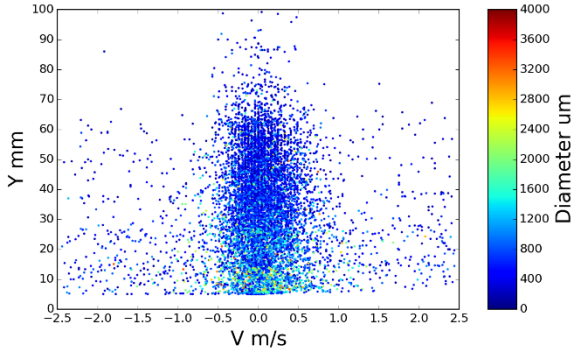


Figure A. 3399: Droplet Height vs Vertical Velocity R-134a 40F 10000Btu 30000Lb Tri

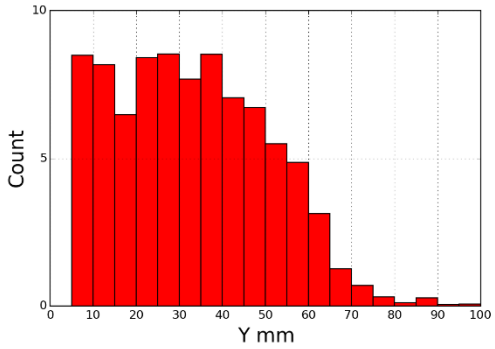


Figure A. 3397: Droplet Height Histogram R-134a 40F 10000Btu 30000Lb Tri

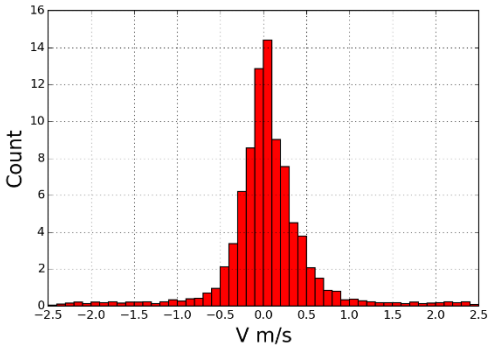


Figure A. 3400: Droplet Vertical Velocity Histogram R-134a 40F 10000Btu 30000Lb Tri

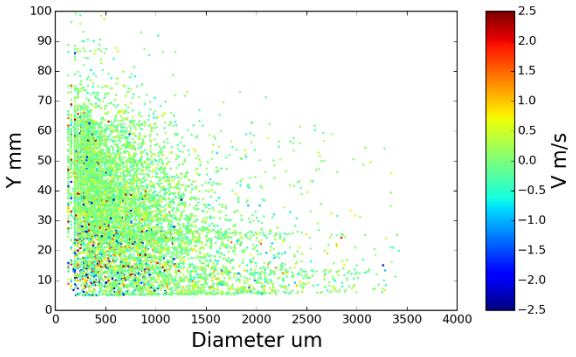


Figure A. 3398: Droplet Height vs Diameter R-134a 40F 10000Btu 30000Lb Tri