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

by

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Appendix B: Triangular bundle with R-123

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B.5.1.1 Lens 100mm Mag 0_29x 433
B.5.1.1 Depth J 433
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B.5.1.1 Matched Only Droplets for .LA Image 436
B.5.1.1 Matched Only Droplets for .LB Image 437
B.5.1.1 Depth K 438
B.5.1.1 All Droplets for .LA Image 439
B.5.1.1 All Droplets for .LB Image 440
B.5.1.1 Matched Only Droplets for .LA Image 441
B.5.1.1 Matched Only Droplets for .LB Image 442
B.5.1.1 Depth L 443
B.5.1.1 All Droplets for .LA Image 444
B.5.1.1 All Droplets for .LB Image 445
B.5.1.1 Matched Only Droplets for .LA Image 446
B.5.1.1 Matched Only Droplets for .LB Image 447
B.5.1.2 Lens 50mm Mag 0_13x 448
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B.5.1.2 All Droplets for .LA Image 449

B.5.1.2 All Droplets for .LB Image 450
B.5.1.2 Matched Only Droplets for .LA Image 451
B.5.1.2 Matched Only Droplets for .LB Image 452
B.5.1.2 Depth K 453
B.5.1.2 All Droplets for .LA Image 454
B.5.1.2 All Droplets for .LB Image 455
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B.5.1.2 Depth L 458
B.5.1.2 All Droplets for .LA Image 459
B.5.1.2 All Droplets for .LB Image 460
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B.5.2.1 Matched Only Droplets for .LA Image 471
B.5.2.1 Matched Only Droplets for .LB Image 472
B.5.2.1 Depth L 473
B.5.2.1 All Droplets for .LA Image 474
B.5.2.1 All Droplets for .LB Image 475
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B.5.2.1 Matched Only Droplets for .LB Image 477
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B.5.2.2 Lens 50mm Mag 0_13x 488
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B.5.2.2 All Droplets for .LA Image 489
B.5.2.2 All Droplets for .LB Image 490
B.5.2.2 Matched Only Droplets for .LA Image 491
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B.5.2.2 Depth K 493
B.5.2.2 All Droplets for .LA Image 494
B.5.2.2 All Droplets for .LB Image 495
B.5.2.2 Matched Only Droplets for .LA Image 496
B.5.2.2 Matched Only Droplets for .LB Image 497
B.5.2.2 Depth L 498
B.5.2.2 All Droplets for .LA Image 499
B.5.2.2 All Droplets for .LB Image 500
B.5.2.2 Matched Only Droplets for .LA Image 501
B.5.2.2 Matched Only Droplets for .LB Image 502
B.5.2.2 Depth M 503
B.5.2.2 All Droplets for .LA Image 504

B.5.2.2 All Droplets for .LB Image 505
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B.5.2.2 Matched Only Droplets for .LB Image 507
B.5.2.2 Depth N 508
B.5.2.2 All Droplets for .LA Image 509
B.5.2.2 All Droplets for .LB Image 510
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B.5.2.2 Matched Only Droplets for .LB Image 512
B.5.3 Liquid Level 3 513
B.5.3.1 Lens 100mm Mag 0_29x 513
B.5.3.1 Depth J 513
B.5.3.1 All Droplets for .LA Image 514
B.5.3.1 All Droplets for .LB Image 515
B.5.3.1 Matched Only Droplets for .LA Image 516
B.5.3.1 Matched Only Droplets for .LB Image 517
B.5.3.1 Depth K 518
B.5.3.1 All Droplets for .LA Image 519
B.5.3.1 All Droplets for .LB Image 520
B.5.3.1 Matched Only Droplets for .LA Image 521
B.5.3.1 Matched Only Droplets for .LB Image 522
B.5.3.1 Depth L 523
B.5.3.1 All Droplets for .LA Image 524
B.5.3.1 All Droplets for .LB Image 525
B.5.3.1 Matched Only Droplets for .LA Image 526
B.5.3.1 Matched Only Droplets for .LB Image 527
B.5.3.1 Depth M 528
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B.5.3.1 All Droplets for .LB Image 530
B.5.3.1 Matched Only Droplets for .LA Image 531

B.5.3.1 Matched Only Droplets for .LB Image 532
B.5.3.1 Depth N 533
B.5.3.1 All Droplets for .LA Image 534
B.5.3.1 All Droplets for .LB Image 535
B.5.3.1 Matched Only Droplets for .LA Image 536
B.5.3.1 Matched Only Droplets for .LB Image 537
B.5.3.2 Lens 50mm Mag 0_13x 538
B.5.3.2 Depth J 538
B.5.3.2 All Droplets for .LA Image 539
B.5.3.2 All Droplets for .LB Image 540
B.5.3.2 Matched Only Droplets for .LA Image 541
B.5.3.2 Matched Only Droplets for .LB Image 542
B.5.3.2 Depth K 543
B.5.3.2 All Droplets for .LA Image 544
B.5.3.2 All Droplets for .LB Image 545
B.5.3.2 Matched Only Droplets for .LA Image 546
B.5.3.2 Matched Only Droplets for .LB Image 547
B.5.3.2 Depth L 548
B.5.3.2 All Droplets for .LA Image 549
B.5.3.2 All Droplets for .LB Image 550
B.5.3.2 Matched Only Droplets for .LA Image 551
B.5.3.2 Matched Only Droplets for .LB Image 552
B.5.3.2 Depth M 553
B.5.3.2 All Droplets for .LA Image 554
B.5.3.2 All Droplets for .LB Image 555
B.5.3.2 Matched Only Droplets for .LA Image 556
B.5.3.2 Matched Only Droplets for .LB Image 557
B.5.3.2 Depth N 558
B.5.3.2 All Droplets for .LA Image 559

B.5.3.2 All Droplets for .LB Image 560
B.5.3.2 Matched Only Droplets for .LA Image 561
B.5.3.2 Matched Only Droplets for .LB Image 562
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B.6.1.1 Lens 100mm Mag 0_29x 564
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B.6.1.1 All Droplets for .LB Image 571
B.6.1.1 Matched Only Droplets for .LA Image 572
B.6.1.1 Matched Only Droplets for .LB Image 573
B.6.1.1 Depth L 574
B.6.1.1 All Droplets for .LA Image 575
B.6.1.1 All Droplets for .LB Image 576
B.6.1.1 Matched Only Droplets for .LA Image 577
B.6.1.1 Matched Only Droplets for .LB Image 578
B.6.1.2 Lens 50mm Mag 0_13x 579
B.6.1.2 Depth J 579
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B.6.1.2 All Droplets for .LB Image 581
B.6.1.2 Matched Only Droplets for .LA Image 582
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B.6.1.2 All Droplets for .LA Image 585

B.6.1.2 All Droplets for .LB Image 586
B.6.1.2 Matched Only Droplets for .LA Image 587
B.6.1.2 Matched Only Droplets for .LB Image 588
B.6.1.2 Depth L 589
B.6.1.2 All Droplets for .LA Image 590
B.6.1.2 All Droplets for .LB Image 591
B.6.1.2 Matched Only Droplets for .LA Image 592
B.6.1.2 Matched Only Droplets for .LB Image 593
B.6.2 Liquid Level 2 594
B.6.2.1 Lens 100mm Mag 0_29x 594
B.6.2.1 Depth J 594
B.6.2.1 All Droplets for .LA Image 595
B.6.2.1 All Droplets for .LB Image 596
B.6.2.1 Matched Only Droplets for .LA Image 597
B.6.2.1 Matched Only Droplets for .LB Image 598
B.6.2.1 Depth K 599
B.6.2.1 All Droplets for .LA Image 600
B.6.2.1 All Droplets for .LB Image 601
B.6.2.1 Matched Only Droplets for .LA Image 602
B.6.2.1 Matched Only Droplets for .LB Image 603
B.6.2.1 Depth L 604
B.6.2.1 All Droplets for .LA Image 605
B.6.2.1 All Droplets for .LB Image 606
B.6.2.1 Matched Only Droplets for .LA Image 607
B.6.2.1 Matched Only Droplets for .LB Image 608
B.6.2.2 Lens 50mm Mag 0_13x 609
B.6.2.2 Depth J 609
B.6.2.2 All Droplets for .LA Image 610
B.6.2.2 All Droplets for .LB Image 611

B.6.2.2 Matched Only Droplets for .LA Image 612
B.6.2.2 Matched Only Droplets for .LB Image 613
B.6.2.2 Depth K 614
B.6.2.2 All Droplets for .LA Image 615
B.6.2.2 All Droplets for .LB Image 616
B.6.2.2 Matched Only Droplets for .LA Image 617
B.6.2.2 Matched Only Droplets for .LB Image 618
B.6.2.2 Depth L 619
B.6.2.2 All Droplets for .LA Image 620
B.6.2.2 All Droplets for .LB Image 621
B.6.2.2 Matched Only Droplets for .LA Image 622
B.6.2.2 Matched Only Droplets for .LB Image 623
B.6.3 Liquid Level 3 624
B.6.3.1 Lens 100mm Mag 0_29x 624
B.6.3.1 Depth J 624
B.6.3.1 All Droplets for .LA Image 625
B.6.3.1 All Droplets for .LB Image 626
B.6.3.1 Matched Only Droplets for .LA Image 627
B.6.3.1 Matched Only Droplets for .LB Image 628
B.6.3.1 Depth K 629
B.6.3.1 All Droplets for .LA Image 630
B.6.3.1 All Droplets for .LB Image 631
B.6.3.1 Matched Only Droplets for .LA Image 632
B.6.3.1 Matched Only Droplets for .LB Image 633
B.6.3.1 Depth L 634
B.6.3.1 All Droplets for .LA Image 635
B.6.3.1 All Droplets for .LB Image 636
B.6.3.1 Matched Only Droplets for .LA Image 637
B.6.3.1 Matched Only Droplets for .LB Image 638

B.6.3.1 Depth M 639
B.6.3.1 All Droplets for .LA Image 640
B.6.3.1 All Droplets for .LB Image 641
B.6.3.1 Matched Only Droplets for .LA Image 642
B.6.3.1 Matched Only Droplets for .LB Image 643
B.6.3.1 Depth N 644
B.6.3.1 All Droplets for .LA Image 645
B.6.3.1 All Droplets for .LB Image 646
B.6.3.1 Matched Only Droplets for .LA Image 647
B.6.3.1 Matched Only Droplets for .LB Image 648
B.6.3.2 Lens 50mm Mag 0_13x 649
B.6.3.2 Depth J 649
B.6.3.2 All Droplets for .LA Image 650
B.6.3.2 All Droplets for .LB Image 651
B.6.3.2 Matched Only Droplets for .LA Image 652
B.6.3.2 Matched Only Droplets for .LB Image 653
B.6.3.2 Depth K 654
B.6.3.2 All Droplets for .LA Image 655
B.6.3.2 All Droplets for .LB Image 656
B.6.3.2 Matched Only Droplets for .LA Image 657
B.6.3.2 Matched Only Droplets for .LB Image 658
B.6.3.2 Depth L 659
B.6.3.2 All Droplets for .LA Image 660
B.6.3.2 All Droplets for .LB Image 661
B.6.3.2 Matched Only Droplets for .LA Image 662
B.6.3.2 Matched Only Droplets for .LB Image 663
B.6.3.2 Depth M 664
B.6.3.2 All Droplets for .LA Image 665
B.6.3.2 All Droplets for .LB Image 666

B.6.3.2 Matched Only Droplets for .LA Image 667
B.6.3.2 Matched Only Droplets for .LB Image 668
B.6.3.2 Depth N 669
B.6.3.2 All Droplets for .LA Image 670
B.6.3.2 All Droplets for .LB Image 671
B.6.3.2 Matched Only Droplets for .LA Image 672
B.6.3.2 Matched Only Droplets for .LB Image 673
B.7 - 1556 R-123 55F 5000Btu 30000Lb Tri 674
B.7.1 Liquid Level 1 674
B.7.1.1 Lens 100mm Mag 0_29x 674
B.7.1.1 Depth J 674
B.7.1.1 All Droplets for .LA Image 675
B.7.1.1 All Droplets for .LB Image 676
B.7.1.1 Matched Only Droplets for .LA Image 677
B.7.1.1 Matched Only Droplets for .LB Image 678
B.7.1.1 Depth K 679
B.7.1.1 All Droplets for .LA Image 680
B.7.1.1 All Droplets for .LB Image 681
B.7.1.1 Matched Only Droplets for .LA Image 682
B.7.1.1 Matched Only Droplets for .LB Image 683
B.7.1.1 Depth L 684
B.7.1.1 All Droplets for .LA Image 685
B.7.1.1 All Droplets for .LB Image 686
B.7.1.1 Matched Only Droplets for .LA Image 687
B.7.1.1 Matched Only Droplets for .LB Image 688
B.7.1.2 Lens 50mm Mag 0_13x 689
B.7.1.2 Depth J 689
B.7.1.2 All Droplets for .LA Image 690
B.7.1.2 All Droplets for .LB Image 691

B.7.1.2 Matched Only Droplets for .LA Image 692
B.7.1.2 Matched Only Droplets for .LB Image 693
B.7.1.2 Depth K 694
B.7.1.2 All Droplets for .LA Image 695
B.7.1.2 All Droplets for .LB Image 696
B.7.1.2 Matched Only Droplets for .LA Image 697
B.7.1.2 Matched Only Droplets for .LB Image 698
B.7.1.2 Depth L 699
B.7.1.2 All Droplets for .LA Image 700
B.7.1.2 All Droplets for .LB Image 701
B.7.1.2 Matched Only Droplets for .LA Image 702
B.7.1.2 Matched Only Droplets for .LB Image 703
B.7.2 Liquid Level 2 704
B.7.2.1 Lens 100mm Mag 0_29x 704
B.7.2.1 Depth J 704
B.7.2.1 All Droplets for .LA Image 705
B.7.2.1 All Droplets for .LB Image 706
B.7.2.1 Matched Only Droplets for .LA Image 707
B.7.2.1 Matched Only Droplets for .LB Image 708
B.7.2.1 Depth K 709
B.7.2.1 All Droplets for .LA Image 710
B.7.2.1 All Droplets for .LB Image 711
B.7.2.1 Matched Only Droplets for .LA Image 712
B.7.2.1 Matched Only Droplets for .LB Image 713
B.7.2.1 Depth L 714
B.7.2.1 All Droplets for .LA Image 715
B.7.2.1 All Droplets for .LB Image 716
B.7.2.1 Matched Only Droplets for .LA Image 717
B.7.2.1 Matched Only Droplets for .LB Image 718

B.7.2.2 Lens 50mm Mag 0_13x 719
B.7.2.2 Depth J 719
B.7.2.2 All Droplets for .LA Image 720
B.7.2.2 All Droplets for .LB Image 721
B.7.2.2 Matched Only Droplets for .LA Image 722
B.7.2.2 Matched Only Droplets for .LB Image 723
B.7.2.2 Depth K 724
B.7.2.2 All Droplets for .LA Image 725
B.7.2.2 All Droplets for .LB Image 726
B.7.2.2 Matched Only Droplets for .LA Image 727
B.7.2.2 Matched Only Droplets for .LB Image 728
B.7.2.2 Depth L 729
B.7.2.2 All Droplets for .LA Image 730
B.7.2.2 All Droplets for .LB Image 731
B.7.2.2 Matched Only Droplets for .LA Image 732
B.7.2.2 Matched Only Droplets for .LB Image 733
B.7.3 Liquid Level 3 734
B.7.3.1 Lens 100mm Mag 0_29x 734
B.7.3.1 Depth J 734
B.7.3.1 All Droplets for .LA Image 735
B.7.3.1 All Droplets for .LB Image 736
B.7.3.1 Matched Only Droplets for .LA Image 737
B.7.3.1 Matched Only Droplets for .LB Image 738
B.7.3.1 Depth K 739
B.7.3.1 All Droplets for .LA Image 740
B.7.3.1 All Droplets for .LB Image 741
B.7.3.1 Matched Only Droplets for .LA Image 742
B.7.3.1 Matched Only Droplets for .LB Image 743
B.7.3.1 Depth L 744

B.7.3.1 All Droplets for .LA Image 745
B.7.3.1 All Droplets for .LB Image 746
B.7.3.1 Matched Only Droplets for .LA Image 747
B.7.3.1 Matched Only Droplets for .LB Image 748
B.7.3.2 Lens 50mm Mag 0_13x 749
B.7.3.2 Depth J 749
B.7.3.2 All Droplets for .LA Image 750
B.7.3.2 All Droplets for .LB Image 751
B.7.3.2 Matched Only Droplets for .LA Image 752
B.7.3.2 Matched Only Droplets for .LB Image 753
B.7.3.2 Depth K 754
B.7.3.2 All Droplets for .LA Image 755
B.7.3.2 All Droplets for .LB Image 756
B.7.3.2 Matched Only Droplets for .LA Image 757
B.7.3.2 Matched Only Droplets for .LB Image 758
B.7.3.2 Depth L 759
B.7.3.2 All Droplets for .LA Image 760
B.7.3.2 All Droplets for .LB Image 761
B.7.3.2 Matched Only Droplets for .LA Image 762
B.7.3.2 Matched Only Droplets for .LB Image 763
B.7.3.2 Depth M 764
B.7.3.2 All Droplets for .LA Image 765
B.7.3.2 All Droplets for .LB Image 766
B.7.3.2 Matched Only Droplets for .LA Image 767
B.7.3.2 Matched Only Droplets for .LB Image 768
B.7.3.2 Depth N 769
B.7.3.2 All Droplets for .LA Image 770
B.7.3.2 All Droplets for .LB Image 771
B.7.3.2 Matched Only Droplets for .LA Image 772

B.7.3.2 Matched Only Droplets for .LB Image 773
B.8 - 1556 R-123 55F 10000Btu 30000Lb Tri 774
B.8.1 Liquid Level 2 774
B.8.1.1 Lens 100mm Mag 0_29x 774
B.8.1.1 Depth J 774
B.8.1.1 Table B. 332: Matched Droplet InfoAll Droplets for .LA Image 774
B.8.1.1 All Droplets for .LB Image 776
B.8.1.1 Matched Only Droplets for .LA Image 777
B.8.1.1 Matched Only Droplets for .LB Image 778
B.8.1.1 Depth K 779
B.8.1.1 All Droplets for .LA Image 780
B.8.1.1 All Droplets for .LB Image 781
B.8.1.1 Matched Only Droplets for .LA Image 782
B.8.1.1 Matched Only Droplets for .LB Image 783
B.8.1.1 Depth L 784
B.8.1.1 All Droplets for .LA Image 785
B.8.1.1 All Droplets for .LB Image 786
B.8.1.1 Matched Only Droplets for .LA Image 787
B.8.1.1 Matched Only Droplets for .LB Image 788
B.8.1.2 Lens 50mm Mag 0_13x 789
B.8.1.2 Depth J 789
B.8.1.2 All Droplets for .LA Image 790
B.8.1.2 All Droplets for .LB Image 791
B.8.1.2 Matched Only Droplets for .LA Image 792
B.8.1.2 Matched Only Droplets for .LB Image 793
B.8.1.2 Depth K 794
B.8.1.2 All Droplets for .LA Image 795
B.8.1.2 All Droplets for .LB Image 796
B.8.1.2 Matched Only Droplets for .LA Image 797

B.8.1.2 Matched Only Droplets for .LB Image 798
B.8.1.2 Depth L 799
B.8.1.2 All Droplets for .LA Image 800
B.8.1.2 All Droplets for .LB Image 801
B.8.1.2 Matched Only Droplets for .LA Image 802
B.8.1.2 Matched Only Droplets for .LB Image 803
B.8.2 Liquid Level 3 804
B.8.2.1 Lens 100mm Mag 0_29x 804
B.8.2.1 Depth J 804
B.8.2.1 All Droplets for .LA Image 805
B.8.2.1 All Droplets for .LB Image 806
B.8.2.1 Matched Only Droplets for .LA Image 807
B.8.2.1 Matched Only Droplets for .LB Image 808
B.8.2.1 Depth K 809
B.8.2.1 All Droplets for .LA Image 810
B.8.2.1 All Droplets for .LB Image 811
B.8.2.1 Matched Only Droplets for .LA Image 812
B.8.2.1 Matched Only Droplets for .LB Image 813
B.8.2.1 Depth L 814
B.8.2.1 All Droplets for .LA Image 815
B.8.2.1 All Droplets for .LB Image 816
B.8.2.1 Matched Only Droplets for .LA Image 817
B.8.2.1 Matched Only Droplets for .LB Image 818
B.8.2.2 Lens 50mm Mag 0_13x 819
B.8.2.2 Depth J 819
B.8.2.2 All Droplets for .LA Image 820
B.8.2.2 All Droplets for .LB Image 821
B.8.2.2 Matched Only Droplets for .LA Image 822
B.8.2.2 Matched Only Droplets for .LB Image 823

B.8.2.2 Depth K 824
B.8.2.2 All Droplets for .LA Image 825
B.8.2.2 All Droplets for .LB Image 826
B.8.2.2 Matched Only Droplets for .LA Image 827
B.8.2.2 Matched Only Droplets for .LB Image 828
B.8.2.2 Depth L 829
B.8.2.2 All Droplets for .LA Image 830
B.8.2.2 All Droplets for .LB Image 831
B.8.2.2 Matched Only Droplets for .LA Image 832
B.8.2.2 Matched Only Droplets for .LB Image 833

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B.1.1 Liquid Level 1

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	11352 / 1.430
Ref Mass Flow (lb/hr) / (kg/s)	1594 / 0.201
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15516 / 21.043
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4875 / 15.38
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	40.1 / 4.51
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	41.7 / 5.38
Total Bundle Q (Btu/hr) / (kW)	125274 / 36.71
Total Bundle & Preboiler Q (Btu/hr) / (kW)	125274 / 36.71
Top Two Rows HTC Ratio	1.076
Bundle Inlet Quality	-0.05
Bundle Exit Quality	0.97

Table B. 1: Thermal Conditions

B.1.1.1 Lens 100mm Mag 0_29x

B.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	55.34	55.04	75.7	3939	602.0	665.0	75.7	3952	602.8	660.7
40-60mm	151.65	152.45	75.7	3950	578.7	622.2	75.7	3948	570.8	618.1
60-80mm	169.14	170.14	75.7	3925	508.9	519.5	75.7	3946	507.3	521.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	376.3	377.82	75.7	3950	550.7	586.5	75.7	3952	546.8	584.8
			Height A (mm)				Height B (mm)			
Highest Particle			78.5287				78.5170			
Lowest Particle			30.5600				30.5600			

Table B. 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	24.75	80.9	3895	859.7	731.6	80.9	3889	855.1	736.2	-2.170	2.170	-0.050	0.590	-2.150	2.170	0.090	0.660
40-60mm	78.69	80.9	3896	761.3	657.3	80.9	3948	751.9	661.8	-2.160	2.170	-0.080	0.550	-2.170	2.170	0.200	0.690
60-80mm	98.79	80.9	3718	641.2	548.8	80.9	3944	634.3	552.6	-2.170	2.170	-0.120	0.500	-2.170	2.170	0.280	0.680
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	202.23	80.9	3896	714.7	621.9	80.9	3948	706.7	625.8	-2.170	2.170	-0.100	0.530	-2.170	2.170	0.230	0.680

Table B. 3: Matched Droplet Info

B.1.1.1 All Droplets for .LA Image

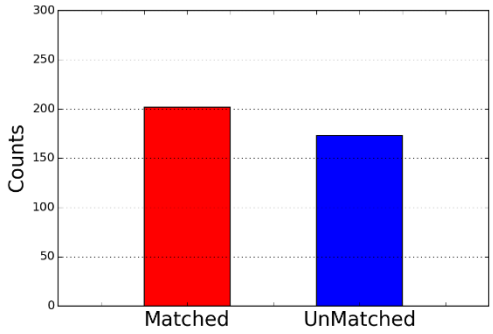


Figure B. 1: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

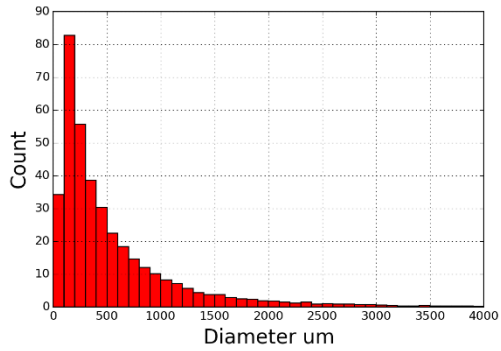


Figure B. 2: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

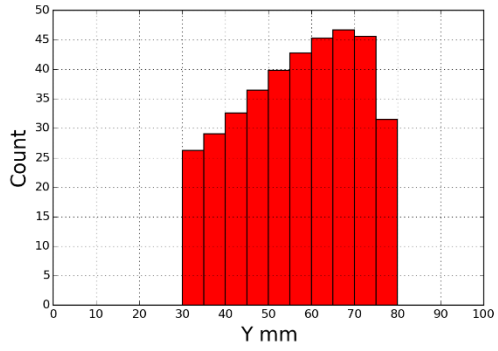


Figure B. 3: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

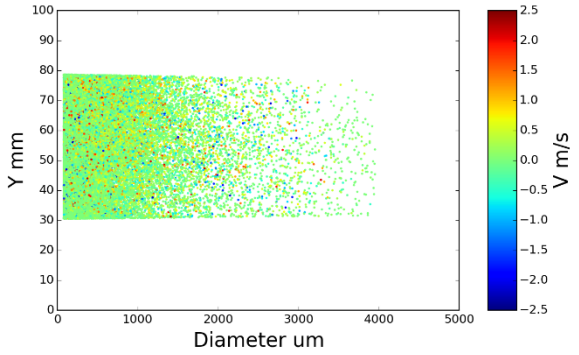


Figure B. 4: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

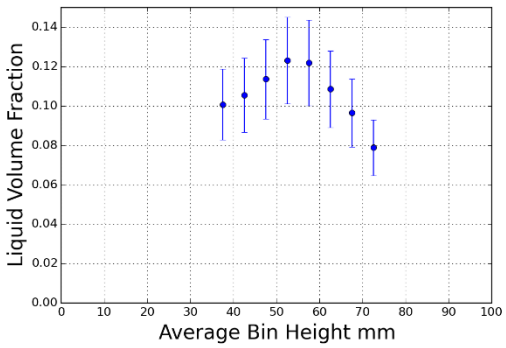


Figure B. 5: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.1.1 All Droplets for .LB Image

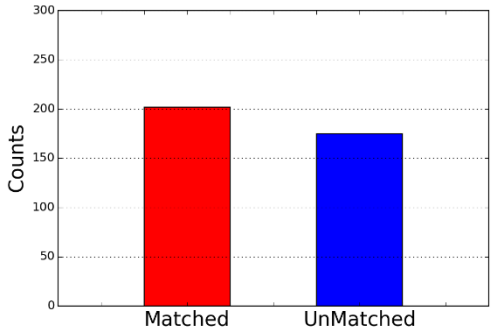


Figure B. 6: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

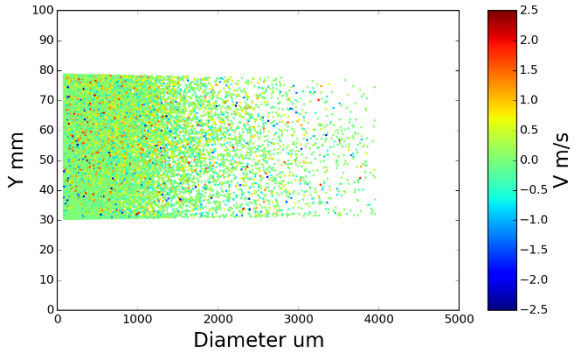


Figure B. 9: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

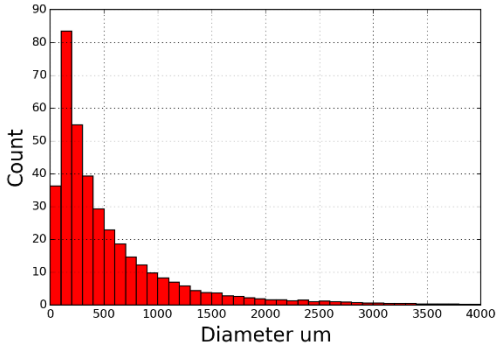


Figure B. 7: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

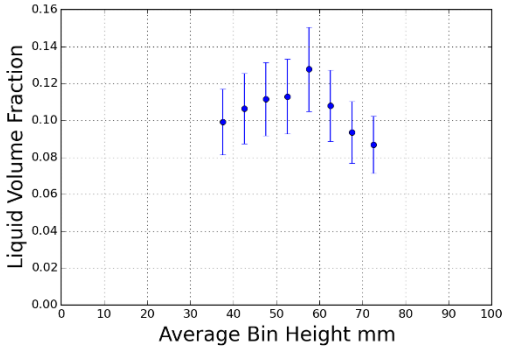


Figure B. 10: Void Fraction R-123 40F 5000Btu 15000Lb Tri

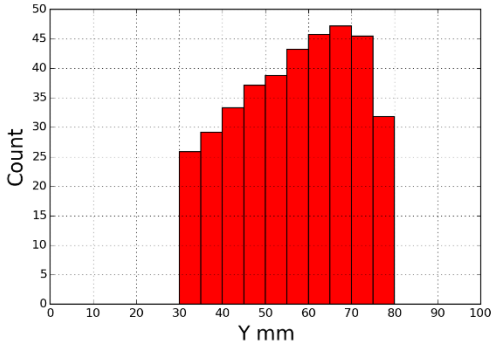


Figure B. 8: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.1.1 Matched Only Droplets for .LA Image

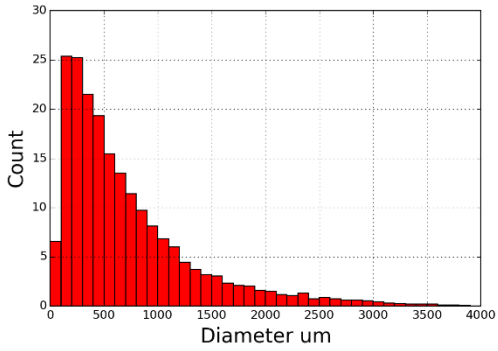


Figure B. 11: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

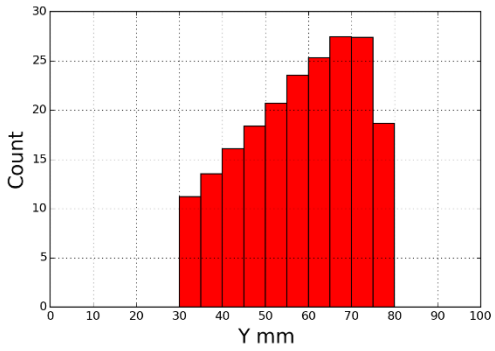


Figure B. 12: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

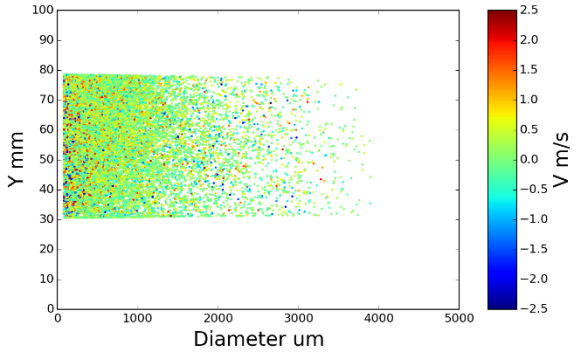


Figure B. 13: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

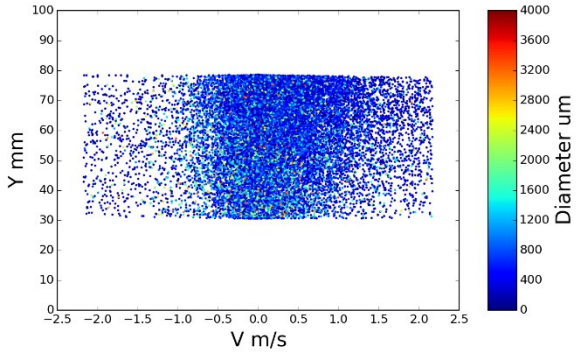


Figure B. 14: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

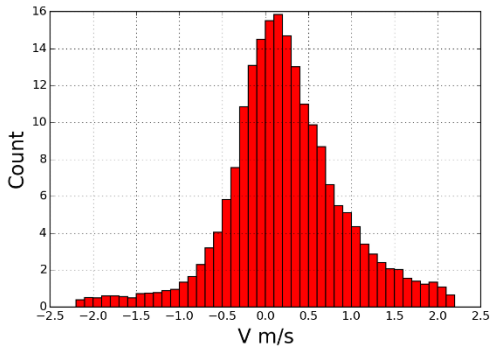


Figure B. 15: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.1.1 Matched Only Droplets for .LB Image

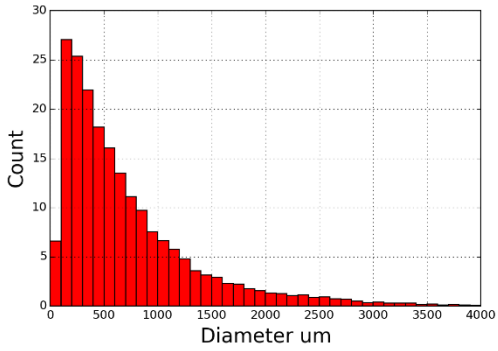


Figure B. 16: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

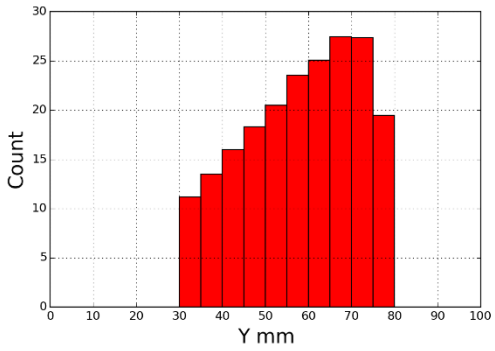


Figure B. 17: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

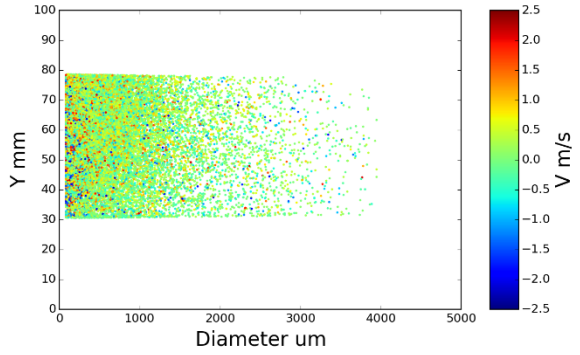


Figure B. 18: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

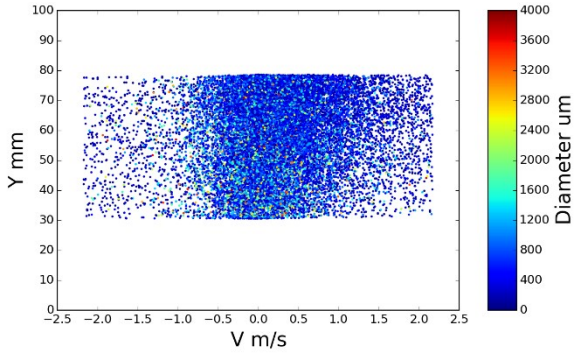


Figure B. 19: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

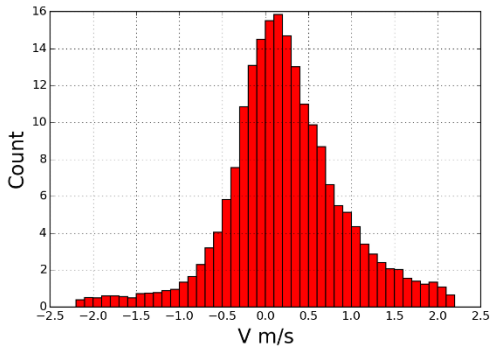


Figure B. 20: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

B.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	24.31	25.54	75.7	3942	868.6	856.0	75.7	3900	821.2	839.4
40-60mm	78.41	80.94	75.7	3951	788.7	768.5	75.7	3952	766.0	765.6
60-80mm	111.14	114.4	75.7	3941	647.4	644.2	75.7	3919	627.9	640.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	214.09	221.02	75.7	3951	724.3	722.8	75.7	3952	700.9	717.2
			Height A (mm)				Height B (mm)			
Highest Particle			78.5178				78.5178			
Lowest Particle			30.5600				30.5600			

Table B. 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	11.13	80.9	3805	1211	832.2	75.7	3834	1201	839.9	-1.990	2.140	-0.060	0.490	-2.040	2.150	0.100	0.580
40-60mm	41.65	80.9	3820	1038	762.2	80.9	3948	1029	768.6	-2.170	2.170	-0.070	0.450	-2.150	2.170	0.160	0.640
60-80mm	64.14	80.9	3786	829.3	656.1	80.9	3919	819.1	657.6	-2.170	2.170	-0.110	0.440	-2.170	2.170	0.220	0.620
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	116.92	80.9	3820	940.2	725.4	75.7	3948	929.9	729.2	-2.170	2.170	-0.090	0.450	-2.170	2.170	0.190	0.620

Table B. 5: Matched Droplet Info

B.1.1.1 All Droplets for .LA Image

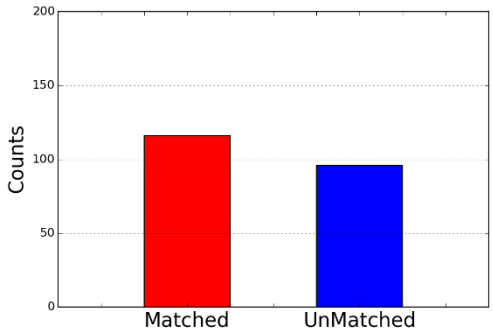


Figure B. 21: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

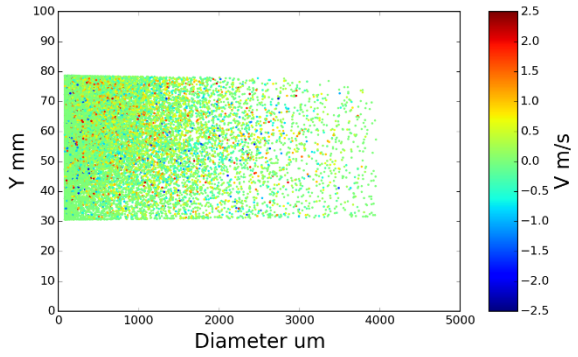


Figure B. 24: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

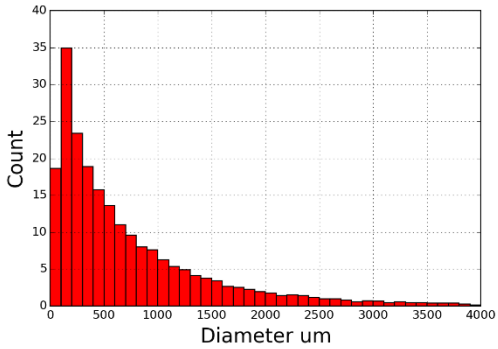


Figure B. 22: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

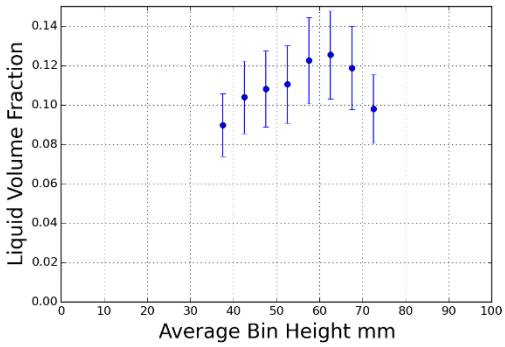


Figure B. 25: Void Fraction R-123 40F 5000Btu 15000Lb Tri

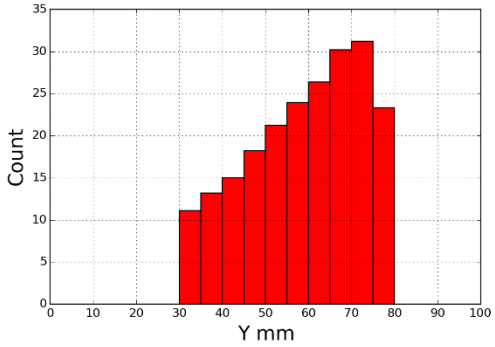


Figure B. 23: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.1.1 All Droplets for .LB Image

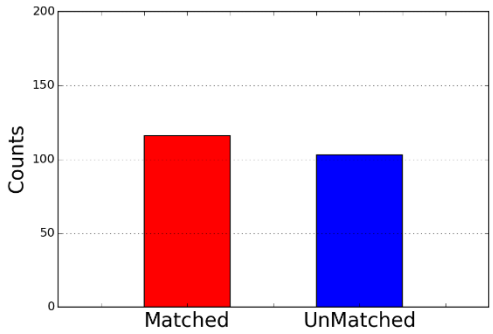


Figure B. 26: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

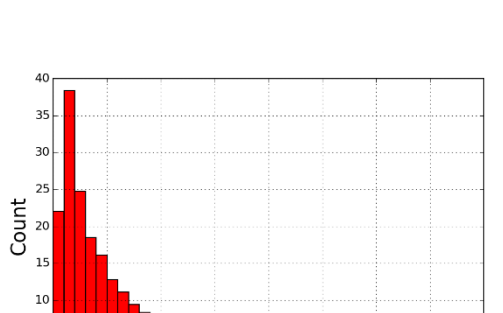


Figure B. 27: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

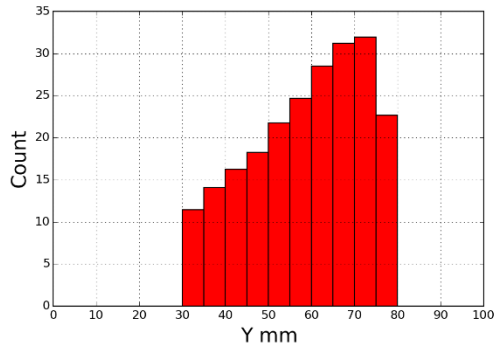


Figure B. 28: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

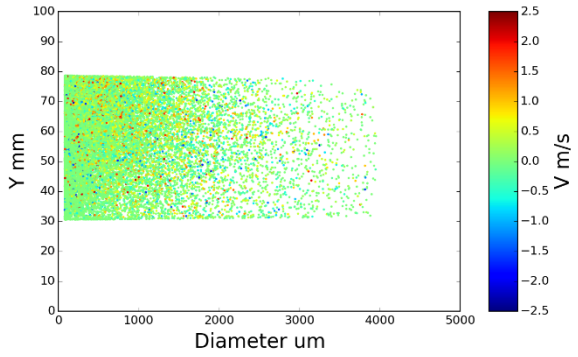


Figure B. 29: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

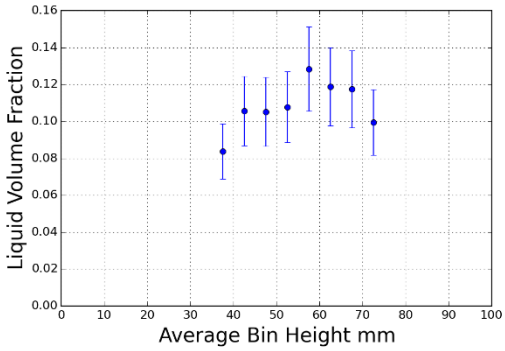


Figure B. 30: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.1.1 Matched Only Droplets for .LA Image

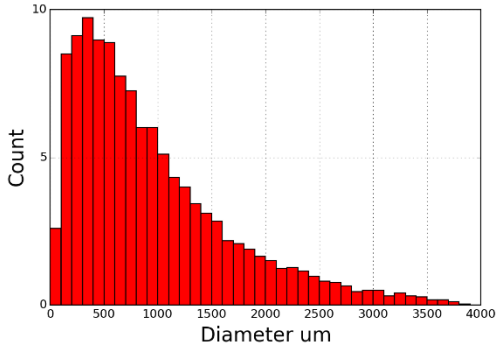


Figure B. 31: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

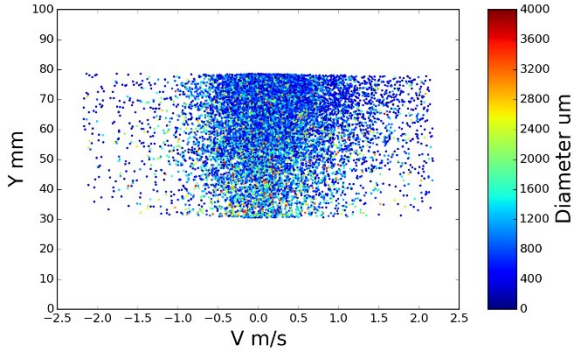


Figure B. 34: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

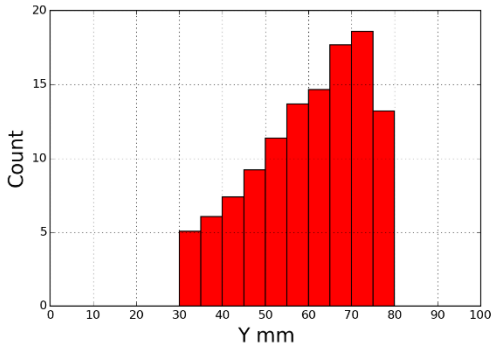


Figure B. 32: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

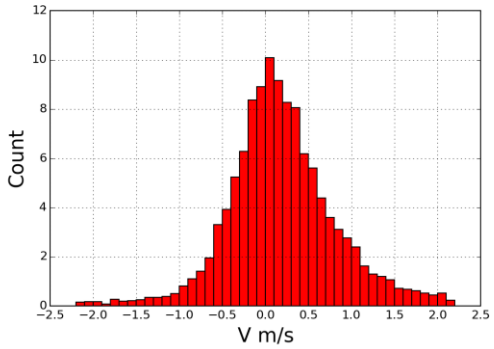


Figure B. 35: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

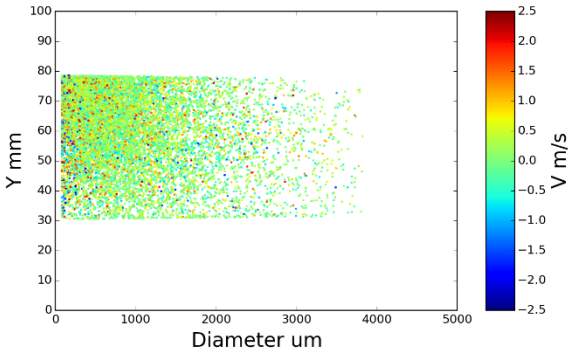


Figure B. 33: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.1.1 Matched Only Droplets for .LB Image

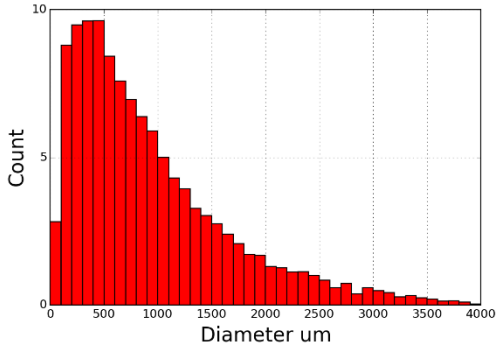


Figure B. 36: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

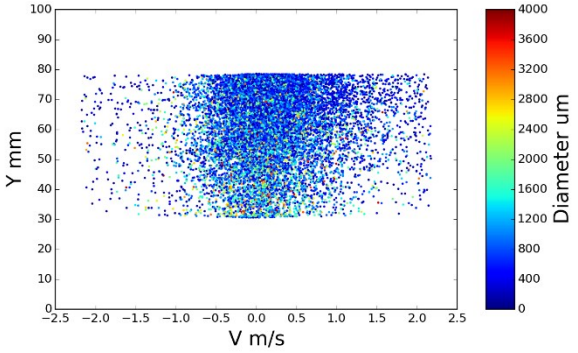


Figure B. 39: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

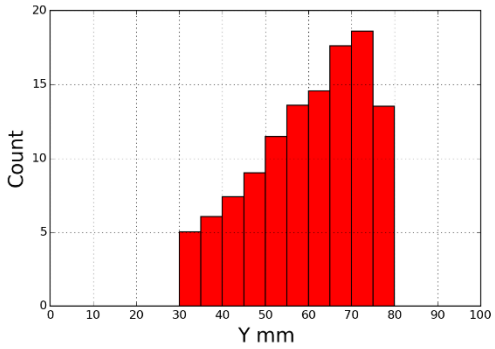


Figure B. 37: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

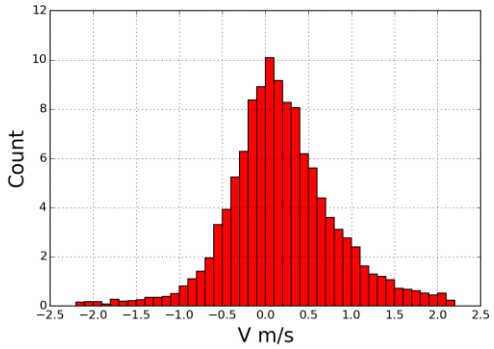


Figure B. 40: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

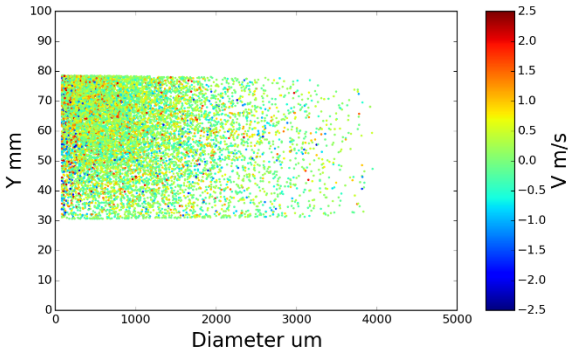


Figure B. 38: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.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	14.35	16.52	75.7	3940	991.2	1006	75.7	3911	896.1	978.5
40-60mm	49.37	54.55	75.7	3949	882.2	893.9	75.7	3947	815.7	892.6
60-80mm	74.47	79.87	75.7	3950	716.3	740.9	75.7	3942	673.3	737.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	138.41	151.12	75.7	3950	804.1	834.5	75.7	3947	749.2	829.4
			Height A (mm)				Height B (mm)			
Highest Particle			78.5170				78.5160			
Lowest Particle			30.5600				30.5600			

Table B. 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	6.72	80.9	3836	1506	963.9	75.7	3911	1499	991.5	-2.150	2.170	-0.020	0.520	-2.170	2.100	0.090	0.610
40-60mm	24.4	80.9	3949	1261	885.8	75.7	3947	1246	894.6	-2.170	2.170	-0.050	0.480	-2.170	2.170	0.160	0.660
60-80mm	39.73	80.9	3948	970.9	762.0	80.9	3942	958.7	774.2	-2.160	2.140	-0.080	0.480	-2.160	2.150	0.190	0.640
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	70.85	80.9	3949	1121	847.0	75.7	3947	1108	859.2	-2.170	2.170	-0.060	0.480	-2.170	2.170	0.170	0.650

Table B. 7: Matched Droplet Info

B.1.1.1 All Droplets for .LA Image

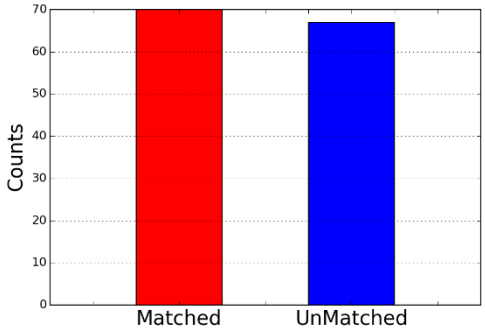


Figure B. 41: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

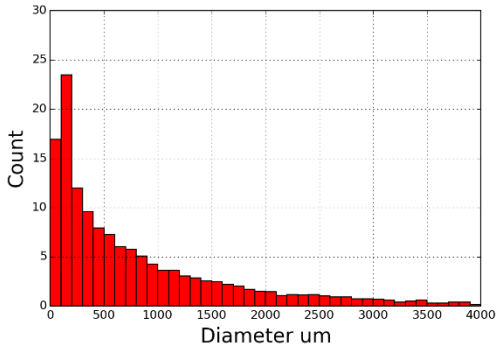


Figure B. 42: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

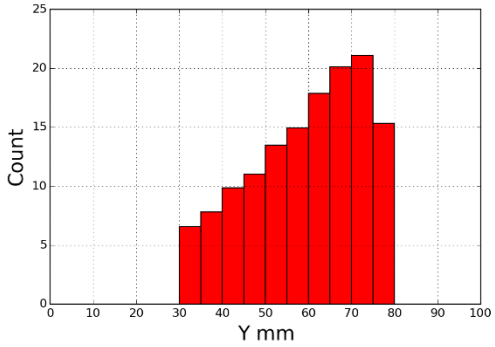


Figure B. 43: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

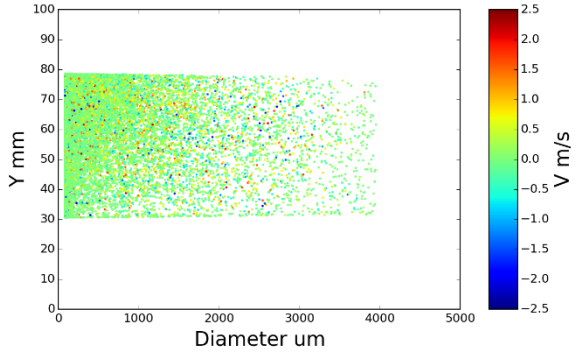


Figure B. 44: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

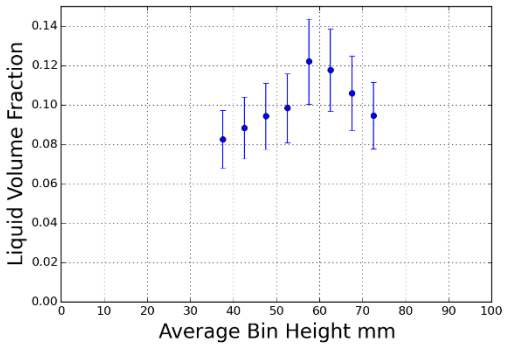


Figure B. 45: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.1.1 All Droplets for .LB Image

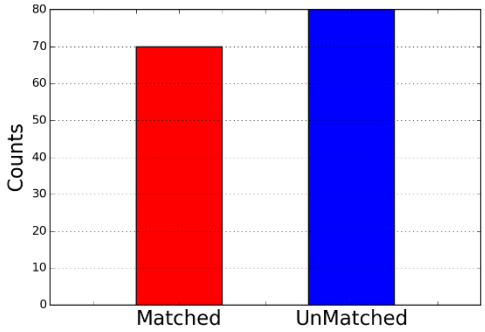


Figure B. 46: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

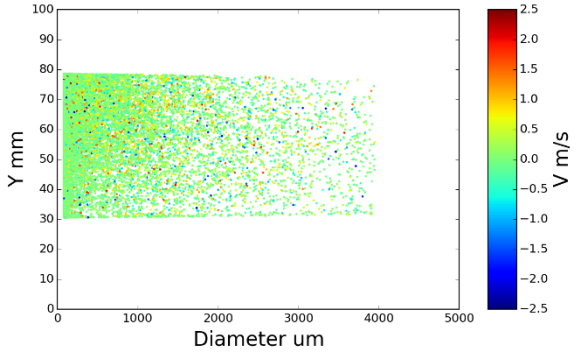


Figure B. 49: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

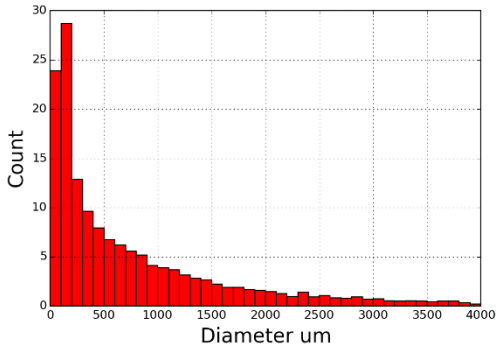


Figure B. 47: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

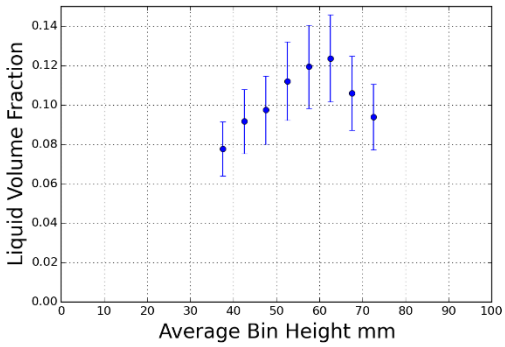


Figure B. 50: Void Fraction R-123 40F 5000Btu 15000Lb Tri

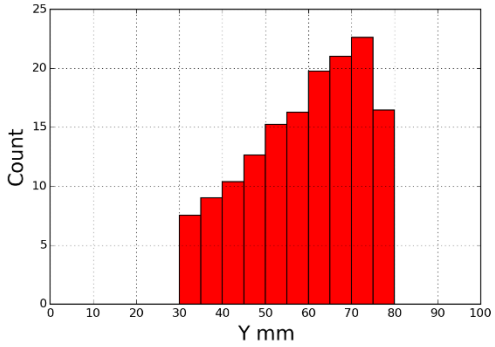


Figure B. 48: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.1.1 Matched Only Droplets for .LA Image

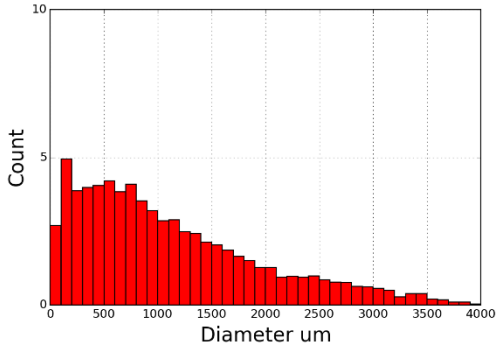


Figure B. 51: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

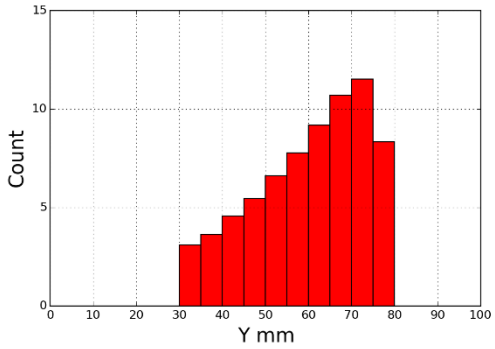


Figure B. 52: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

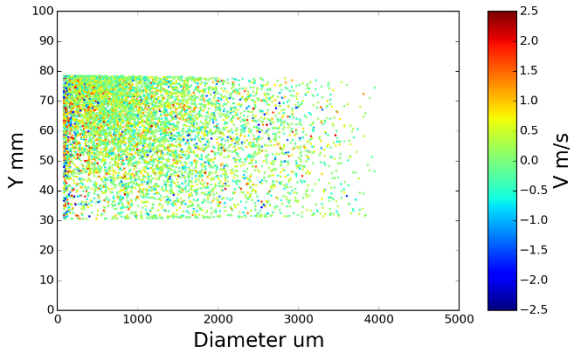


Figure B. 53: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

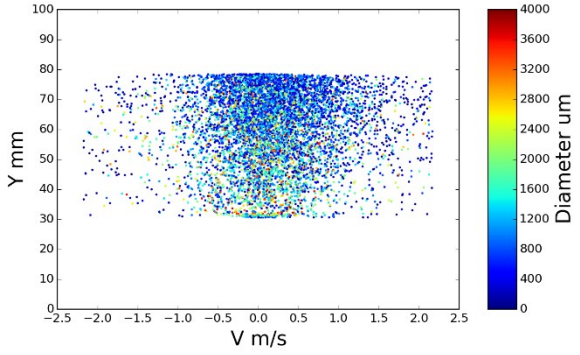


Figure B. 54: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

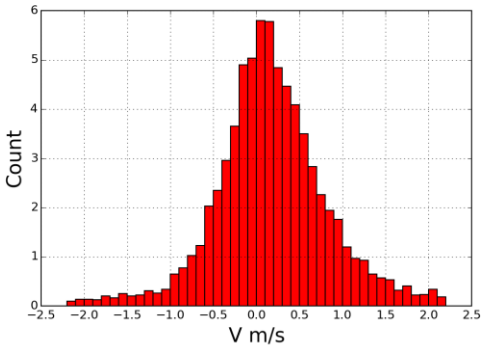


Figure B. 55: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.1.1 Matched Only Droplets for .LB Image

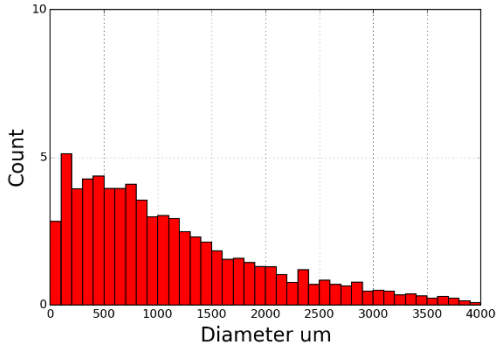


Figure B. 56: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

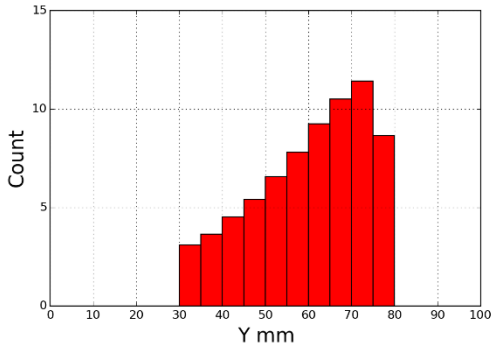


Figure B. 57: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

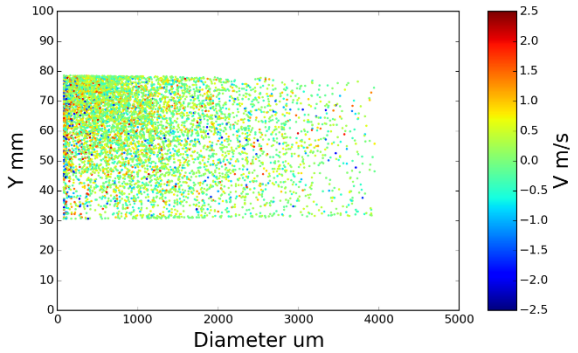


Figure B. 58: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

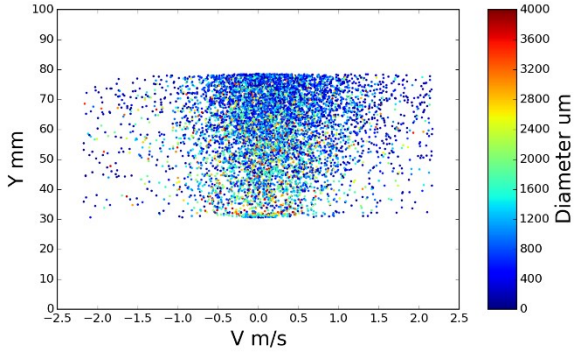


Figure B. 59: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

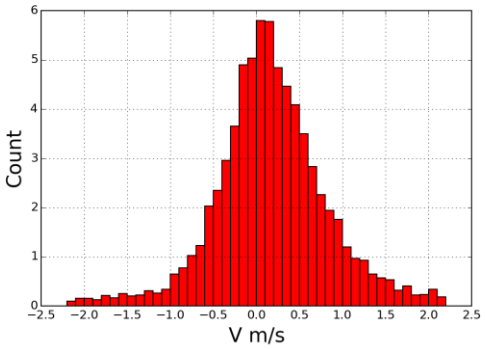


Figure B. 60: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.1.2 Lens 50mm Mag 0_13x

B.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	49.56	50.21	170.1	3982	762.7	685.2	181.9	3975	754.4	689.0
40-60mm	116.87	117.59	170.1	3986	754.3	662.4	170.1	3989	743.9	658.4
60-80mm	115.81	115.5	170.1	3965	727.4	593.1	181.9	3985	723.5	589.1
80-100mm	87.92	88.54	170.1	3932	582.7	398.8	170.1	3745	581.3	398.7
All	370.16	371.84	170.1	3986	706.3	595.1	170.1	3989	700.3	592.8
			Height A (mm)				Height B (mm)			
Highest Particle			99.9890				99.9890			
Lowest Particle			30.0907				30.1135			

Table B. 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	22.85	181.9	3778	894.8	713.9	181.9	3842	884.5	721.8	-2.160	2.160	-0.100	0.850	-2.160	2.160	0.120	0.880
40-60mm	59.96	181.9	3913	855.4	671.8	181.9	3989	837.3	679.1	-2.160	2.160	-0.120	0.800	-2.160	2.160	0.180	0.890
60-80mm	66.23	181.9	3815	827.0	606.2	181.9	3983	811.5	608.1	-2.160	2.160	-0.130	0.680	-2.160	2.160	0.230	0.800
80-100mm	57.46	181.9	3258	648.3	420.9	181.9	3745	636.0	412.9	-2.160	2.140	-0.130	0.540	-2.160	2.160	0.310	0.720
All	206.5	181.9	3913	793.0	602.5	181.9	3989	777.5	604.0	-2.160	2.160	-0.130	0.700	-2.160	2.160	0.230	0.810

Table B. 9: Matched Droplet Info

B.1.1.2 All Droplets for .LA Image

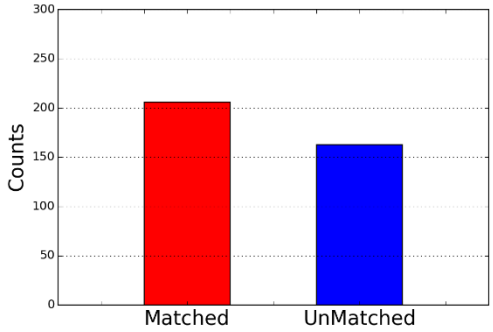


Figure B. 61: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

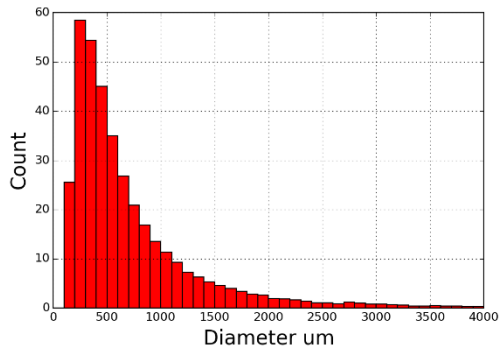


Figure B. 62: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

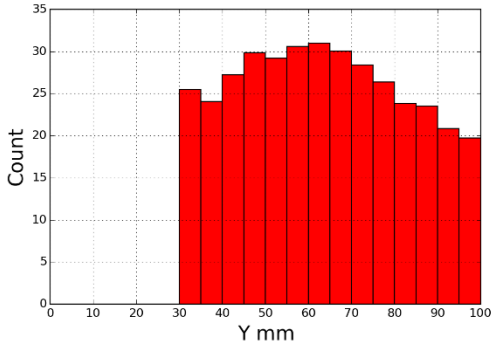


Figure B. 63: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

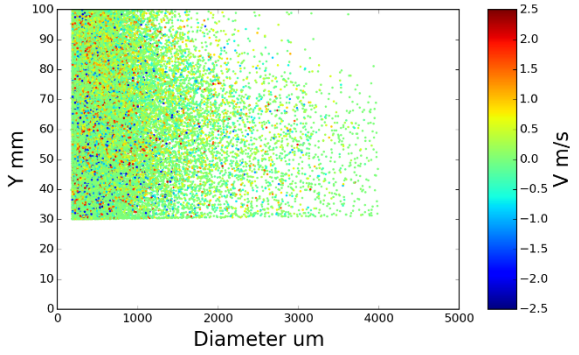


Figure B. 64: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

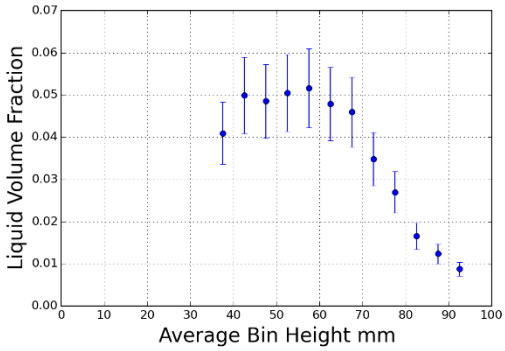


Figure B. 65: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.1.2 All Droplets for .LB Image

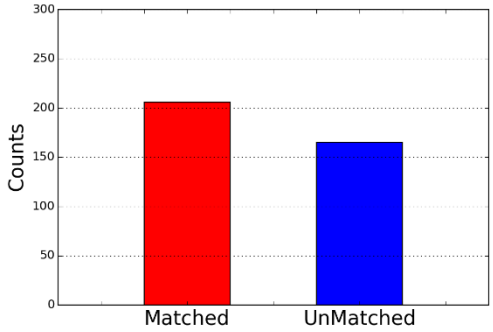


Figure B. 66: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

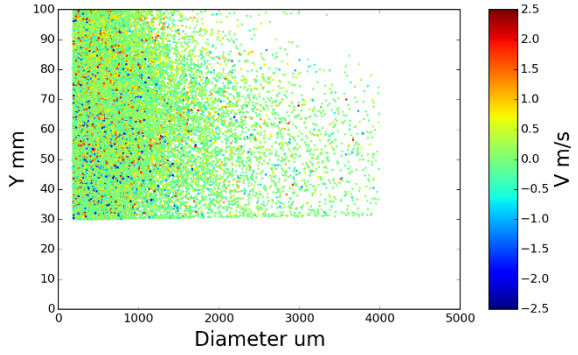


Figure B. 69: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

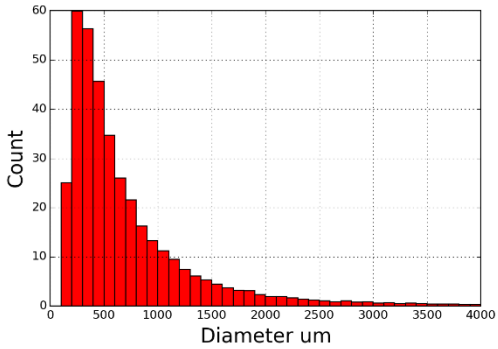


Figure B. 67: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

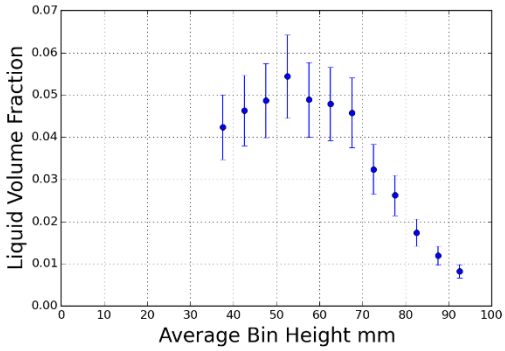


Figure B. 70: Void Fraction R-123 40F 5000Btu 15000Lb Tri

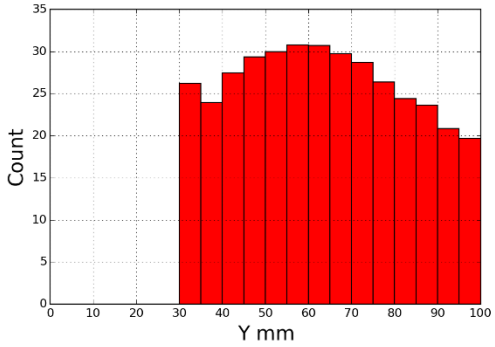


Figure B. 68: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.1.2 Matched Only Droplets for .LA Image

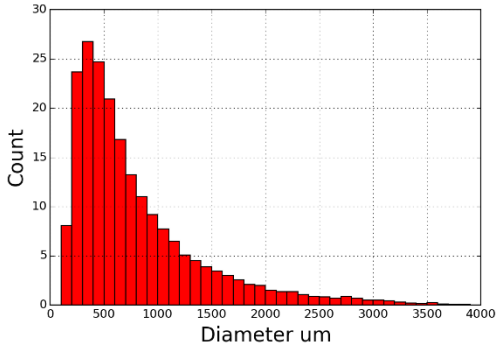


Figure B. 71: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

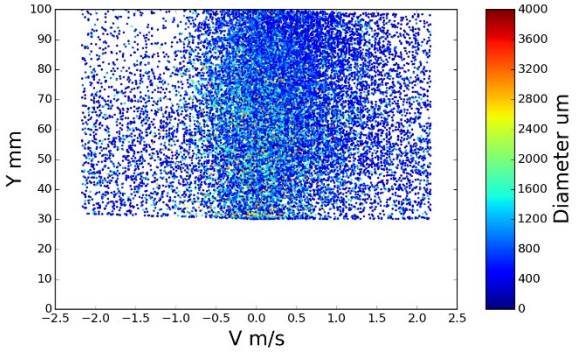


Figure B. 74: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

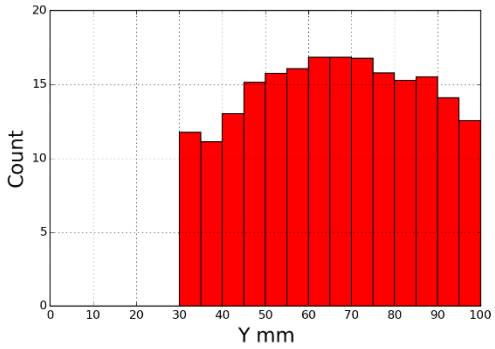


Figure B. 72: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

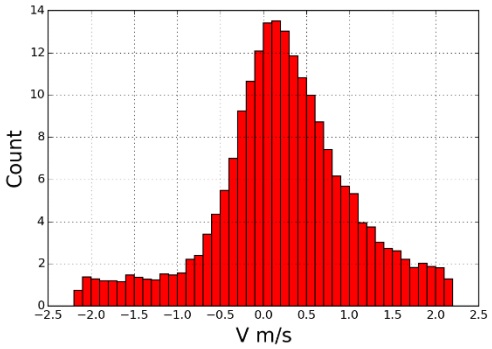


Figure B. 75: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

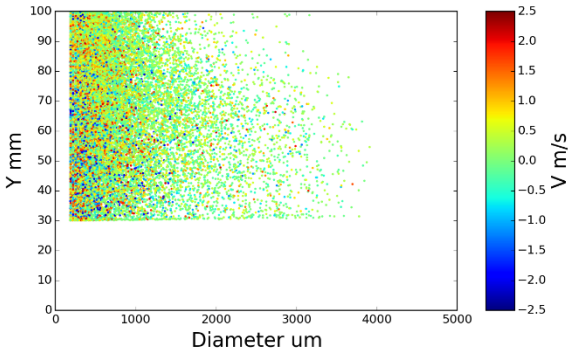


Figure B. 73: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.1.2 Matched Only Droplets for .LB Image

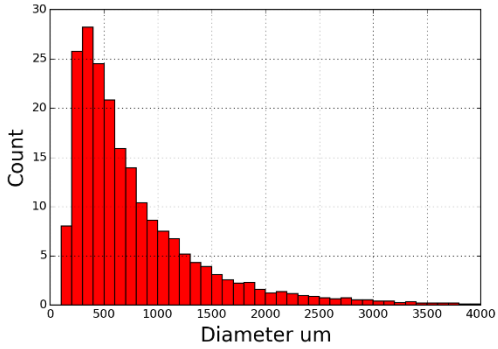


Figure B. 76: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

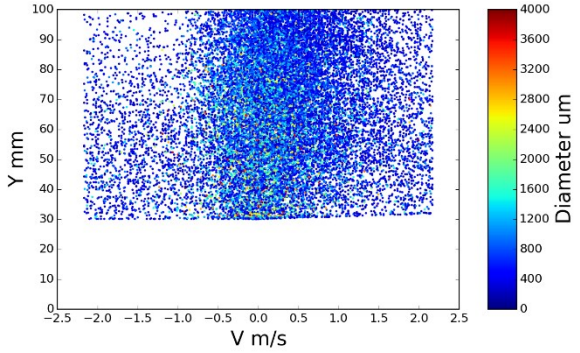


Figure B. 79: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

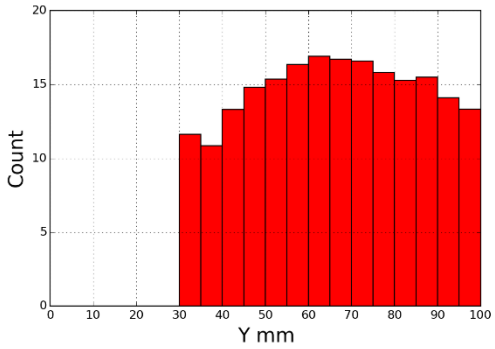


Figure B. 77: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

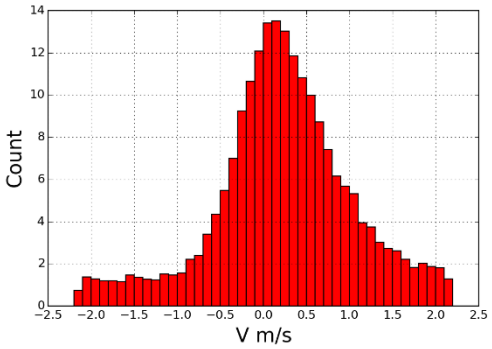


Figure B. 80: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

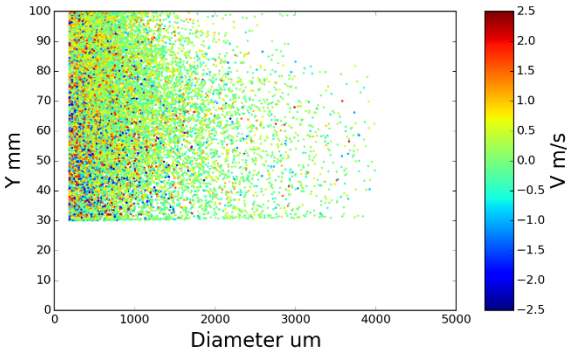


Figure B. 78: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.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	35.21	35.84	170.1	3986	919.9	773.5	181.9	3950	890.9	760.1
40-60mm	90.28	90.32	170.1	3984	884.7	729.2	170.1	3986	879.7	719.5
60-80mm	112.52	112.21	181.9	3980	780.5	605.8	170.1	3968	783.0	610.3
80-100mm	94.83	93.89	170.1	3862	590.5	401.3	170.1	3822	594.8	409.8
All	332.84	332.26	170.1	3986	769.4	626.6	170.1	3986	767.7	624.4
			Height A (mm)				Height B (mm)			
Highest Particle			99.9912				99.9890			
Lowest Particle			30.0907				30.0907			

Table B. 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	15.39	181.9	3814	1115	778.1	181.9	3894	1088	793.7	-2.160	2.160	-0.090	0.750	-2.160	2.160	0.070	0.790
40-60mm	45.7	181.9	3917	1042	734.6	181.9	3986	1024	739.9	-2.160	2.160	-0.100	0.700	-2.160	2.160	0.130	0.800
60-80mm	65.65	181.9	3845	898.9	621.4	170.1	3902	882.1	621.1	-2.160	2.160	-0.110	0.670	-2.160	2.160	0.200	0.790
80-100mm	59.59	181.9	3361	665.9	422.6	181.9	3621	654.6	423.4	-2.160	2.160	-0.140	0.580	-2.160	2.160	0.210	0.720
All	186.33	181.9	3917	877.5	633.5	170.1	3986	860.0	635.0	-2.160	2.160	-0.110	0.660	-2.160	2.160	0.170	0.770

Table B. 11: Matched Droplet Info

B.1.1.2 All Droplets for .LA Image

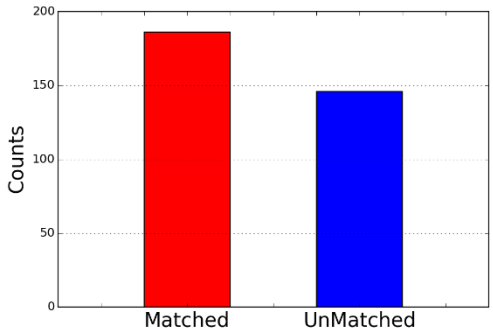


Figure B. 81: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

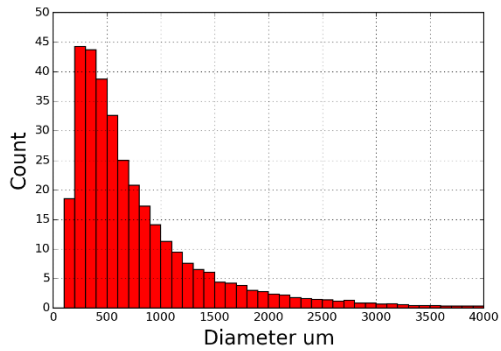


Figure B. 82: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

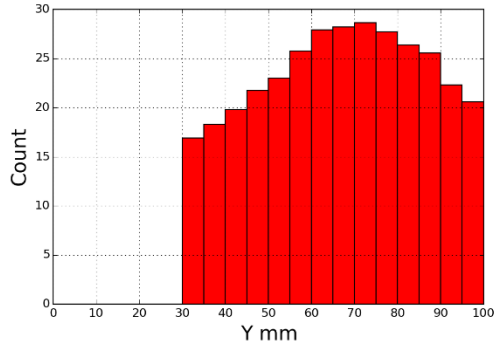


Figure B. 83: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

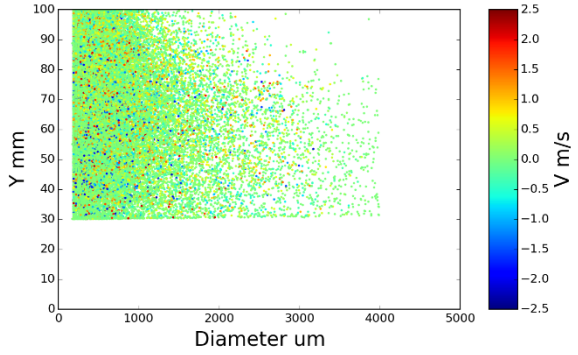


Figure B. 84: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

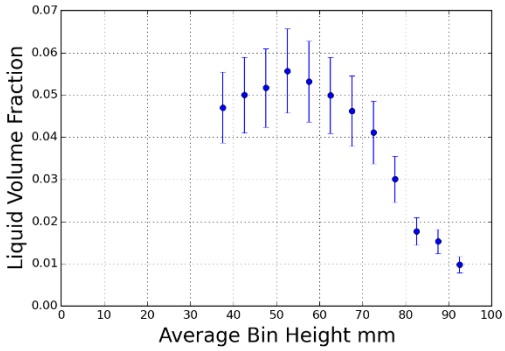


Figure B. 85: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.1.2 All Droplets for .LB Image

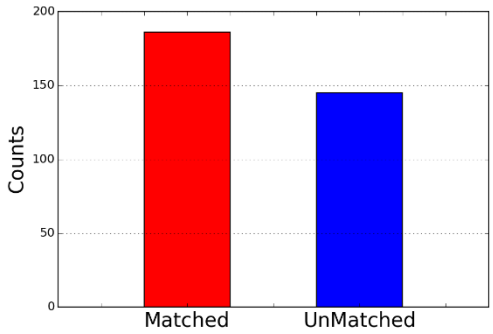


Figure B. 86: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

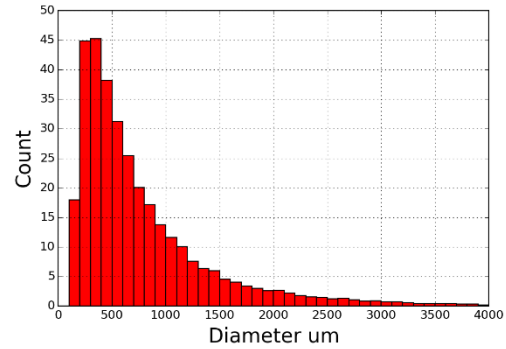


Figure B. 87: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

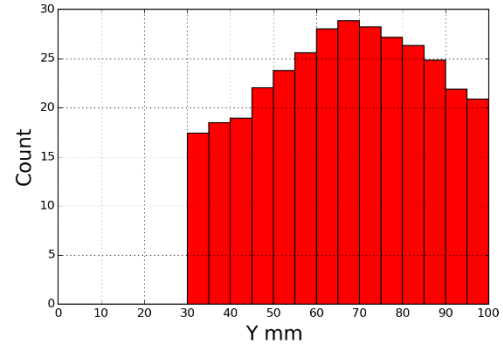


Figure B. 88: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

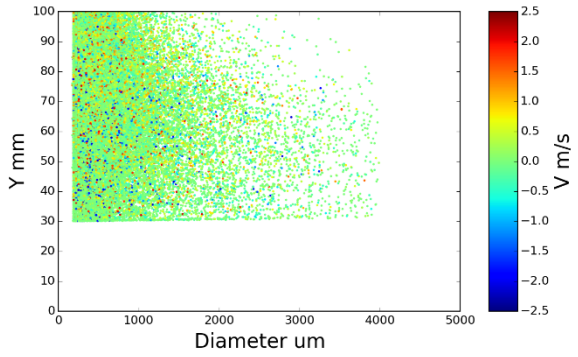


Figure B. 89: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

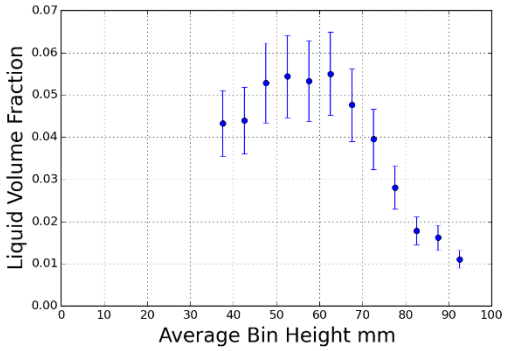


Figure B. 90: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.1.2 Matched Only Droplets for .LA Image

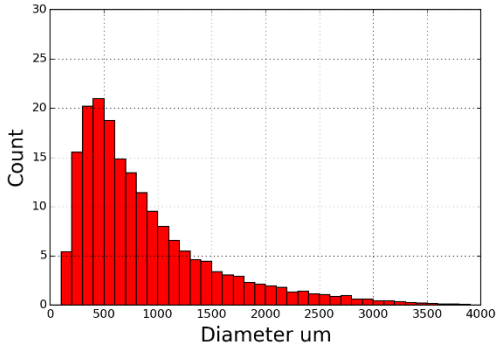


Figure B. 91: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

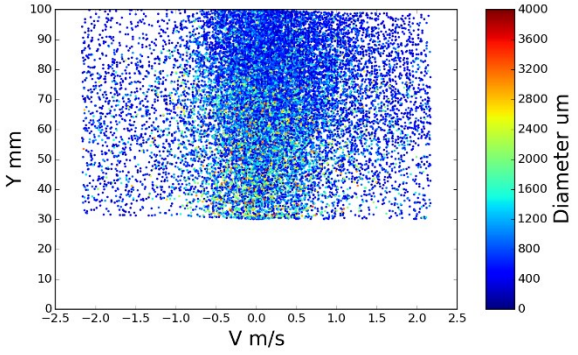


Figure B. 94: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

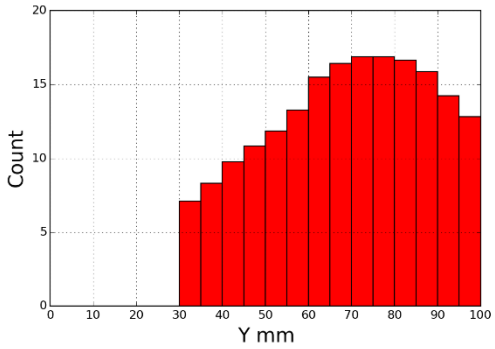


Figure B. 92: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

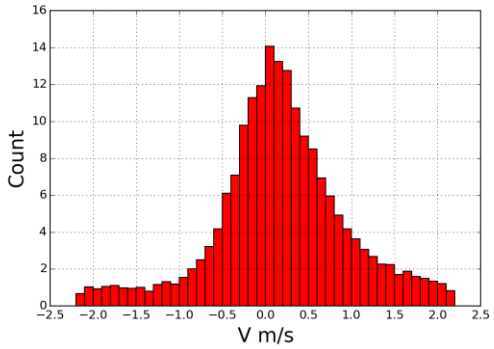


Figure B. 95: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

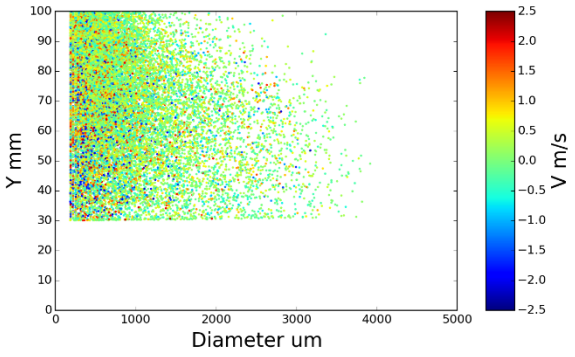


Figure B. 93: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.1.2 Matched Only Droplets for .LB Image

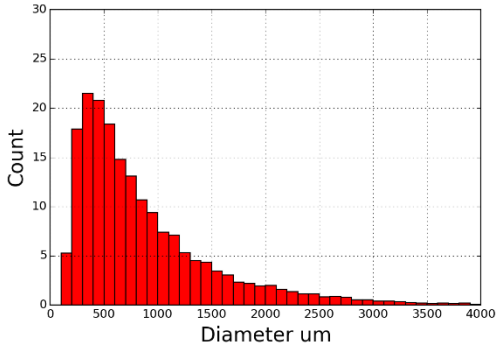


Figure B. 96: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

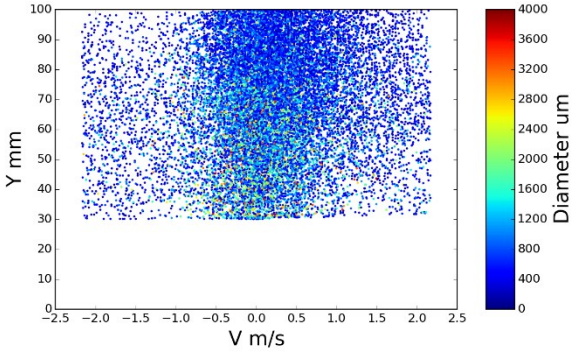


Figure B. 99: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

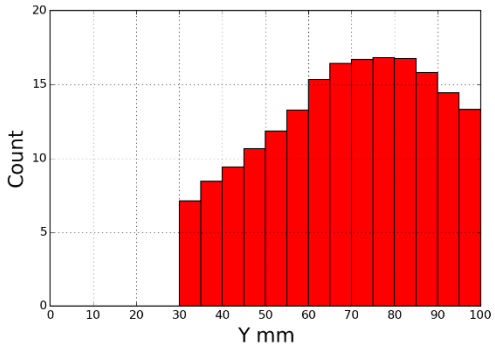


Figure B. 97: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

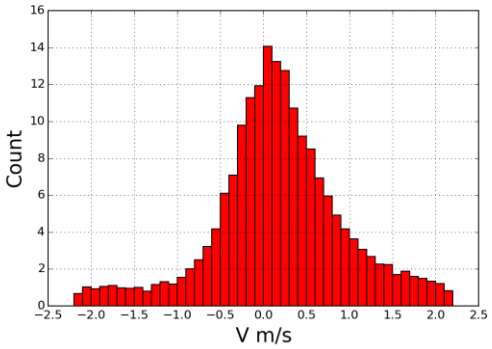


Figure B. 100: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

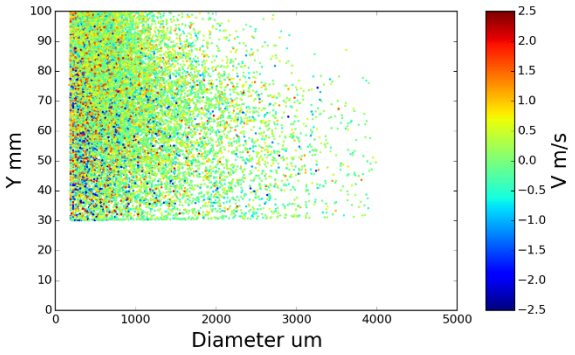


Figure B. 98: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.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	19.62	19.98	181.9	3981	1150	912.0	181.9	3981	1130	883.2
40-60mm	53.69	54.26	181.9	3983	1085	841.5	170.1	3985	1071	826.9
60-80mm	79.17	78.62	170.1	3965	891.6	684.5	170.1	3974	895.4	684.4
80-100mm	73.34	72.91	181.9	3959	649.0	444.5	181.9	3768	648.0	443.4
All	225.82	225.77	170.1	3983	881.1	709.0	170.1	3985	878.5	701.2
			Height A (mm)				Height B (mm)			
Highest Particle			99.9930				99.9890			
Lowest Particle			30.1097				30.1166			

Table B. 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	8.54	181.9	3895	1486	873.7	181.9	3981	1475	913.6	-2.160	2.050	-0.070	0.570	-2.140	2.150	0.050	0.640
40-60mm	25.69	181.9	3856	1300	799.1	181.9	3984	1276	811.1	-2.160	2.160	-0.110	0.620	-2.160	2.140	0.120	0.760
60-80mm	42.9	181.9	3941	1052	686.9	181.9	3974	1032	697.4	-2.160	2.160	-0.110	0.630	-2.160	2.160	0.170	0.760
80-100mm	44.55	181.9	3438	760.8	480.7	181.9	3690	742.8	472.7	-2.160	2.160	-0.140	0.560	-2.160	2.160	0.160	0.710
All	121.68	181.9	3941	1028	704.3	181.9	3984	1008	711.8	-2.160	2.160	-0.120	0.600	-2.160	2.160	0.150	0.740

Table B. 13: Matched Droplet Info

B.1.1.2 All Droplets for .LA Image

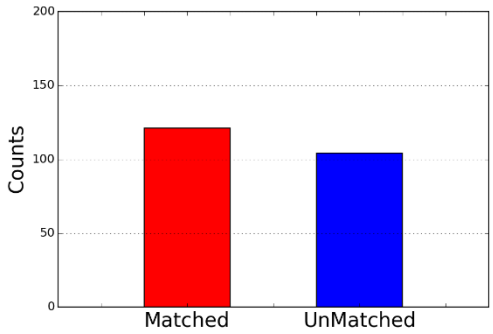


Figure B. 101: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

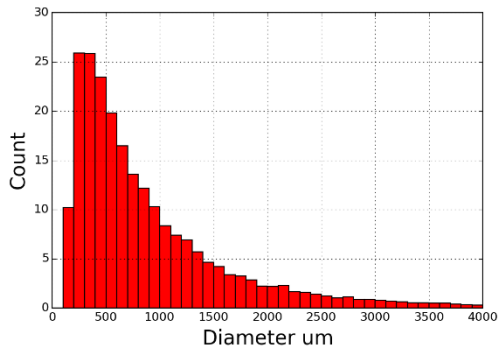


Figure B. 102: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

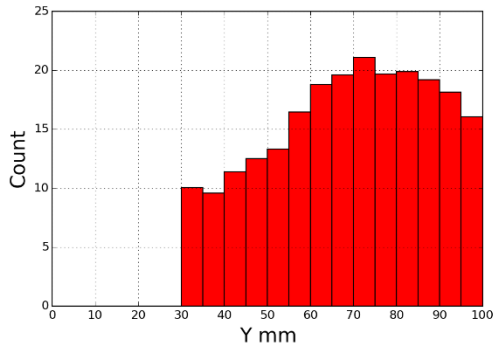


Figure B. 103: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

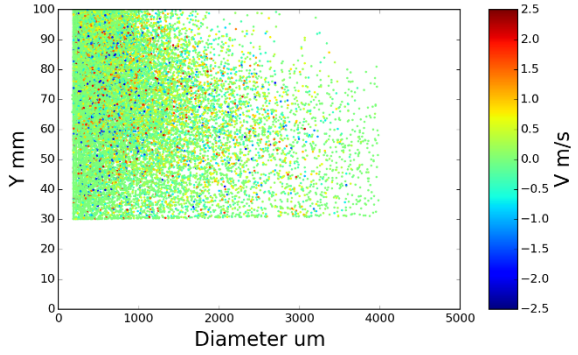


Figure B. 104: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

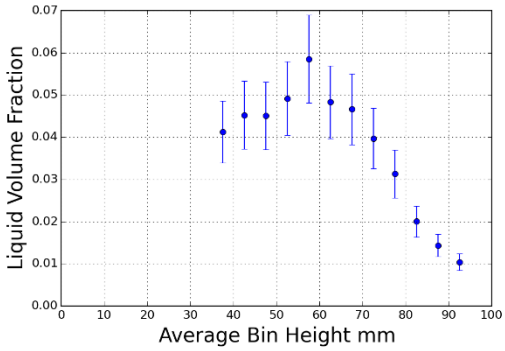


Figure B. 105: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.1.2 All Droplets for .LB Image

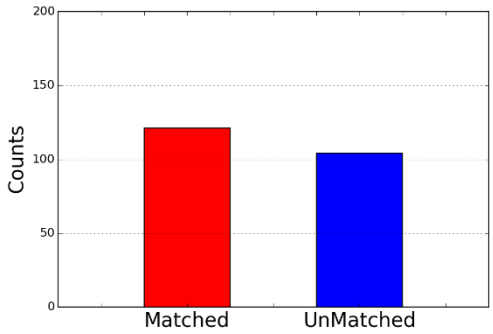


Figure B. 106: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

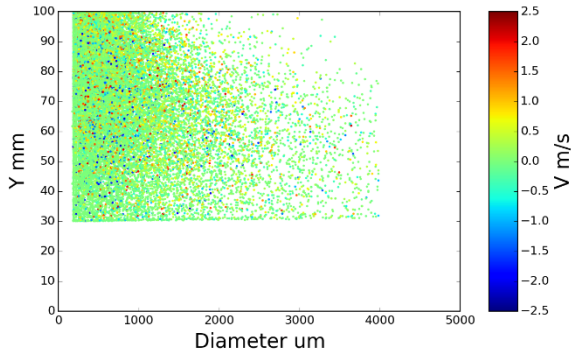


Figure B. 109: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

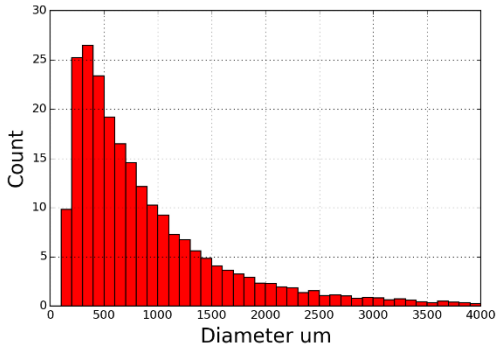


Figure B. 107: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

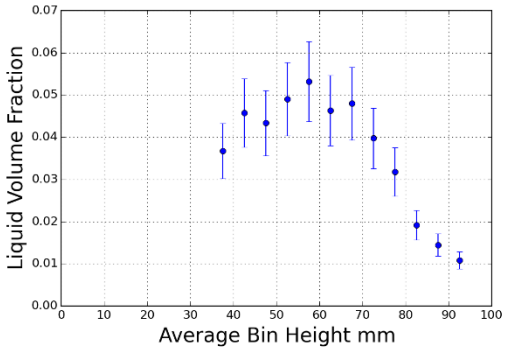


Figure B. 110: Void Fraction R-123 40F 5000Btu 15000Lb Tri

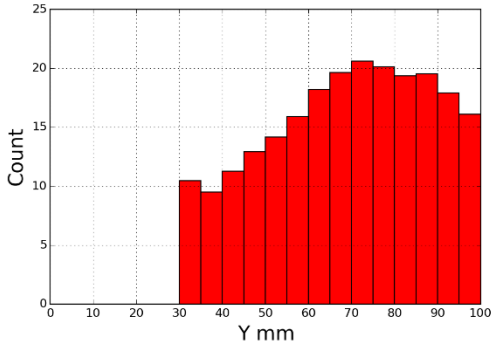


Figure B. 108: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.1.2 Matched Only Droplets for .LA Image

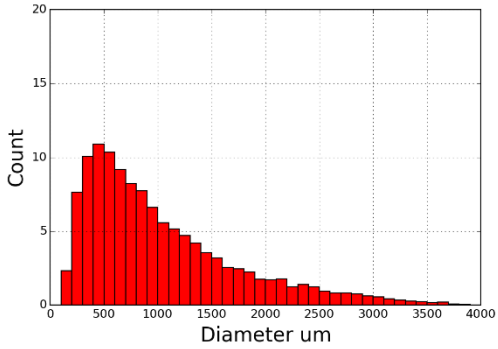


Figure B. 111: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

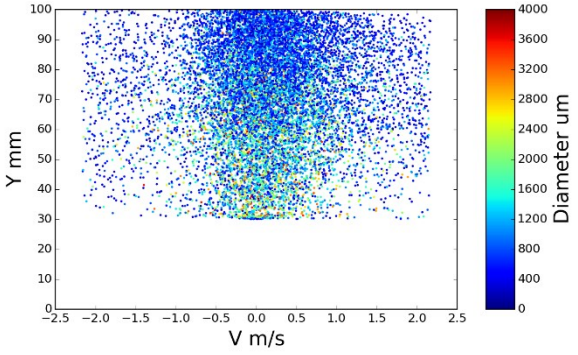


Figure B. 114: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

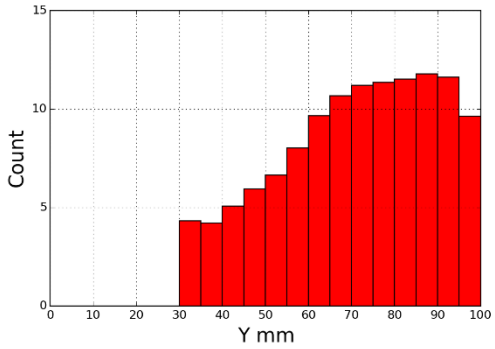


Figure B. 112: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

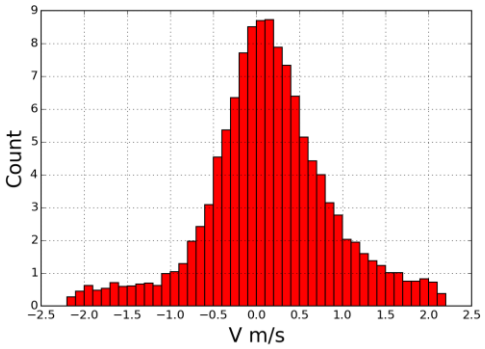


Figure B. 115: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

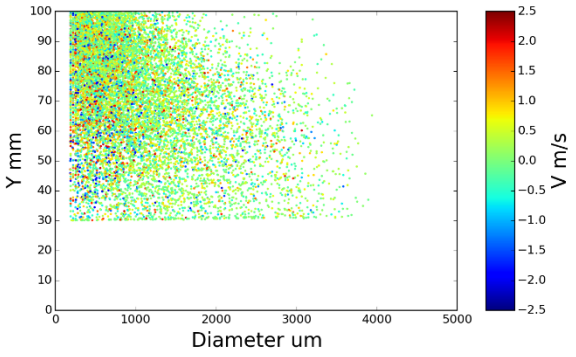


Figure B. 113: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.1.2 Matched Only Droplets for .LB Image

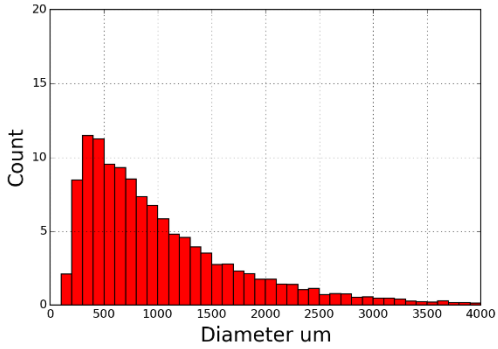


Figure B. 116: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

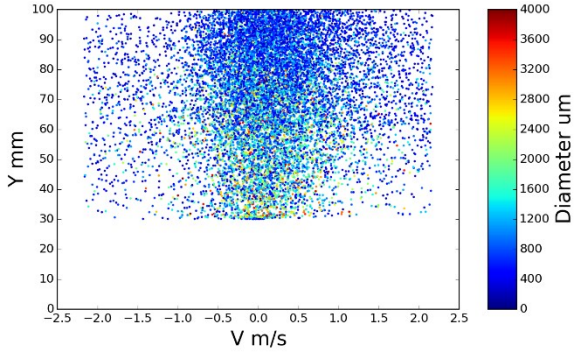


Figure B. 119: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

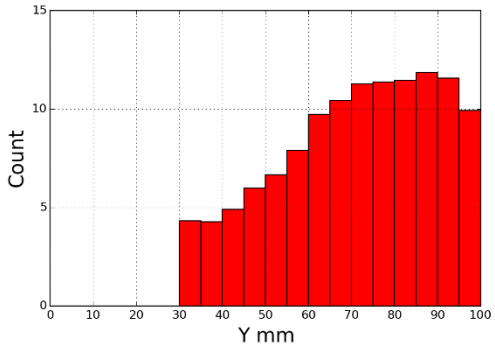


Figure B. 117: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

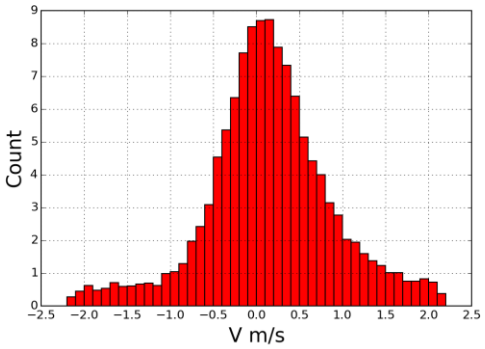


Figure B. 120: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

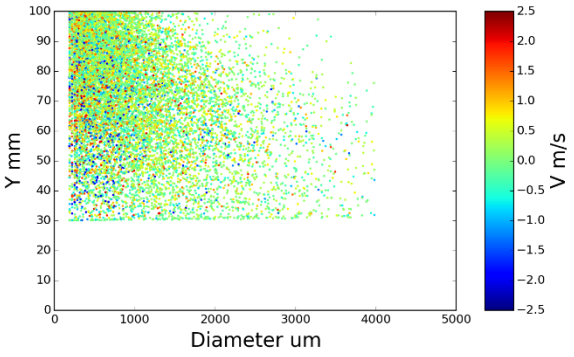


Figure B. 118: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.2 Liquid Level 2

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	11119 / 1.401
Ref Mass Flow (lb/hr) / (kg/s)	1594 / 0.201
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15516 / 21.043
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4664 / 14.71
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	39.8 / 4.31
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	41.3 / 5.18
Total Bundle Q (Btu/hr) / (kW)	125520 / 36.79
Total Bundle & Preboiler Q (Btu/hr) / (kW)	125520 / 36.79
Top Two Rows HTC Ratio	1.046
Bundle Inlet Quality	-0.05
Bundle Exit Quality	0.97

Table B. 14: Thermal Conditions

B.1.2.1 Lens 100mm Mag 0_29x

B.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	67.29	68.6	75.7	3942	533.9	609.3	75.7	3919	541.1	617.6
40-60mm	163.81	164.71	75.7	3953	543.0	597.0	75.7	3952	545.5	600.6
60-80mm	180.97	183.53	75.7	3953	496.3	513.7	75.7	3947	485.6	506.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	412.39	417.16	75.7	3953	521.0	564.5	75.7	3952	518.4	564.9
			Height A (mm)				Height B (mm)			
Highest Particle			78.5174				78.5287			
Lowest Particle			30.5716				30.5600			

Table B. 15: 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	30.05	80.9	3880	734.5	673.7	80.9	3918	729.1	682.6	-2.170	2.140	-0.060	0.650	-2.160	2.170	0.090	0.720
40-60mm	81.99	80.9	3850	716.2	640.6	75.7	3940	708.9	643.6	-2.170	2.170	-0.080	0.570	-2.170	2.170	0.230	0.720
60-80mm	102.96	80.9	3897	624.1	540.9	80.9	3947	615.4	539.3	-2.170	2.170	-0.100	0.520	-2.170	2.170	0.340	0.700
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	215.0	80.9	3897	674.7	602.0	75.7	3947	666.7	603.7	-2.170	2.170	-0.090	0.560	-2.170	2.170	0.260	0.720

Table B. 16: Matched Droplet Info

B.1.2.1 All Droplets for .LA Image

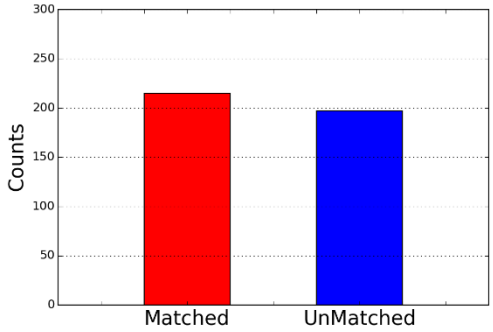


Figure B. 121: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

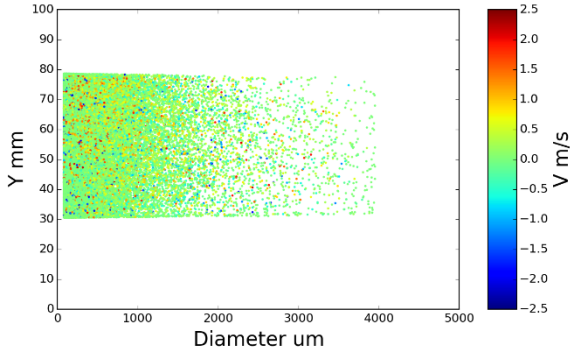


Figure B. 124: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

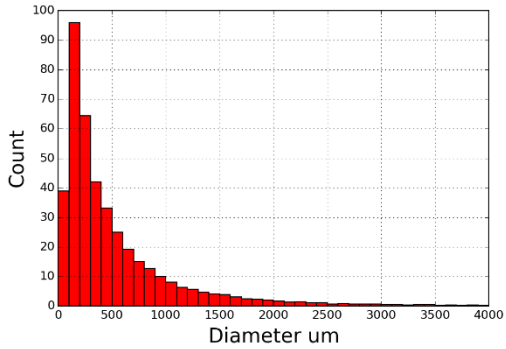


Figure B. 122: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

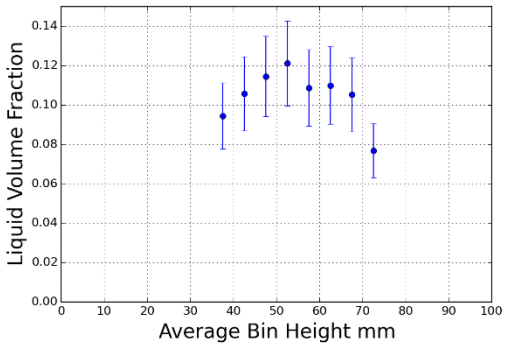


Figure B. 125: Void Fraction R-123 40F 5000Btu 15000Lb Tri

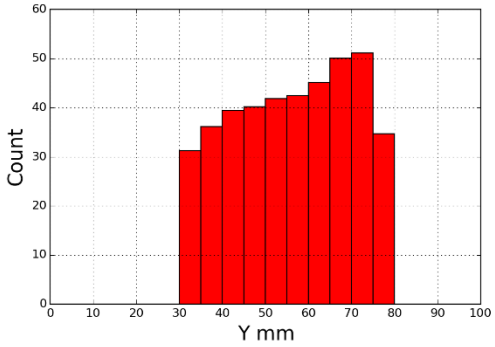


Figure B. 123: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.2.1 All Droplets for .LB Image

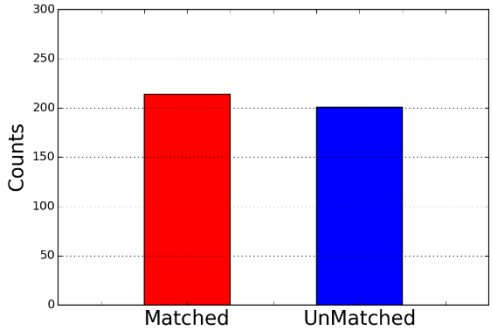


Figure B. 126: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

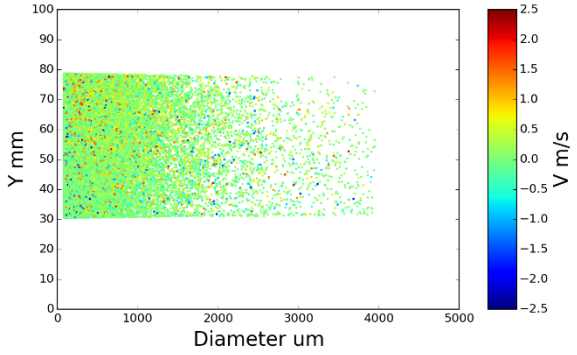


Figure B. 129: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

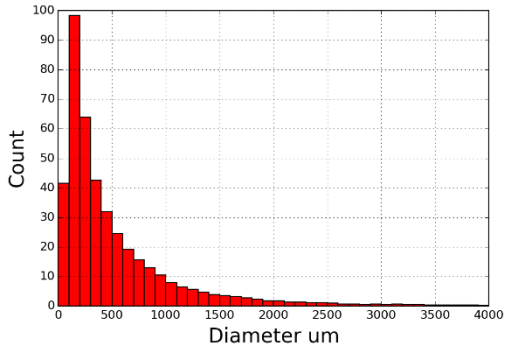


Figure B. 127: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

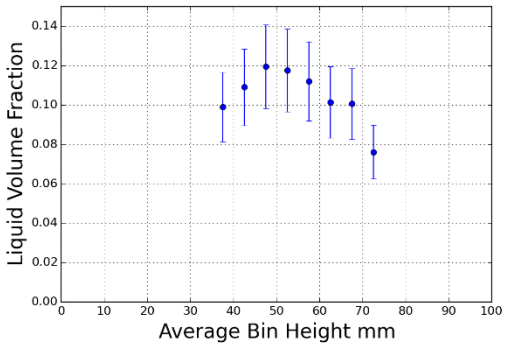


Figure B. 130: Void Fraction R-123 40F 5000Btu 15000Lb Tri

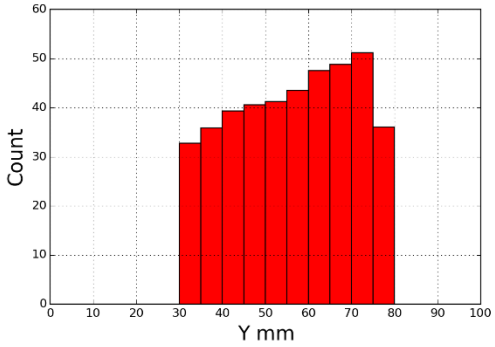


Figure B. 128: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.2.1 Matched Only Droplets for .LA Image

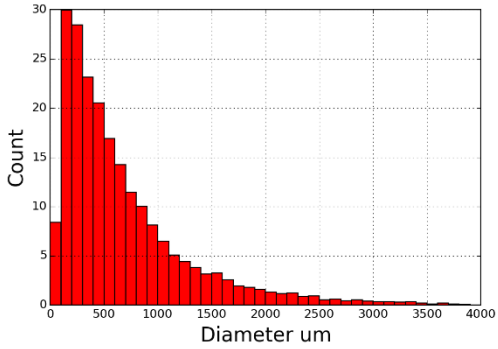


Figure B. 131: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

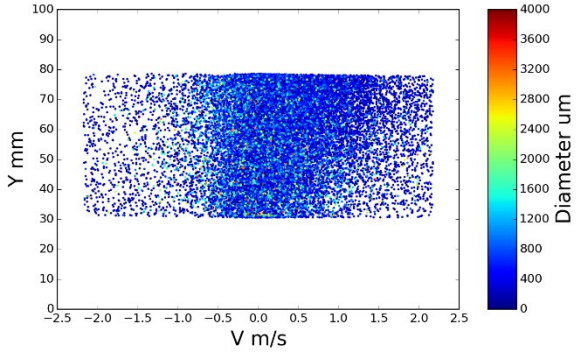


Figure B. 134: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

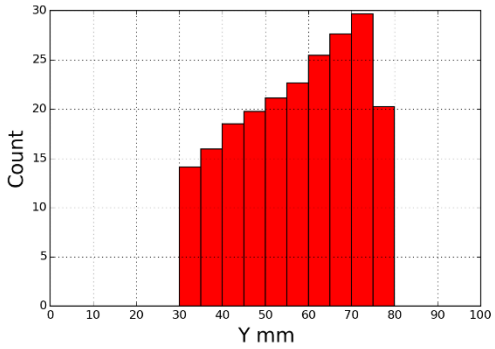


Figure B. 132: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

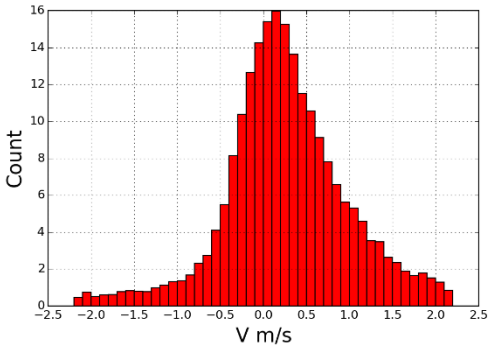


Figure B. 135: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

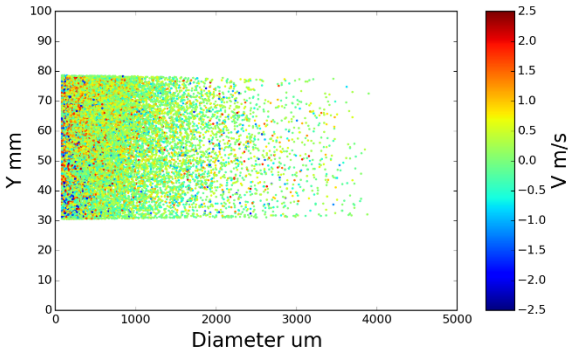


Figure B. 133: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.2.1 Matched Only Droplets for .LB Image

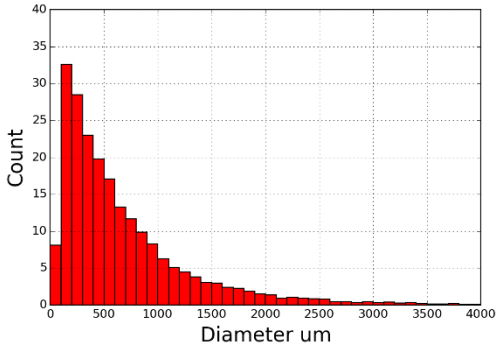


Figure B. 136: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

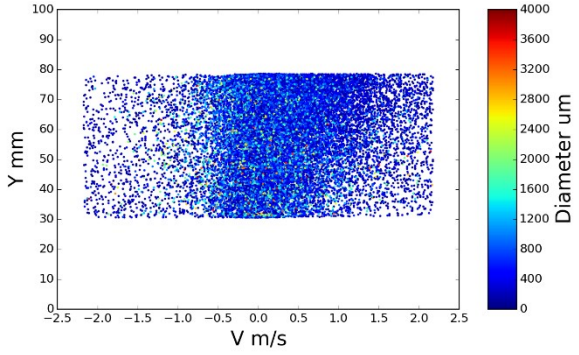


Figure B. 139: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

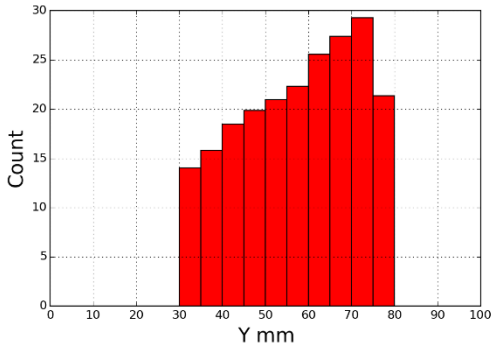


Figure B. 137: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

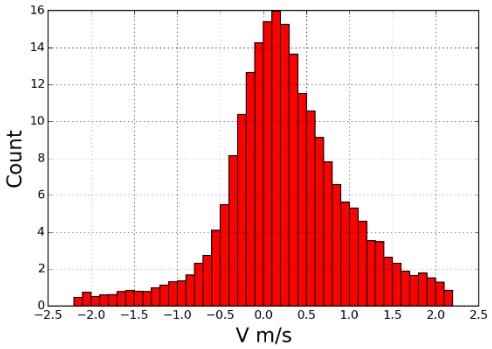


Figure B. 140: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

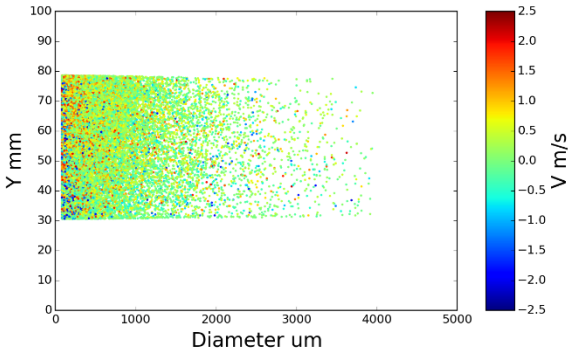


Figure B. 138: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.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	31.42	31.28	75.7	3951	834.9	834.4	75.7	3950	821.0	819.3
40-60mm	87.59	89.91	75.7	3952	789.9	775.3	75.7	3950	761.4	764.2
60-80mm	119.49	121.8	75.7	3949	644.1	627.5	75.7	3941	632.8	627.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	238.6	243.17	75.7	3952	722.8	718.5	75.7	3950	704.6	710.8
			Height A (mm)				Height B (mm)			
Highest Particle			78.5287				78.5185			
Lowest Particle			30.5600				30.5600			

Table B. 17: 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	14.75	80.9	3804	1164	826.8	85.8	3906	1162	840.0	-2.170	2.110	-0.050	0.490	-2.150	2.170	0.100	0.590
40-60mm	46.82	80.9	3908	1023	755.4	80.9	3945	1014	761.7	-2.170	2.160	-0.060	0.460	-2.150	2.170	0.190	0.630
60-80mm	71.5	80.9	3782	809.9	634.1	80.9	3941	796.3	634.8	-2.170	2.170	-0.070	0.460	-2.170	2.170	0.280	0.650
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	133.07	80.9	3908	924.1	713.7	80.9	3945	912.8	718.5	-2.170	2.170	-0.070	0.460	-2.170	2.170	0.230	0.640

Table B. 18: Matched Droplet Info

B.1.2.1 All Droplets for .LA Image

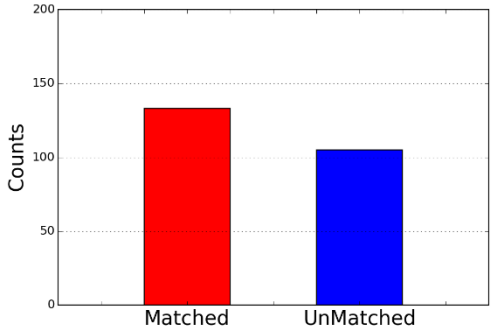


Figure B. 141: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

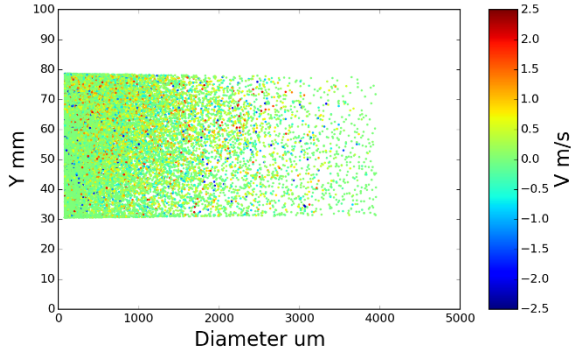


Figure B. 144: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

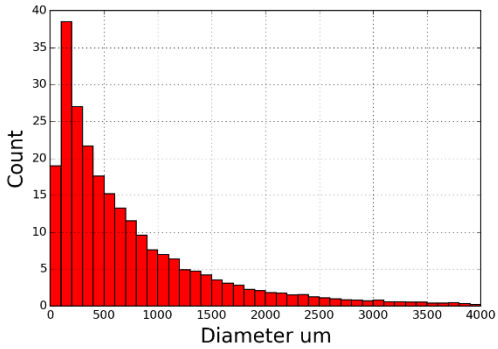


Figure B. 142: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

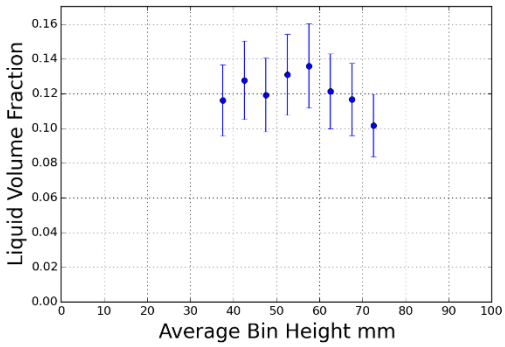


Figure B. 145: Void Fraction R-123 40F 5000Btu 15000Lb Tri

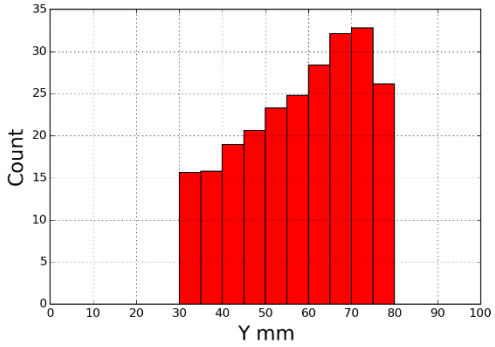


Figure B. 143: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.2.1 All Droplets for .LB Image

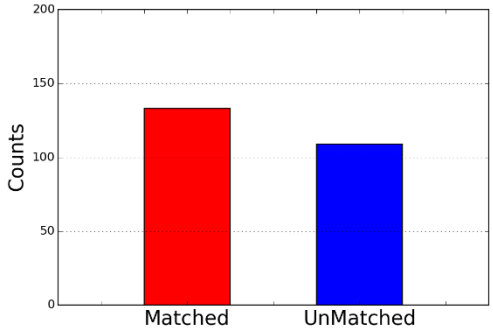


Figure B. 146: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

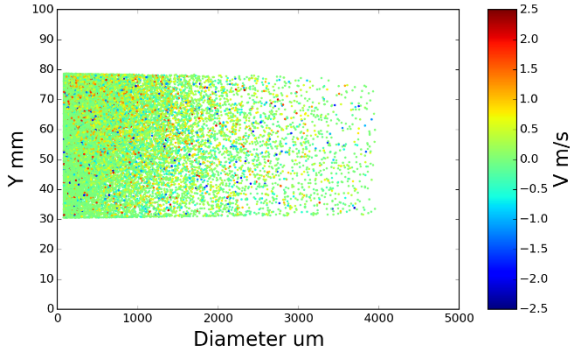


Figure B. 149: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

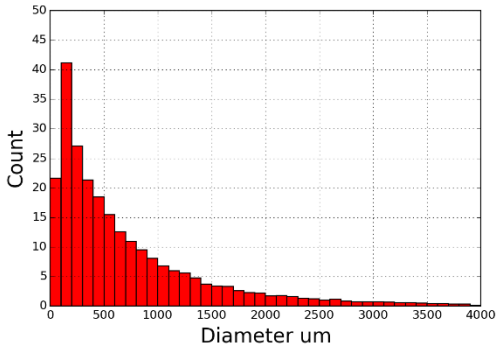


Figure B. 147: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

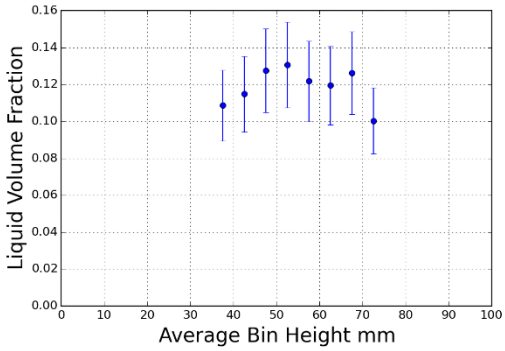


Figure B. 150: Void Fraction R-123 40F 5000Btu 15000Lb Tri

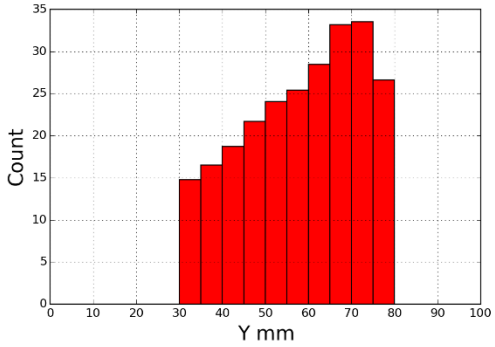


Figure B. 148: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.2.1 Matched Only Droplets for .LA Image

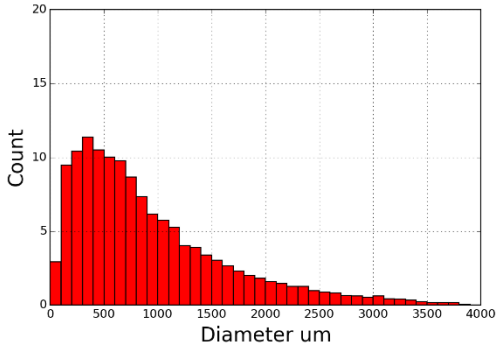


Figure B. 151: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

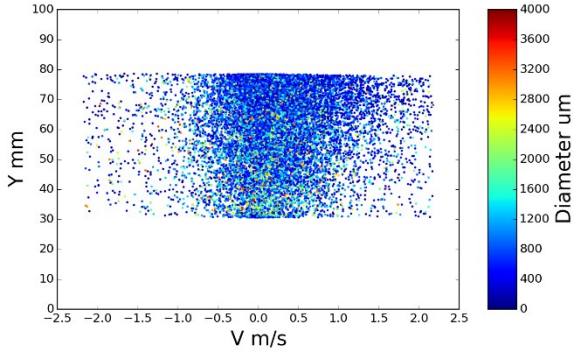


Figure B. 154: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

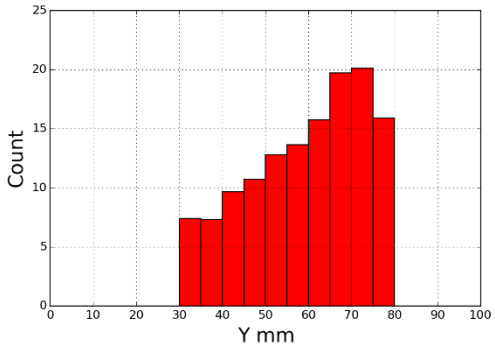


Figure B. 152: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

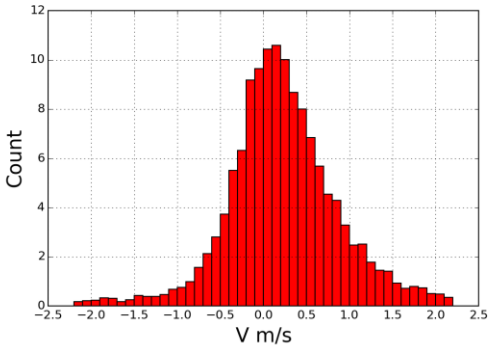


Figure B. 155: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

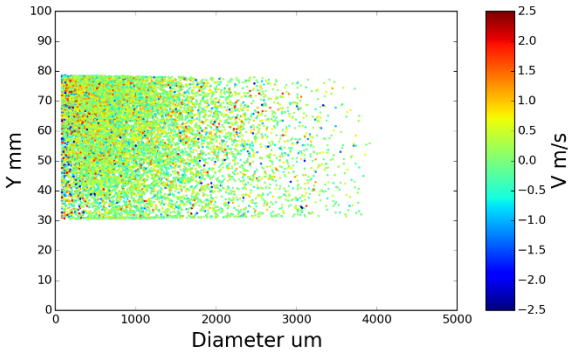


Figure B. 153: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.2.1 Matched Only Droplets for .LB Image

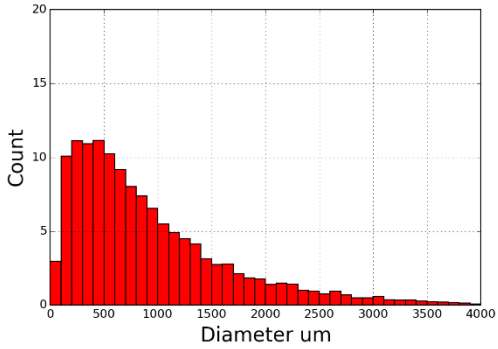


Figure B. 156: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

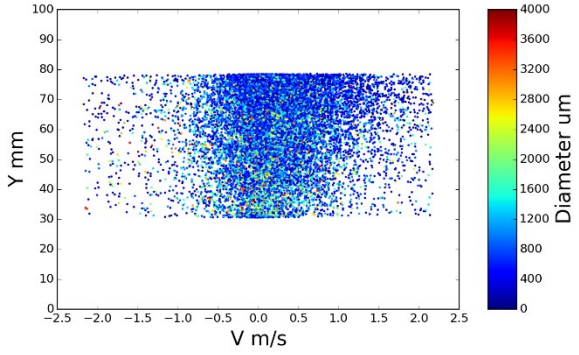


Figure B. 159: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

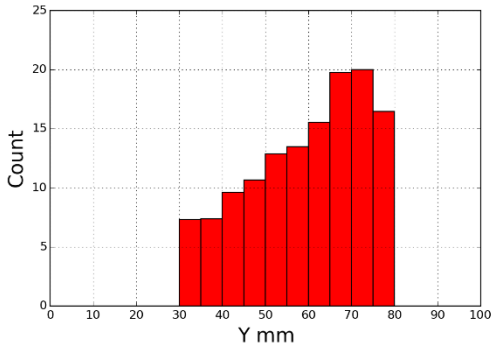


Figure B. 157: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

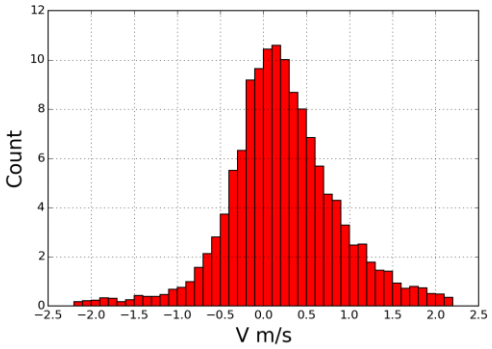


Figure B. 160: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

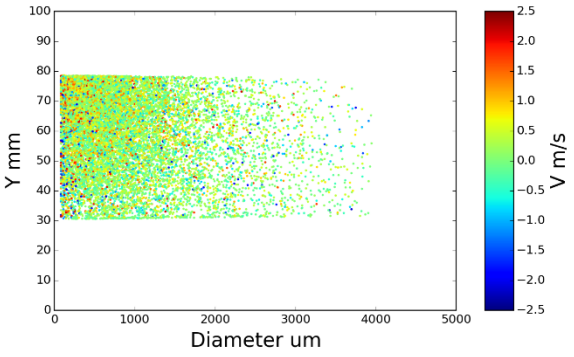


Figure B. 158: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.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	16.85	18.82	75.7	3950	1011	971.3	75.7	3946	913.7	946.9
40-60mm	52.43	57.07	75.7	3947	886.1	882.4	75.7	3938	822.9	881.6
60-80mm	82.15	85.64	75.7	3946	732.7	736.1	75.7	3943	695.7	726.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	151.51	161.54	75.7	3950	816.8	823.5	75.7	3946	766.0	815.5
			Height A (mm)				Height B (mm)			
Highest Particle			78.5287				78.5178			
Lowest Particle			30.5709				30.5727			

Table B. 19: 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	8.14	80.9	3864	1441	941.5	80.9	3934	1420	951.4	-2.170	2.130	-0.030	0.490	-2.170	2.140	0.100	0.600
40-60mm	25.69	80.9	3847	1230	874.0	80.9	3930	1224	890.6	-2.170	2.130	-0.070	0.490	-2.150	2.160	0.180	0.650
60-80mm	44.72	80.9	3844	974.9	742.0	80.9	3911	964.6	750.0	-2.170	2.170	-0.080	0.460	-2.170	2.170	0.230	0.640
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	78.55	80.9	3864	1106	825.6	80.9	3934	1096	836.1	-2.170	2.170	-0.070	0.470	-2.170	2.170	0.200	0.640

Table B. 20: Matched Droplet Info

B.1.2.1 All Droplets for .LA Image

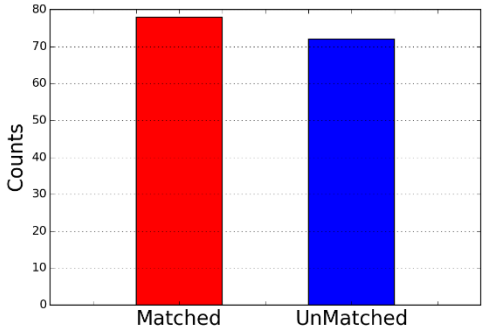


Figure B. 161: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

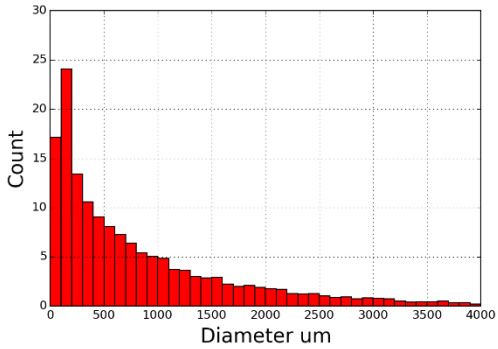


Figure B. 162: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

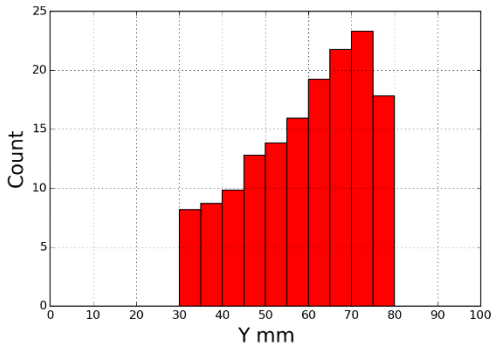


Figure B. 163: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

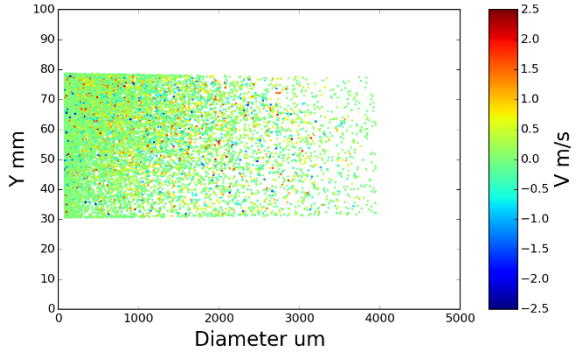


Figure B. 164: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

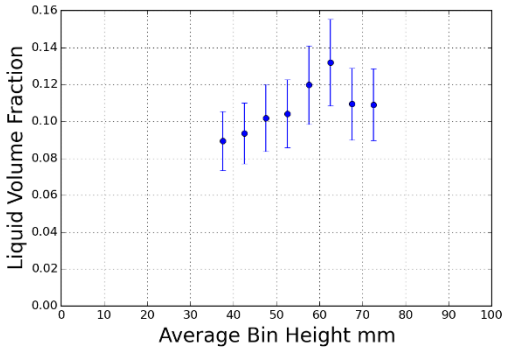


Figure B. 165: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.2.1 All Droplets for .LB Image

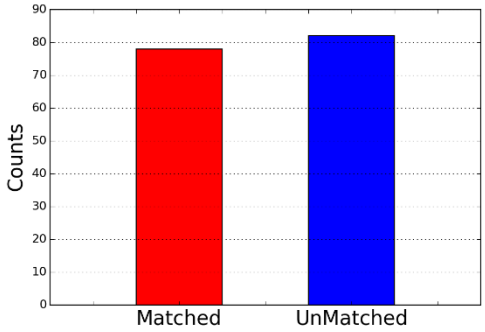


Figure B. 166: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

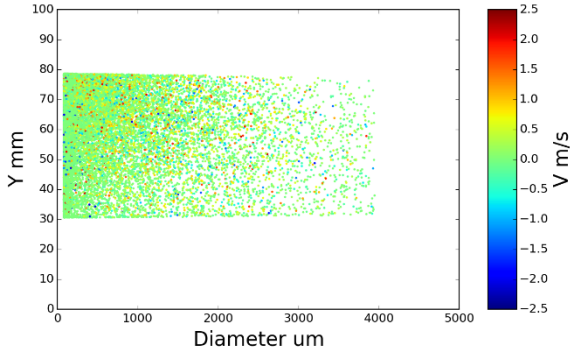


Figure B. 169: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

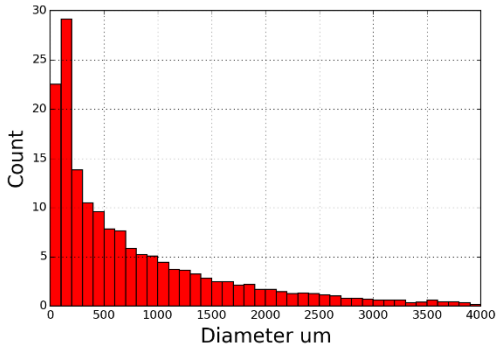


Figure B. 167: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

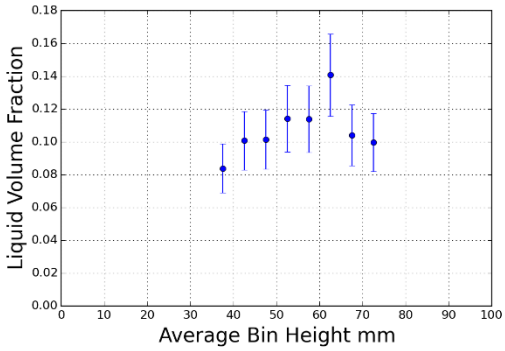


Figure B. 170: Void Fraction R-123 40F 5000Btu 15000Lb Tri

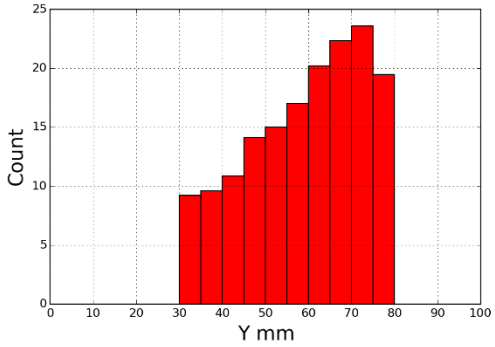


Figure B. 168: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.2.1 Matched Only Droplets for .LA Image

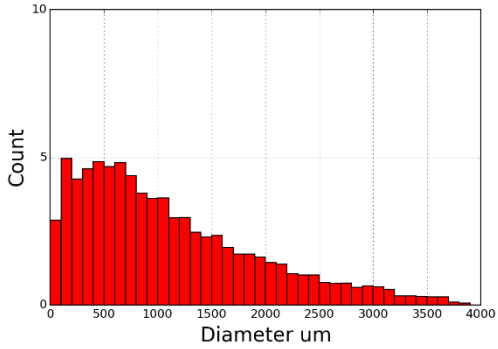


Figure B. 171: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

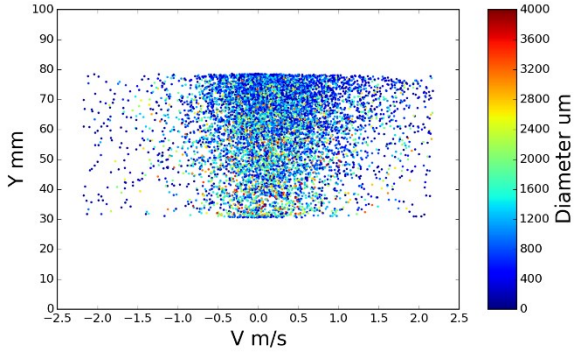


Figure B. 174: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

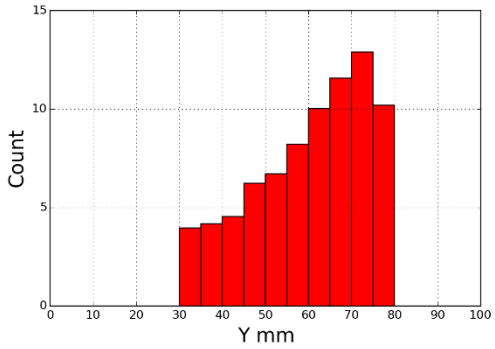


Figure B. 172: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

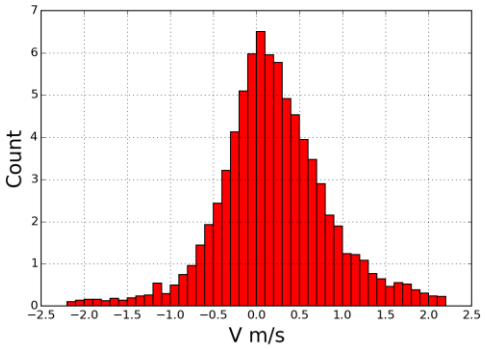


Figure B. 175: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

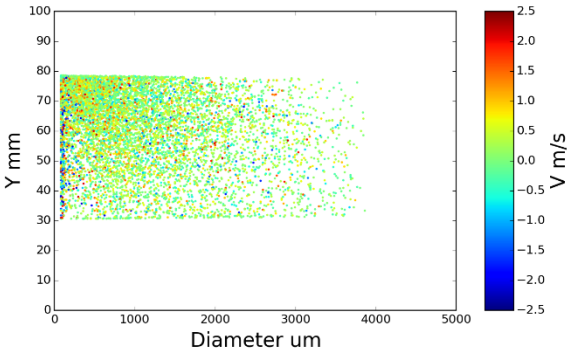


Figure B. 173: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.2.1 Matched Only Droplets for .LB Image

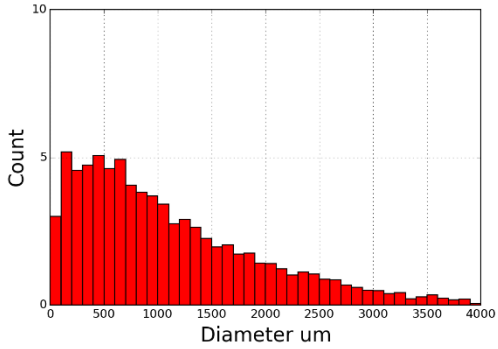


Figure B. 176: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

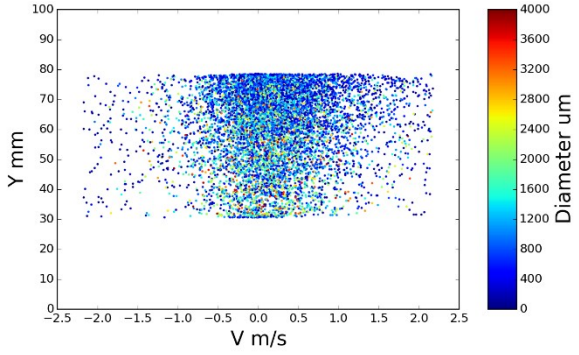


Figure B. 179: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

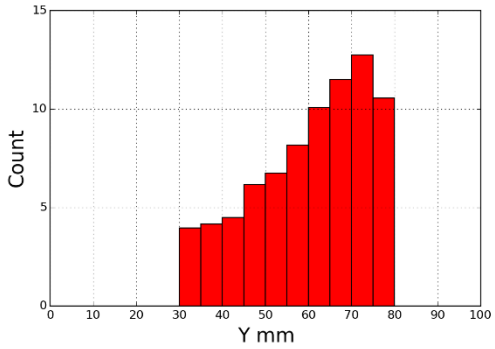


Figure B. 177: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

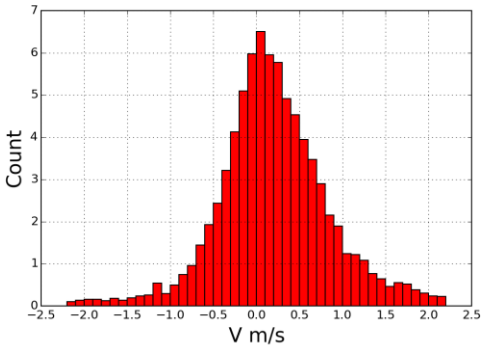


Figure B. 180: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

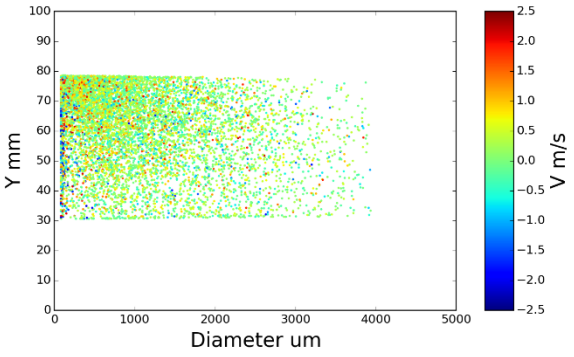


Figure B. 178: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.2.2 Lens 50mm Mag 0_13x

B.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	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	95.07	95.5	181.9	3983	749.3	677.0	170.1	3986	737.1	661.5
40-60mm	111.42	110.99	181.9	3983	790.2	683.1	170.1	3982	784.3	678.5
60-80mm	123.15	124.35	170.1	3977	738.0	590.2	181.9	3984	739.1	597.6
80-100mm	97.31	97.15	170.1	3841	590.0	413.0	170.1	3989	588.7	411.8
All	426.95	427.99	170.1	3983	720.4	607.1	170.1	3989	716.2	603.7
			Height A (mm)				Height B (mm)			
Highest Particle			99.9912				99.9890			
Lowest Particle			20.1175				20.1359			

Table B. 21: 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	42.95	181.9	3956	867.4	695.8	181.9	3983	849.0	702.5	-2.160	2.160	-0.110	0.870	-2.160	2.160	0.090	0.910
40-60mm	56.45	181.9	3967	906.7	692.3	181.9	3981	888.0	693.5	-2.160	2.160	-0.100	0.780	-2.160	2.160	0.180	0.860
60-80mm	71.43	181.9	3849	838.0	606.6	181.9	3958	823.6	606.6	-2.160	2.160	-0.120	0.700	-2.160	2.160	0.260	0.820
80-100mm	62.07	181.9	3642	661.0	436.9	181.9	3989	647.6	429.0	-2.160	2.160	-0.140	0.580	-2.160	2.160	0.290	0.750
All	232.9	181.9	3967	812.9	615.0	181.9	3989	796.3	614.2	-2.160	2.160	-0.120	0.730	-2.160	2.160	0.210	0.830

Table B. 22: Matched Droplet Info

B.1.2.2 All Droplets for .LA Image

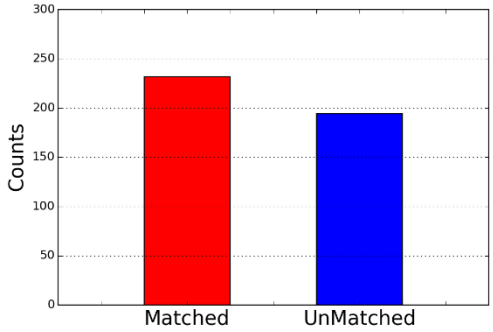


Figure B. 181: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

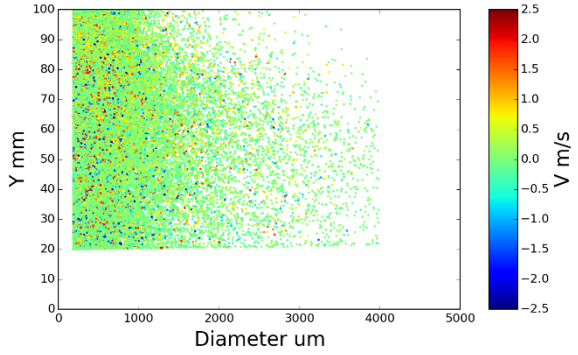


Figure B. 184: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

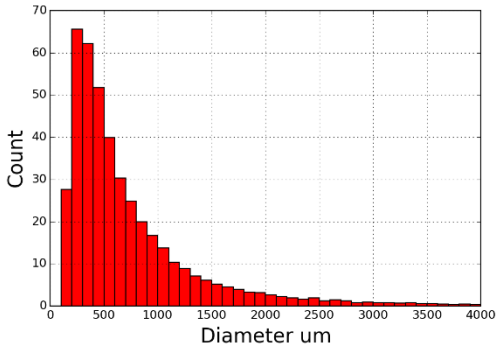


Figure B. 182: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

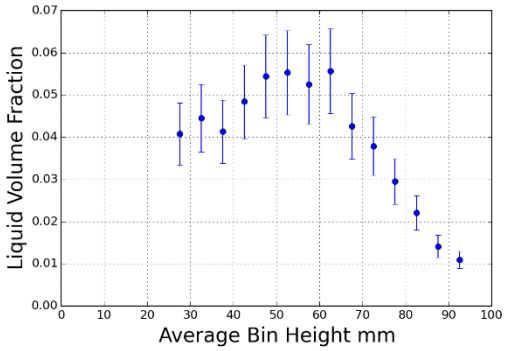


Figure B. 185: Void Fraction R-123 40F 5000Btu 15000Lb Tri

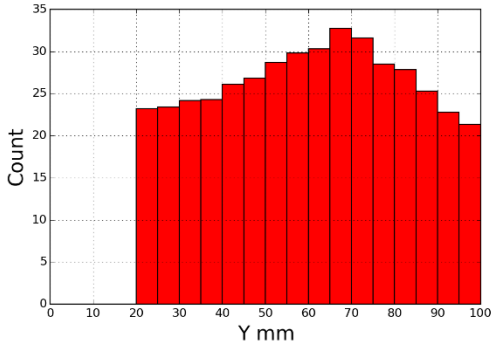


Figure B. 183: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.2.2 All Droplets for .LB Image

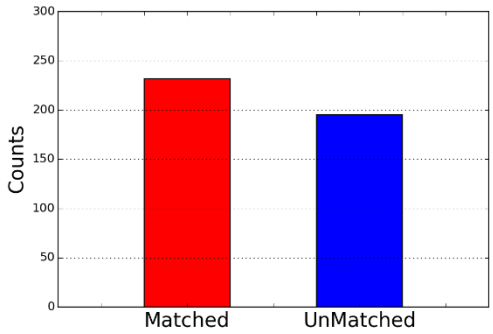


Figure B. 186: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

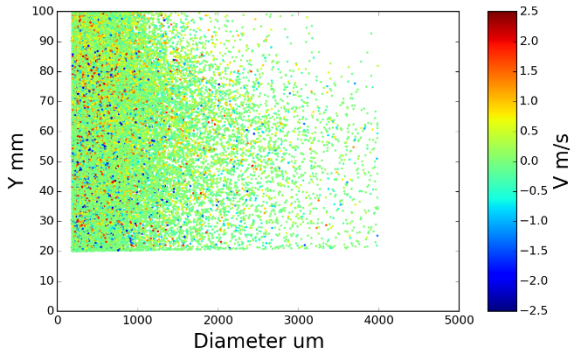


Figure B. 189: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

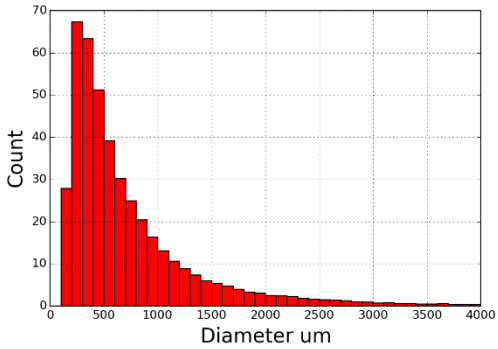


Figure B. 187: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

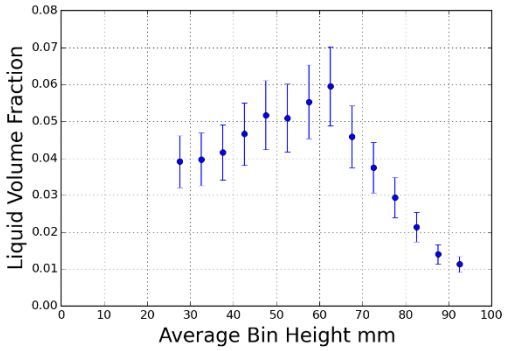


Figure B. 190: Void Fraction R-123 40F 5000Btu 15000Lb Tri

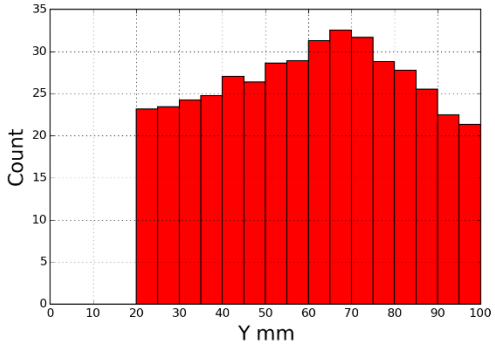


Figure B. 188: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.2.2 Matched Only Droplets for .LA Image

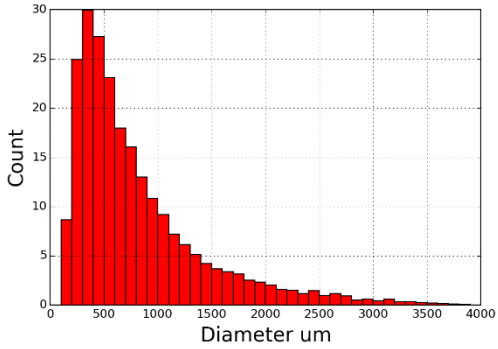


Figure B. 191: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

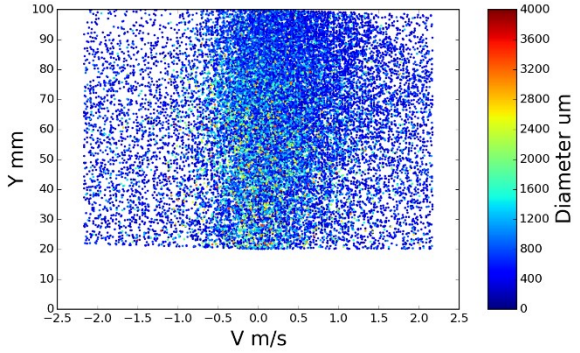


Figure B. 194: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

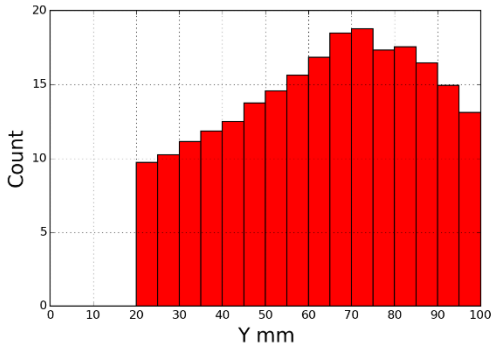


Figure B. 192: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

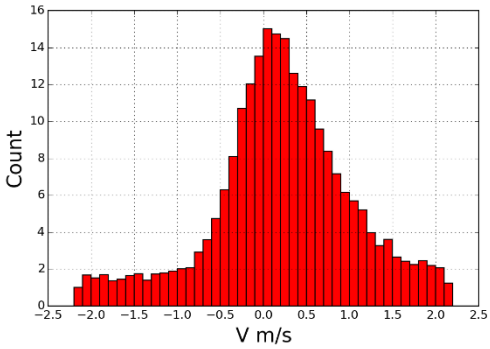


Figure B. 195: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

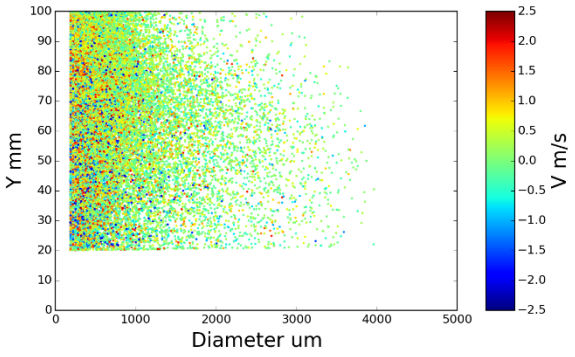


Figure B. 193: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.2.2 Matched Only Droplets for .LB Image

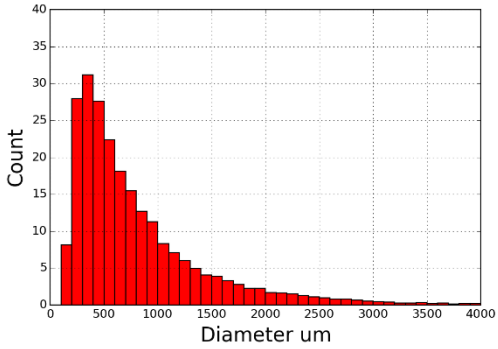


Figure B. 196: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

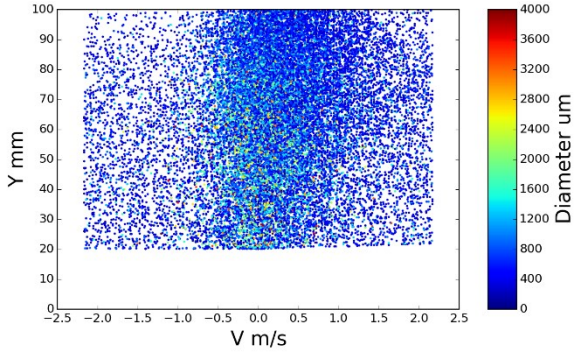


Figure B. 199: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

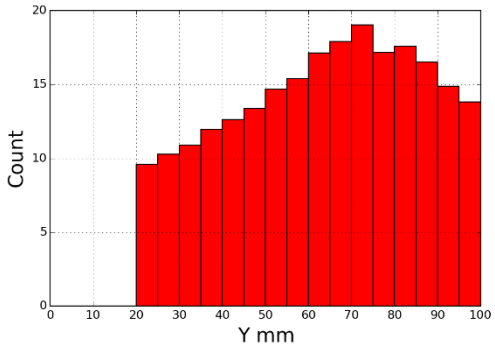


Figure B. 197: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

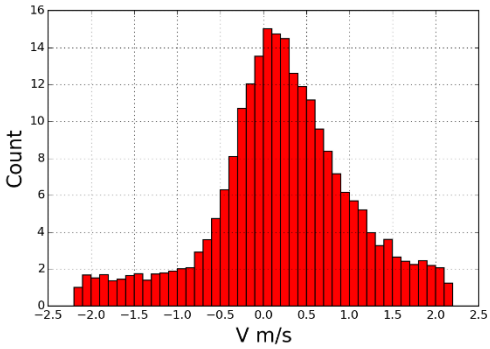


Figure B. 200: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

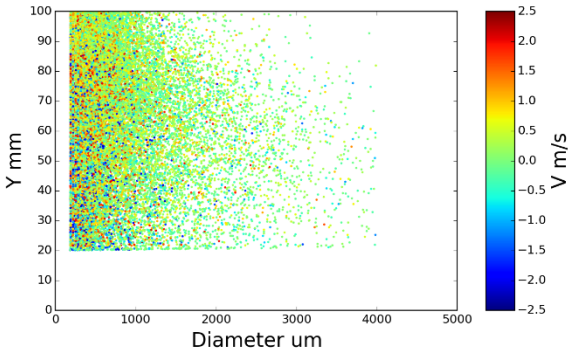


Figure B. 198: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.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	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	60.95	61.38	181.9	3986	922.5	792.3	181.9	3977	917.3	784.3
40-60mm	76.5	73.89	170.1	3988	964.7	762.7	170.1	3981	978.7	762.5
60-80mm	103.56	104.07	181.9	3980	831.2	645.3	181.9	3982	825.6	641.4
80-100mm	93.0	92.54	181.9	3623	620.3	423.9	181.9	3955	622.3	417.9
All	334.01	331.88	170.1	3988	819.7	666.9	170.1	3982	820.0	662.7
			Height A (mm)				Height B (mm)			
Highest Particle			99.9912				99.9921			
Lowest Particle			20.1175				20.1175			

Table B. 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	25.59	181.9	3902	1138	811.5	181.9	3977	1114	826.3	-2.160	2.160	-0.070	0.740	-2.160	2.160	0.080	0.800
40-60mm	37.8	181.9	3914	1150	746.8	181.9	3980	1129	750.1	-2.160	2.160	-0.090	0.670	-2.160	2.160	0.150	0.770
60-80mm	58.28	181.9	3829	962.7	655.2	181.9	3960	943.6	655.5	-2.160	2.160	-0.110	0.650	-2.160	2.160	0.240	0.770
80-100mm	58.32	181.9	3623	709.7	450.8	181.9	3642	694.5	439.1	-2.160	2.160	-0.130	0.580	-2.160	2.160	0.220	0.720
All	179.99	181.9	3914	944.9	669.1	181.9	3980	925.0	668.7	-2.160	2.160	-0.110	0.650	-2.160	2.160	0.190	0.760

Table B. 24: Matched Droplet Info

B.1.2.2 All Droplets for .LA Image

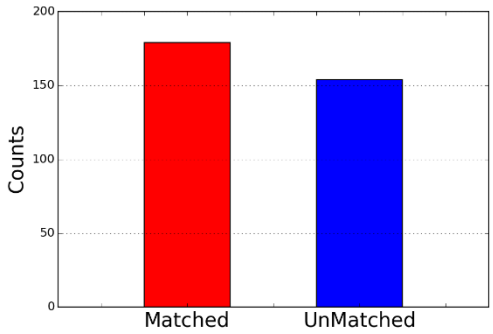


Figure B. 201: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

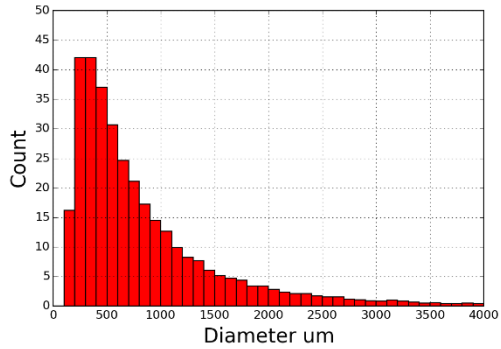


Figure B. 202: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

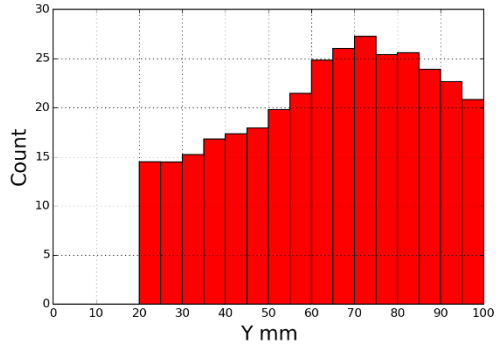


Figure B. 203: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

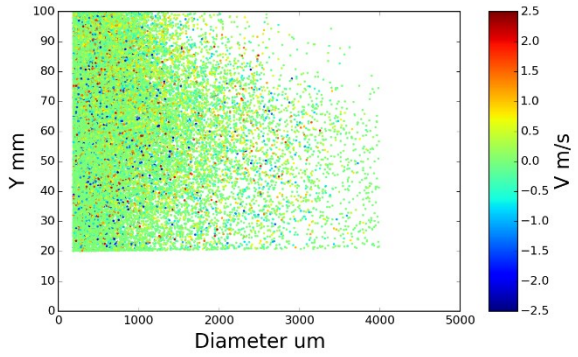


Figure B. 204: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

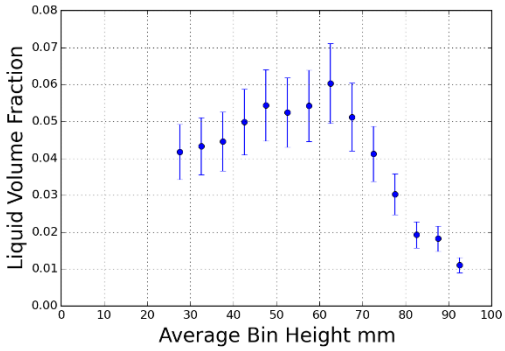


Figure B. 205: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.2.2 All Droplets for .LB Image

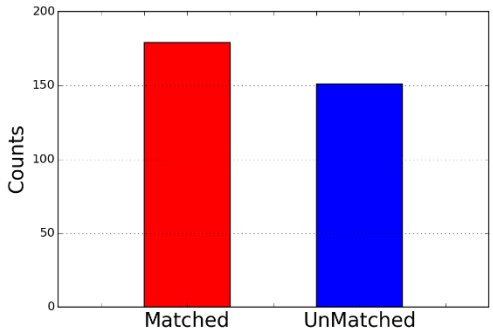


Figure B. 206: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

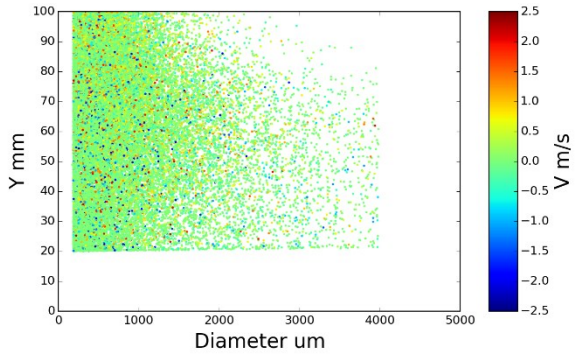


Figure B. 209: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

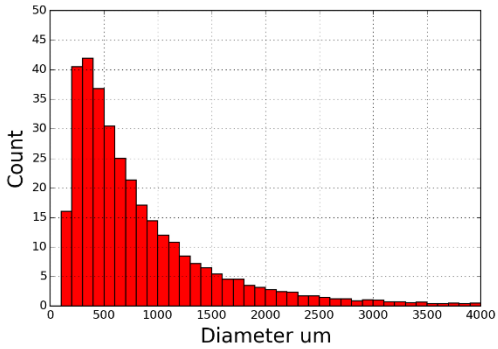


Figure B. 207: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

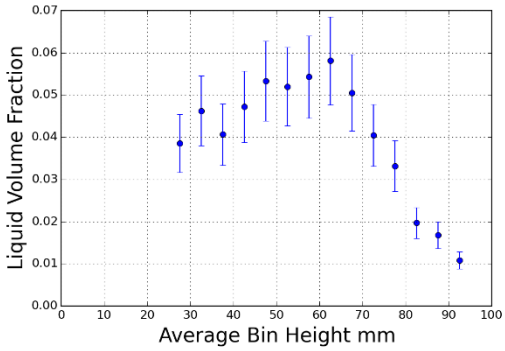


Figure B. 210: Void Fraction R-123 40F 5000Btu 15000Lb Tri

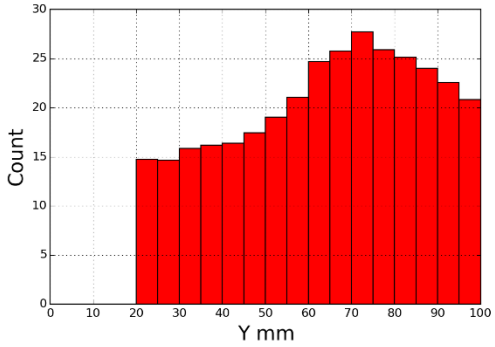


Figure B. 208: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.2.2 Matched Only Droplets for .LA Image

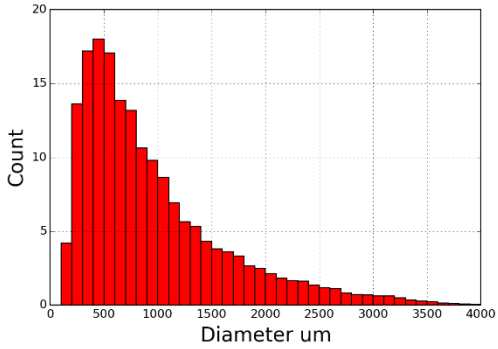


Figure B. 211: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

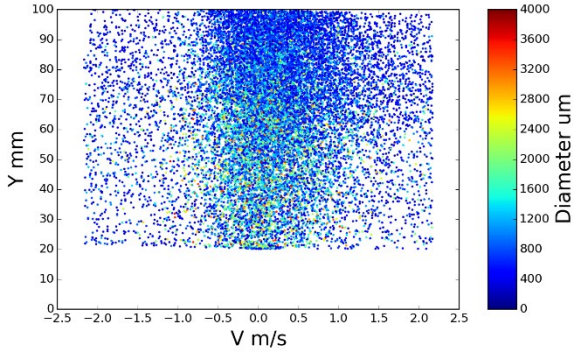


Figure B. 214: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

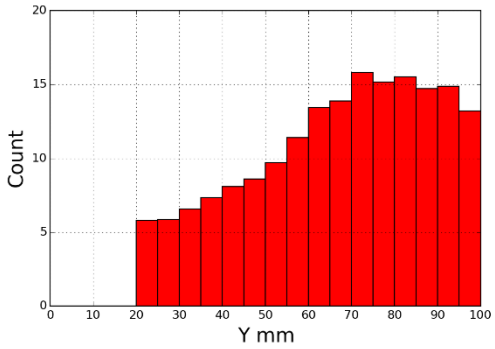


Figure B. 212: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

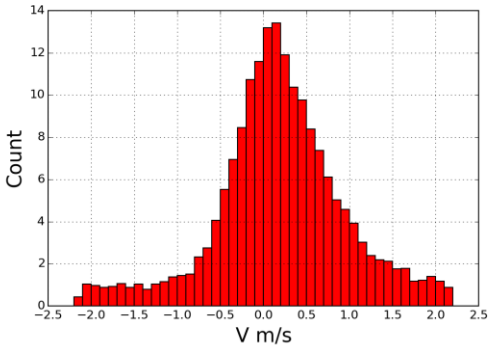


Figure B. 215: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

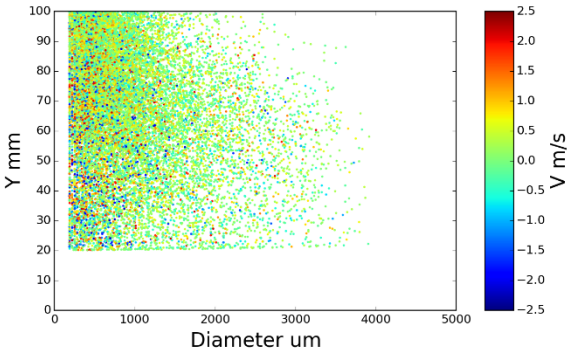


Figure B. 213: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.2.2 Matched Only Droplets for .LB Image

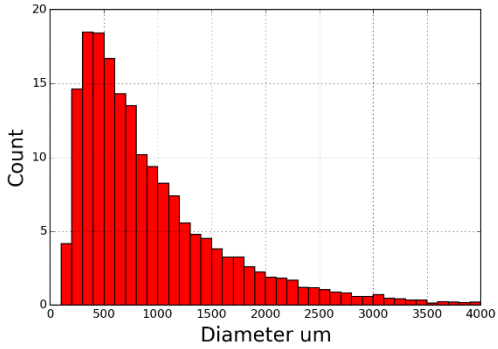


Figure B. 216: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

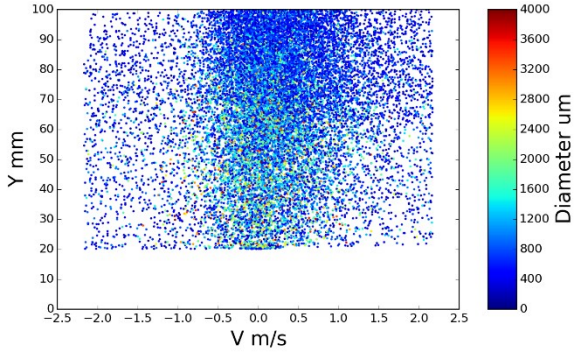


Figure B. 219: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

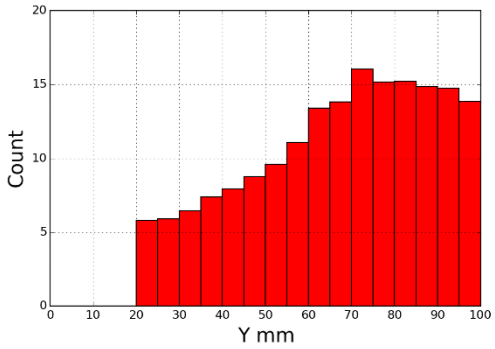


Figure B. 217: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

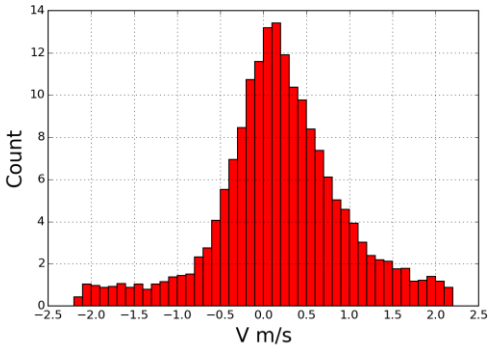


Figure B. 220: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

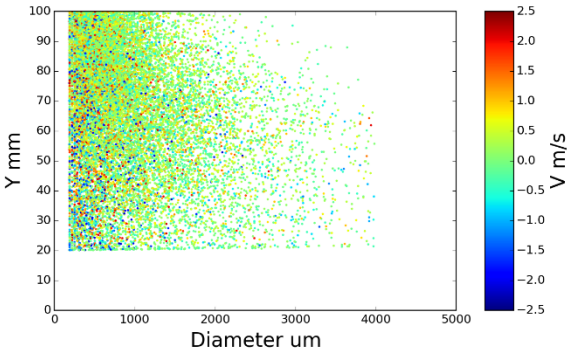


Figure B. 218: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.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	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	37.19	37.36	181.9	3977	1100	882.2	181.9	3989	1088	873.6
40-60mm	48.22	49.53	170.1	3989	1156	858.2	181.9	3987	1140	853.6
60-80mm	73.74	74.54	170.1	3976	958.9	734.7	181.9	3989	947.5	740.0
80-100mm	72.61	72.82	181.9	3944	687.1	481.4	181.9	3837	680.7	482.0
All	231.76	234.26	170.1	3989	937.4	745.9	170.1	3989	927.8	745.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.9913				100.0175			
Lowest Particle			20.1346				20.1175			

Table B. 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	14.6	181.9	3971	1474	890.6	181.9	3983	1444	912.0	-2.160	2.120	-0.050	0.640	-2.160	2.140	0.070	0.730
40-60mm	23.73	192.9	3989	1382	815.8	181.9	3987	1361	829.9	-2.160	2.160	-0.080	0.570	-2.160	2.160	0.150	0.710
60-80mm	39.47	181.9	3976	1131	731.4	181.9	3947	1104	736.8	-2.160	2.160	-0.100	0.630	-2.160	2.160	0.180	0.760
80-100mm	43.06	181.9	3562	802.6	519.2	181.9	3837	785.1	520.9	-2.160	2.150	-0.120	0.580	-2.160	2.160	0.200	0.720
All	120.86	181.9	3989	1105	749.3	181.9	3987	1080	755.8	-2.160	2.160	-0.100	0.600	-2.160	2.160	0.170	0.730

Table B. 26: Matched Droplet Info

B.1.2.2 All Droplets for .LA Image

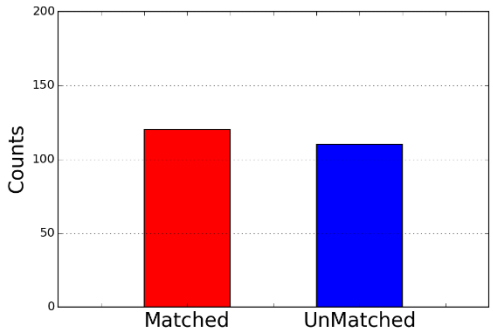


Figure B. 221: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

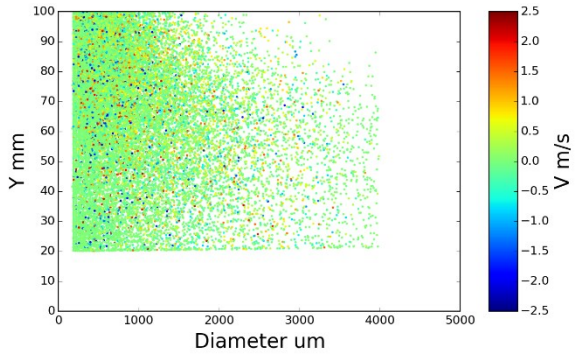


Figure B. 224: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

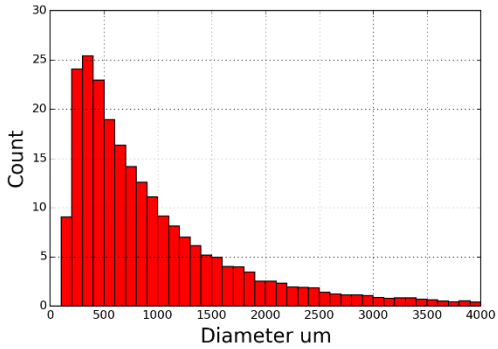


Figure B. 222: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

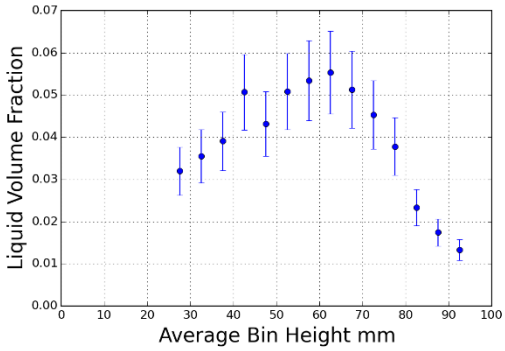


Figure B. 225: Void Fraction R-123 40F 5000Btu 15000Lb Tri

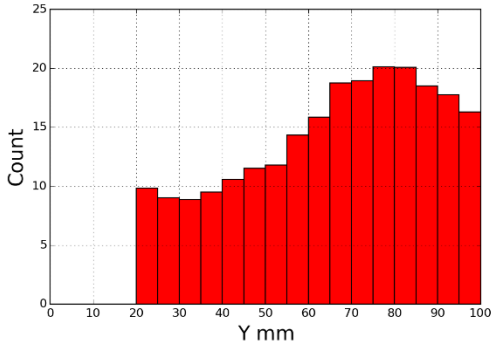


Figure B. 223: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.2.2 All Droplets for .LB Image

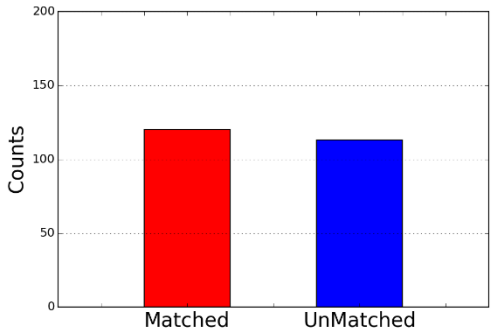


Figure B. 226: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

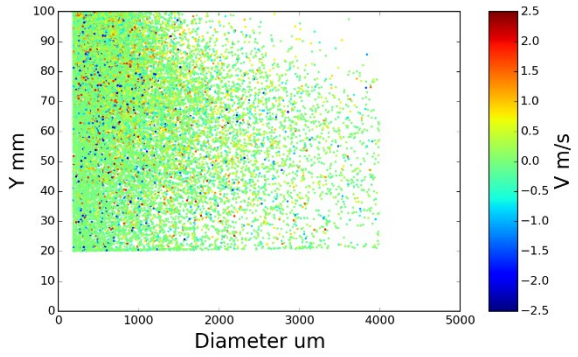


Figure B. 229: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

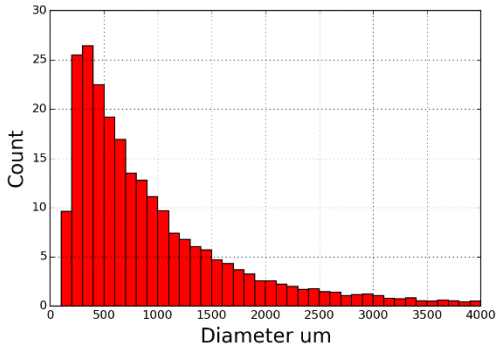


Figure B. 227: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

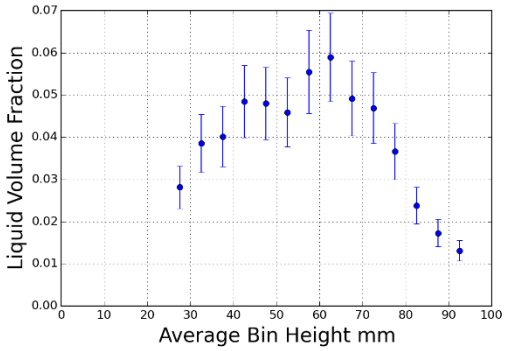


Figure B. 230: Void Fraction R-123 40F 5000Btu 15000Lb Tri

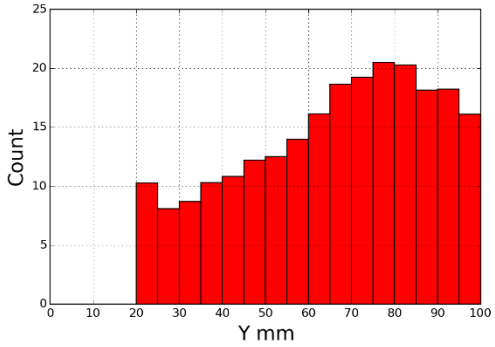


Figure B. 228: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.2.2 Matched Only Droplets for .LA Image

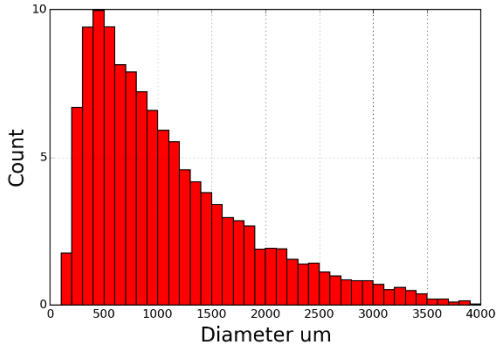


Figure B. 231: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

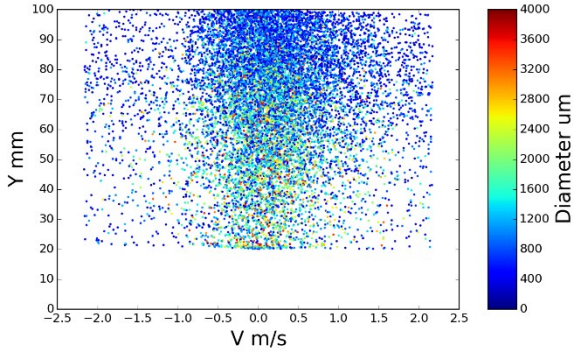


Figure B. 234: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

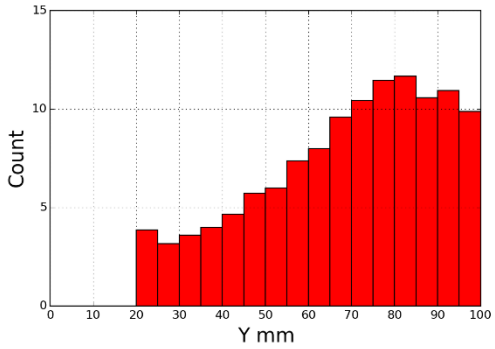


Figure B. 232: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

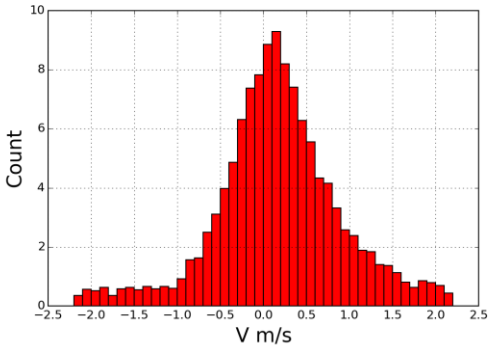


Figure B. 235: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

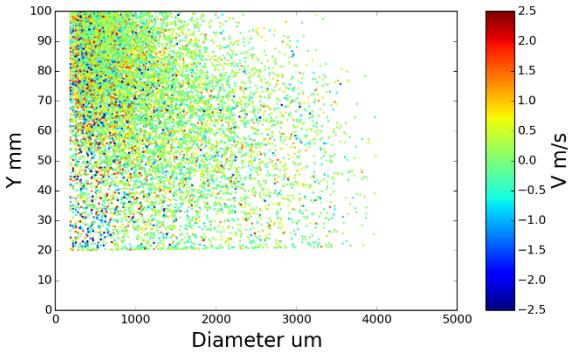


Figure B. 233: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.2.2 Matched Only Droplets for .LB Image

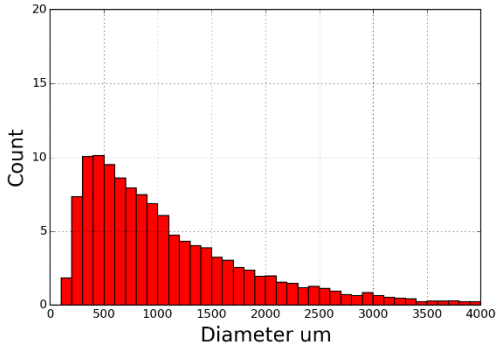


Figure B. 236: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

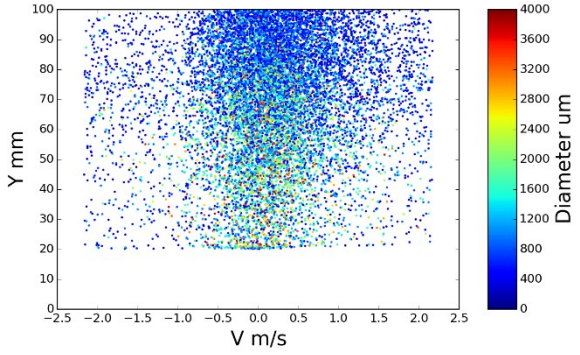


Figure B. 239: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

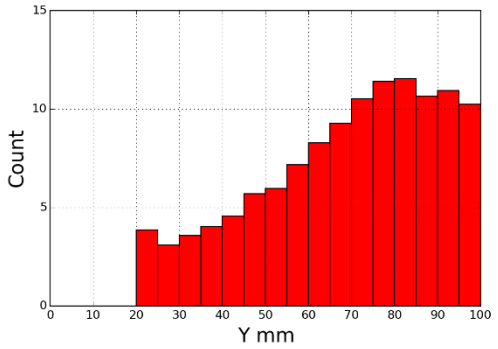


Figure B. 237: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

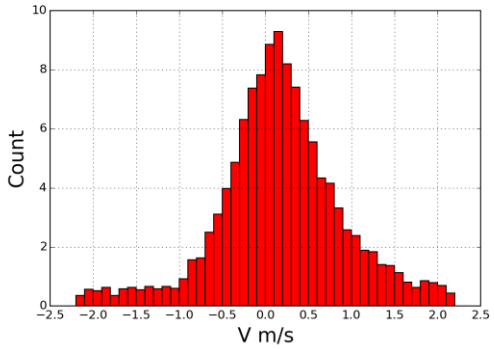


Figure B. 240: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

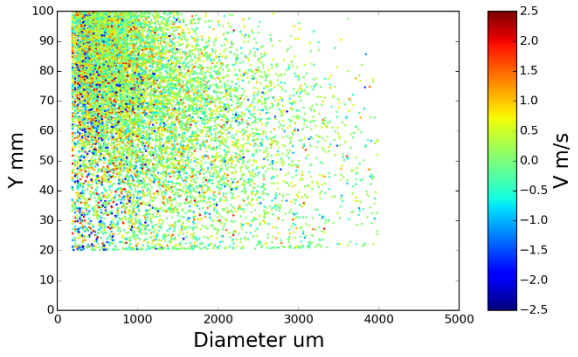


Figure B. 238: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.3 Liquid Level 3

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	11445 / 1.442
Ref Mass Flow (lb/hr) / (kg/s)	1592 / 0.201
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15492 / 21.011
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	2340 / 7.38
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	39.4 / 4.11
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	40.8 / 4.90
Total Bundle Q (Btu/hr) / (kW)	128262 / 37.59
Total Bundle & Preboiler Q (Btu/hr) / (kW)	128262 / 37.59
Top Two Rows HTC Ratio	0.556
Bundle Inlet Quality	-0.05
Bundle Exit Quality	1.00

Table B. 27: Thermal Conditions

B.1.3.1 Lens 100mm Mag 0_29x

B.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	2.44	2.99	75.7	2945	536.1	498.5	80.9	2642	493.3	495.7
40-60mm	7.26	9.57	75.7	3426	548.3	585.8	75.7	3306	449.1	539.8
60-80mm	4.8	5.65	75.7	2888	547.3	524.9	80.9	2863	481.0	508.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	14.5	18.21	75.7	3426	545.9	552.1	75.7	3306	466.3	523.5
			Height A (mm)				Height B (mm)			
Highest Particle			78.5160				78.4947			
Lowest Particle			30.5727				30.6667			

Table B. 28: 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	1.37	85.8	1841	656.2	444.2	80.9	2026	660.5	452.0	-1.530	1.950	-0.130	0.480	-1.740	2.100	0.090	0.730
40-60mm	3.93	80.9	2851	717.1	589.6	80.9	3066	722.4	611.6	-2.140	2.080	-0.140	0.590	-1.700	2.150	0.310	0.800
60-80mm	3.08	85.8	2605	627.0	504.9	80.9	2659	625.5	509.7	-2.160	2.100	-0.070	0.540	-2.040	1.990	0.110	0.760
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	8.38	80.9	2851	674.1	539.2	80.9	3066	676.3	553.1	-2.160	2.100	-0.110	0.550	-2.040	2.150	0.200	0.780

Table B. 29: Matched Droplet Info

B.1.3.1 All Droplets for .LA Image

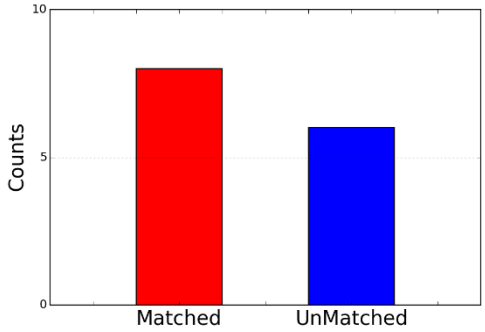


Figure B. 241: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

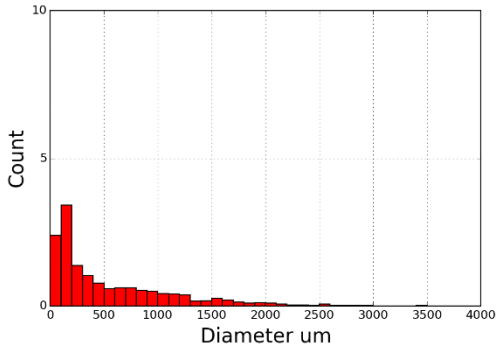


Figure B. 242: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

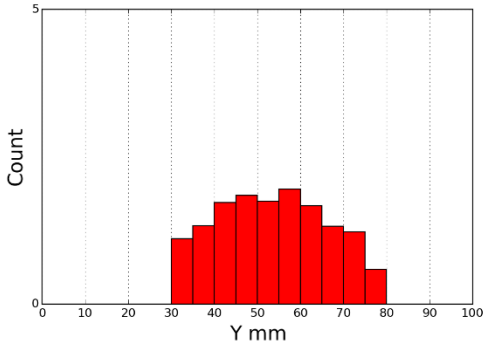


Figure B. 243: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

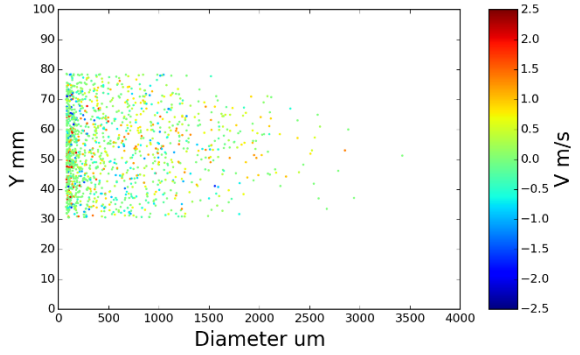


Figure B. 244: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

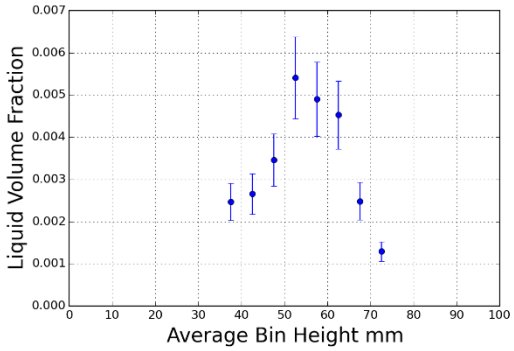


Figure B. 245: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.3.1 All Droplets for .LB Image

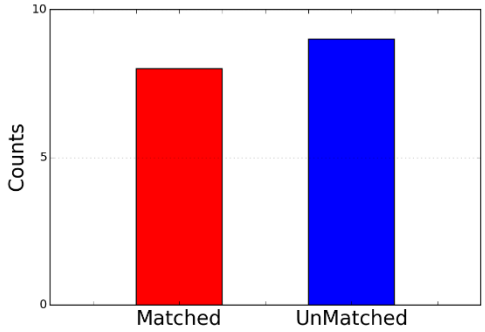


Figure B. 246: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

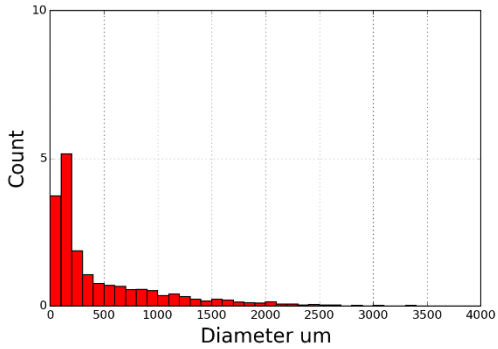


Figure B. 247: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

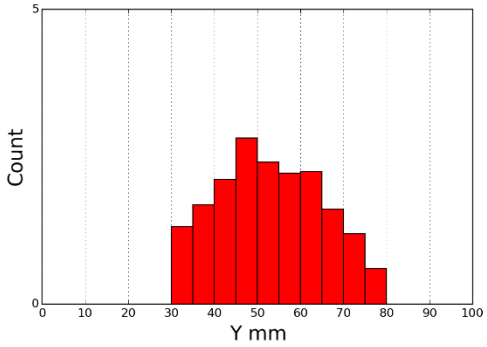


Figure B. 248: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

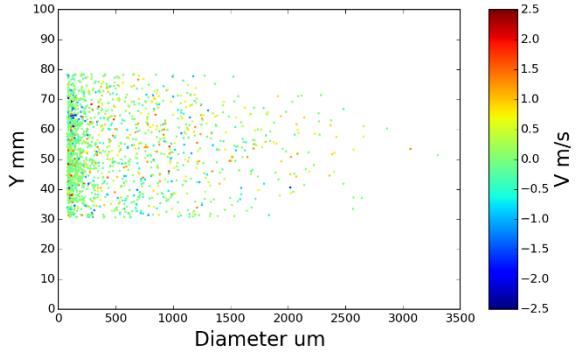


Figure B. 249: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

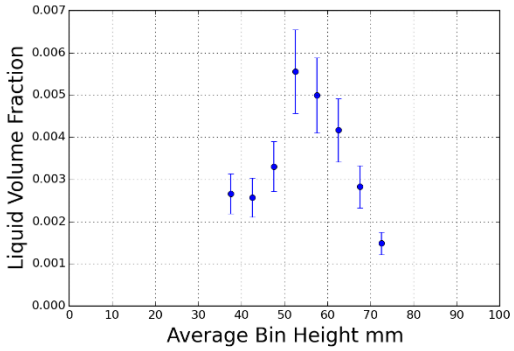


Figure B. 250: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.3.1 Matched Only Droplets for .LA Image

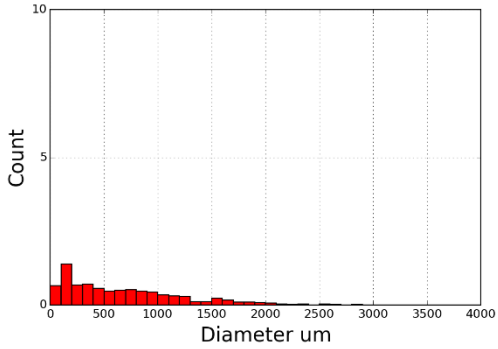


Figure B. 251: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

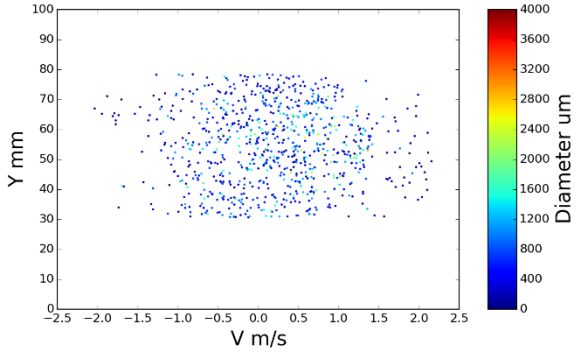


Figure B. 254: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

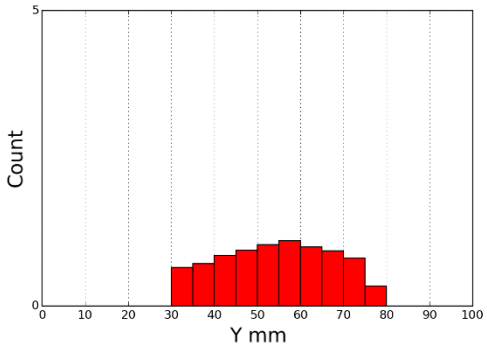


Figure B. 252: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

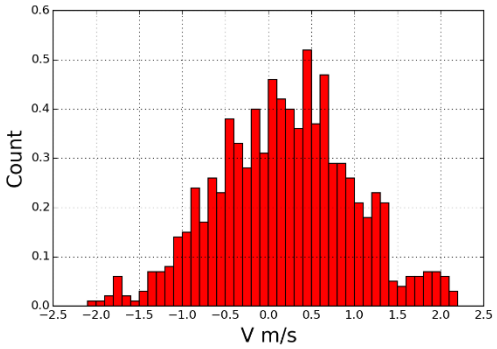


Figure B. 255: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

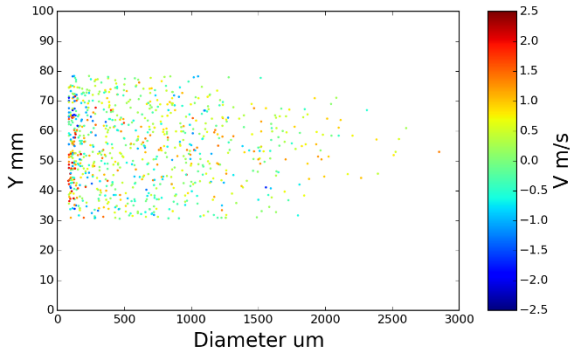


Figure B. 253: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.3.1 Matched Only Droplets for .LB Image

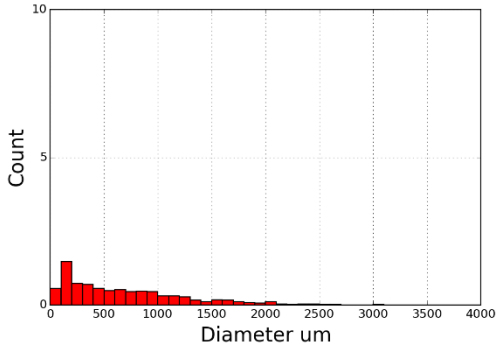


Figure B. 256: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

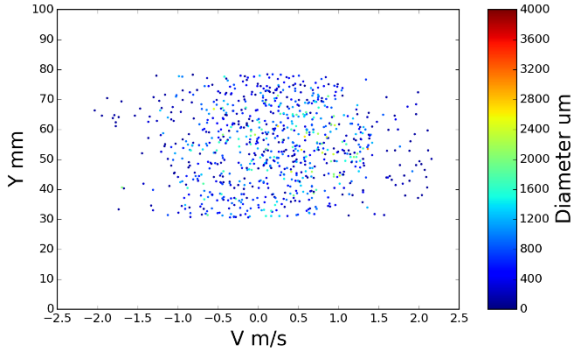


Figure B. 259: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

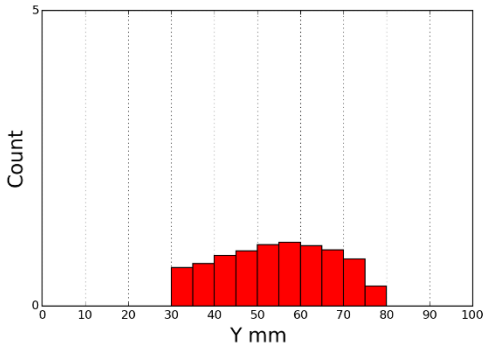


Figure B. 257: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

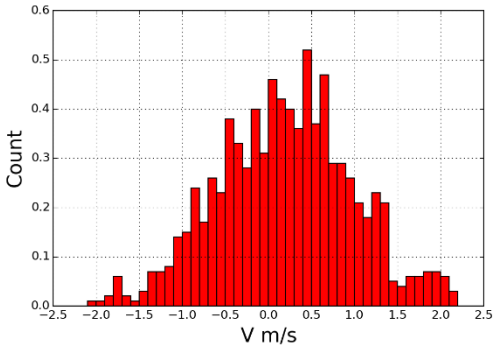


Figure B. 260: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

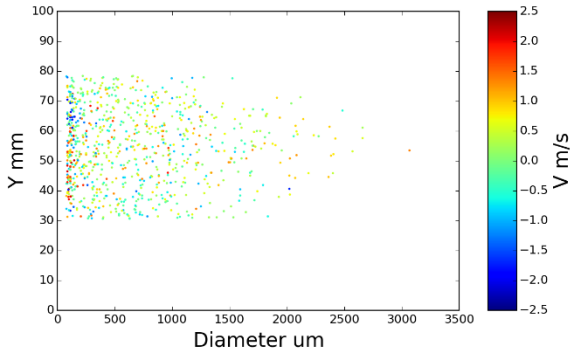


Figure B. 258: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.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	4.5	4.79	80.9	2336	529.0	424.1	75.7	2373	505.3	420.3
40-60mm	11.25	11.92	80.9	2812	527.4	469.2	75.7	2744	506.2	461.4
60-80mm	8.01	8.8	80.9	2699	555.2	456.6	75.7	2676	512.4	447.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	23.76	25.51	80.9	2812	537.1	456.9	75.7	2744	508.2	449.2
			Height A (mm)				Height B (mm)			
Highest Particle			78.4272				78.5070			
Lowest Particle			30.5727				30.6004			

Table B. 30: 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	2.99	85.8	2336	617.5	394.9	85.8	2373	618.4	402.2	-1.620	2.160	-0.200	0.470	-1.580	1.910	0.460	0.720
40-60mm	7.25	80.9	2567	636.3	450.3	80.9	2671	635.4	457.5	-1.950	2.170	-0.230	0.420	-2.170	2.160	0.440	0.710
60-80mm	5.43	80.9	2195	642.3	418.5	85.8	2220	640.4	426.7	-2.150	2.030	-0.210	0.450	-1.920	2.160	0.400	0.690
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	15.67	80.9	2567	634.8	429.4	80.9	2671	634.0	437.0	-2.150	2.170	-0.220	0.440	-2.170	2.160	0.430	0.710

Table B. 31: Matched Droplet Info

B.1.3.1 All Droplets for .LA Image

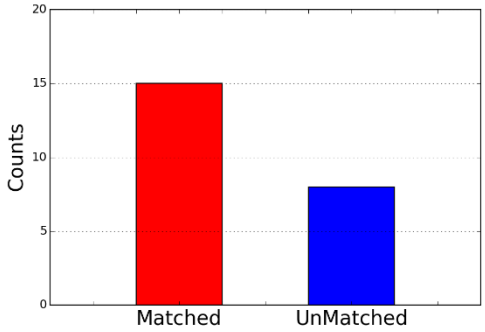


Figure B. 261: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

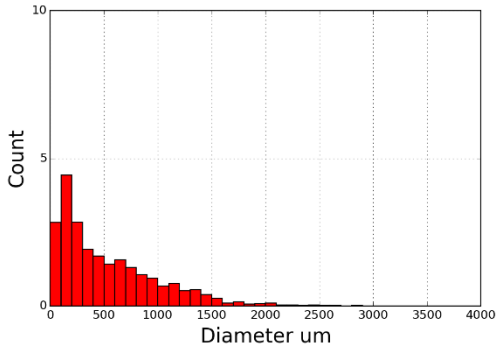


Figure B. 262: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

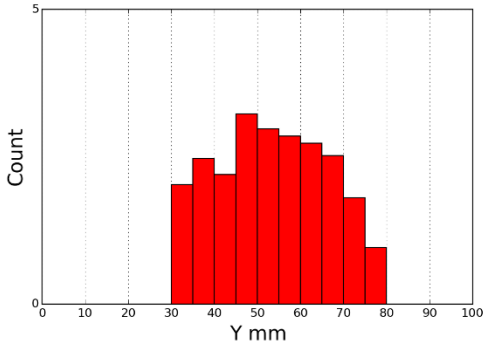


Figure B. 263: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

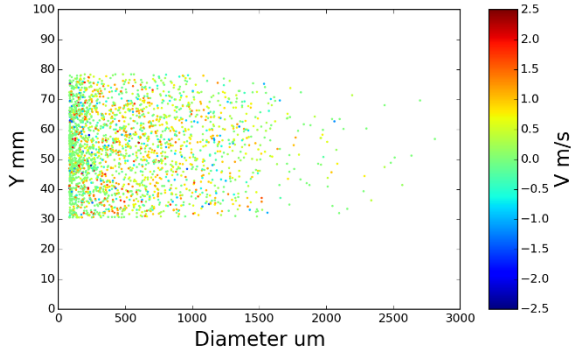


Figure B. 264: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

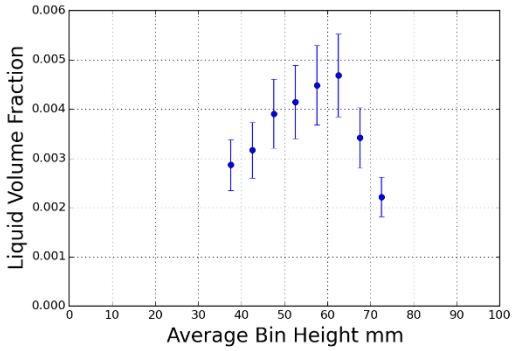


Figure B. 265: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.3.1 All Droplets for .LB Image

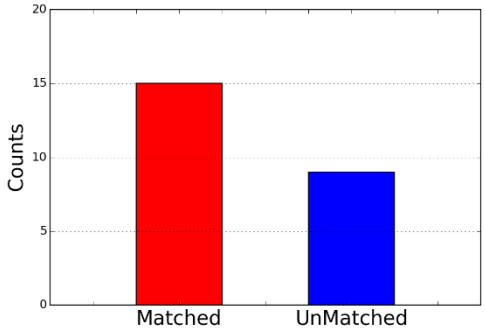


Figure B. 266: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

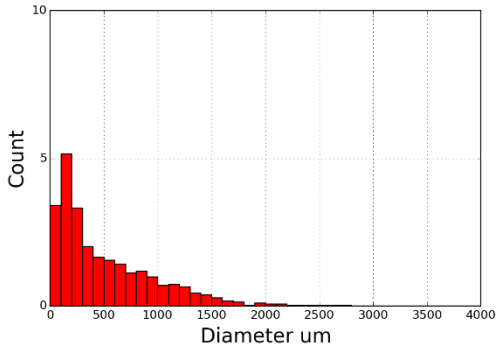


Figure B. 267: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

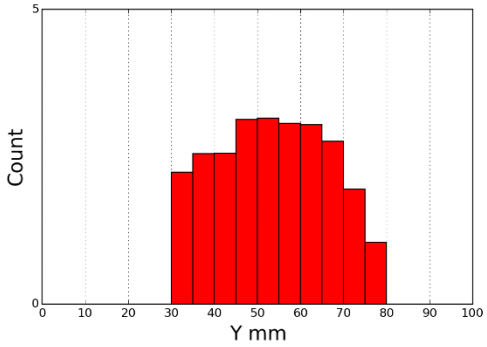


Figure B. 268: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

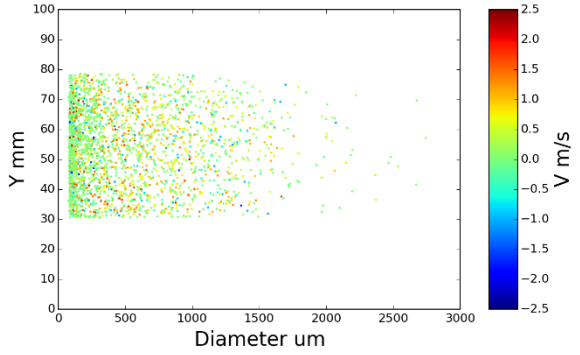


Figure B. 269: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

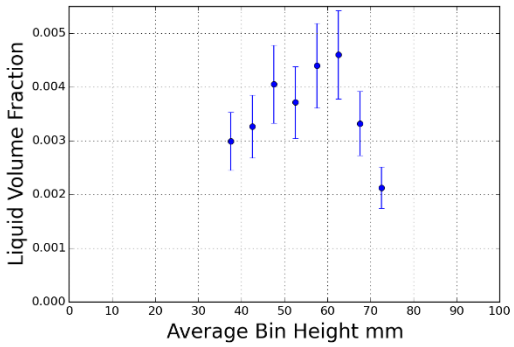


Figure B. 270: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.3.1 Matched Only Droplets for .LA Image

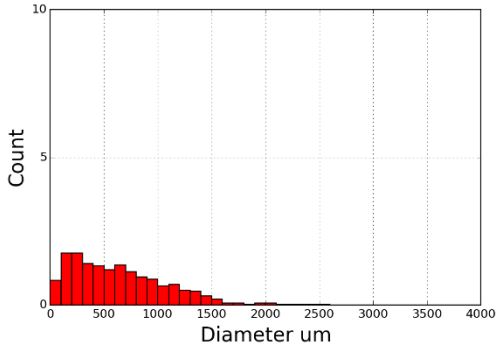


Figure B. 271: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

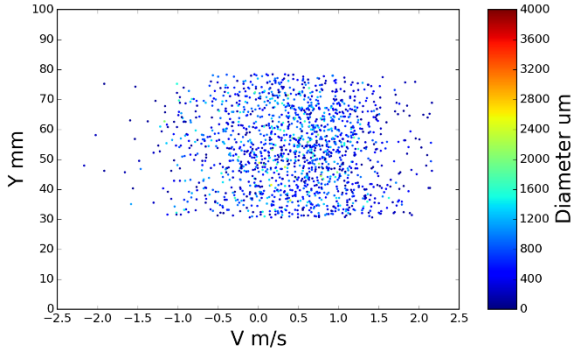


Figure B. 274: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

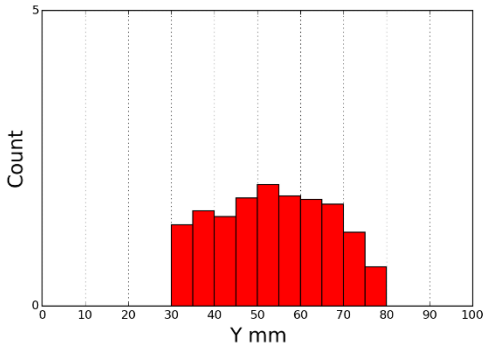


Figure B. 272: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

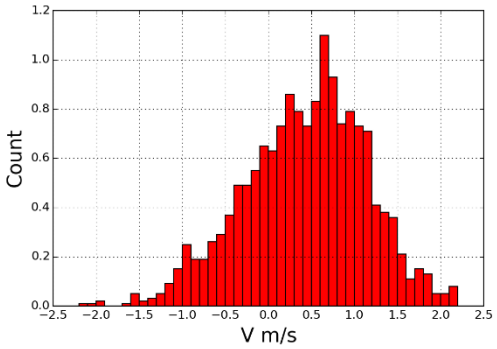


Figure B. 275: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

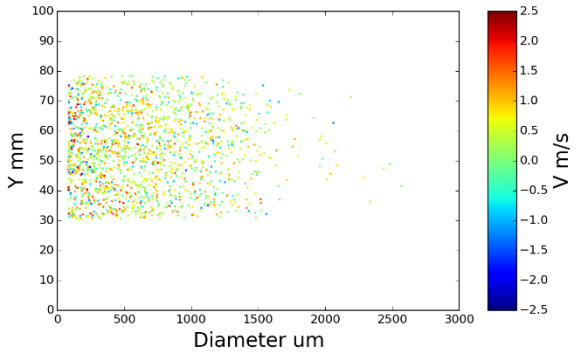


Figure B. 273: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.3.1 Matched Only Droplets for .LB Image

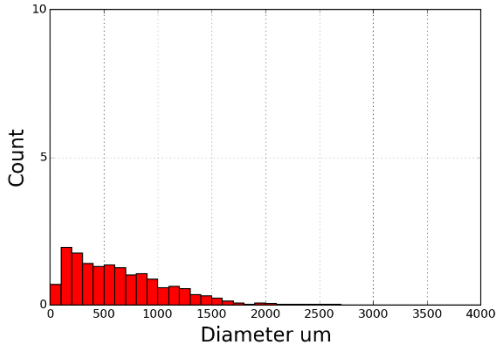


Figure B. 276: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

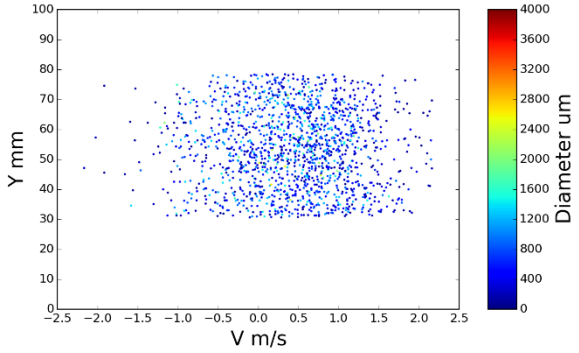


Figure B. 279: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

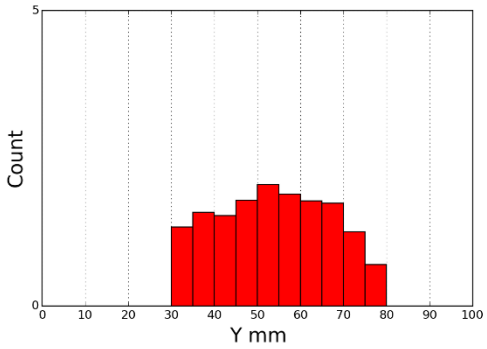


Figure B. 277: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

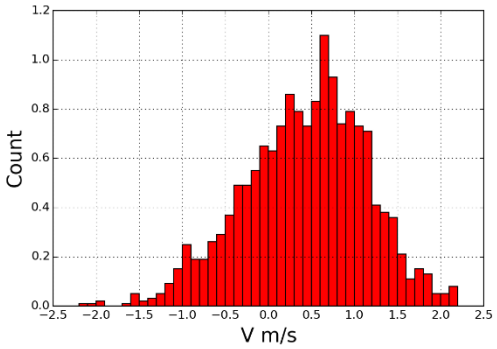


Figure B. 280: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

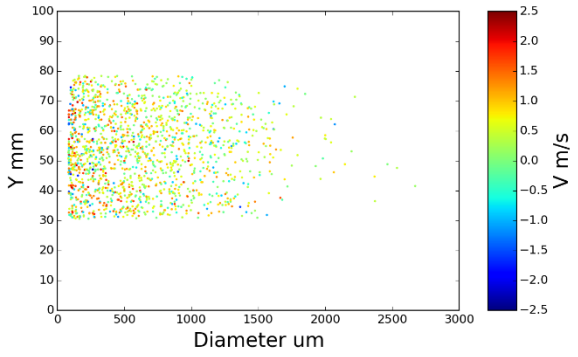


Figure B. 278: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.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	8.68	8.79	80.9	2908	499.1	415.6	75.7	2898	496.4	423.5
40-60mm	18.13	18.66	75.7	2631	521.6	450.4	75.7	2588	511.4	449.4
60-80mm	12.44	13.25	80.9	2454	508.9	419.4	80.9	2337	481.4	415.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	39.25	40.7	75.7	2908	512.6	433.3	75.7	2898	498.4	433.4
			Height A (mm)				Height B (mm)			
Highest Particle			78.5160				78.4935			
Lowest Particle			30.5837				30.5600			

Table B. 32: 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	5.7	85.8	2908	606.3	417.6	80.9	2898	615.3	432.6	-2.140	1.930	-0.320	0.380	-1.830	2.170	0.830	0.730
40-60mm	12.83	80.9	2609	610.2	429.0	75.7	2588	610.1	435.0	-2.170	2.170	-0.340	0.430	-2.140	2.160	0.850	0.730
60-80mm	8.58	80.9	2279	613.1	406.4	80.9	2337	609.2	411.4	-2.110	1.740	-0.320	0.420	-1.810	2.170	0.810	0.690
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	27.11	80.9	2908	610.3	419.6	75.7	2898	610.9	427.1	-2.170	2.170	-0.330	0.420	-2.140	2.170	0.840	0.720

Table B. 33: Matched Droplet Info

B.1.3.1 All Droplets for .LA Image

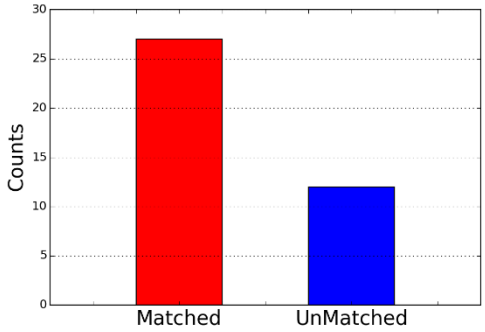


Figure B. 281: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

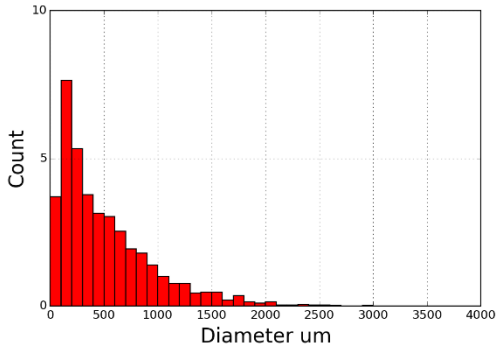


Figure B. 282: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

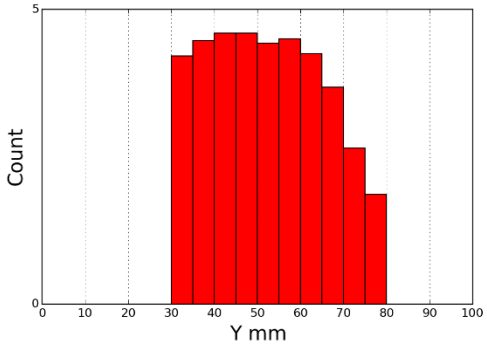


Figure B. 283: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

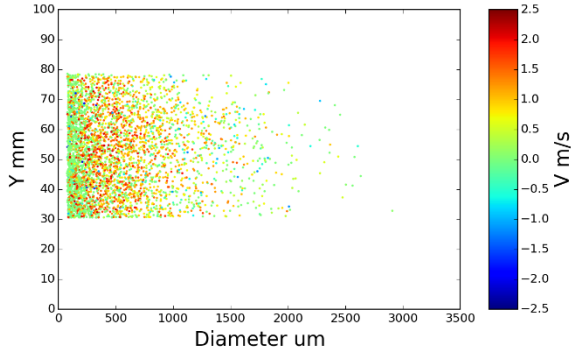


Figure B. 284: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

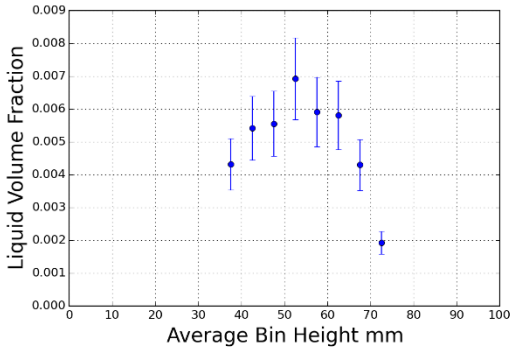


Figure B. 285: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.3.1 All Droplets for .LB Image

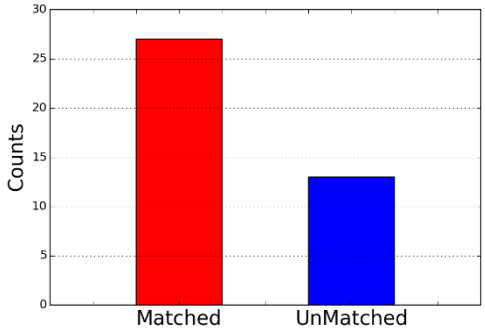


Figure B. 286: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

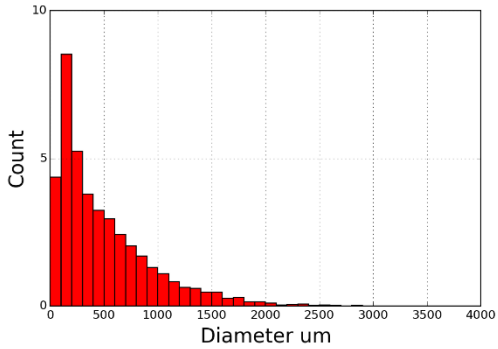


Figure B. 287: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

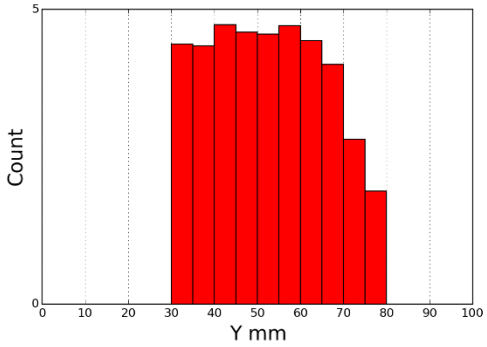


Figure B. 288: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

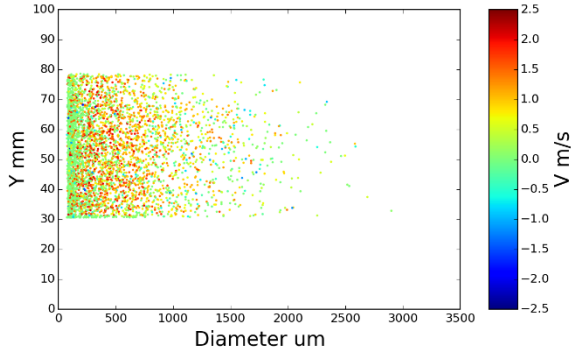


Figure B. 289: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

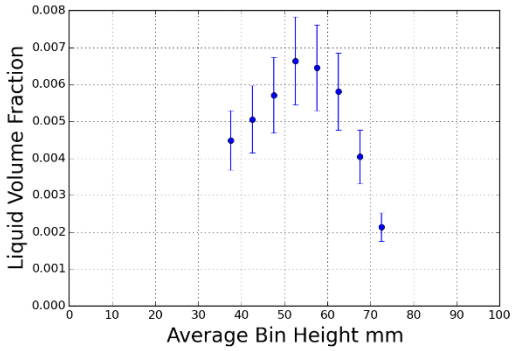


Figure B. 290: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.3.1 Matched Only Droplets for .LA Image

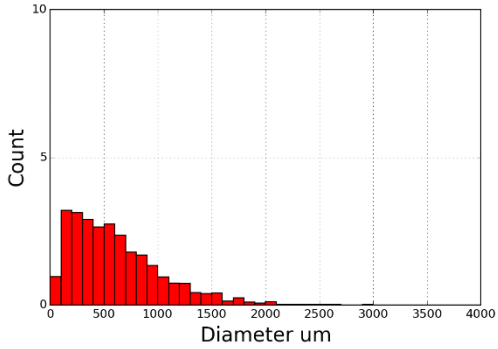


Figure B. 291: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

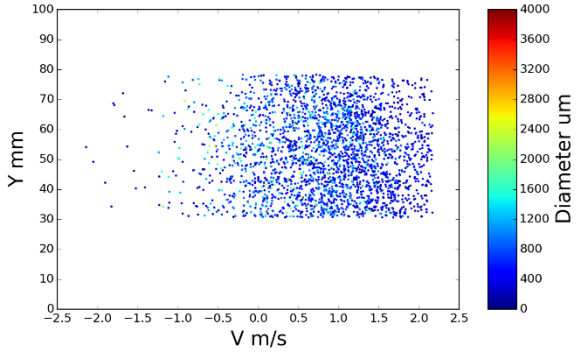


Figure B. 294: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

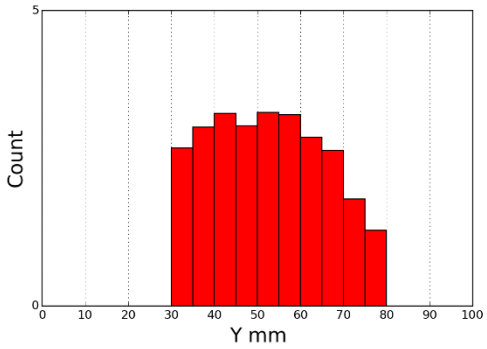


Figure B. 292: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

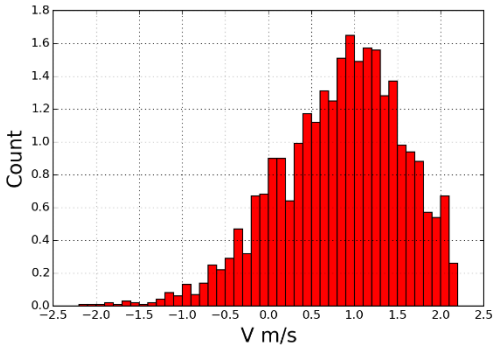


Figure B. 295: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

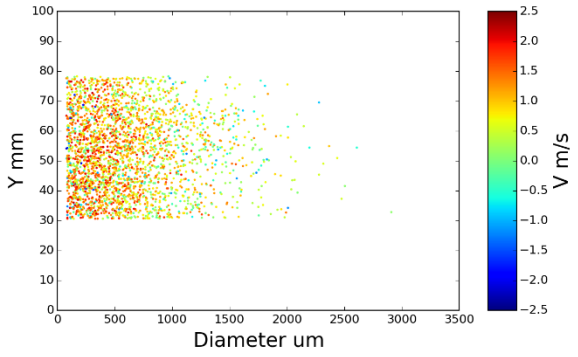


Figure B. 293: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.3.1 Matched Only Droplets for .LB Image

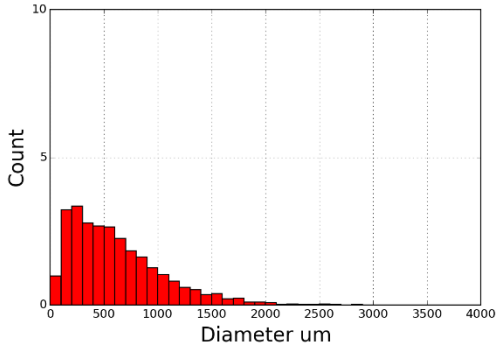


Figure B. 296: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

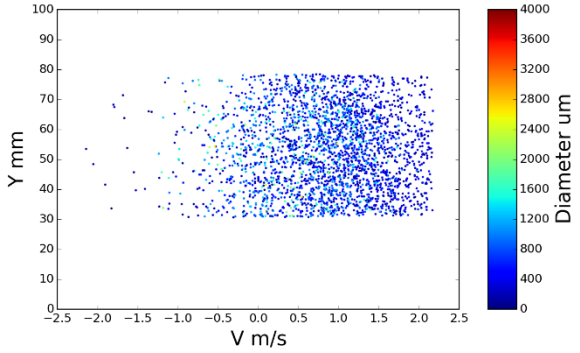


Figure B. 299: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

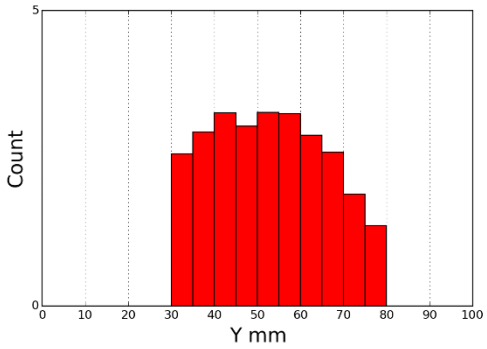


Figure B. 297: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

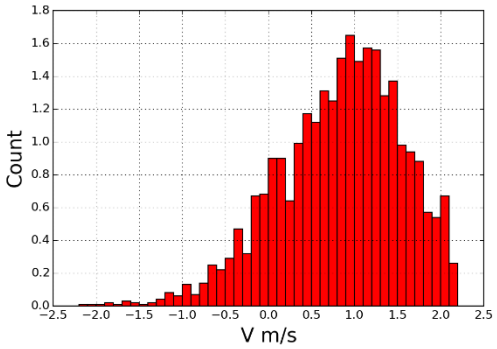


Figure B. 300: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

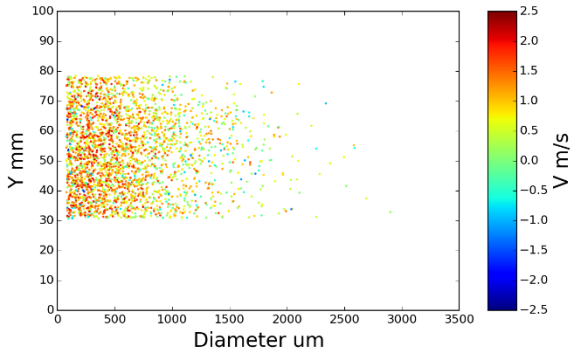


Figure B. 298: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.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	8.54	8.64	80.9	2611	512.1	434.4	75.7	2455	511.9	427.0
40-60mm	20.07	20.66	75.7	2879	500.0	409.6	75.7	2826	486.2	412.0
60-80mm	13.78	14.47	80.9	3319	523.0	442.6	75.7	3157	492.5	425.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	42.39	43.77	75.7	3319	509.9	425.7	75.7	3157	493.3	419.7
			Height A (mm)				Height B (mm)			
Highest Particle			78.4942				78.5160			
Lowest Particle			30.5727				30.5600			

Table B. 34: 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	5.94	85.8	2456	589.1	402.7	85.8	2455	598.1	410.6	-2.110	1.590	-0.320	0.440	-1.180	2.130	1.120	0.630
40-60mm	13.64	80.9	2319	604.0	396.0	80.9	2383	601.4	400.1	-2.170	2.140	-0.360	0.430	-1.850	2.170	1.060	0.650
60-80mm	8.98	80.9	2787	639.0	404.1	80.9	2884	625.6	404.8	-1.870	1.940	-0.350	0.420	-2.070	2.170	0.990	0.630
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	28.56	80.9	2787	611.9	400.4	80.9	2884	608.5	403.9	-2.170	2.140	-0.350	0.430	-2.070	2.170	1.050	0.640

Table B. 35: Matched Droplet Info

B.1.3.1 All Droplets for .LA Image

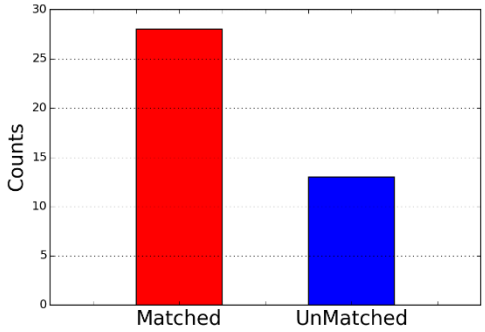


Figure B. 301: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

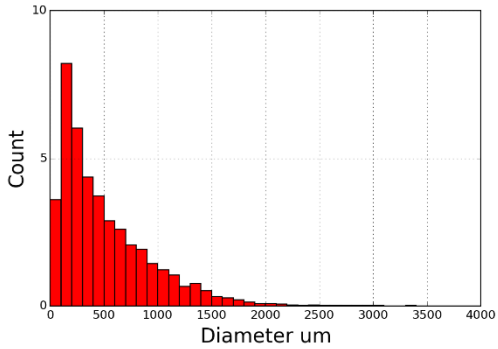


Figure B. 302: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

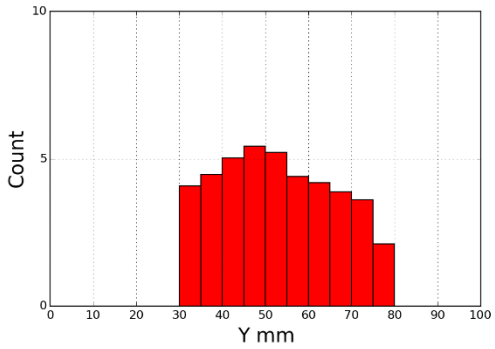


Figure B. 303: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

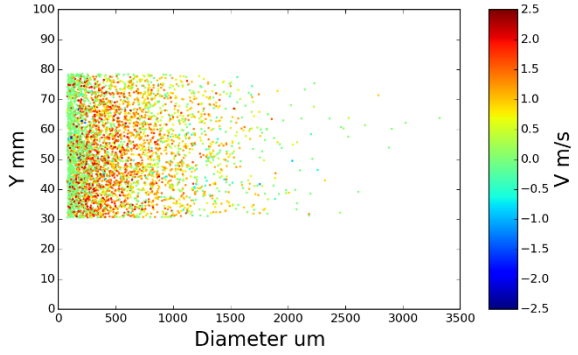


Figure B. 304: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

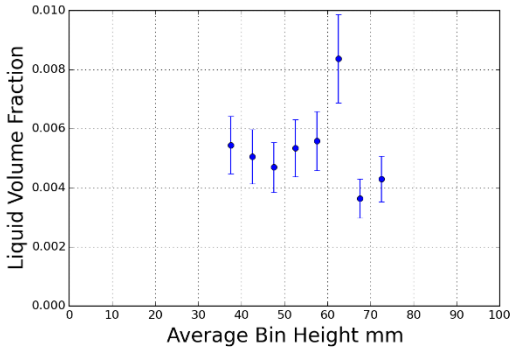


Figure B. 305: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.3.1 All Droplets for .LB Image

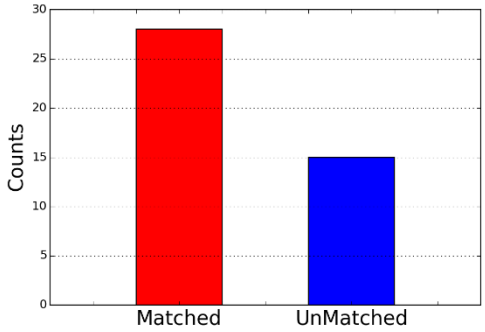


Figure B. 306: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

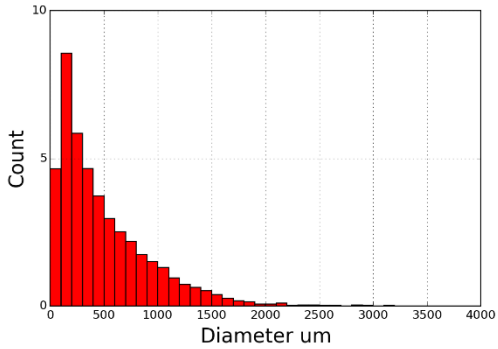


Figure B. 307: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

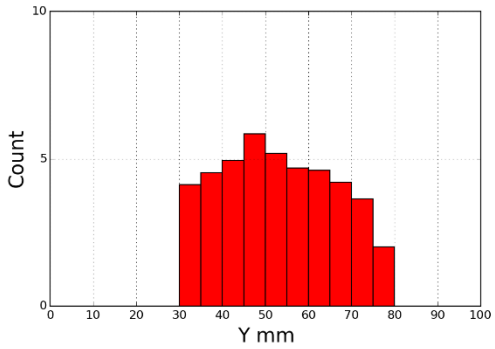


Figure B. 308: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

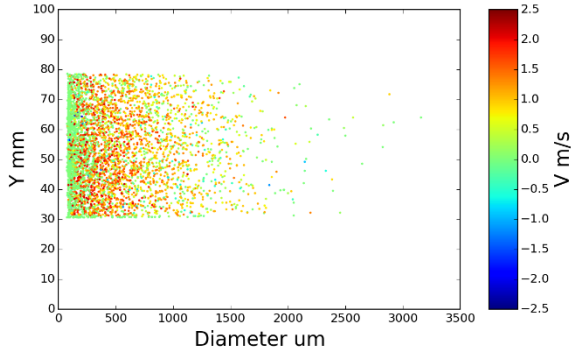


Figure B. 309: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

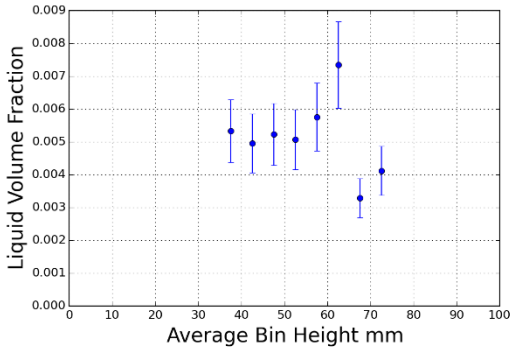


Figure B. 310: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.3.1 Matched Only Droplets for .LA Image

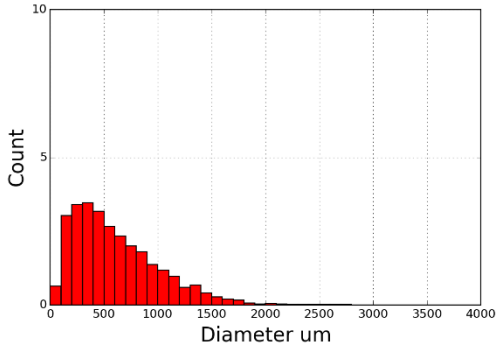


Figure B. 311: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

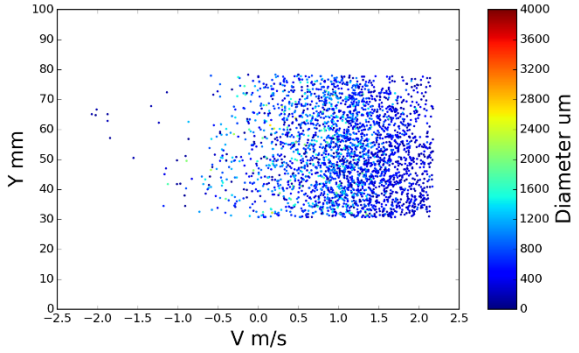


Figure B. 314: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

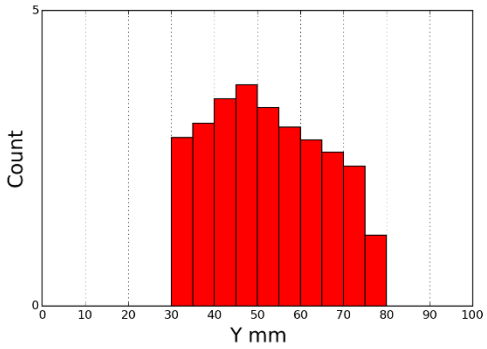


Figure B. 312: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

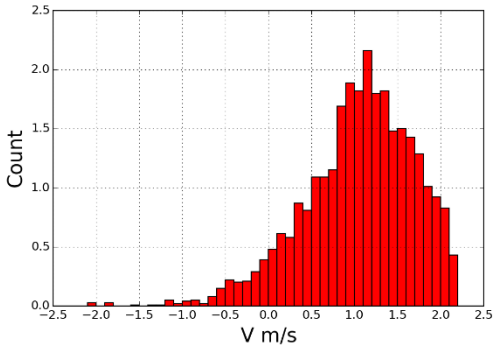


Figure B. 315: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

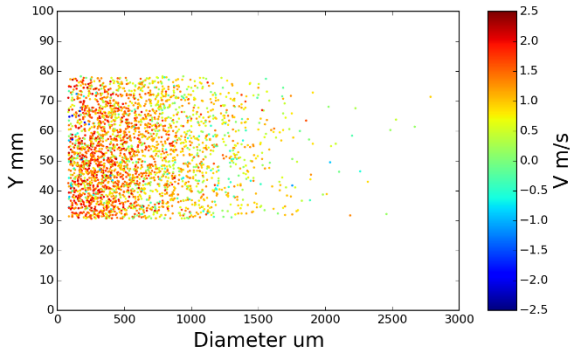


Figure B. 313: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.3.1 Matched Only Droplets for .LB Image

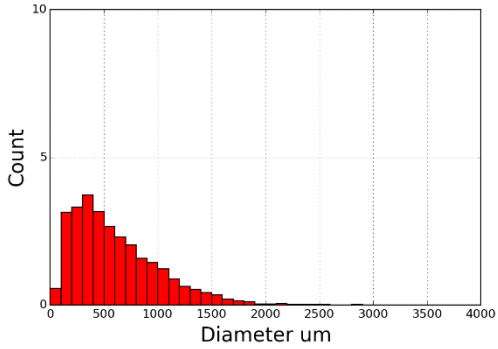


Figure B. 316: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

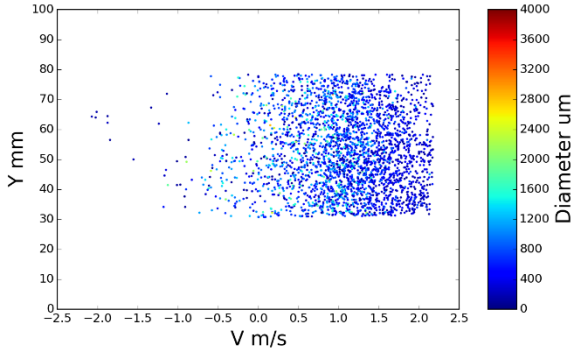


Figure B. 319: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

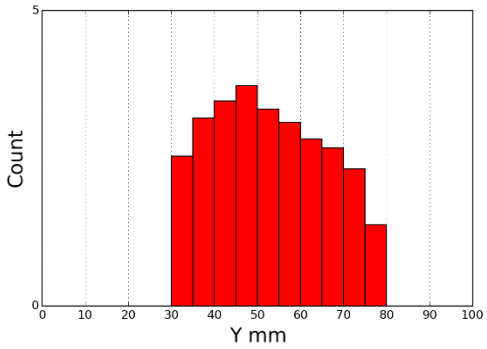


Figure B. 317: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

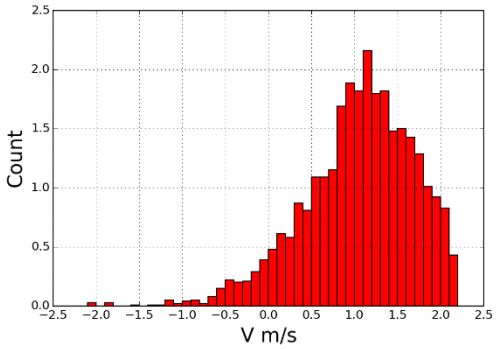


Figure B. 320: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

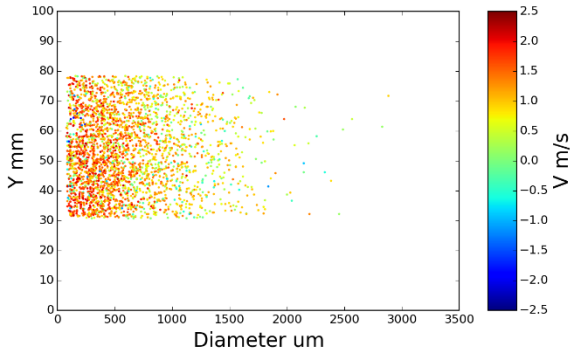


Figure B. 318: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.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	5.24	5.72	80.9	2629	602.1	502.0	80.9	2648	581.2	509.6
40-60mm	15.2	16.53	75.7	3544	542.3	494.8	75.7	3226	510.9	495.3
60-80mm	12.77	13.06	80.9	2794	509.2	459.1	75.7	2783	495.4	456.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	33.21	35.31	75.7	3544	539.0	483.6	75.7	3226	516.5	484.5
			Height A (mm)				Height B (mm)			
Highest Particle			78.5160				78.5160			
Lowest Particle			30.5727				30.5958			

Table B. 36: 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	3.44	80.9	2629	714.9	502.2	80.9	2648	731.5	519.7	-1.880	2.140	-0.270	0.450	-1.810	2.150	1.020	0.610
40-60mm	9.48	80.9	3149	681.4	478.4	75.7	3226	687.1	493.5	-2.170	2.130	-0.310	0.460	-1.980	2.170	1.150	0.640
60-80mm	7.64	85.8	2390	652.1	439.9	80.9	2667	637.1	443.5	-2.100	1.560	-0.360	0.420	-2.160	2.170	1.140	0.640
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	20.56	80.9	3149	676.1	469.2	75.7	3226	675.0	480.6	-2.170	2.140	-0.320	0.440	-2.160	2.170	1.130	0.640

Table B. 37: Matched Droplet Info

B.1.3.1 All Droplets for .LA Image

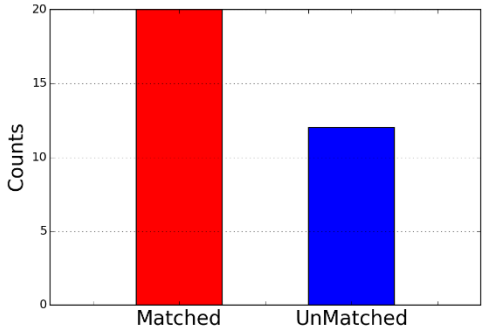


Figure B. 321: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

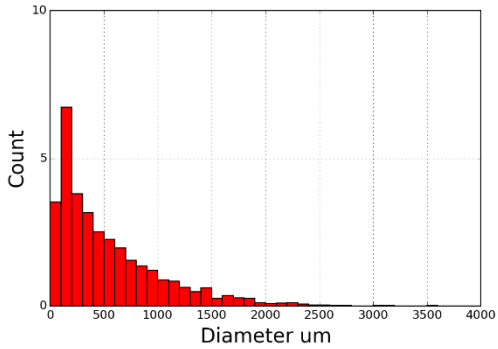


Figure B. 322: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

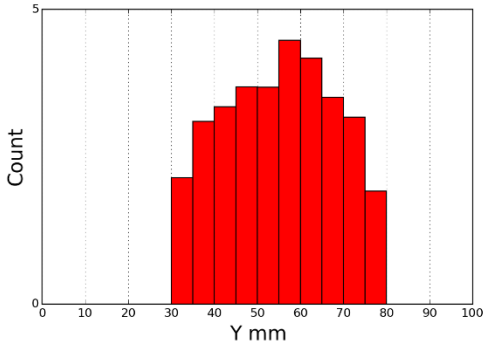


Figure B. 323: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

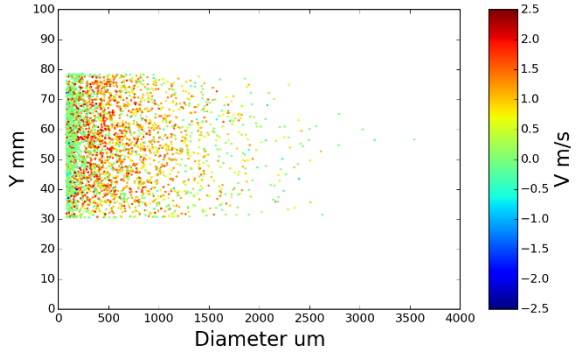


Figure B. 324: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

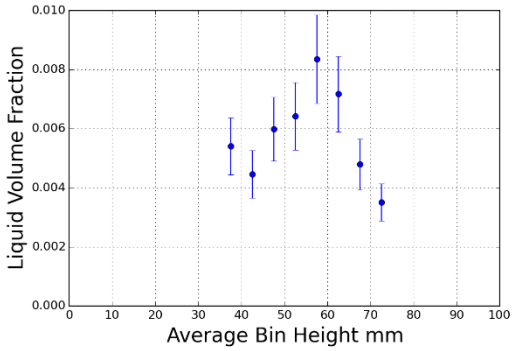


Figure B. 325: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.3.1 All Droplets for .LB Image

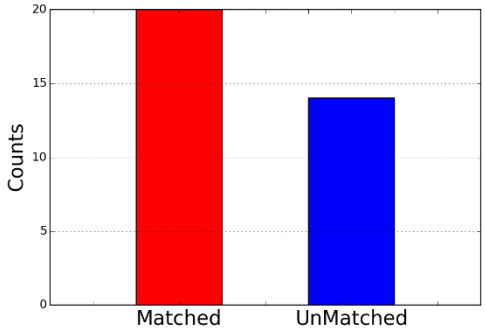


Figure B. 326: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

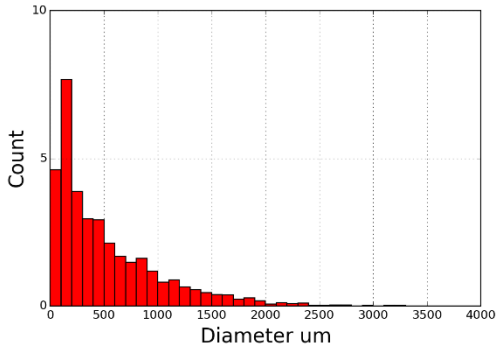


Figure B. 327: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

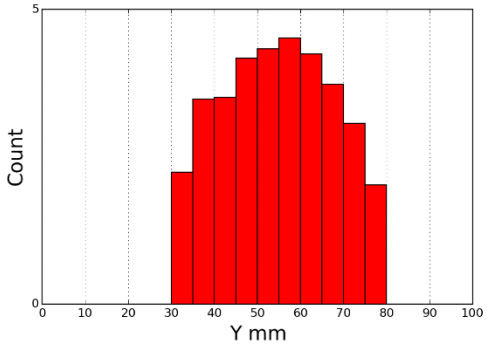


Figure B. 328: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

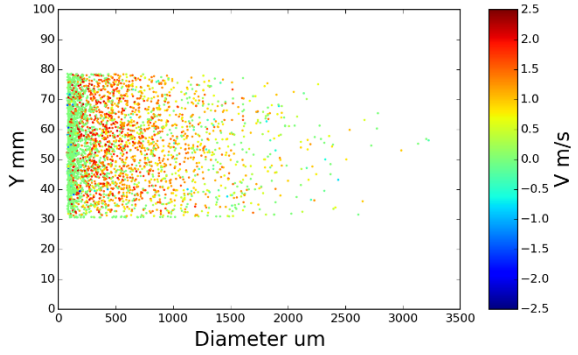


Figure B. 329: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

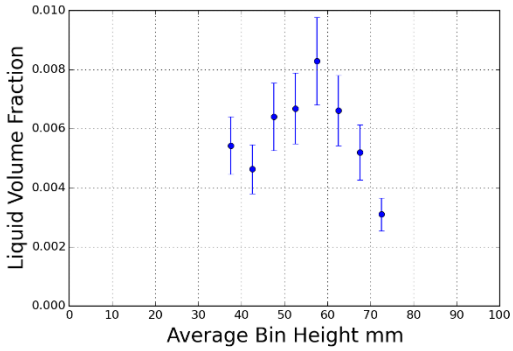


Figure B. 330: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.3.1 Matched Only Droplets for .LA Image

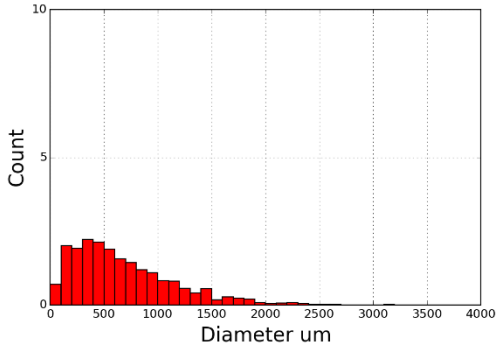


Figure B. 331: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

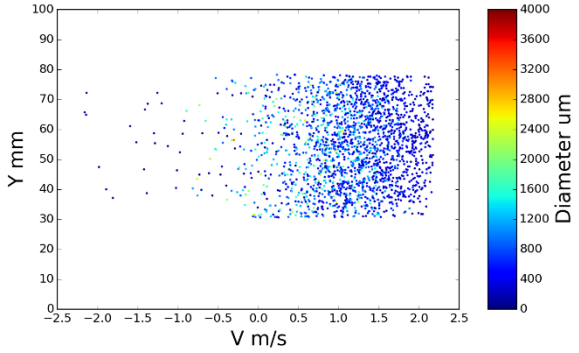


Figure B. 334: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

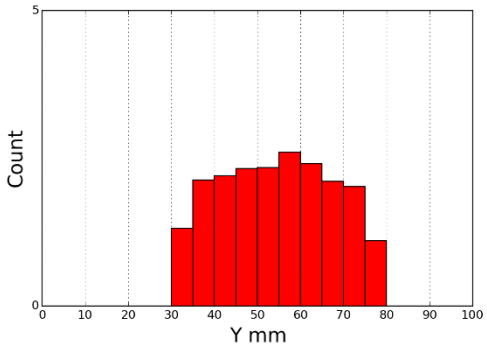


Figure B. 332: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

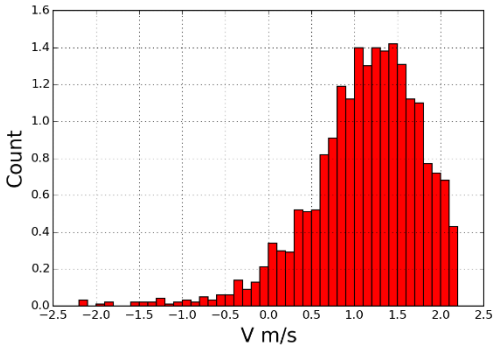


Figure B. 335: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

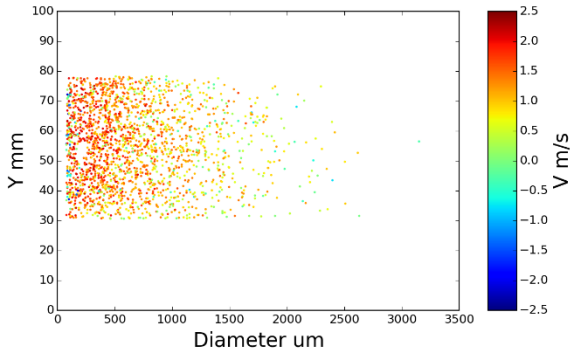


Figure B. 333: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.3.1 Matched Only Droplets for .LB Image

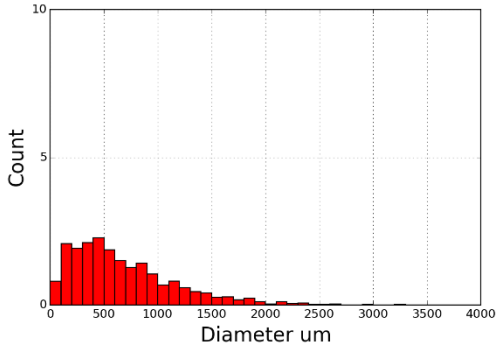


Figure B. 336: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

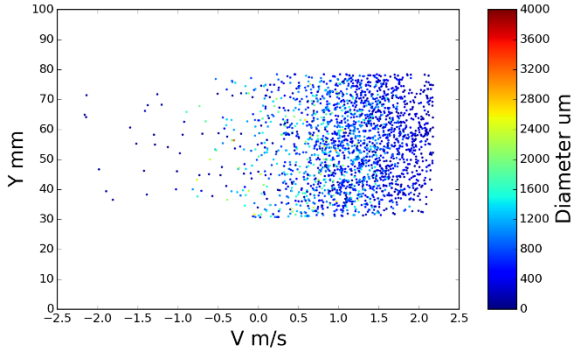


Figure B. 339: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

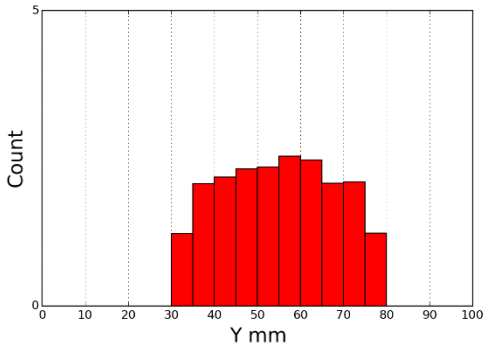


Figure B. 337: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

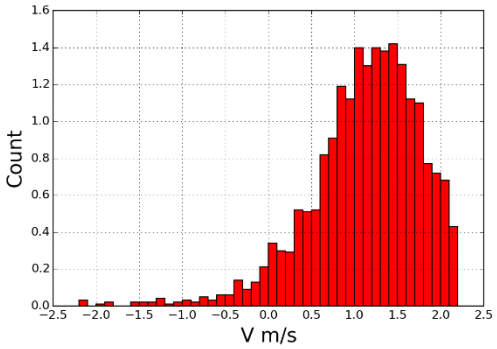


Figure B. 340: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

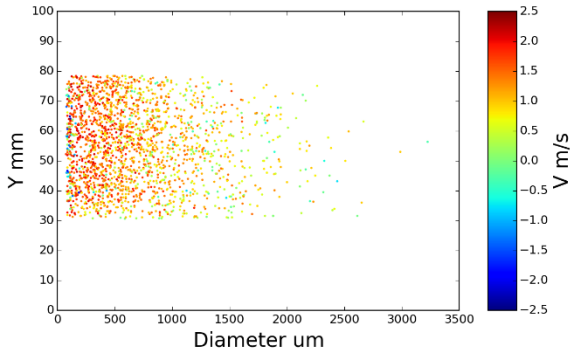


Figure B. 338: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.3.2 Lens 50mm Mag 0_13x

B.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	8.73	8.57	181.9	3500	831.2	530.2	181.9	3604	821.3	545.4
20-40mm	9.9	9.68	181.9	2734	743.9	481.2	181.9	2745	744.0	478.2
40-60mm	10.69	10.63	181.9	3906	765.4	475.6	181.9	3846	764.3	480.1
60-80mm	9.9	9.88	192.9	2873	668.2	407.7	181.9	2822	670.0	412.2
80-100mm	6.71	6.78	181.9	1997	573.9	323.6	192.9	1788	563.7	321.6
All	45.93	45.54	181.9	3906	724.4	462.3	181.9	3846	720.4	466.2
			Height A (mm)				Height B (mm)			
Highest Particle			99.9890				99.9656			
Lowest Particle			5.2011				5.1544			

Table B. 38: 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	6.14	192.9	3500	915.3	518.3	192.9	3604	914.5	541.2	-1.980	1.600	-0.160	0.330	-1.870	2.060	0.360	0.610
20-40mm	7.03	192.9	2506	806.8	468.2	192.9	2745	803.9	476.9	-1.810	2.020	-0.200	0.340	-1.280	2.150	0.420	0.710
40-60mm	8.42	181.9	3020	811.6	452.4	192.9	3005	810.9	462.7	-1.370	1.690	-0.180	0.360	-2.070	2.120	0.490	0.680
60-80mm	7.91	192.9	2796	704.0	394.3	192.9	2822	703.1	407.4	-1.700	1.120	-0.040	0.350	-0.980	2.110	0.410	0.610
80-100mm	5.58	181.9	1997	599.6	327.1	192.9	1788	589.2	319.3	-1.840	1.540	0.080	0.330	-0.980	1.850	0.350	0.550
All	35.08	181.9	3500	770.8	449.6	192.9	3604	766.8	460.1	-1.980	2.020	-0.110	0.360	-2.070	2.150	0.410	0.640

Table B. 39: Matched Droplet Info

B.1.3.2 All Droplets for .LA Image

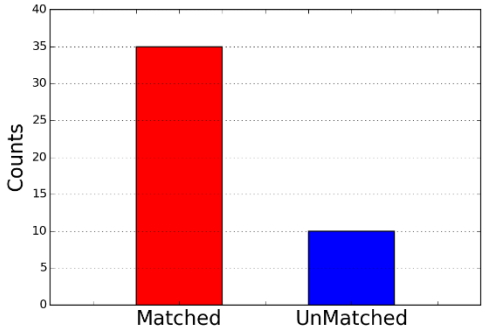


Figure B. 341: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

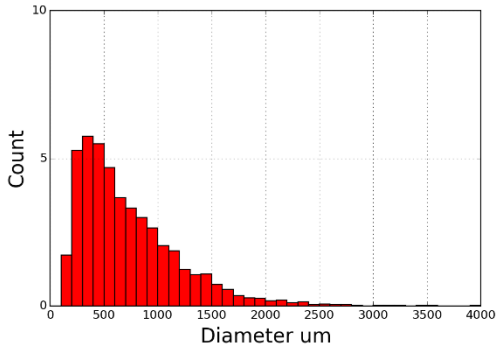


Figure B. 342: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

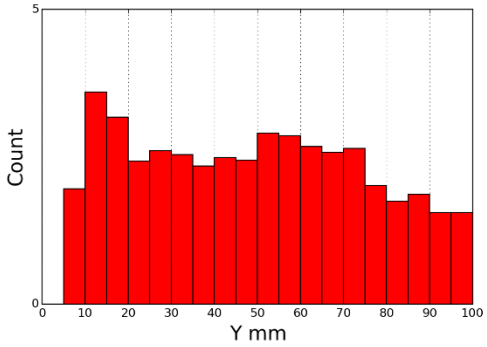


Figure B. 343: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

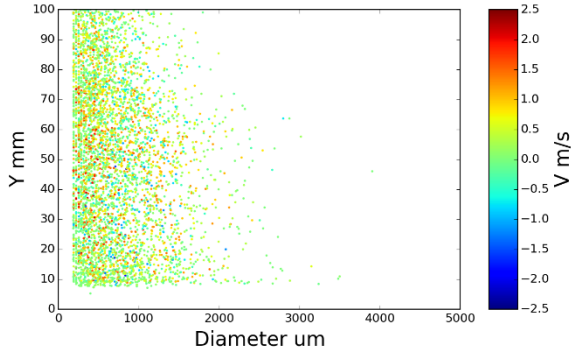


Figure B. 344: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

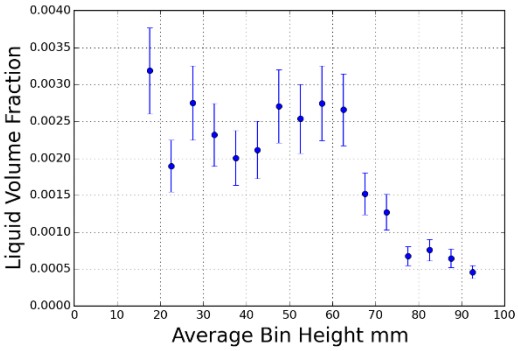


Figure B. 345: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.3.2 All Droplets for .LB Image

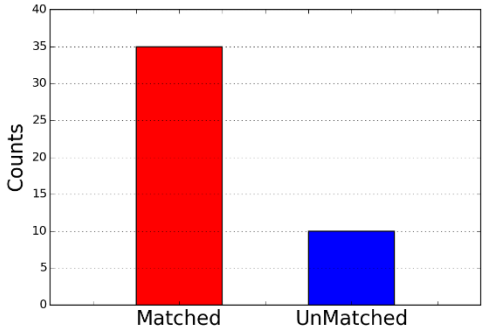


Figure B. 346: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

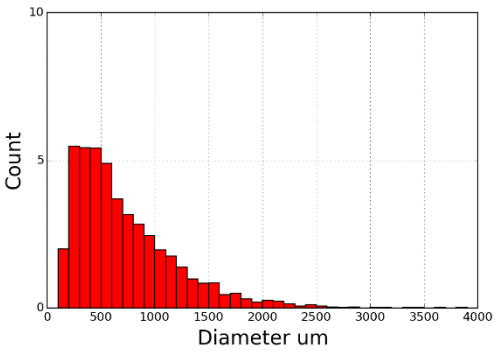


Figure B. 347: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

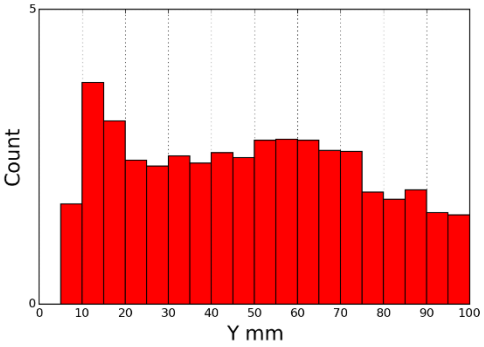


Figure B. 348: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

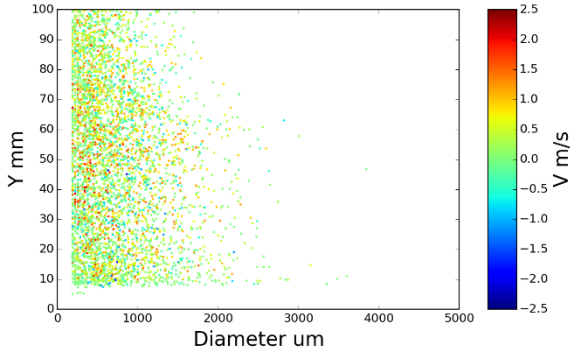


Figure B. 349: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

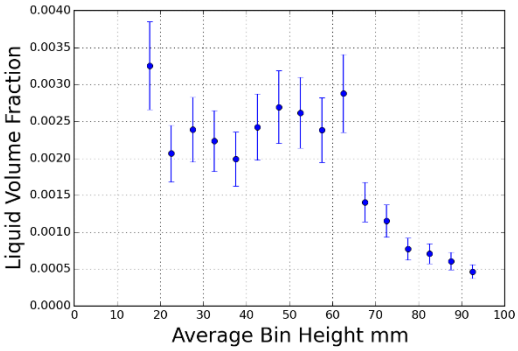


Figure B. 350: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.3.2 Matched Only Droplets for .LA Image

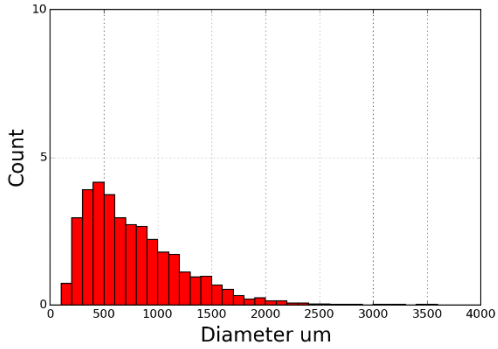


Figure B. 351: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

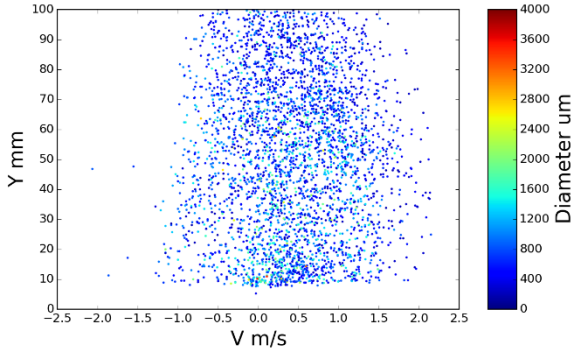


Figure B. 354: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

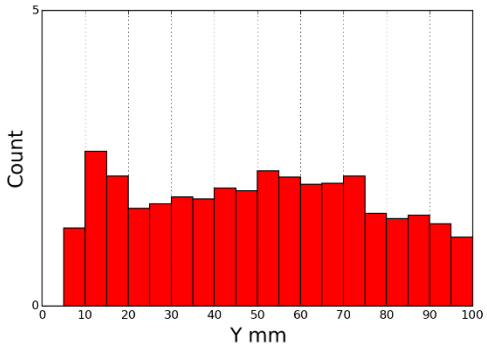


Figure B. 352: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

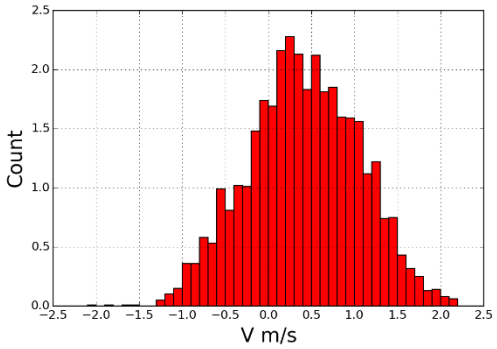


Figure B. 355: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

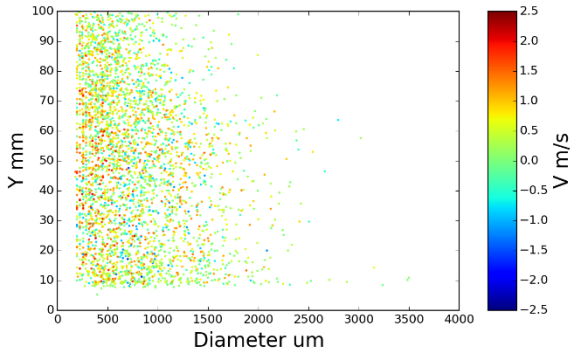


Figure B. 353: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.3.2 Matched Only Droplets for .LB Image

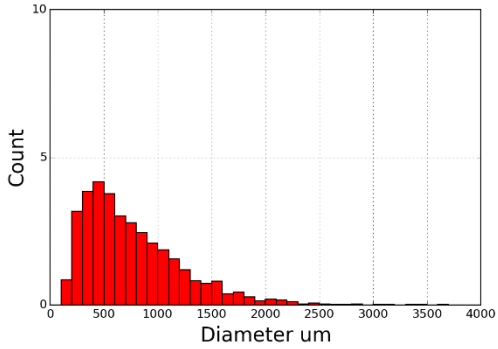


Figure B. 356: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

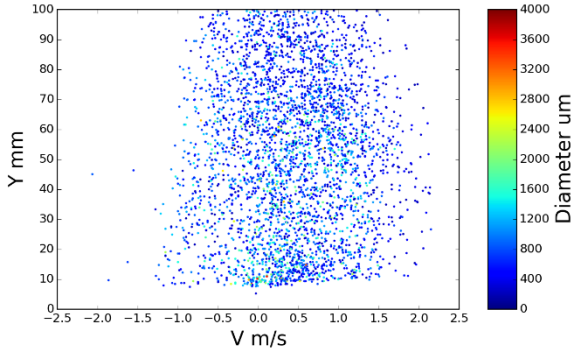


Figure B. 359: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

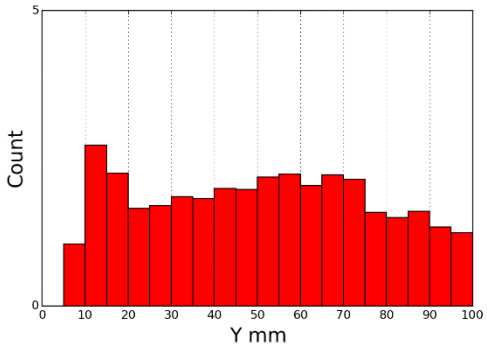


Figure B. 357: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

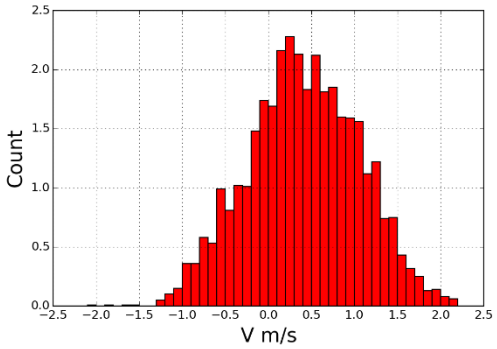


Figure B. 360: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

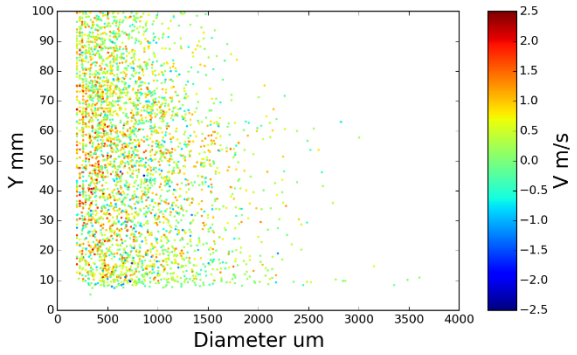


Figure B. 358: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.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	15.52	15.62	181.9	3283	679.7	492.6	181.9	3431	691.1	500.9
20-40mm	17.89	18.02	181.9	3269	670.9	424.5	181.9	3062	668.4	429.8
40-60mm	20.96	20.9	181.9	3255	682.8	424.9	181.9	3377	684.8	423.8
60-80mm	17.52	17.39	181.9	3544	643.7	407.4	181.9	3433	646.7	404.4
80-100mm	10.06	9.83	181.9	2111	558.4	312.6	181.9	2045	556.2	313.6
All	81.95	81.76	181.9	3544	656.0	424.9	181.9	3433	658.8	427.6
			Height A (mm)				Height B (mm)			
Highest Particle			99.9890				99.9890			
Lowest Particle			5.7218				5.9650			

Table B. 40: 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	11.22	192.9	3283	741.8	489.1	181.9	3431	743.2	500.8	-1.950	2.020	-0.180	0.390	-2.110	2.160	0.620	0.700
20-40mm	13.53	181.9	2410	716.2	405.3	181.9	3046	716.2	418.2	-2.120	2.110	-0.250	0.370	-2.150	2.160	0.750	0.710
40-60mm	15.97	181.9	3255	732.4	410.6	181.9	3377	734.5	420.3	-2.110	1.890	-0.290	0.410	-2.160	2.160	0.860	0.670
60-80mm	13.58	181.9	2399	689.0	384.2	181.9	2440	677.9	381.9	-2.160	2.160	-0.200	0.410	-2.160	2.160	0.770	0.680
80-100mm	8.05	181.9	2111	591.3	304.3	181.9	2045	586.0	312.2	-2.150	2.030	-0.080	0.360	-1.510	2.150	0.600	0.610
All	62.35	181.9	3283	702.9	410.1	181.9	3431	699.7	417.4	-2.160	2.160	-0.220	0.400	-2.160	2.160	0.740	0.680

Table B. 41: Matched Droplet Info

B.1.3.2 All Droplets for .LA Image

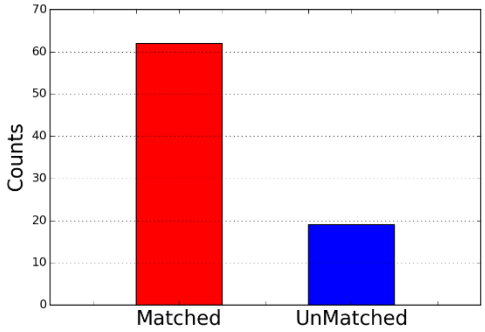


Figure B. 361: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

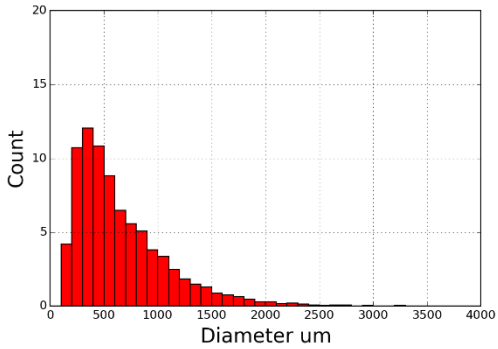


Figure B. 362: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

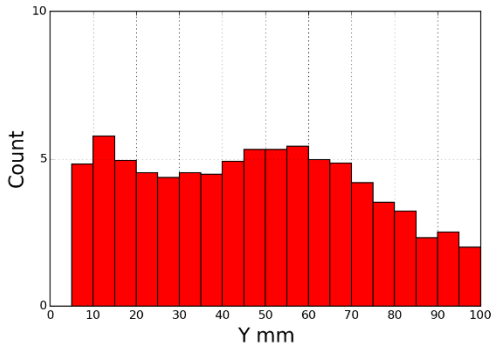


Figure B. 363: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

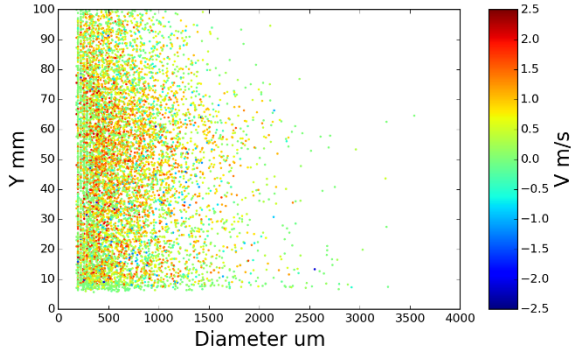


Figure B. 364: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

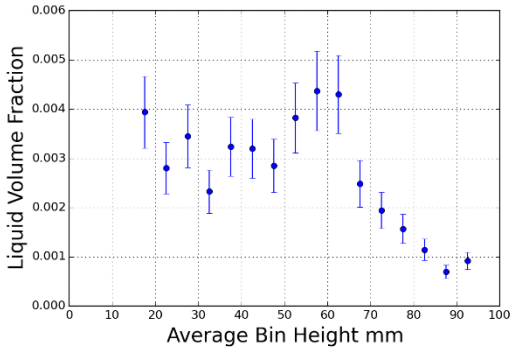


Figure B. 365: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.3.2 All Droplets for .LB Image

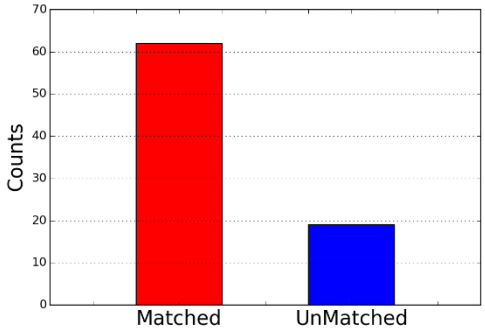


Figure B. 366: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

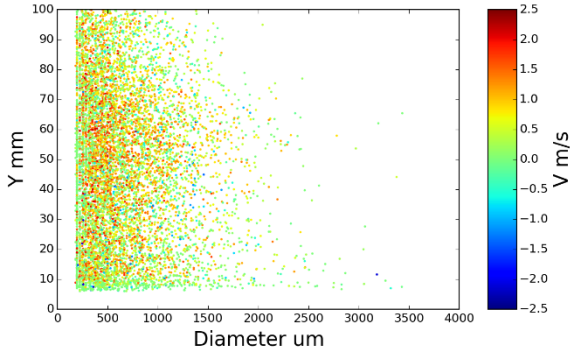


Figure B. 369: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

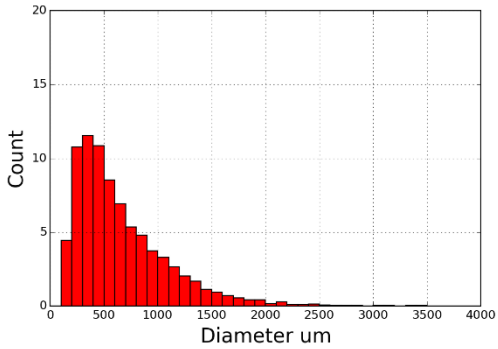


Figure B. 367: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

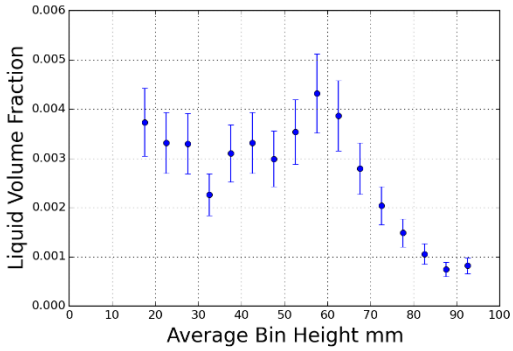


Figure B. 370: Void Fraction R-123 40F 5000Btu 15000Lb Tri

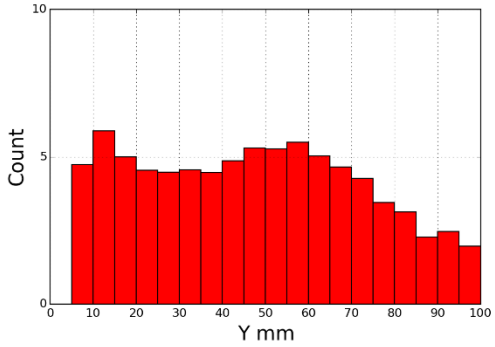


Figure B. 368: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.3.2 Matched Only Droplets for .LA Image

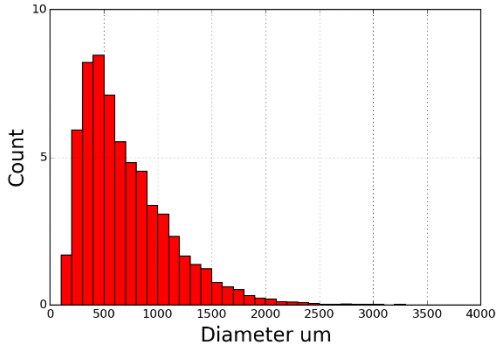


Figure B. 371: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

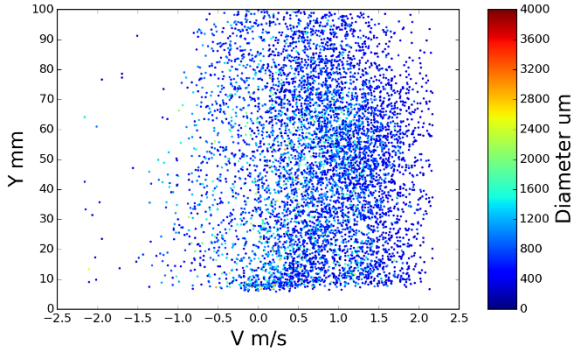


Figure B. 374: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

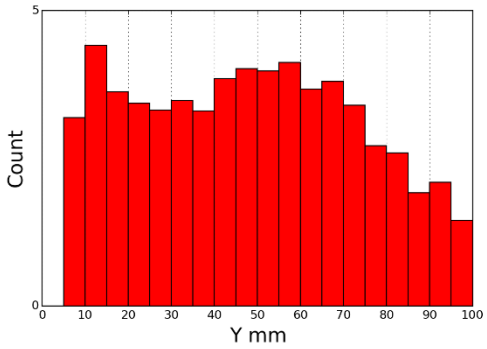


Figure B. 372: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

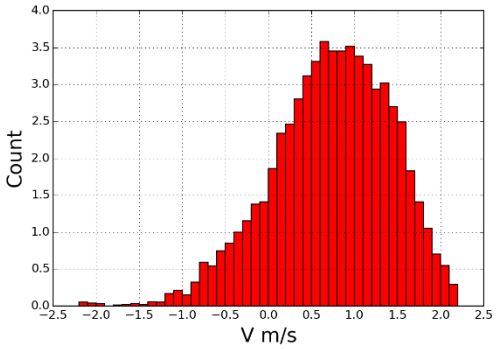


Figure B. 375: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

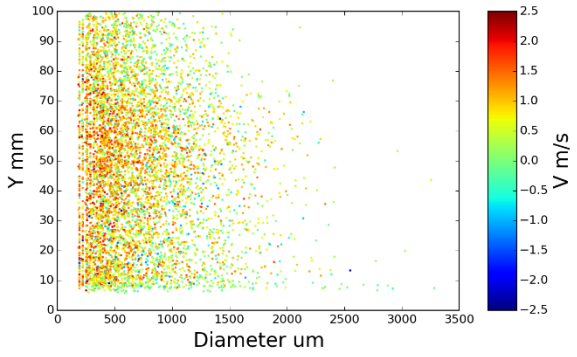


Figure B. 373: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.3.2 Matched Only Droplets for .LB Image

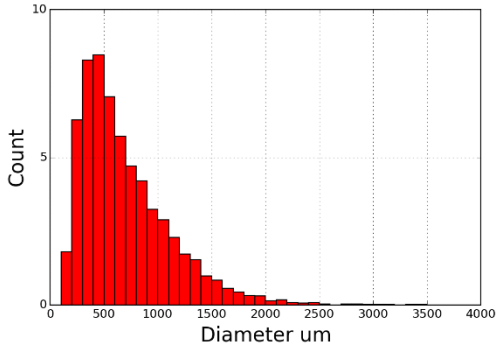


Figure B. 376: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

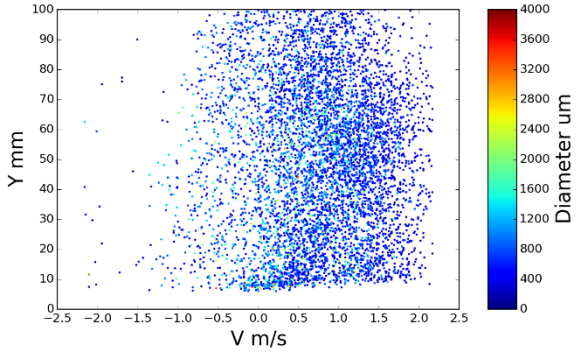


Figure B. 379: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

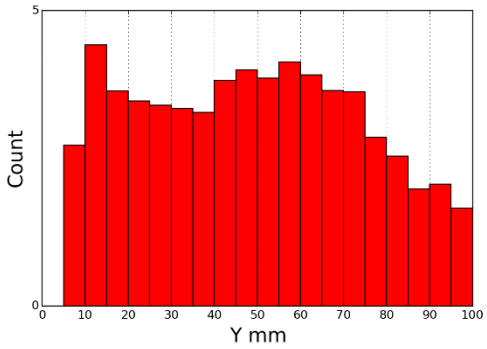


Figure B. 377: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

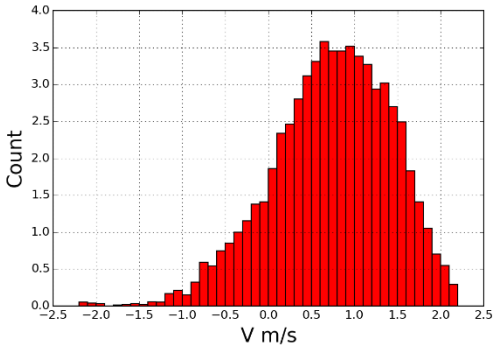


Figure B. 380: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

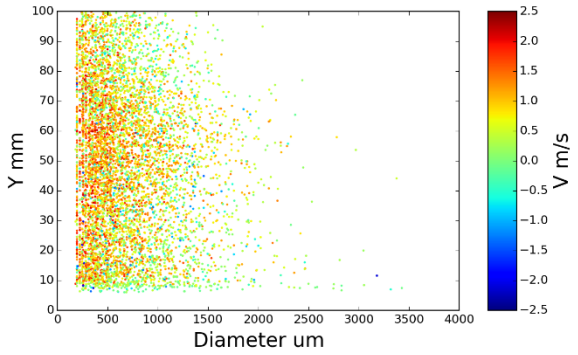


Figure B. 378: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.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	19.79	20.5	181.9	3549	650.7	456.4	170.1	3508	647.8	452.3
20-40mm	20.72	20.75	181.9	2682	618.5	397.6	181.9	2846	623.0	405.0
40-60mm	22.33	22.7	181.9	3266	663.1	412.1	181.9	3327	660.1	415.7
60-80mm	17.87	17.87	181.9	2578	648.6	398.5	181.9	3173	645.8	391.7
80-100mm	9.13	8.99	192.9	2430	565.0	316.7	181.9	2479	559.6	318.9
All	89.84	90.81	181.9	3549	637.2	408.9	170.1	3508	636.1	409.8
			Height A (mm)				Height B (mm)			
Highest Particle			99.9890				99.9890			
Lowest Particle			5.1796				5.1576			

Table B. 42: 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	13.97	181.9	3494	713.6	425.3	192.9	3508	715.7	442.9	-2.160	2.160	-0.170	0.460	-2.060	2.160	0.740	0.750
20-40mm	15.62	192.9	2682	676.0	396.3	181.9	2846	682.9	409.5	-2.120	2.100	-0.270	0.390	-1.990	2.160	0.940	0.700
40-60mm	16.93	181.9	3266	729.5	406.6	181.9	3327	727.8	417.0	-2.150	2.110	-0.330	0.430	-2.040	2.160	0.940	0.690
60-80mm	13.4	192.9	2484	709.9	387.3	181.9	3173	696.0	386.5	-2.140	1.610	-0.300	0.390	-2.160	2.160	0.880	0.660
80-100mm	6.92	192.9	2430	617.0	315.7	192.9	2479	597.6	310.5	-2.030	1.530	-0.200	0.360	-1.670	2.160	0.690	0.630
All	66.84	181.9	3494	698.1	397.3	181.9	3508	694.5	406.2	-2.160	2.160	-0.260	0.420	-2.160	2.160	0.860	0.700

Table B. 43: Matched Droplet Info

B.1.3.2 All Droplets for .LA Image

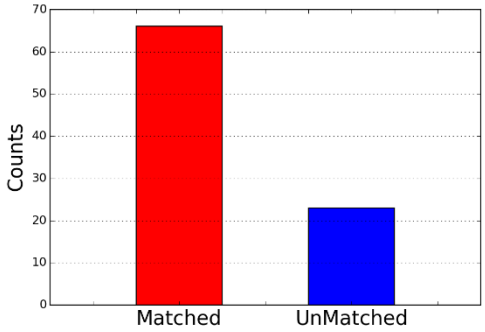


Figure B. 381: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

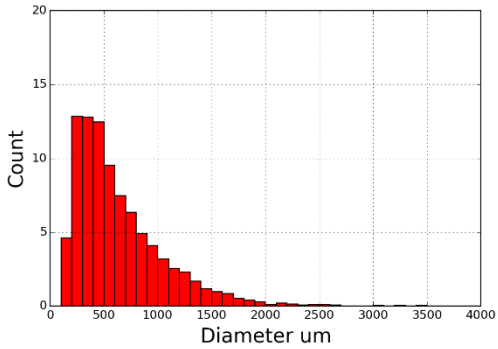


Figure B. 382: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

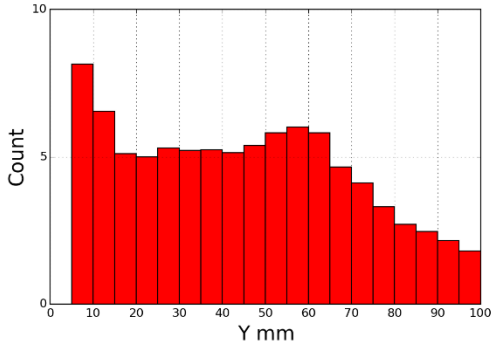


Figure B. 383: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

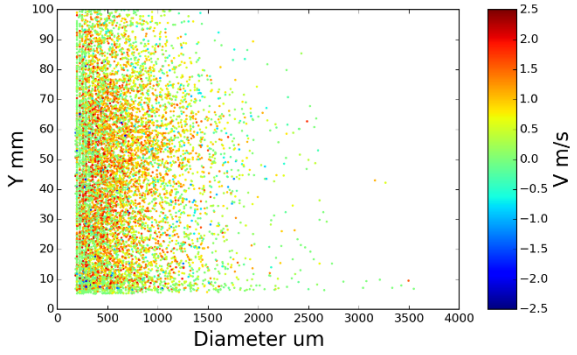


Figure B. 384: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

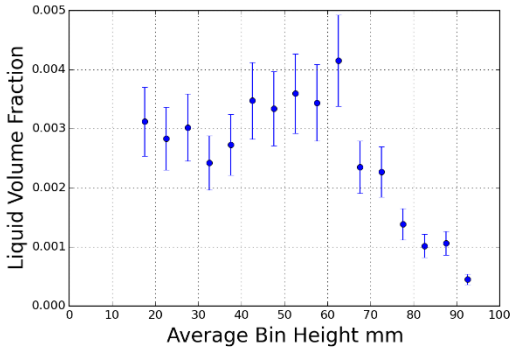


Figure B. 385: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.3.2 All Droplets for .LB Image

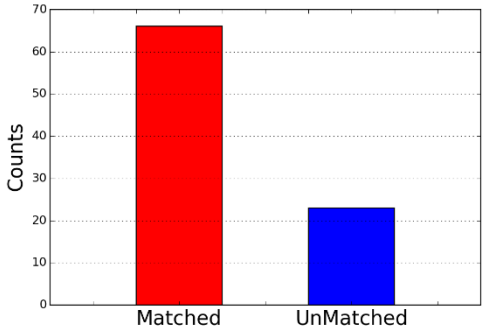


Figure B. 386: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

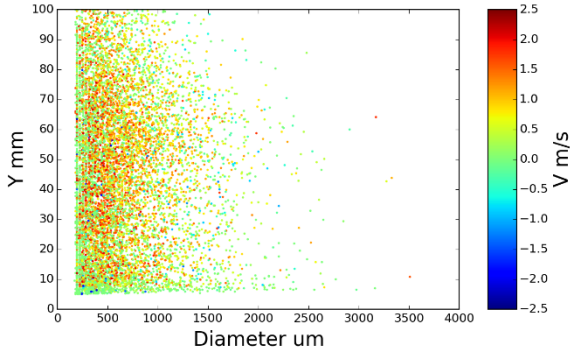


Figure B. 389: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

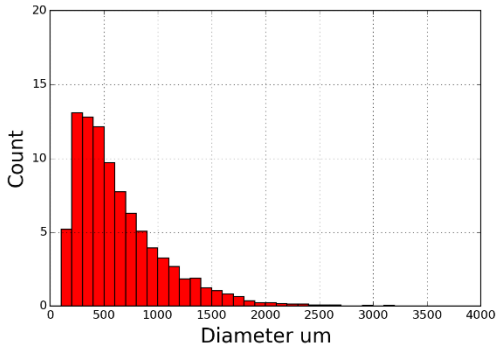


Figure B. 387: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

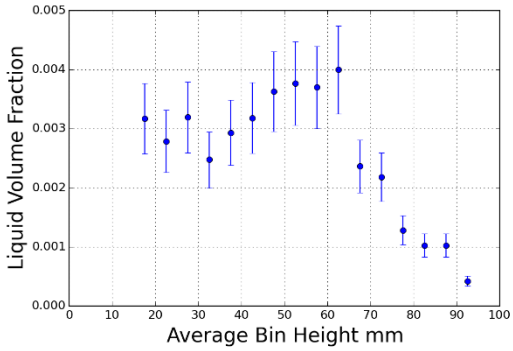


Figure B. 390: Void Fraction R-123 40F 5000Btu 15000Lb Tri

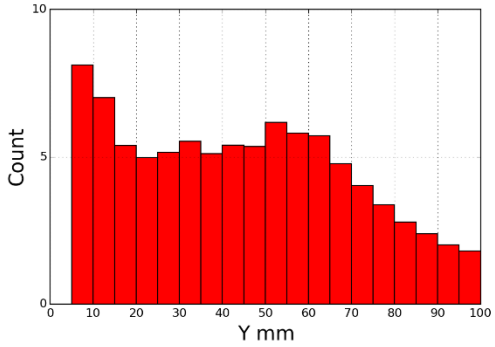


Figure B. 388: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.3.2 Matched Only Droplets for .LA Image

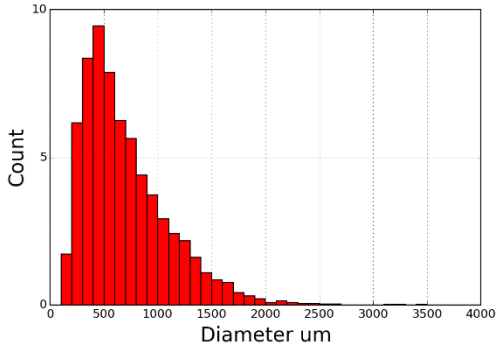


Figure B. 391: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

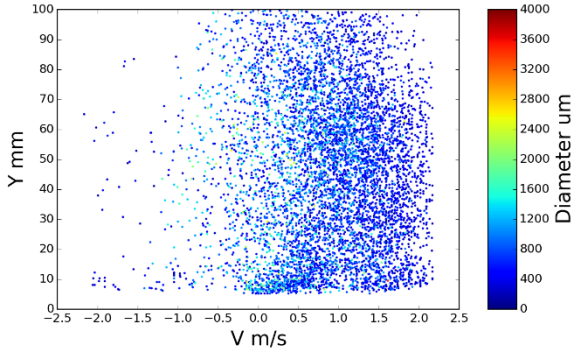


Figure B. 394: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

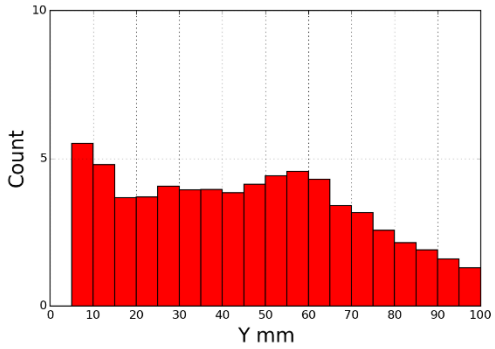


Figure B. 392: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

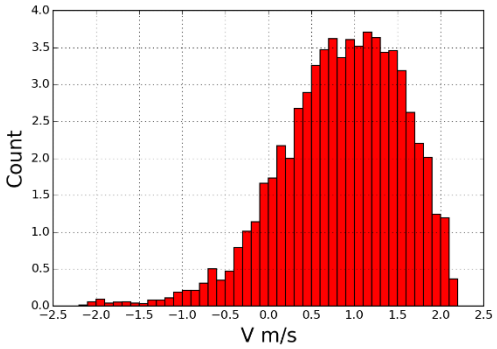


Figure B. 395: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

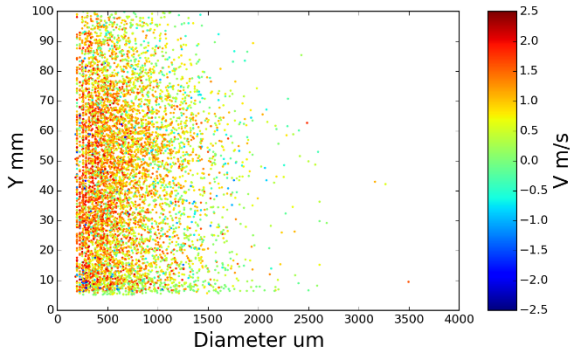


Figure B. 393: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.3.2 Matched Only Droplets for .LB Image

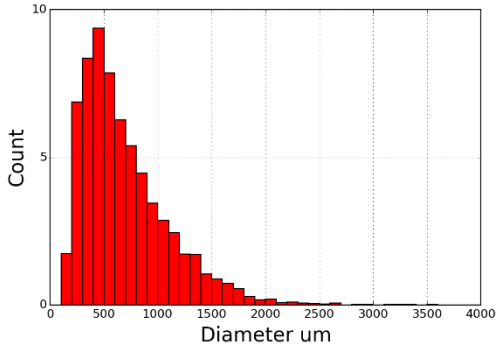


Figure B. 396: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

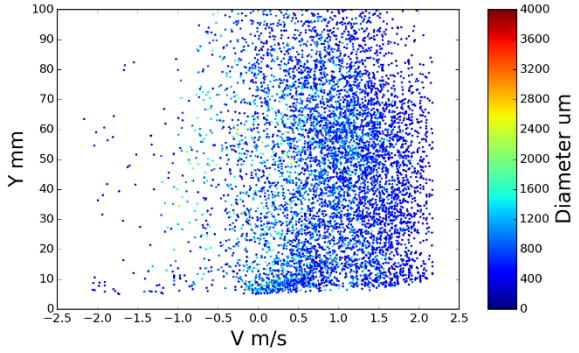


Figure B. 399: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

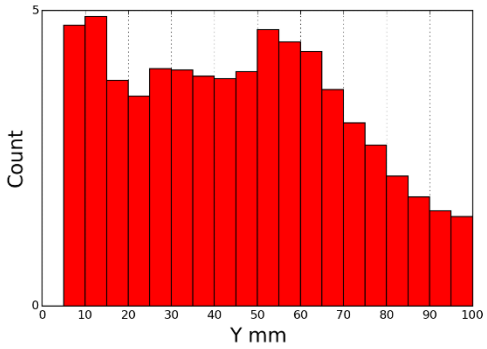


Figure B. 397: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

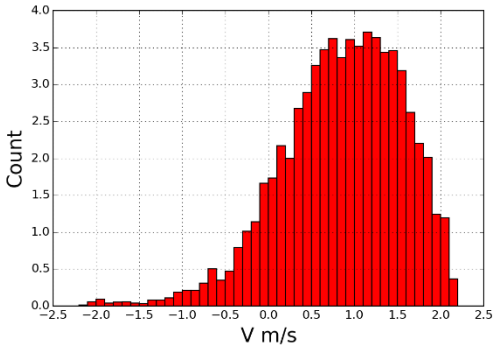


Figure B. 400: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

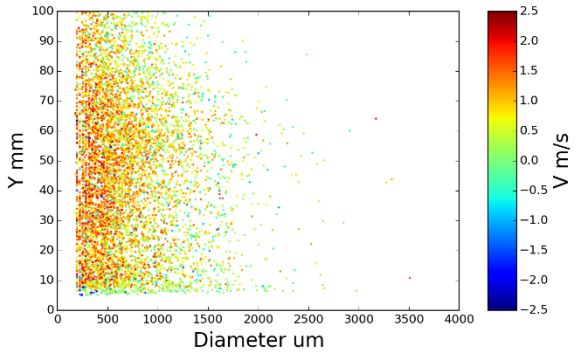


Figure B. 398: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.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	14.22	14.24	181.9	3245	689.9	449.4	181.9	3320	696.3	445.6
20-40mm	17.14	17.13	181.9	2861	663.3	417.3	181.9	2578	663.5	410.8
40-60mm	19.26	19.27	181.9	3542	679.9	431.3	181.9	3383	677.8	436.9
60-80mm	14.78	14.9	181.9	3738	672.4	421.6	181.9	3846	664.6	422.8
80-100mm	7.88	7.64	192.9	3035	572.4	337.4	192.9	3006	582.5	344.5
All	73.28	73.18	181.9	3738	664.9	421.9	181.9	3846	665.4	422.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.9656				99.9890			
Lowest Particle			5.1576				5.1576			

Table B. 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	9.62	181.9	3245	779.4	420.4	192.9	3320	785.9	439.2	-2.060	2.140	-0.160	0.400	-1.960	2.130	0.770	0.670
20-40mm	11.85	192.9	2313	737.6	400.2	181.9	2358	737.3	402.9	-1.800	2.090	-0.260	0.410	-2.110	2.160	0.960	0.670
40-60mm	13.83	181.9	2644	764.6	409.6	192.9	3056	764.1	418.0	-2.070	1.870	-0.340	0.390	-2.060	2.160	1.060	0.630
60-80mm	10.76	192.9	3738	752.6	410.9	192.9	3846	735.5	414.0	-1.980	2.160	-0.350	0.380	-1.340	2.160	1.040	0.580
80-100mm	5.68	192.9	2167	644.9	334.2	192.9	2437	634.6	338.8	-2.090	1.750	-0.290	0.350	-1.680	2.140	0.860	0.580
All	51.74	181.9	3738	745.5	404.0	181.9	3846	741.0	411.6	-2.090	2.160	-0.280	0.400	-2.110	2.160	0.960	0.640

Table B. 45: Matched Droplet Info

B.1.3.2 All Droplets for .LA Image

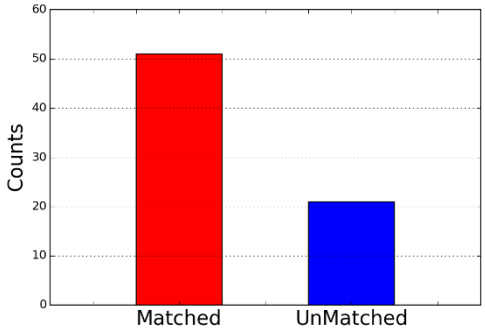


Figure B. 401: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

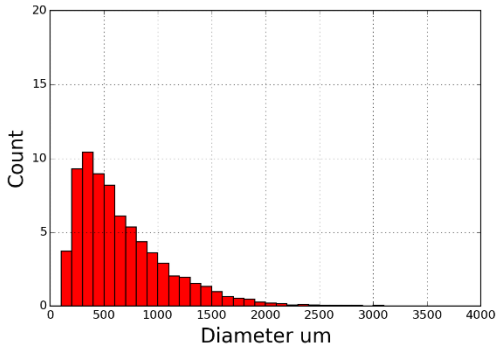


Figure B. 402: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

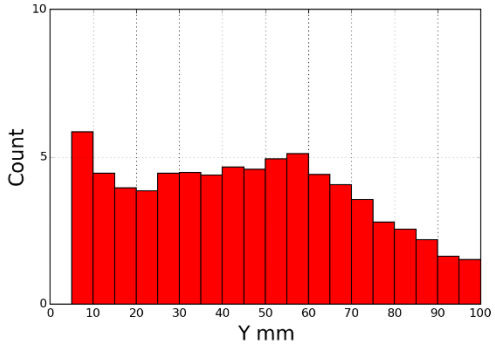


Figure B. 403: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

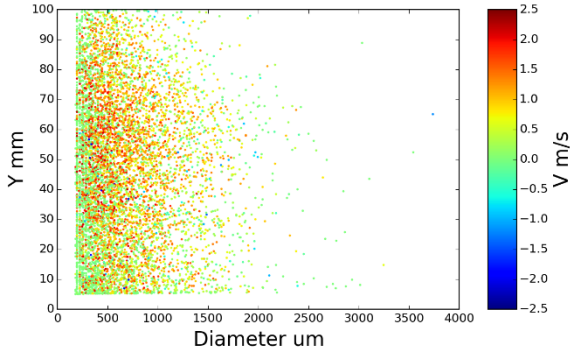


Figure B. 404: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

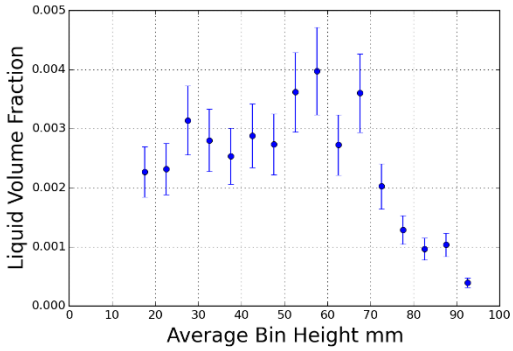


Figure B. 405: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.3.2 All Droplets for .LB Image

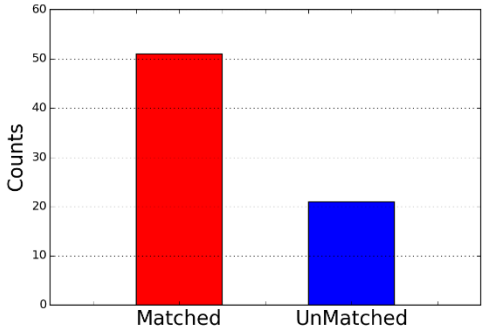


Figure B. 406: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

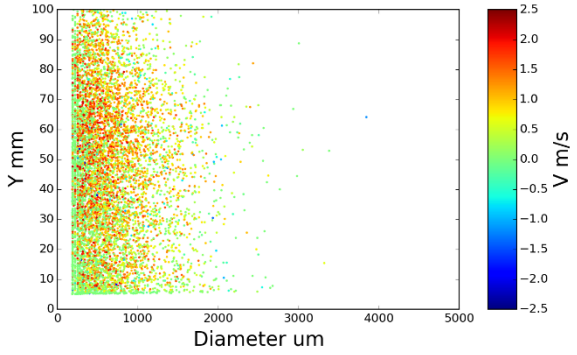


Figure B. 409: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

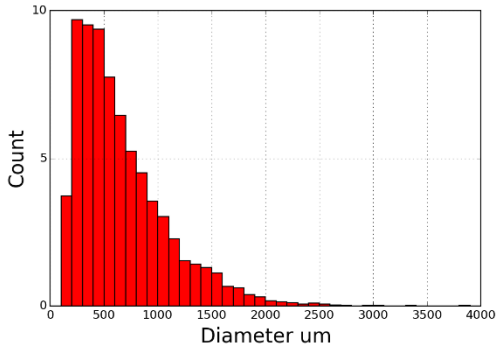


Figure B. 407: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

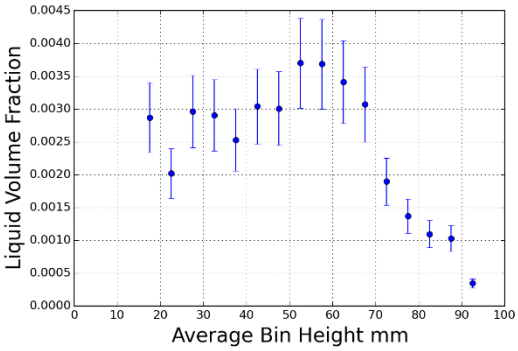


Figure B. 410: Void Fraction R-123 40F 5000Btu 15000Lb Tri

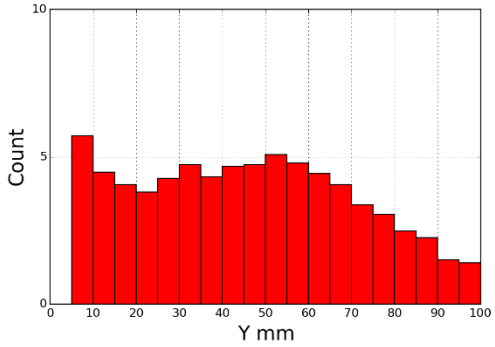


Figure B. 408: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.3.2 Matched Only Droplets for .LA Image

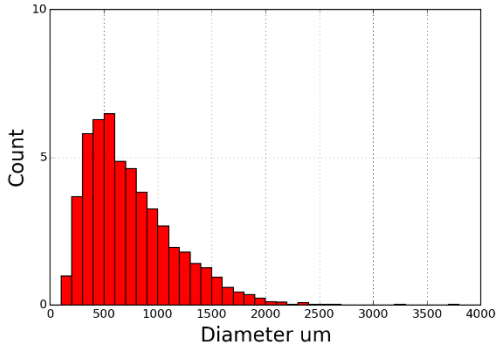


Figure B. 411: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

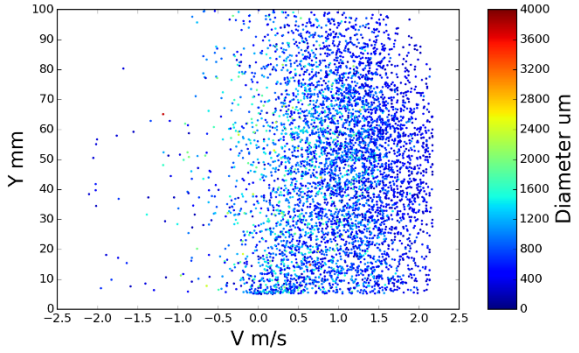


Figure B. 414: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

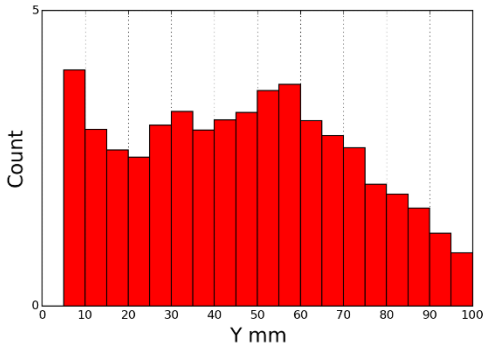


Figure B. 412: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

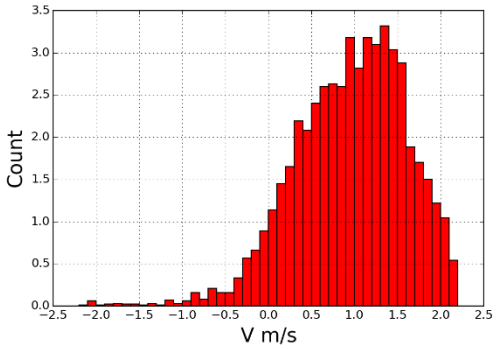


Figure B. 415: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

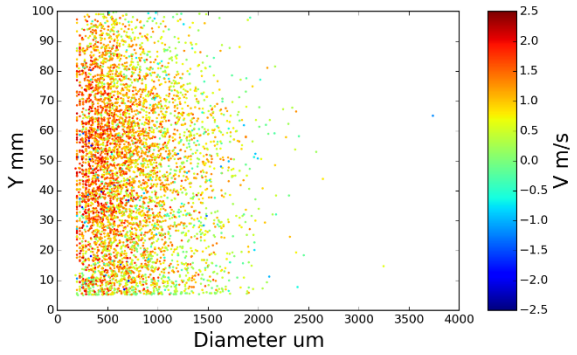


Figure B. 413: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.3.2 Matched Only Droplets for .LB Image

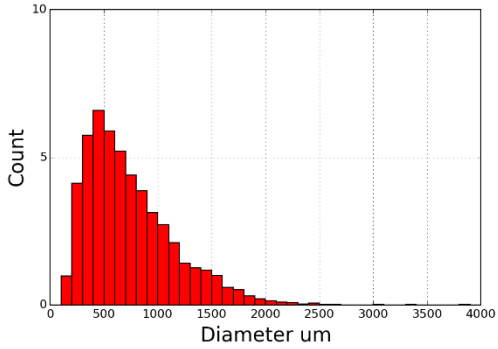


Figure B. 416: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

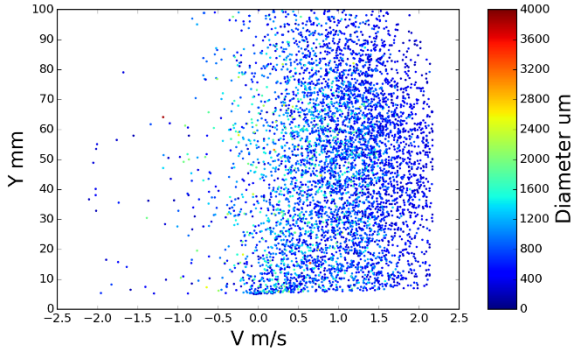


Figure B. 419: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

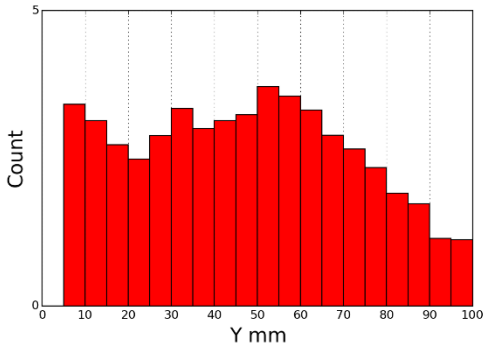


Figure B. 417: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

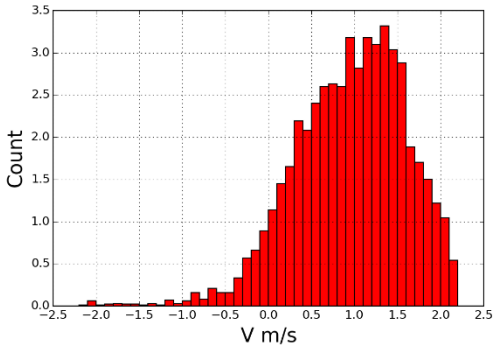


Figure B. 420: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

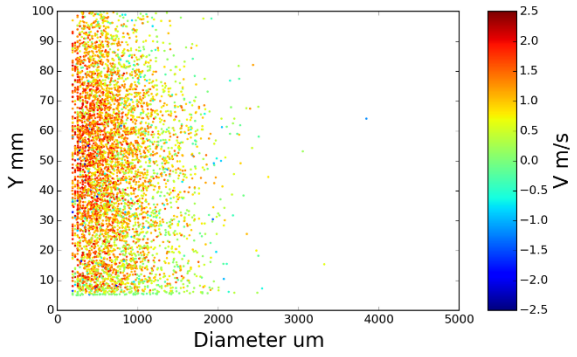


Figure B. 418: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.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	8.15	8.48	181.9	3085	816.2	515.9	181.9	3368	805.6	526.1
20-40mm	10.89	10.85	181.9	3449	778.4	505.1	181.9	3232	768.1	495.9
40-60mm	14.97	15.07	181.9	2871	792.7	496.9	181.9	2926	790.6	513.1
60-80mm	12.72	12.62	181.9	3114	714.2	477.4	181.9	3133	714.7	471.6
80-100mm	6.35	6.48	181.9	2525	611.7	337.9	181.9	2607	599.2	339.5
All	53.08	53.5	181.9	3449	752.9	484.8	181.9	3368	747.3	488.2
			Height A (mm)				Height B (mm)			
Highest Particle			99.9035				99.9605			
Lowest Particle			5.1544				5.1576			

Table B. 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	5.19	192.9	2982	934.3	482.0	181.9	3246	935.1	514.4	-1.650	1.830	-0.140	0.380	-2.060	2.070	0.630	0.650
20-40mm	6.94	192.9	3202	911.2	489.7	181.9	3232	895.2	487.9	-1.840	1.870	-0.250	0.350	-1.740	2.140	0.880	0.630
40-60mm	10.5	181.9	2739	889.8	462.5	181.9	2836	906.2	486.2	-2.060	1.780	-0.330	0.370	-2.020	2.160	1.070	0.600
60-80mm	8.8	192.9	3114	809.8	452.1	192.9	3133	788.4	456.7	-1.950	1.330	-0.370	0.360	-2.060	2.160	1.060	0.600
80-100mm	4.62	181.9	2525	683.0	332.6	181.9	2607	665.4	336.6	-1.960	1.730	-0.290	0.330	-1.940	2.160	0.910	0.570
All	36.05	181.9	3202	854.3	460.6	181.9	3246	846.1	474.3	-2.060	1.870	-0.290	0.370	-2.060	2.160	0.950	0.620

Table B. 47: Matched Droplet Info

B.1.3.2 All Droplets for .LA Image

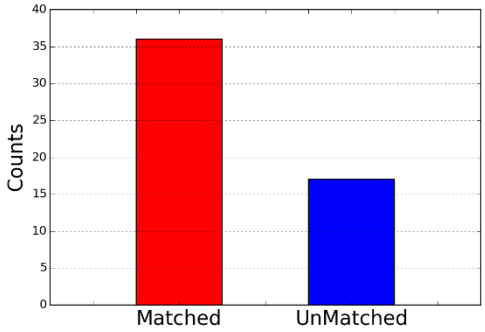


Figure B. 421: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

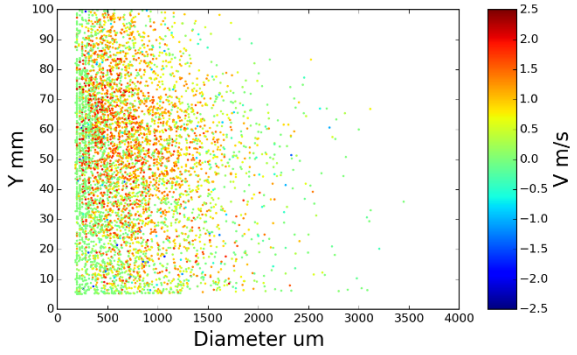


Figure B. 424: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

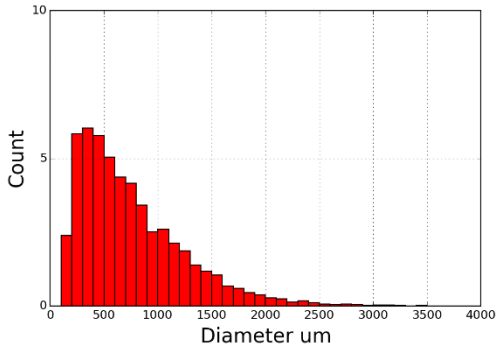


Figure B. 422: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

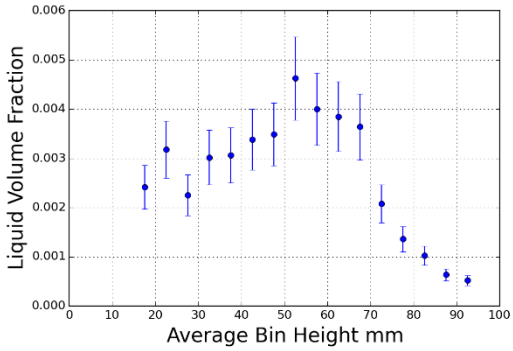


Figure B. 425: Void Fraction R-123 40F 5000Btu 15000Lb Tri

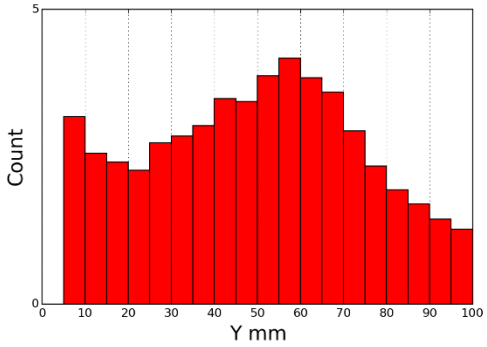


Figure B. 423: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

B.1.3.2 All Droplets for .LB Image

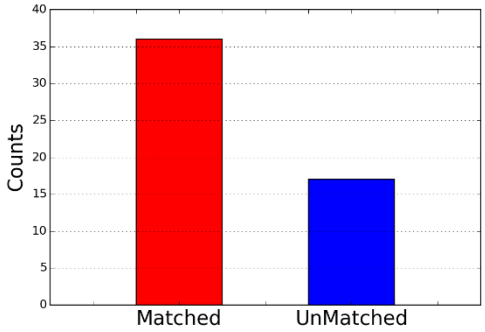


Figure B. 426: CHC Count Comparison R-123 40F 5000Btu 15000Lb Tri

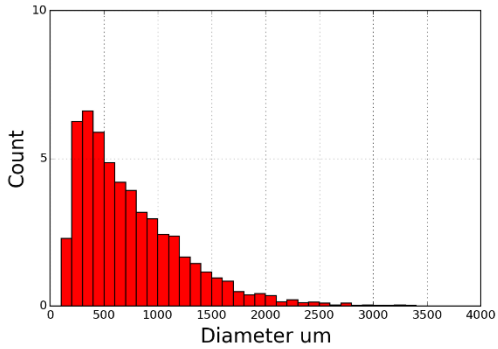


Figure B. 427: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

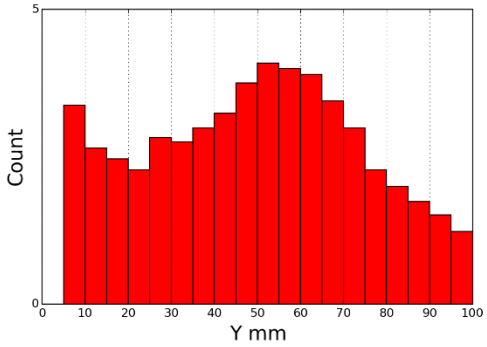


Figure B. 428: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

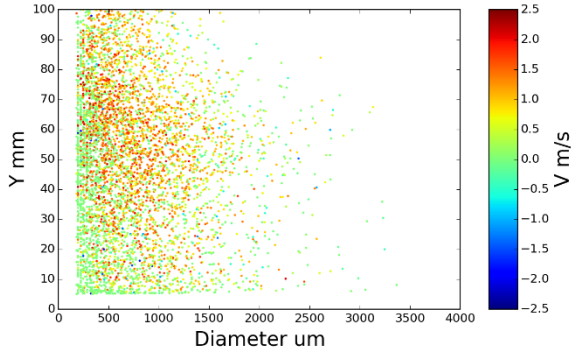


Figure B. 429: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

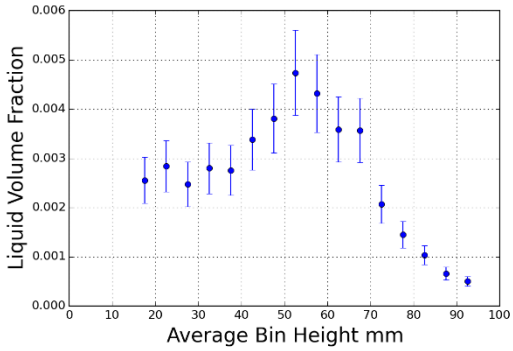


Figure B. 430: Void Fraction R-123 40F 5000Btu 15000Lb Tri

B.1.3.2 Matched Only Droplets for .LA Image

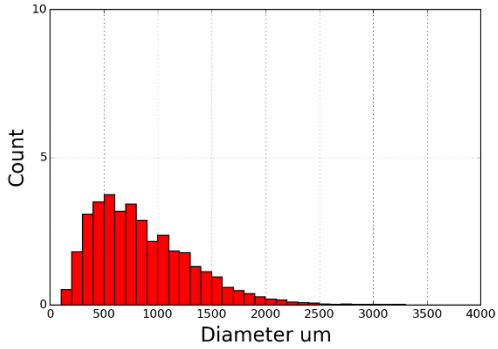


Figure B. 431: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

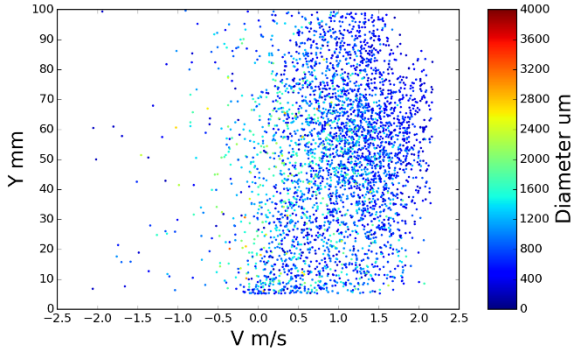


Figure B. 434: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

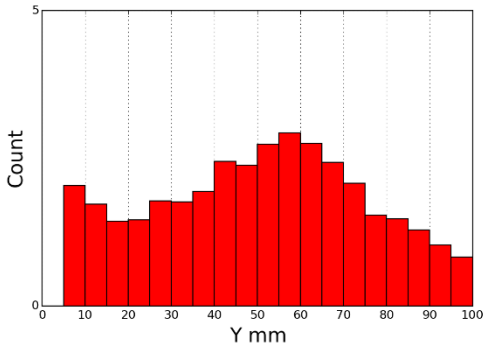


Figure B. 432: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

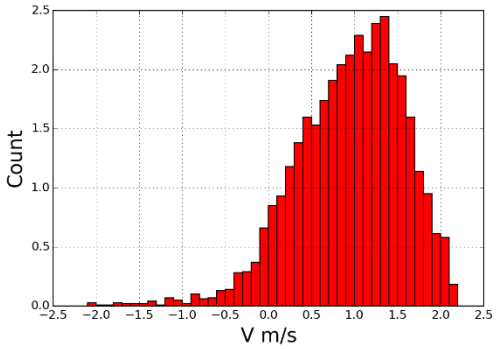


Figure B. 435: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

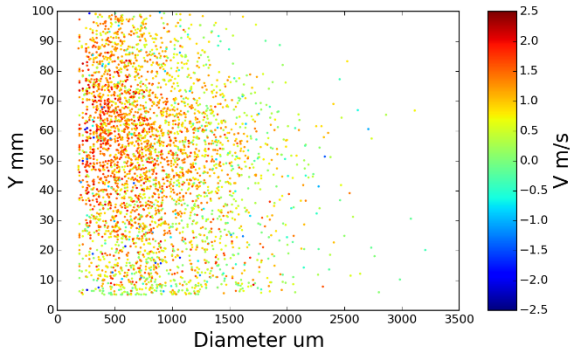


Figure B. 433: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.1.3.2 Matched Only Droplets for .LB Image

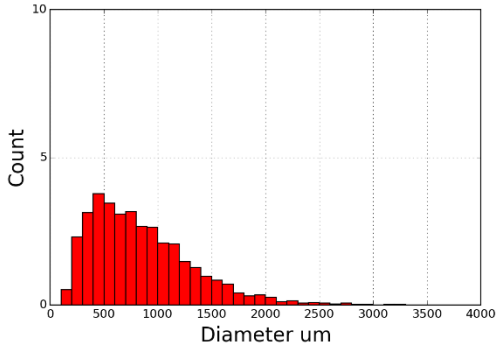


Figure B. 436: Droplet Diameter Histogram R-123 40F 5000Btu 15000Lb Tri

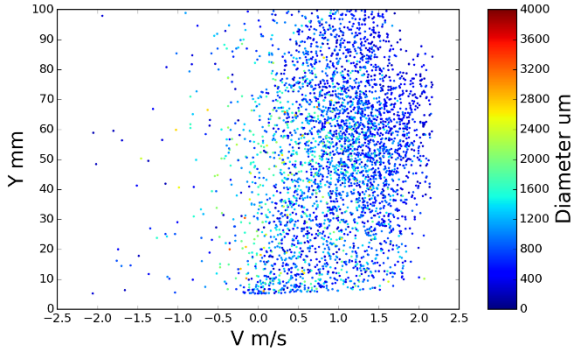


Figure B. 439: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 15000Lb Tri

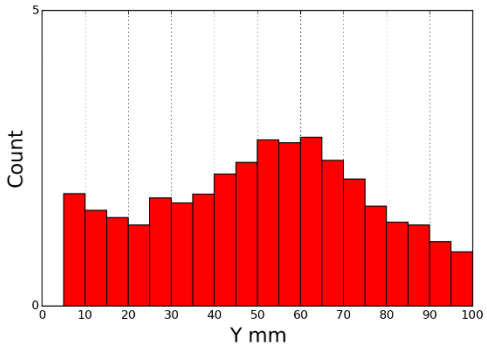


Figure B. 437: Droplet Height Histogram R-123 40F 5000Btu 15000Lb Tri

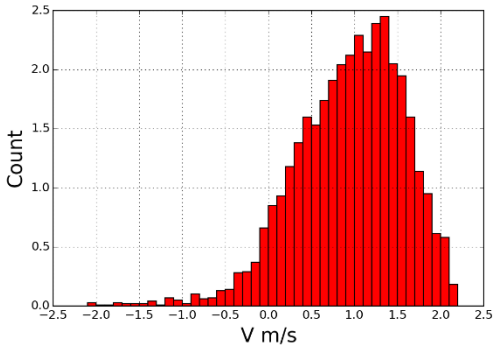


Figure B. 440: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 15000Lb Tri

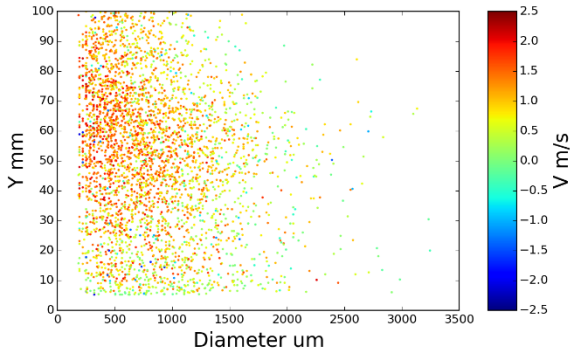


Figure B. 438: Droplet Height vs Diameter R-123 40F 5000Btu 15000Lb Tri

B.2 - 1556 R-123 40F 5000Btu 30000Lb Tri

B.2.1 Liquid Level 1

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	11816 / 1.489
Ref Mass Flow (lb/hr) / (kg/s)	3193 / 0.402
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	31084 / 42.157
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	5036 / 15.89
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	39.7 / 4.26
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	41.8 / 5.46
Total Bundle Q (Btu/hr) / (kW)	114747 / 33.63
Total Bundle & Preboiler Q (Btu/hr) / (kW)	176435 / 51.71
Top Two Rows HTC Ratio	1.091
Bundle Inlet Quality	0.17
Bundle Exit Quality	0.64

Table B. 48: Thermal Conditions

B.2.1.1 Lens 100mm Mag 0_29x

B.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	47.92	47.18	75.8	3884	514.7	583.1	75.8	3935	517.6	584.9
40-60mm	82.5	84.19	75.8	3943	549.4	602.5	75.8	3947	553.0	602.2
60-80mm	119.06	119.07	75.8	3929	551.8	609.5	75.8	3952	541.4	606.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	253.77	254.8	75.8	3943	543.9	602.4	75.8	3952	540.8	601.1
			Height A (mm)				Height B (mm)			
Highest Particle			77.3887				77.3887			
Lowest Particle			29.4016				29.4016			

Table B. 49: 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	20.67	75.8	3851	721.5	656.7	81.0	3915	711.2	661.8	-4.480	4.430	-0.110	1.220	-4.420	4.430	0.150	1.250
40-60mm	36.78	81.0	3896	769.2	660.1	75.8	3947	753.5	661.3	-4.450	4.470	-0.090	1.140	-4.440	4.480	0.250	1.210
60-80mm	56.93	81.0	3921	738.2	650.9	75.8	3952	731.4	659.3	-4.470	4.470	-0.090	1.180	-4.480	4.480	0.290	1.230
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	114.38	75.8	3921	745.1	655.1	75.8	3952	734.9	660.5	-4.480	4.470	-0.100	1.180	-4.480	4.480	0.250	1.230

B.2.1.1 Table B. 50: Matched Droplet Info

All Droplets for .LA Image

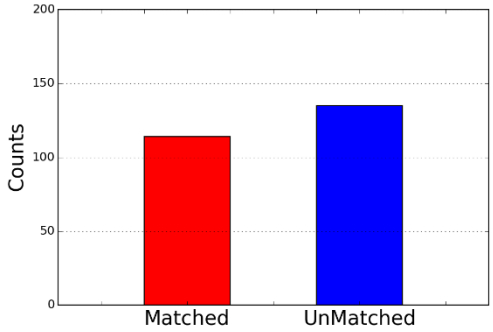


Figure B. 441: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

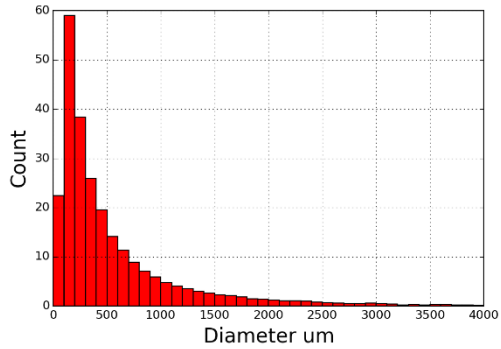


Figure B. 442: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

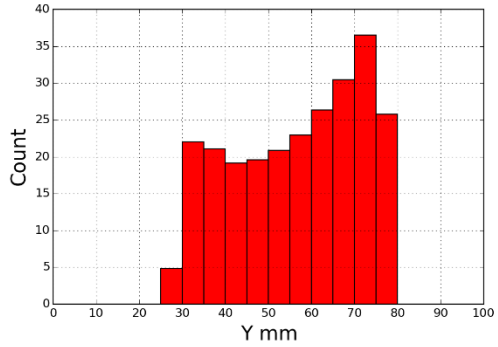


Figure B. 443: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

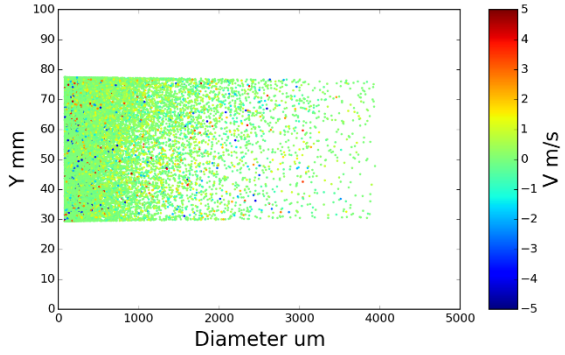


Figure B. 444: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

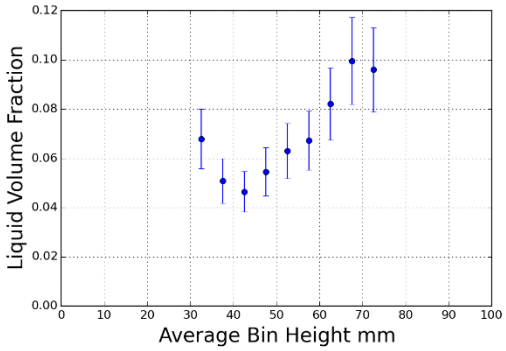


Figure B. 445: Void Fraction R-123 40F 5000Btu 30000Lb Tri

B.2.1.1 All Droplets for .LB Image

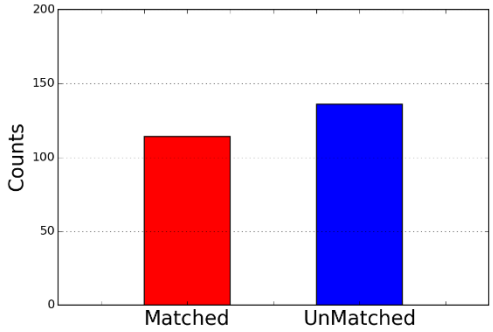


Figure B. 446: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

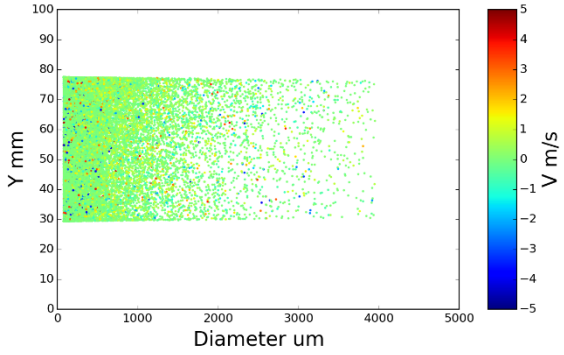


Figure B. 449: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

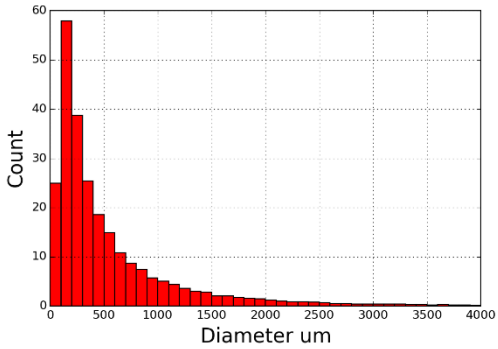


Figure B. 447: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

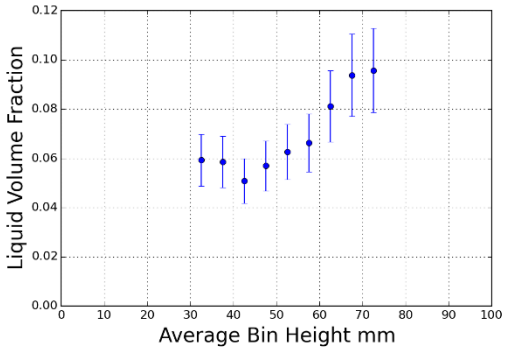


Figure B. 450: Void Fraction R-123 40F 5000Btu 30000Lb Tri

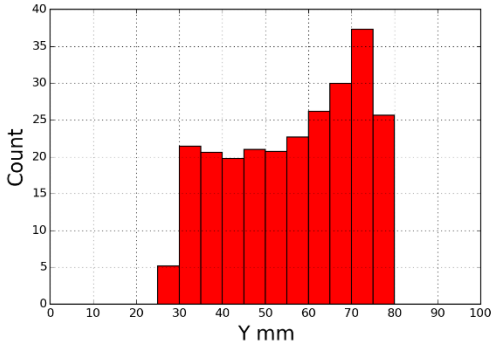


Figure B. 448: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.1.1 Matched Only Droplets for .LA Image

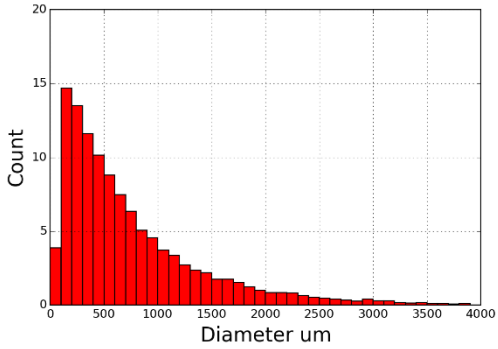


Figure B. 451: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

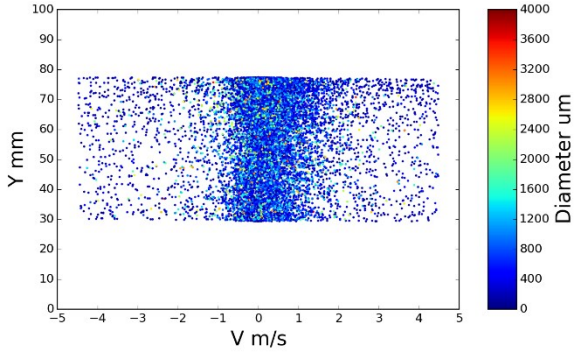


Figure B. 454: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

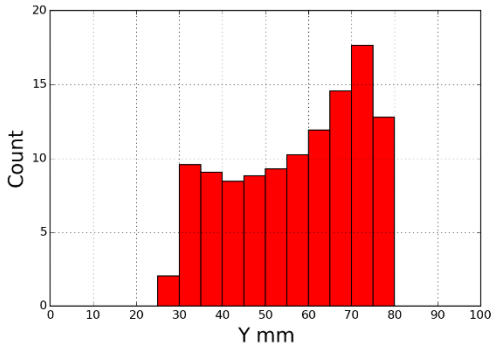


Figure B. 452: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

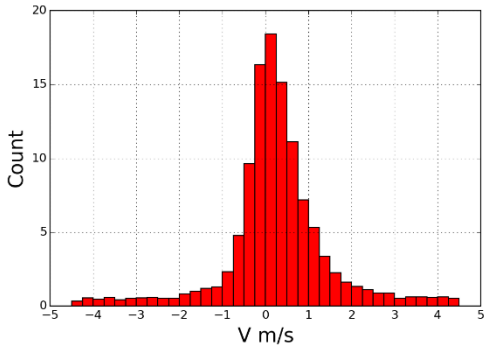


Figure B. 455: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

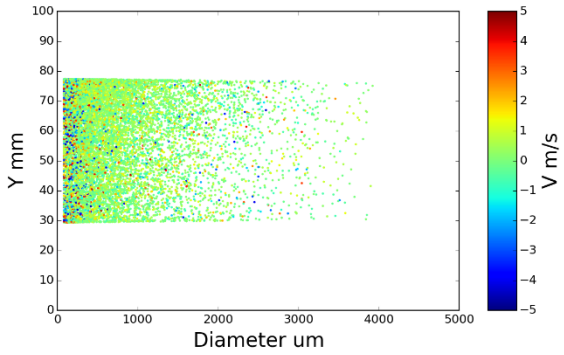


Figure B. 453: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.1.1 Matched Only Droplets for .LB Image

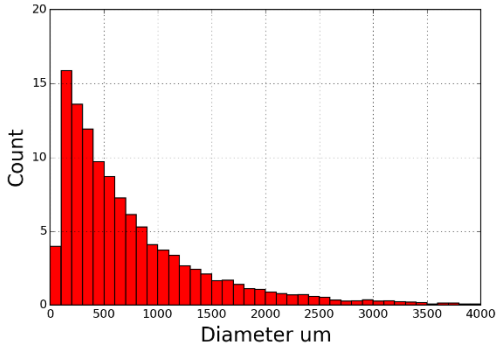


Figure B. 456: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

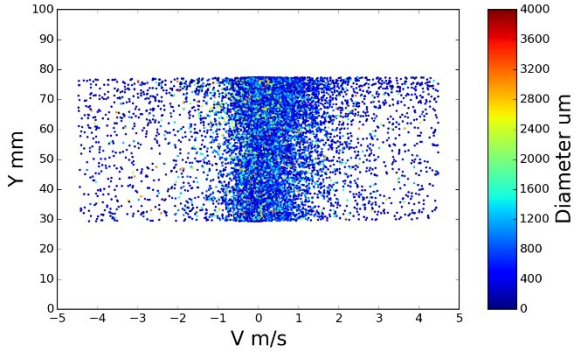


Figure B. 459: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

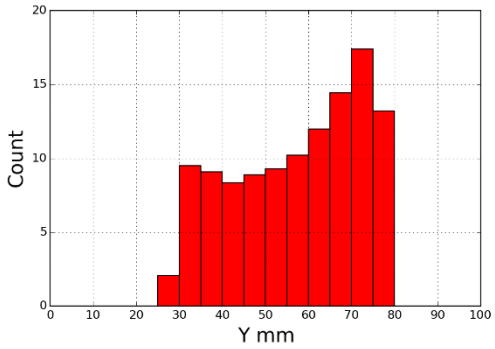


Figure B. 457: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

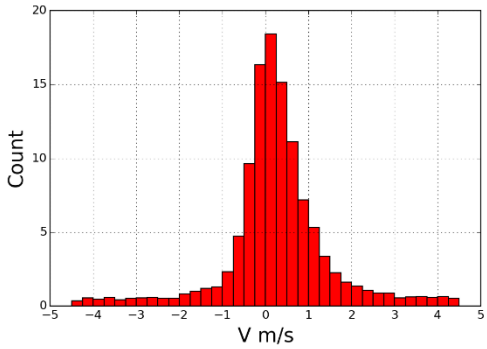


Figure B. 460: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

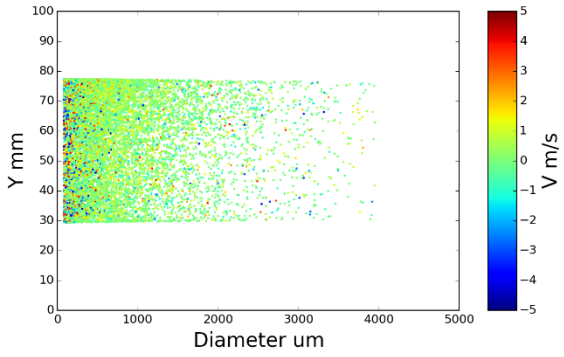


Figure B. 458: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.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	17.62	19.4	75.8	3948	843.2	846.5	75.8	3939	785.4	840.2
40-60mm	31.67	33.07	75.8	3961	883.5	858.1	75.8	3923	841.7	839.3
60-80mm	44.82	46.76	75.8	3959	861.2	845.0	75.8	3959	830.5	834.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	96.53	101.88	75.8	3961	865.3	849.8	75.8	3959	825.4	837.4
			Height A (mm)				Height B (mm)			
Highest Particle			77.3887				77.3887			
Lowest Particle			29.4016				29.4016			

Table B. 51: 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	7.94	81.0	3842	1214	837.9	81.0	3939	1203	854.0	-4.060	4.370	-0.010	0.930	-4.330	4.280	0.130	1.050
40-60mm	14.9	75.8	3900	1258	814.4	75.8	3923	1249	825.8	-4.480	4.310	-0.010	0.860	-4.450	4.480	0.200	0.980
60-80mm	23.68	75.8	3909	1168	822.4	75.8	3959	1160	832.3	-4.420	4.450	-0.050	0.860	-4.460	4.480	0.220	0.950
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	46.52	75.8	3909	1205	823.5	75.8	3959	1196	834.9	-4.480	4.450	-0.030	0.870	-4.460	4.480	0.200	0.980

Table B. 52: Matched Droplet Info

B.2.1.1 All Droplets for .LA Image

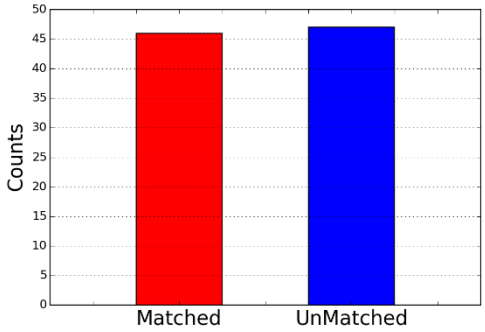


Figure B. 461: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

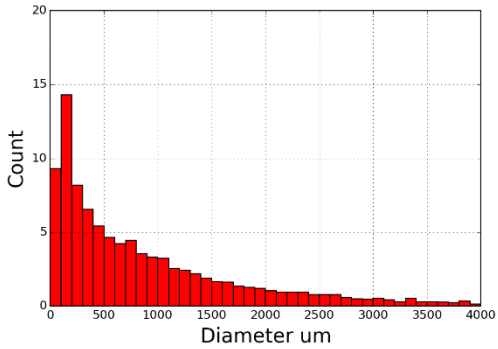


Figure B. 462: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

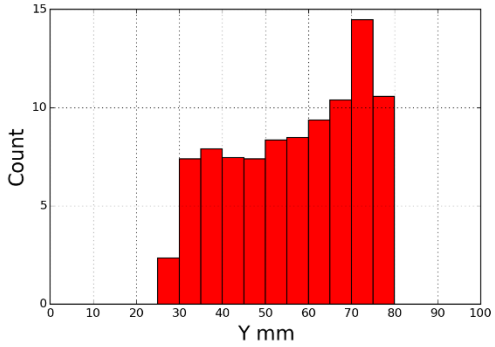


Figure B. 463: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

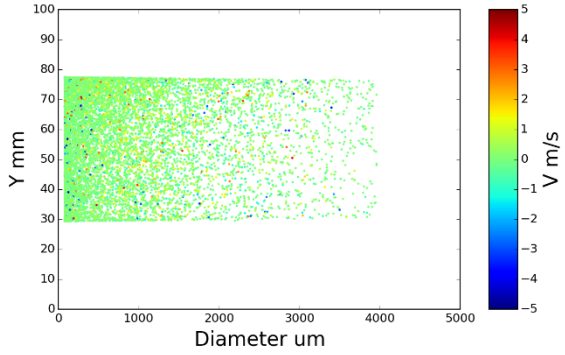


Figure B. 464: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

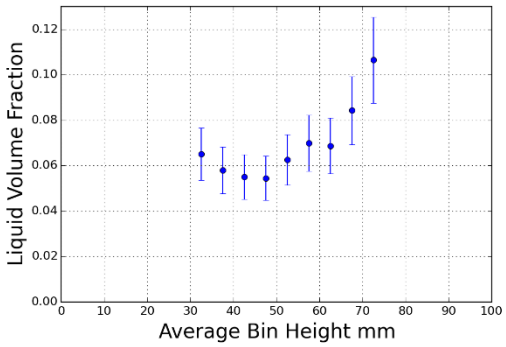


Figure B. 465: Void Fraction R-123 40F 5000Btu 30000Lb Tri

B.2.1.1 All Droplets for .LB Image

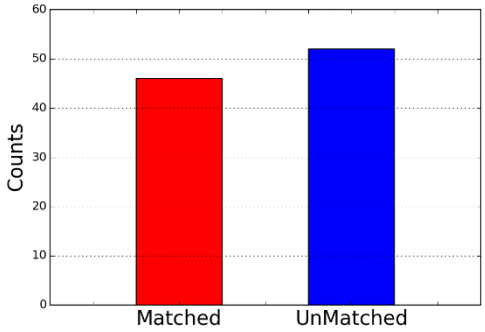


Figure B. 466: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

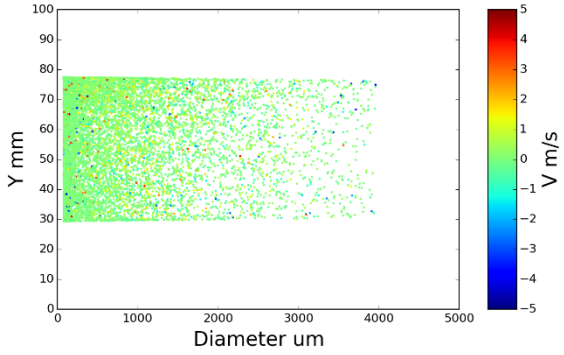


Figure B. 469: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

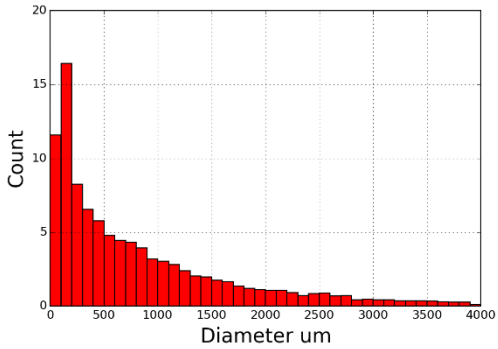


Figure B. 467: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

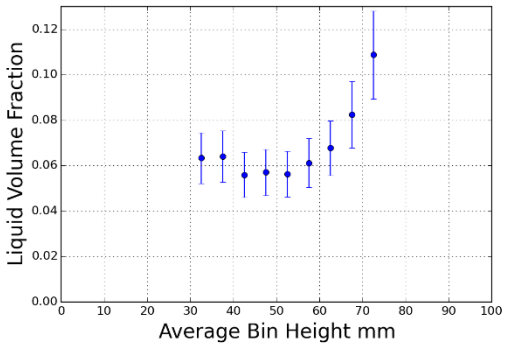


Figure B. 470: Void Fraction R-123 40F 5000Btu 30000Lb Tri

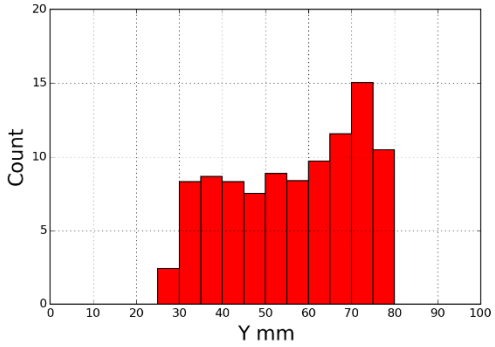


Figure B. 468: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.1.1 Matched Only Droplets for .LA Image

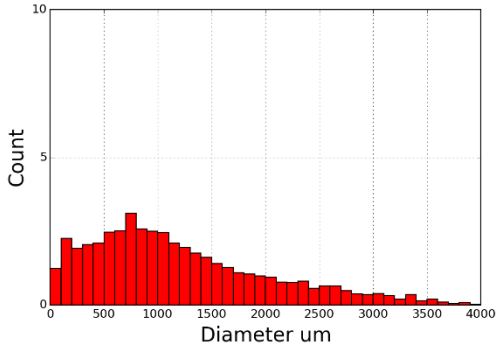


Figure B. 471: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

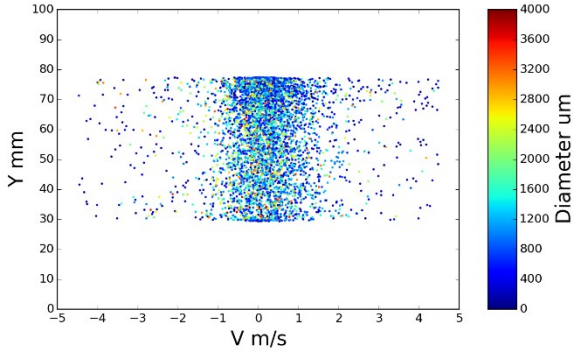


Figure B. 474: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

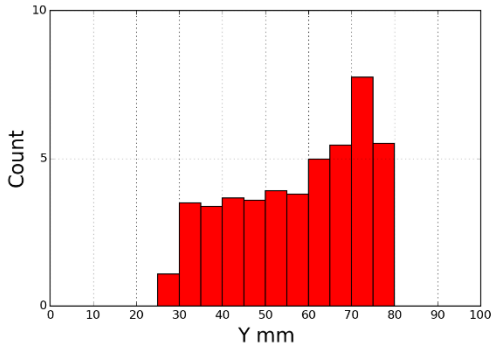


Figure B. 472: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

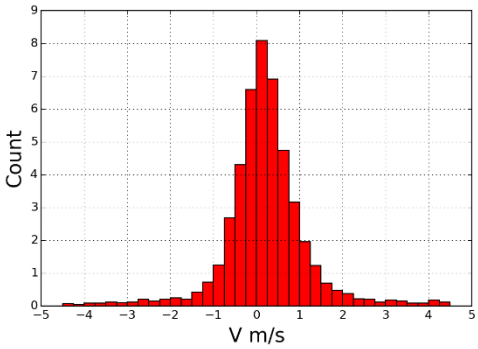


Figure B. 475: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

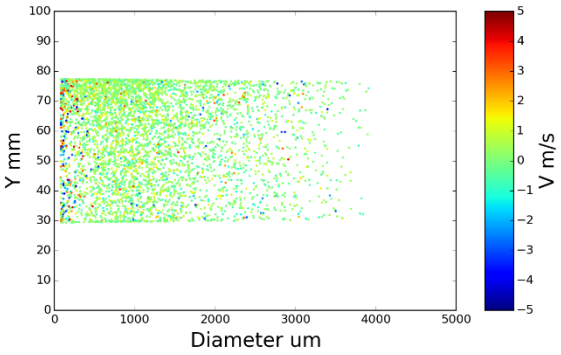


Figure B. 473: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.1.1 Matched Only Droplets for .LB Image

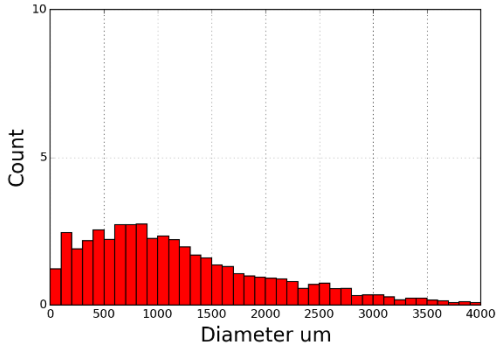


Figure B. 476: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

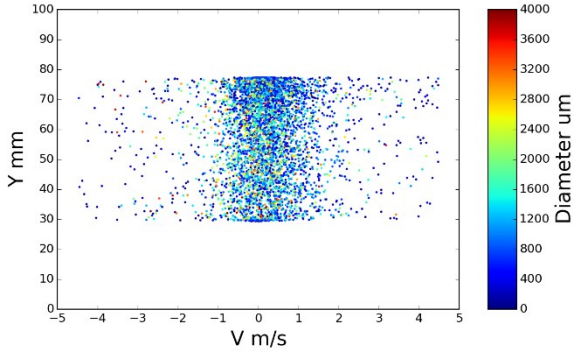


Figure B. 479: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

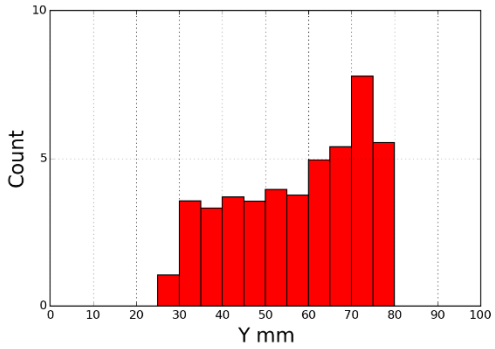


Figure B. 477: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

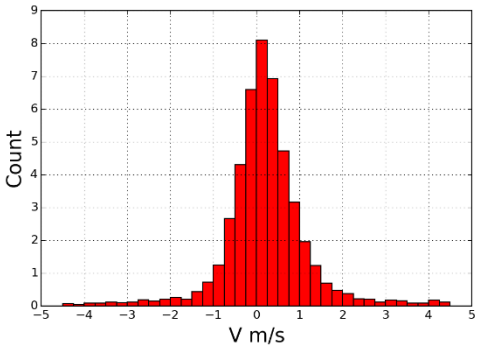


Figure B. 480: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

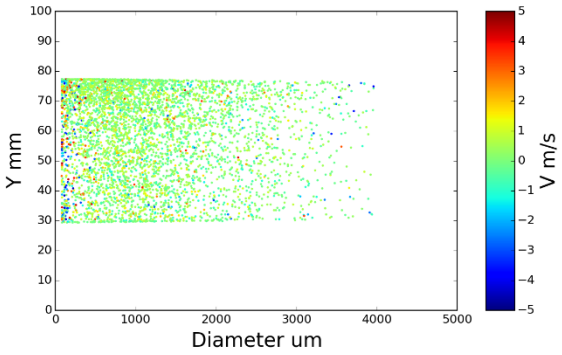


Figure B. 478: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.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	12.56	13.92	75.8	3948	813.5	957.2	75.8	3954	742.1	941.5
40-60mm	19.71	21.81	75.8	3927	835.3	951.3	75.8	3932	778.0	947.0
60-80mm	23.61	28.0	75.8	3949	958.1	1008	75.8	3952	819.0	976.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	58.18	66.09	75.8	3949	882.3	979.1	75.8	3954	788.2	959.3
			Height A (mm)				Height B (mm)			
Highest Particle			77.3887				77.3887			
Lowest Particle			29.4016				29.4016			

Table B. 53: 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	5.04	81.0	3872	1357	990.6	75.8	3918	1353	1010	-4.330	4.480	0.030	1.170	-4.400	4.180	0.270	1.150
40-60mm	7.94	81.0	3917	1440	965.3	81.0	3924	1412	979.0	-4.290	4.480	0.060	1.150	-4.480	4.360	0.360	1.200
60-80mm	10.97	81.0	3878	1437	992.7	75.8	3924	1432	1011	-4.480	4.480	-0.080	1.050	-4.380	4.480	0.200	1.150
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	23.95	81.0	3917	1421	983.8	75.8	3924	1409	1001	-4.480	4.480	-0.010	1.110	-4.480	4.480	0.270	1.170

Table B. 54: Matched Droplet Info

B.2.1.1 All Droplets for .LA Image

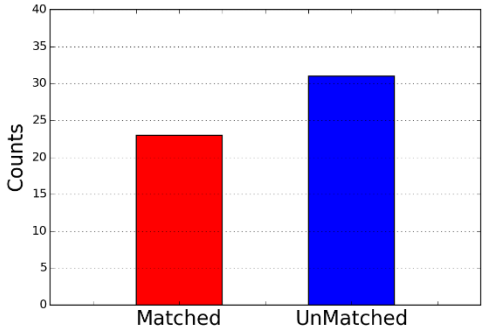


Figure B. 481: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

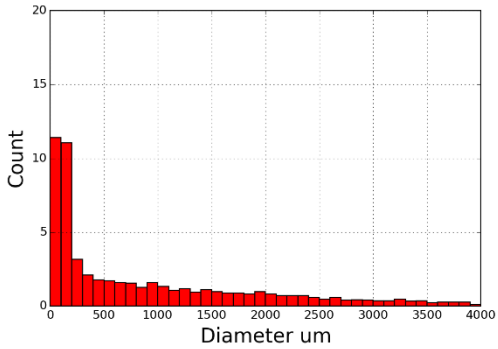


Figure B. 482: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

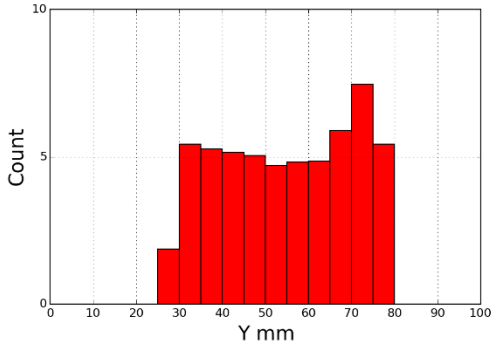


Figure B. 483: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

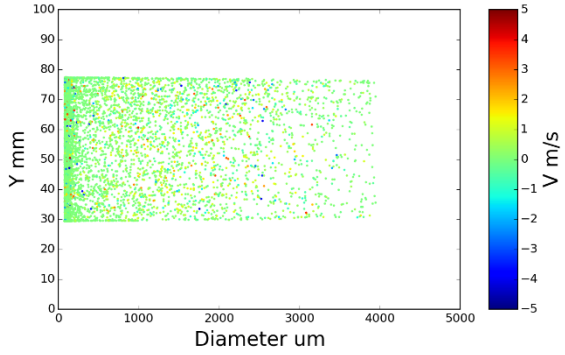


Figure B. 484: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

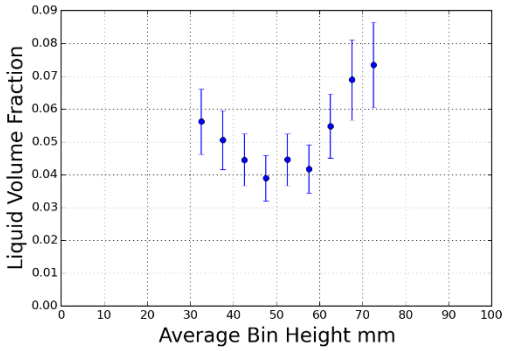


Figure B. 485: Void Fraction R-123 40F 5000Btu 30000Lb Tri

B.2.1.1 All Droplets for .LB Image

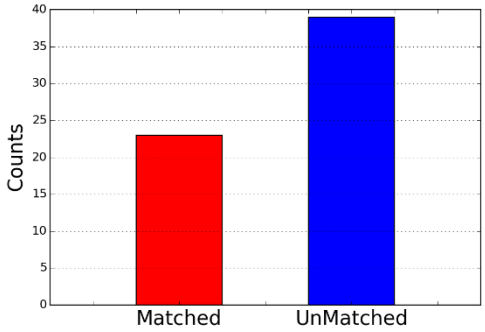


Figure B. 486: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

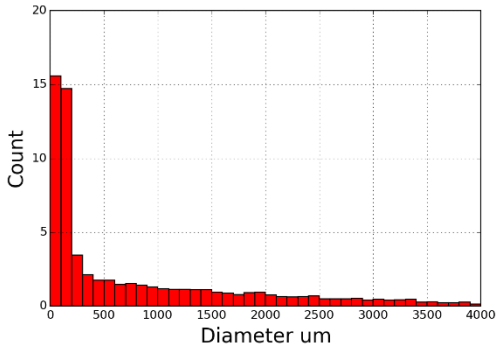


Figure B. 487: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

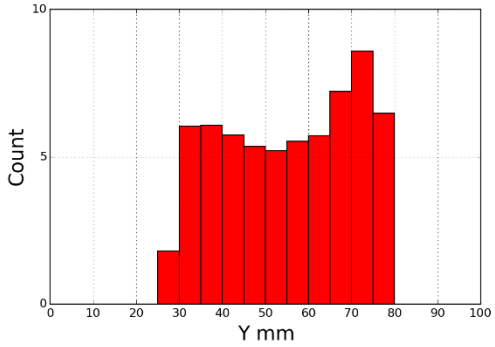


Figure B. 488: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

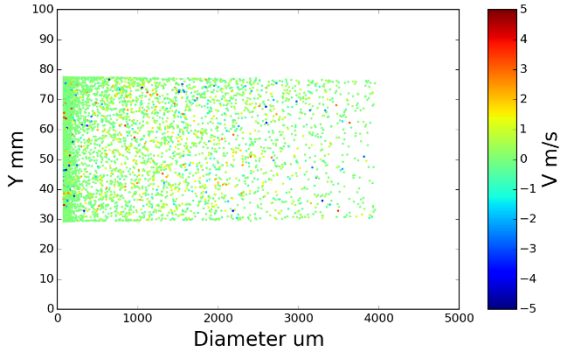


Figure B. 489: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

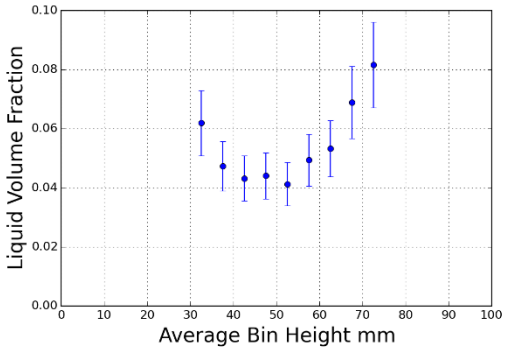


Figure B. 490: Void Fraction R-123 40F 5000Btu 30000Lb Tri

B.2.1.1 Matched Only Droplets for .LA Image

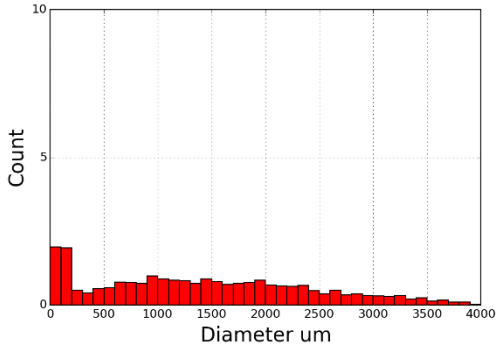


Figure B. 491: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

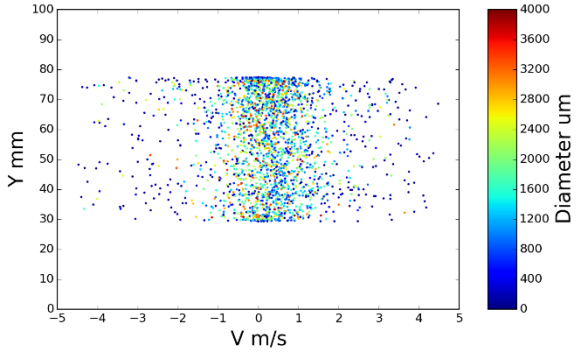


Figure B. 494: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

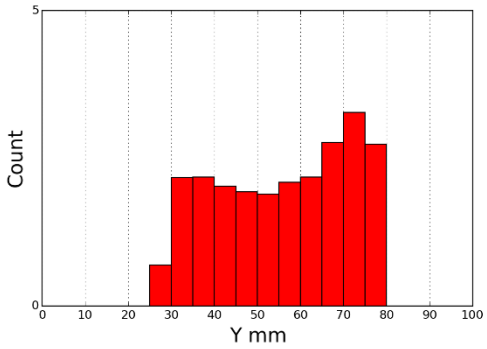


Figure B. 492: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

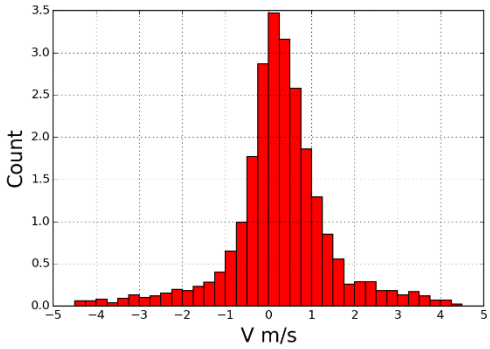


Figure B. 495: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

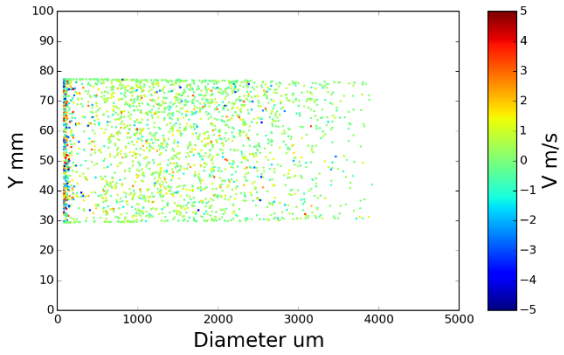


Figure B. 493: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.1.1 Matched Only Droplets for .LB Image

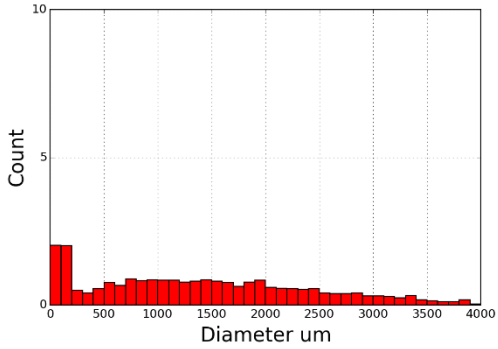


Figure B. 496: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

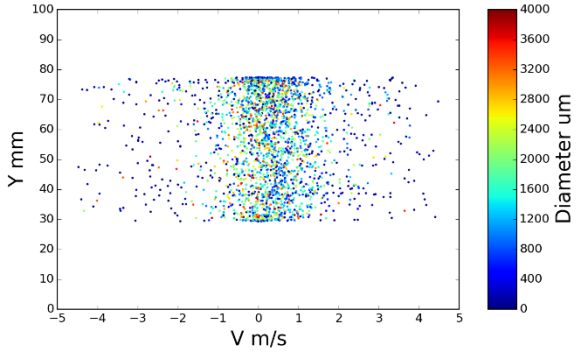


Figure B. 499: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

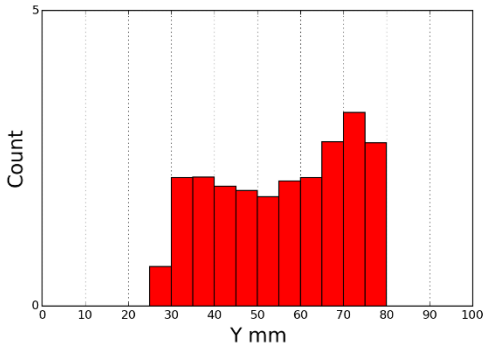


Figure B. 497: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

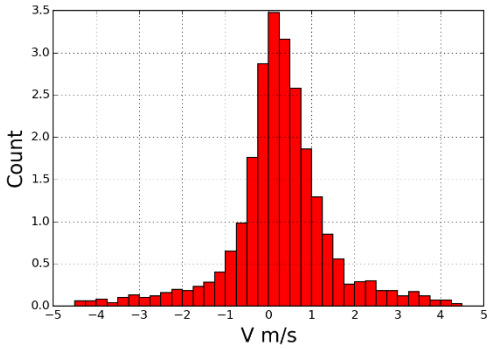


Figure B. 500: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

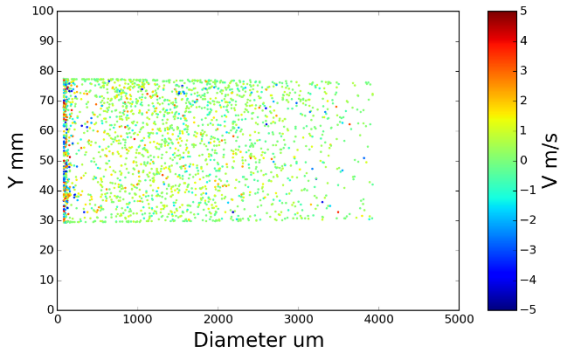


Figure B. 498: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.1.2 Lens 50mm Mag 0_13x

B.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	33.21	34.87	181.9	3989	685.0	619.9	170.2	3939	700.8	639.4
40-60mm	66.83	65.75	170.2	3954	721.1	638.3	170.2	3974	719.6	644.0
60-80mm	98.47	97.42	170.2	3954	717.5	631.9	170.2	3966	729.7	644.2
80-100mm	129.87	127.68	170.2	3983	707.7	590.8	181.9	3988	714.6	593.2
All	328.67	326.09	170.2	3989	711.1	616.2	170.2	3988	718.6	624.2
			Height A (mm)				Height B (mm)			
Highest Particle			99.9765				99.9765			
Lowest Particle			30.1013				30.1013			

Table B. 55: 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	15.28	181.9	3874	835.6	699.2	181.9	3924	816.3	693.6	-4.390	4.390	-0.180	1.730	-4.390	4.390	0.090	1.790
40-60mm	29.09	181.9	3904	862.6	659.4	170.2	3959	838.1	666.5	-4.380	4.390	-0.180	1.630	-4.370	4.370	0.210	1.710
60-80mm	48.48	181.9	3891	850.8	662.5	181.9	3966	838.3	667.9	-4.390	4.380	-0.180	1.660	-4.390	4.390	0.200	1.720
80-100mm	69.87	181.9	3799	816.2	605.1	181.9	3969	800.4	600.5	-4.390	4.390	-0.170	1.510	-4.390	4.390	0.270	1.560
All	162.72	181.9	3904	836.6	641.9	170.2	3969	819.8	642.2	-4.390	4.390	-0.170	1.600	-4.390	4.390	0.220	1.660

Table B. 56: Matched Droplet Info

B.2.1.2 All Droplets for .LA Image

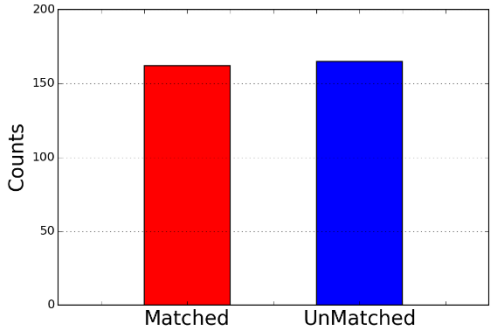


Figure B. 501: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

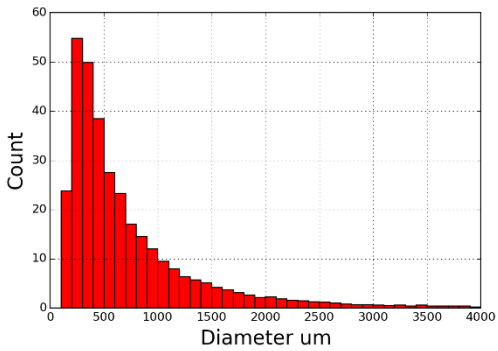


Figure B. 502: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

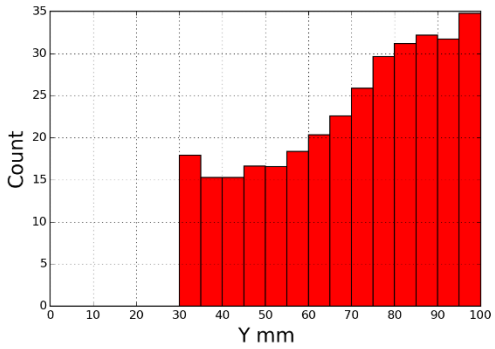


Figure B. 503: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

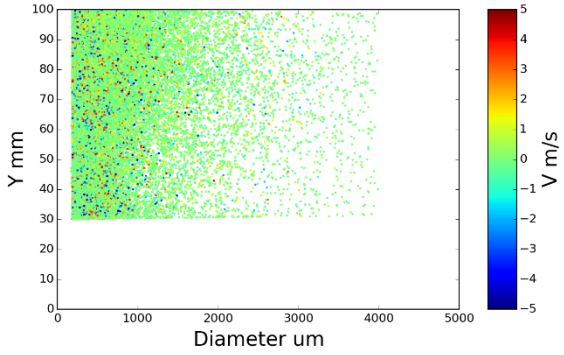


Figure B. 504: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

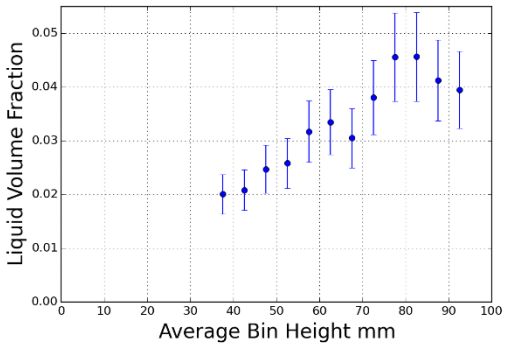


Figure B. 505: Void Fraction R-123 40F 5000Btu 30000Lb Tri

B.2.1.2 All Droplets for .LB Image

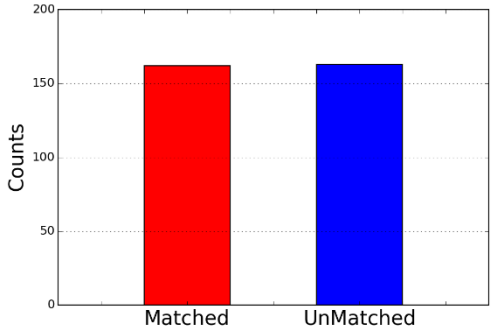


Figure B. 506: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

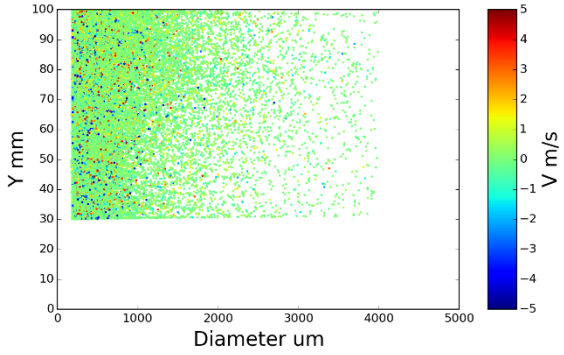


Figure B. 509: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

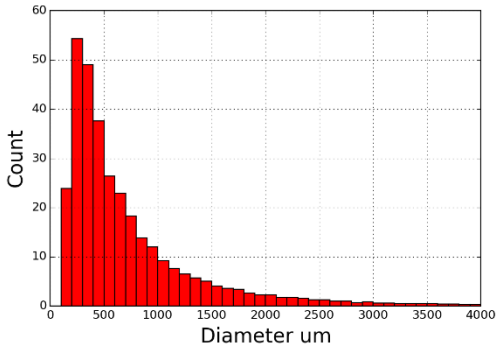


Figure B. 507: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

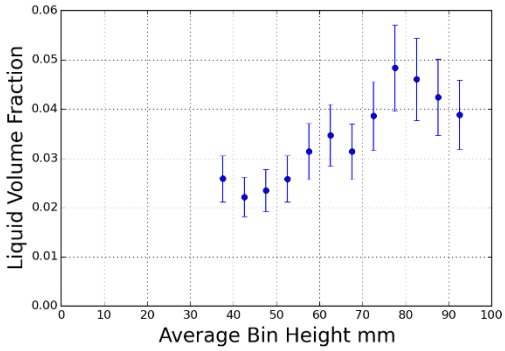


Figure B. 510: Void Fraction R-123 40F 5000Btu 30000Lb Tri

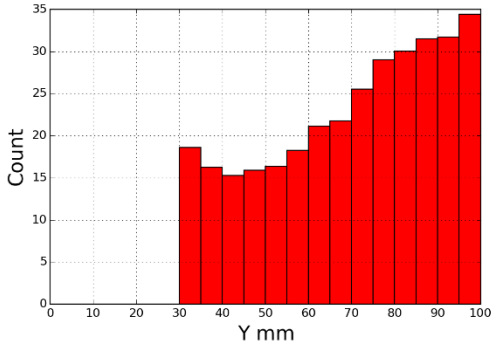


Figure B. 508: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.1.2 Matched Only Droplets for .LA Image

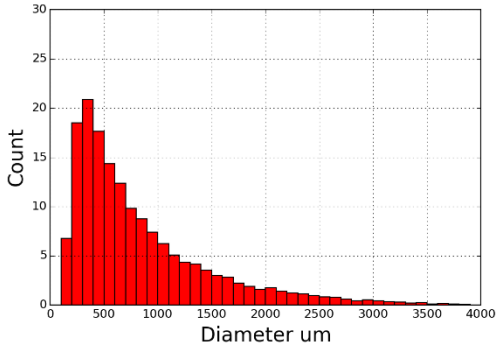


Figure B. 511: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

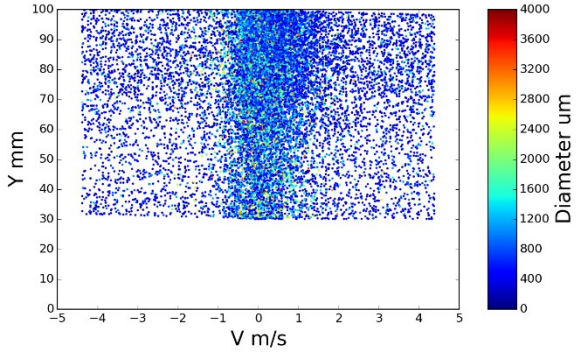


Figure B. 514: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

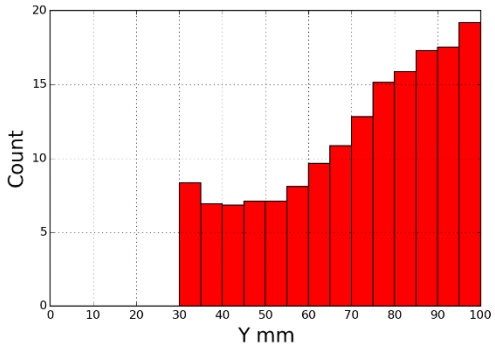


Figure B. 512: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

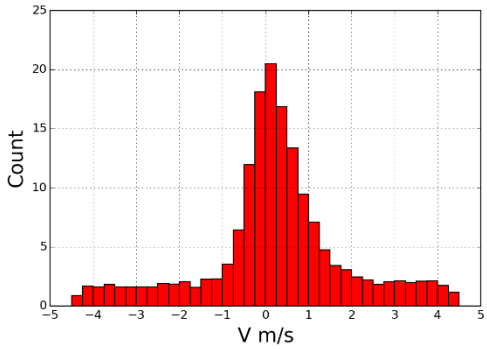


Figure B. 515: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

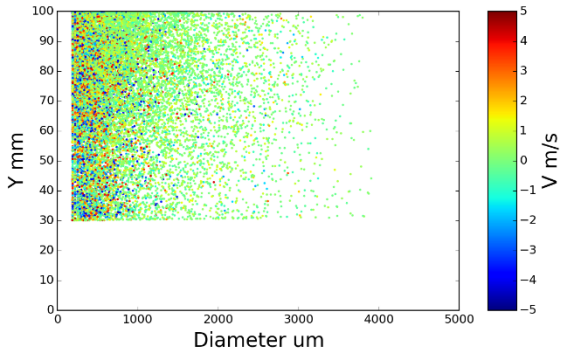


Figure B. 513: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.1.2 Matched Only Droplets for .LB Image

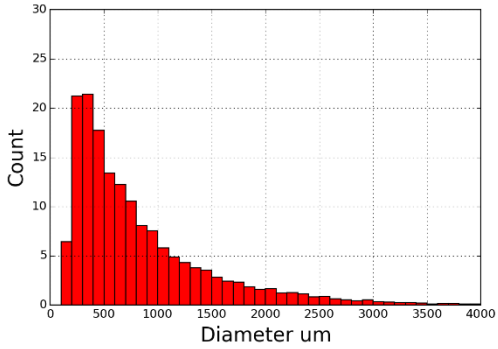


Figure B. 516: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

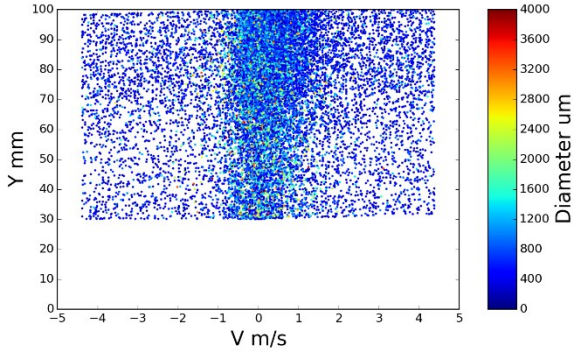


Figure B. 519: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

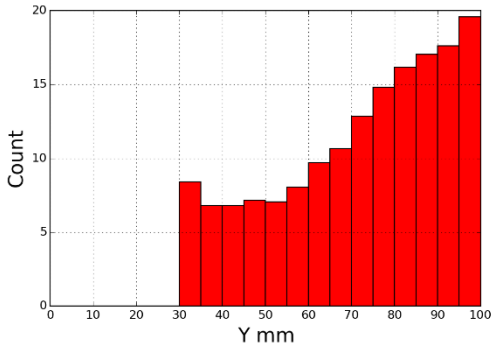


Figure B. 517: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

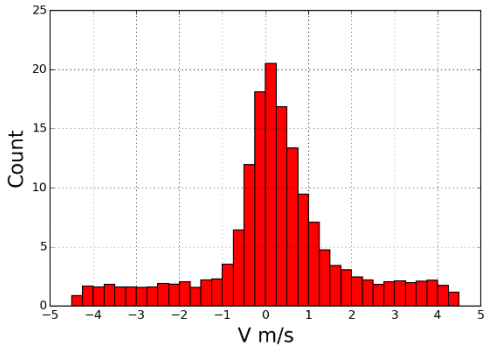


Figure B. 520: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

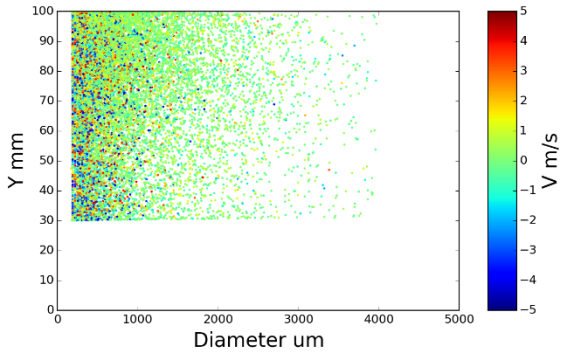


Figure B. 518: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.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	17.65	18.15	181.9	3966	871.4	763.4	170.2	3980	879.5	770.9
40-60mm	33.56	33.77	170.2	3988	963.9	805.7	170.2	3984	949.9	807.2
60-80mm	53.07	52.35	181.9	3982	920.1	767.3	170.2	3978	909.8	759.6
80-100mm	84.64	84.72	170.2	3988	861.5	696.1	181.9	3967	863.9	697.5
All	189.02	189.28	170.2	3988	897.1	744.2	170.2	3984	893.5	743.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.9955				99.9696			
Lowest Particle			30.1298				30.1013			

Table B. 57: 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	7.1	181.9	3915	1182	821.9	181.9	3978	1157	833.0	-4.360	4.390	-0.050	1.430	-4.390	4.380	0.230	1.360
40-60mm	14.74	181.9	3981	1240	820.7	181.9	3984	1219	835.0	-4.390	4.330	-0.080	1.250	-4.380	4.370	0.220	1.310
60-80mm	24.28	181.9	3810	1160	786.0	181.9	3936	1145	789.9	-4.390	4.390	-0.130	1.310	-4.390	4.390	0.210	1.370
80-100mm	45.32	181.9	3904	1041	702.4	181.9	3965	1028	715.2	-4.390	4.370	-0.160	1.290	-4.380	4.390	0.240	1.340
All	91.44	181.9	3981	1116	758.7	181.9	3984	1100	768.8	-4.390	4.390	-0.130	1.300	-4.390	4.390	0.230	1.350

Table B. 58: Matched Droplet Info

B.2.1.2 All Droplets for .LA Image

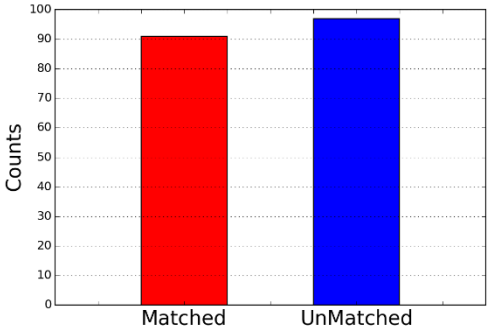


Figure B. 521: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

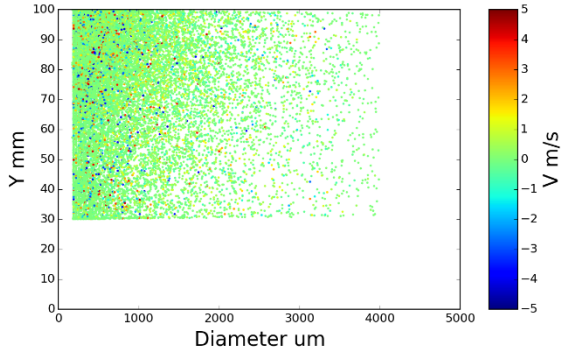


Figure B. 524: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

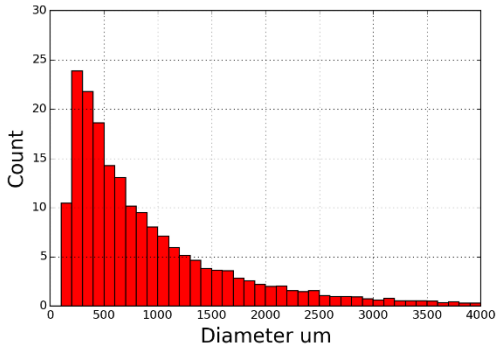


Figure B. 522: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

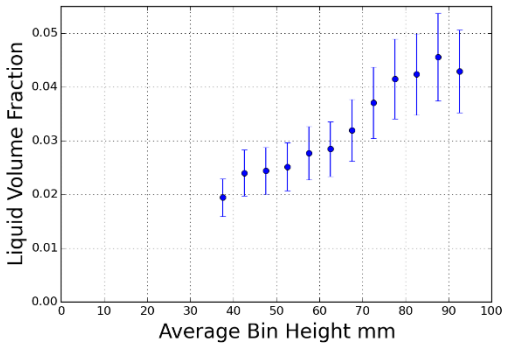


Figure B. 525: Void Fraction R-123 40F 5000Btu 30000Lb Tri

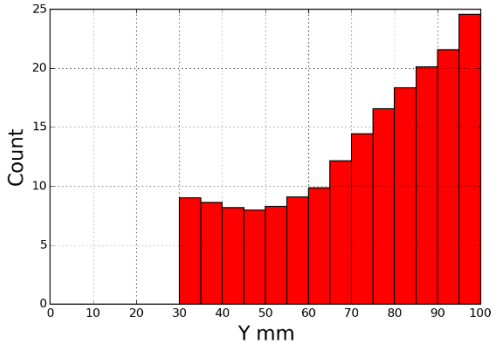


Figure B. 523: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.1.2 All Droplets for .LB Image

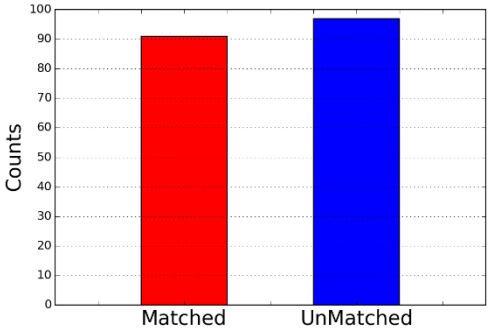


Figure B. 526: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

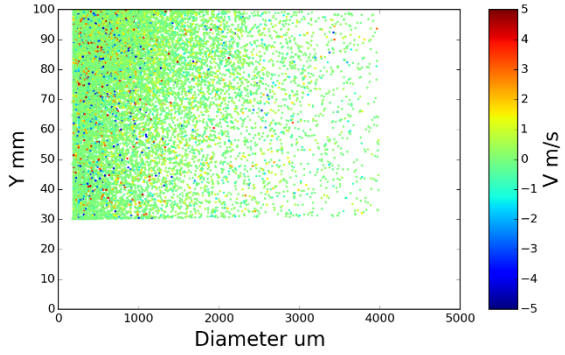


Figure B. 529: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

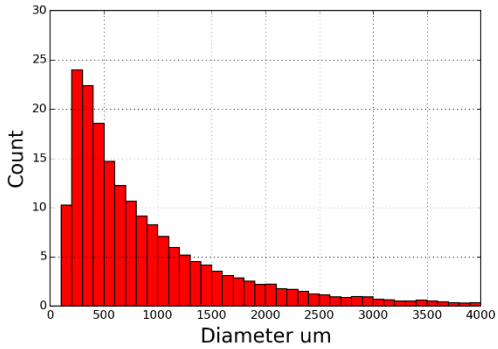


Figure B. 527: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

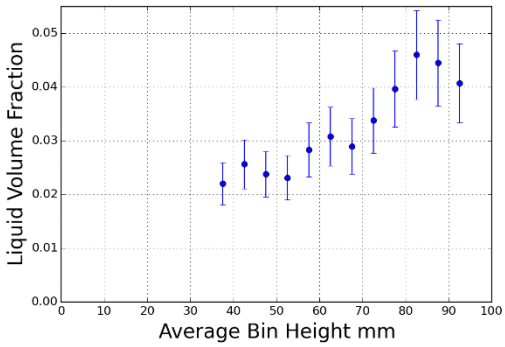


Figure B. 530: Void Fraction R-123 40F 5000Btu 30000Lb Tri

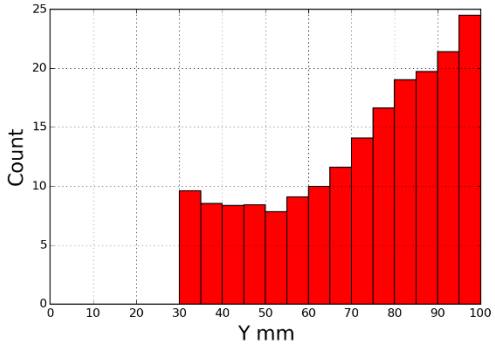


Figure B. 528: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.1.2 Matched Only Droplets for .LA Image

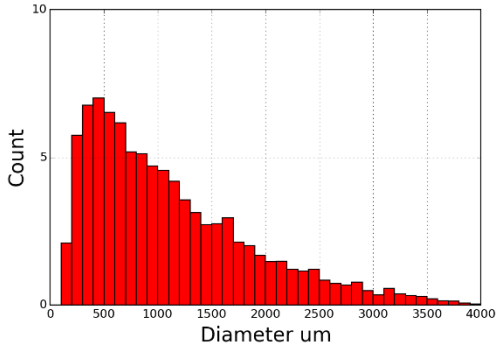


Figure B. 531: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

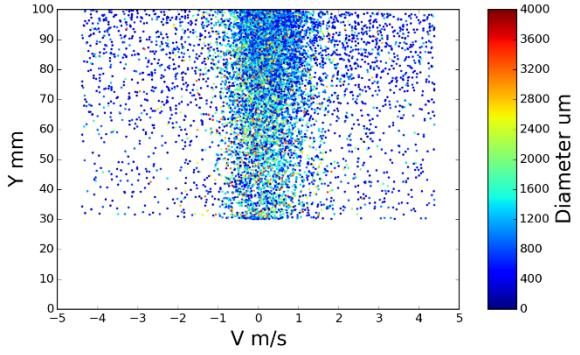


Figure B. 534: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

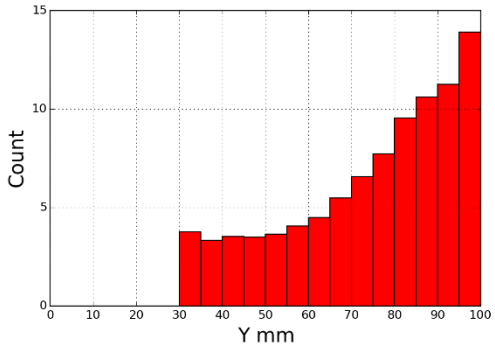


Figure B. 532: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

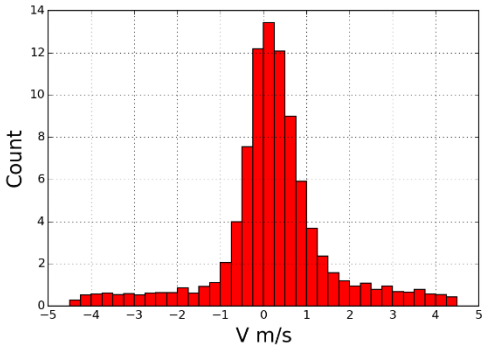


Figure B. 535: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

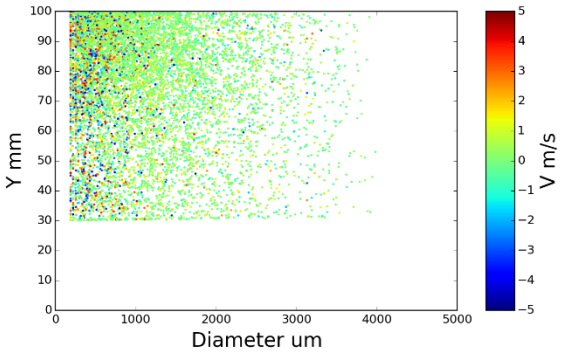


Figure B. 533: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.1.2 Matched Only Droplets for .LB Image

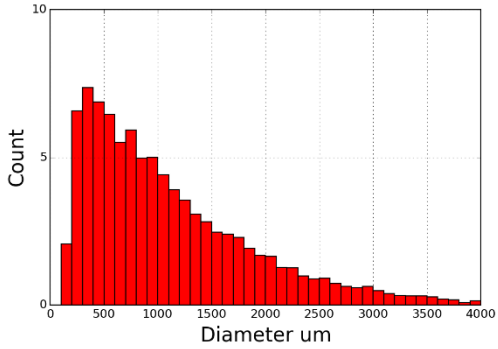


Figure B. 536: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

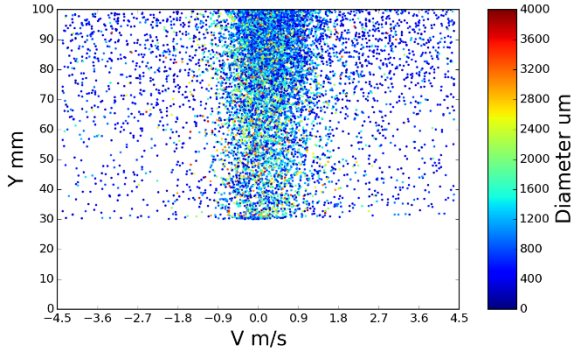


Figure B. 539: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

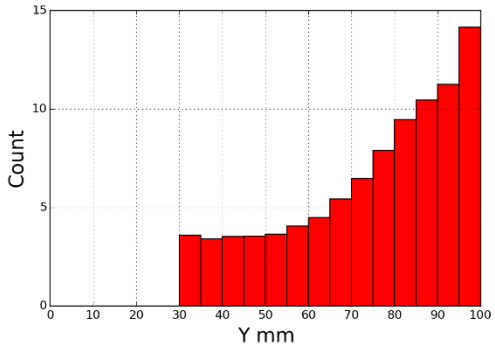


Figure B. 537: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

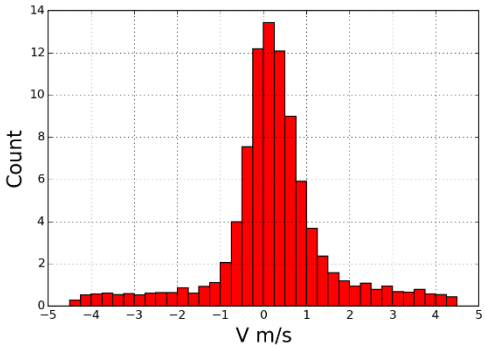


Figure B. 540: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

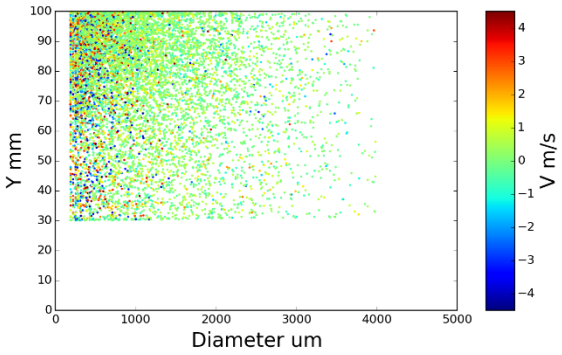


Figure B. 538: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.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	10.45	9.87	170.2	3952	1051	892.4	181.9	3973	1076	888.4
40-60mm	17.98	18.48	181.9	3988	1182	930.5	170.2	3986	1145	902.7
60-80mm	30.08	30.96	170.2	3971	1113	898.4	170.2	3989	1095	890.4
80-100mm	55.51	55.82	181.9	3976	951.2	767.9	170.2	3981	951.3	765.9
All	114.1	115.26	170.2	3988	1040	847.3	170.2	3989	1032	838.2
			Height A (mm)				Height B (mm)			
Highest Particle			99.9784				99.9685			
Lowest Particle			30.1272				30.1283			

Table B. 59: 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	4.07	193.0	3823	1469	891.2	181.9	3955	1431	906.2	-4.260	3.830	-0.080	1.110	-4.240	4.360	0.280	1.240
40-60mm	7.59	181.9	3932	1546	859.1	193.0	3986	1518	871.4	-4.370	4.330	-0.060	1.000	-4.350	4.310	0.160	1.100
60-80mm	13.48	181.9	3811	1418	856.6	170.2	3961	1404	880.5	-4.380	4.190	-0.070	1.150	-4.240	4.380	0.240	1.200
80-100mm	27.6	181.9	3876	1205	768.2	181.9	3950	1185	779.5	-4.390	4.390	-0.100	1.210	-4.380	4.390	0.220	1.250
All	52.74	181.9	3932	1329	826.0	170.2	3986	1308	840.4	-4.390	4.390	-0.090	1.160	-4.380	4.390	0.220	1.210

Table B. 60: Matched Droplet Info

B.2.1.2 All Droplets for .LA Image

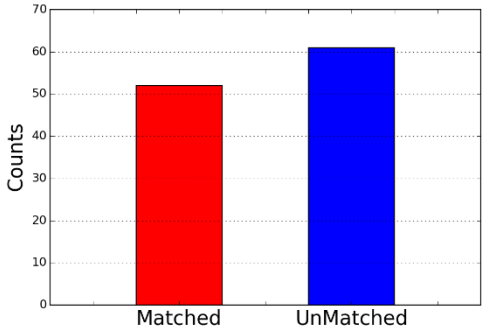


Figure B. 541: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

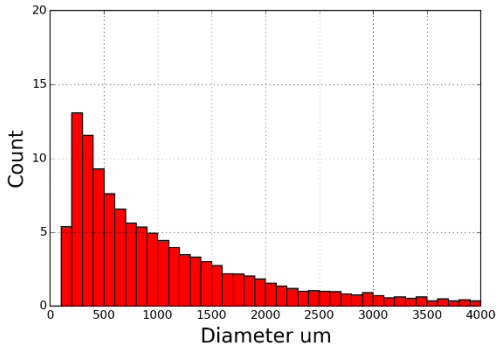


Figure B. 542: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

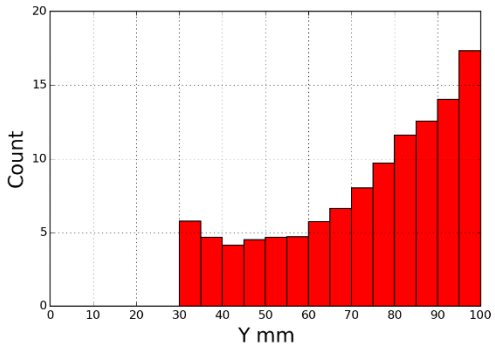


Figure B. 543: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

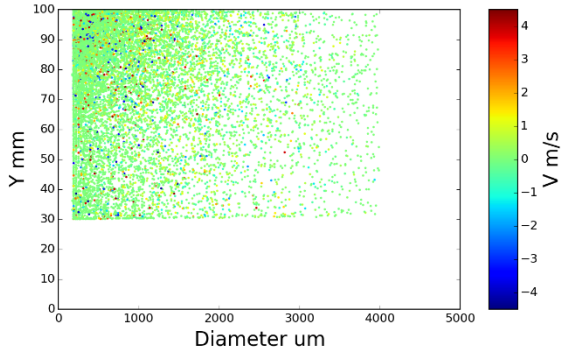


Figure B. 544: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

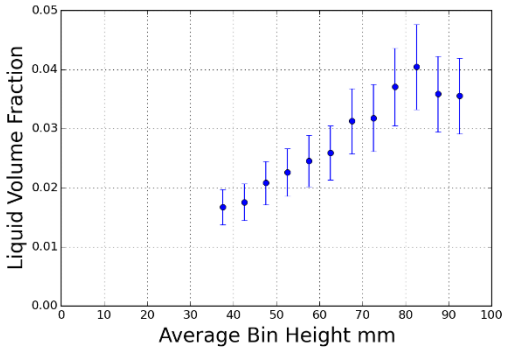


Figure B. 545: Void Fraction R-123 40F 5000Btu 30000Lb Tri

B.2.1.2 All Droplets for .LB Image

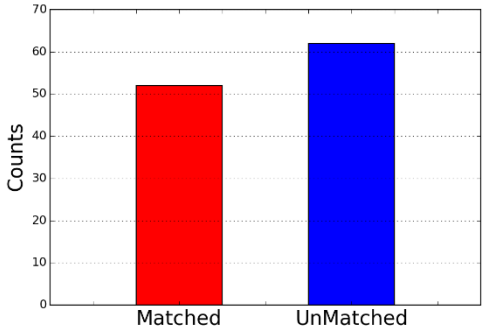


Figure B. 546: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

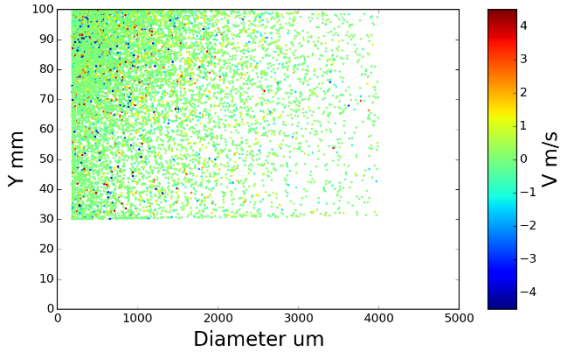


Figure B. 549: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

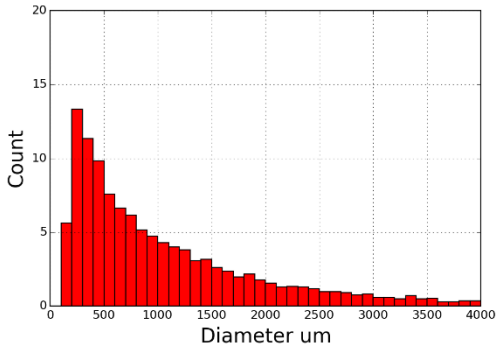


Figure B. 547: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

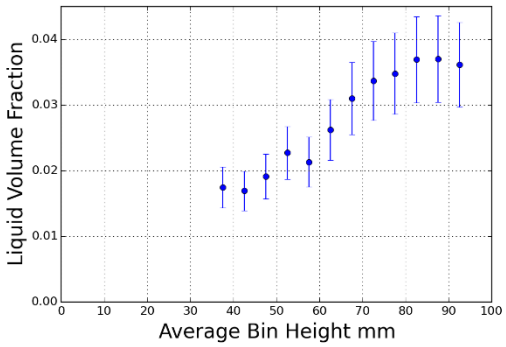


Figure B. 550: Void Fraction R-123 40F 5000Btu 30000Lb Tri

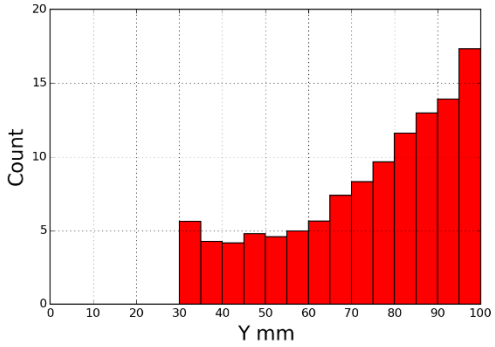


Figure B. 548: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.1.2 Matched Only Droplets for .LA Image

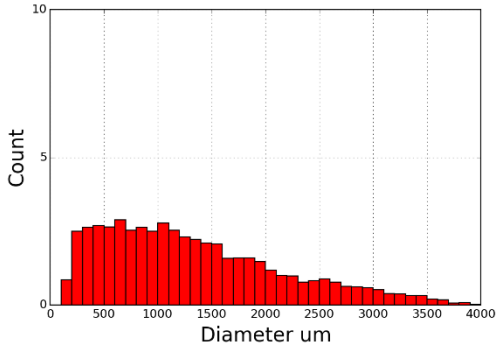


Figure B. 551: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

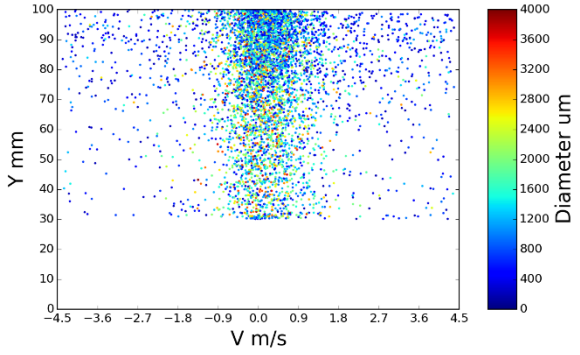


Figure B. 554: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

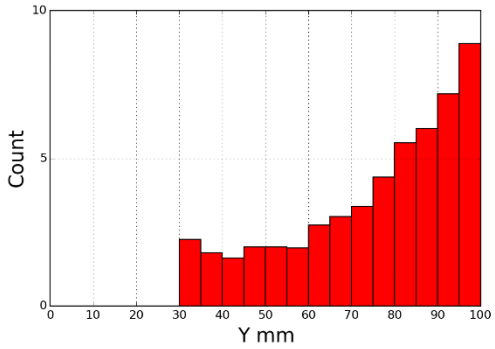


Figure B. 552: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

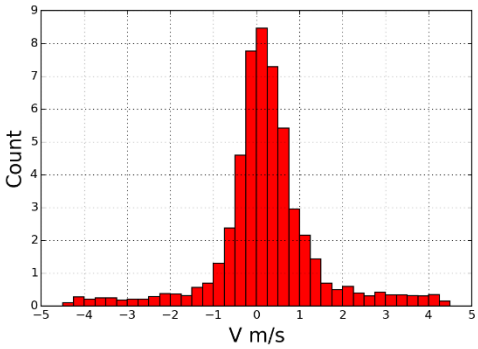


Figure B. 555: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

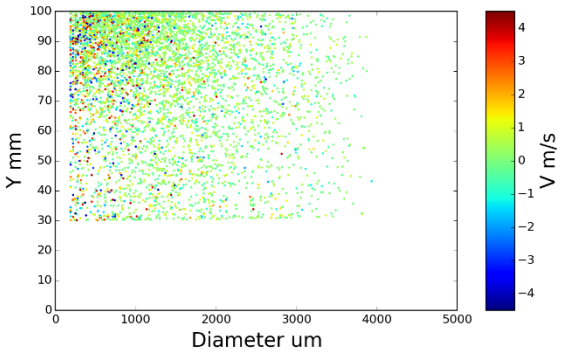


Figure B. 553: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.1.2 Matched Only Droplets for .LB Image

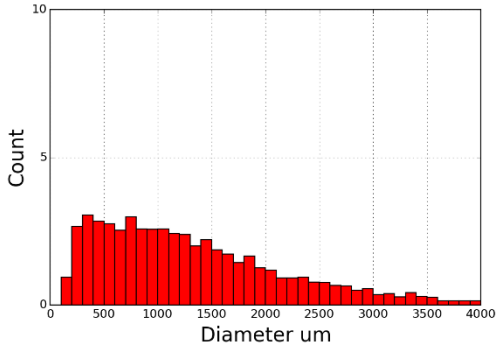


Figure B. 556: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

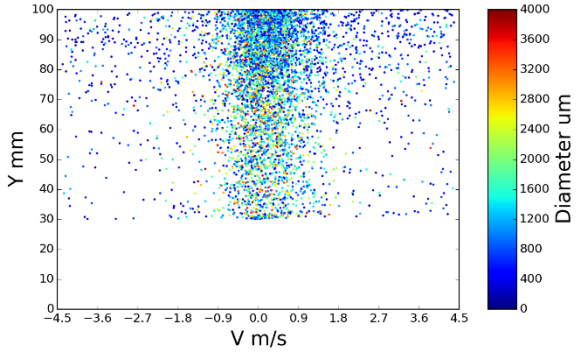


Figure B. 559: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

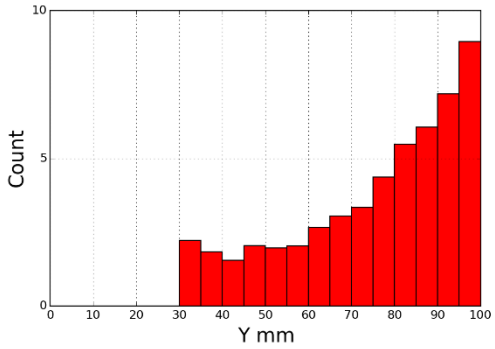


Figure B. 557: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

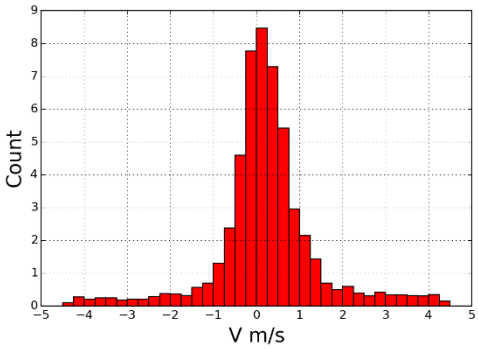


Figure B. 560: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

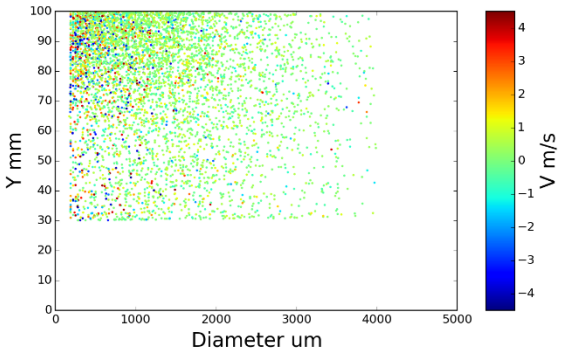


Figure B. 558: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.2 Liquid Level 2

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	11816 / 1.489
Ref Mass Flow (lb/hr) / (kg/s)	3054 / 0.385
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	29726 / 40.316
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	5047 / 15.92
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	39.6 / 4.21
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	41.7 / 5.39
Total Bundle Q (Btu/hr) / (kW)	117306 / 34.38
Total Bundle & Preboiler Q (Btu/hr) / (kW)	183976 / 53.92
Top Two Rows HTC Ratio	1.075
Bundle Inlet Quality	0.21
Bundle Exit Quality	0.71

Table B. 61: Thermal Conditions

B.2.2.1 Lens 100mm Mag 0_29x

B.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	82.25	83.83	75.8	3956	517.5	566.1	75.8	3936	508.6	568.2
40-60mm	151.58	155.34	75.8	3943	537.8	579.5	75.8	3960	525.1	573.8
60-80mm	141.88	144.44	75.8	3929	533.0	582.7	75.8	3957	523.6	576.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	375.93	383.86	75.8	3956	531.5	577.9	75.8	3960	520.9	573.7
			Height A (mm)				Height B (mm)			
Highest Particle			77.3887				77.3887			
Lowest Particle			29.4016				29.4016			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	42.36	81.0	3774	689.5	621.1	81.0	3929	684.5	631.2	-4.480	4.480	-0.020	1.210	-4.470	4.480	0.670	1.280
40-60mm	78.22	81.0	3929	709.3	612.6	75.8	3945	702.2	619.1	-4.480	4.480	-0.030	1.110	-4.480	4.480	0.860	1.360
60-80mm	74.83	81.0	3922	703.4	625.0	75.8	3945	693.1	628.1	-4.480	4.480	-0.020	1.080	-4.480	4.470	0.950	1.310
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	195.41	81.0	3929	702.8	619.2	75.8	3945	694.9	625.2	-4.480	4.480	-0.030	1.120	-4.480	4.480	0.850	1.330

Table B. 63: Matched Droplet Info

B.2.2.1 All Droplets for .LA Image

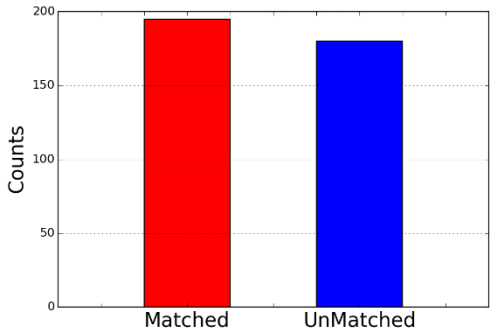


Figure B. 561: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

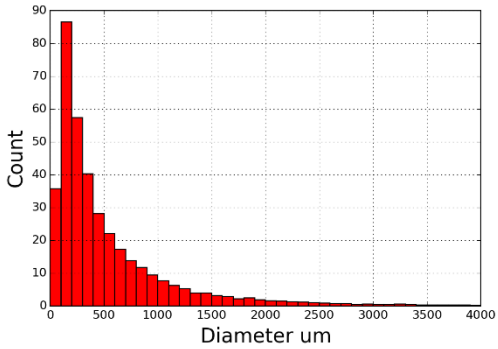


Figure B. 562: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

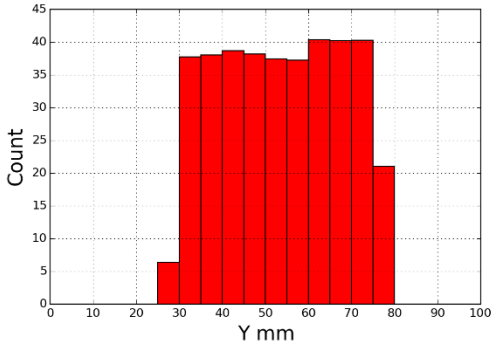


Figure B. 563: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

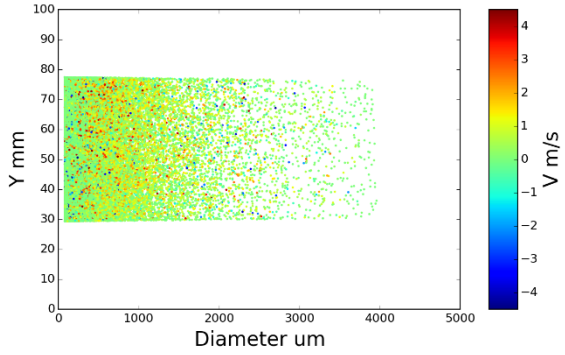


Figure B. 564: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

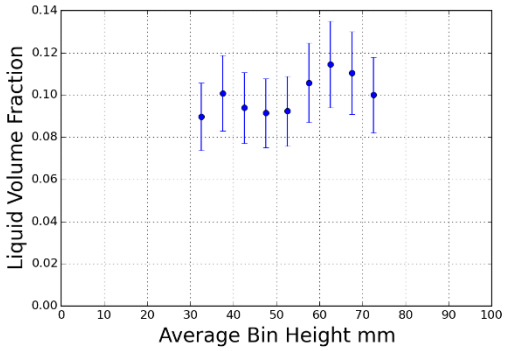


Figure B. 565: Void Fraction R-123 40F 5000Btu 30000Lb Tri

B.2.2.1 All Droplets for .LB Image

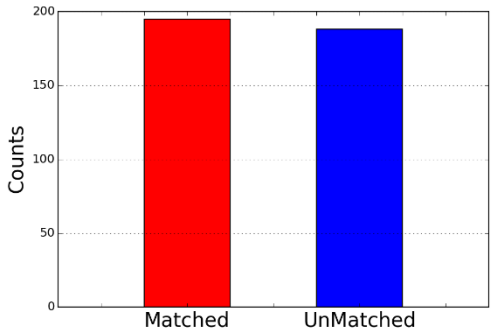


Figure B. 566: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

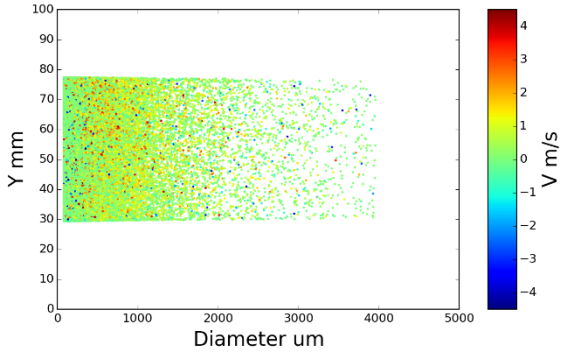


Figure B. 569: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

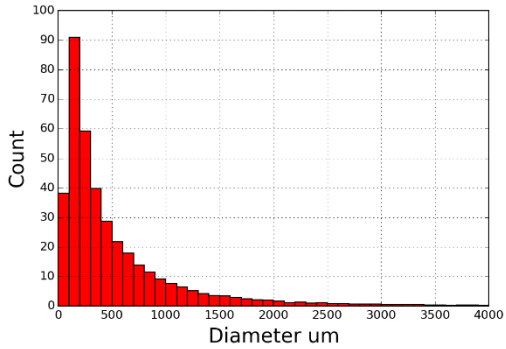


Figure B. 567: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

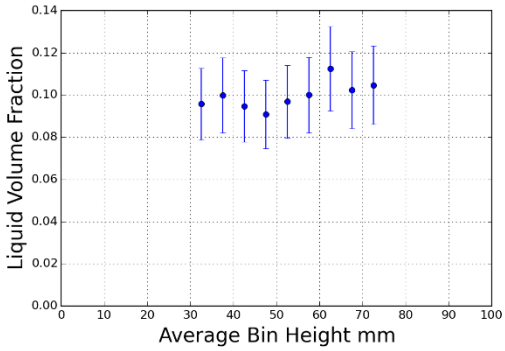


Figure B. 570: Void Fraction R-123 40F 5000Btu 30000Lb Tri

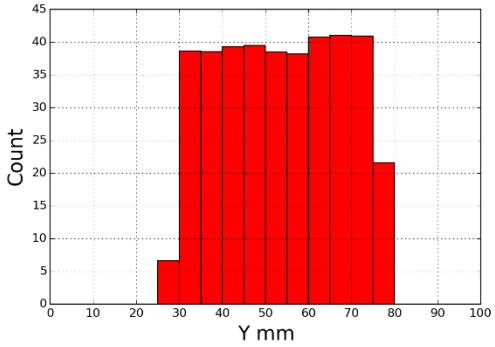


Figure B. 568: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.2.1 Matched Only Droplets for .LA Image

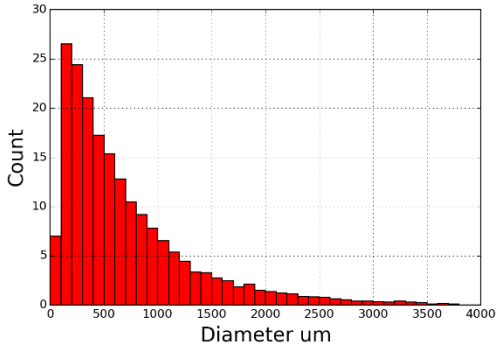


Figure B. 571: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

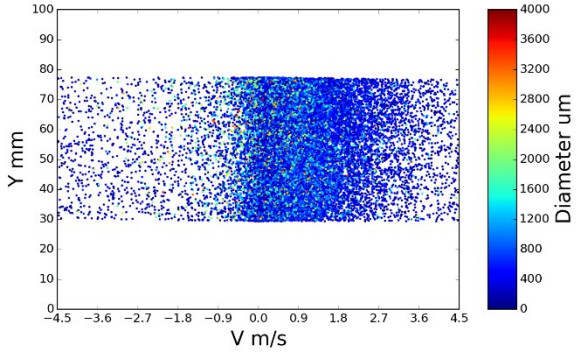


Figure B. 574: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

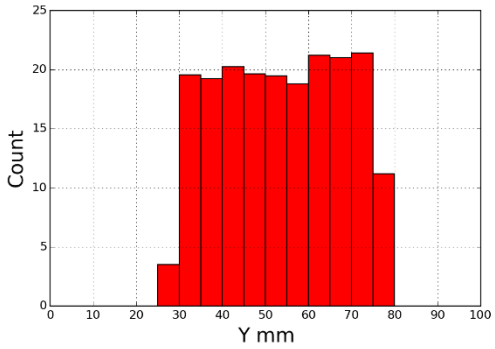


Figure B. 572: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

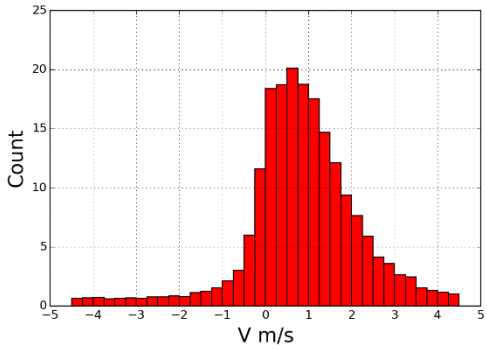


Figure B. 575: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

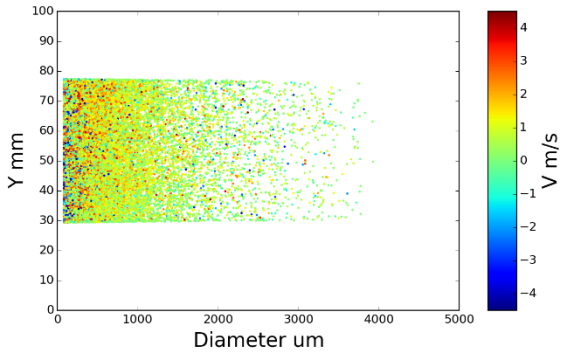


Figure B. 573: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.2.1 Matched Only Droplets for .LB Image

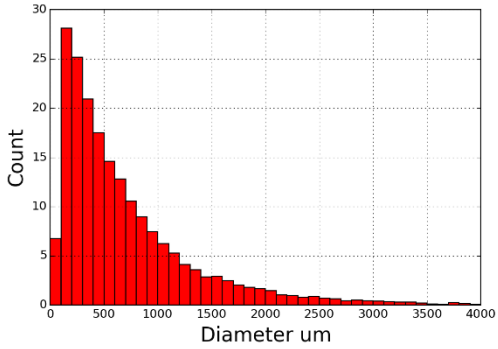


Figure B. 576: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

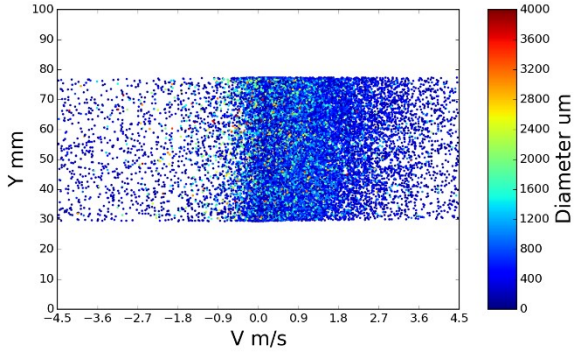


Figure B. 579: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

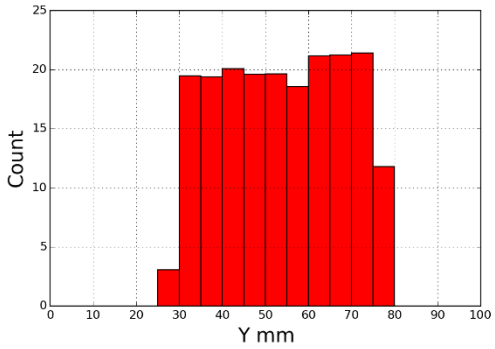


Figure B. 577: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

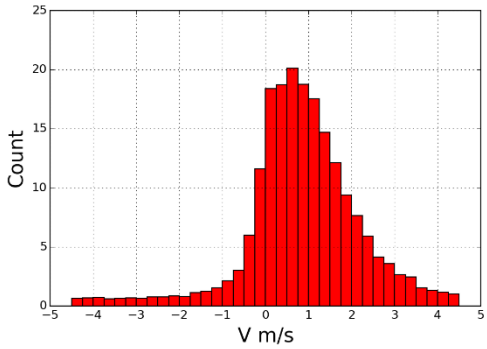


Figure B. 580: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

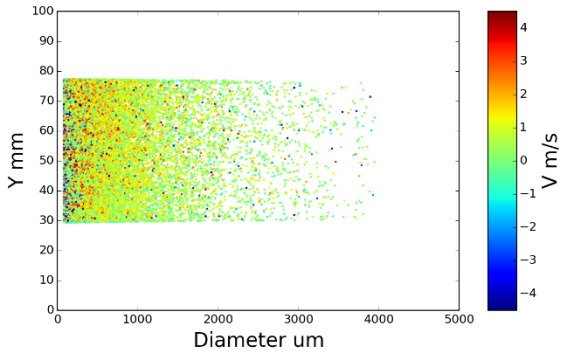


Figure B. 578: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.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	39.65	41.59	75.8	3952	741.8	747.2	75.8	3960	702.9	736.8
40-60mm	71.53	76.87	75.8	3949	768.6	760.0	75.8	3950	717.8	741.6
60-80mm	69.54	72.12	75.8	3938	734.2	748.5	75.8	3954	707.7	735.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	180.9	190.68	75.8	3952	749.5	752.9	75.8	3960	710.7	738.3
			Height A (mm)				Height B (mm)			
Highest Particle			77.3803				77.3803			
Lowest Particle			29.4120				29.4129			

Table B. 64: 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	20.84	81.0	3941	999.4	742.5	75.8	3958	999.1	758.6	-4.410	4.450	-0.020	0.930	-4.450	4.470	0.750	1.100
40-60mm	37.96	81.0	3903	1051	757.4	75.8	3930	1039	765.7	-4.480	4.480	-0.040	0.940	-4.480	4.480	0.870	1.170
60-80mm	36.69	81.0	3828	1002	745.0	75.8	3928	993.3	750.0	-4.450	4.480	-0.050	0.890	-4.420	4.470	0.880	1.110
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	95.49	81.0	3941	1021	749.8	75.8	3958	1013	758.4	-4.480	4.480	-0.040	0.920	-4.480	4.480	0.850	1.130

Table B. 65: Matched Droplet Info

B.2.2.1 All Droplets for .LA Image

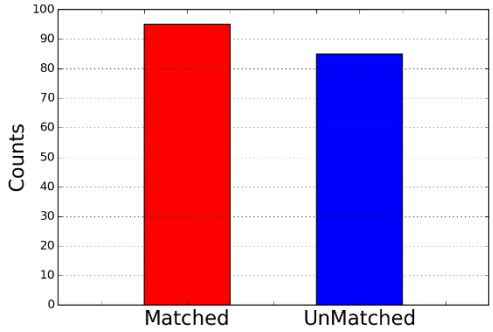


Figure B. 581: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

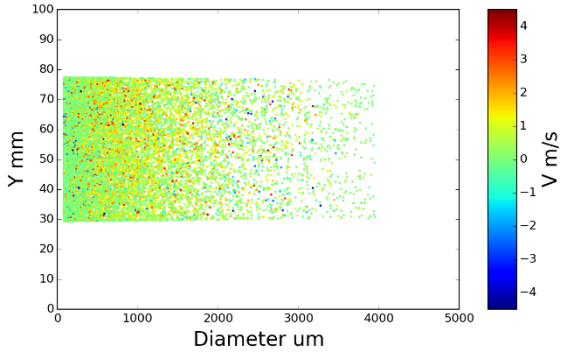


Figure B. 584: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

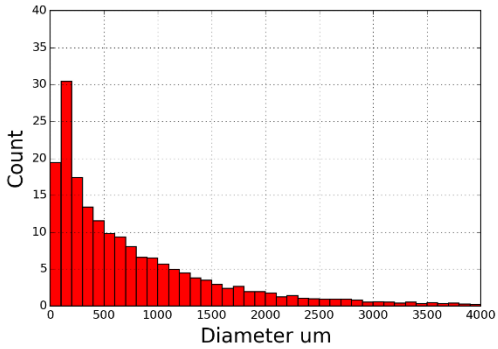


Figure B. 582: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

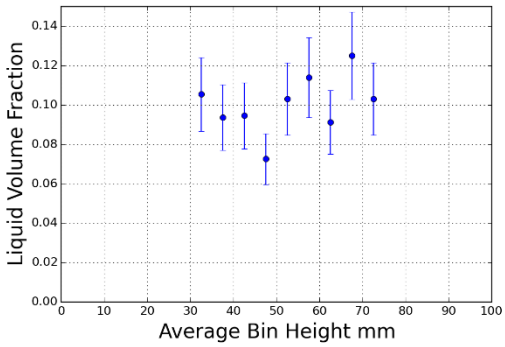


Figure B. 585: Void Fraction R-123 40F 5000Btu 30000Lb Tri

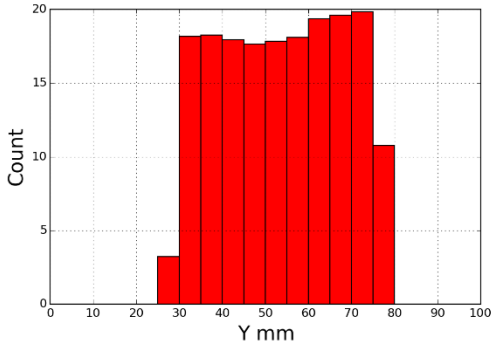


Figure B. 583: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.2.1 All Droplets for .LB Image

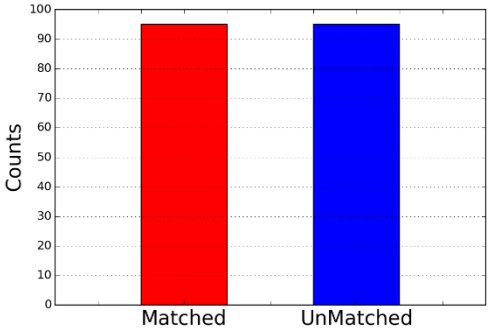


Figure B. 586: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

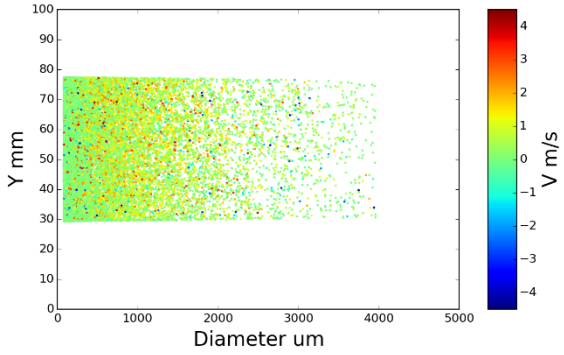


Figure B. 589: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

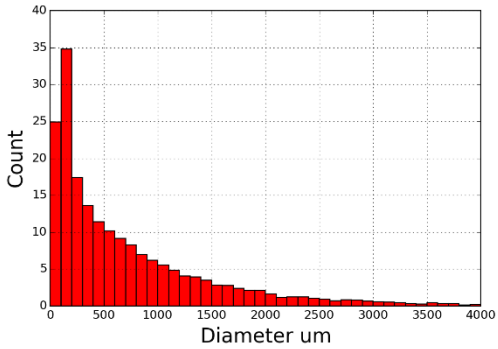


Figure B. 587: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

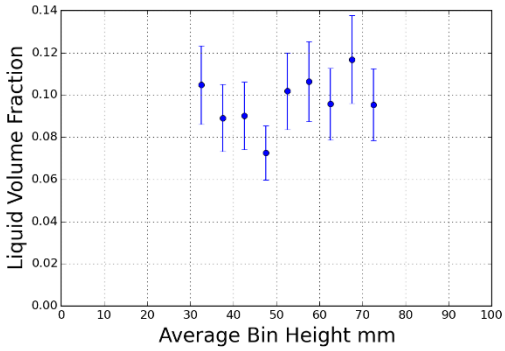


Figure B. 590: Void Fraction R-123 40F 5000Btu 30000Lb Tri

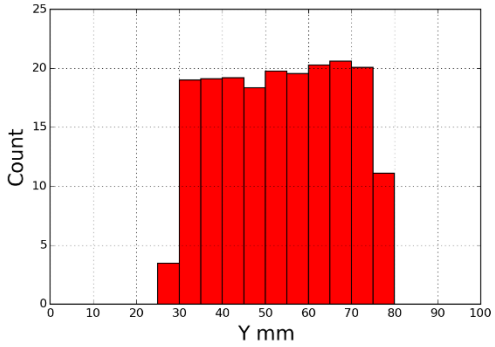


Figure B. 588: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.2.1 Matched Only Droplets for .LA Image

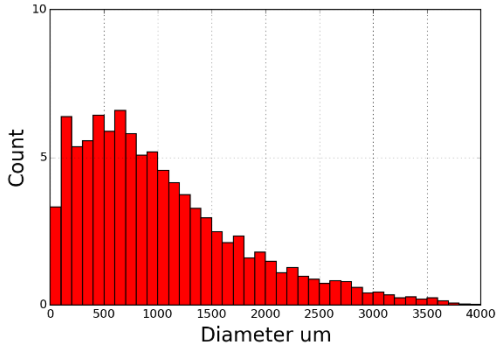


Figure B. 591: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

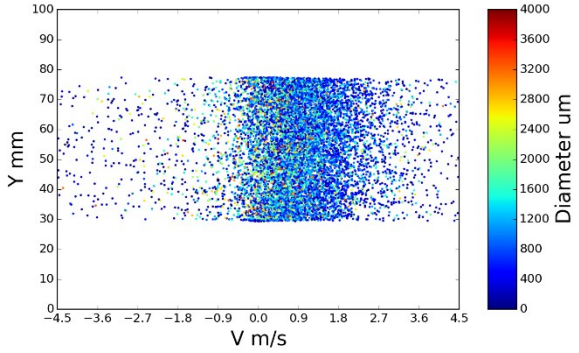


Figure B. 594: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

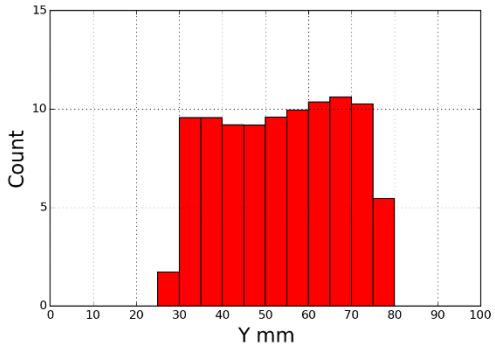


Figure B. 592: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

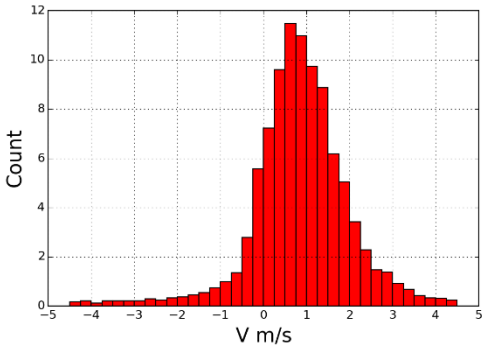


Figure B. 595: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

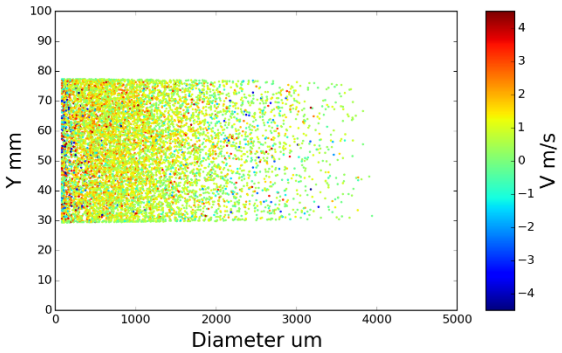


Figure B. 593: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.2.1 Matched Only Droplets for .LB Image

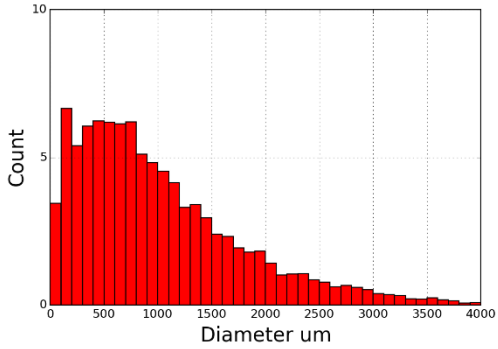


Figure B. 596: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

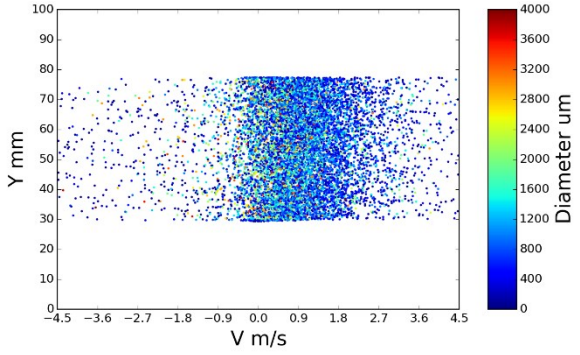


Figure B. 599: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

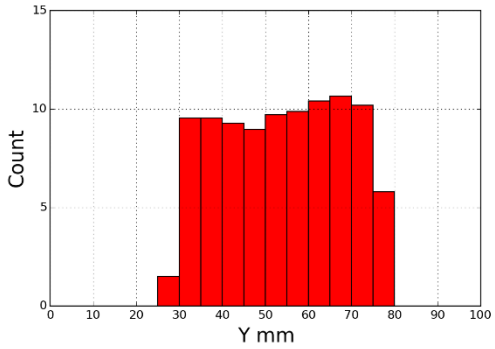


Figure B. 597: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

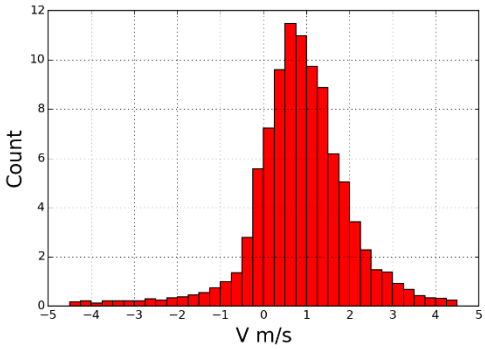


Figure B. 600: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

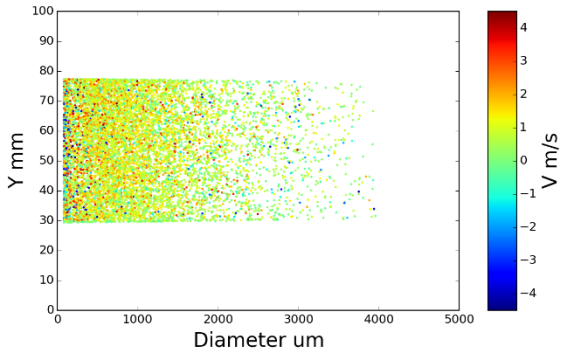


Figure B. 598: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.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	23.15	25.51	75.8	3958	734.0	860.1	75.8	3944	669.3	830.5
40-60mm	42.09	50.0	75.8	3959	709.6	849.3	75.8	3924	624.0	807.1
60-80mm	42.95	49.93	75.8	3942	703.0	826.0	75.8	3959	620.0	793.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	108.66	126.01	75.8	3959	712.2	842.5	75.8	3959	631.6	806.6
			Height A (mm)				Height B (mm)			
Highest Particle			77.3786				77.3774			
Lowest Particle			29.4016				29.4016			

Table B. 66: 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	9.98	81.0	3906	1184	918.6	75.8	3936	1184	937.5	-4.470	4.410	-0.060	1.240	-4.480	4.440	0.630	1.340
40-60mm	18.98	75.8	3806	1115	897.3	75.8	3924	1110	909.0	-4.420	4.450	-0.030	1.240	-4.480	4.480	0.710	1.420
60-80mm	19.28	81.0	3938	1082	886.3	75.8	3959	1074	891.4	-4.410	4.480	-0.110	1.240	-4.480	4.480	0.620	1.400
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	48.24	75.8	3938	1116	898.2	75.8	3959	1111	908.8	-4.470	4.480	-0.070	1.240	-4.480	4.480	0.660	1.400

Table B. 67: Matched Droplet Info

B.2.2.1 All Droplets for .LA Image

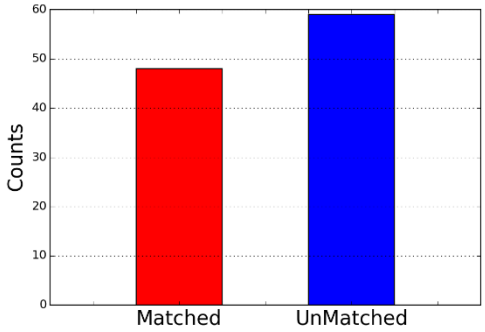


Figure B. 601: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

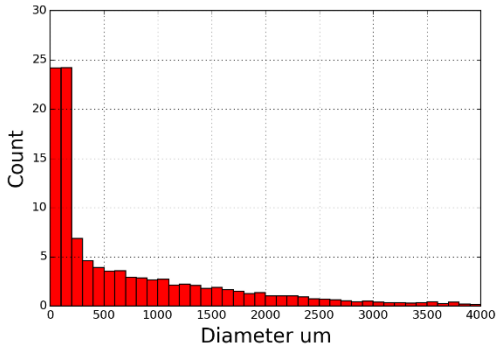


Figure B. 602: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

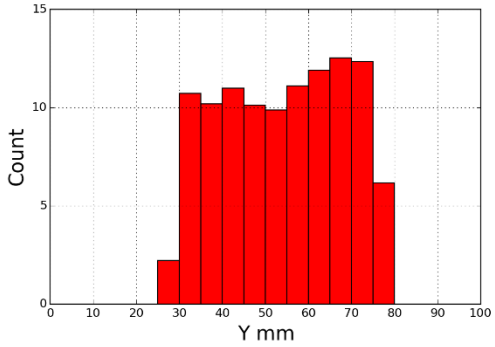


Figure B. 603: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

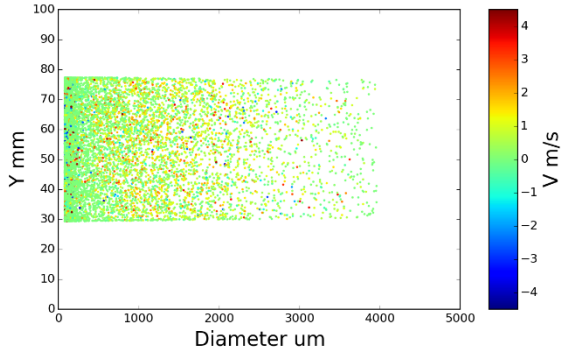


Figure B. 604: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

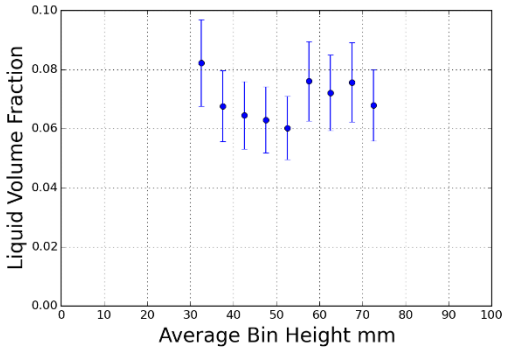


Figure B. 605: Void Fraction R-123 40F 5000Btu 30000Lb Tri

B.2.2.1 All Droplets for .LB Image

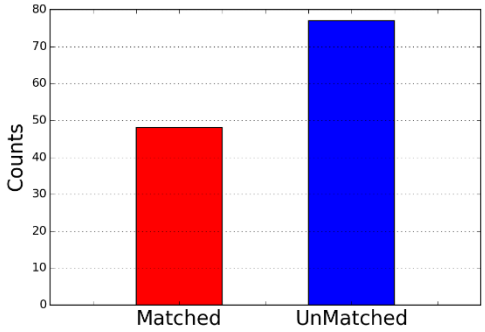


Figure B. 606: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

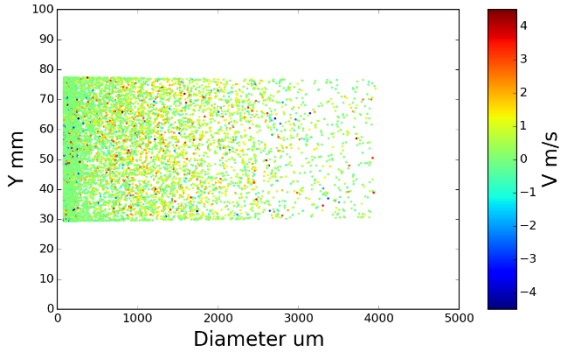


Figure B. 609: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

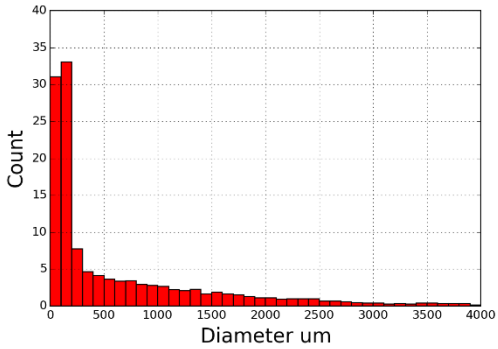


Figure B. 607: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

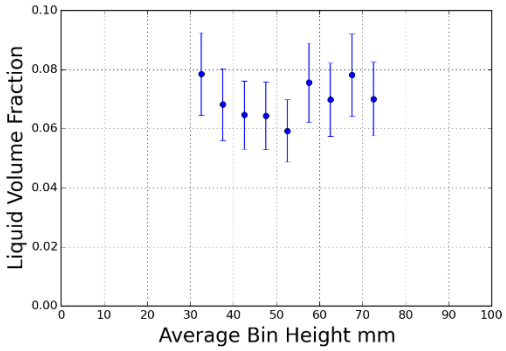


Figure B. 610: Void Fraction R-123 40F 5000Btu 30000Lb Tri

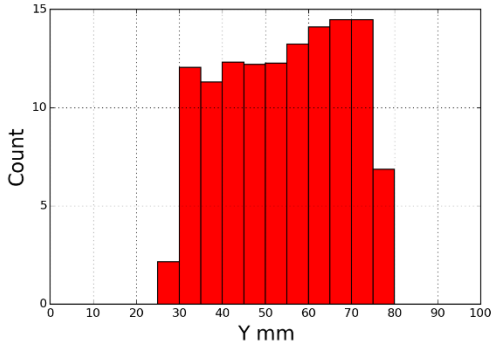


Figure B. 608: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.2.1 Matched Only Droplets for .LA Image

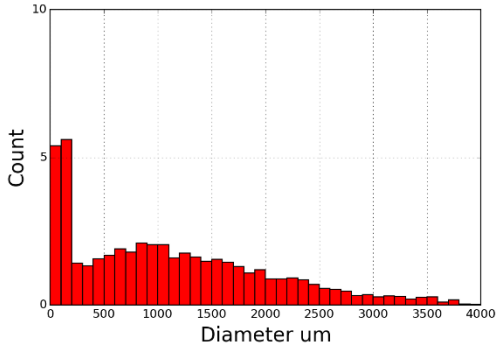


Figure B. 611: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

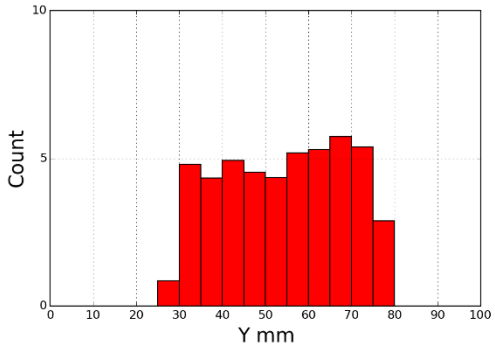


Figure B. 612: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

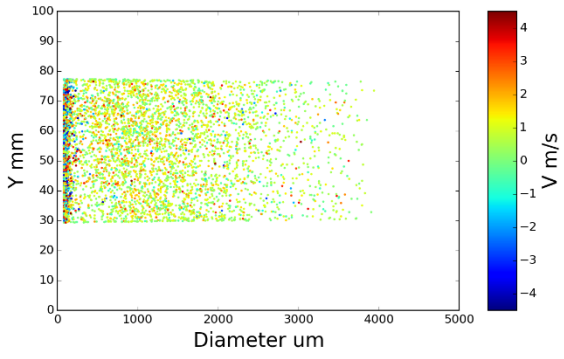


Figure B. 613: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

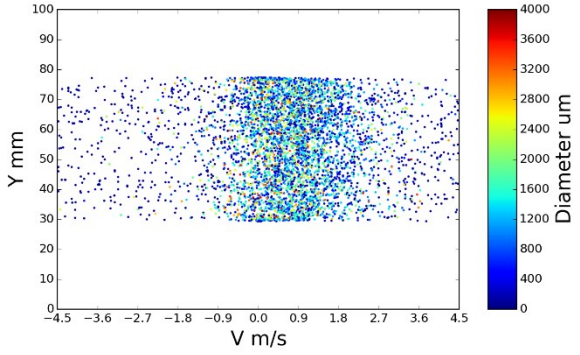


Figure B. 614: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

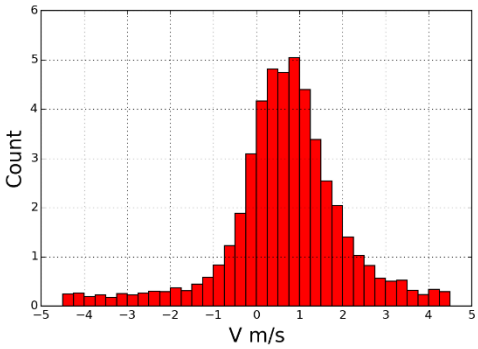


Figure B. 615: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.2.1 Matched Only Droplets for .LB Image

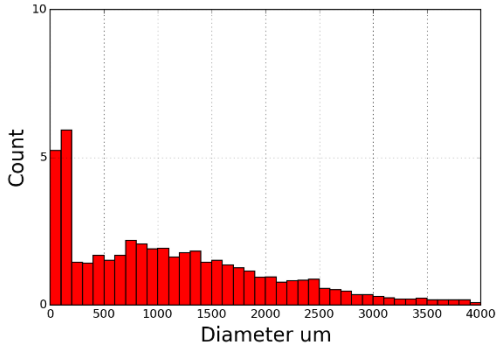


Figure B. 616: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

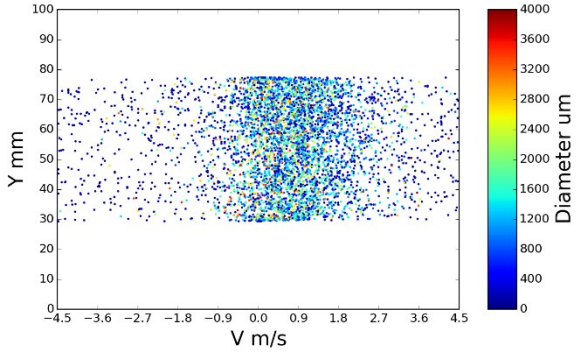


Figure B. 619: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

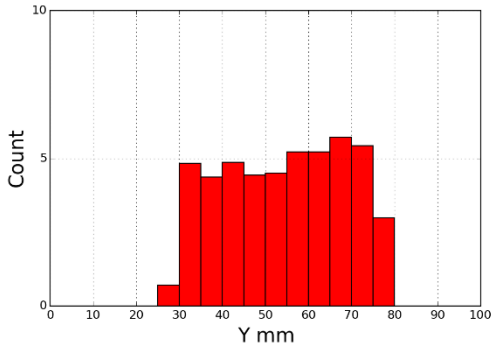


Figure B. 617: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

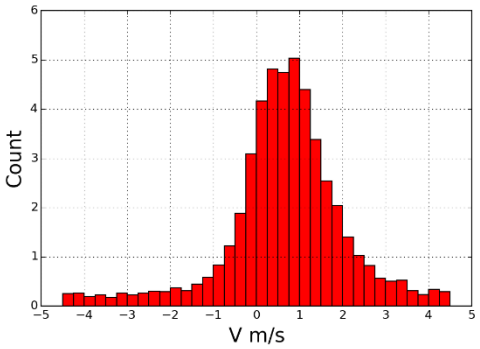


Figure B. 620: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

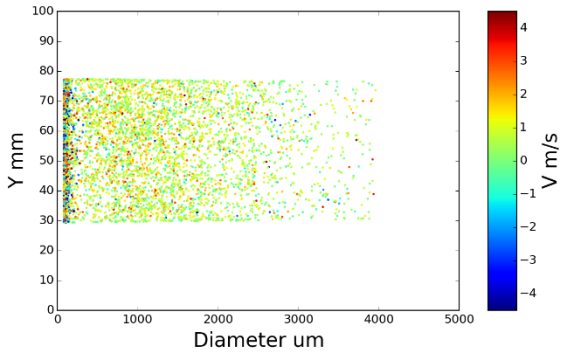


Figure B. 618: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.2.2 Lens 50mm Mag 0_13x

B.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	91.25	91.91	170.2	3979	732.3	625.5	170.2	3982	723.0	622.6
40-60mm	98.87	100.48	170.2	3986	711.9	601.9	181.9	3975	714.6	608.7
60-80mm	99.95	100.69	170.2	3986	737.7	646.0	170.2	3986	727.5	632.6
80-100mm	87.47	89.54	181.9	3951	669.3	525.5	181.9	3942	665.7	523.7
All	377.87	382.97	170.2	3986	713.4	603.7	170.2	3986	708.1	600.3
			Height A (mm)				Height B (mm)			
Highest Particle			100.0335				100.0272			
Lowest Particle			20.1245				20.1530			

Table B. 68: 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	46.07	181.9	3938	870.7	661.6	181.9	3982	852.0	667.1	-4.390	4.390	-0.100	1.570	-4.390	4.390	0.510	1.630
40-60mm	49.84	181.9	3973	834.7	626.7	181.9	3961	819.1	631.9	-4.390	4.390	-0.110	1.590	-4.390	4.390	0.640	1.700
60-80mm	51.74	181.9	3798	857.7	659.2	181.9	3974	840.5	667.3	-4.390	4.390	-0.110	1.440	-4.390	4.390	0.730	1.620
80-100mm	49.24	181.9	3704	790.0	561.8	181.9	3859	776.5	559.4	-4.390	4.390	-0.090	1.300	-4.390	4.390	0.800	1.490
All	197.0	181.9	3973	837.6	629.2	181.9	3982	821.2	633.1	-4.390	4.390	-0.100	1.480	-4.390	4.390	0.670	1.620

Table B. 69: Matched Droplet Info

B.2.2.2 All Droplets for .LA Image

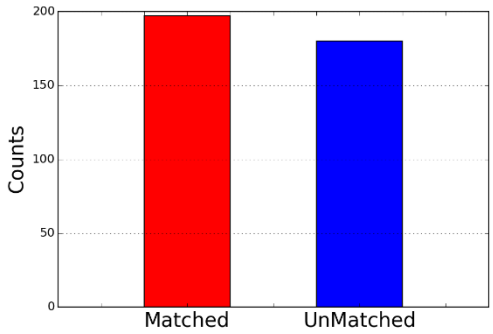


Figure B. 621: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

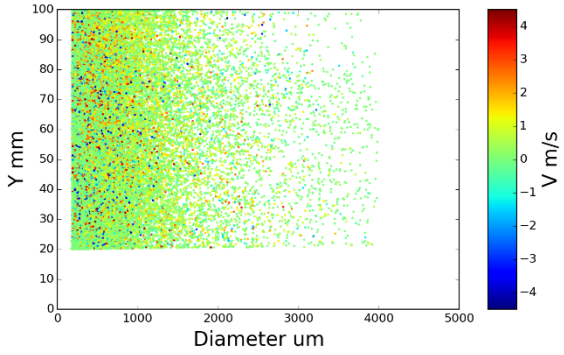


Figure B. 624: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

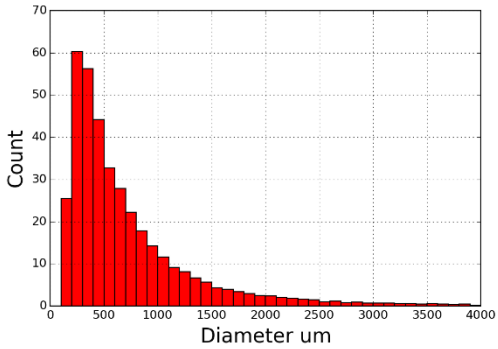


Figure B. 622: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

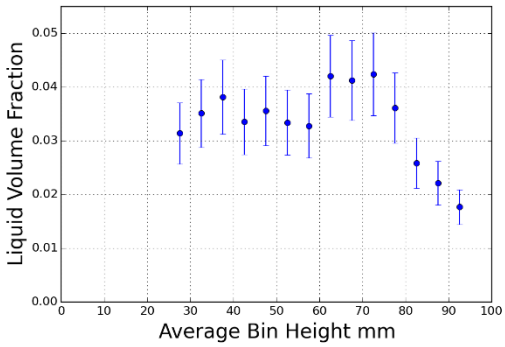


Figure B. 625: Void Fraction R-123 40F 5000Btu 30000Lb Tri

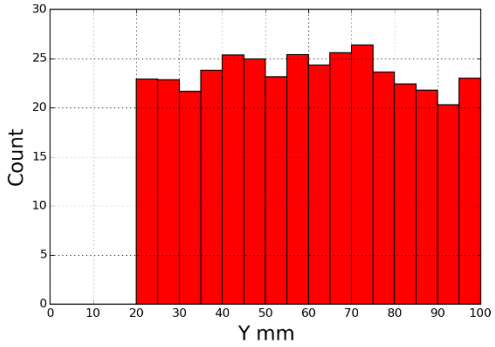


Figure B. 623: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.2.2 All Droplets for .LB Image

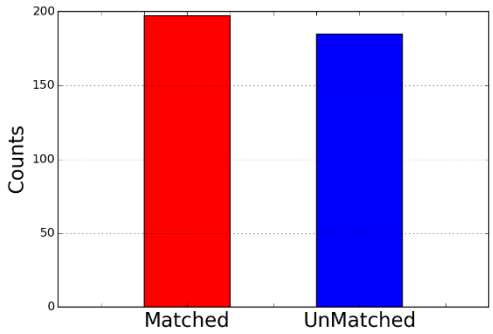


Figure B. 626: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

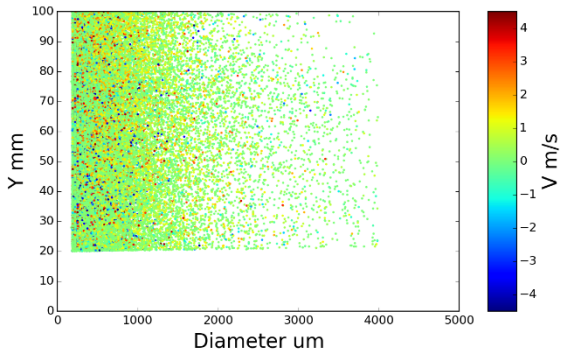


Figure B. 629: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

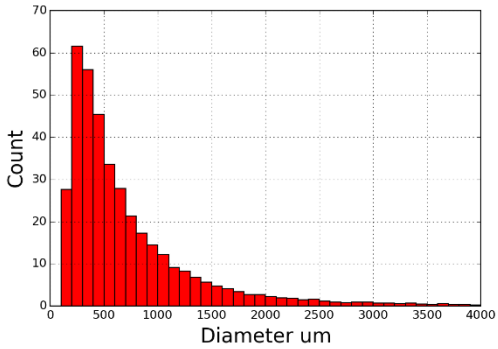


Figure B. 627: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

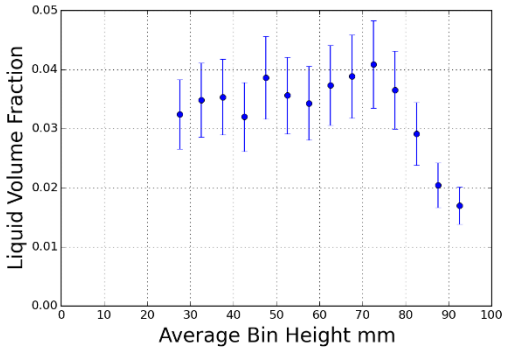


Figure B. 630: Void Fraction R-123 40F 5000Btu 30000Lb Tri

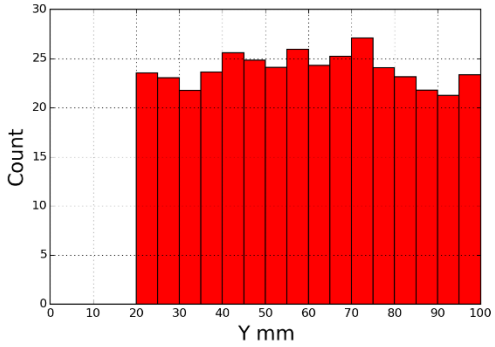


Figure B. 628: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.2.2 Matched Only Droplets for .LA Image

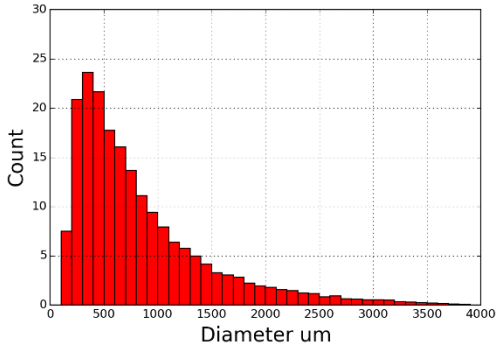


Figure B. 631: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

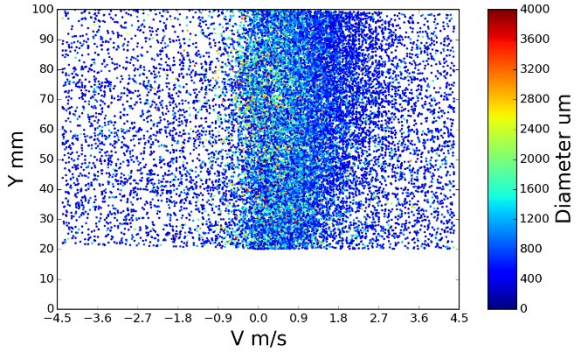


Figure B. 634: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

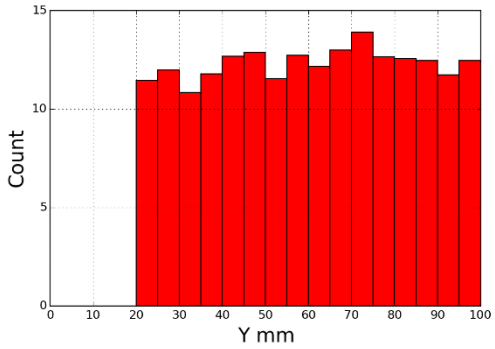


Figure B. 632: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

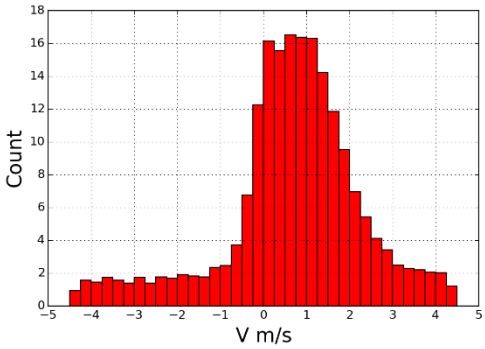


Figure B. 635: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

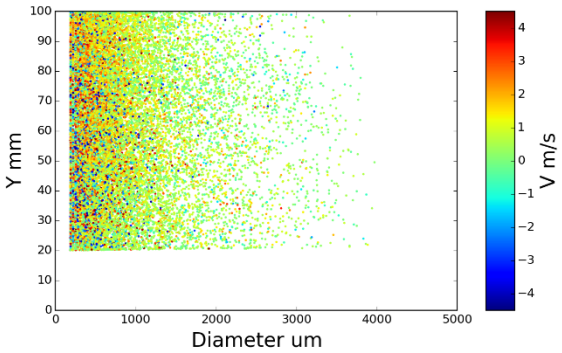


Figure B. 633: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.2.2 Matched Only Droplets for .LB Image

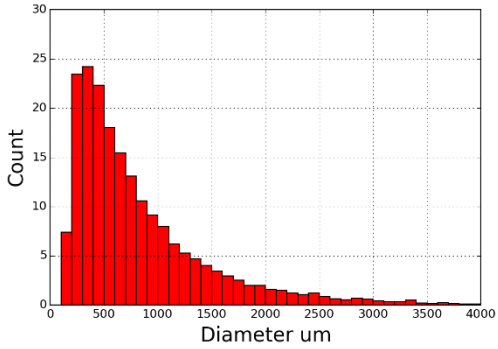


Figure B. 636: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

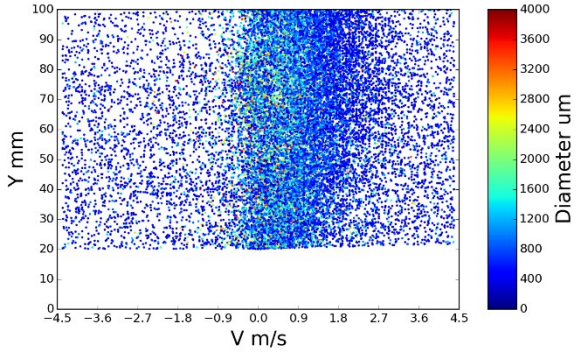


Figure B. 639: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

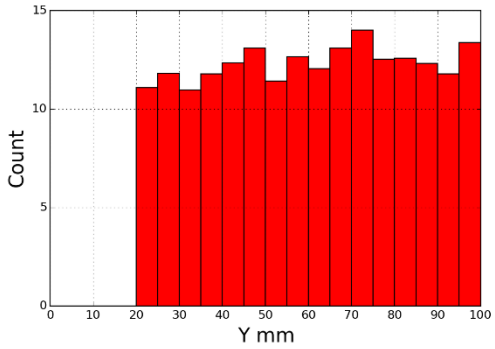


Figure B. 637: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

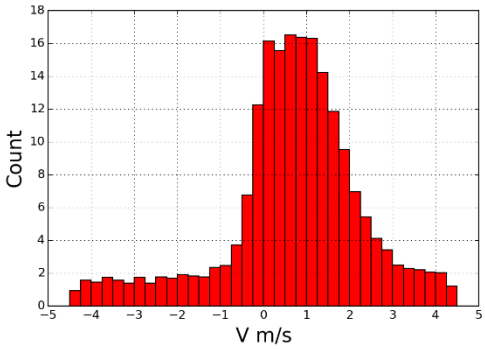


Figure B. 640: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

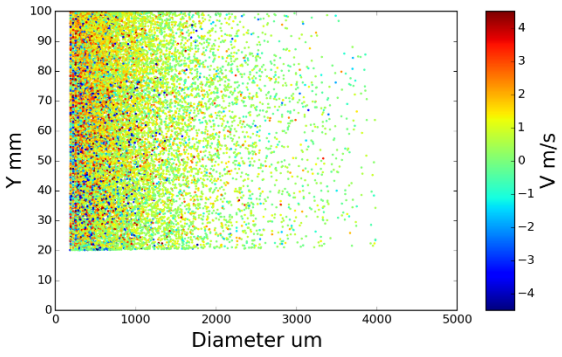


Figure B. 638: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.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	60.7	60.63	170.2	3962	866.0	711.2	181.9	3988	863.3	698.4
40-60mm	56.43	55.5	181.9	3982	938.3	750.3	170.2	3979	939.7	749.9
60-80mm	59.31	60.6	170.2	3986	918.5	732.9	170.2	3989	912.3	730.5
80-100mm	59.62	59.89	181.9	3987	772.5	585.8	170.2	3966	778.2	584.0
All	236.26	236.87	170.2	3987	872.3	700.2	170.2	3989	871.6	695.4
			Height A (mm)				Height B (mm)			
Highest Particle			100.0240				100.0526			
Lowest Particle			20.1530				20.1435			

Table B. 70: 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	29.09	181.9	3852	1088	731.0	181.9	3970	1067	742.1	-4.390	4.390	-0.010	1.300	-4.390	4.380	0.540	1.380
40-60mm	27.5	181.9	3982	1170	752.4	170.2	3979	1147	760.4	-4.380	4.390	-0.070	1.200	-4.370	4.390	0.680	1.370
60-80mm	30.8	181.9	3986	1128	740.9	181.9	3961	1116	753.4	-4.390	4.350	-0.040	1.210	-4.380	4.390	0.700	1.340
80-100mm	33.15	181.9	3946	945.8	610.9	181.9	3966	928.0	611.1	-4.380	4.390	-0.080	1.090	-4.380	4.380	0.810	1.290
All	120.56	181.9	3986	1078	713.1	170.2	3979	1059	720.7	-4.390	4.390	-0.050	1.200	-4.390	4.390	0.690	1.350

Table B. 71: Matched Droplet Info

B.2.2.2 All Droplets for .LA Image

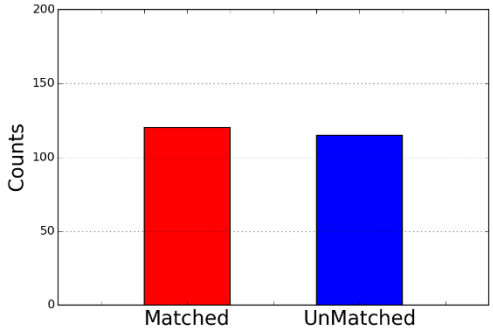


Figure B. 641: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

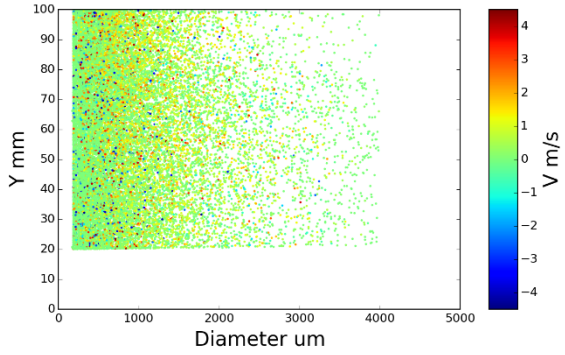


Figure B. 644: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

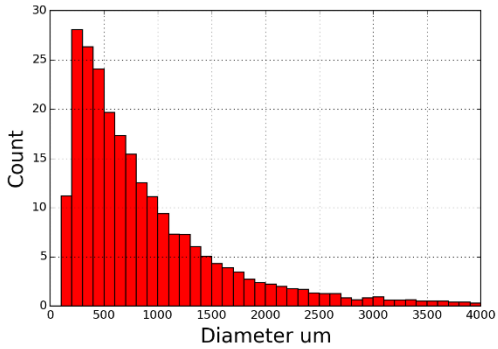


Figure B. 642: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

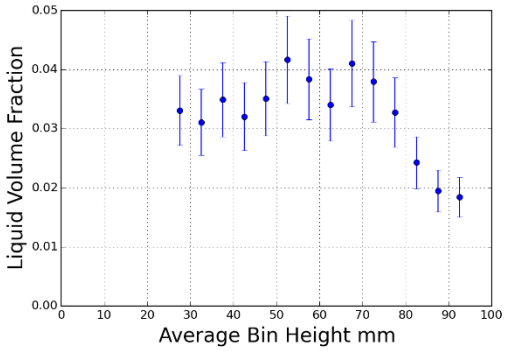


Figure B. 645: Void Fraction R-123 40F 5000Btu 30000Lb Tri

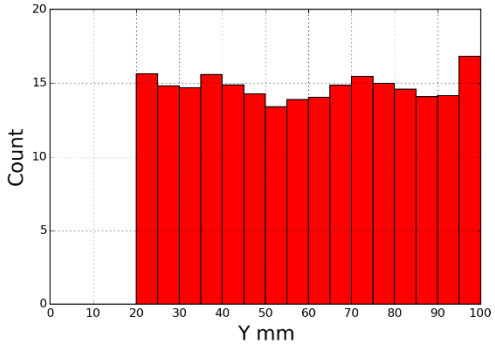


Figure B. 643: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.2.2 All Droplets for .LB Image

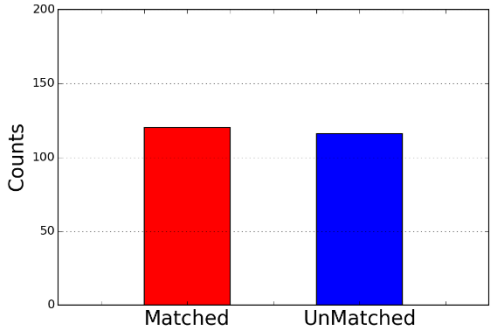


Figure B. 646: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

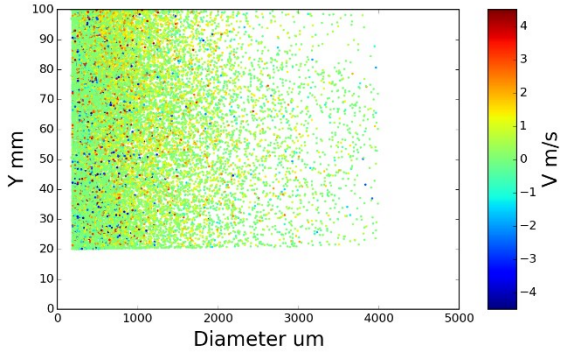


Figure B. 649: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

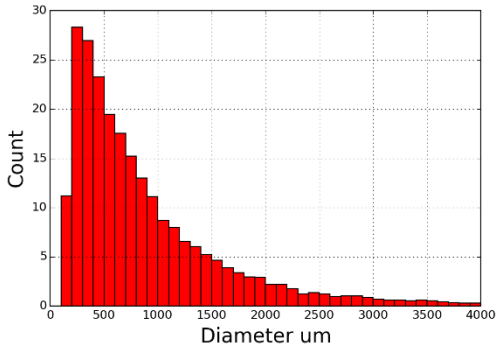


Figure B. 647: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

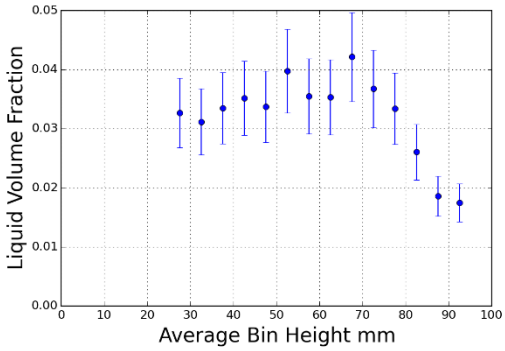


Figure B. 650: Void Fraction R-123 40F 5000Btu 30000Lb Tri

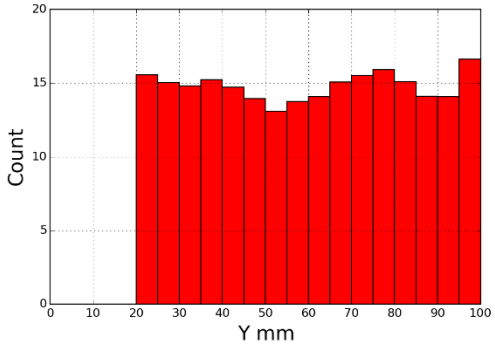


Figure B. 648: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.2.2 Matched Only Droplets for .LA Image

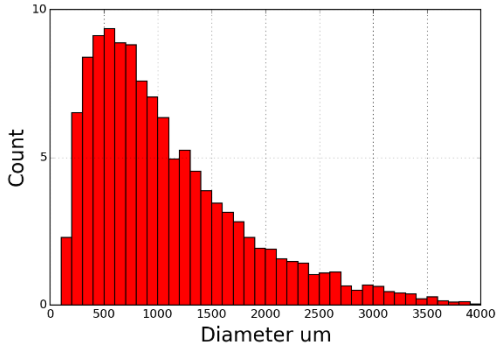


Figure B. 651: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

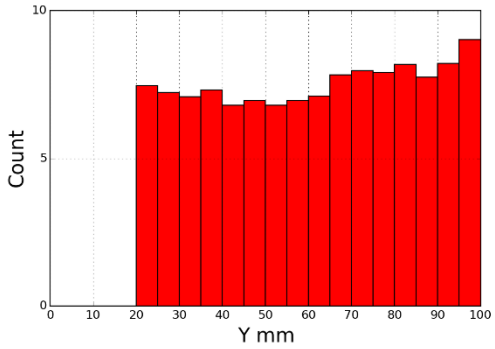


Figure B. 652: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

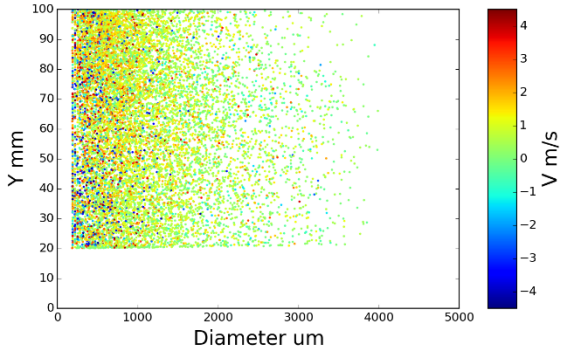


Figure B. 653: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

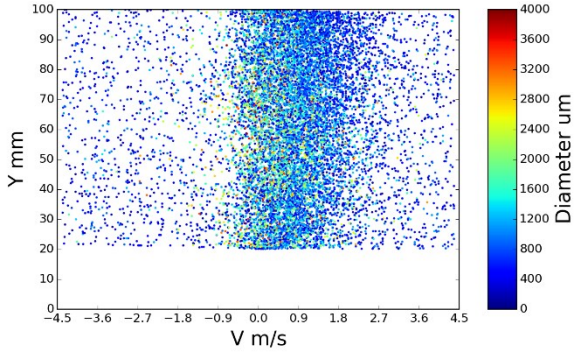


Figure B. 654: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

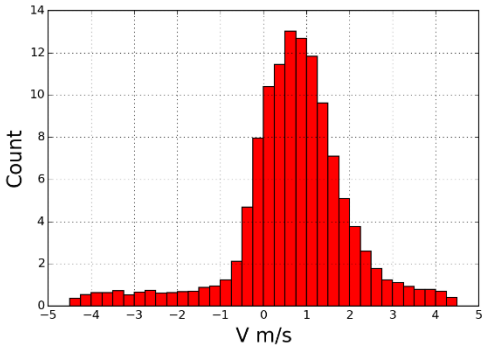


Figure B. 655: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.2.2 Matched Only Droplets for .LB Image

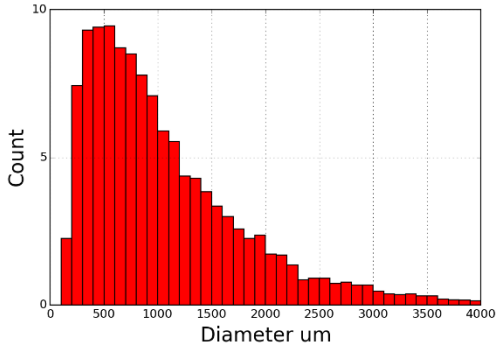


Figure B. 656: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

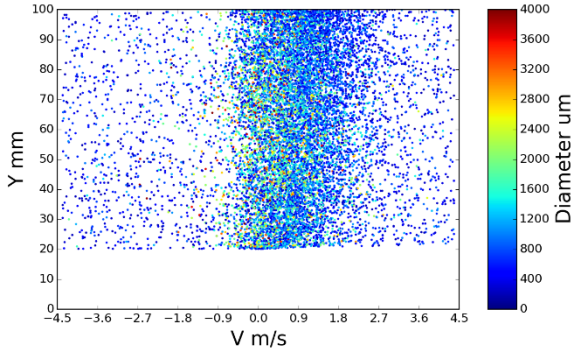


Figure B. 659: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

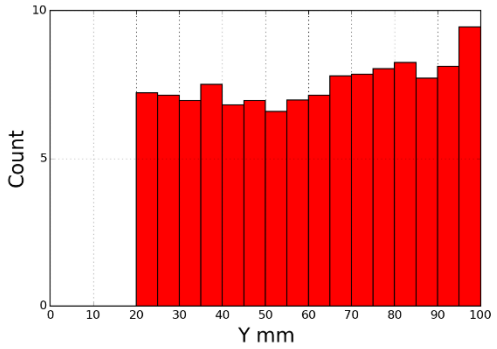


Figure B. 657: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

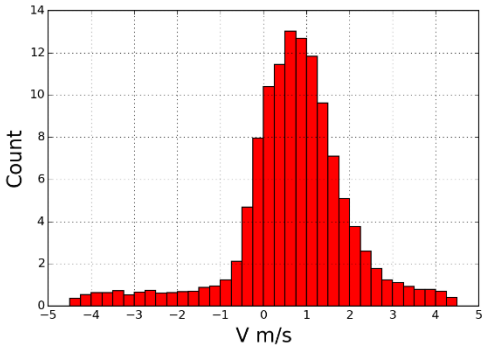


Figure B. 660: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

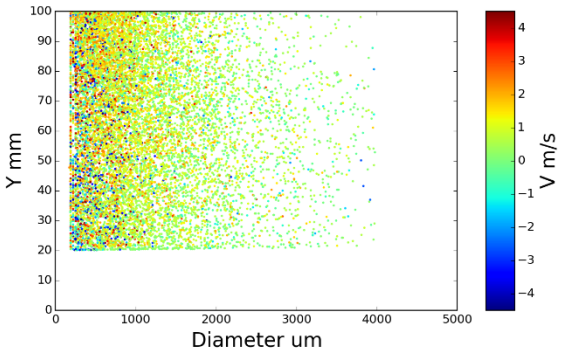


Figure B. 658: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.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	47.43	45.79	181.9	3981	958.1	776.1	170.2	3989	975.5	795.7
40-60mm	40.59	41.05	181.9	3987	1088	834.5	181.9	3977	1074	832.6
60-80mm	43.32	44.65	181.9	3986	1069	824.9	181.9	3988	1037	797.1
80-100mm	43.74	44.75	181.9	3956	868.6	658.0	181.9	3878	859.4	655.7
All	175.25	176.47	181.9	3987	992.6	780.3	170.2	3989	983.4	776.2
			Height A (mm)				Height B (mm)			
Highest Particle			100.0266				100.0335			
Lowest Particle			20.1453				20.1530			

Table B. 72: 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	21.05	181.9	3763	1269	805.7	181.9	3887	1249	825.6	-4.370	4.360	-0.040	1.210	-4.340	4.360	0.540	1.270
40-60mm	19.27	181.9	3866	1374	802.8	181.9	3977	1350	819.3	-4.390	4.390	-0.030	1.080	-4.370	4.370	0.670	1.310
60-80mm	21.55	181.9	3823	1312	780.0	181.9	3988	1293	791.2	-4.340	4.380	-0.080	1.090	-4.360	4.340	0.770	1.260
80-100mm	22.59	181.9	3743	1092	692.4	181.9	3744	1074	688.6	-4.330	4.360	-0.060	0.930	-4.370	4.390	0.750	1.160
All	84.47	181.9	3866	1256	776.9	181.9	3988	1235	787.4	-4.390	4.390	-0.050	1.080	-4.370	4.390	0.680	1.250

Table B. 73: Matched Droplet Info

B.2.2.2 All Droplets for .LA Image

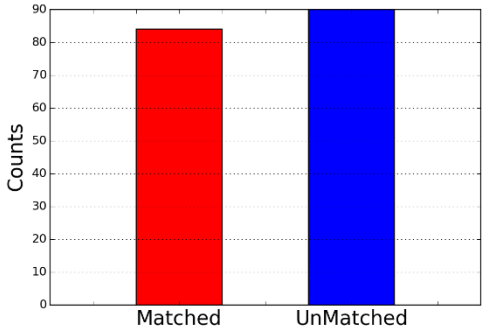


Figure B. 661: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

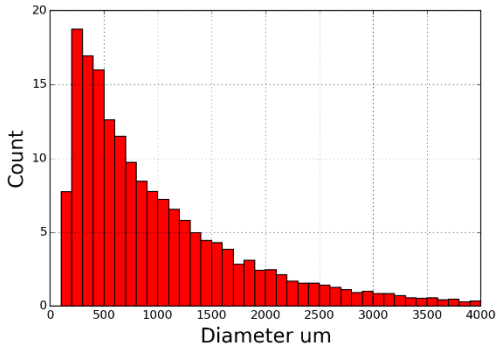


Figure B. 662: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

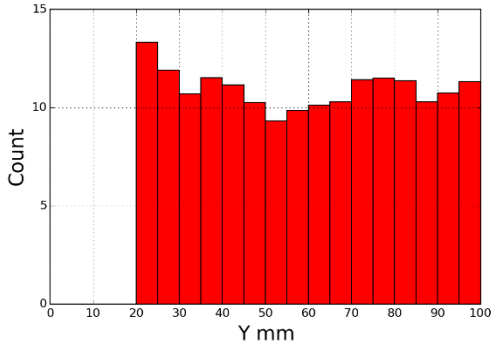


Figure B. 663: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

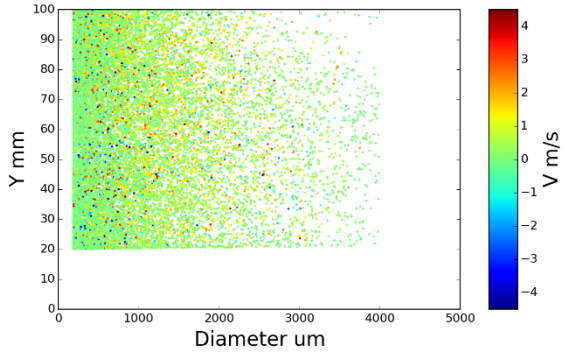


Figure B. 664: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

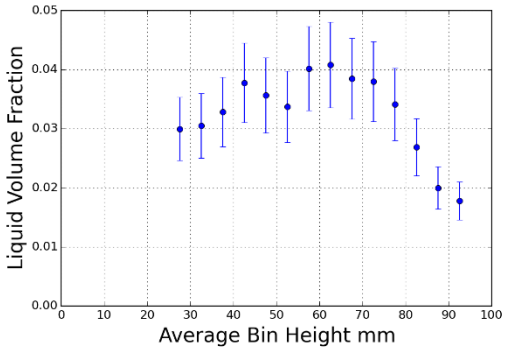


Figure B. 665: Void Fraction R-123 40F 5000Btu 30000Lb Tri

B.2.2.2 All Droplets for .LB Image

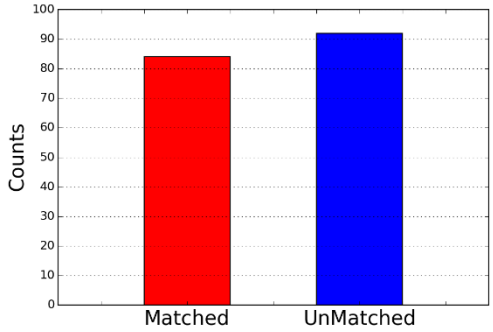


Figure B. 666: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

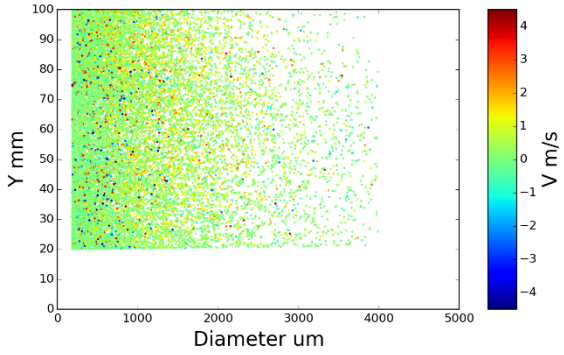


Figure B. 669: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

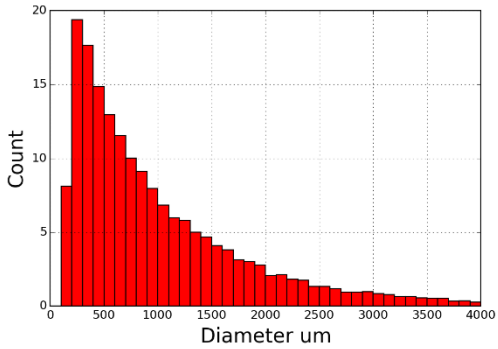


Figure B. 667: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

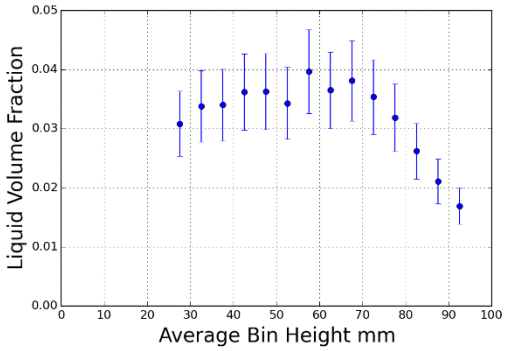


Figure B. 670: Void Fraction R-123 40F 5000Btu 30000Lb Tri

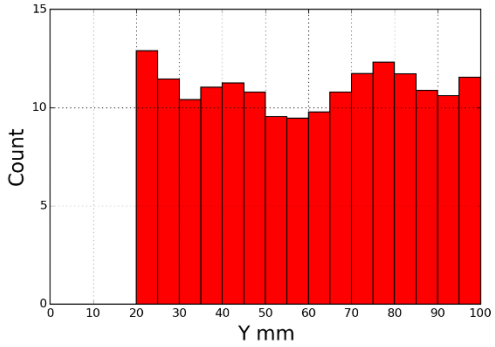


Figure B. 668: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.2.2 Matched Only Droplets for .LA Image

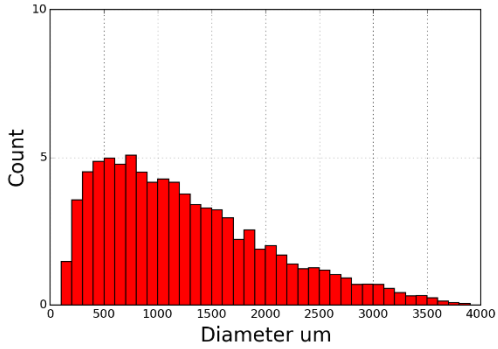


Figure B. 671: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

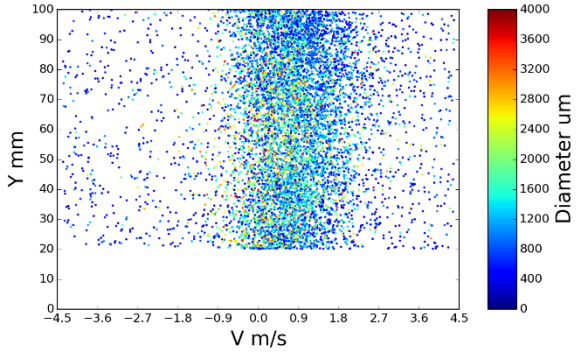


Figure B. 674: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

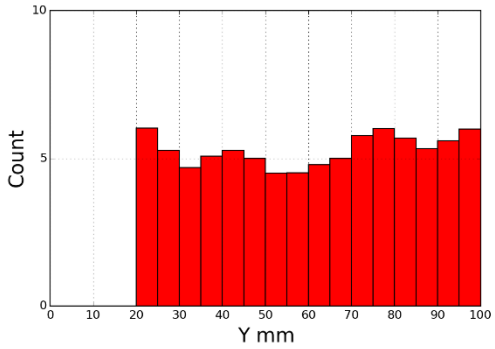


Figure B. 672: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

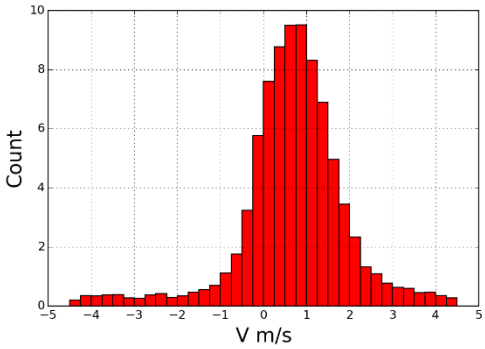


Figure B. 675: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

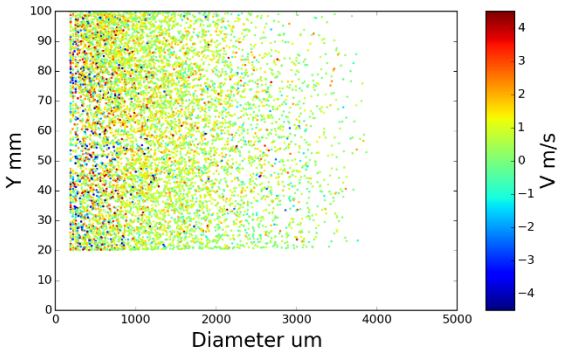


Figure B. 673: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.2.2 Matched Only Droplets for .LB Image

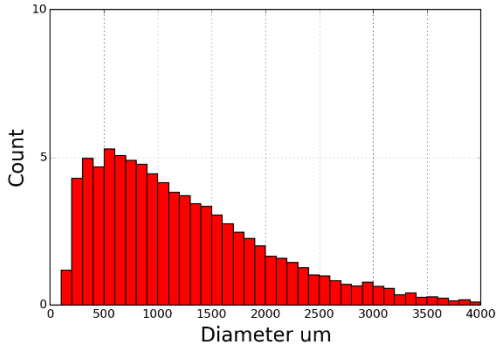


Figure B. 676: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

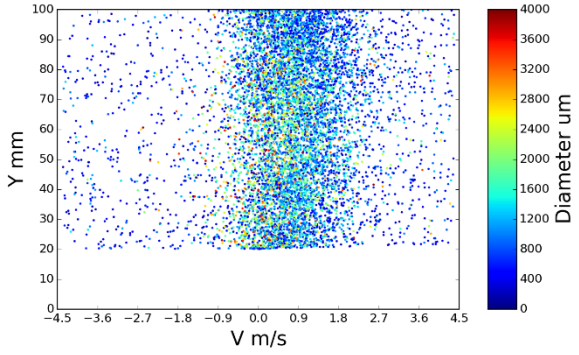


Figure B. 679: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

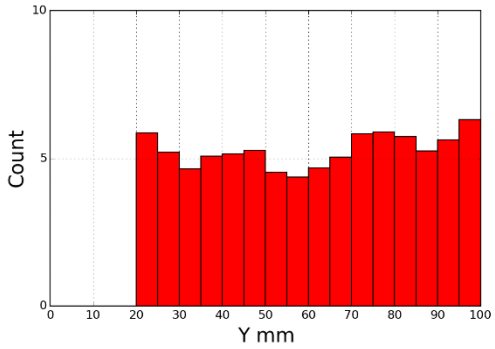


Figure B. 677: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

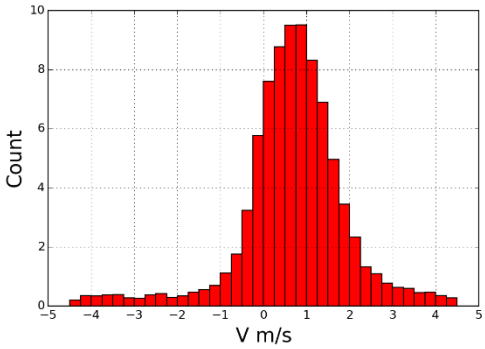


Figure B. 680: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

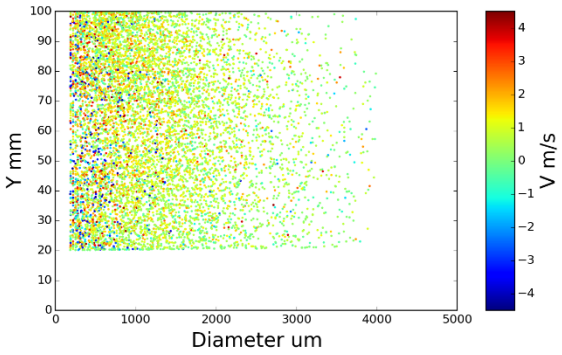


Figure B. 678: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.3 Liquid Level 3

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	11960 / 1.507
Ref Mass Flow (lb/hr) / (kg/s)	3172 / 0.400
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	30880 / 41.880
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	3496 / 11.03
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	39.6 / 4.23
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	41.9 / 5.48
Total Bundle Q (Btu/hr) / (kW)	130829 / 38.34
Total Bundle & Preboiler Q (Btu/hr) / (kW)	202215 / 59.26
Top Two Rows HTC Ratio	0.702
Bundle Inlet Quality	0.21
Bundle Exit Quality	0.75

Table B. 74: Thermal Conditions

B.2.3.1 Lens 100mm Mag 0_29x

B.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	9.31	10.51	81.0	2995	328.9	332.9	81.0	2497	318.1	319.0
40-60mm	28.45	31.33	75.8	3570	352.6	343.5	75.8	3025	333.9	334.2
60-80mm	20.64	21.42	75.8	2811	374.3	335.9	75.8	2367	363.6	330.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	58.4	63.26	75.8	3570	356.5	339.5	75.8	3025	341.4	331.0
			Height A (mm)				Height B (mm)			
Highest Particle			77.3760				77.3639			
Lowest Particle			29.4143				29.4143			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	5.47	81.0	2259	385.1	324.9	81.0	2497	387.4	337.3	-4.470	4.260	-0.150	1.030	-4.180	4.480	1.210	1.490
40-60mm	16.71	81.0	2734	412.7	337.2	81.0	2799	407.1	340.9	-4.260	4.430	-0.190	0.960	-4.290	4.480	1.450	1.470
60-80mm	13.25	86.0	2349	422.4	324.0	81.0	2132	417.4	328.0	-4.360	4.340	-0.220	0.890	-4.180	4.470	1.500	1.390
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	35.43	81.0	2734	412.1	330.6	81.0	2799	408.1	335.7	-4.470	4.430	-0.190	0.950	-4.290	4.480	1.430	1.440

Table B. 76: Matched Droplet Info

B.2.3.1 All Droplets for .LA Image

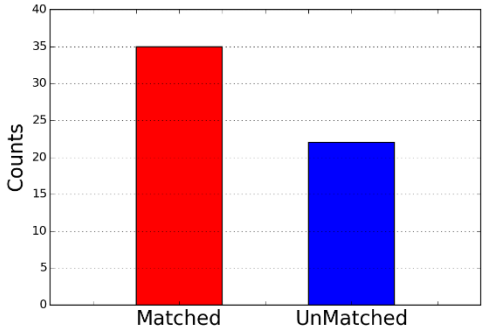


Figure B. 681: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

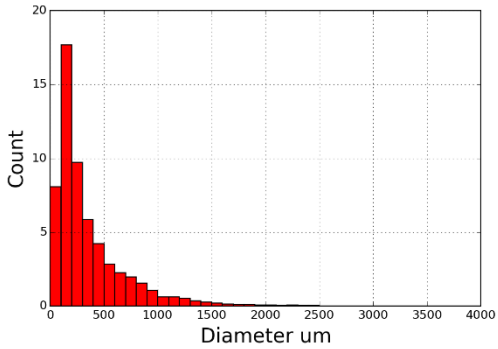


Figure B. 682: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

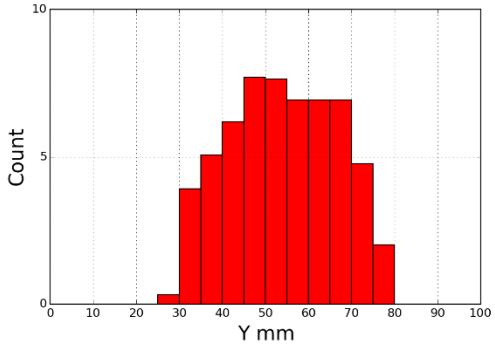


Figure B. 683: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

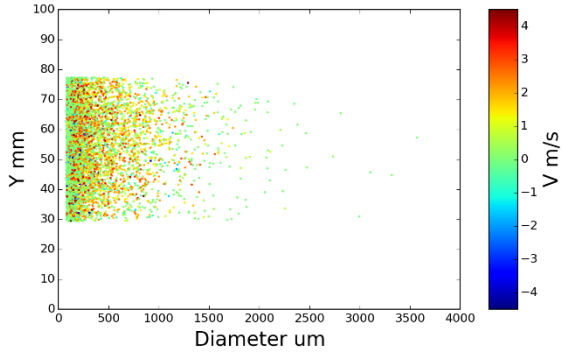


Figure B. 684: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

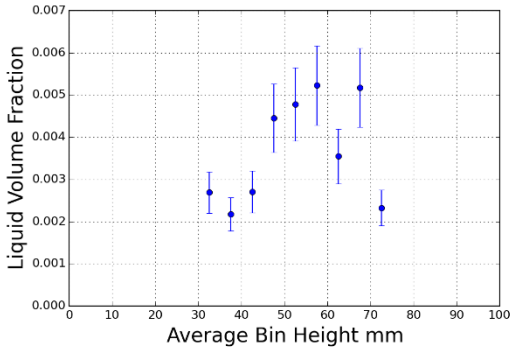


Figure B. 685: Void Fraction R-123 40F 5000Btu 30000Lb Tri

B.2.3.1 All Droplets for .LB Image

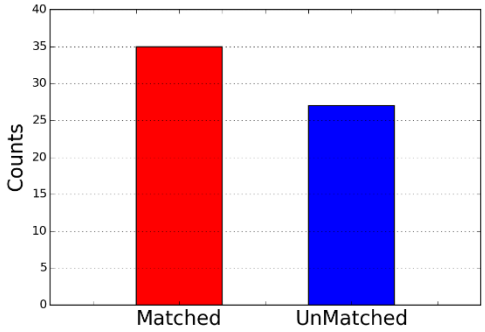


Figure B. 686: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

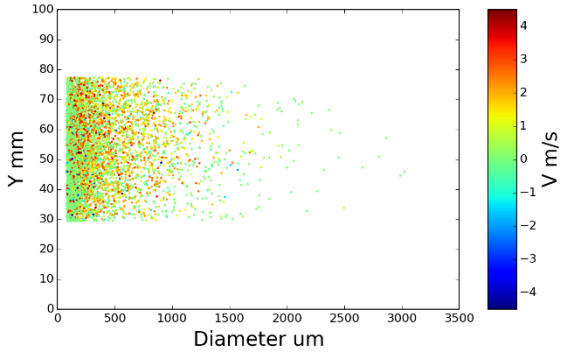


Figure B. 689: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

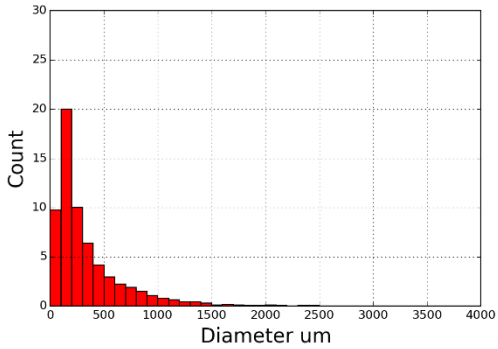


Figure B. 687: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

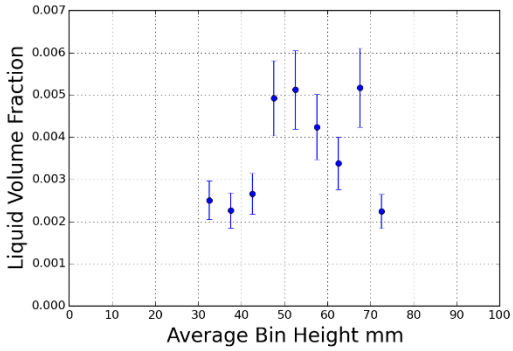


Figure B. 690: Void Fraction R-123 40F 5000Btu 30000Lb Tri

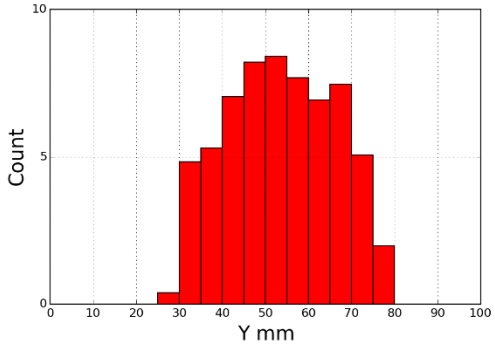


Figure B. 688: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.3.1 Matched Only Droplets for .LA Image

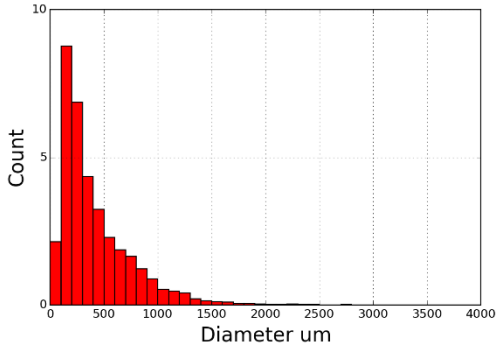


Figure B. 691: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

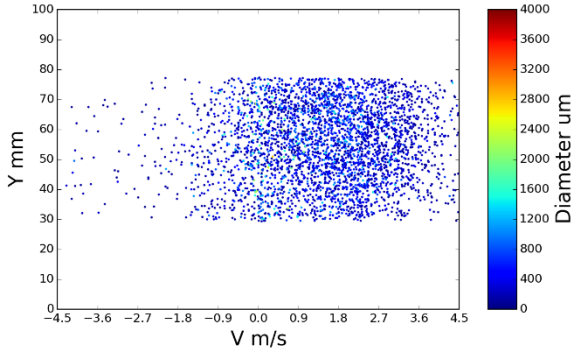


Figure B. 694: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

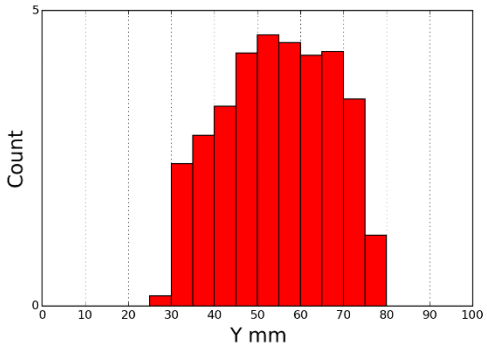


Figure B. 692: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

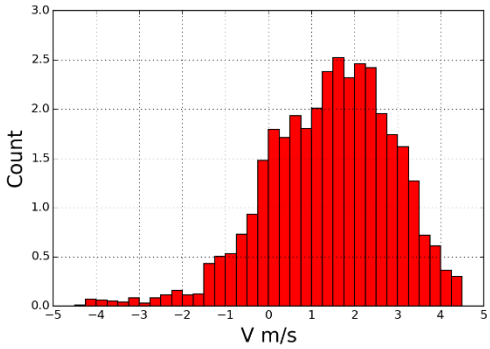


Figure B. 695: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

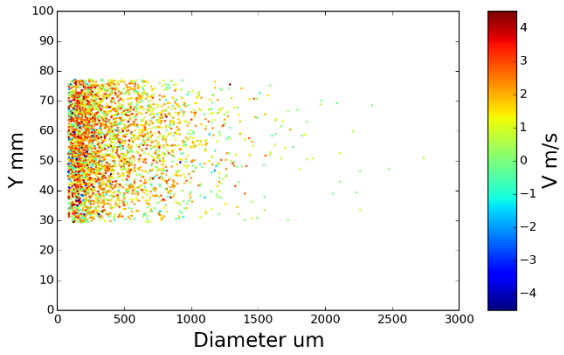


Figure B. 693: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.3.1 Matched Only Droplets for .LB Image

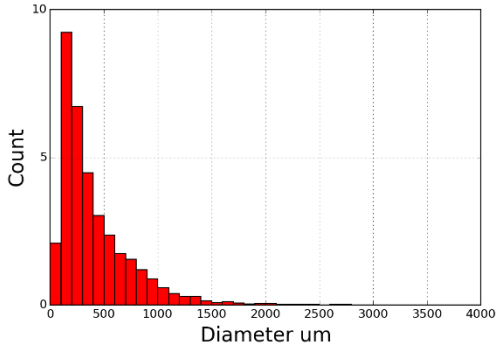


Figure B. 696: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

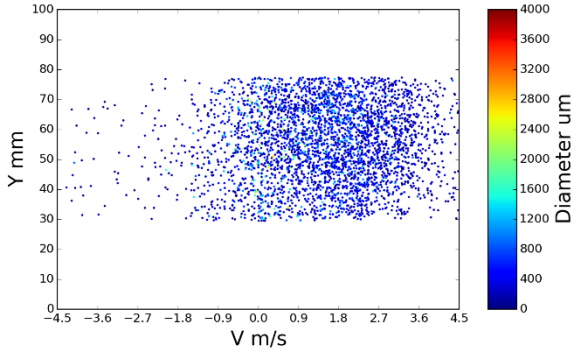


Figure B. 699: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

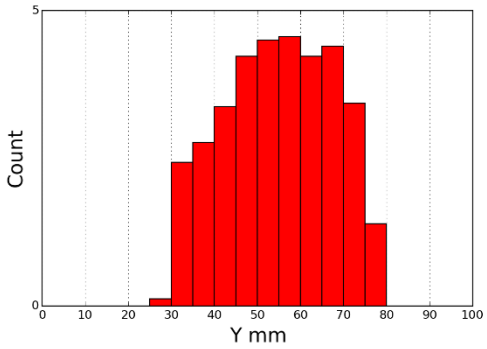


Figure B. 697: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

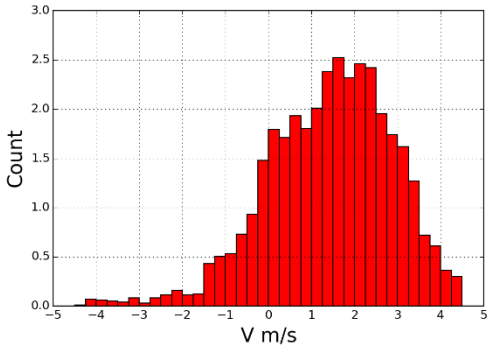


Figure B. 700: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

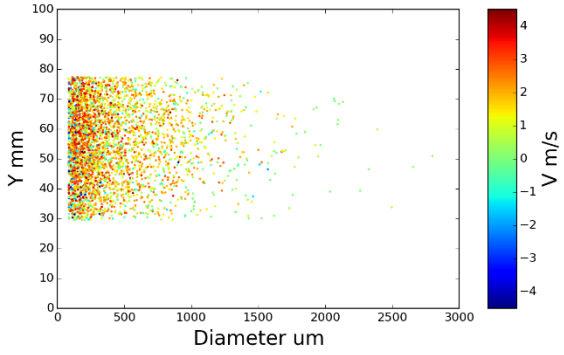


Figure B. 698: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.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	10.51	10.55	81.0	2215	328.0	261.9	81.0	2265	329.6	263.0
40-60mm	27.7	28.77	75.8	2238	385.5	309.4	75.8	2257	376.1	305.7
60-80mm	22.34	23.1	81.0	2156	377.4	293.2	75.8	2156	368.5	288.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	60.55	62.42	75.8	2238	372.5	296.4	75.8	2265	365.4	293.1
			Height A (mm)				Height B (mm)			
Highest Particle			77.3760				77.3760			
Lowest Particle			29.4143				29.4143			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	7.71	81.0	2215	364.9	259.6	86.0	2265	366.1	265.1	-4.320	4.400	-0.330	0.750	-3.690	4.440	1.850	1.170
40-60mm	21.69	81.0	2238	424.8	306.0	81.0	2257	421.9	307.2	-4.480	4.350	-0.410	0.700	-4.050	4.480	1.830	1.130
60-80mm	16.9	81.0	2156	423.6	290.7	81.0	2156	418.7	293.7	-4.480	4.370	-0.320	0.680	-4.240	4.470	1.810	1.120
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	46.3	81.0	2238	414.4	294.0	81.0	2265	411.8	296.5	-4.480	4.400	-0.360	0.700	-4.240	4.480	1.820	1.140

Table B. 78: Matched Droplet Info

B.2.3.1 All Droplets for .LA Image

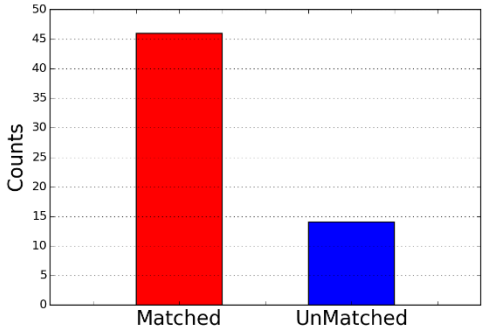


Figure B. 701: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

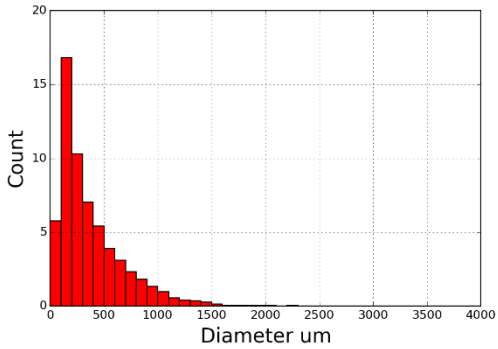


Figure B. 702: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

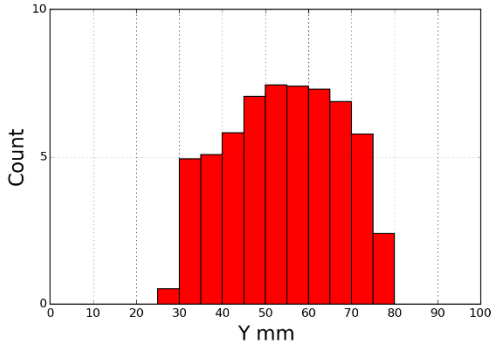


Figure B. 703: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

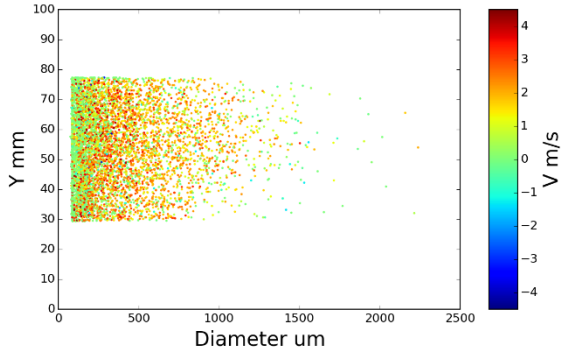


Figure B. 704: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

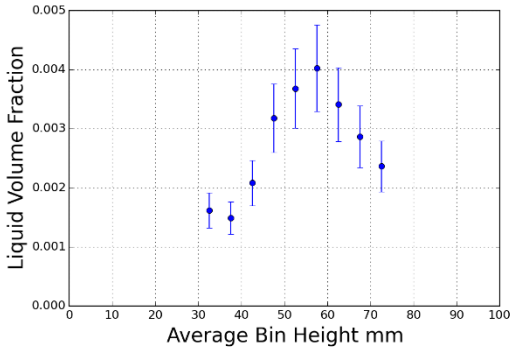


Figure B. 705: Void Fraction R-123 40F 5000Btu 30000Lb Tri

B.2.3.1 All Droplets for .LB Image

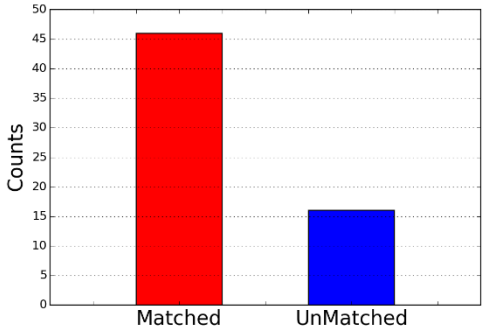


Figure B. 706: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

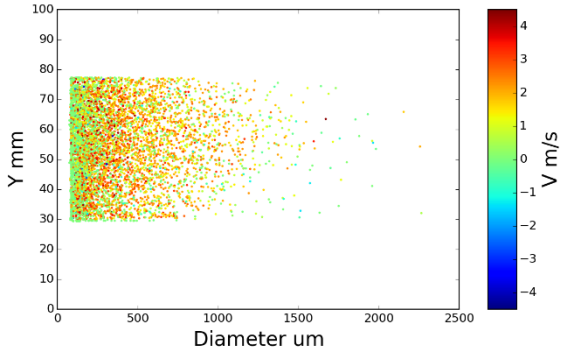


Figure B. 709: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

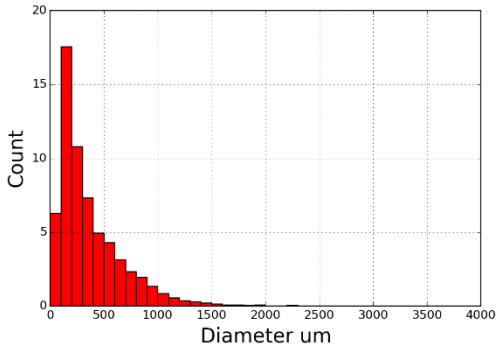


Figure B. 707: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

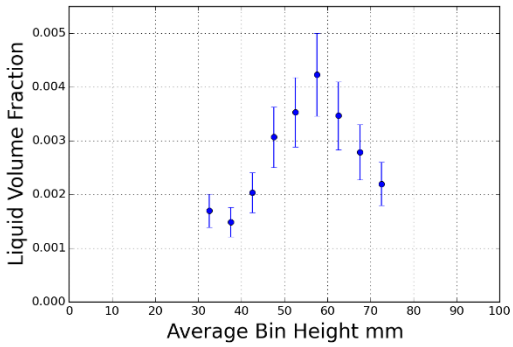


Figure B. 710: Void Fraction R-123 40F 5000Btu 30000Lb Tri

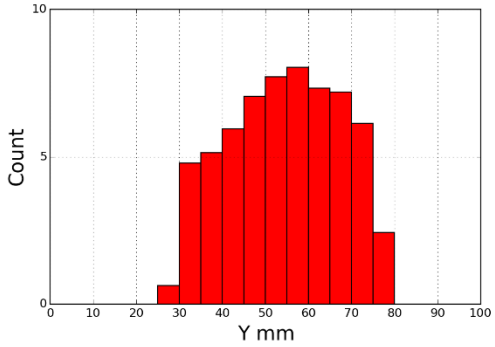


Figure B. 708: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.3.1 Matched Only Droplets for .LA Image

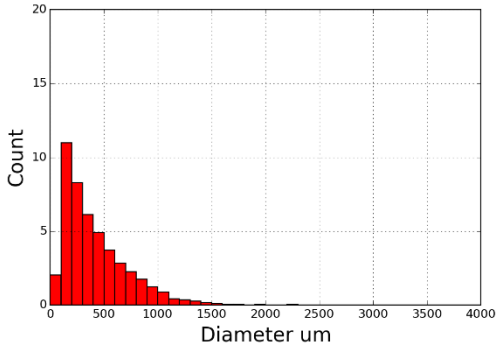


Figure B. 711: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

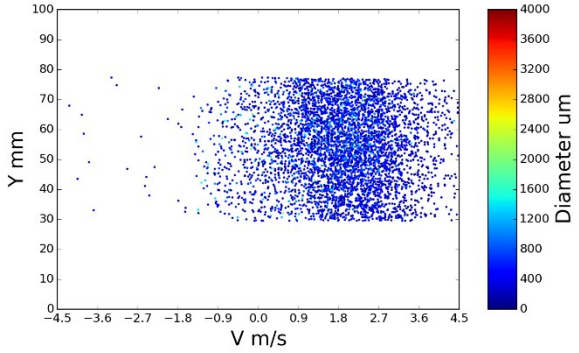


Figure B. 714: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

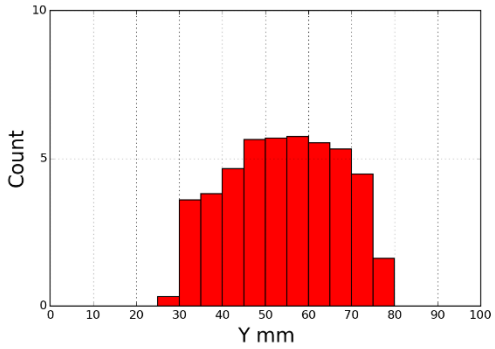


Figure B. 712: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

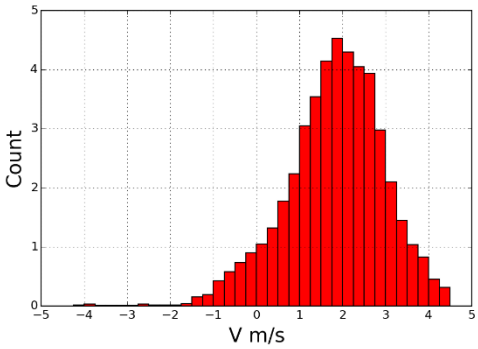


Figure B. 715: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

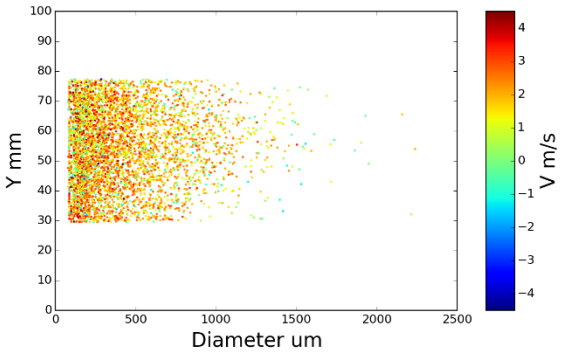


Figure B. 713: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.3.1 Matched Only Droplets for .LB Image

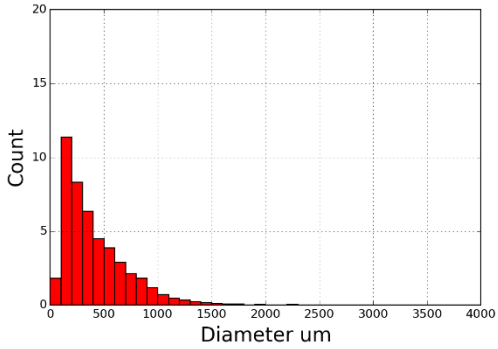


Figure B. 716: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

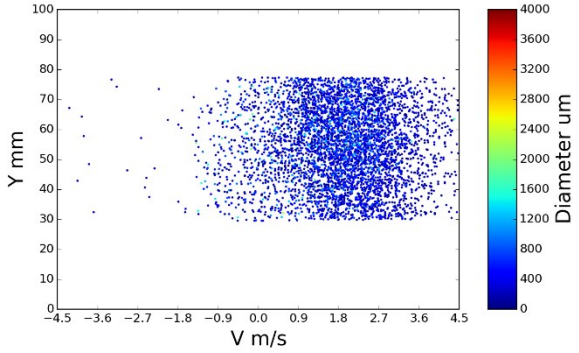


Figure B. 719: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

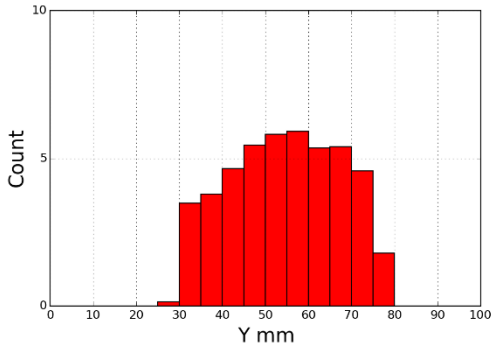


Figure B. 717: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

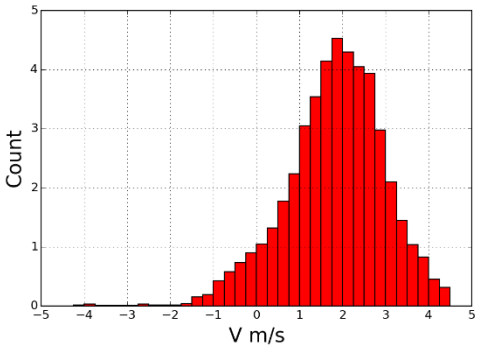


Figure B. 720: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

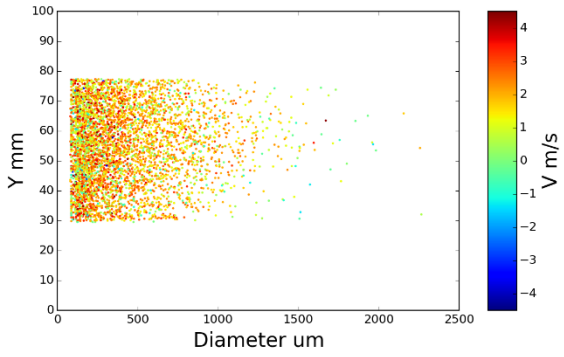


Figure B. 718: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.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	15.11	15.5	81.0	1833	346.4	264.6	81.0	1930	341.4	265.1
40-60mm	35.03	35.35	81.0	2105	356.5	278.5	81.0	2236	353.5	277.1
60-80mm	25.36	26.44	81.0	3266	363.2	296.5	81.0	2742	356.7	289.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	75.5	77.29	81.0	3266	356.7	282.1	81.0	2742	352.1	279.2
			Height A (mm)				Height B (mm)			
Highest Particle			77.3561				77.3760			
Lowest Particle			29.4122				29.4143			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	11.56	81.0	1660	383.6	255.9	81.0	1930	385.9	262.2	-4.090	3.610	-0.170	0.650	-3.520	4.480	2.350	1.050
40-60mm	27.1	81.0	2105	392.1	270.6	81.0	2236	391.9	273.5	-4.200	3.800	-0.330	0.690	-4.410	4.480	2.310	1.110
60-80mm	19.16	81.0	2379	404.1	283.2	81.0	2385	400.6	282.4	-4.480	4.470	-0.350	0.700	-4.150	4.480	2.110	1.140
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	57.82	81.0	2379	394.4	272.1	81.0	2385	393.7	274.5	-4.480	4.470	-0.300	0.690	-4.410	4.480	2.250	1.110

Table B. 80: Matched Droplet Info

B.2.3.1 All Droplets for .LA Image

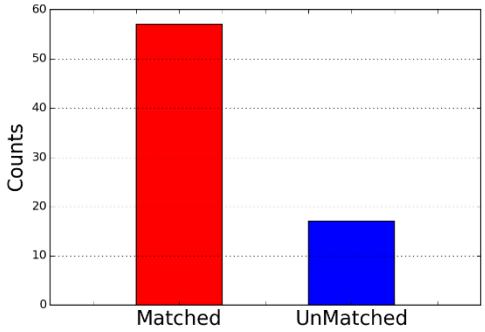


Figure B. 721: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

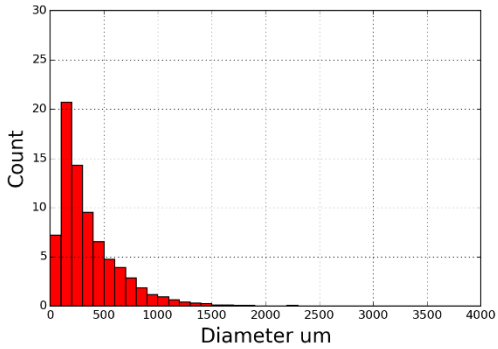


Figure B. 722: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

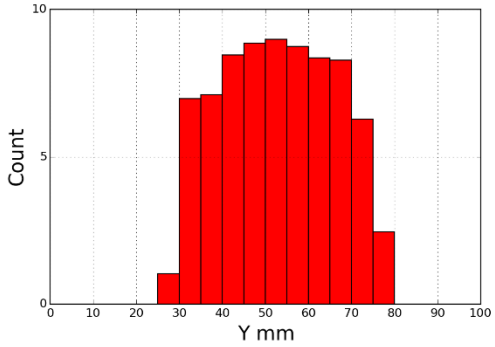


Figure B. 723: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

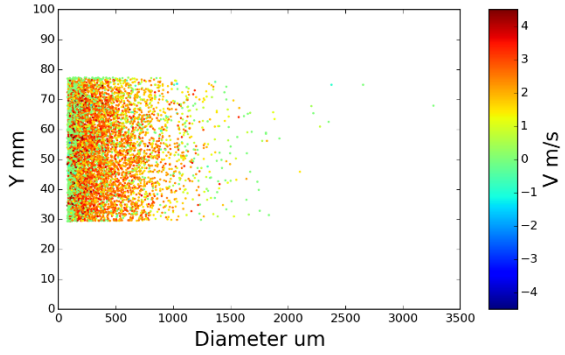


Figure B. 724: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

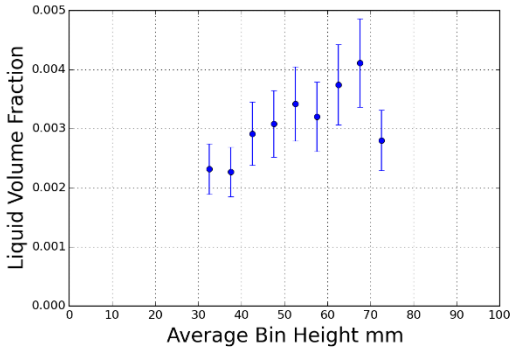


Figure B. 725: Void Fraction R-123 40F 5000Btu 30000Lb Tri

B.2.3.1 All Droplets for .LB Image

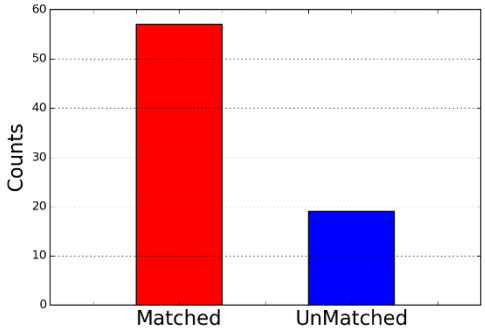


Figure B. 726: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

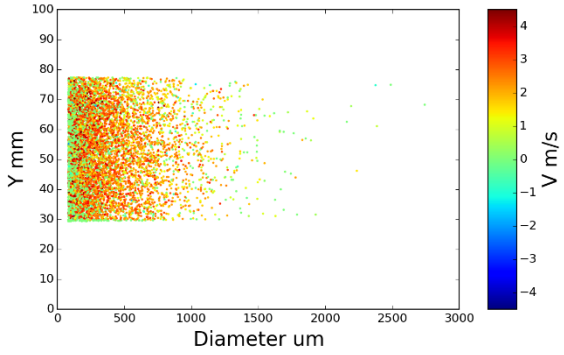


Figure B. 729: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

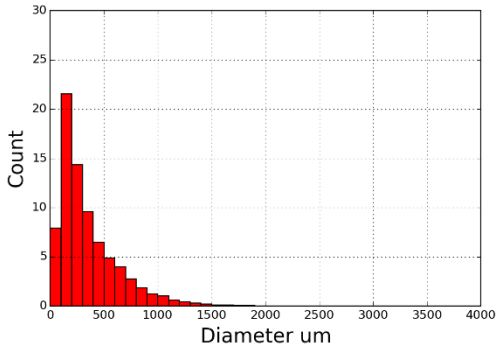


Figure B. 727: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

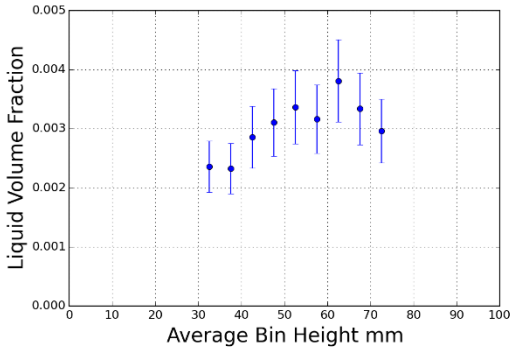


Figure B. 730: Void Fraction R-123 40F 5000Btu 30000Lb Tri

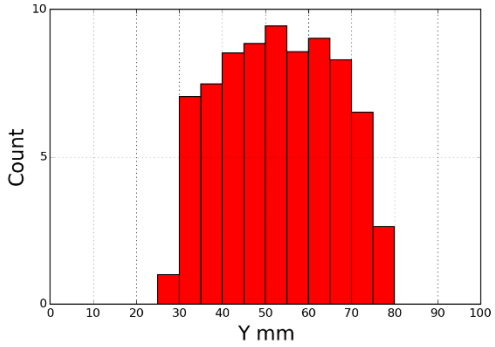


Figure B. 728: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.3.1 Matched Only Droplets for .LA Image

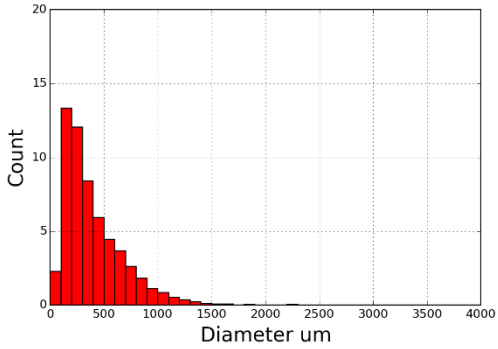


Figure B. 731: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

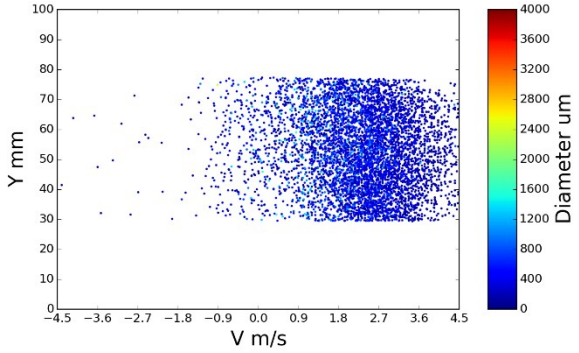


Figure B. 734: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

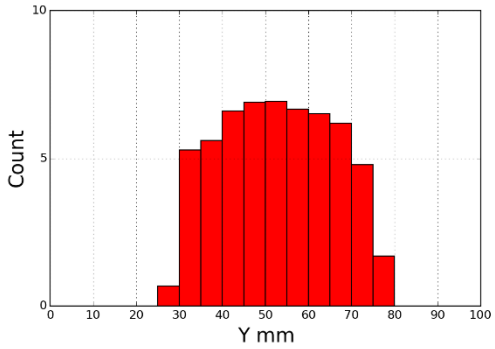


Figure B. 732: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

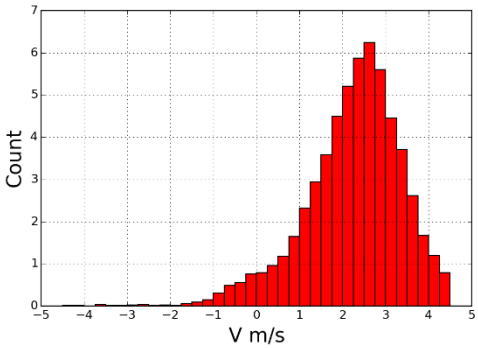


Figure B. 735: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

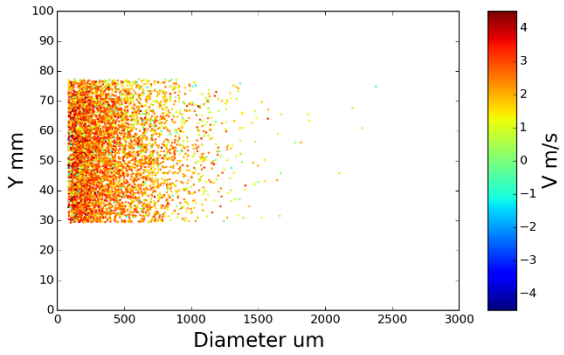


Figure B. 733: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.3.1 Matched Only Droplets for .LB Image

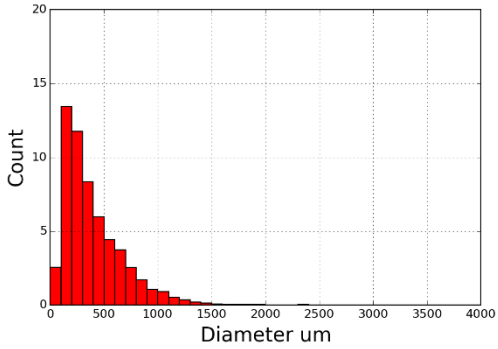


Figure B. 736: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

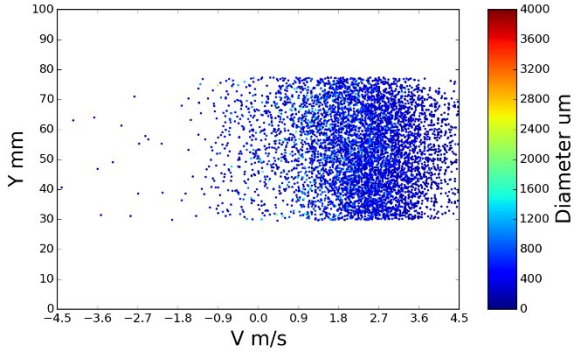


Figure B. 739: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

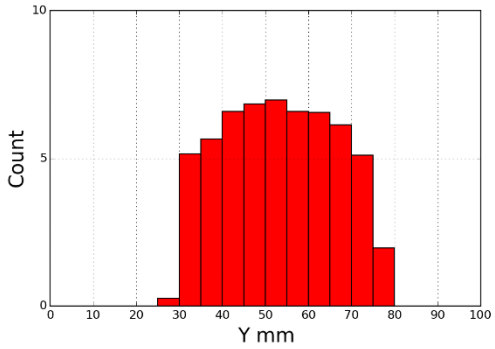


Figure B. 737: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

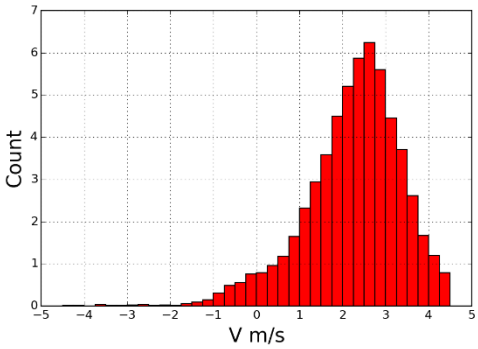


Figure B. 740: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

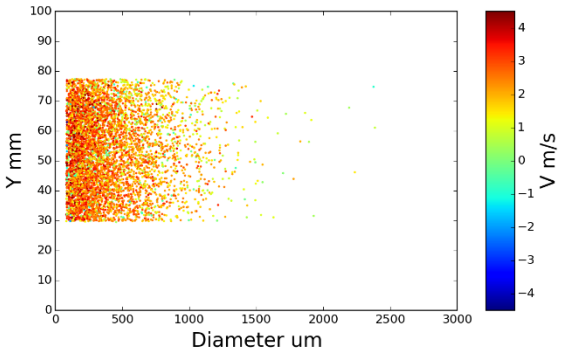


Figure B. 738: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.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	11.7	12.5	81.0	1607	362.6	282.9	81.0	3420	351.8	293.0
40-60mm	29.51	31.27	81.0	2845	385.2	317.9	75.8	3202	373.3	315.8
60-80mm	24.77	25.21	75.8	2681	361.8	305.8	81.0	3148	361.0	306.7
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	65.98	68.98	75.8	2845	372.4	307.6	75.8	3420	364.9	308.5
			Height A (mm)				Height B (mm)			
Highest Particle			77.3506				77.3760			
Lowest Particle			29.4132				29.4143			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	8.46	81.0	1607	412.2	284.2	86.0	3420	422.7	310.6	-4.400	4.140	-0.150	0.640	-2.620	4.480	2.430	0.940
40-60mm	21.87	81.0	2845	435.7	308.5	86.0	2436	437.0	312.5	-4.220	3.880	-0.200	0.670	-3.860	4.480	2.560	0.970
60-80mm	17.5	81.0	2681	413.3	301.3	81.0	3148	415.1	308.1	-4.330	4.380	-0.250	0.680	-4.260	4.480	2.470	0.970
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	47.83	81.0	2845	423.4	301.9	81.0	3420	426.4	310.7	-4.400	4.380	-0.210	0.670	-4.260	4.480	2.500	0.970

Table B. 82: Matched Droplet Info

B.2.3.1 All Droplets for .LA Image

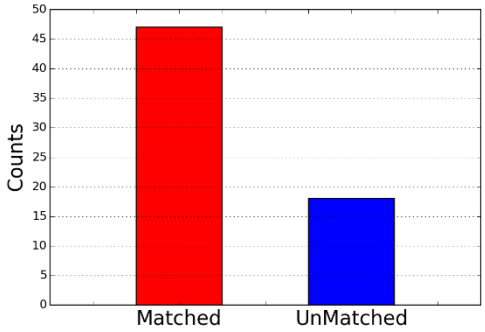


Figure B. 741: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

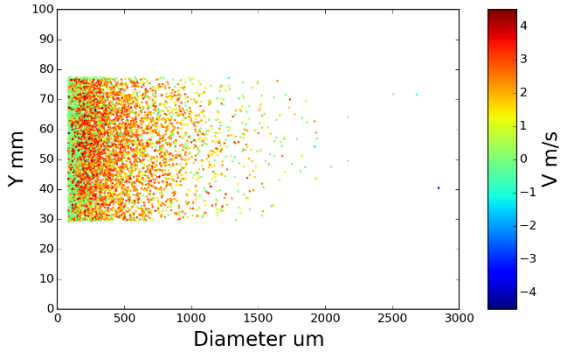


Figure B. 744: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

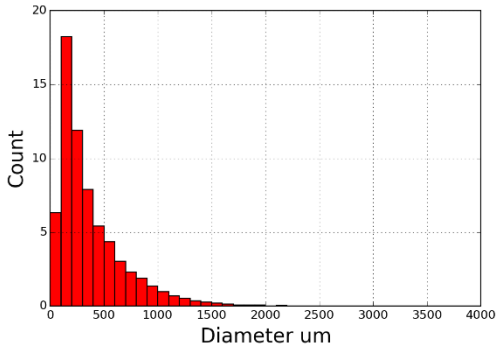


Figure B. 742: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

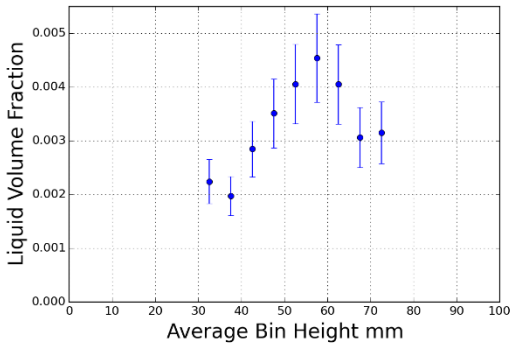


Figure B. 745: Void Fraction R-123 40F 5000Btu 30000Lb Tri

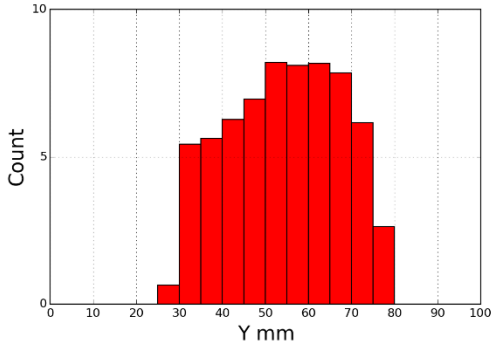


Figure B. 743: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.3.1 All Droplets for .LB Image

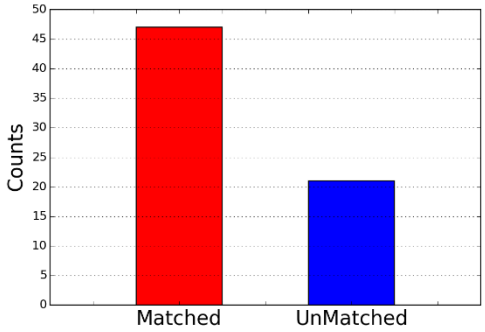


Figure B. 746: CHC Count Comparison R-123 40F 5000Btu 30000Lb Tri

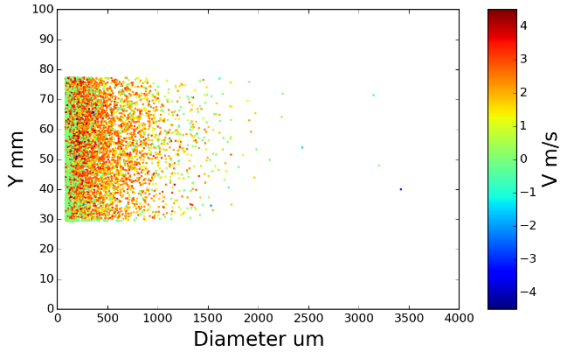


Figure B. 749: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

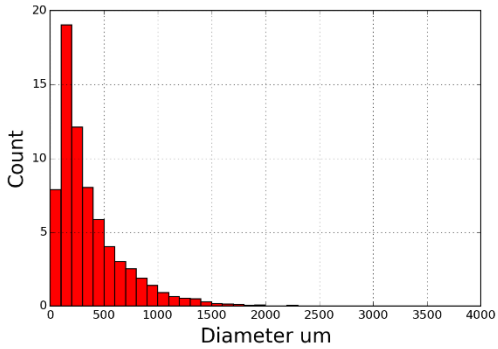


Figure B. 747: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

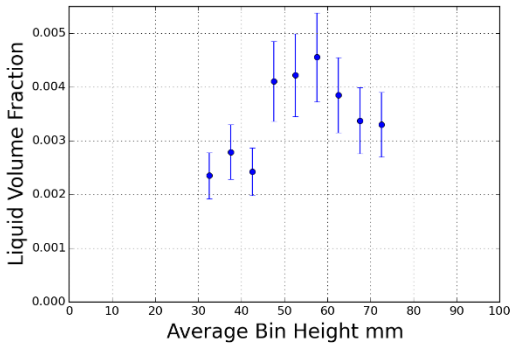


Figure B. 750: Void Fraction R-123 40F 5000Btu 30000Lb Tri

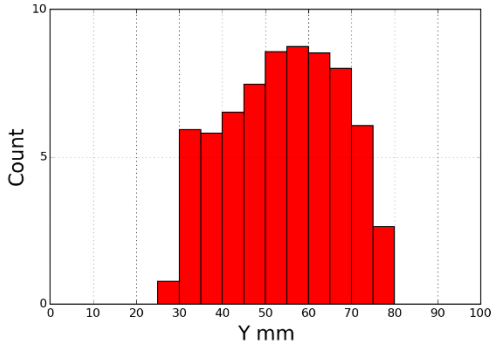


Figure B. 748: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

B.2.3.1 Matched Only Droplets for .LA Image

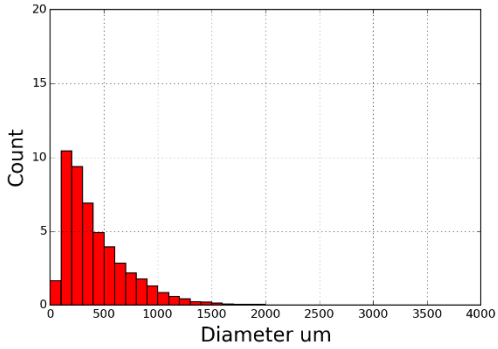


Figure B. 751: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

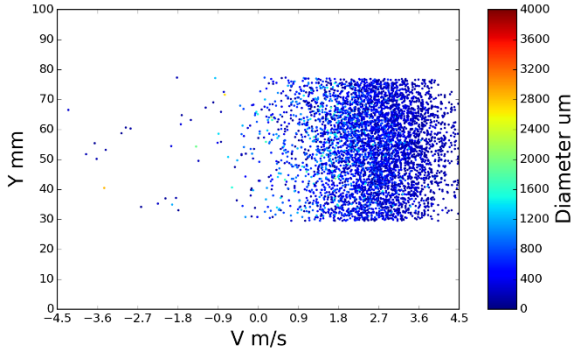


Figure B. 754: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

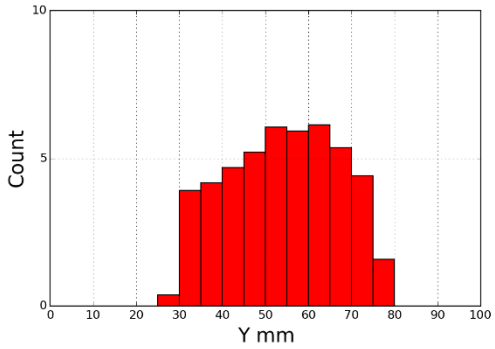


Figure B. 752: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

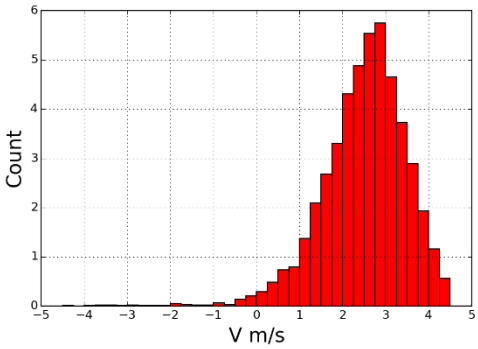


Figure B. 755: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

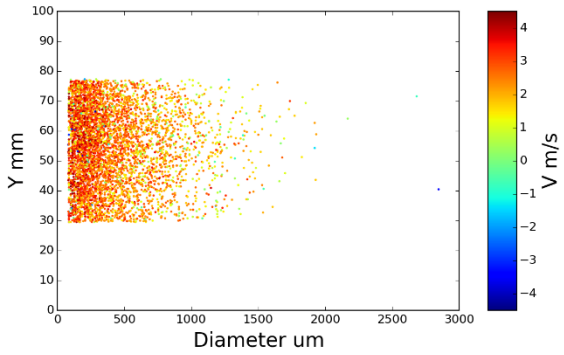


Figure B. 753: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.2.3.1 Matched Only Droplets for .LB Image

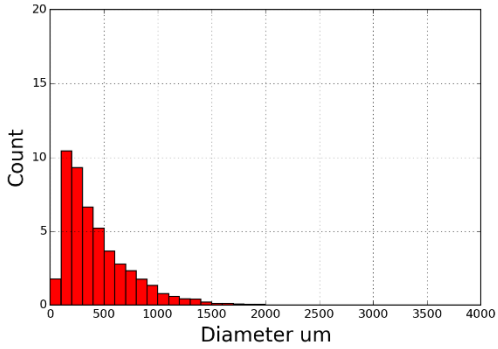


Figure B. 756: Droplet Diameter Histogram R-123 40F 5000Btu 30000Lb Tri

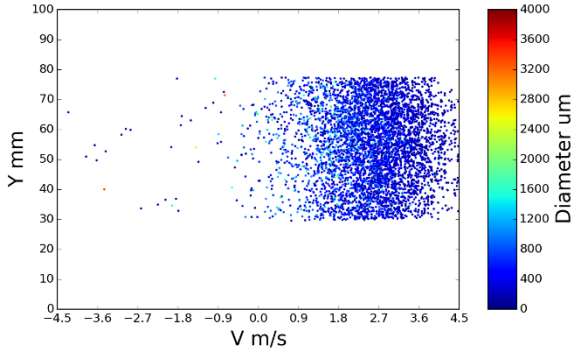


Figure B. 759: Droplet Height vs Vertical Velocity R-123 40F 5000Btu 30000Lb Tri

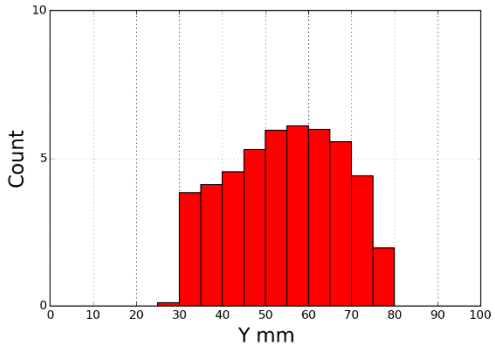


Figure B. 757: Droplet Height Histogram R-123 40F 5000Btu 30000Lb Tri

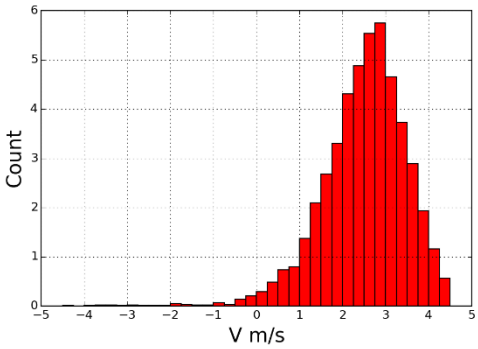


Figure B. 760: Droplet Vertical Velocity Histogram R-123 40F 5000Btu 30000Lb Tri

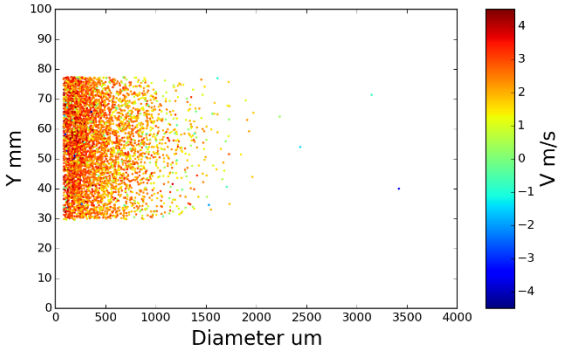


Figure B. 758: Droplet Height vs Diameter R-123 40F 5000Btu 30000Lb Tri

B.3 - 1556 R-123 40F 10000Btu 30000Lb Tri

B.3.1 Liquid Level 1

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	22290 / 2.809
Ref Mass Flow (lb/hr) / (kg/s)	3194 / 0.402
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	31094 / 42.171
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	9862 / 31.11
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	39.6 / 4.24
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	42.4 / 5.77
Total Bundle Q (Btu/hr) / (kW)	184263 / 54.00
Total Bundle & Preboiler Q (Btu/hr) / (kW)	183871 / 53.89
Top Two Rows HTC Ratio	1.103
Bundle Inlet Quality	-0.08
Bundle Exit Quality	0.67

Table B. 83: Thermal Conditions

B.3.1.1 Lens 100mm Mag 0_29x

B.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	69.12	69.7	57.2	5628	450.7	640.4	57.2	5545	448.8	644.3
40-60mm	103.45	102.55	57.2	5530	472.6	652.3	57.2	5623	473.3	647.7
60-80mm	119.85	119.91	57.2	5556	474.4	664.6	57.2	5599	479.8	674.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	304.56	303.74	57.2	5628	468.1	654.7	57.2	5623	470.1	658.2
			Height A (mm)				Height B (mm)			
Highest Particle			74.8586				74.8586			
Lowest Particle			26.8964				26.8964			

Table B. 84: 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	28.34	57.2	5324	650.0	744.0	57.2	5545	641.5	757.5	-4.460	4.420	-0.110	1.440	-4.470	4.470	0.020	1.500
40-60mm	43.39	57.2	5530	669.8	733.4	57.2	5603	658.0	736.6	-4.470	4.460	-0.140	1.360	-4.470	4.470	0.050	1.450
60-80mm	53.88	57.2	5427	675.9	760.2	57.2	5556	664.9	763.2	-4.470	4.470	-0.140	1.380	-4.470	4.470	0.110	1.410
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	125.61	57.2	5530	668.0	747.5	57.2	5603	657.2	752.9	-4.470	4.470	-0.130	1.390	-4.470	4.470	0.070	1.450

B.3.1.1 Table B. 85: Matched Droplet Info

All Droplets for .LA Image

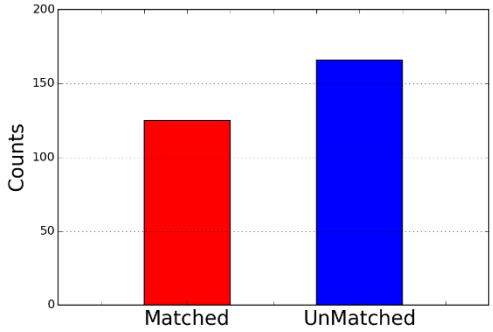


Figure B. 761: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

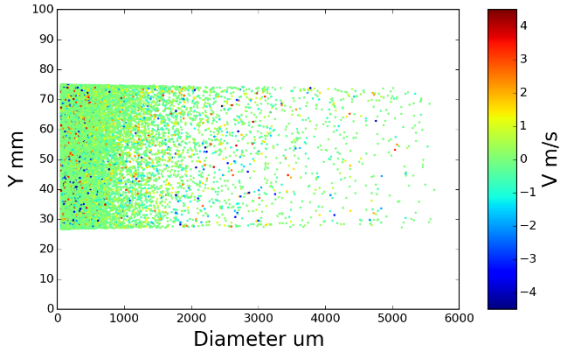


Figure B. 764: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

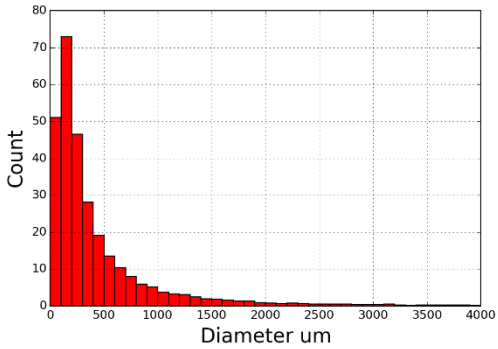


Figure B. 762: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

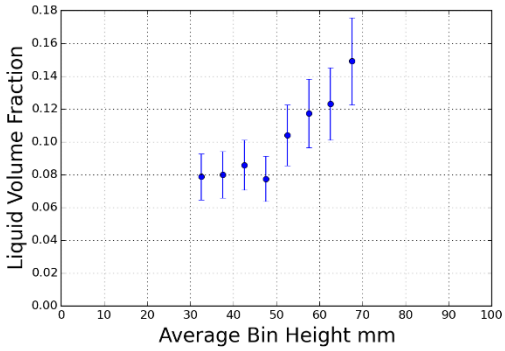


Figure B. 765: Void Fraction R-123 40F 10000Btu 30000Lb Tri

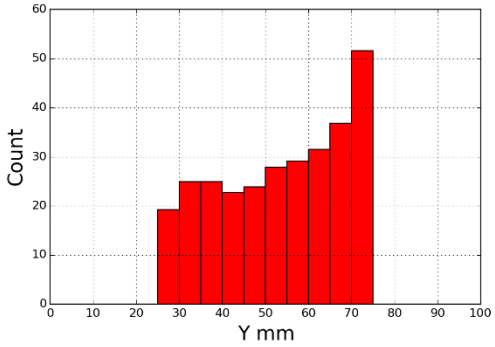


Figure B. 763: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.1.1 All Droplets for .LB Image

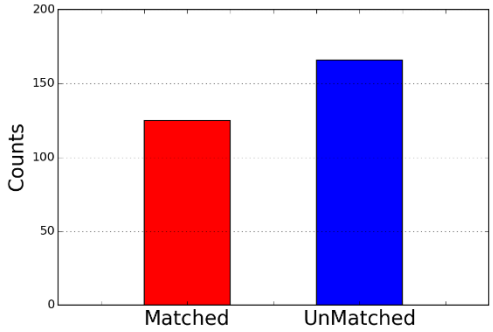


Figure B. 766: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

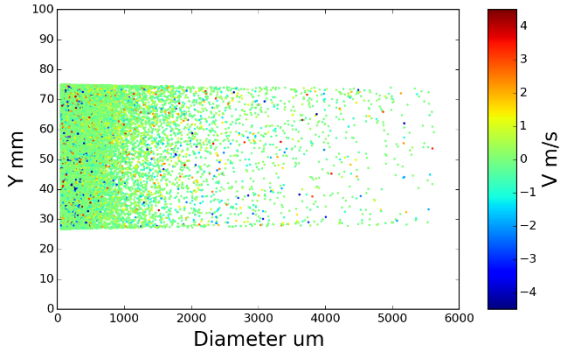


Figure B. 769: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

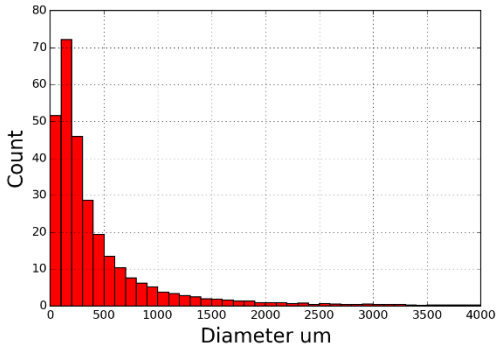


Figure B. 767: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

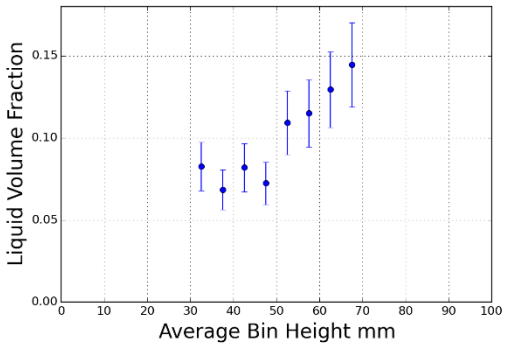


Figure B. 770: Void Fraction R-123 40F 10000Btu 30000Lb Tri

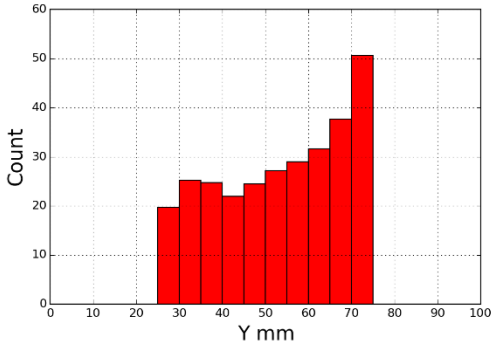


Figure B. 768: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.1.1 Matched Only Droplets for .LA Image

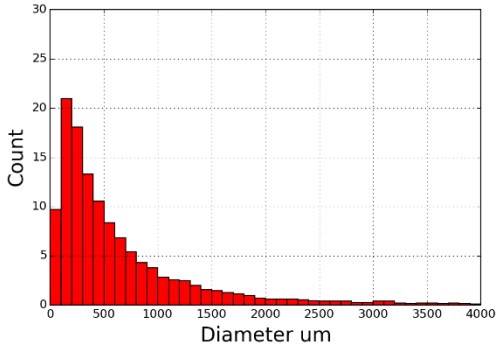


Figure B. 771: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

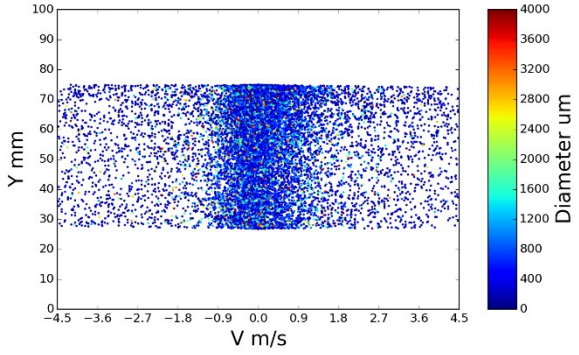


Figure B. 774: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

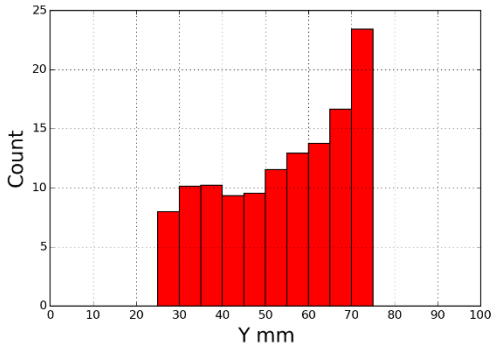


Figure B. 772: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

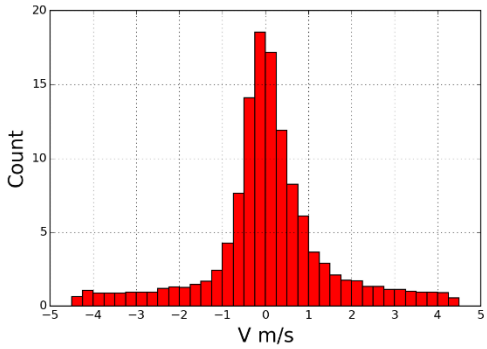


Figure B. 775: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

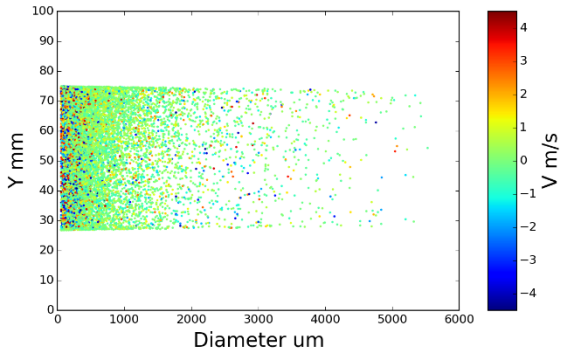


Figure B. 773: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.1.1 Matched Only Droplets for .LB Image

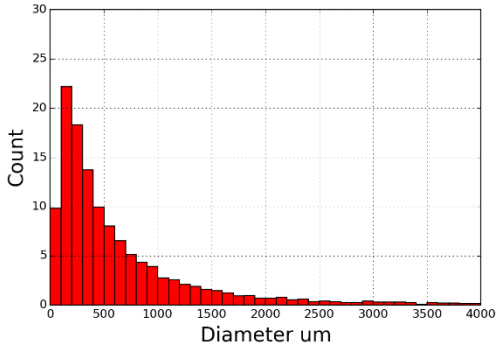


Figure B. 776: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

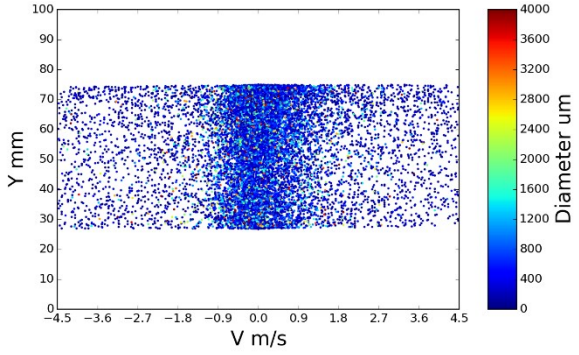


Figure B. 779: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

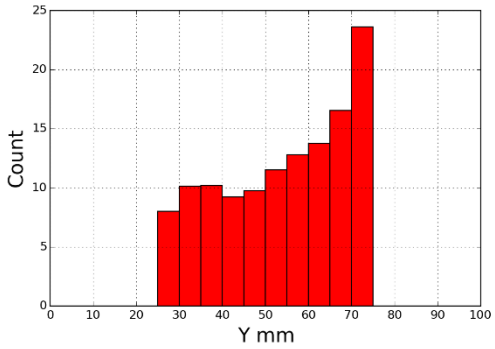


Figure B. 777: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

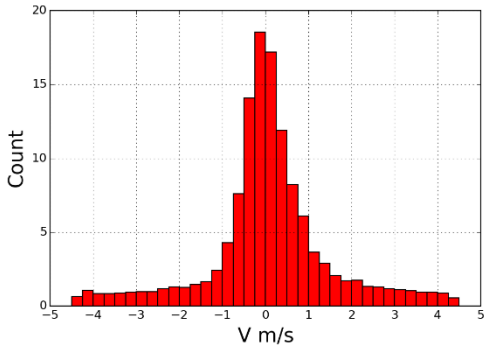


Figure B. 780: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

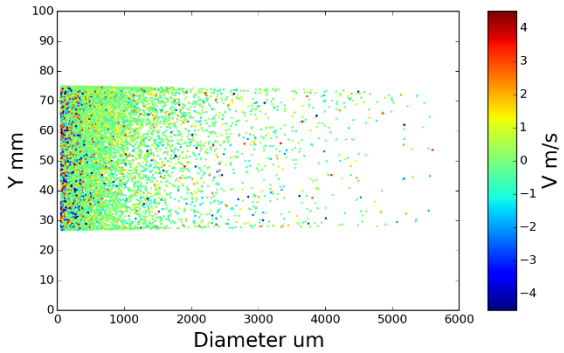


Figure B. 778: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.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	22.02	23.3	57.2	5612	747.7	1017	57.2	5518	707.5	979.5
40-60mm	27.73	30.89	57.2	5626	815.4	1011	57.2	5627	765.9	998.0
60-80mm	35.91	36.86	57.2	5583	814.5	1010	57.2	5574	813.2	1026
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	96.7	102.86	57.2	5626	797.6	1013	57.2	5627	770.1	1006
			Height A (mm)				Height B (mm)			
Highest Particle			74.8586				74.8586			
Lowest Particle			26.8964				26.8964			

Table B. 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	8.74	57.2	5444	1249	1110	57.2	5518	1242	1108	-4.450	4.470	0.000	1.140	-4.410	4.470	0.180	1.250
40-60mm	11.7	57.2	5547	1299	1062	57.2	5627	1291	1076	-4.460	4.470	-0.070	0.990	-4.390	4.470	0.170	1.130
60-80mm	16.05	57.2	5401	1249	1030	57.2	5414	1237	1040	-4.470	4.450	-0.090	0.950	-4.470	4.270	0.100	1.030
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	36.49	57.2	5547	1265	1060	57.2	5627	1256	1069	-4.470	4.470	-0.060	1.010	-4.470	4.470	0.140	1.120

Table B. 87: Matched Droplet Info

B.3.1.1 All Droplets for .LA Image

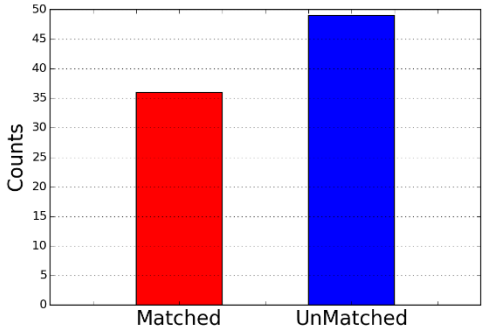


Figure B. 781: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

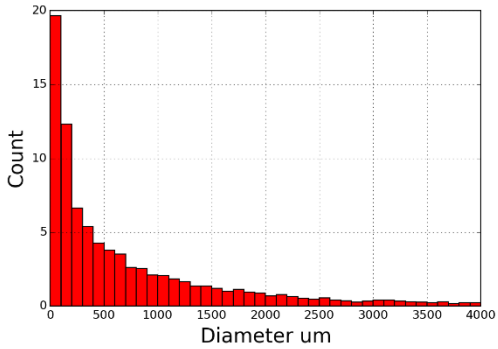


Figure B. 782: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

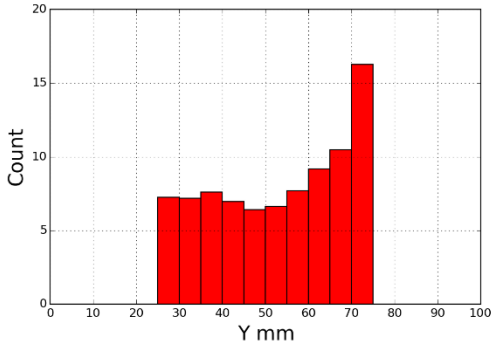


Figure B. 783: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

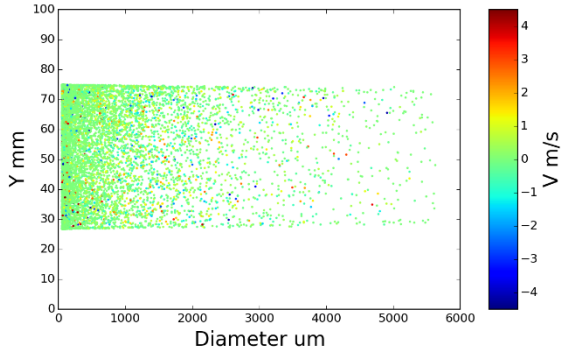


Figure B. 784: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

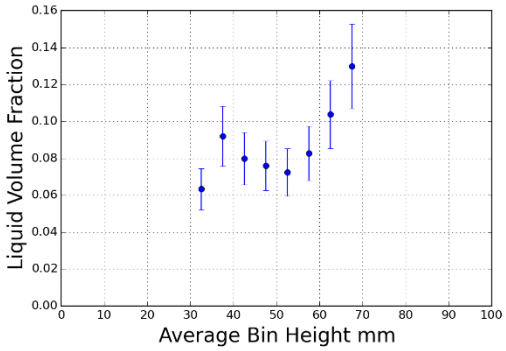


Figure B. 785: Void Fraction R-123 40F 10000Btu 30000Lb Tri

B.3.1.1 All Droplets for .LB Image

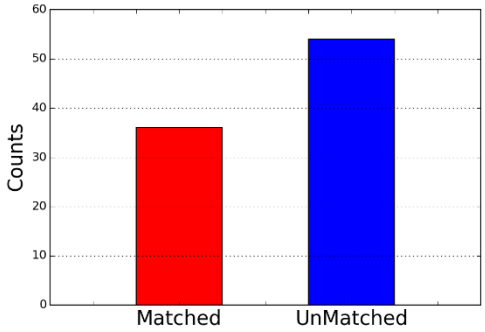


Figure B. 786: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

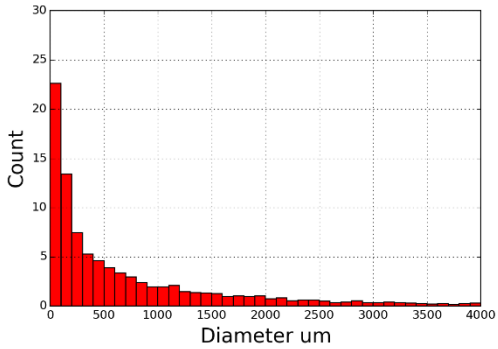


Figure B. 787: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

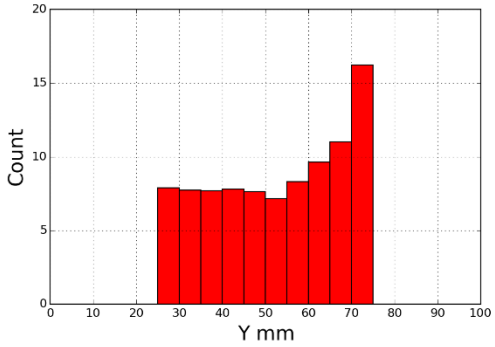


Figure B. 788: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

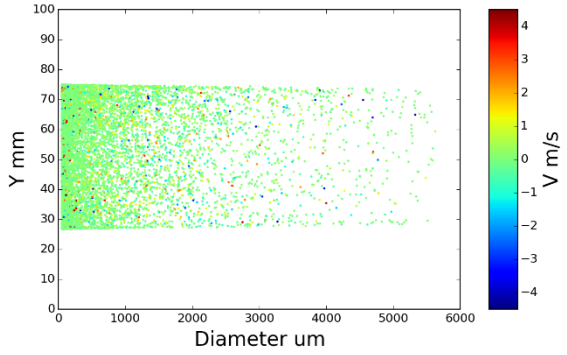


Figure B. 789: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

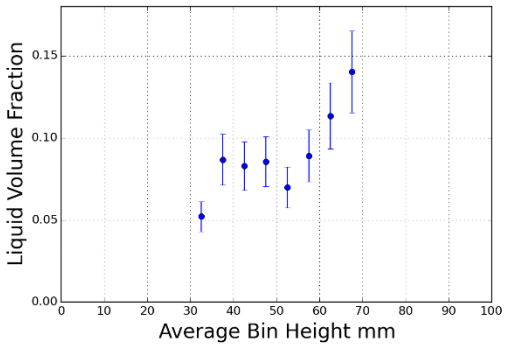


Figure B. 790: Void Fraction R-123 40F 10000Btu 30000Lb Tri

B.3.1.1 Matched Only Droplets for .LA Image

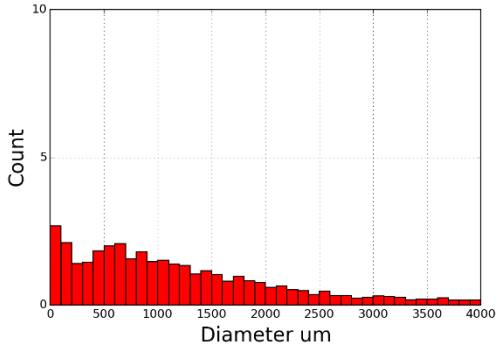


Figure B. 791: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

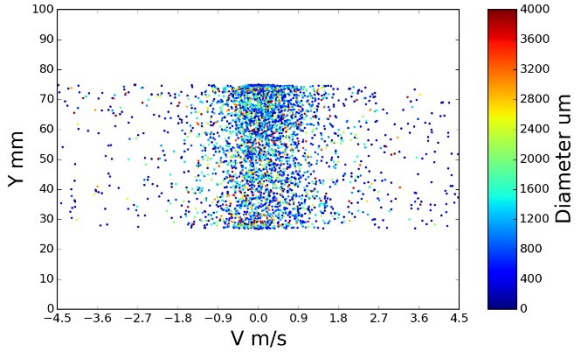


Figure B. 794: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

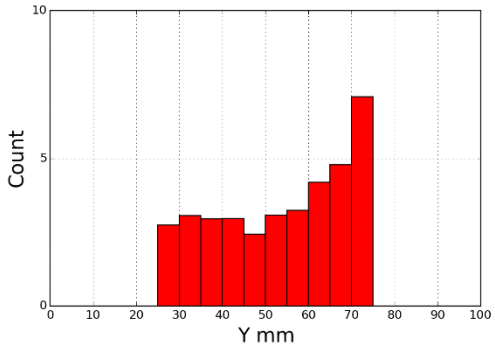


Figure B. 792: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

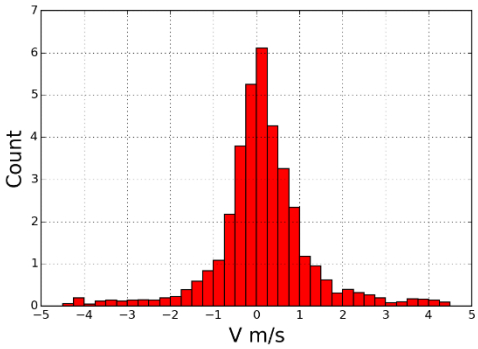


Figure B. 795: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

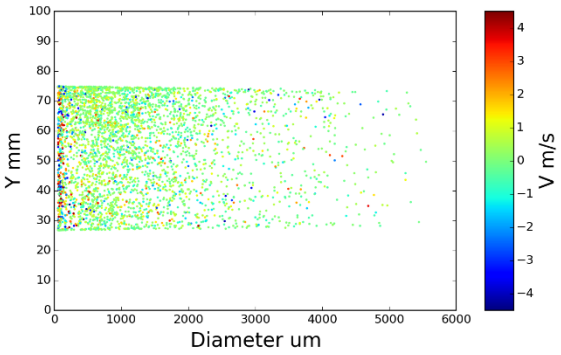


Figure B. 793: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.1.1 Matched Only Droplets for .LB Image

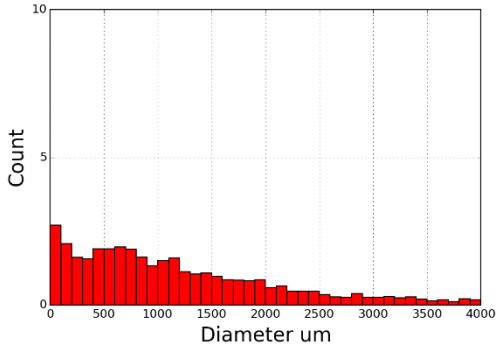


Figure B. 796: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

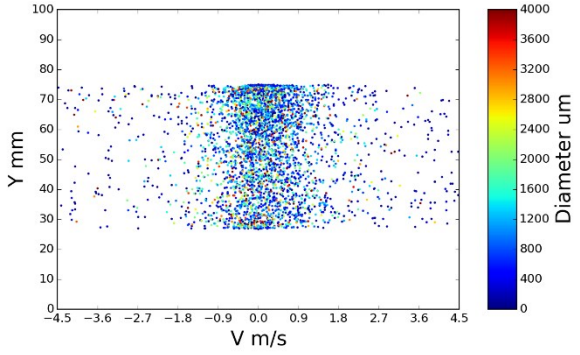


Figure B. 799: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

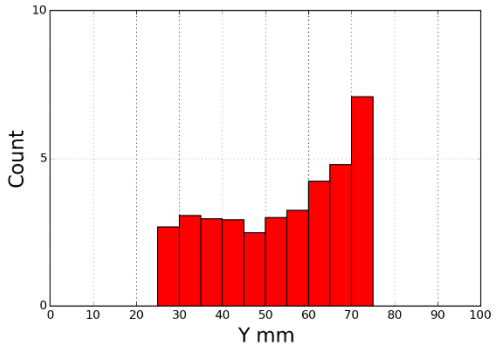


Figure B. 797: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

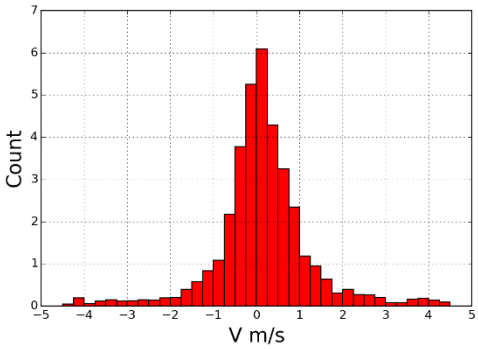


Figure B. 800: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

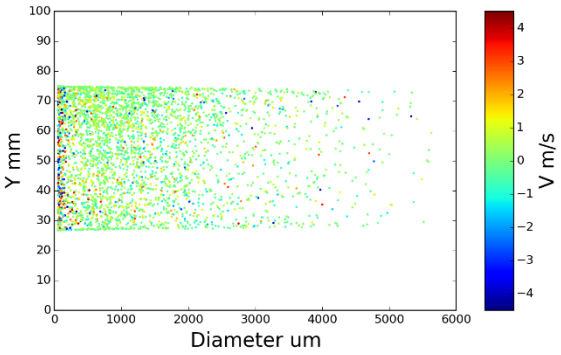


Figure B. 798: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.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	16.76	17.81	57.2	5596	660.1	1088	57.2	5560	631.5	1067
40-60mm	20.47	23.84	57.2	5604	773.9	1157	57.2	5608	694.2	1104
60-80mm	25.09	27.47	57.2	5612	757.7	1113	57.2	5622	718.8	1108
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	71.95	79.92	57.2	5612	736.8	1122	57.2	5622	687.8	1097
			Height A (mm)				Height B (mm)			
Highest Particle			74.8586				74.8586			
Lowest Particle			26.8964				26.8964			

Table B. 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	5.33	57.2	5569	1351	1313	57.2	5560	1353	1342	-4.470	4.470	0.010	1.520	-4.380	4.470	0.110	1.500
40-60mm	7.28	57.2	5563	1479	1283	57.2	5562	1470	1296	-4.320	4.470	-0.010	1.220	-4.470	4.470	0.050	1.470
60-80mm	9.29	57.2	5483	1368	1214	57.2	5563	1365	1225	-4.470	4.470	-0.050	1.320	-4.470	4.470	0.080	1.380
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	21.9	57.2	5569	1401	1263	57.2	5563	1397	1279	-4.470	4.470	-0.020	1.340	-4.470	4.470	0.080	1.440

Table B. 89: Matched Droplet Info

B.3.1.1 All Droplets for .LA Image

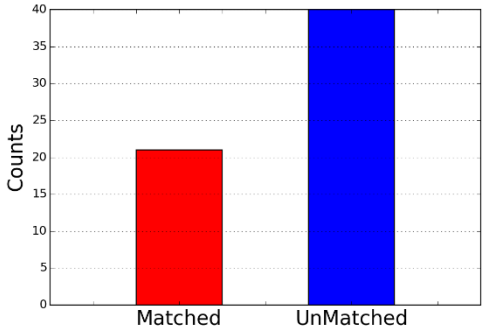


Figure B. 801: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

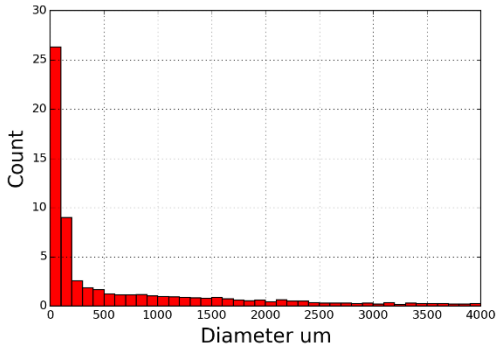


Figure B. 802: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

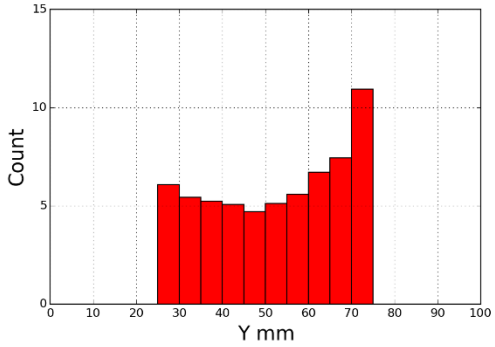


Figure B. 803: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

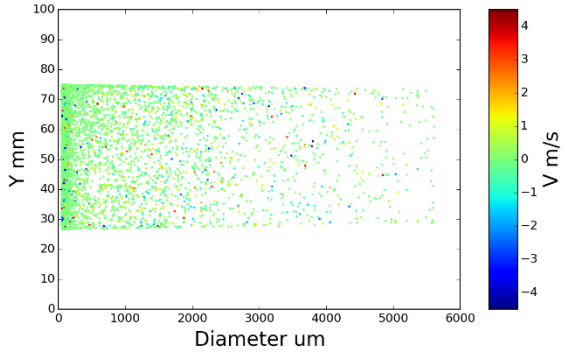


Figure B. 804: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

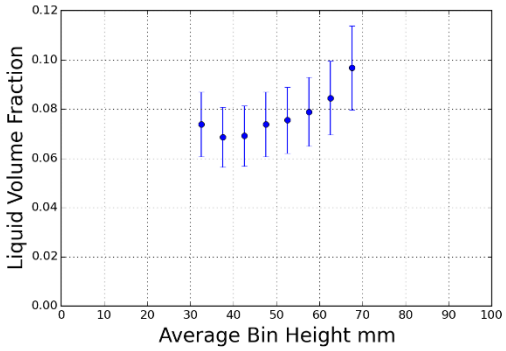


Figure B. 805: Void Fraction R-123 40F 10000Btu 30000Lb Tri

B.3.1.1 All Droplets for .LB Image

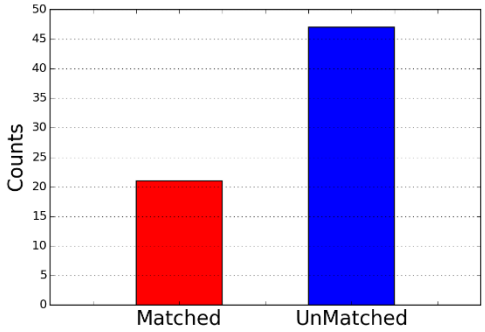


Figure B. 806: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

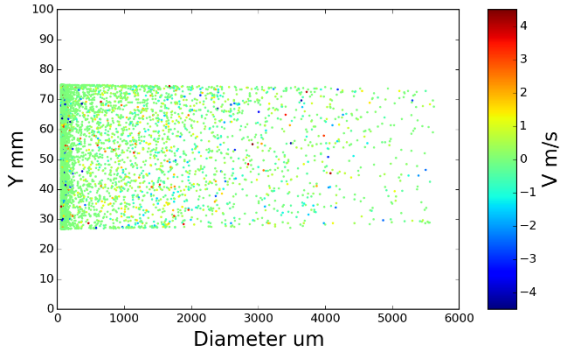


Figure B. 809: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

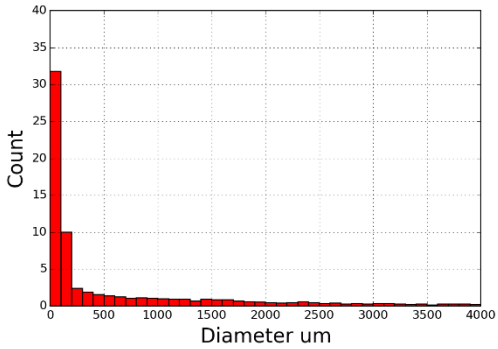


Figure B. 807: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

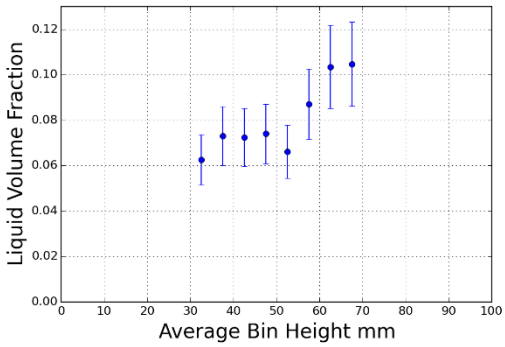


Figure B. 810: Void Fraction R-123 40F 10000Btu 30000Lb Tri

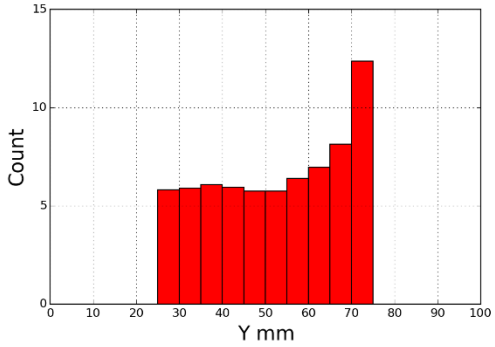


Figure B. 808: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.1.1 Matched Only Droplets for .LA Image

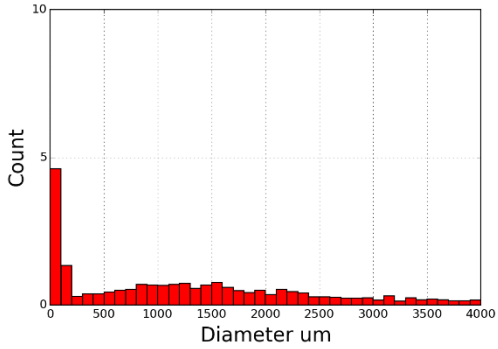


Figure B. 811: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

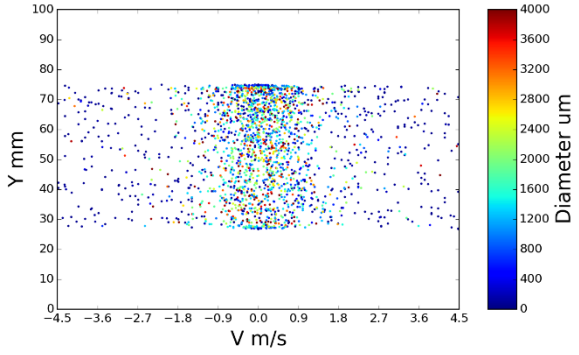


Figure B. 814: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

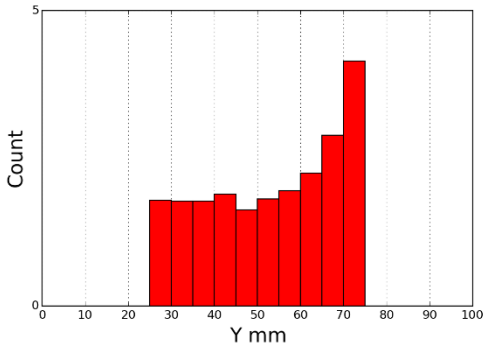


Figure B. 812: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

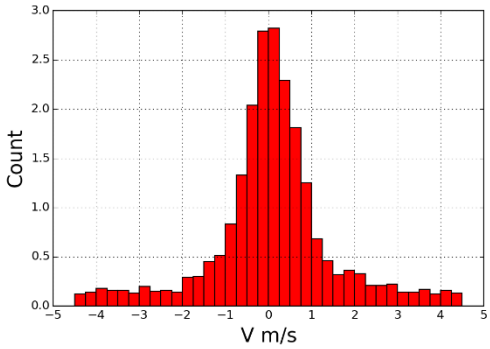


Figure B. 815: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

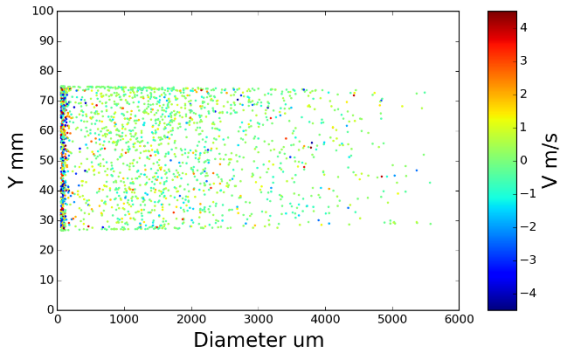


Figure B. 813: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.1.1 Matched Only Droplets for .LB Image

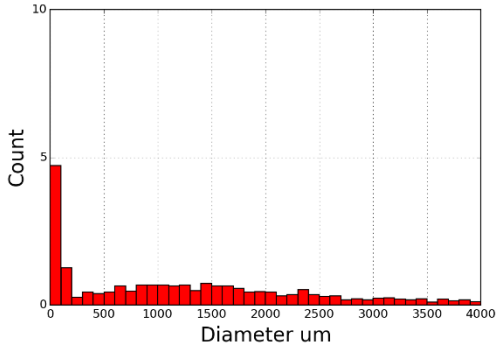


Figure B. 816: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

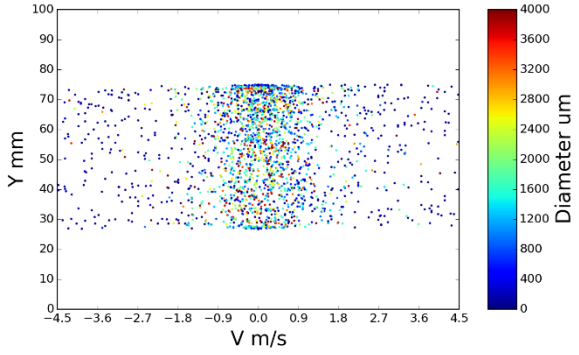


Figure B. 819: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

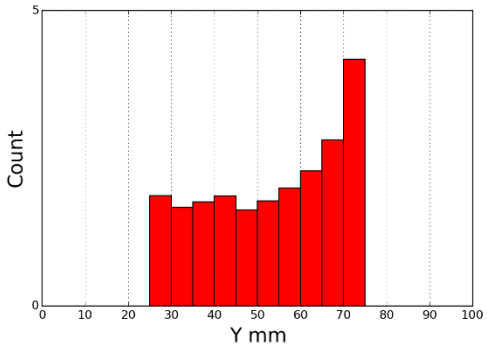


Figure B. 817: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

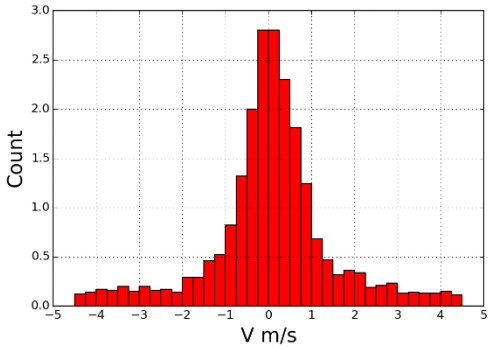


Figure B. 820: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

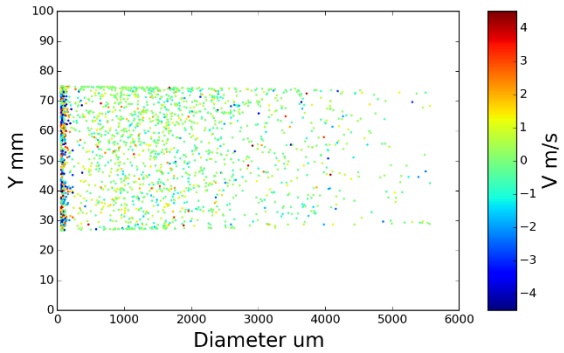


Figure B. 818: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.1.2 Lens 50mm Mag 0_13x

B.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	22.51	23.63	128.7	5477	696.3	771.7	128.7	5614	677.6	741.3
40-60mm	45.71	46.76	128.7	5592	699.4	738.3	128.7	5702	684.6	734.0
60-80mm	72.01	71.64	128.7	5662	690.2	719.5	128.7	5673	692.6	716.9
80-100mm	107.63	107.71	128.7	5650	711.0	676.4	128.7	5671	703.2	668.8
All	250.04	252.32	128.7	5662	700.0	709.2	128.7	5702	693.2	702.0
			Height A (mm)				Height B (mm)			
Highest Particle			100.0306				100.0306			
Lowest Particle			30.1118				30.1118			

Table B. 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	8.62	128.7	4850	894.2	854.4	128.7	5338	867.0	843.4	-4.390	4.390	-0.180	1.690	-4.370	4.390	0.050	1.740
40-60mm	18.49	128.7	5531	880.9	821.6	128.7	5702	863.7	832.3	-4.390	4.390	-0.160	1.650	-4.390	4.390	0.040	1.780
60-80mm	31.17	128.7	5662	869.5	769.3	128.7	5673	847.5	771.0	-4.390	4.380	-0.220	1.650	-4.390	4.390	0.100	1.710
80-100mm	54.3	128.7	5187	852.9	695.1	128.7	5402	839.2	706.0	-4.390	4.390	-0.200	1.490	-4.390	4.390	0.120	1.550
All	112.72	128.7	5662	864.4	750.8	128.7	5702	846.9	757.0	-4.390	4.390	-0.200	1.580	-4.390	4.390	0.090	1.650

Table B. 91: Matched Droplet Info

B.3.1.2 All Droplets for .LA Image

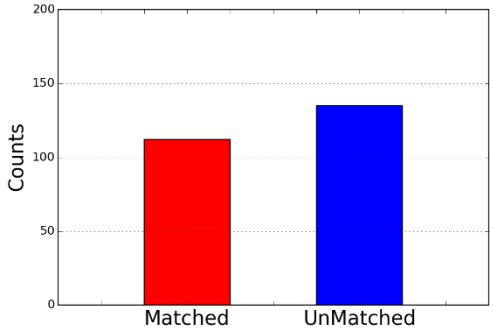


Figure B. 821: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

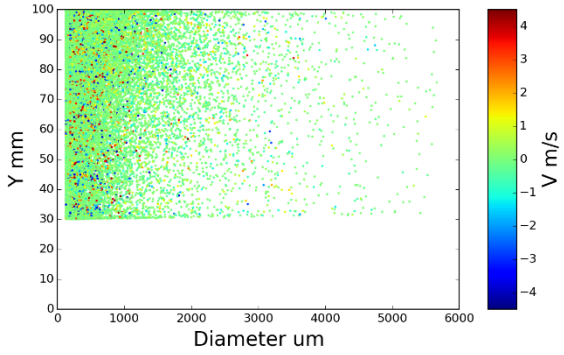


Figure B. 824: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

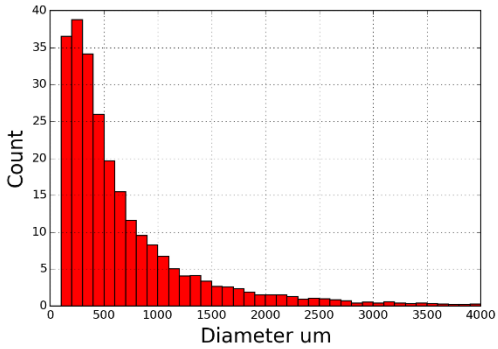


Figure B. 822: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

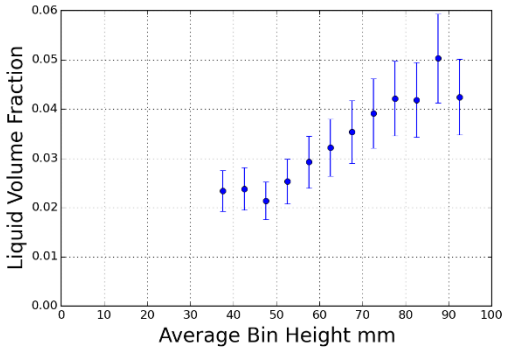


Figure B. 825: Void Fraction R-123 40F 10000Btu 30000Lb Tri

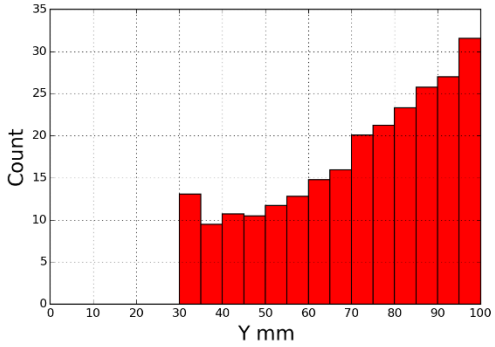


Figure B. 823: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.1.2 All Droplets for .LB Image

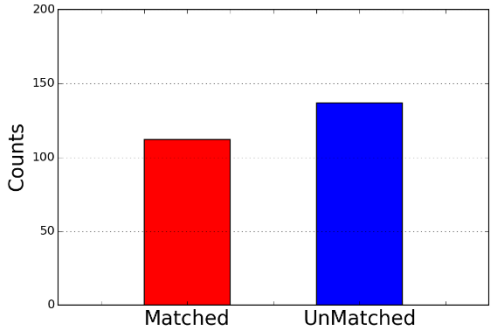


Figure B. 826: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

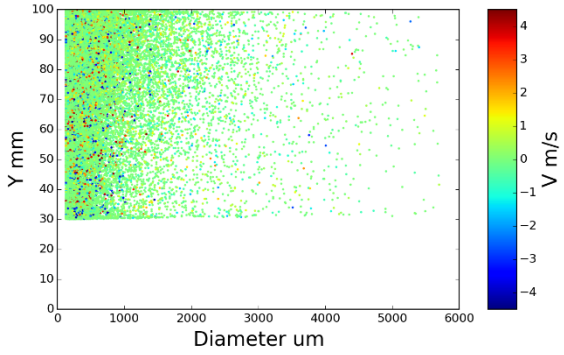


Figure B. 829: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

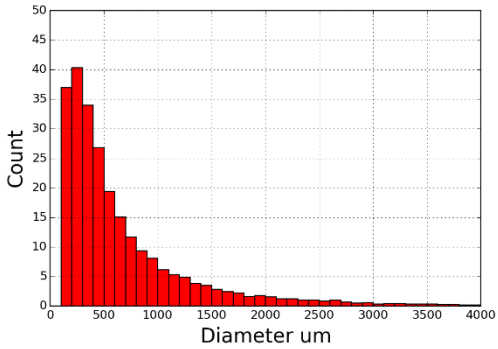


Figure B. 827: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

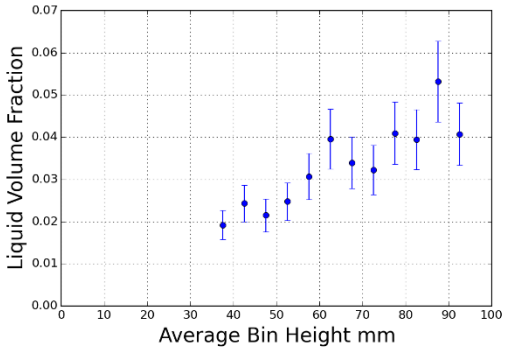


Figure B. 830: Void Fraction R-123 40F 10000Btu 30000Lb Tri

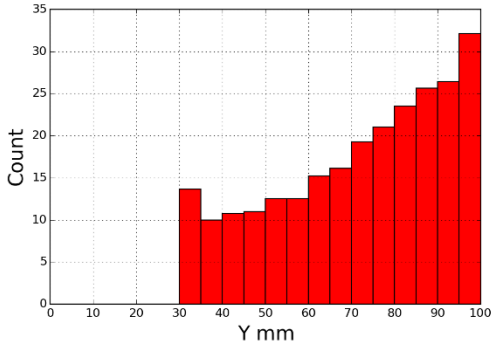


Figure B. 828: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.1.2 Matched Only Droplets for .LA Image

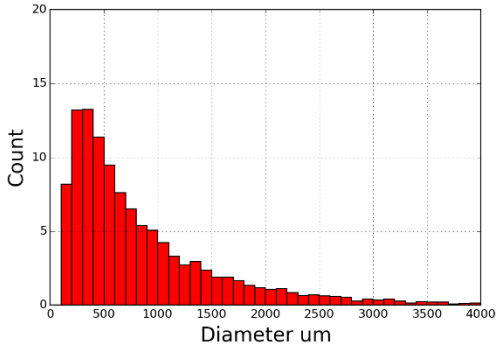


Figure B. 831: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

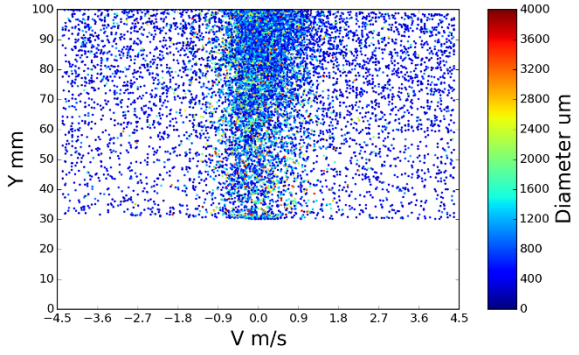


Figure B. 834: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

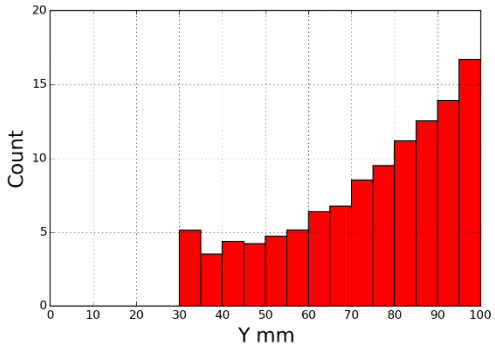


Figure B. 832: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

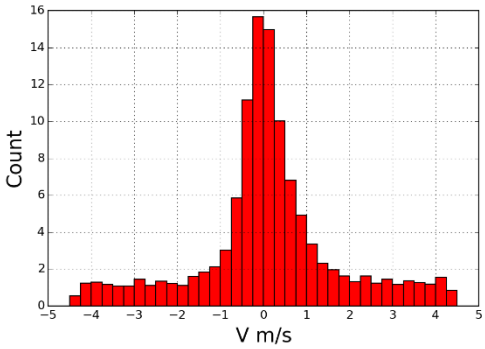


Figure B. 835: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

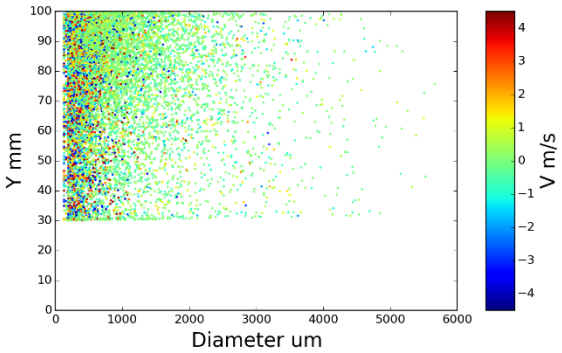


Figure B. 833: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.1.2 Matched Only Droplets for .LB Image

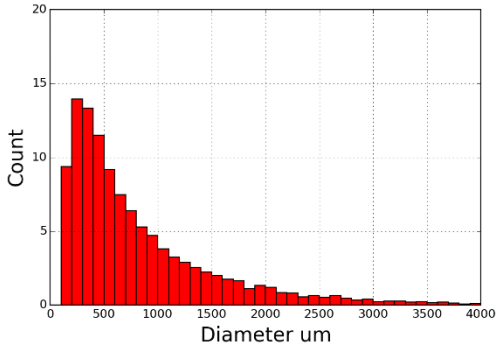


Figure B. 836: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

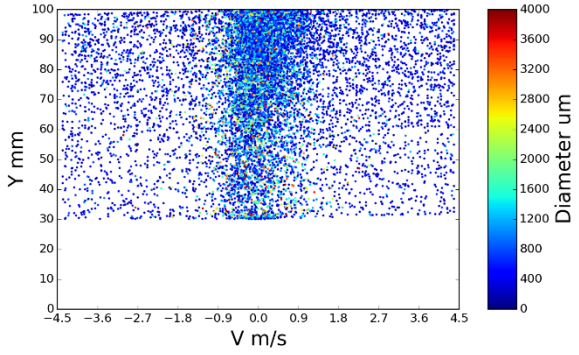


Figure B. 839: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

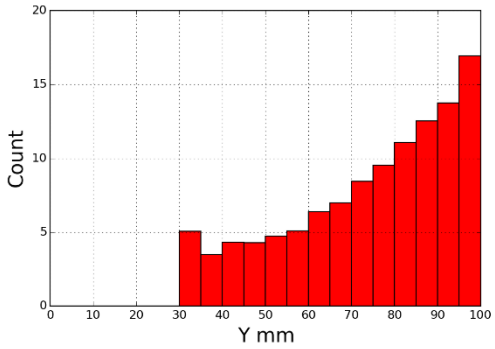


Figure B. 837: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

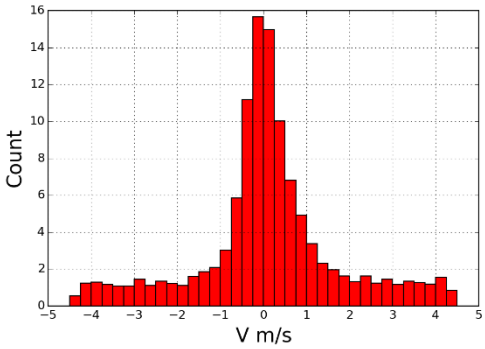


Figure B. 840: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

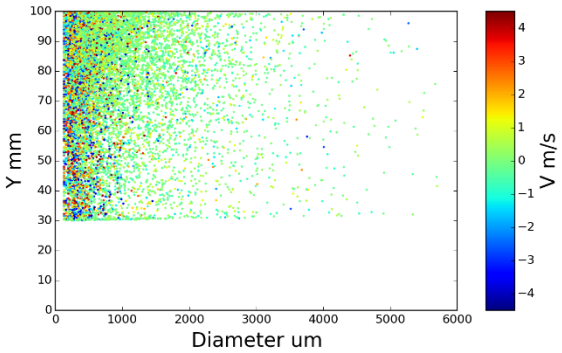


Figure B. 838: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.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	14.49	14.68	128.7	5645	949.4	1008	128.7	5533	902.4	959.1
40-60mm	23.57	23.73	128.7	5695	955.3	980.7	128.7	5627	988.6	1030
60-80mm	39.94	38.71	128.7	5691	902.6	938.5	128.7	5617	886.8	929.3
80-100mm	64.67	63.44	128.7	5652	875.0	831.6	128.7	5700	856.1	811.4
All	144.22	141.69	128.7	5695	901.0	906.6	128.7	5700	890.1	900.9
			Height A (mm)				Height B (mm)			
Highest Particle			100.0306				100.0306			
Lowest Particle			30.1118				30.1118			

Table B. 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	5.33	128.7	4992	1255	1014	128.7	5533	1236	1042	-4.230	4.380	-0.080	1.440	-4.110	4.260	0.150	1.340
40-60mm	9.21	128.7	5582	1349	1081	128.7	5627	1334	1108	-4.340	4.320	-0.080	1.310	-4.360	4.330	-0.060	1.380
60-80mm	15.85	128.7	5626	1239	993.8	128.7	5617	1217	1006	-4.390	4.310	-0.150	1.300	-4.390	4.310	0.090	1.360
80-100mm	30.81	128.7	5171	1104	842.1	128.7	5568	1082	845.3	-4.370	4.390	-0.170	1.270	-4.390	4.390	0.120	1.320
All	61.32	128.7	5626	1187	941.8	128.7	5627	1167	953.9	-4.390	4.390	-0.140	1.300	-4.390	4.390	0.080	1.340

Table B. 93: Matched Droplet Info

B.3.1.2 All Droplets for .LA Image

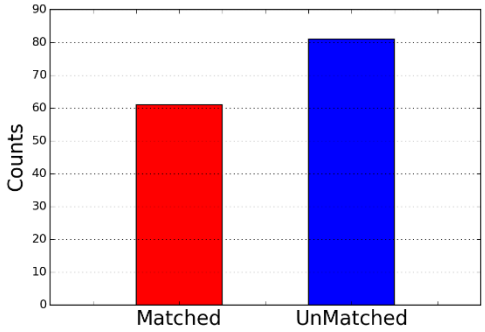


Figure B. 841: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

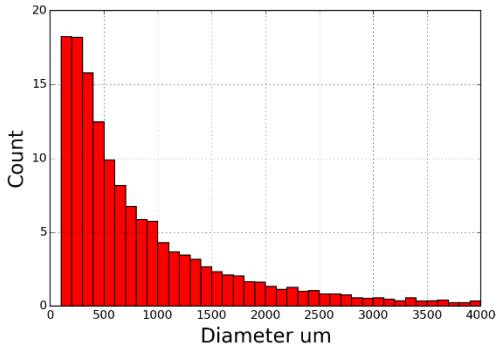


Figure B. 842: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

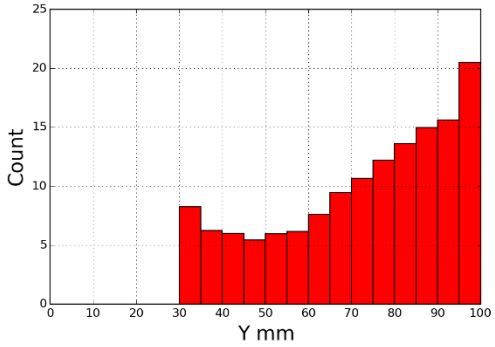


Figure B. 843: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

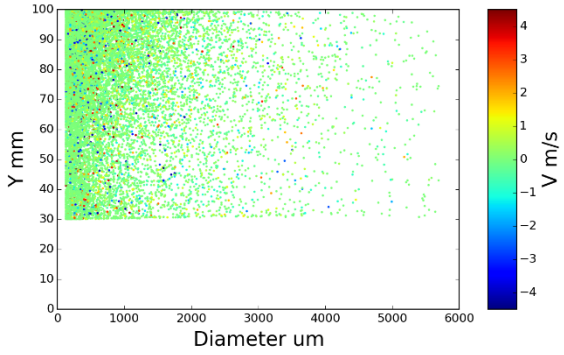


Figure B. 844: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

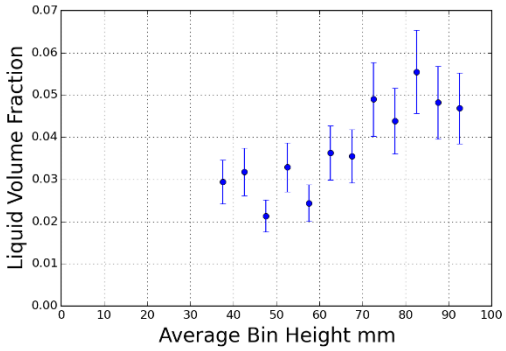


Figure B. 845: Void Fraction R-123 40F 10000Btu 30000Lb Tri

B.3.1.2 All Droplets for .LB Image

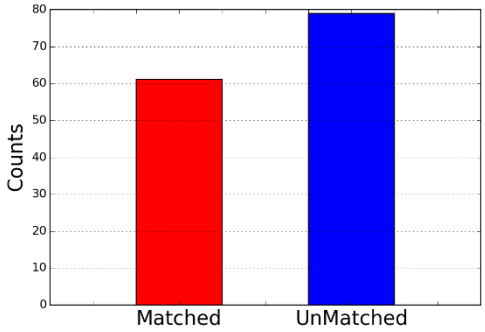


Figure B. 846: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

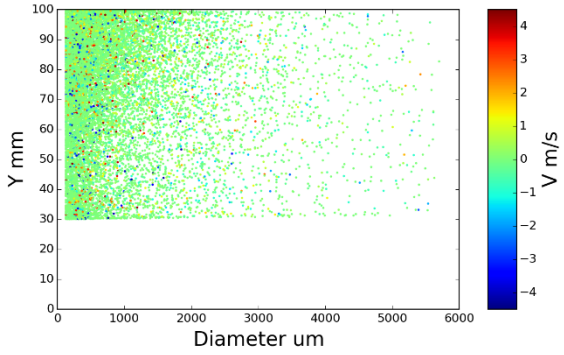


Figure B. 849: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

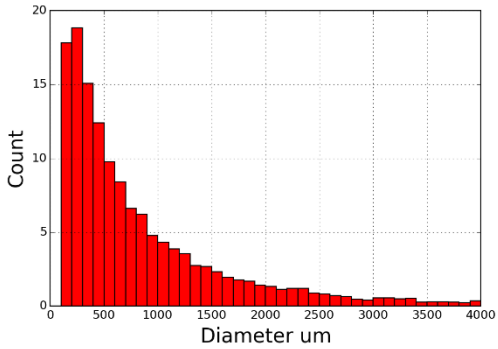


Figure B. 847: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

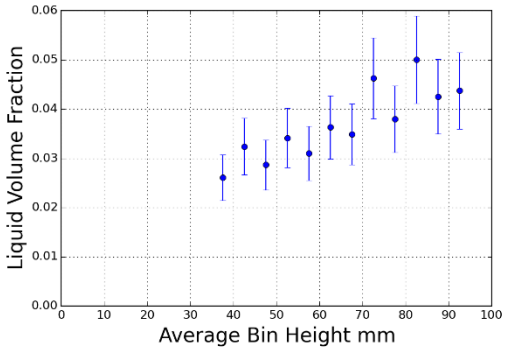


Figure B. 850: Void Fraction R-123 40F 10000Btu 30000Lb Tri

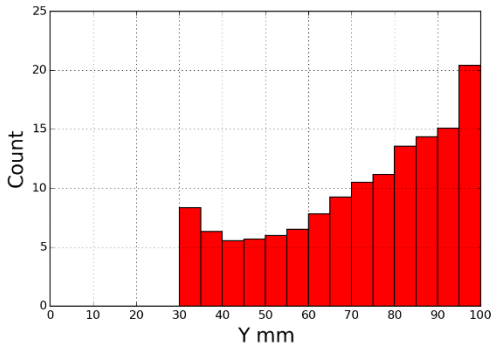


Figure B. 848: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.1.2 Matched Only Droplets for .LA Image

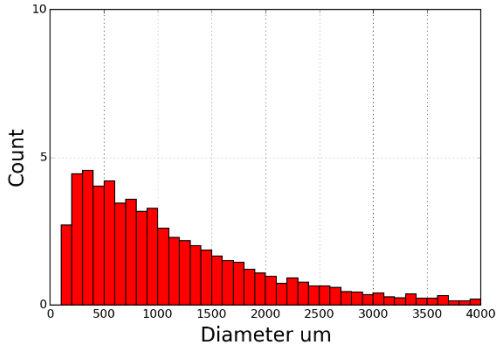


Figure B. 851: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

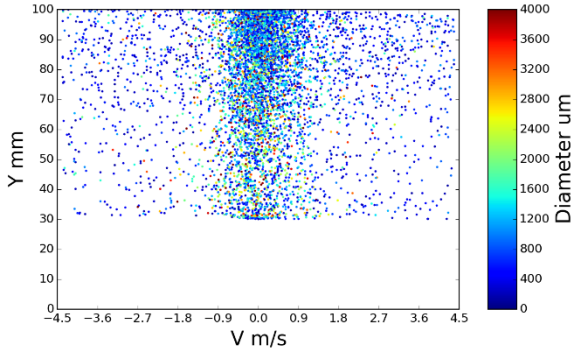


Figure B. 854: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

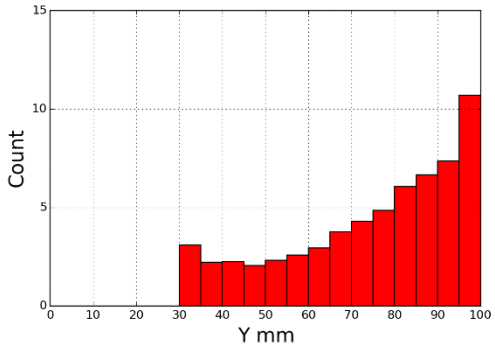


Figure B. 852: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

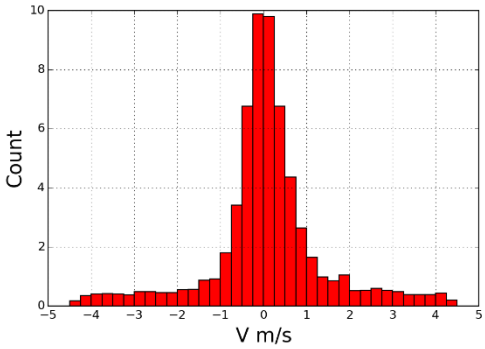


Figure B. 855: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

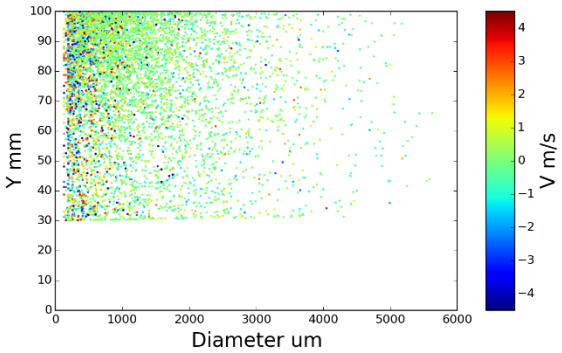


Figure B. 853: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.1.2 Matched Only Droplets for .LB Image

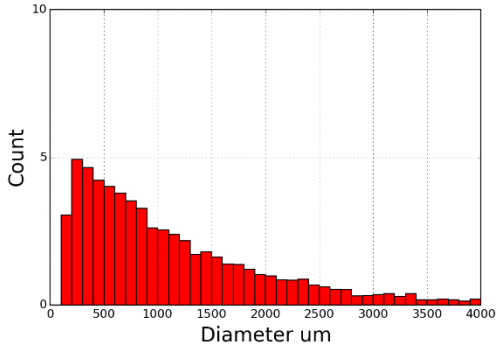


Figure B. 856: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

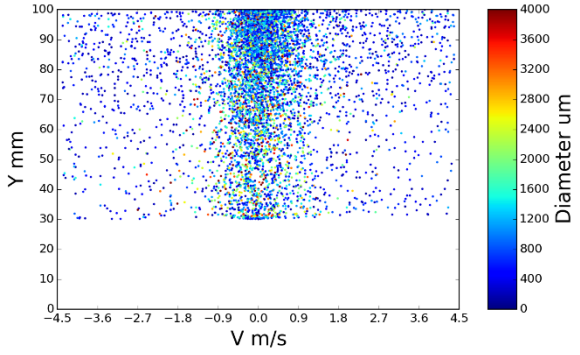


Figure B. 859: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

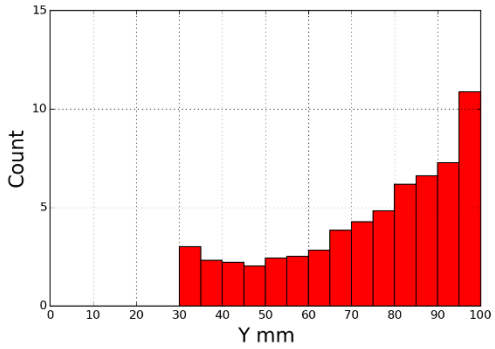


Figure B. 857: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

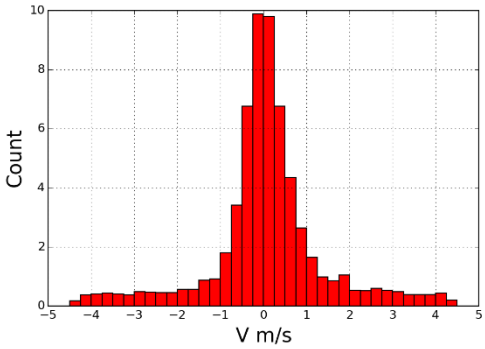


Figure B. 860: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

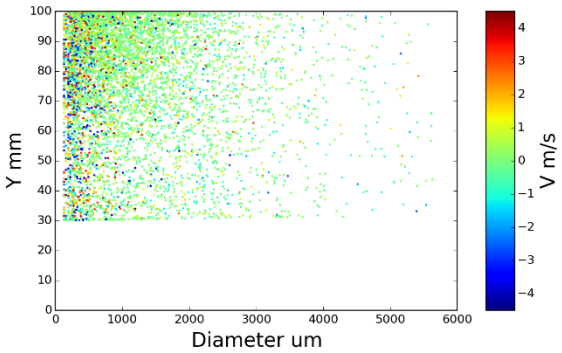


Figure B. 858: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.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	7.24	7.44	128.7	5246	1140	1133	128.7	5653	1202	1207
40-60mm	13.22	13.56	128.7	5682	1319	1221	128.7	5683	1294	1234
60-80mm	22.37	22.53	128.7	5573	1094	1075	128.7	5702	1077	1076
80-100mm	45.78	45.04	128.7	5679	1016	990.1	128.7	5685	1007	955.4
All	89.49	89.45	128.7	5682	1088	1066	128.7	5702	1082	1060
			Height A (mm)				Height B (mm)			
Highest Particle			100.0306				100.0306			
Lowest Particle			30.1118				30.1118			

Table B. 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	2.88	128.7	5246	1808	1228	128.7	5604	1816	1272	-3.750	4.310	0.000	1.020	-3.730	4.020	0.090	0.950
40-60mm	5.07	128.7	5545	1876	1172	128.7	5683	1871	1210	-4.310	3.830	-0.030	0.940	-4.360	4.150	0.060	1.100
60-80mm	8.73	128.7	5076	1553	1098	128.7	5662	1503	1108	-4.360	4.170	-0.090	1.080	-4.280	4.390	0.140	1.260
80-100mm	20.17	128.7	5489	1350	1014	128.7	5520	1328	1021	-4.380	4.390	-0.150	1.160	-4.390	4.340	0.100	1.250
All	36.9	128.7	5545	1505	1094	128.7	5683	1481	1110	-4.380	4.390	-0.110	1.110	-4.390	4.390	0.100	1.210

Table B. 95: Matched Droplet Info

B.3.1.2 All Droplets for .LA Image

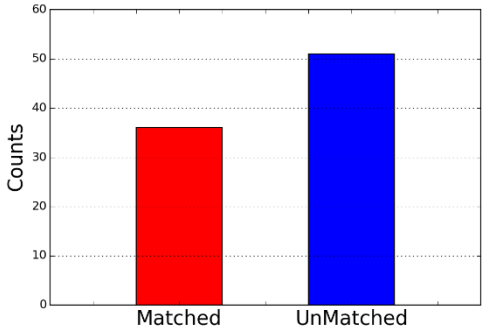


Figure B. 861: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

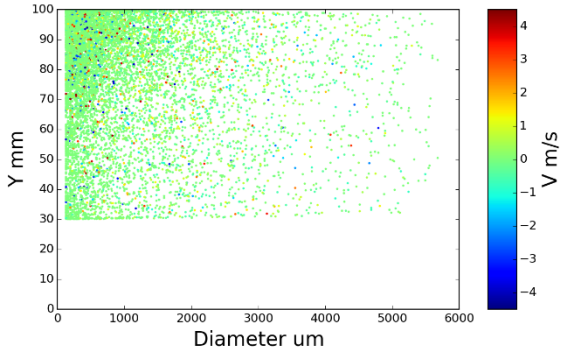


Figure B. 864: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

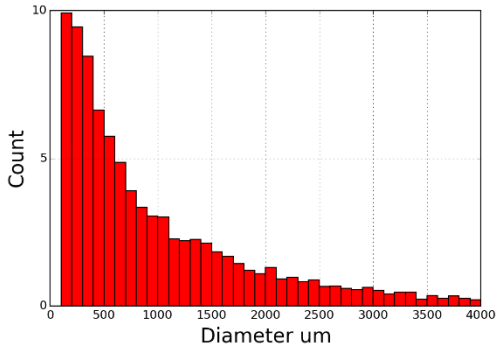


Figure B. 862: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

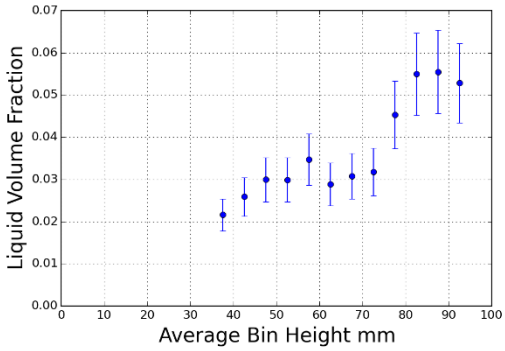


Figure B. 865: Void Fraction R-123 40F 10000Btu 30000Lb Tri

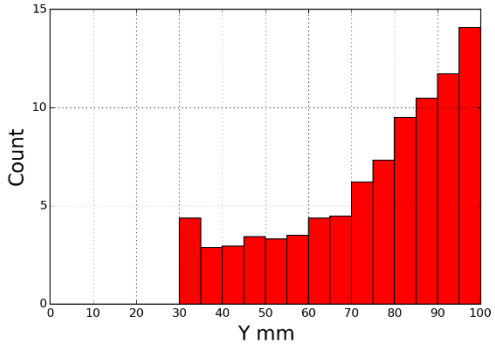


Figure B. 863: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.1.2 All Droplets for .LB Image

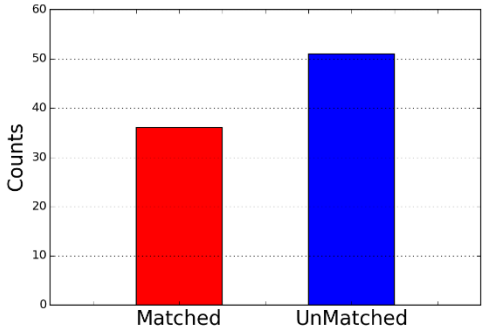


Figure B. 866: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

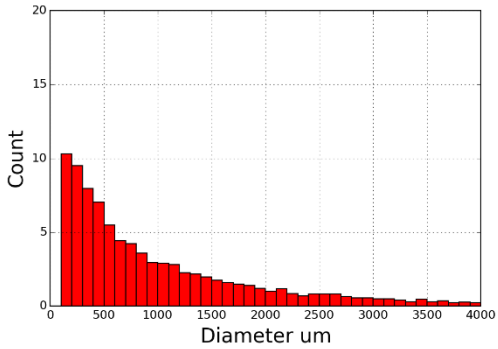


Figure B. 867: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

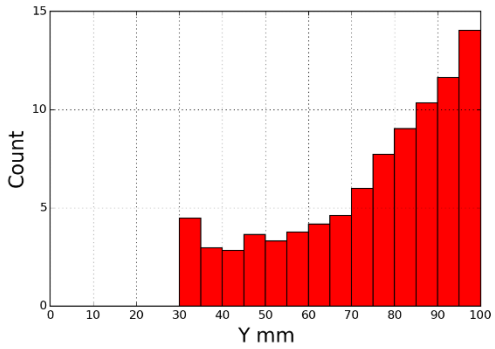


Figure B. 868: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

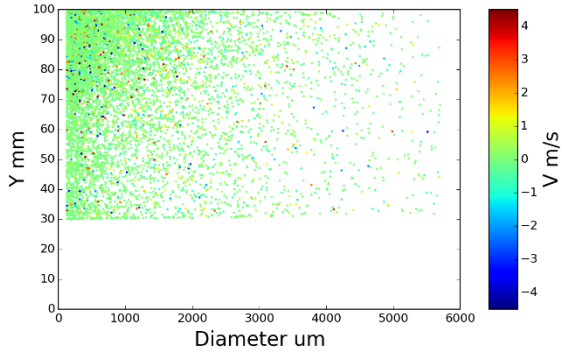


Figure B. 869: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

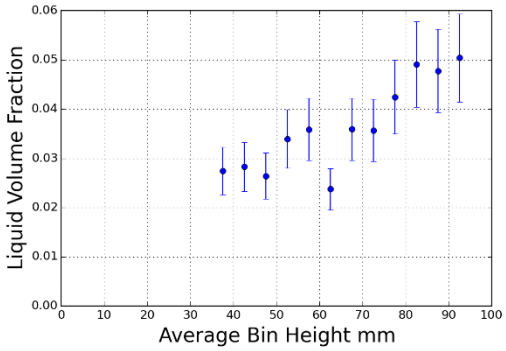


Figure B. 870: Void Fraction R-123 40F 10000Btu 30000Lb Tri

B.3.1.2 Matched Only Droplets for .LA Image

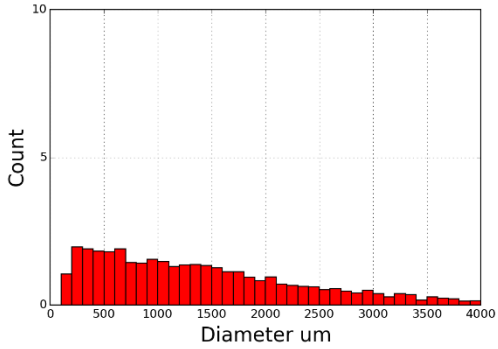


Figure B. 871: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

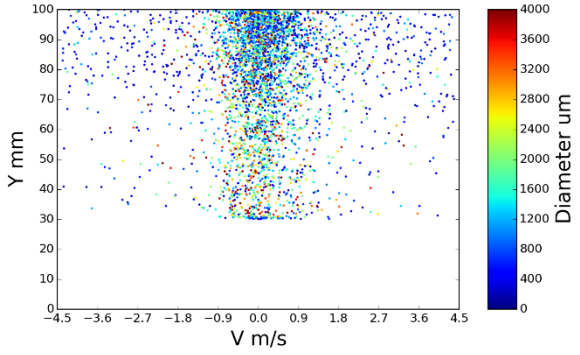


Figure B. 874: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

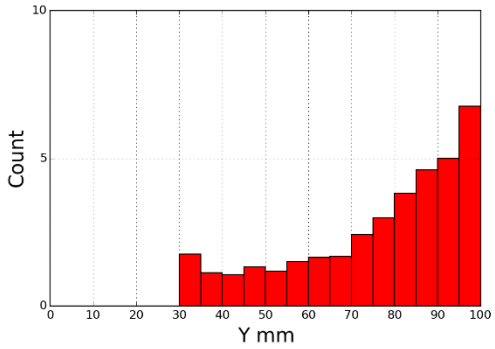


Figure B. 872: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

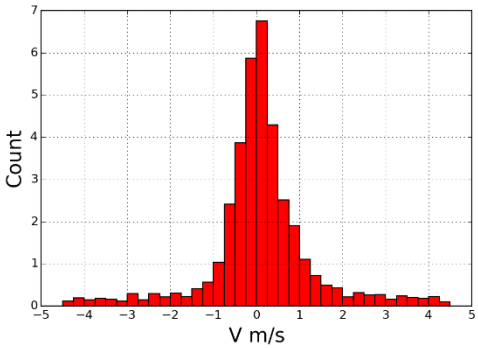


Figure B. 875: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

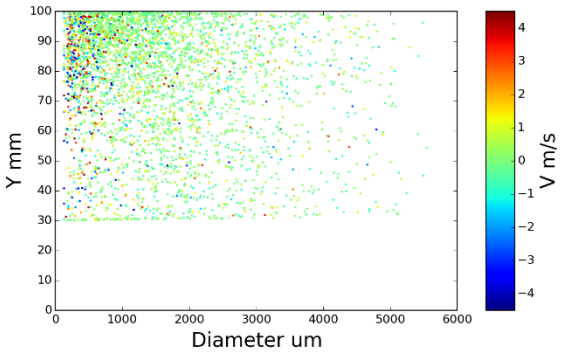


Figure B. 873: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.1.2 Matched Only Droplets for .LB Image

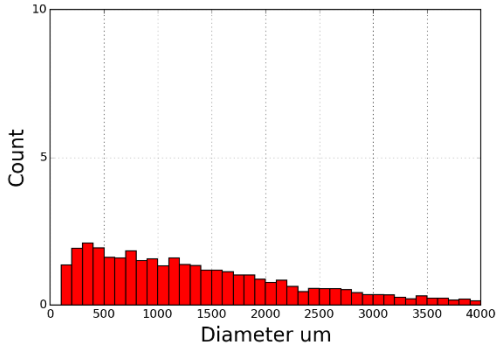


Figure B. 876: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

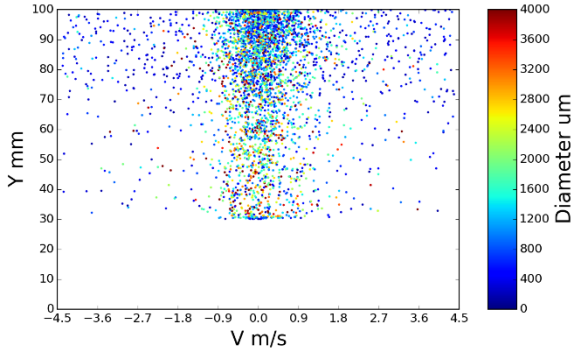


Figure B. 879: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

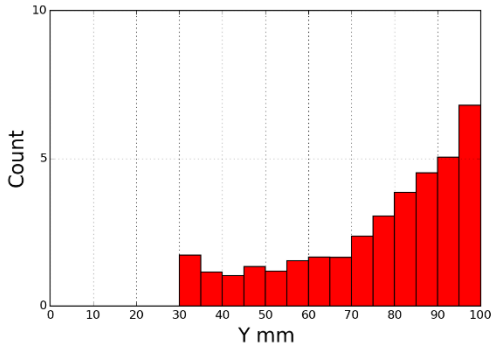


Figure B. 877: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

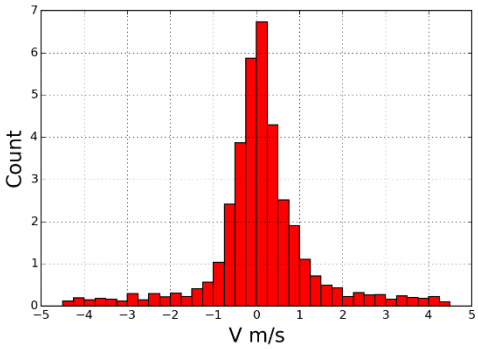


Figure B. 880: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

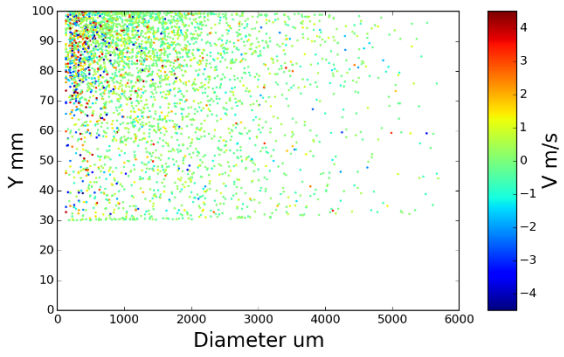


Figure B. 878: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.2 Liquid Level 2

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	22290 / 2.808
Ref Mass Flow (lb/hr) / (kg/s)	3191 / 0.402
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	31065 / 42.131
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	10057 / 31.73
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	39.6 / 4.21
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	42.3 / 5.73
Total Bundle Q (Btu/hr) / (kW)	191469 / 56.11
Total Bundle & Preboiler Q (Btu/hr) / (kW)	191064 / 56.00
Top Two Rows HTC Ratio	1.093
Bundle Inlet Quality	-0.08
Bundle Exit Quality	0.70

Table B. 96: Thermal Conditions

B.3.2.1 Lens 100mm Mag 0_29x

B.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	82.29	84.55	57.2	5583	530.0	706.8	57.2	5570	525.6	712.5
40-60mm	106.15	108.46	57.2	5623	603.2	766.1	57.2	5592	584.5	749.1
60-80mm	95.34	100.09	57.2	5623	623.8	783.7	57.2	5618	601.5	772.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	287.22	296.37	57.2	5623	588.9	756.5	57.2	5618	573.3	747.7
			Height A (mm)				Height B (mm)			
Highest Particle			74.8586				74.8586			
Lowest Particle			26.8964				26.8964			

Table B. 97: 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	5384	790.1	833.6	57.2	5570	776.6	843.2	-4.470	4.470	-0.060	1.310	-4.470	4.470	0.480	1.370
40-60mm	45.47	57.2	5394	888.1	848.7	57.2	5585	869.1	847.6	-4.470	4.470	-0.050	1.150	-4.470	4.470	0.600	1.340
60-80mm	41.94	57.2	5471	913.9	860.0	57.2	5547	892.8	856.3	-4.470	4.470	-0.040	1.220	-4.470	4.470	0.600	1.340
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	121.94	57.2	5471	869.2	849.9	57.2	5585	851.2	850.8	-4.470	4.470	-0.050	1.220	-4.470	4.470	0.560	1.350

Table B. 98: Matched Droplet Info

B.3.2.1 All Droplets for .LA Image

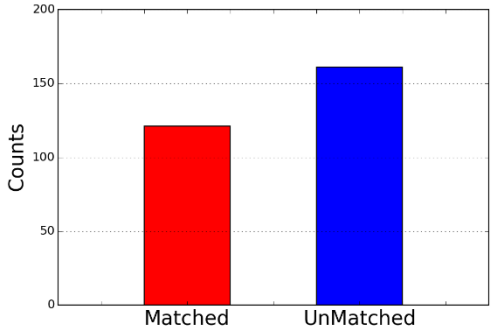


Figure B. 881: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

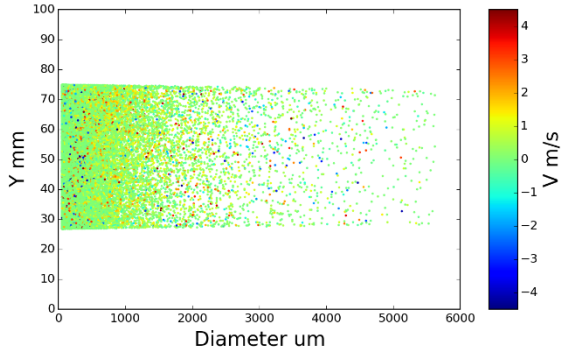


Figure B. 884: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

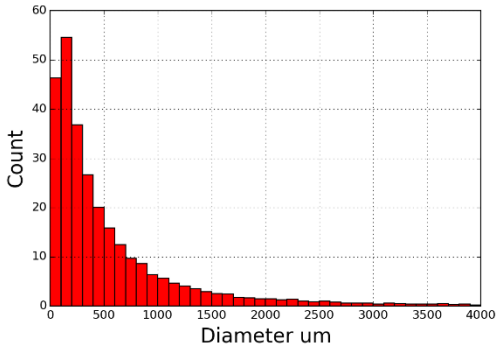


Figure B. 882: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

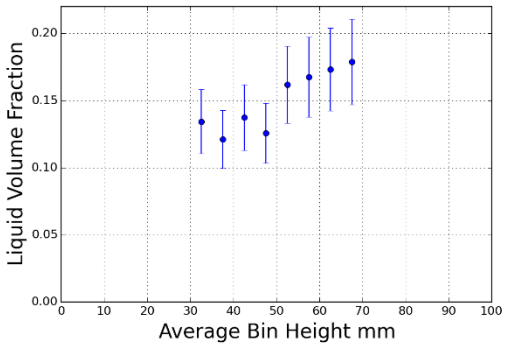


Figure B. 885: Void Fraction R-123 40F 10000Btu 30000Lb Tri

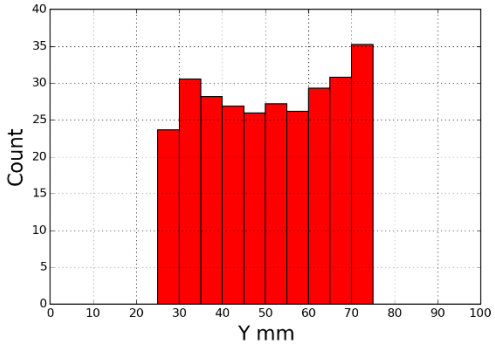


Figure B. 883: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.2.1 All Droplets for .LB Image

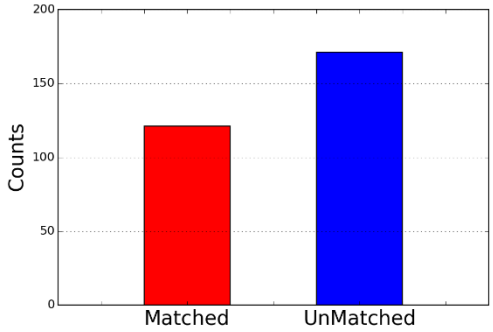


Figure B. 886: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

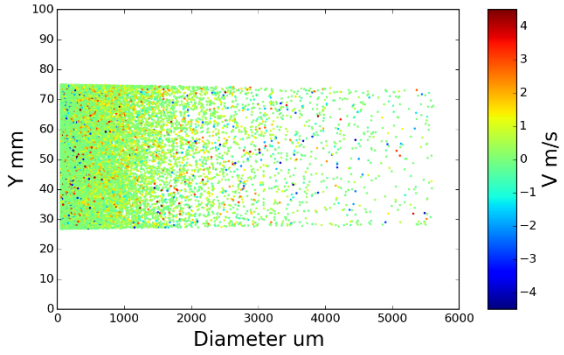


Figure B. 889: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

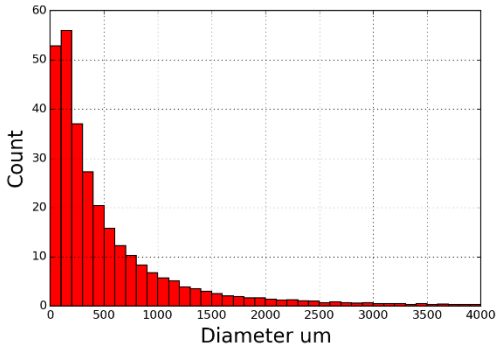


Figure B. 887: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

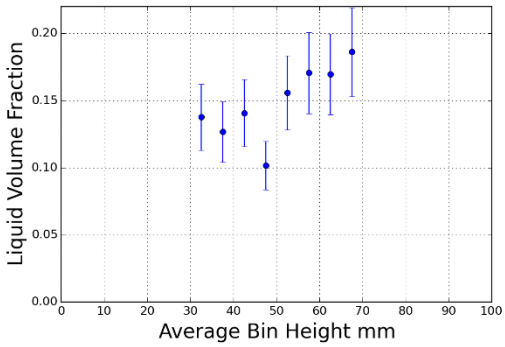


Figure B. 890: Void Fraction R-123 40F 10000Btu 30000Lb Tri

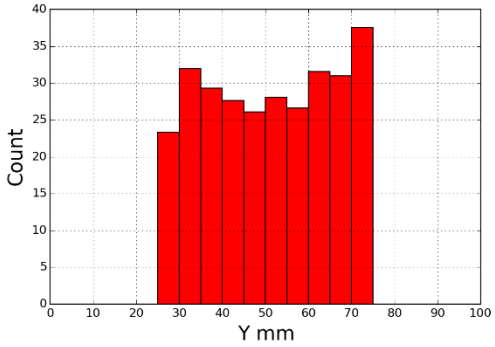


Figure B. 888: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.2.1 Matched Only Droplets for .LA Image

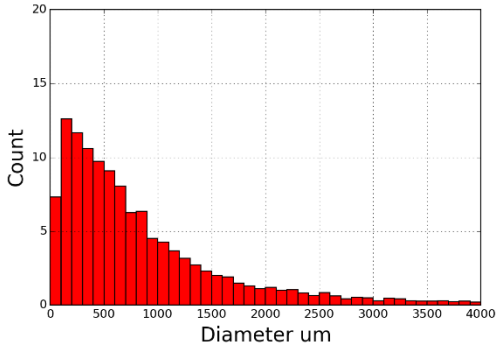


Figure B. 891: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

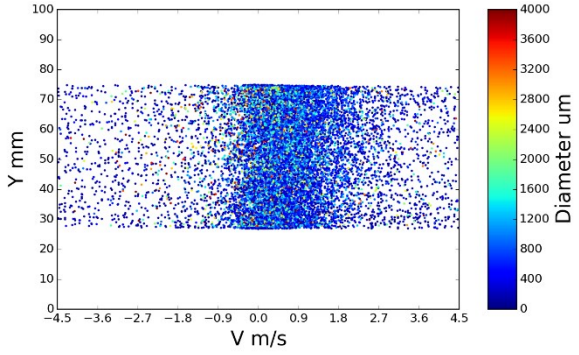


Figure B. 894: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

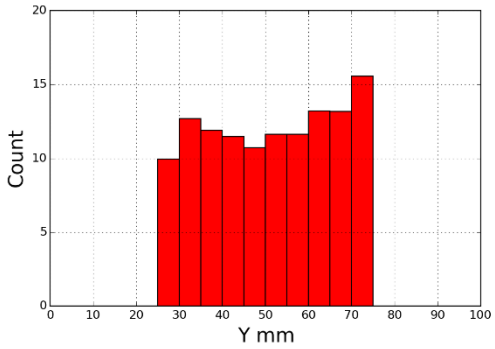


Figure B. 892: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

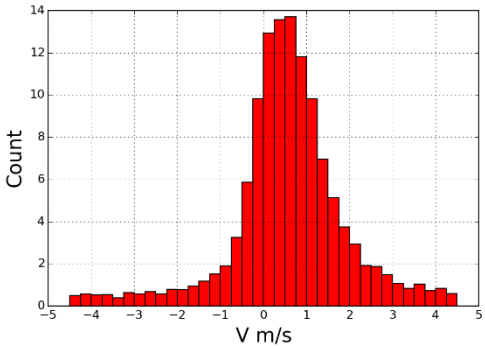


Figure B. 895: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

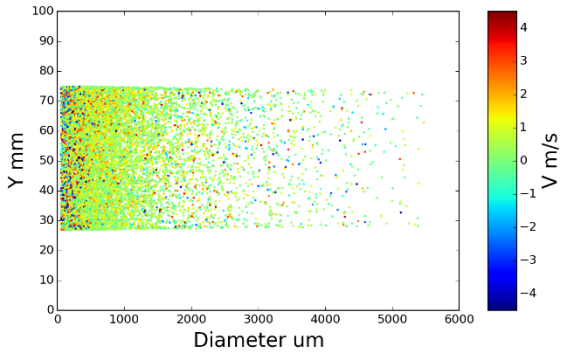


Figure B. 893: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.2.1 Matched Only Droplets for .LB Image

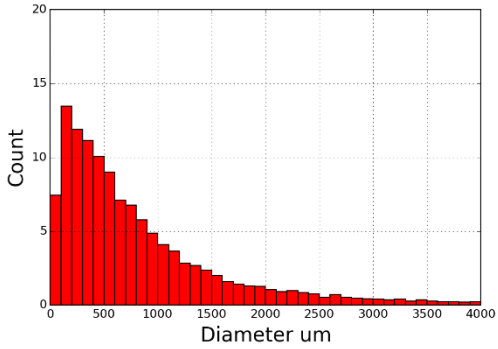


Figure B. 896: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

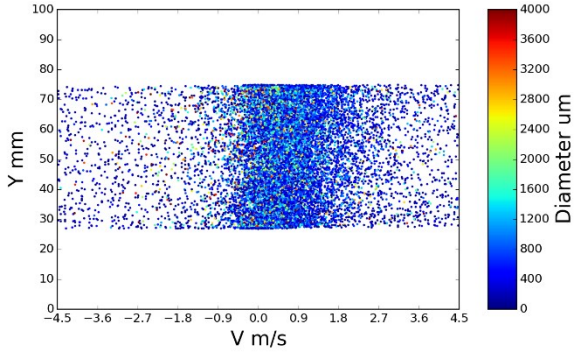


Figure B. 899: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

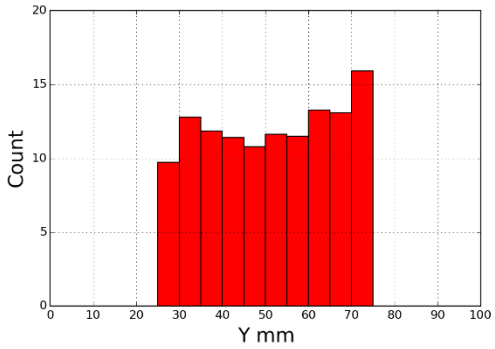


Figure B. 897: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

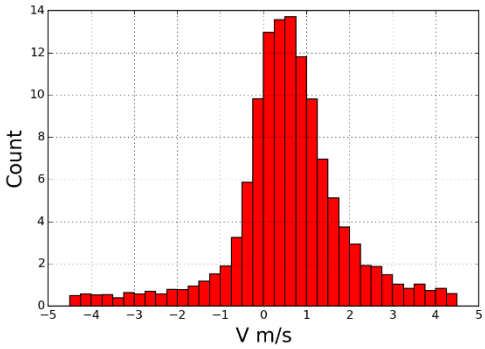


Figure B. 900: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

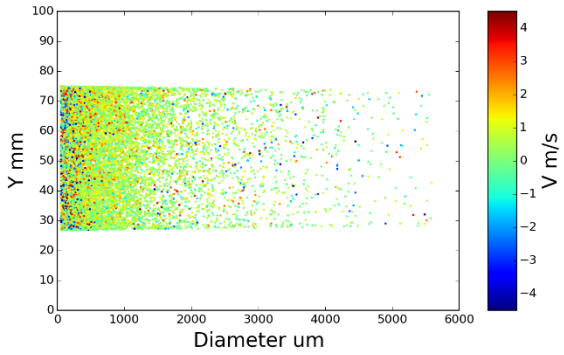


Figure B. 898: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.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	40.8	41.64	57.2	5623	717.5	989.6	57.2	5557	661.3	940.7
40-60mm	49.32	57.59	57.2	5626	782.4	1030	57.2	5614	694.9	995.5
60-80mm	40.97	45.92	57.2	5617	837.4	1079	57.2	5507	753.2	1043
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	132.52	146.49	57.2	5626	779.4	1034	57.2	5614	703.7	996.2
			Height A (mm)				Height B (mm)			
Highest Particle			74.8586				74.8480			
Lowest Particle			26.8964				26.8964			

Table B. 99: 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	14.33	57.2	5231	1218	1062	57.2	5471	1193	1068	-4.470	4.420	-0.010	1.300	-4.470	4.450	0.570	1.330
40-60mm	18.33	57.2	5626	1336	1128	57.2	5614	1299	1128	-4.470	4.470	0.010	1.240	-4.460	4.470	0.620	1.350
60-80mm	16.26	57.2	5389	1395	1139	57.2	5507	1371	1150	-4.470	4.470	-0.060	1.200	-4.460	4.470	0.570	1.240
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	48.92	57.2	5626	1321	1115	57.2	5614	1292	1121	-4.470	4.470	-0.020	1.240	-4.470	4.470	0.590	1.310

Table B. 100: Matched Droplet Info

B.3.2.1 All Droplets for .LA Image

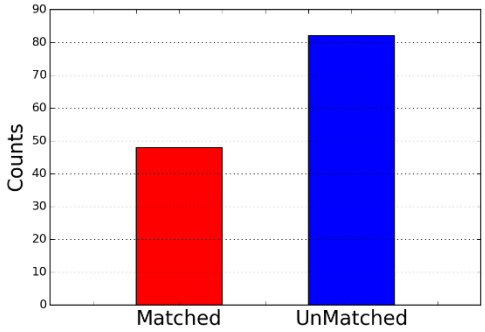


Figure B. 901: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

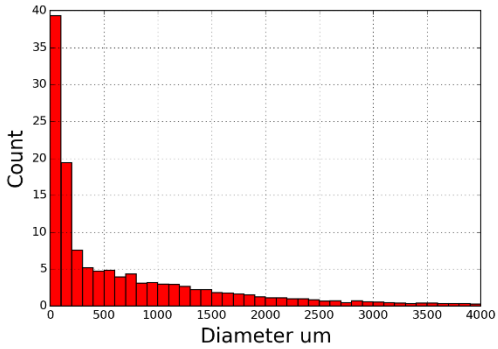


Figure B. 902: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

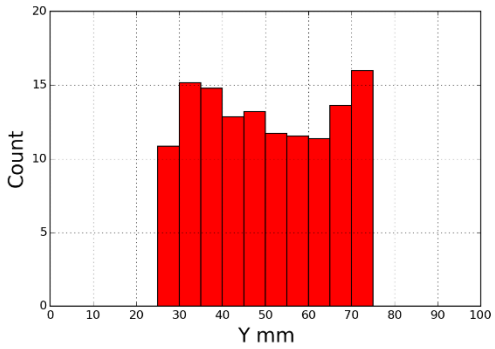


Figure B. 903: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

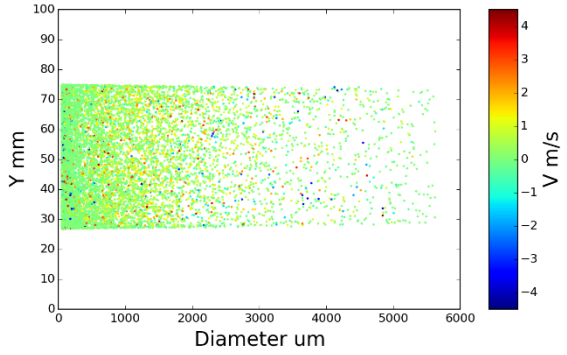


Figure B. 904: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

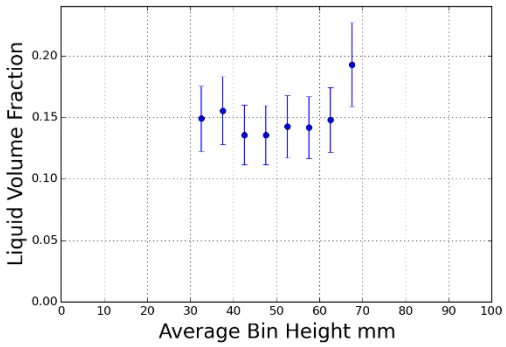


Figure B. 905: Void Fraction R-123 40F 10000Btu 30000Lb Tri

B.3.2.1 All Droplets for .LB Image

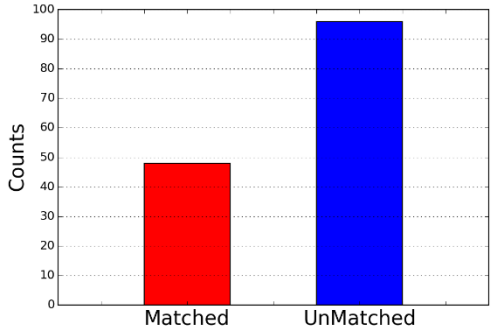


Figure B. 906: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

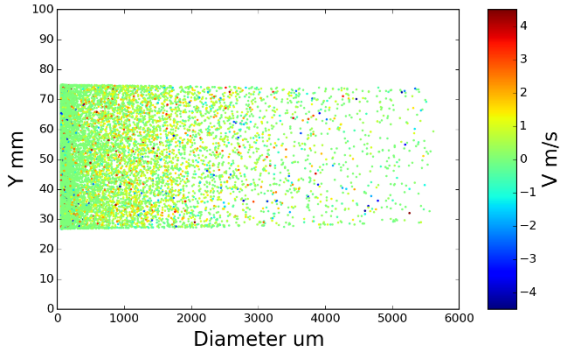


Figure B. 909: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

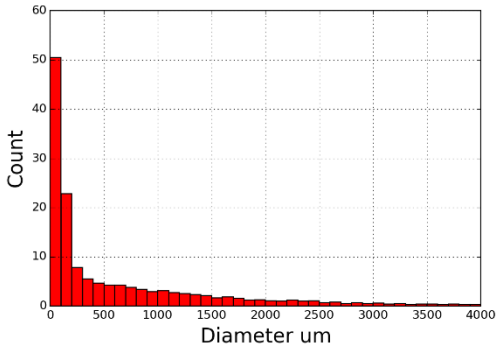


Figure B. 907: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

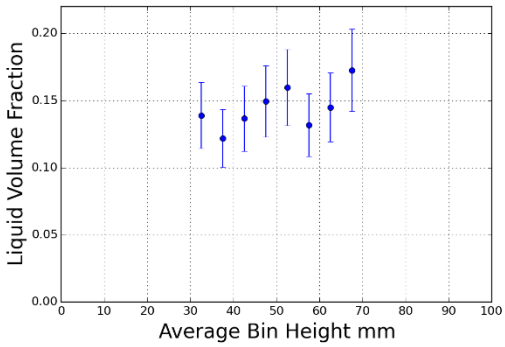


Figure B. 910: Void Fraction R-123 40F 10000Btu 30000Lb Tri

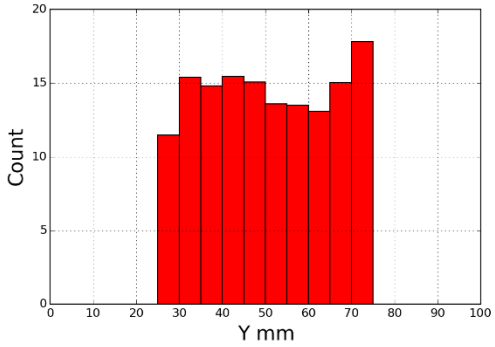


Figure B. 908: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.2.1 Matched Only Droplets for .LA Image

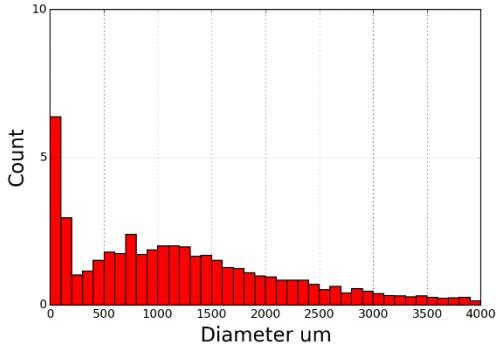


Figure B. 911: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

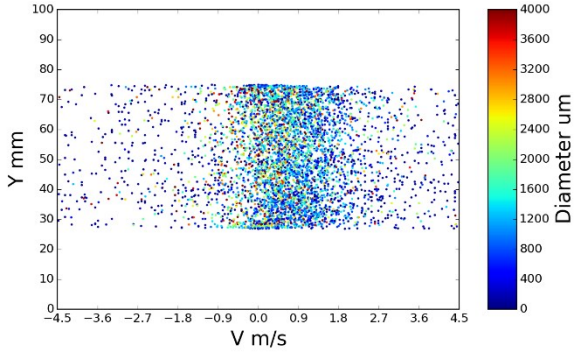


Figure B. 914: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

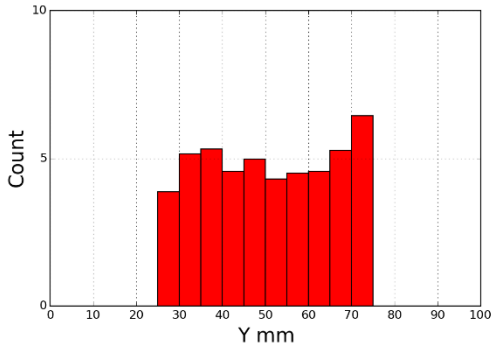


Figure B. 912: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

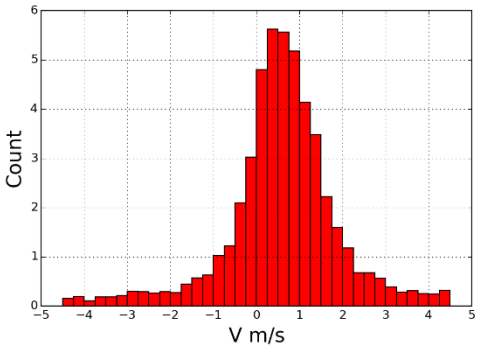


Figure B. 915: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

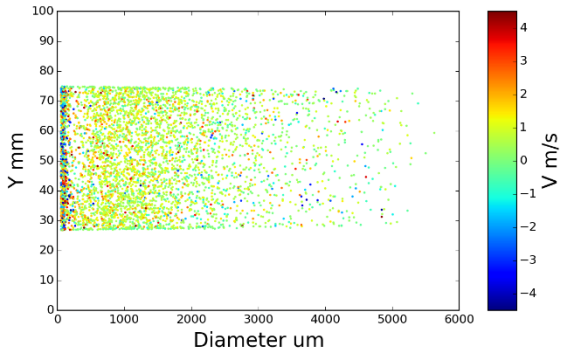


Figure B. 913: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.2.1 Matched Only Droplets for .LB Image

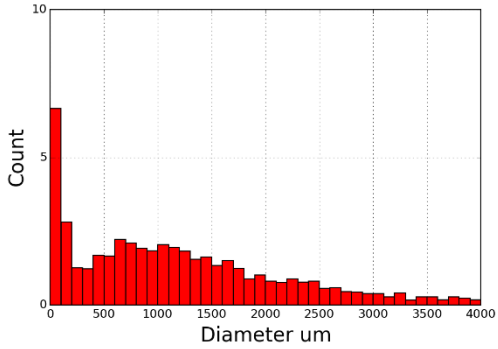


Figure B. 916: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

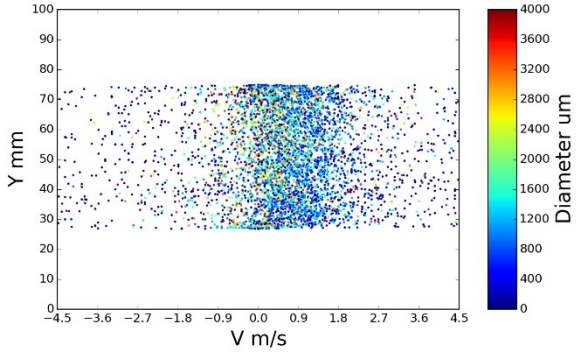


Figure B. 919: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

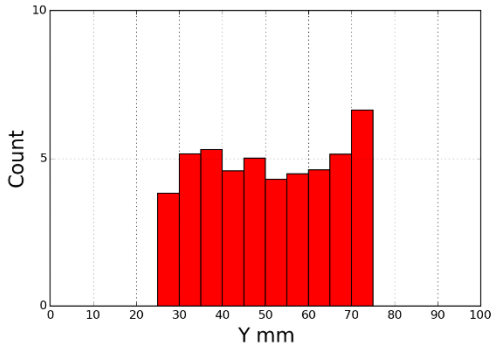


Figure B. 917: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

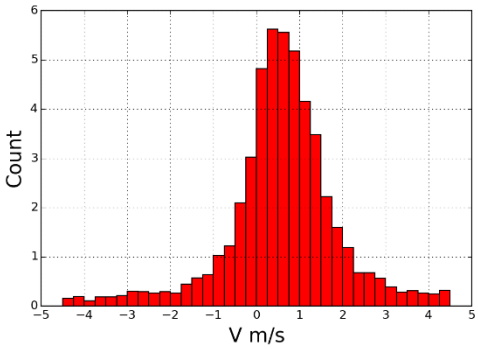


Figure B. 920: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

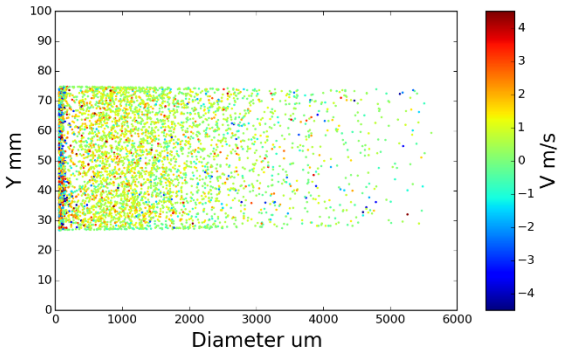


Figure B. 918: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.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	32.14	38.64	57.2	5479	550.2	967.1	57.2	5585	476.8	896.0
40-60mm	44.2	57.08	57.2	5576	585.0	1034	57.2	5586	468.5	923.2
60-80mm	40.7	48.22	57.2	5622	598.1	1045	57.2	5592	515.7	977.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	119.86	147.7	57.2	5622	580.0	1020	57.2	5592	486.5	935.0
			Height A (mm)				Height B (mm)			
Highest Particle			74.8586				74.8477			
Lowest Particle			26.8964				26.8964			

Table B. 101: 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	9.51	57.2	5245	1116	1221	57.2	5329	1085	1210	-4.470	4.470	-0.030	1.770	-4.410	4.470	0.420	1.790
40-60mm	13.71	57.2	5374	1091	1282	57.2	5584	1072	1285	-4.470	4.470	0.020	1.770	-4.470	4.470	0.390	1.850
60-80mm	12.0	57.2	5307	1169	1281	57.2	5592	1138	1280	-4.470	4.460	-0.110	1.760	-4.470	4.470	0.350	1.740
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	35.22	57.2	5374	1124	1266	57.2	5592	1098	1264	-4.470	4.470	-0.040	1.770	-4.470	4.470	0.380	1.800

Table B. 102: Matched Droplet Info

B.3.2.1 All Droplets for .LA Image

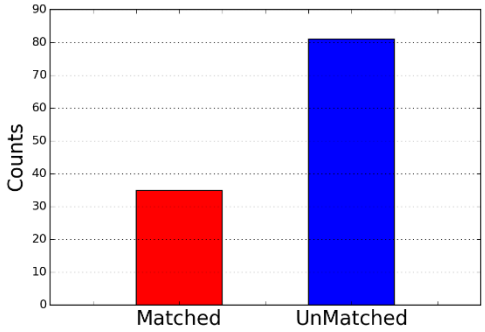


Figure B. 921: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

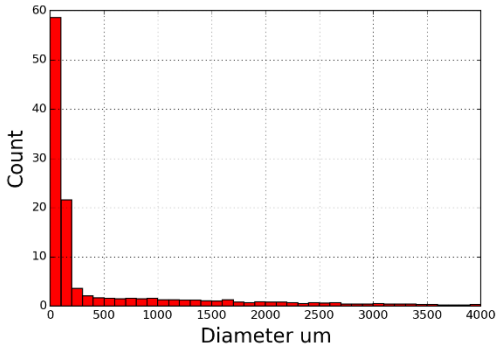


Figure B. 922: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

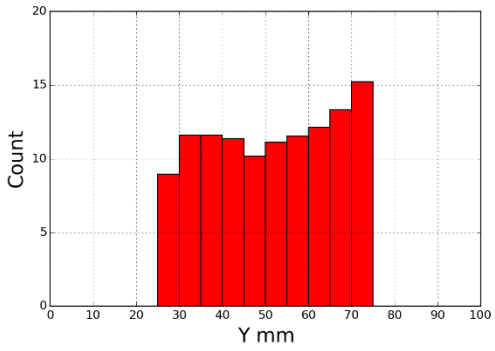


Figure B. 923: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

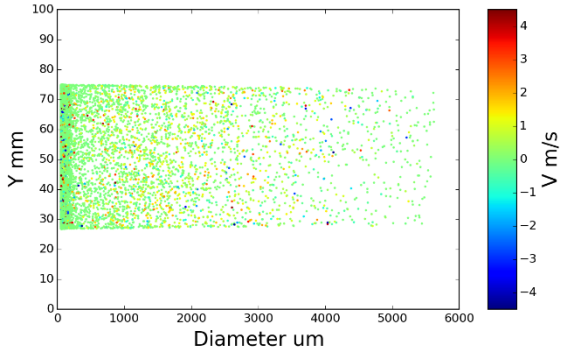


Figure B. 924: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

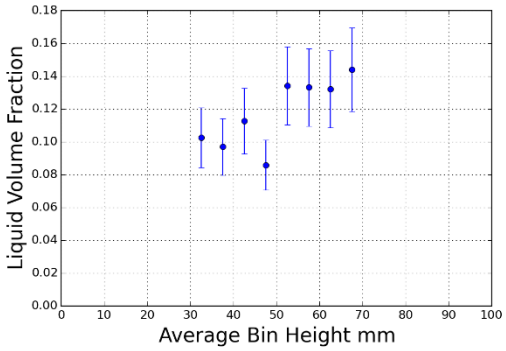


Figure B. 925: Void Fraction R-123 40F 10000Btu 30000Lb Tri

B.3.2.1 All Droplets for .LB Image

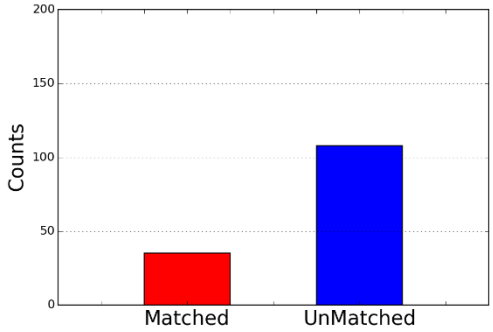


Figure B. 926: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

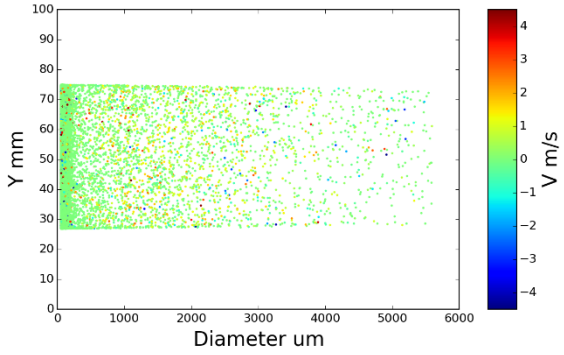


Figure B. 929: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

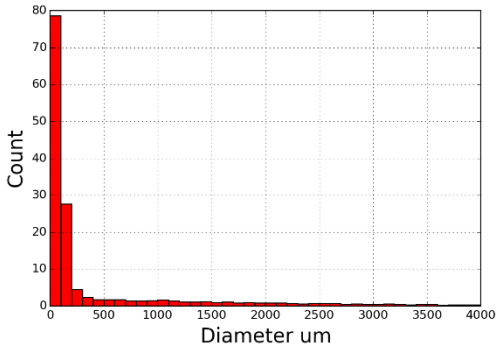


Figure B. 927: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

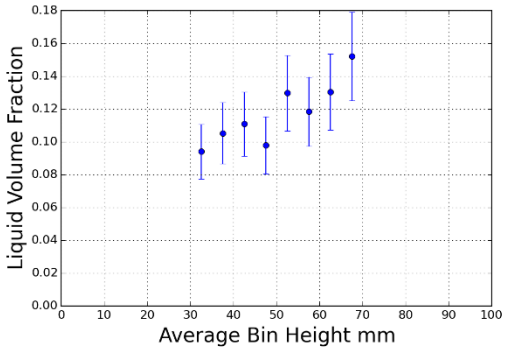


Figure B. 930: Void Fraction R-123 40F 10000Btu 30000Lb Tri

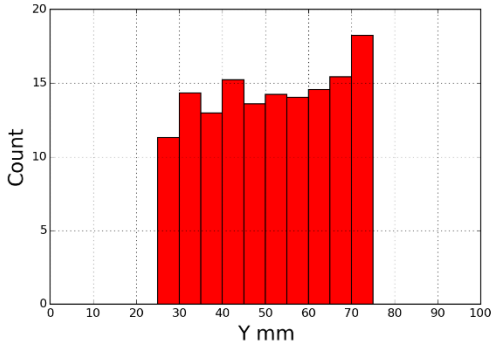


Figure B. 928: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.2.1 Matched Only Droplets for .LA Image

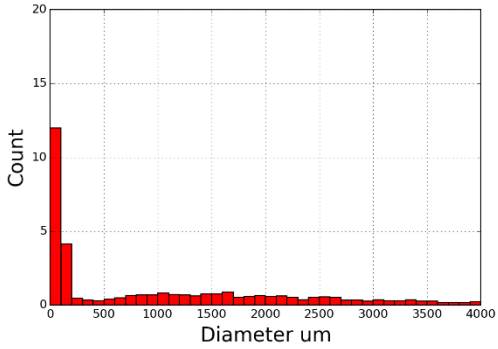


Figure B. 931: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

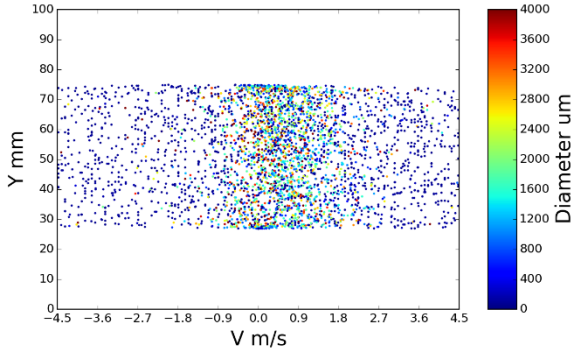


Figure B. 934: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

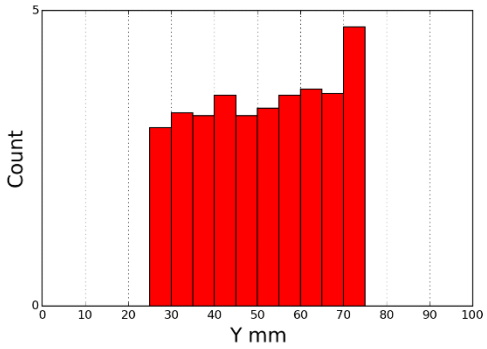


Figure B. 932: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

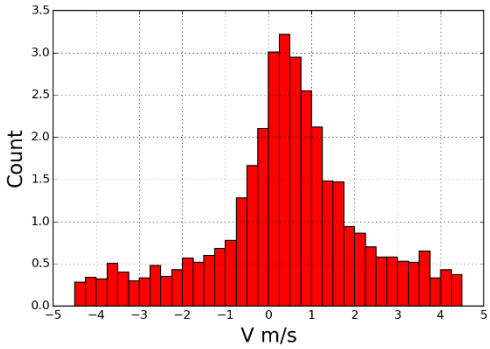


Figure B. 935: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

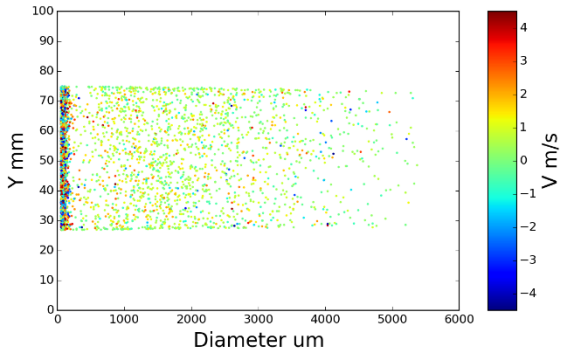


Figure B. 933: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.2.1 Matched Only Droplets for .LB Image

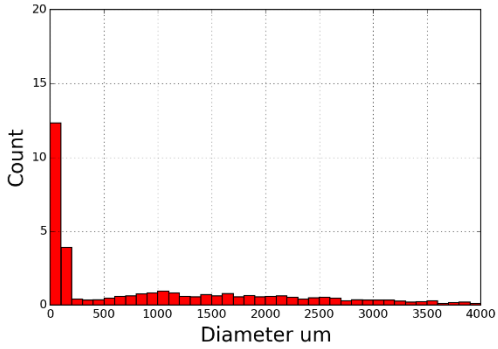


Figure B. 936: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

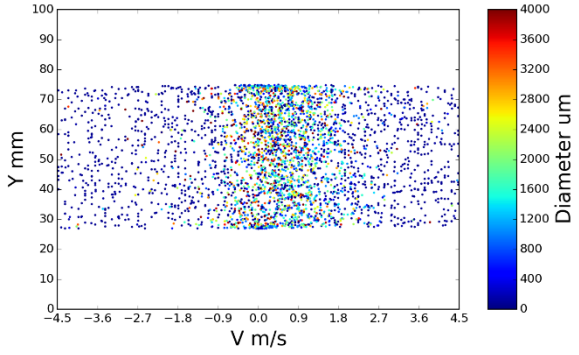


Figure B. 939: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

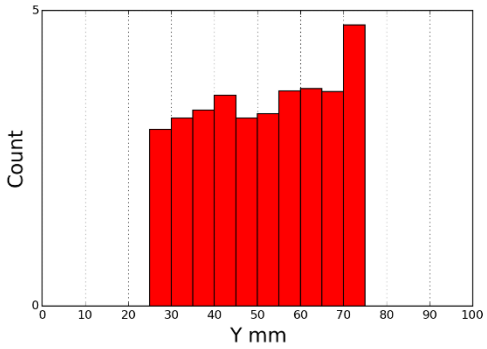


Figure B. 937: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

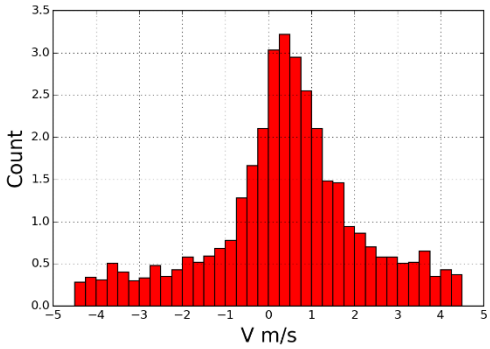


Figure B. 940: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

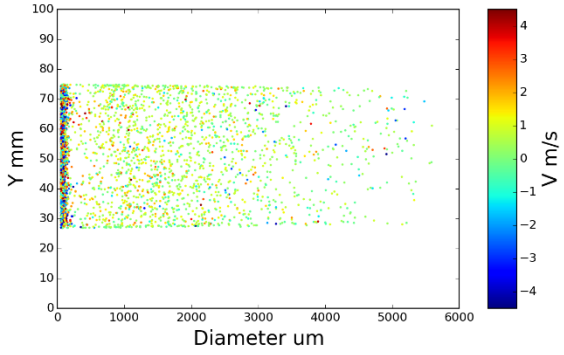


Figure B. 938: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.2.2 Lens 50mm Mag 0_13x

B.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	104.65	103.89	128.7	5650	632.4	654.6	128.7	5644	635.1	665.3
40-60mm	96.39	94.98	128.7	5695	667.6	690.5	128.7	5599	654.0	670.6
60-80mm	108.29	108.75	128.7	5683	688.4	720.1	128.7	5666	679.2	705.1
80-100mm	124.43	123.92	128.7	5672	686.6	666.2	128.7	5685	685.7	675.2
All	434.82	432.45	128.7	5695	668.9	682.8	128.7	5685	664.1	679.5
			Height A (mm)				Height B (mm)			
Highest Particle			100.0306				100.0306			
Lowest Particle			20.1316				20.1316			

Table B. 103: 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	45.68	128.7	5224	771.5	718.9	128.7	5286	751.4	721.4	-4.390	4.390	-0.210	1.830	-4.390	4.390	0.340	1.870
40-60mm	42.04	128.7	5330	794.3	730.2	128.7	5417	769.7	725.1	-4.390	4.390	-0.190	1.780	-4.390	4.390	0.420	1.840
60-80mm	48.6	128.7	5460	832.1	754.9	128.7	5666	812.0	759.8	-4.390	4.390	-0.070	1.750	-4.390	4.390	0.390	1.830
80-100mm	60.84	128.7	5435	851.8	731.6	128.7	5685	835.1	736.7	-4.390	4.390	-0.180	1.620	-4.390	4.390	0.400	1.720
All	197.28	128.7	5460	815.7	734.8	128.7	5685	795.8	737.2	-4.390	4.390	-0.160	1.740	-4.390	4.390	0.390	1.810

Table B. 104: Matched Droplet Info

B.3.2.2 All Droplets for .LA Image

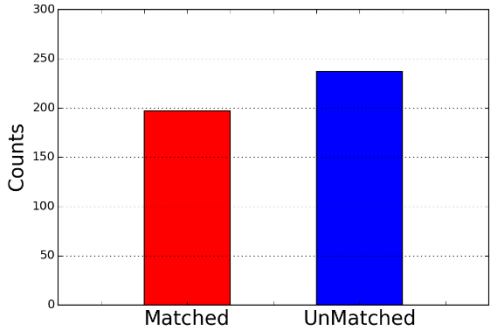


Figure B. 941: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

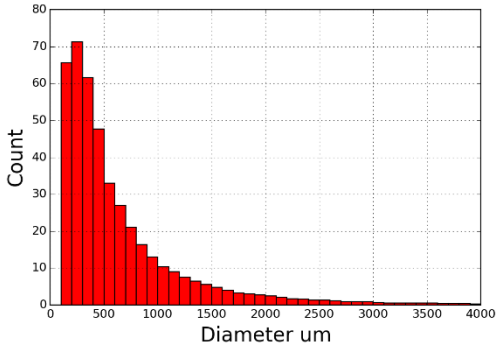


Figure B. 942: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

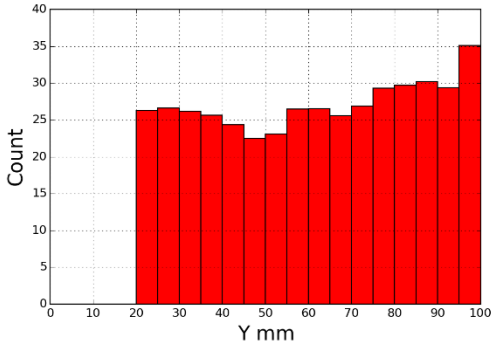


Figure B. 943: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

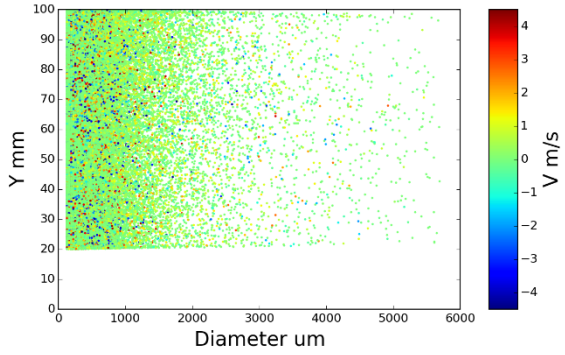


Figure B. 944: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

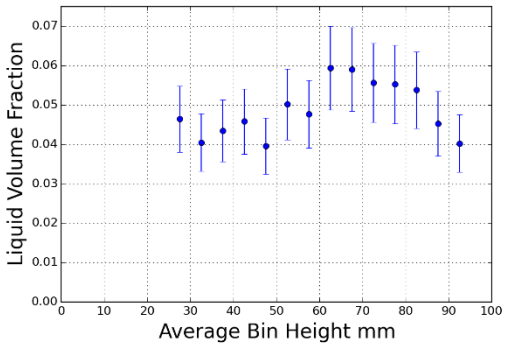


Figure B. 945: Void Fraction R-123 40F 10000Btu 30000Lb Tri

B.3.2.2 All Droplets for .LB Image

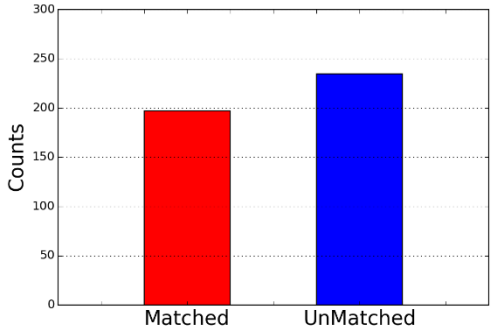


Figure B. 946: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

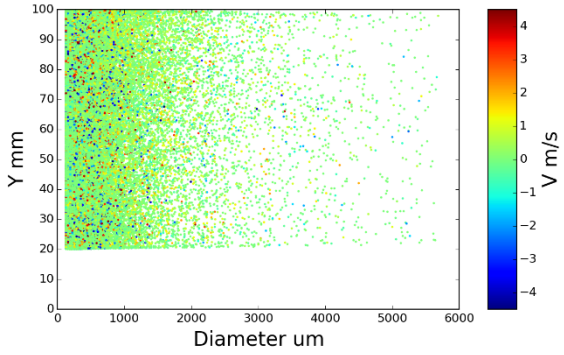


Figure B. 949: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

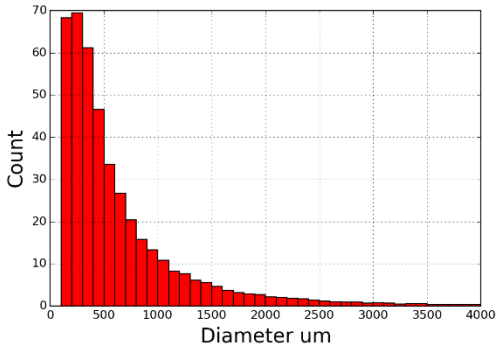


Figure B. 947: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

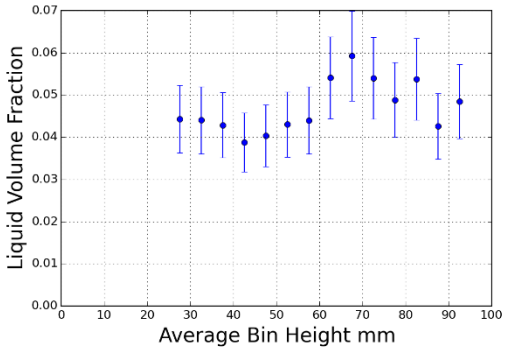


Figure B. 950: Void Fraction R-123 40F 10000Btu 30000Lb Tri

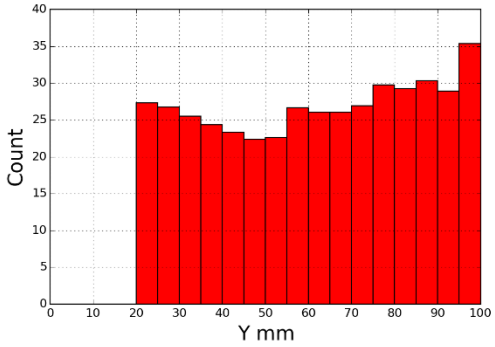


Figure B. 948: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.2.2 Matched Only Droplets for .LA Image

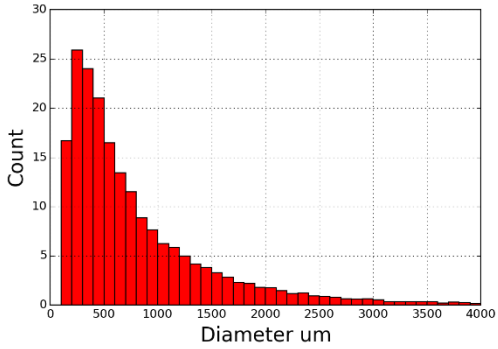


Figure B. 951: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

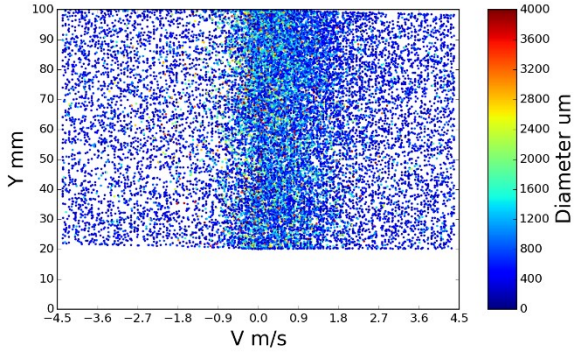


Figure B. 954: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

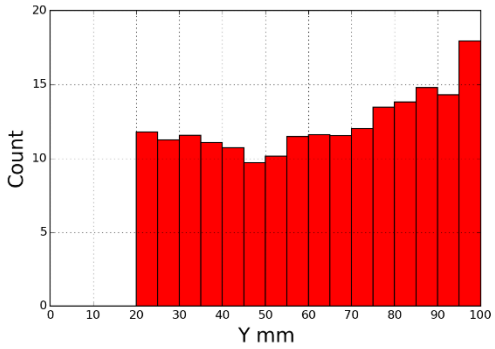


Figure B. 952: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

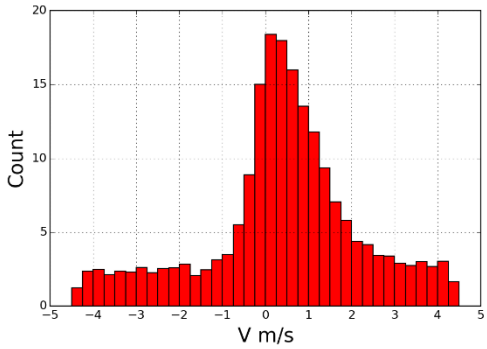


Figure B. 955: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

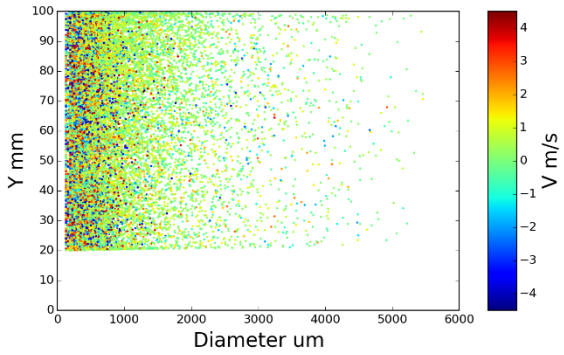


Figure B. 953: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.2.2 Matched Only Droplets for .LB Image

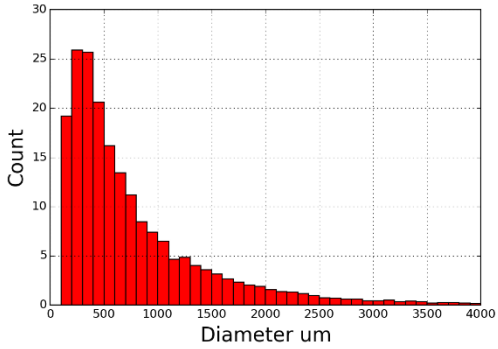


Figure B. 956: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

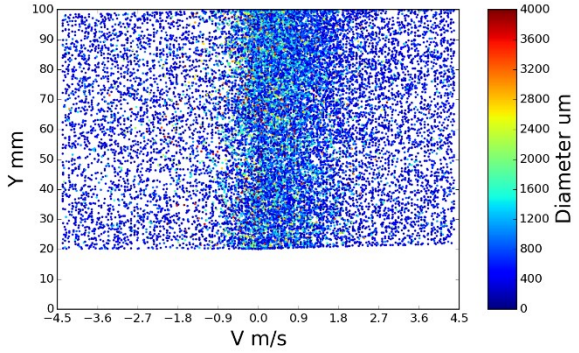


Figure B. 959: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

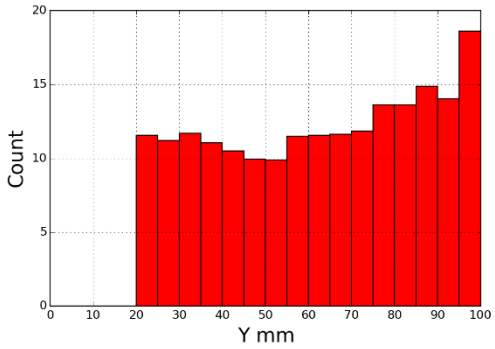


Figure B. 957: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

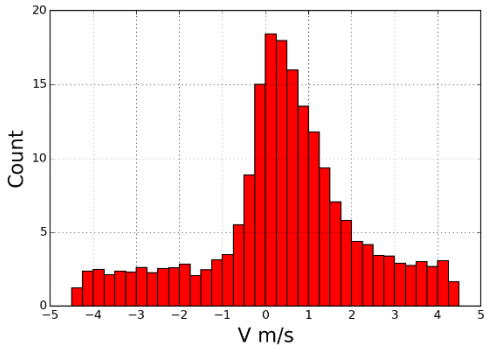


Figure B. 960: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

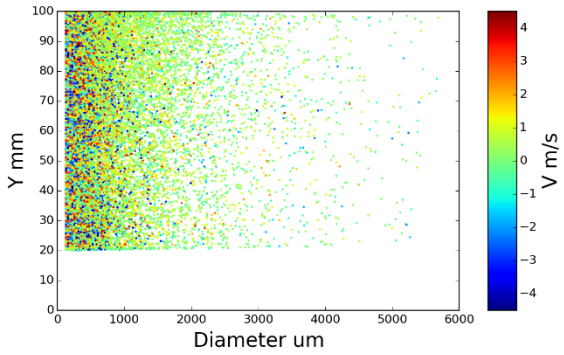


Figure B. 958: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.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	51.34	51.22	128.7	5642	856.4	864.5	128.7	5666	862.8	883.8
40-60mm	45.67	45.9	128.7	5690	962.2	964.8	128.7	5675	959.4	967.5
60-80mm	59.41	61.2	128.7	5614	939.1	944.6	128.7	5696	920.3	927.4
80-100mm	75.1	76.42	128.7	5684	877.8	818.1	128.7	5698	860.9	791.4
All	231.85	235.16	128.7	5690	904.5	892.6	128.7	5698	895.0	884.7
			Height A (mm)				Height B (mm)			
Highest Particle			100.0306				100.0306			
Lowest Particle			20.1316				20.1316			

Table B. 105: 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	20.19	128.7	5642	1167	951.1	128.7	5666	1136	956.3	-4.390	4.390	-0.100	1.510	-4.390	4.380	0.400	1.520
40-60mm	18.84	128.7	5510	1303	998.4	128.7	5675	1283	1015	-4.390	4.390	-0.040	1.380	-4.390	4.390	0.480	1.440
60-80mm	25.29	128.7	5310	1255	987.7	128.7	5696	1233	993.9	-4.390	4.380	-0.080	1.360	-4.380	4.390	0.430	1.490
80-100mm	35.83	128.7	5272	1137	849.2	128.7	5526	1113	856.4	-4.390	4.390	-0.090	1.330	-4.390	4.350	0.460	1.450
All	100.22	128.7	5642	1203	937.4	128.7	5696	1179	945.5	-4.390	4.390	-0.080	1.380	-4.390	4.390	0.450	1.470

Table B. 106: Matched Droplet Info

B.3.2.2 All Droplets for .LA Image

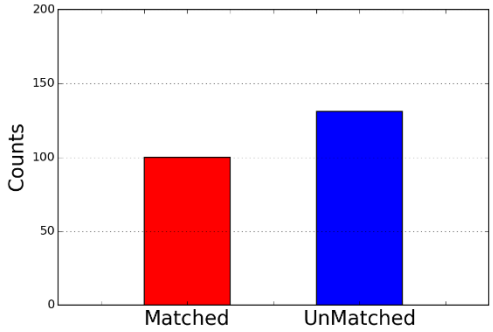


Figure B. 961: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

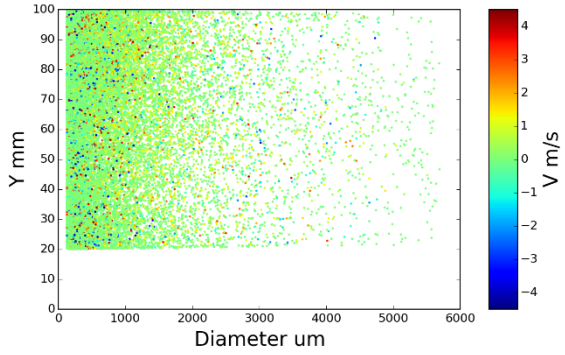


Figure B. 964: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

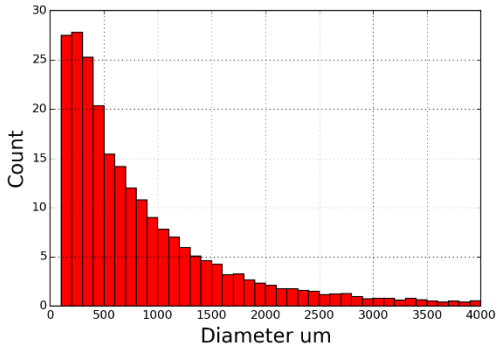


Figure B. 962: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

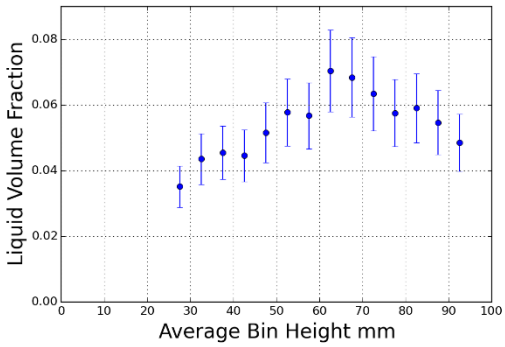


Figure B. 965: Void Fraction R-123 40F 10000Btu 30000Lb Tri

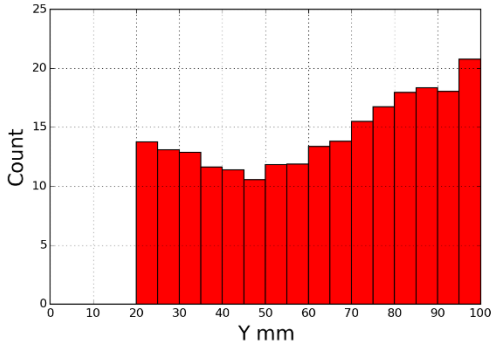


Figure B. 963: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.2.2 All Droplets for .LB Image

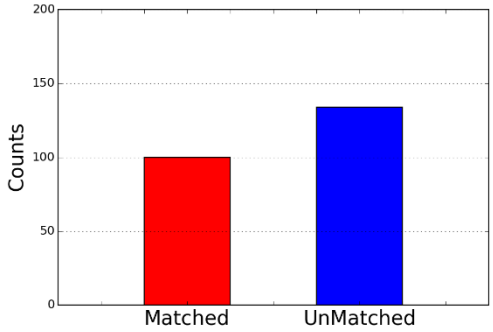


Figure B. 966: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

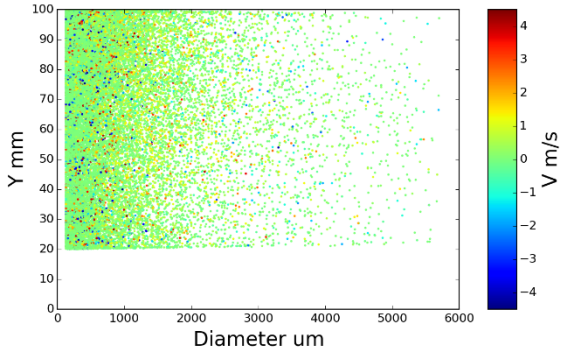


Figure B. 969: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

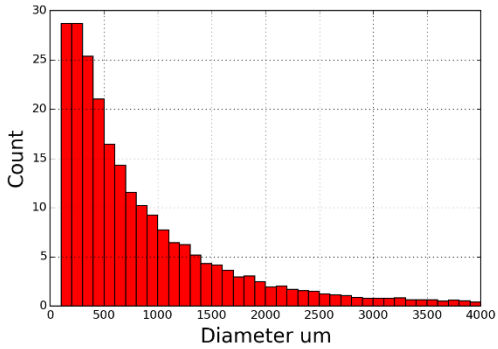


Figure B. 967: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

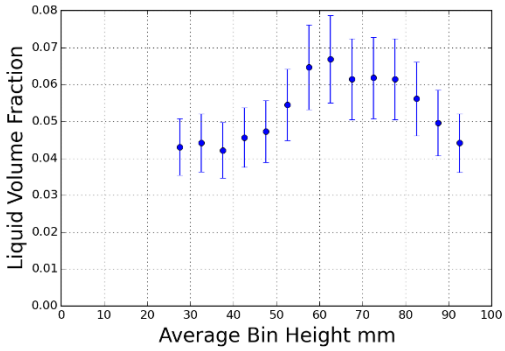


Figure B. 970: Void Fraction R-123 40F 10000Btu 30000Lb Tri

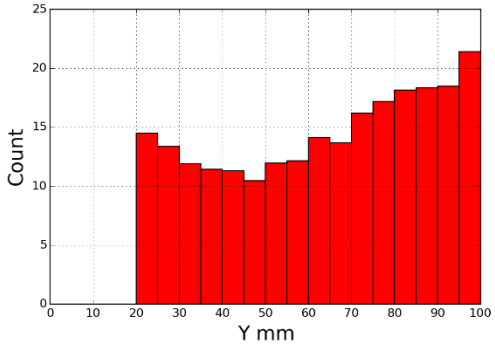


Figure B. 968: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.2.2 Matched Only Droplets for .LA Image

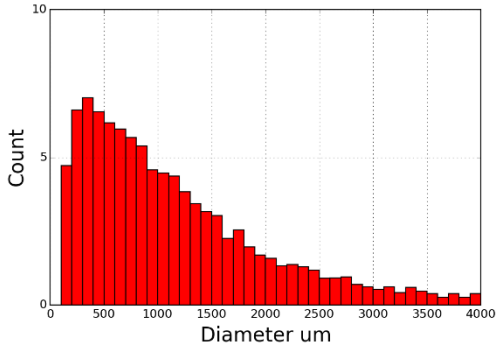


Figure B. 971: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

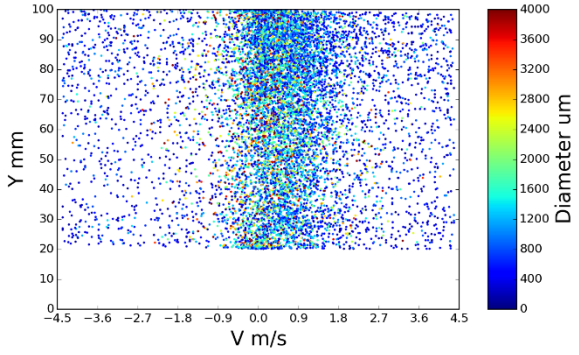


Figure B. 974: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

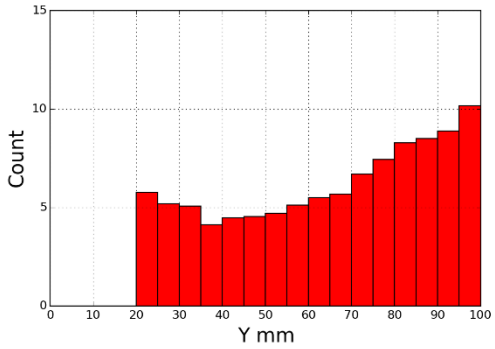


Figure B. 972: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

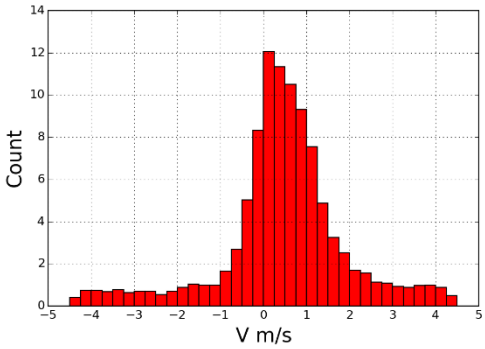


Figure B. 975: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

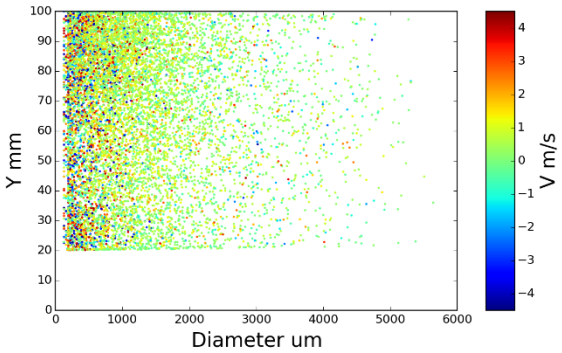


Figure B. 973: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.2.2 Matched Only Droplets for .LB Image

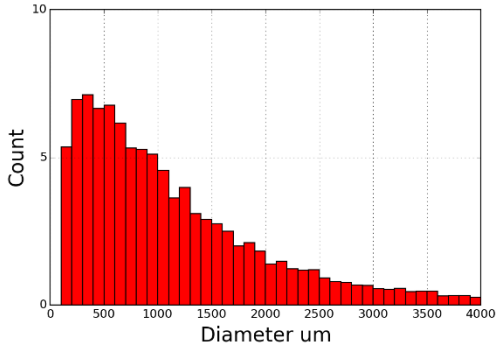


Figure B. 976: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

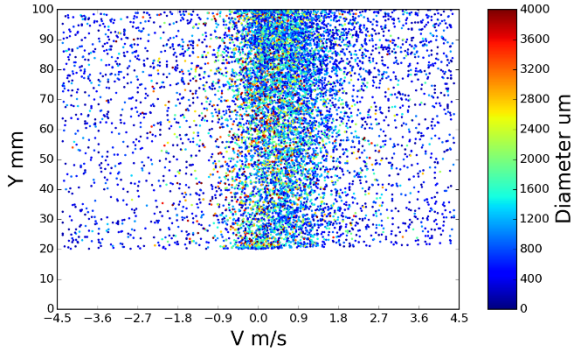


Figure B. 979: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

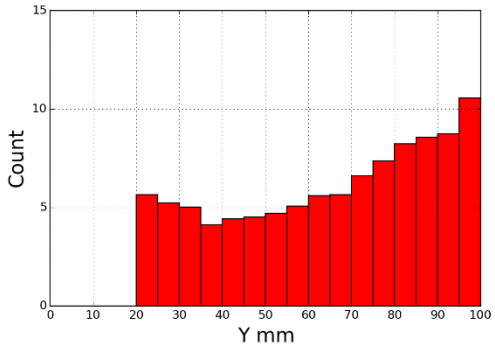


Figure B. 977: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

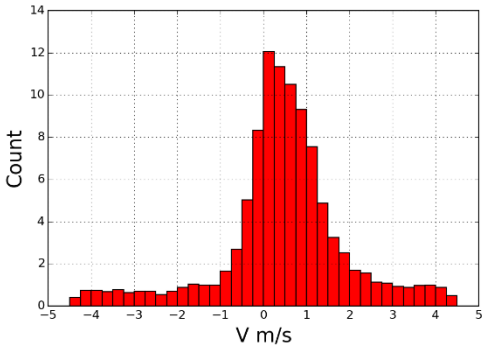


Figure B. 980: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

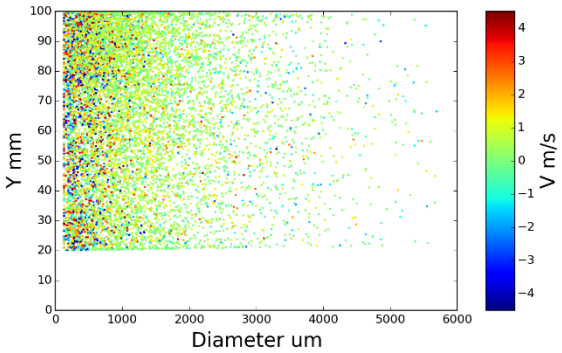


Figure B. 978: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.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	31.73	32.24	128.7	5694	1060	1053	128.7	5694	1059	1082
40-60mm	24.53	25.26	128.7	5678	1291	1193	128.7	5618	1290	1195
60-80mm	36.05	35.47	128.7	5694	1126	1104	128.7	5670	1143	1121
80-100mm	46.36	48.34	128.7	5683	1011	936.7	128.7	5655	997.3	932.4
All	138.88	141.55	128.7	5694	1100	1060	128.7	5694	1099	1070
			Height A (mm)				Height B (mm)			
Highest Particle			100.0062				100.0306			
Lowest Particle			20.1316				20.1316			

Table B. 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	11.43	128.7	5564	1542	1142	128.7	5627	1517	1156	-4.370	4.390	0.030	1.160	-4.310	4.380	0.450	1.300
40-60mm	10.18	128.7	5440	1825	1177	128.7	5577	1783	1202	-4.350	4.380	0.000	1.030	-4.340	4.370	0.440	1.200
60-80mm	14.08	128.7	5692	1638	1158	128.7	5670	1604	1164	-4.310	4.390	-0.050	1.230	-4.360	4.310	0.420	1.310
80-100mm	20.99	128.7	5548	1397	983.4	128.7	5655	1362	992.2	-4.370	4.390	-0.110	1.150	-4.350	4.390	0.420	1.250
All	56.72	128.7	5692	1562	1108	128.7	5670	1528	1119	-4.370	4.390	-0.050	1.150	-4.360	4.390	0.430	1.270

Table B. 108: Matched Droplet Info

B.3.2.2 All Droplets for .LA Image

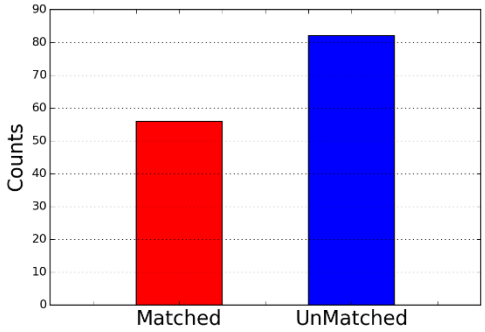


Figure B. 981: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

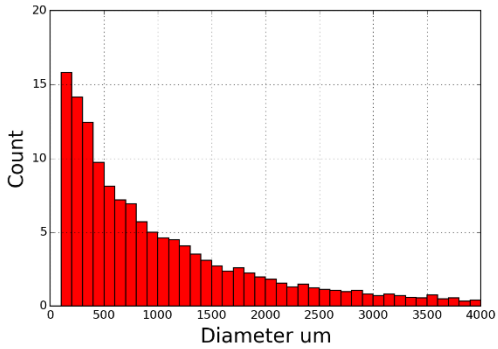


Figure B. 982: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

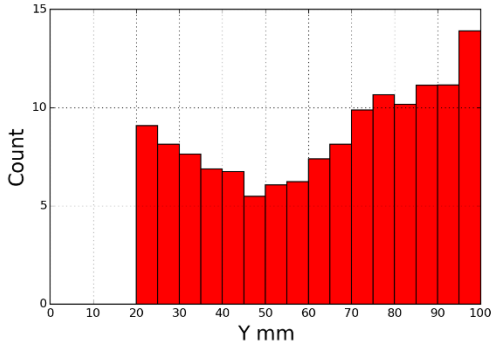


Figure B. 983: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

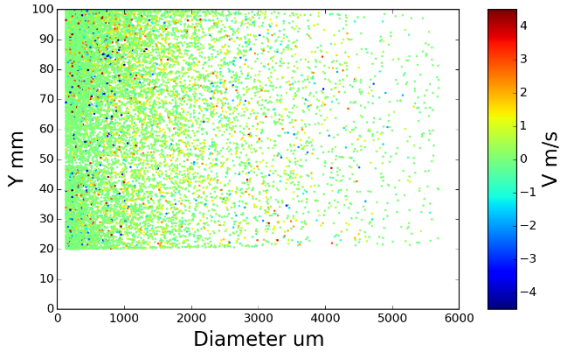


Figure B. 984: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

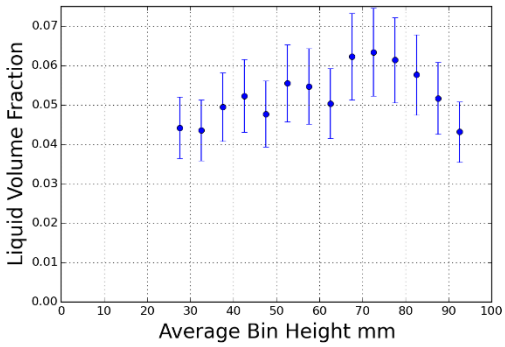


Figure B. 985: Void Fraction R-123 40F 10000Btu 30000Lb Tri

B.3.2.2 All Droplets for .LB Image

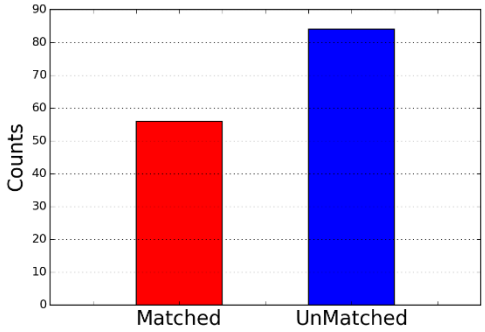


Figure B. 986: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

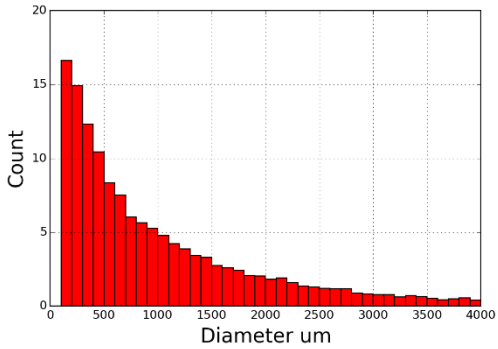


Figure B. 987: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

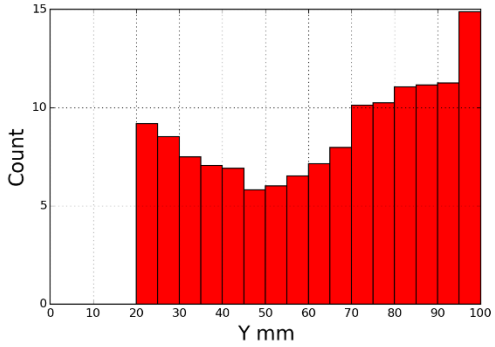


Figure B. 988: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

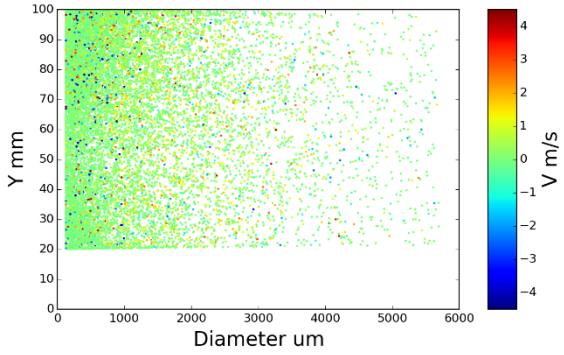


Figure B. 989: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

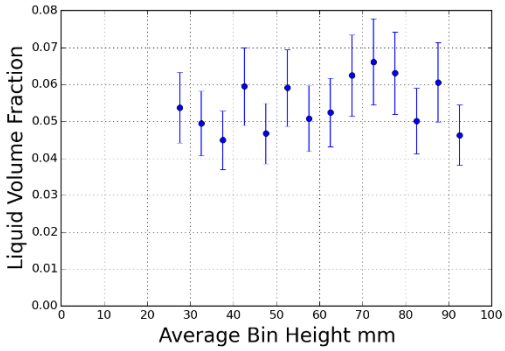


Figure B. 990: Void Fraction R-123 40F 10000Btu 30000Lb Tri

B.3.2.2 Matched Only Droplets for .LA Image

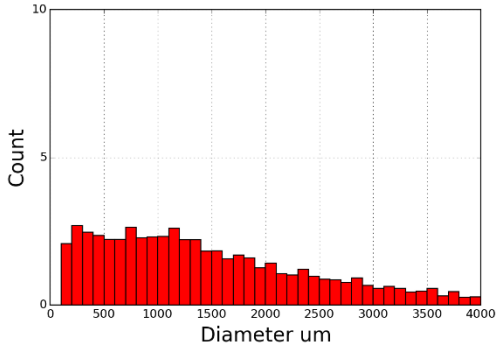


Figure B. 991: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

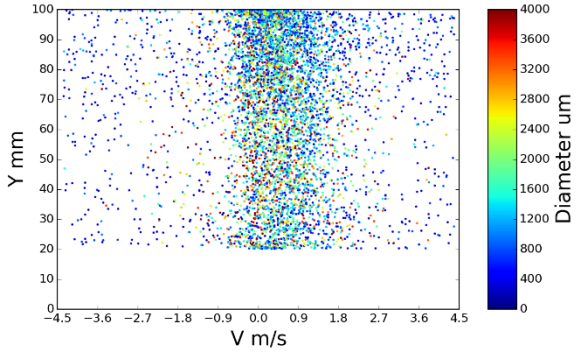


Figure B. 994: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

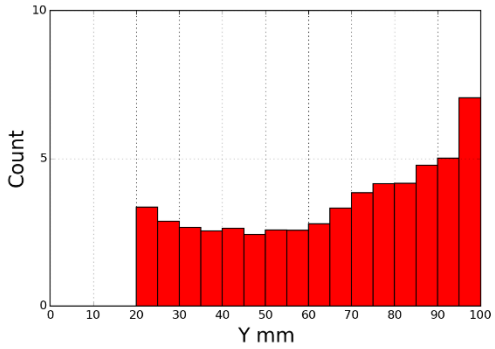


Figure B. 992: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

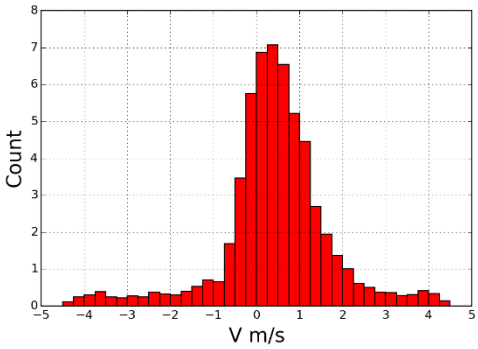


Figure B. 995: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

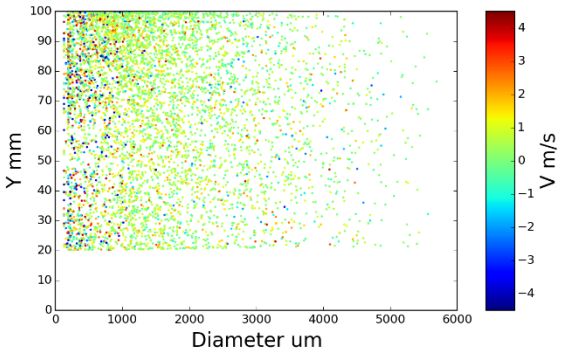


Figure B. 993: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.2.2 Matched Only Droplets for .LB Image

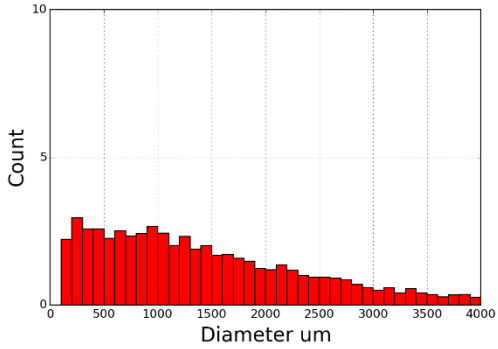


Figure B. 996: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

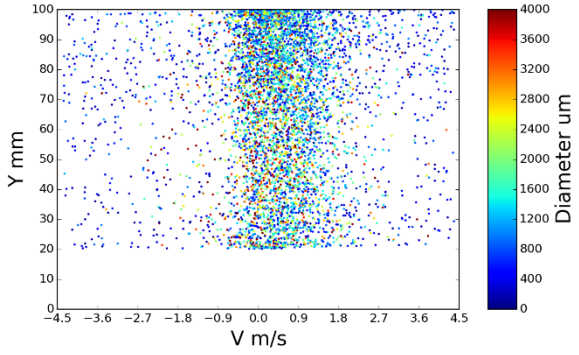


Figure B. 999: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

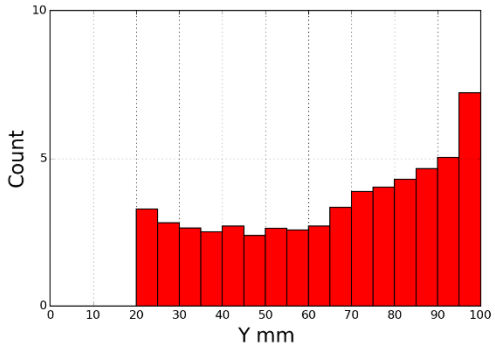


Figure B. 997: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

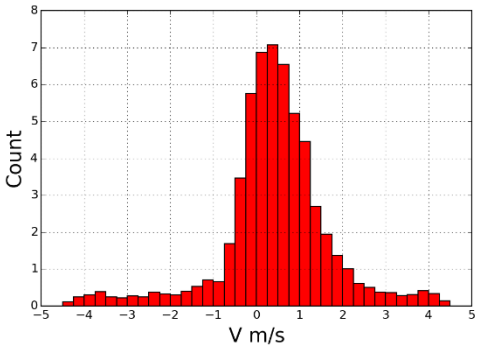


Figure B. 1000: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

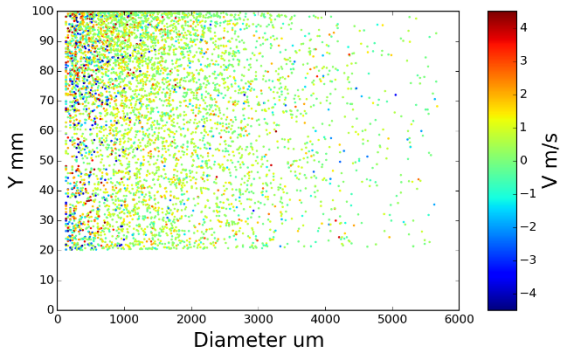


Figure B. 998: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.3 Liquid Level 3

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	22317 / 2.812
Ref Mass Flow (lb/hr) / (kg/s)	2947 / 0.371
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	28686 / 38.905
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	7716 / 24.34
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	39.7 / 4.26
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	42.3 / 5.73
Total Bundle Q (Btu/hr) / (kW)	197513 / 57.89
Total Bundle & Preboiler Q (Btu/hr) / (kW)	197122 / 57.77
Top Two Rows HTC Ratio	0.867
Bundle Inlet Quality	-0.07
Bundle Exit Quality	0.8

Table B. 109: Thermal Conditions

B.3.3.1 Lens 100mm Mag 0_29x

B.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	79.96	85.02	57.2	5573	468.0	767.0	57.2	5621	437.9	747.4
40-60mm	159.16	178.19	57.2	5555	402.2	611.1	57.2	5609	367.2	597.6
60-80mm	104.59	118.15	57.2	5572	388.3	541.6	57.2	5372	360.2	534.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	343.82	381.75	57.2	5573	413.3	632.4	57.2	5621	380.8	617.1
			Height A (mm)				Height B (mm)			
Highest Particle			74.8480				74.8586			
Lowest Particle			26.8964				26.9048			

Table B. 110: 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	29.21	57.2	5339	701.4	899.6	57.2	5536	700.0	924.3	-4.470	4.470	-0.110	1.500	-4.460	4.470	0.750	1.550
40-60mm	65.86	57.2	5401	555.1	703.5	57.2	5609	546.9	715.5	-4.470	4.470	-0.150	1.320	-4.470	4.470	1.340	1.710
60-80mm	46.2	57.2	4810	540.2	636.4	57.2	4859	527.9	635.3	-4.470	4.470	-0.180	1.230	-4.470	4.470	1.510	1.720
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	141.27	57.2	5401	580.4	731.0	57.2	5609	571.8	741.5	-4.470	4.470	-0.150	1.330	-4.470	4.470	1.270	1.710

Table B. 111: Matched Droplet Info

B.3.3.1 All Droplets for .LA Image

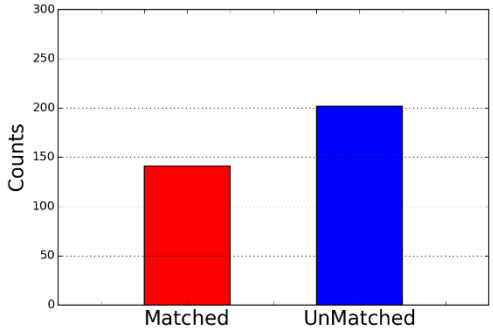


Figure B. 1001: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

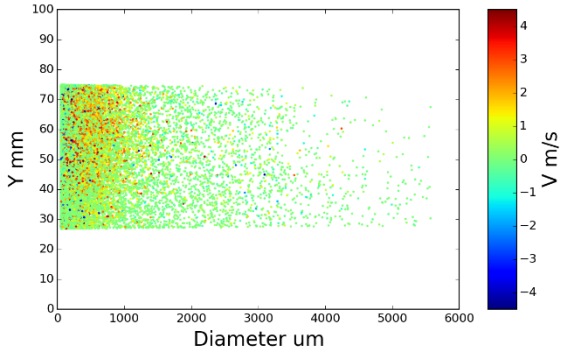


Figure B. 1004: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

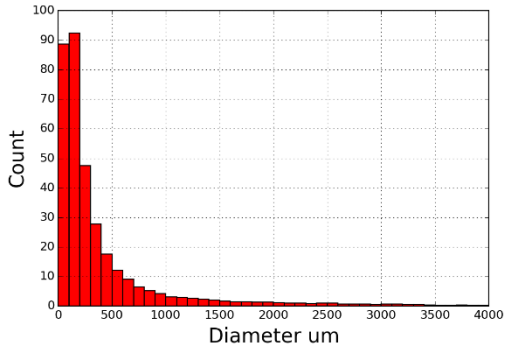


Figure B. 1002: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

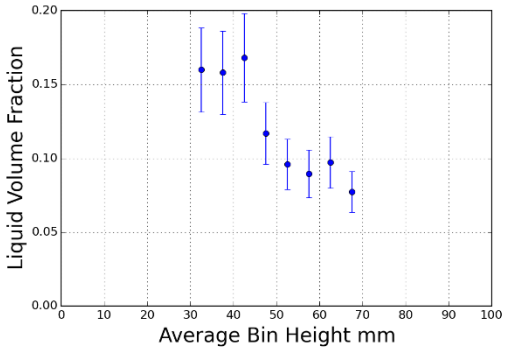


Figure B. 1005: Void Fraction R-123 40F 10000Btu 30000Lb Tri

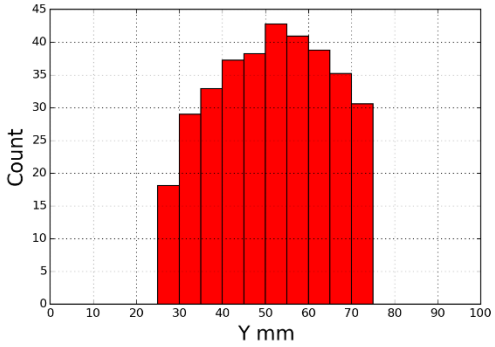


Figure B. 1003: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.3.1 All Droplets for .LB Image

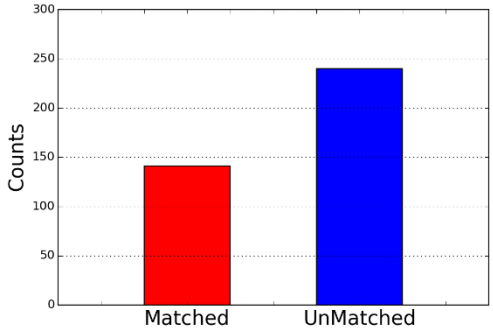


Figure B. 1006: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

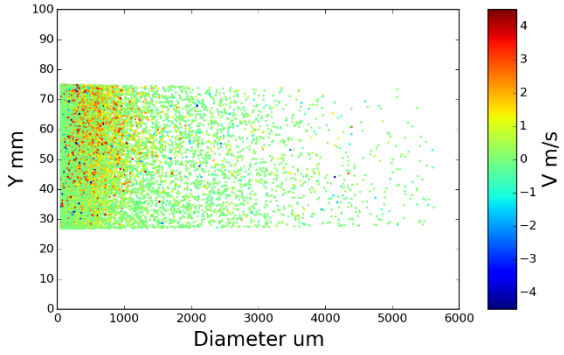


Figure B. 1009: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

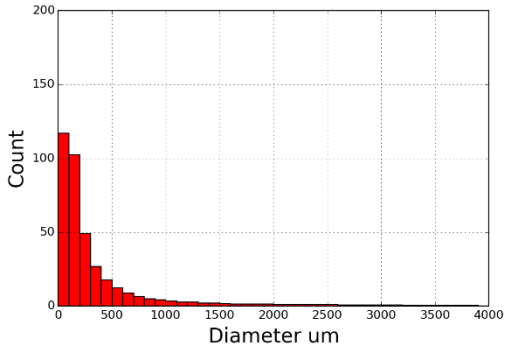


Figure B. 1007: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

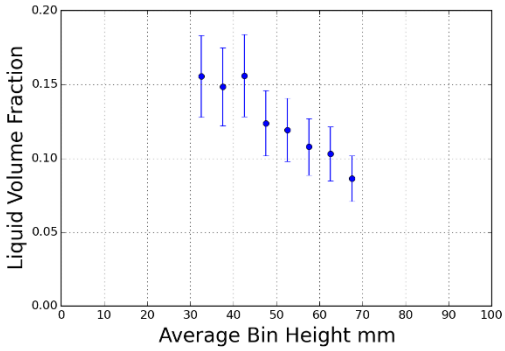


Figure B. 1010: Void Fraction R-123 40F 10000Btu 30000Lb Tri

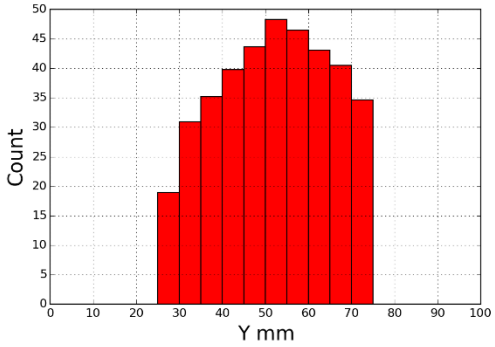


Figure B. 1008: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.3.1 Matched Only Droplets for .LA Image

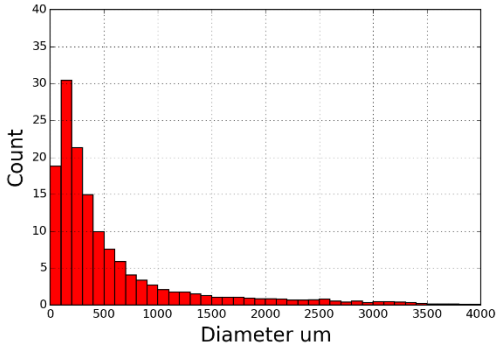


Figure B. 1011: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

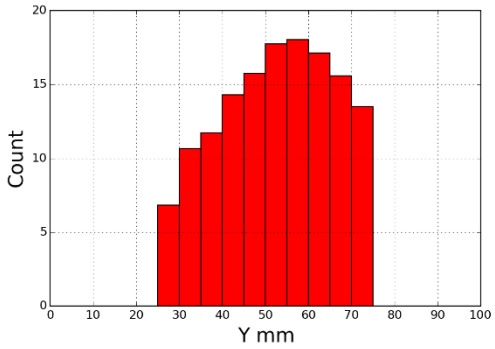


Figure B. 1012: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

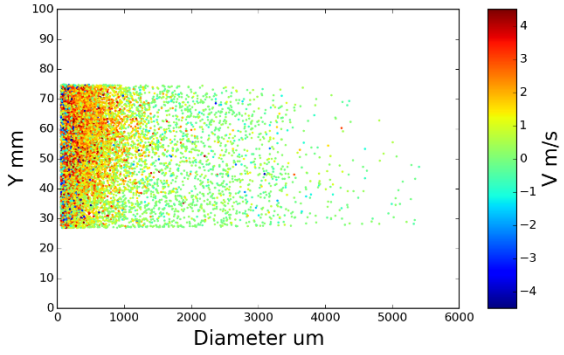


Figure B. 1013: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

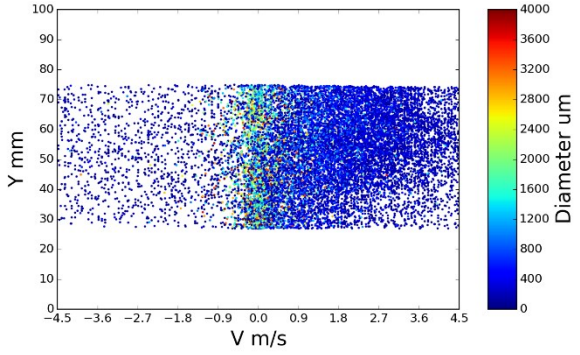


Figure B. 1014: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

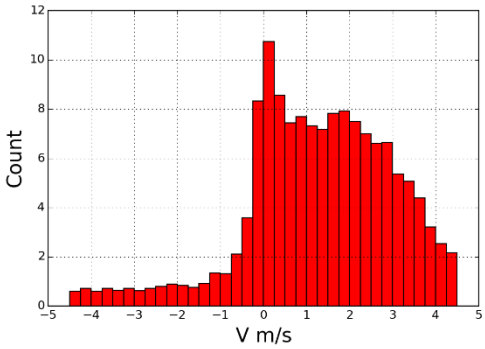


Figure B. 1015: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.3.1 Matched Only Droplets for .LB Image

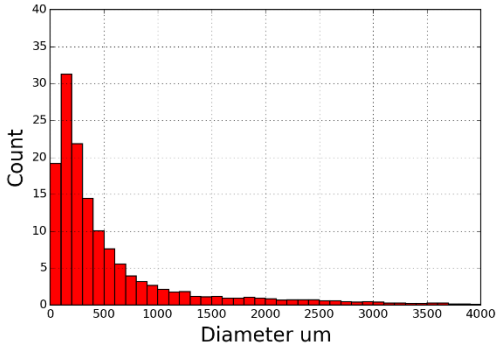


Figure B. 1016: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

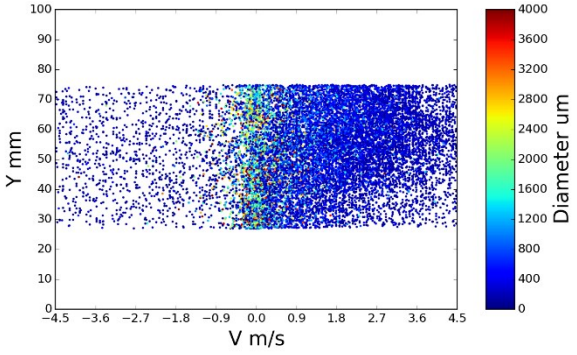


Figure B. 1019: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

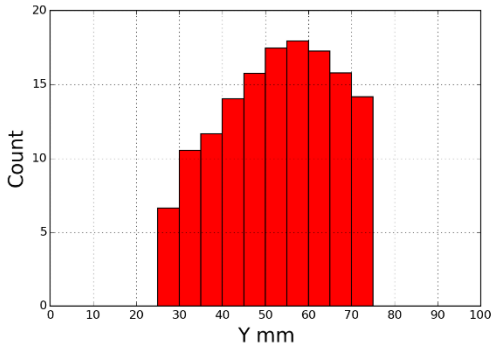


Figure B. 1017: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

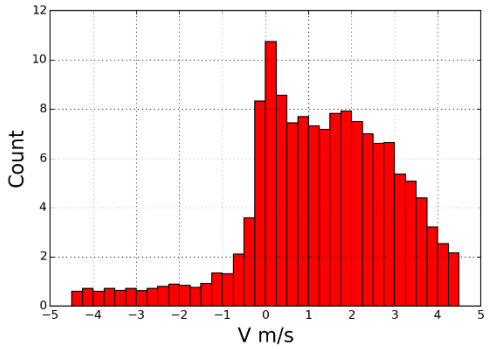


Figure B. 1020: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

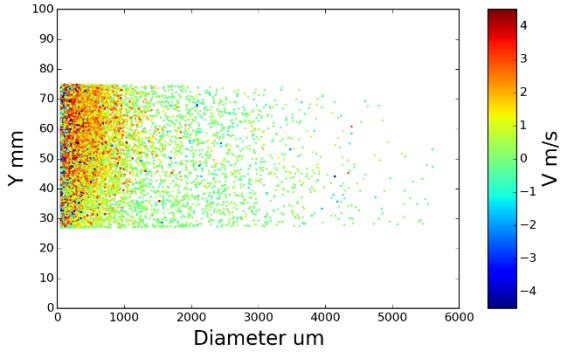


Figure B. 1018: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.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	43.15	54.07	57.2	5605	562.5	921.4	57.2	5596	466.3	850.1
40-60mm	97.4	114.94	57.2	5607	463.5	689.9	57.2	5622	401.8	658.0
60-80mm	66.49	79.95	57.2	5025	432.6	566.3	57.2	5298	387.4	571.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	207.04	249.84	57.2	5607	474.2	711.4	57.2	5622	411.2	680.2
			Height A (mm)				Height B (mm)			
Highest Particle			74.8586				74.8490			
Lowest Particle			26.8964				26.8964			

Table B. 112: 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	14.66	57.2	5472	979.2	1152	57.2	5596	979.5	1184	-4.470	4.460	-0.170	1.580	-4.470	4.420	0.460	1.460
40-60mm	36.42	57.2	5296	702.0	815.8	57.2	5386	698.8	837.3	-4.470	4.470	-0.200	1.440	-4.470	4.470	1.050	1.590
60-80mm	25.59	57.2	4757	636.6	672.4	57.2	4938	632.8	693.2	-4.470	4.470	-0.240	1.340	-4.470	4.470	1.180	1.490
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	76.67	57.2	5472	733.2	857.8	57.2	5596	729.6	879.9	-4.470	4.470	-0.210	1.440	-4.470	4.470	0.980	1.560

Table B. 113: Matched Droplet Info

B.3.3.1 All Droplets for .LA Image

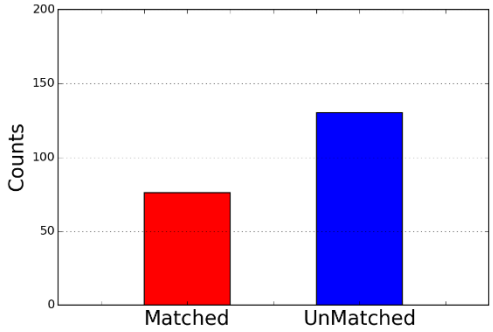


Figure B. 1021: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

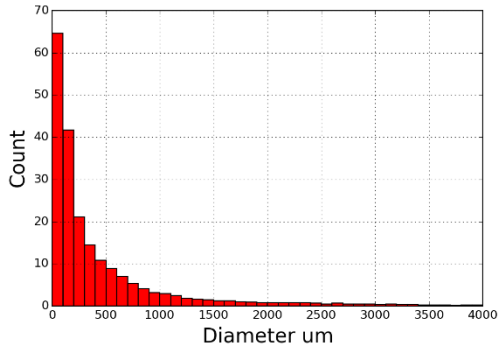


Figure B. 1022: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

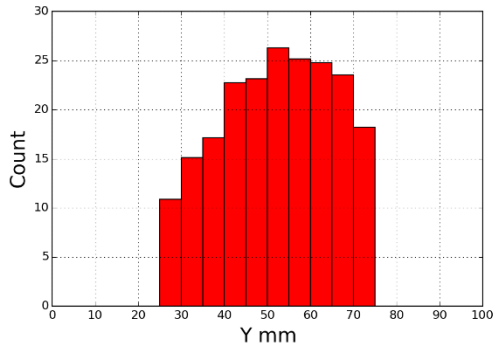


Figure B. 1023: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

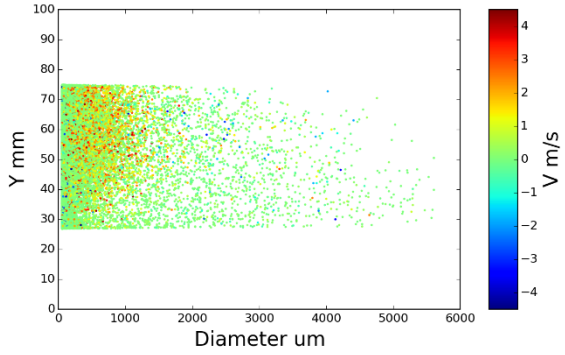


Figure B. 1024: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

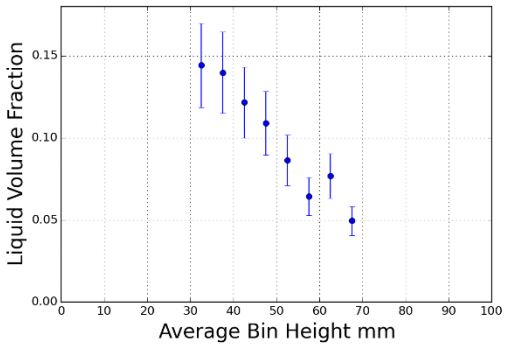


Figure B. 1025: Void Fraction R-123 40F 10000Btu 30000Lb Tri

B.3.3.1 All Droplets for .LB Image

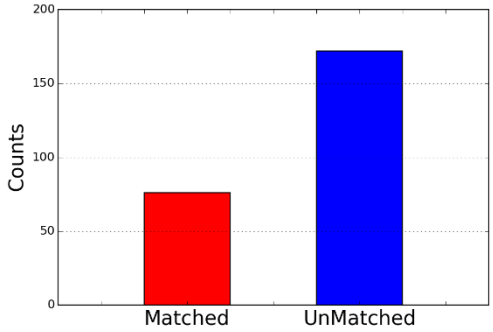


Figure B. 1026: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

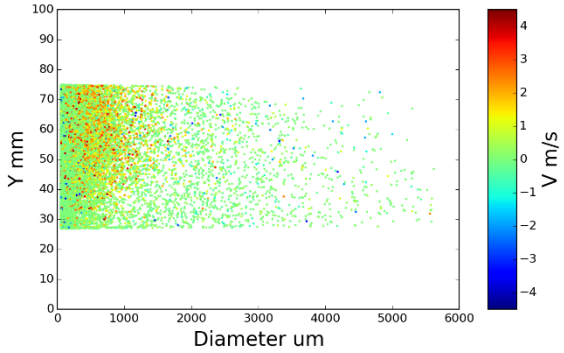


Figure B. 1029: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

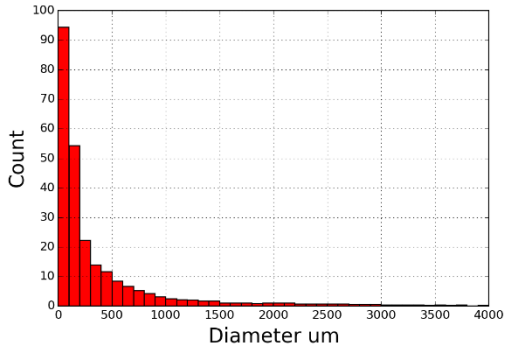


Figure B. 1027: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

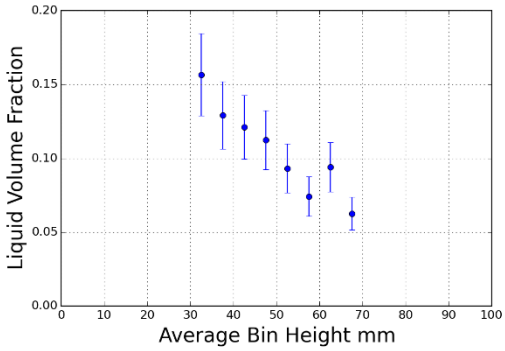


Figure B. 1030: Void Fraction R-123 40F 10000Btu 30000Lb Tri

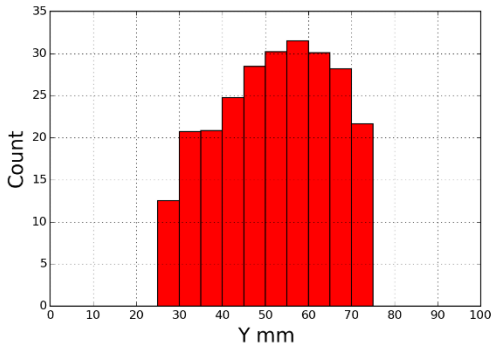


Figure B. 1028: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.3.1 Matched Only Droplets for .LA Image

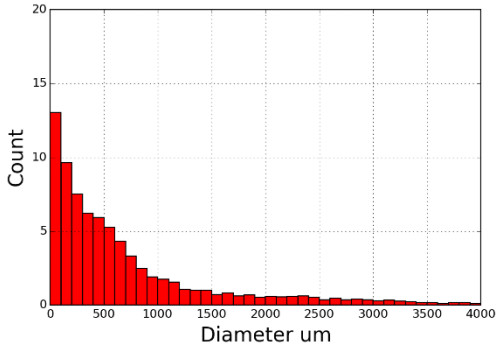


Figure B. 1031: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

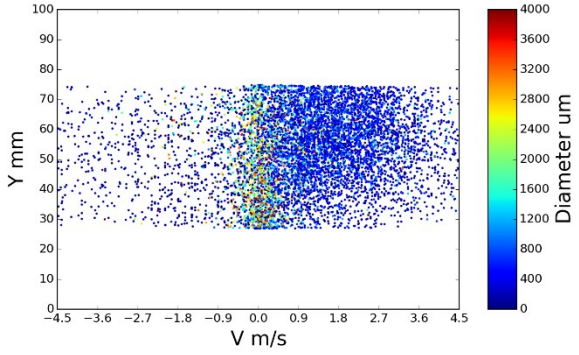


Figure B. 1034: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

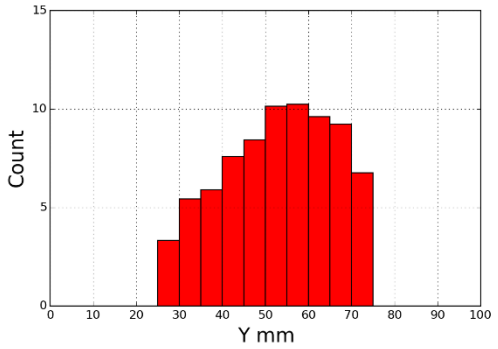


Figure B. 1032: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

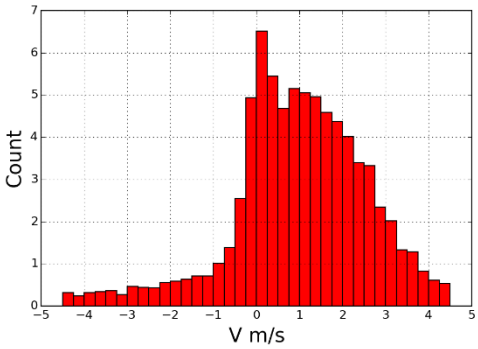


Figure B. 1035: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

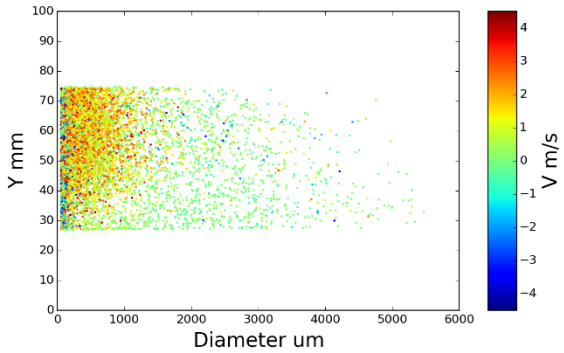


Figure B. 1033: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.3.1 Matched Only Droplets for .LB Image

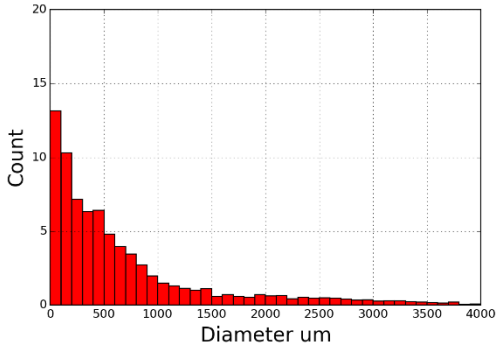


Figure B. 1036: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

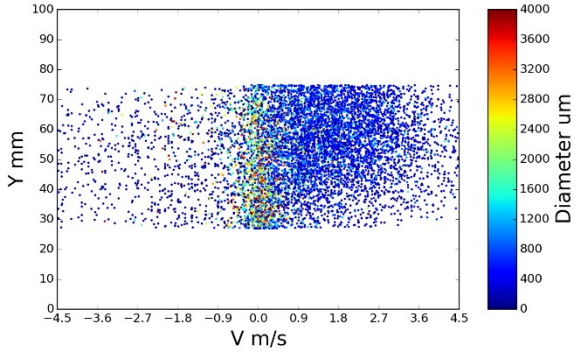


Figure B. 1039: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

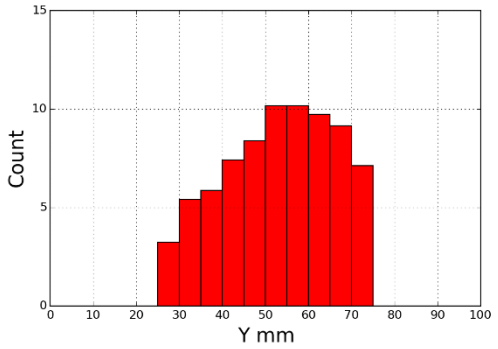


Figure B. 1037: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

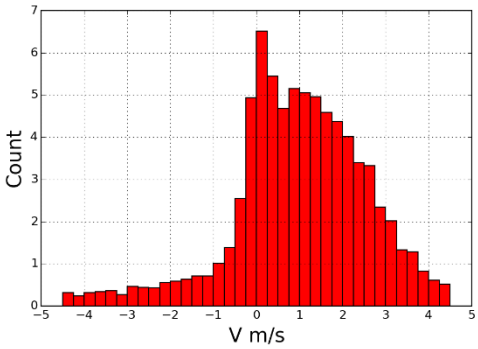


Figure B. 1040: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

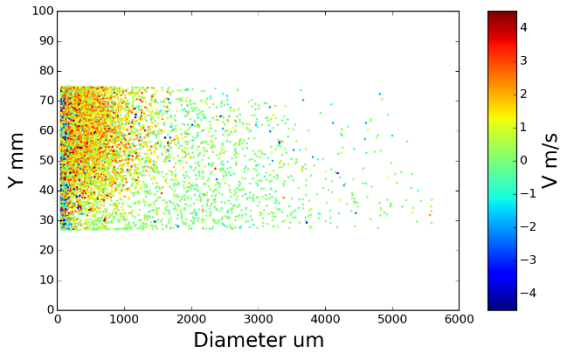


Figure B. 1038: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.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	38.53	54.11	57.2	5596	429.9	822.6	57.2	5566	335.9	729.2
40-60mm	73.22	100.61	57.2	5501	405.5	727.3	57.2	5548	323.8	652.3
60-80mm	38.72	57.85	57.2	4990	376.1	573.5	57.2	5302	300.4	546.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	150.47	213.6	57.2	5596	404.2	718.1	57.2	5566	320.5	646.6
			Height A (mm)				Height B (mm)			
Highest Particle			74.8586				74.8586			
Lowest Particle			26.9065				26.8964			

Table B. 114: 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	9.54	57.2	5374	729.2	1074	57.2	5360	745.4	1128	-4.470	4.470	-0.210	2.120	-4.470	4.470	0.440	1.870
40-60mm	19.72	57.2	5029	633.6	884.8	57.2	5447	635.1	926.5	-4.470	4.470	-0.260	1.910	-4.470	4.470	0.720	1.910
60-80mm	10.48	57.2	4990	611.8	739.7	57.2	5302	609.4	765.8	-4.470	4.470	-0.270	1.650	-4.400	4.470	0.860	1.750
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	39.74	57.2	5374	650.8	900.8	57.2	5447	654.6	942.1	-4.470	4.470	-0.250	1.900	-4.470	4.470	0.690	1.870

Table B. 115: Matched Droplet Info

B.3.3.1 All Droplets for .LA Image

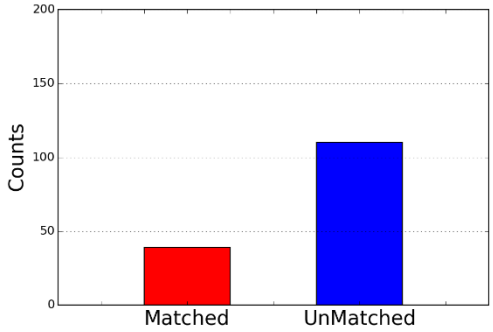


Figure B. 1041: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

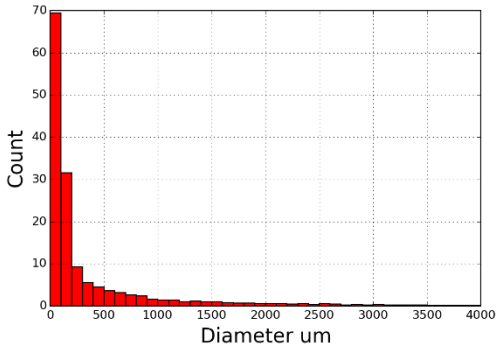


Figure B. 1042: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

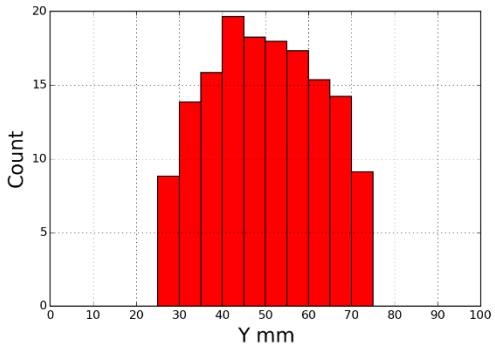


Figure B. 1043: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

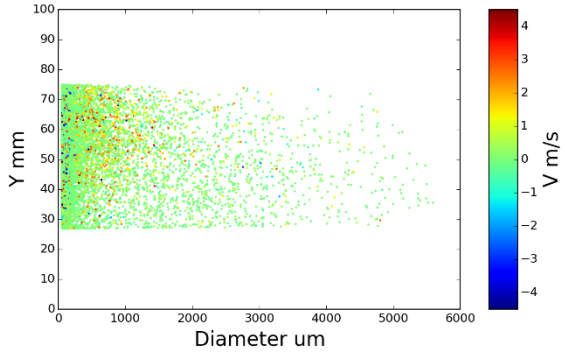


Figure B. 1044: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

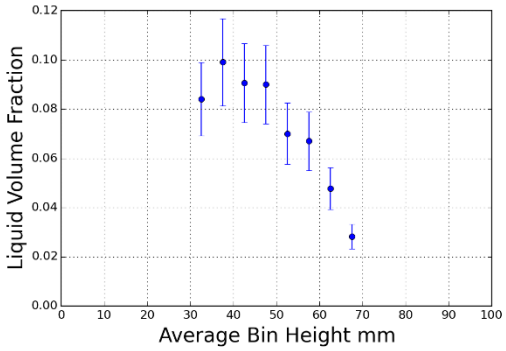


Figure B. 1045: Void Fraction R-123 40F 10000Btu 30000Lb Tri

B.3.3.1 All Droplets for .LB Image

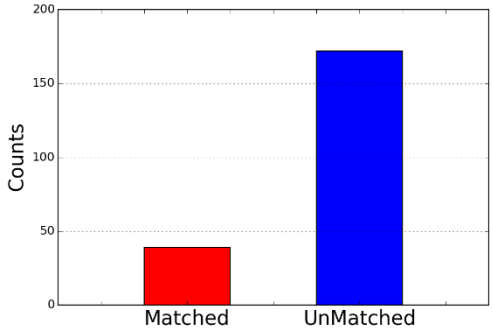


Figure B. 1046: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

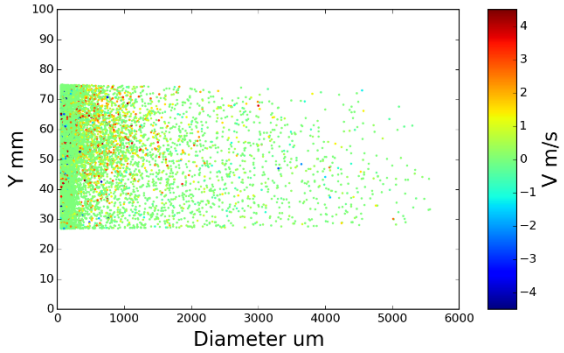


Figure B. 1049: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

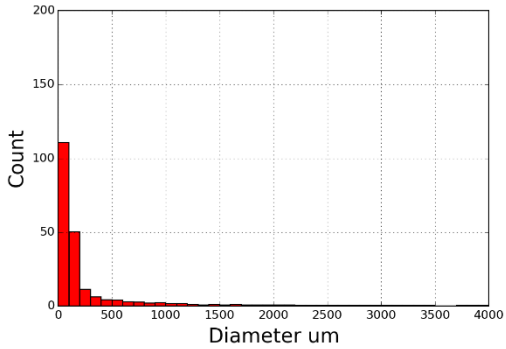


Figure B. 1047: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

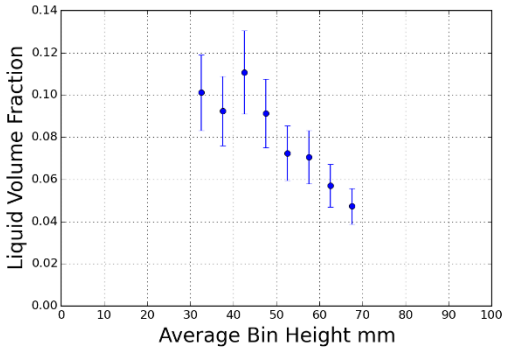


Figure B. 1050: Void Fraction R-123 40F 10000Btu 30000Lb Tri

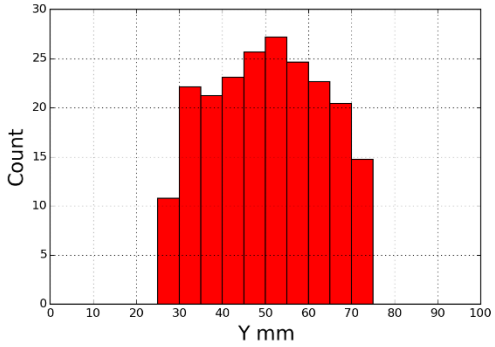


Figure B. 1048: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.3.1 Matched Only Droplets for .LA Image

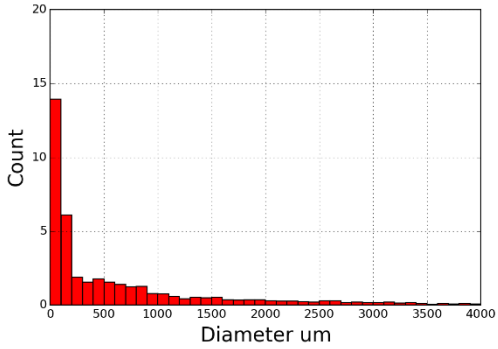


Figure B. 1051: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

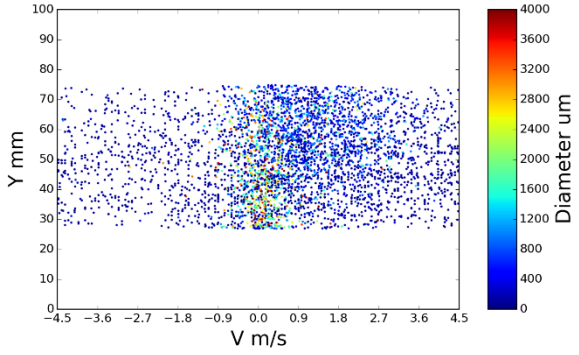


Figure B. 1054: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

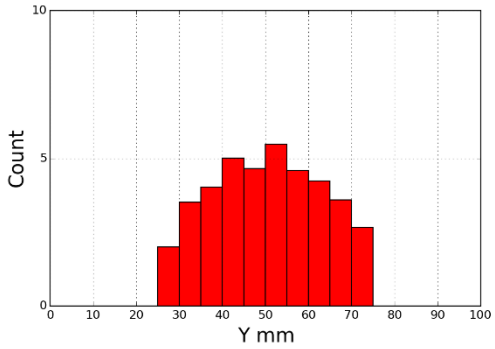


Figure B. 1052: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

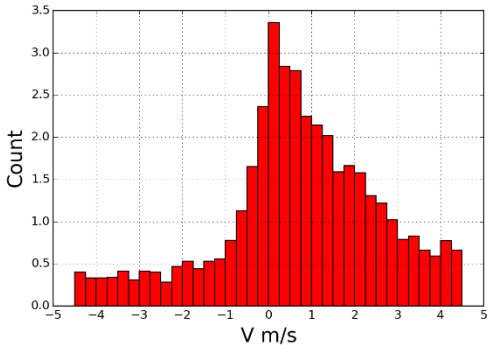


Figure B. 1055: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

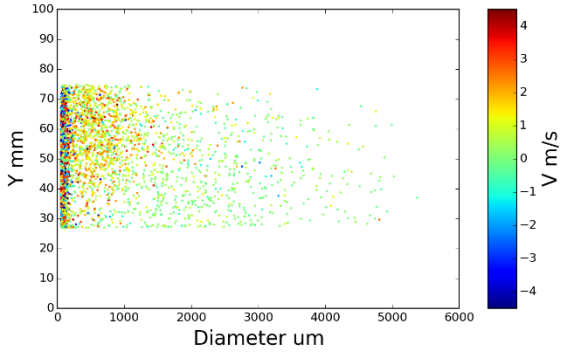


Figure B. 1053: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.3.1 Matched Only Droplets for .LB Image

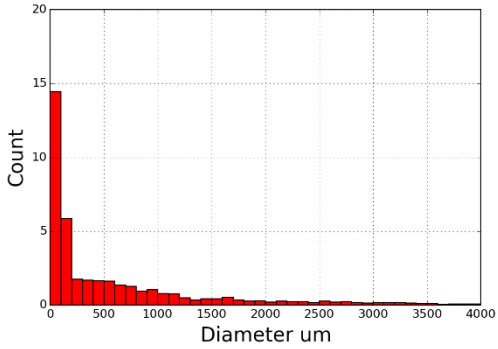


Figure B. 1056: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

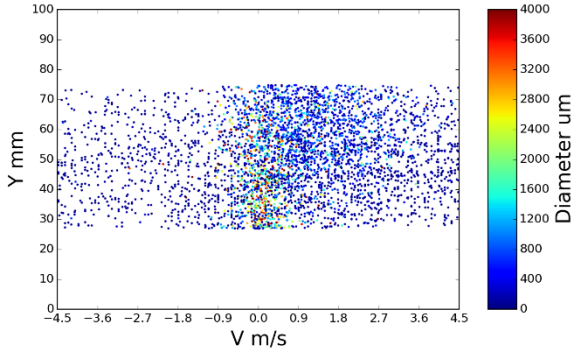


Figure B. 1059: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

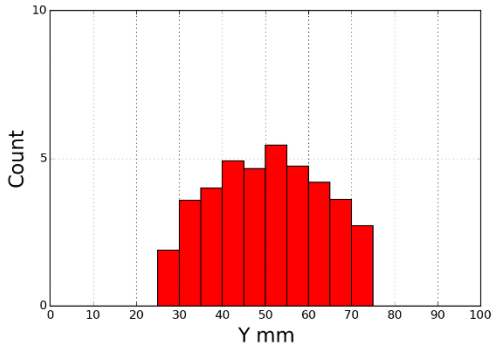


Figure B. 1057: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

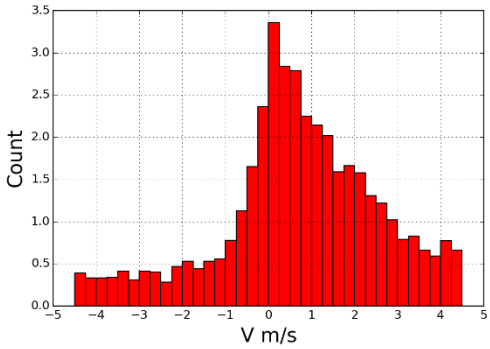


Figure B. 1060: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

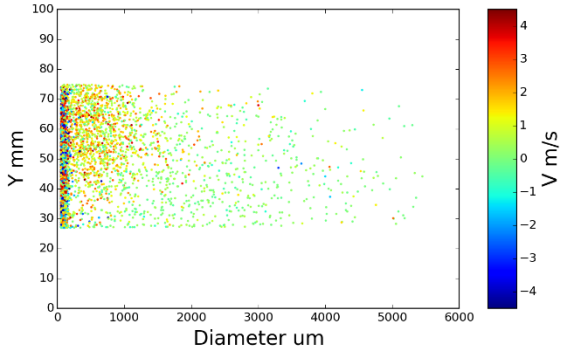


Figure B. 1058: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.3.2 Lens 50mm Mag 0_13x

B.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	21.33	22.28	128.7	5689	520.1	418.9	128.7	5390	519.8	415.9
20-40mm	45.16	45.56	128.7	5688	807.9	861.8	128.7	5695	778.3	835.8
40-60mm	61.72	62.39	128.7	5660	729.5	823.9	128.7	5561	693.1	789.8
60-80mm	55.23	55.42	128.7	5163	620.8	612.8	128.7	5234	620.0	633.2
80-100mm	31.4	31.91	128.7	4807	541.3	513.8	128.7	5086	552.4	533.5
All	215.02	217.82	128.7	5689	669.4	716.7	128.7	5695	653.4	702.7
			Height A (mm)				Height B (mm)			
Highest Particle			100.0306100.0306							
Lowest Particle			5.16125.1327							

Table B. 116: 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	10.93	128.7	4143	637.3	446.1	128.7	3976	624.4	444.6	-4.300	4.390	-0.120	1.040	-4.310	4.350	0.740	1.260
20-40mm	19.98	128.7	5245	1062	906.4	128.7	5695	1014	903.6	-4.340	4.390	-0.010	1.290	-4.350	4.330	0.380	1.290
40-60mm	28.12	128.7	5102	902.3	874.8	128.7	5561	880.5	882.4	-4.390	4.390	-0.150	1.300	-4.390	4.390	0.800	1.650
60-80mm	27.27	128.7	4864	778.0	695.1	128.7	5165	749.0	683.0	-4.390	4.390	-0.080	1.230	-4.390	4.380	1.070	1.630
80-100mm	16.83	128.7	4794	678.3	596.3	128.7	4989	656.8	584.2	-4.380	4.390	-0.120	0.900	-4.360	4.340	1.220	1.360
All	103.13	128.7	5245	835.8	771.3	128.7	5695	807.1	766.3	-4.390	4.390	-0.100	1.200	-4.390	4.390	0.850	1.520

Table B. 117: Matched Droplet Info

B.3.3.2 All Droplets for .LA Image

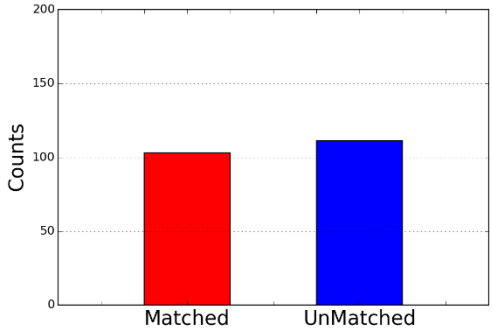


Figure B. 1061: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

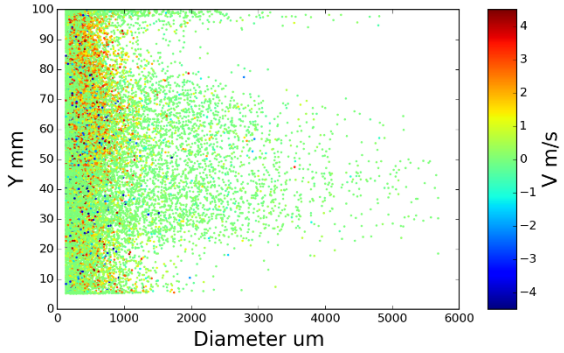


Figure B. 1064: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

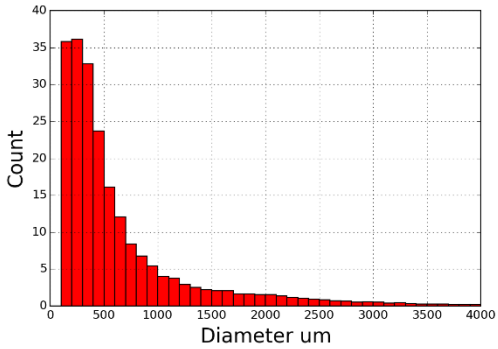


Figure B. 1062: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

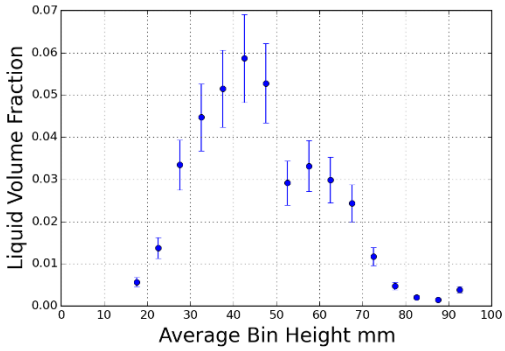


Figure B. 1065: Void Fraction R-123 40F 10000Btu 30000Lb Tri

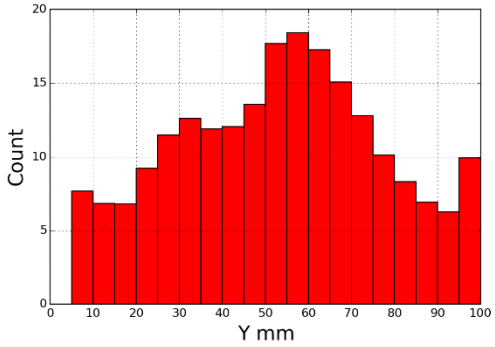


Figure B. 1063: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.3.2 All Droplets for .LB Image

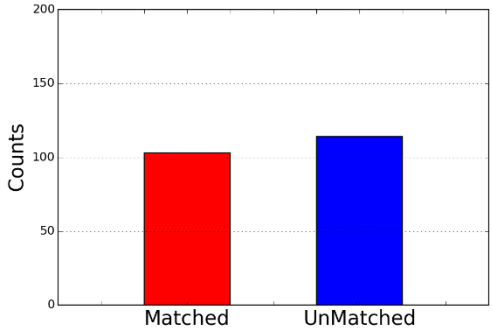


Figure B. 1066: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

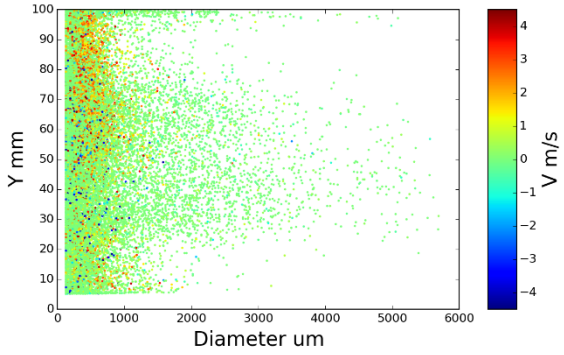


Figure B. 1069: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

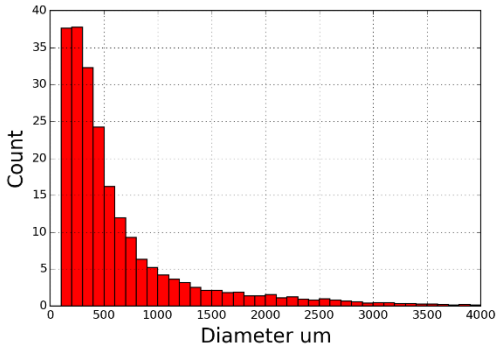


Figure B. 1067: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

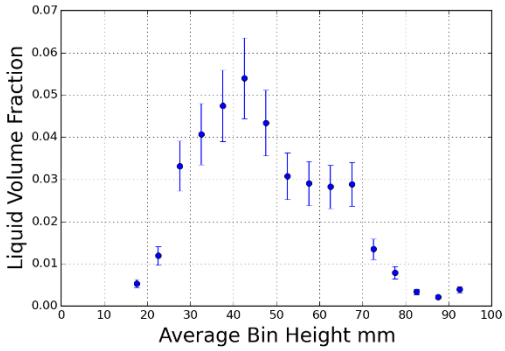


Figure B. 1070: Void Fraction R-123 40F 10000Btu 30000Lb Tri

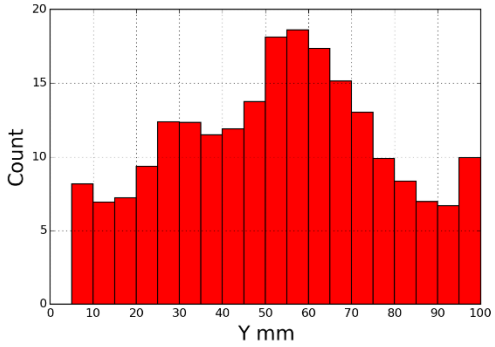


Figure B. 1068: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.3.2 Matched Only Droplets for .LA Image

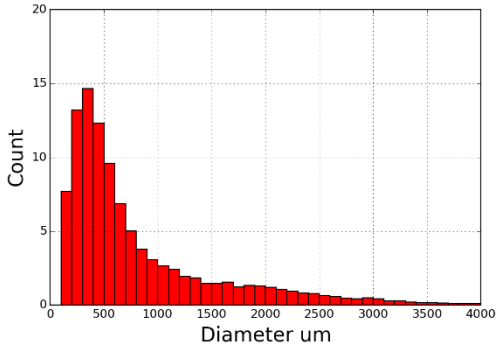


Figure B. 1071: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

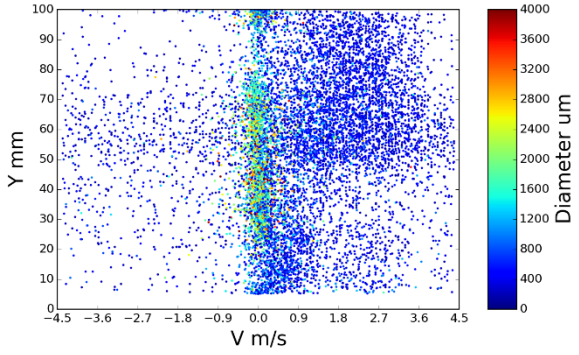


Figure B. 1074: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

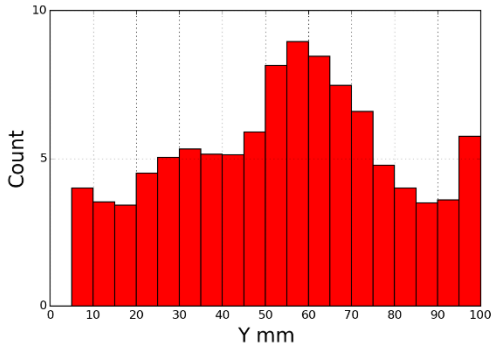


Figure B. 1072: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

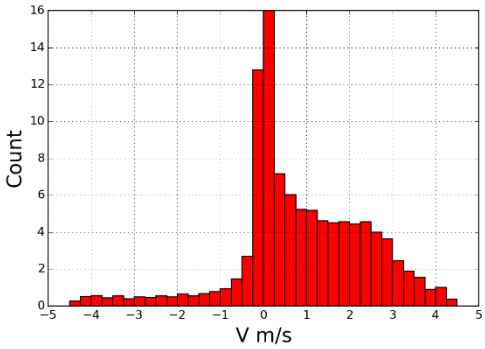


Figure B. 1075: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

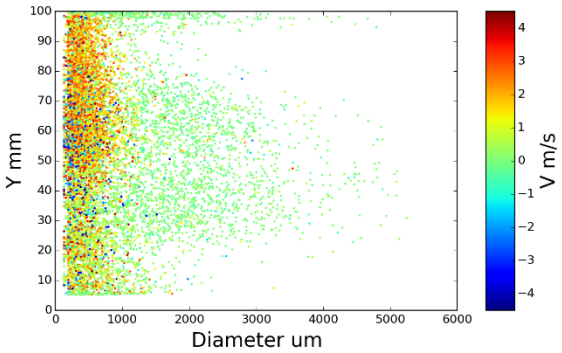


Figure B. 1073: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.3.2 Matched Only Droplets for .LB Image

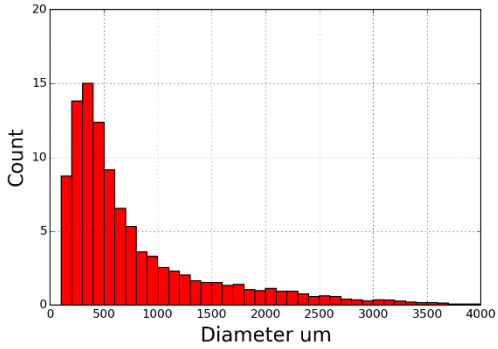


Figure B. 1076: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

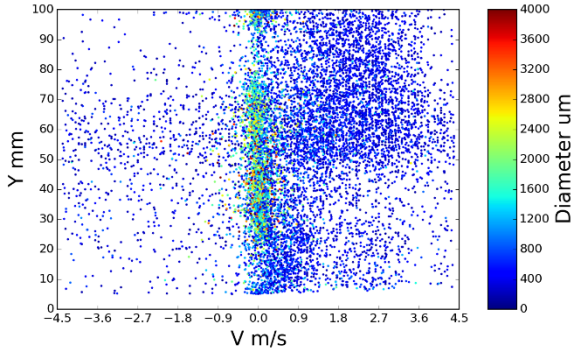


Figure B. 1079: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

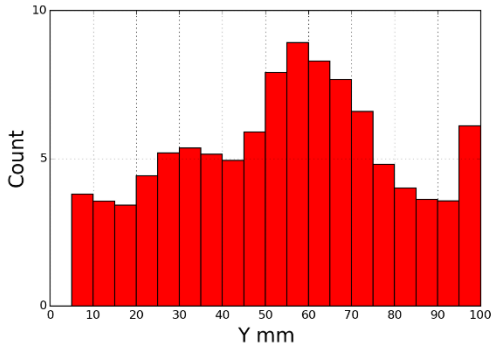


Figure B. 1077: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

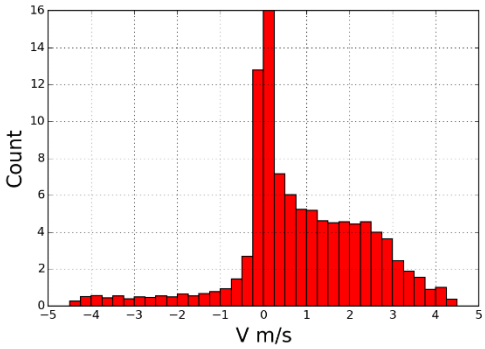


Figure B. 1080: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

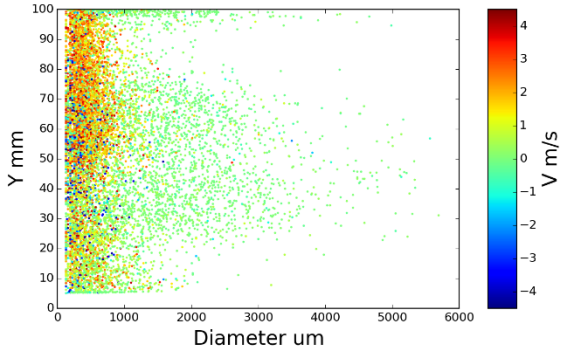


Figure B. 1078: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.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	25.55	26.63	128.7	5016	673.0	622.1	128.7	5264	662.2	623.5
20-40mm	35.17	36.22	128.7	5698	912.6	944.1	128.7	5648	884.2	927.9
40-60mm	51.04	51.7	128.7	5620	757.6	779.9	128.7	5684	742.8	771.2
60-80mm	43.82	43.24	128.7	5239	696.5	663.9	128.7	5426	702.4	677.2
80-100mm	23.14	23.99	128.7	4112	577.7	488.0	128.7	4112	578.9	490.4
All	178.91	181.91	128.7	5698	737.1	744.0	128.7	5684	727.5	739.6
			Height A (mm)				Height B (mm)			
Highest Particle			100.0306100.0021							
Lowest Particle			5.13275.1327							

Table B. 118: 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	13.33	128.7	5016	862.1	702.9	128.7	5264	847.1	712.1	-4.350	4.310	-0.070	1.100	-4.380	4.390	0.570	1.300
20-40mm	15.4	128.7	5698	1205	963.8	128.7	5648	1181	981.4	-4.390	4.390	-0.160	1.170	-4.390	4.310	0.470	1.260
40-60mm	23.77	128.7	5133	957.5	829.4	128.7	5684	927.1	827.7	-4.390	4.390	-0.130	1.200	-4.390	4.390	0.860	1.480
60-80mm	20.51	128.7	4960	902.9	735.3	128.7	4914	876.1	727.1	-4.390	4.390	-0.100	1.080	-4.390	4.390	0.990	1.410
80-100mm	12.12	128.7	3956	734.1	557.8	128.7	4112	712.0	550.0	-4.120	4.390	-0.140	0.840	-4.300	4.300	1.070	1.270
All	85.15	128.7	5698	942.3	795.1	128.7	5684	915.7	795.6	-4.390	4.390	-0.120	1.100	-4.390	4.390	0.810	1.390

Table B. 119: Matched Droplet Info

B.3.3.2 All Droplets for .LA Image

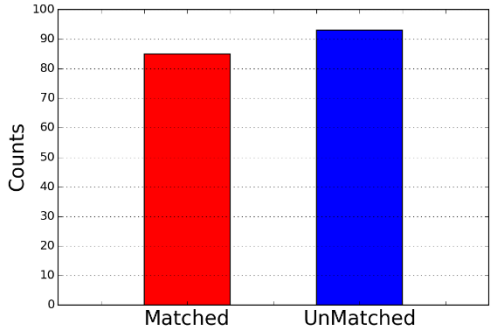


Figure B. 1081: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

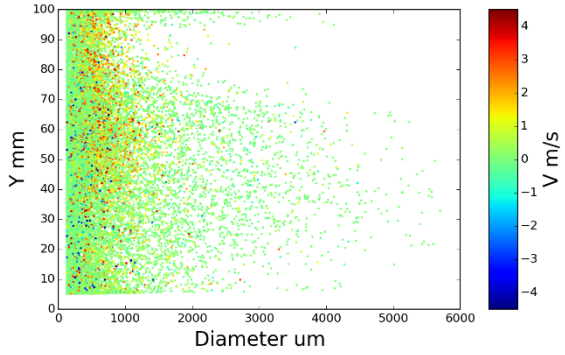


Figure B. 1084: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

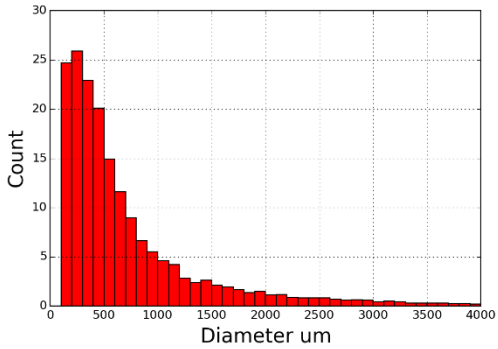


Figure B. 1082: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

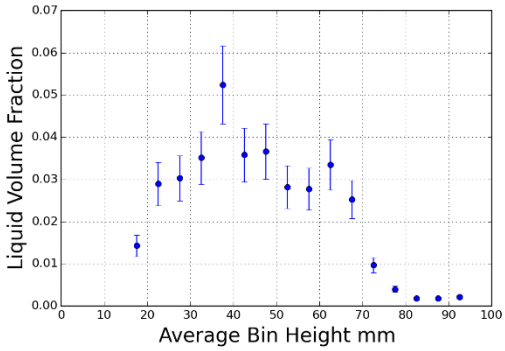


Figure B. 1085: Void Fraction R-123 40F 10000Btu 30000Lb Tri

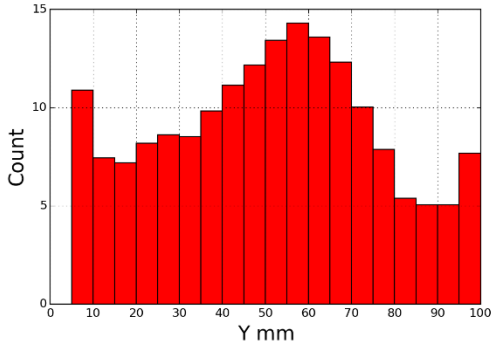


Figure B. 1083: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.3.2 All Droplets for .LB Image

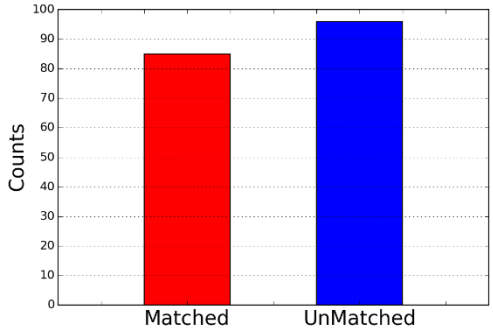


Figure B. 1086: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

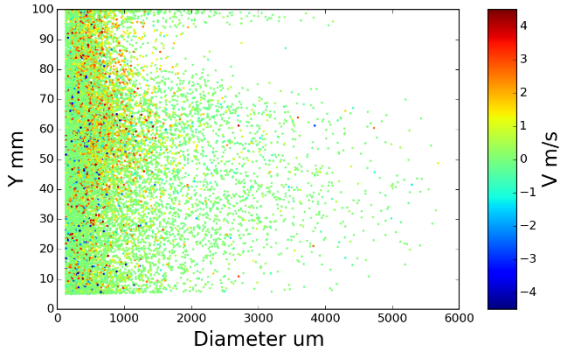


Figure B. 1089: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

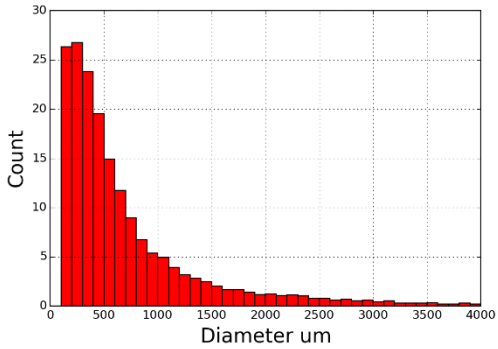


Figure B. 1087: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

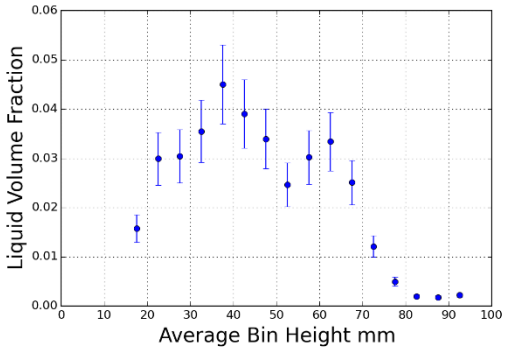


Figure B. 1090: Void Fraction R-123 40F 10000Btu 30000Lb Tri

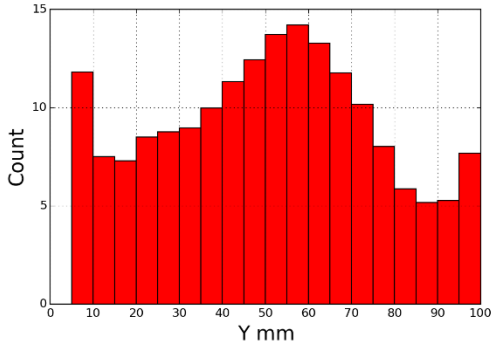


Figure B. 1088: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

B.3.3.2 Matched Only Droplets for .LA Image

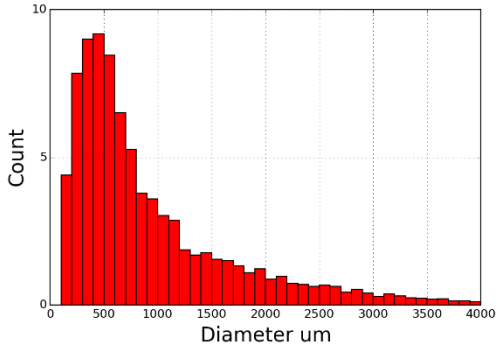


Figure B. 1091: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

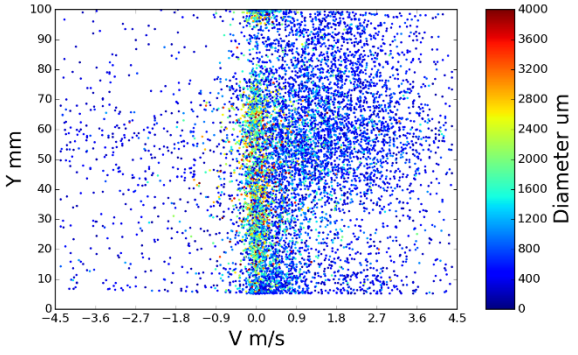


Figure B. 1094: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

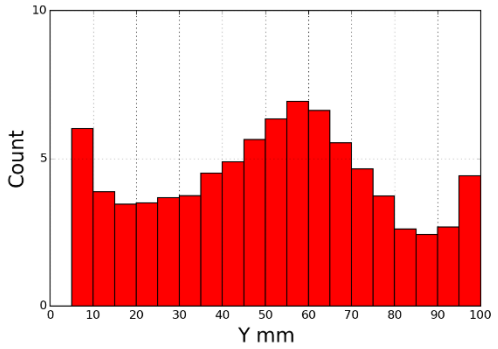


Figure B. 1092: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

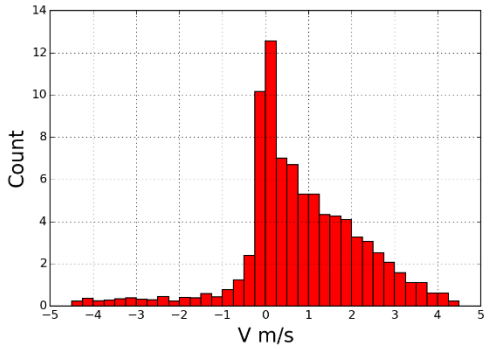


Figure B. 1095: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

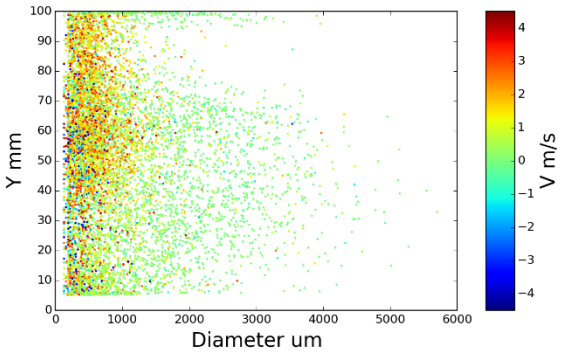


Figure B. 1093: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.3.2 Matched Only Droplets for .LB Image

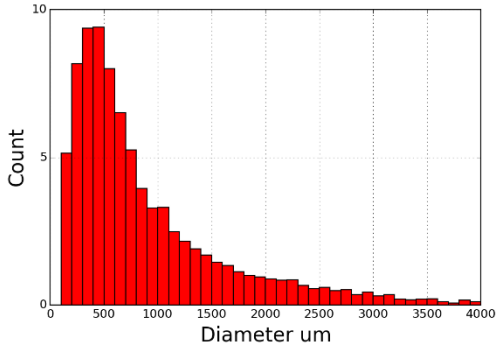


Figure B. 1096: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

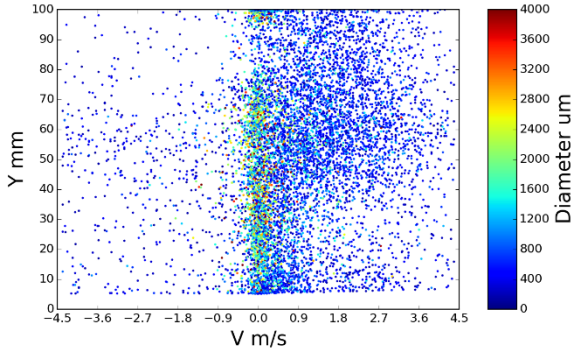


Figure B. 1099: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

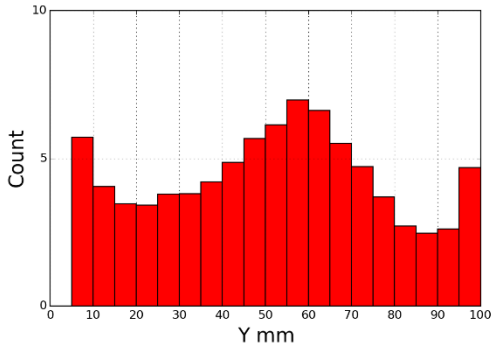


Figure B. 1097: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

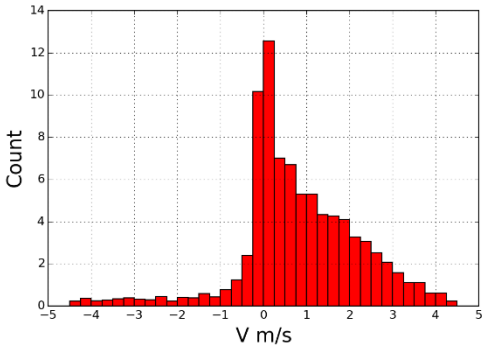


Figure B. 1100: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

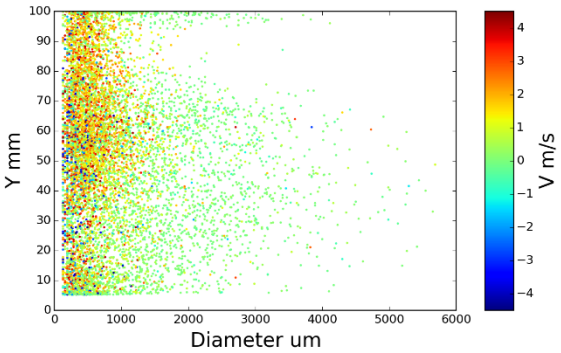


Figure B. 1098: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.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	21.48	21.59	128.7	5522	626.1	584.5	128.7	5547	638.5	587.5
20-40mm	23.35	24.24	128.7	5499	905.6	936.0	128.7	5691	873.7	917.1
40-60mm	30.75	32.43	128.7	5551	876.2	879.2	128.7	5655	841.8	874.3
60-80mm	26.07	27.03	128.7	5270	718.7	673.2	128.7	5619	745.3	752.0
80-100mm	12.06	12.66	128.7	5306	598.9	534.7	128.7	5106	611.0	566.2
All	113.86	118.01	128.7	5551	768.7	775.7	128.7	5691	764.0	787.2
			Height A (mm)				Height B (mm)			
Highest Particle			100.0306100.0043							
Lowest Particle			5.13275.1612							

Table B. 120: 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	10.65	128.7	4526	793.5	629.4	128.7	4810	782.5	634.2	-4.370	4.260	-0.130	0.990	-4.390	4.390	0.760	1.350
20-40mm	8.65	128.7	5148	1250	975.2	128.7	5253	1193	955.5	-4.370	4.190	-0.120	1.130	-4.290	4.330	0.440	1.110
40-60mm	12.4	128.7	5342	1120	905.9	128.7	5655	1090	911.5	-4.360	4.320	-0.170	1.130	-4.370	4.310	0.720	1.330
60-80mm	9.65	128.7	4084	952.4	752.3	128.7	4438	927.6	755.4	-4.390	4.370	-0.210	1.140	-4.090	4.390	0.790	1.370
80-100mm	5.33	128.7	4230	787.0	604.9	128.7	4314	769.8	629.2	-4.320	4.340	-0.190	0.820	-3.930	3.730	0.870	1.120
All	46.72	128.7	5342	996.2	821.0	128.7	5655	967.7	818.5	-4.390	4.370	-0.160	1.070	-4.390	4.390	0.710	1.290

Table B. 121: Matched Droplet Info

B.3.3.2 All Droplets for .LA Image

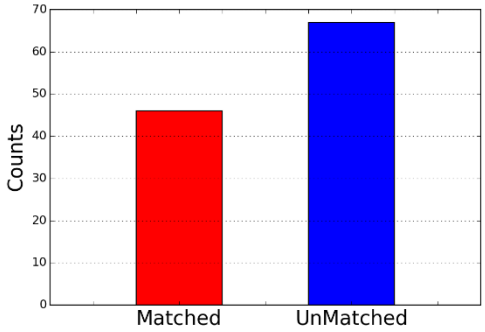


Figure B. 1101: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

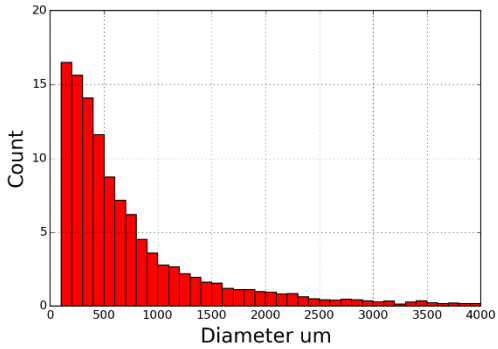


Figure B. 1102: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

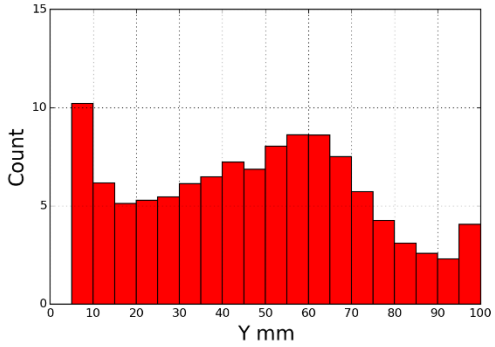


Figure B. 1103: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

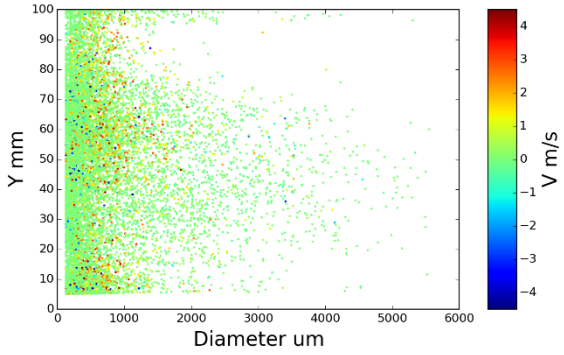


Figure B. 1104: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

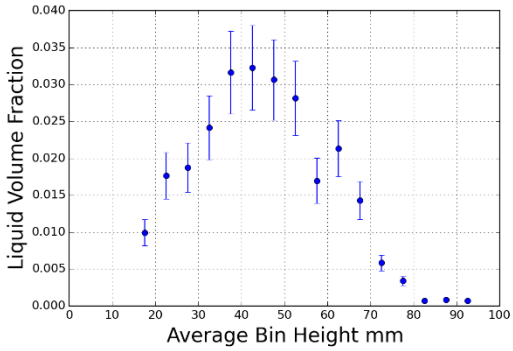


Figure B. 1105: Void Fraction R-123 40F 10000Btu 30000Lb Tri

B.3.3.2 All Droplets for .LB Image

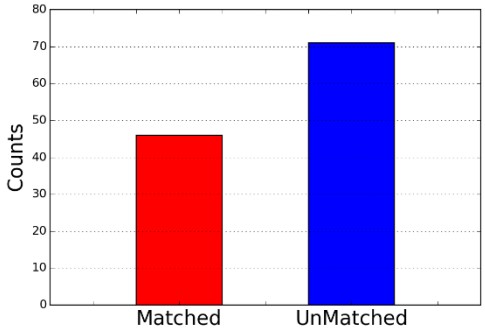


Figure B. 1106: CHC Count Comparison R-123 40F 10000Btu 30000Lb Tri

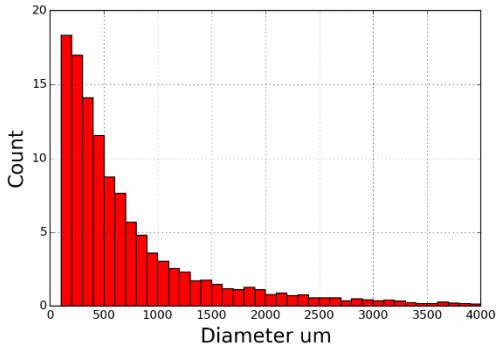


Figure B. 1107: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

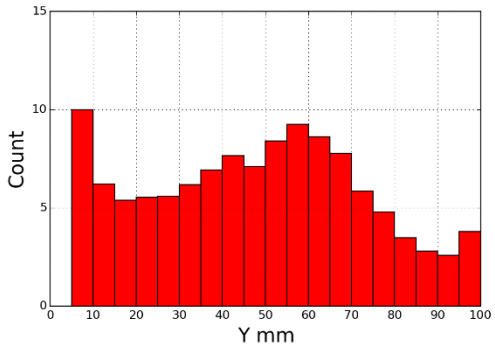


Figure B. 1108: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

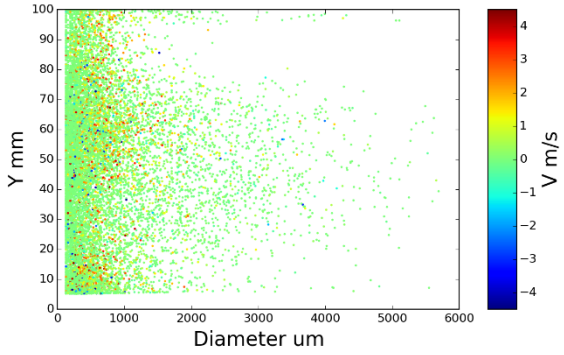


Figure B. 1109: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

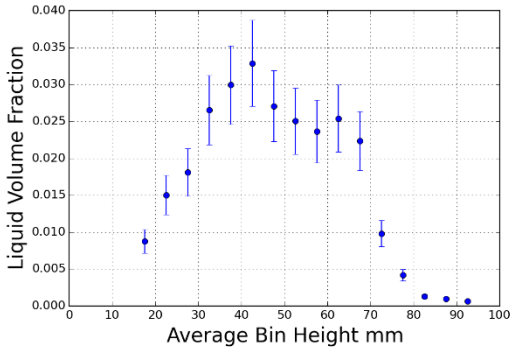


Figure B. 1110: Void Fraction R-123 40F 10000Btu 30000Lb Tri

B.3.3.2 Matched Only Droplets for .LA Image

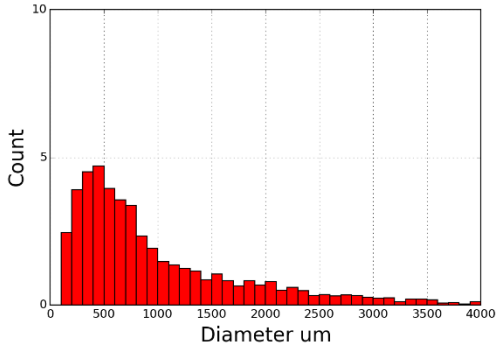


Figure B. 1111: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

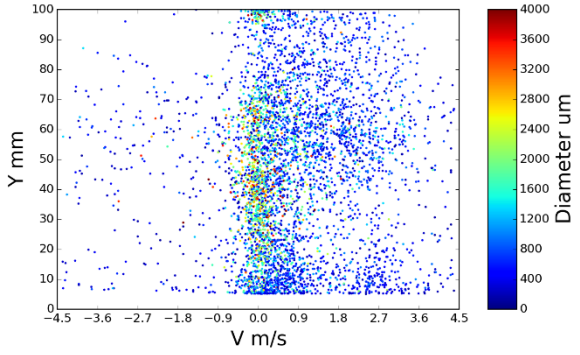


Figure B. 1114: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

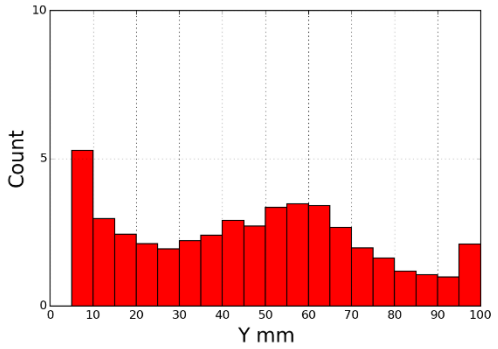


Figure B. 1112: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

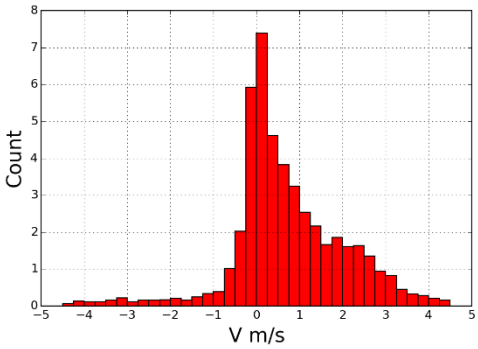


Figure B. 1115: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

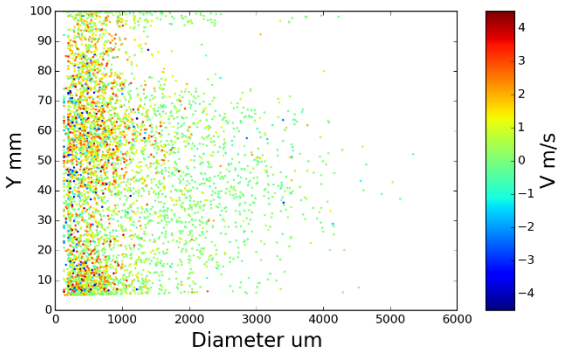


Figure B. 1113: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.3.3.2 Matched Only Droplets for .LB Image

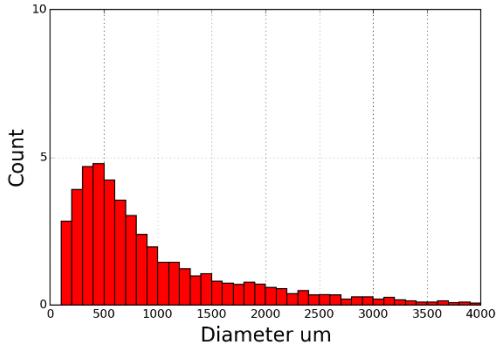


Figure B. 1116: Droplet Diameter Histogram R-123 40F 10000Btu 30000Lb Tri

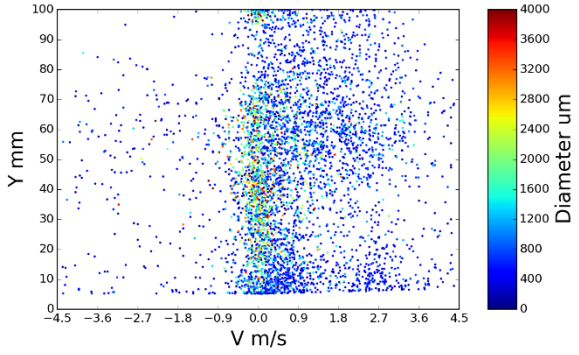


Figure B. 1119: Droplet Height vs Vertical Velocity R-123 40F 10000Btu 30000Lb Tri

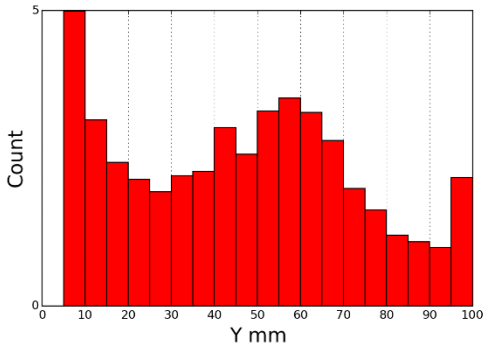


Figure B. 1117: Droplet Height Histogram R-123 40F 10000Btu 30000Lb Tri

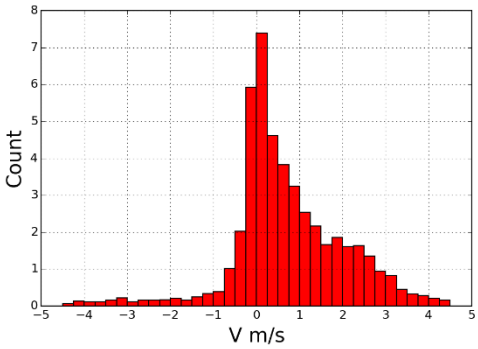


Figure B. 1120: Droplet Vertical Velocity Histogram R-123 40F 10000Btu 30000Lb Tri

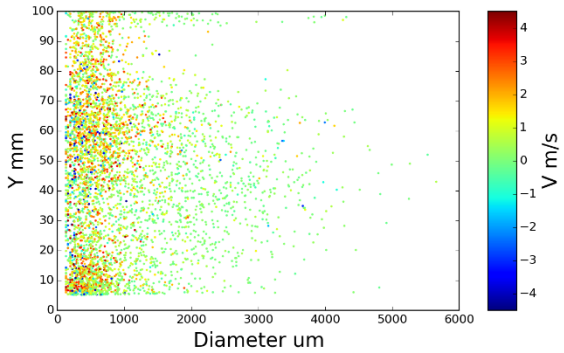


Figure B. 1118: Droplet Height vs Diameter R-123 40F 10000Btu 30000Lb Tri

B.4 - 1556 R-123 55F 1700Btu 2550Lb Tri

B.4.1 Liquid Level 1

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	18219 / 2.296
Ref Mass Flow (lb/hr) / (kg/s)	284 / 0.036
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	2762 / 3.747
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	1565 / 4.94
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.4 / 13.02
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	56.3 / 13.51
Total Bundle Q (Btu/hr) / (kW)	21777 / 6.38
Total Bundle & Preboiler Q (Btu/hr) / (kW)	21777 / 6.38
Top Two Rows HTC Ratio	1.121
Bundle Inlet Quality	-0.08
Bundle Exit Quality	0.93

Table B. 122: Thermal Conditions

B.4.1.1 Lens 100mm Mag 0_29x

B.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	36.79	32.81	57.2	3037	416.3	479.0	57.2	3038	412.9	477.1
40-60mm	66.43	61.39	57.2	3039	378.9	429.2	57.2	3036	363.6	412.0
60-80mm	35.12	32.18	57.2	2710	352.6	353.9	57.2	3020	334.9	341.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	138.39	126.44	57.2	3039	382.1	426.4	57.2	3038	369.1	414.7
			Height A (mm)				Height B (mm)			
Highest Particle			76.9817				76.9930			
Lowest Particle			29.0118				29.0118			

Table B. 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	17.12	57.2	3037	556.0	549.8	57.2	3038	530.4	528.6	-0.950	0.940	0.020	0.280	-0.950	0.950	-0.050	0.390
40-60mm	34.0	57.2	3039	471.5	463.3	57.2	2981	455.0	451.9	-0.940	0.940	-0.000	0.240	-0.950	0.950	-0.040	0.390
60-80mm	19.96	57.2	2710	418.4	380.4	57.2	3017	399.4	365.5	-0.940	0.890	-0.010	0.230	-0.920	0.950	-0.010	0.390
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	71.08	57.2	3039	476.9	467.5	57.2	3038	457.6	452.6	-0.950	0.940	0.000	0.250	-0.950	0.950	-0.030	0.390

B.4.1.1 Table B. 124: Matched Droplet Info

All Droplets for .LA Image

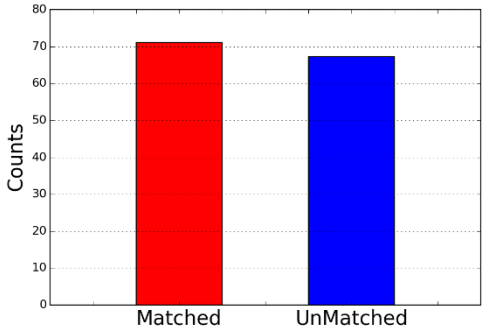


Figure B. 1121: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

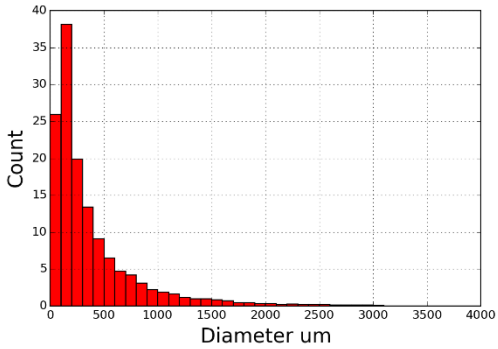


Figure B. 1122: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

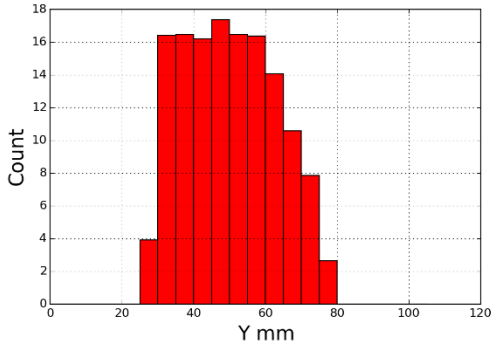


Figure B. 1123: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

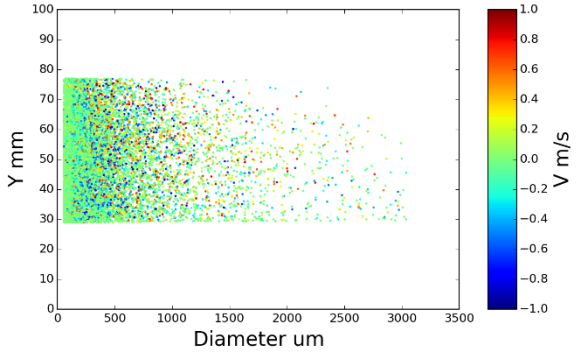


Figure B. 1124: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

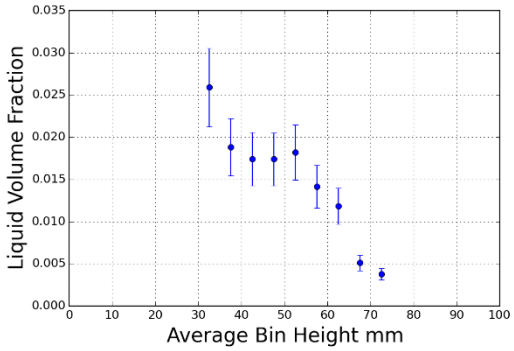


Figure B. 1125: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.1.1 All Droplets for .LB Image

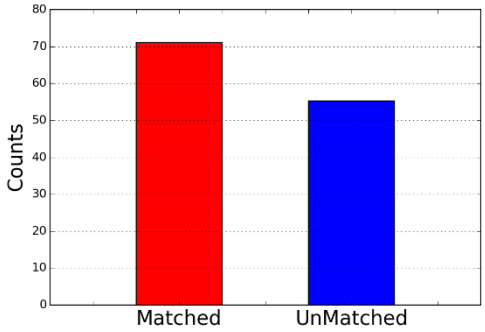


Figure B. 1126: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

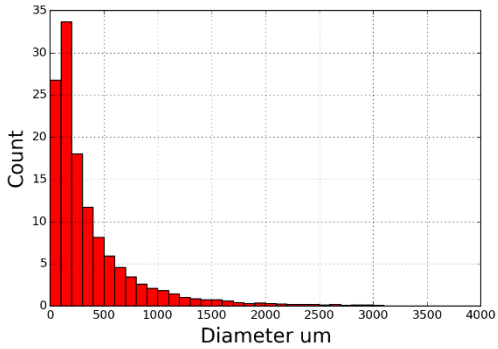


Figure B. 1127: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

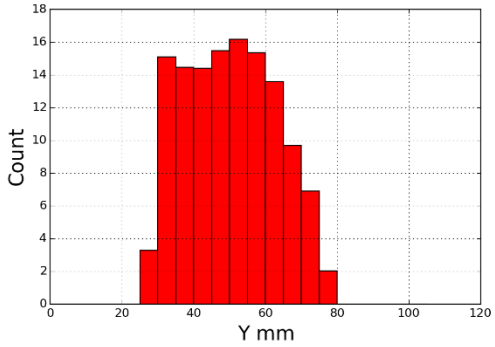


Figure B. 1128: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

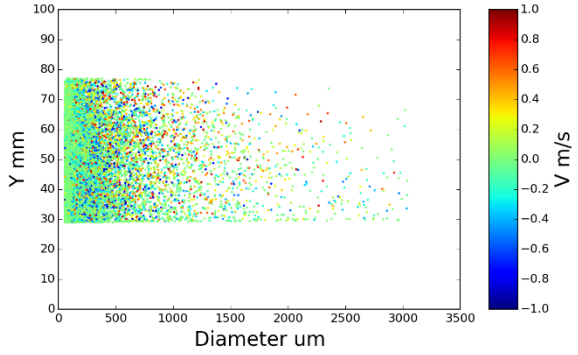


Figure B. 1129: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

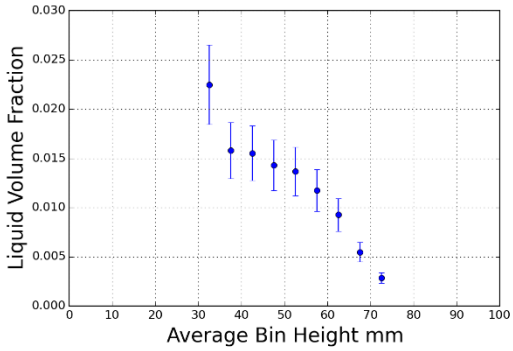


Figure B. 1130: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.1.1 Matched Only Droplets for .LA Image

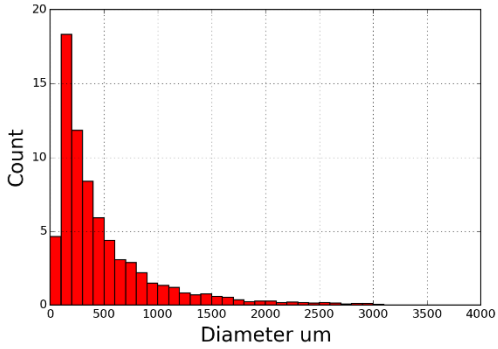


Figure B. 1131: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

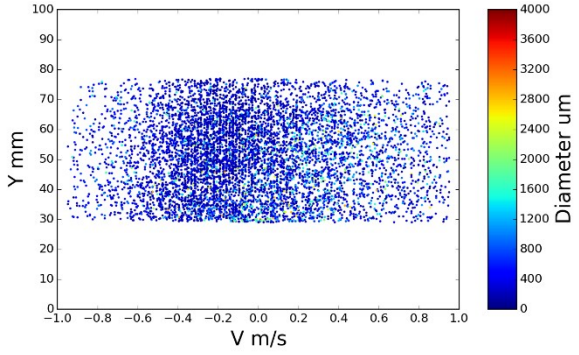


Figure B. 1134: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

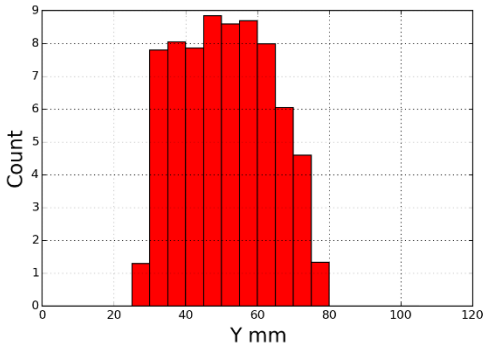


Figure B. 1132: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

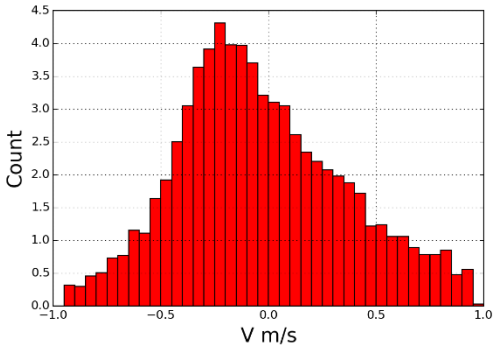


Figure B. 1135: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

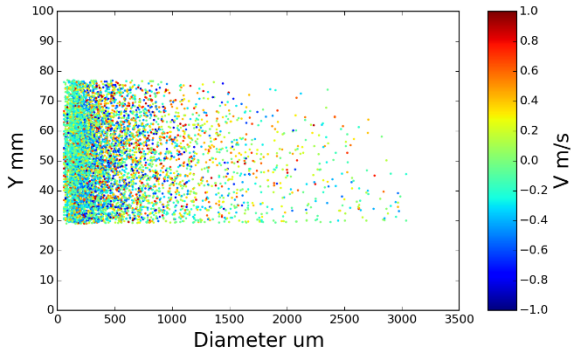


Figure B. 1133: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.1.1 Matched Only Droplets for .LB Image

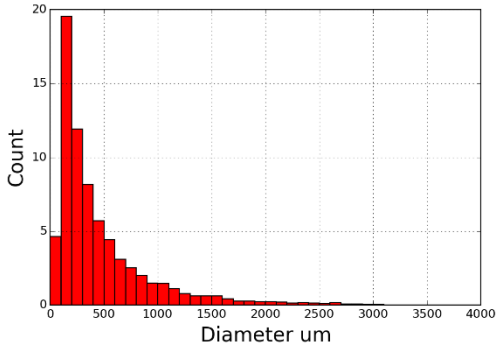


Figure B. 1136: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

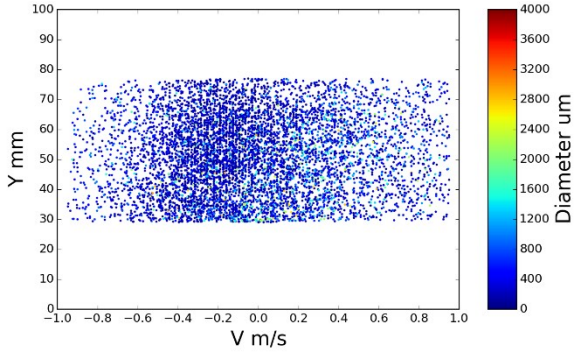


Figure B. 1139: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

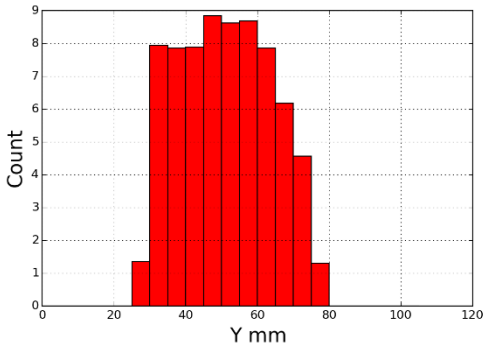


Figure B. 1137: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

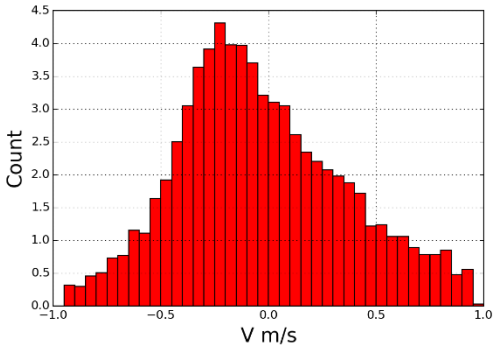


Figure B. 1140: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

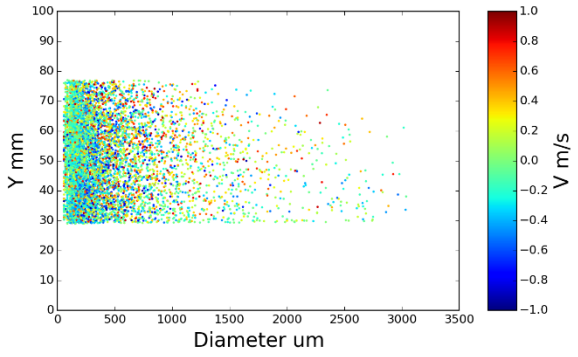


Figure B. 1138: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	38.4	34.74	57.2	3037	449.1	470.1	57.2	3042	444.2	473.2
40-60mm	72.43	65.74	57.2	3010	373.3	405.6	57.2	3002	365.3	403.8
60-80mm	39.4	34.9	57.2	2636	334.9	339.1	57.2	2980	330.4	335.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	150.25	135.4	57.2	3037	382.6	409.6	57.2	3042	376.5	409.3
			Height A (mm)				Height B (mm)			
Highest Particle			76.9930				76.9930			
Lowest Particle			29.0118				29.0118			

Table B. 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	17.56	57.2	2990	595.7	536.1	57.2	2955	569.6	522.3	-0.950	0.950	-0.000	0.290	-0.940	0.940	0.010	0.400
40-60mm	36.84	57.2	3010	473.9	454.7	57.2	3002	455.4	439.4	-0.950	0.940	-0.010	0.250	-0.950	0.950	0.010	0.410
60-80mm	20.46	57.2	2636	415.2	380.1	57.2	2707	399.3	368.8	-0.950	0.890	-0.020	0.230	-0.950	0.950	-0.010	0.390
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	74.86	57.2	3010	486.4	461.4	57.2	3002	466.9	447.2	-0.950	0.950	-0.010	0.260	-0.950	0.950	0.010	0.400

Table B. 126: Matched Droplet Info

B.4.1.1 All Droplets for .LA Image

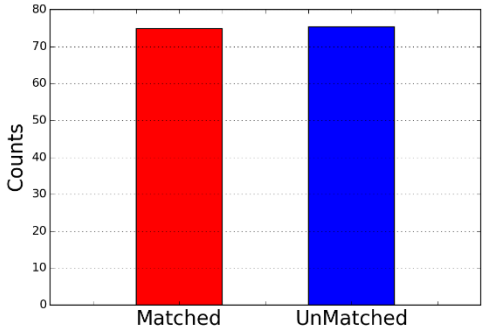


Figure B. 1141: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

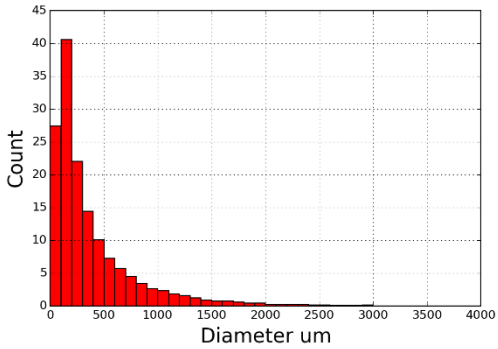


Figure B. 1142: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

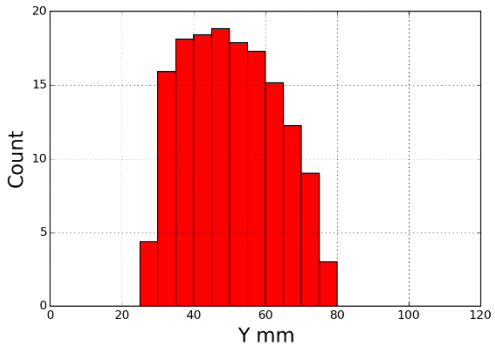


Figure B. 1143: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

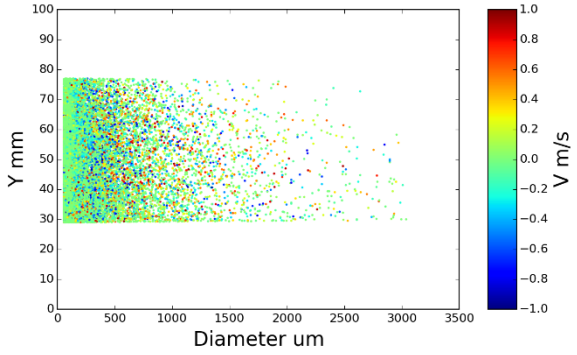


Figure B. 1144: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

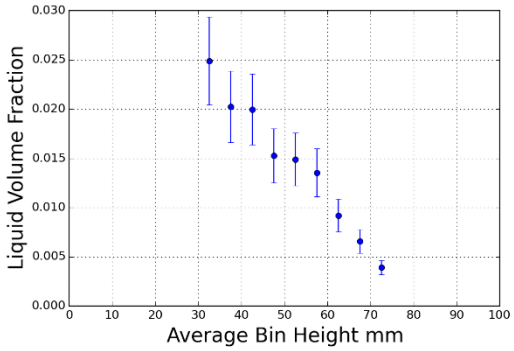


Figure B. 1145: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.1.1 All Droplets for .LB Image

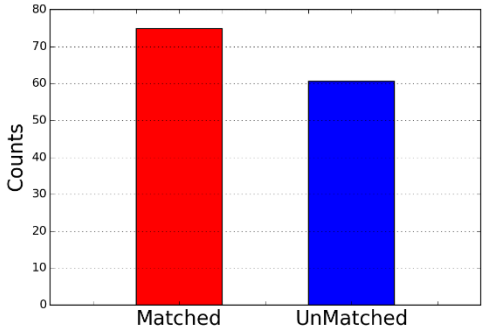


Figure B. 1146: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

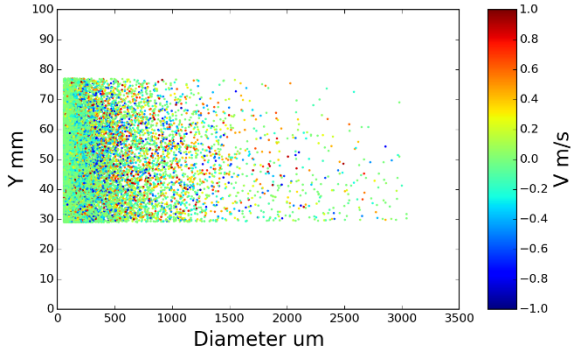


Figure B. 1149: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

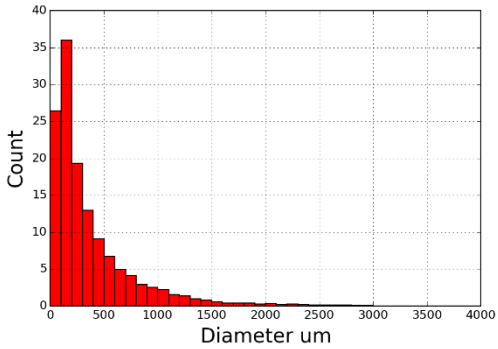


Figure B. 1147: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

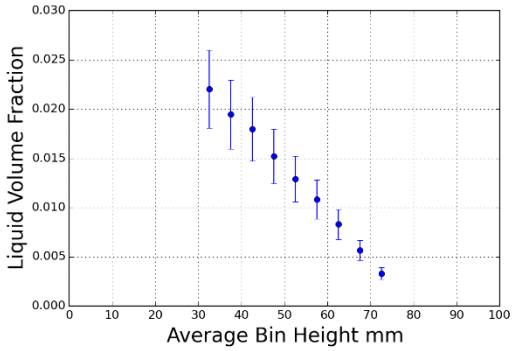


Figure B. 1150: Void Fraction R-123 55F 1700Btu 2550Lb Tri

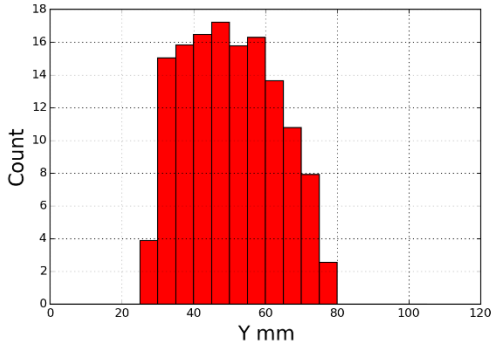


Figure B. 1148: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.1.1 Matched Only Droplets for .LA Image

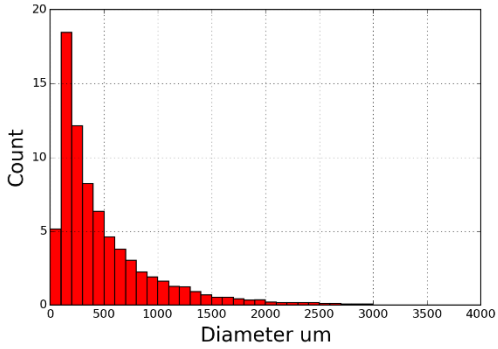


Figure B. 1151: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

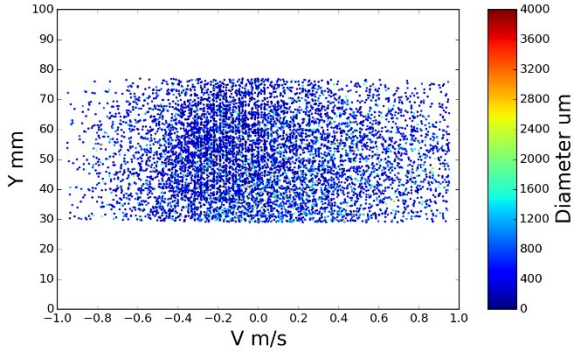


Figure B. 1154: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

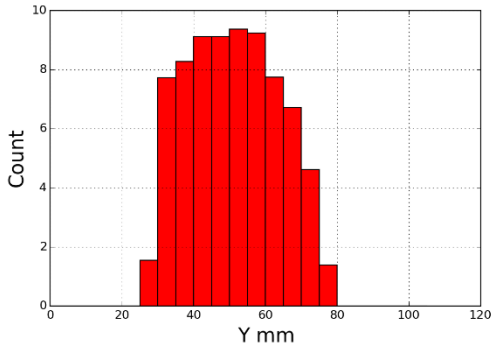


Figure B. 1152: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

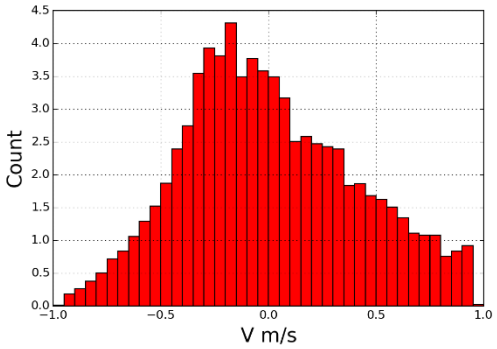


Figure B. 1155: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

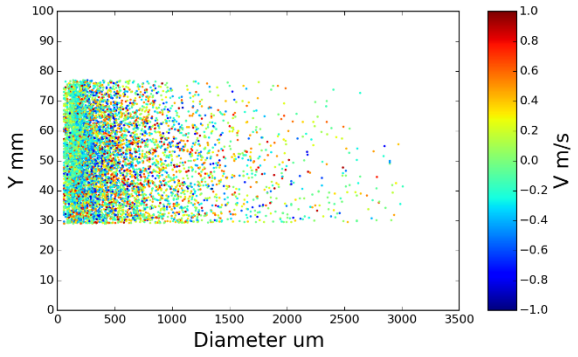


Figure B. 1153: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.1.1 Matched Only Droplets for .LB Image

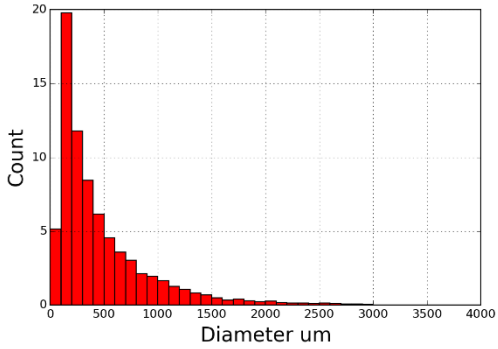


Figure B. 1156: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

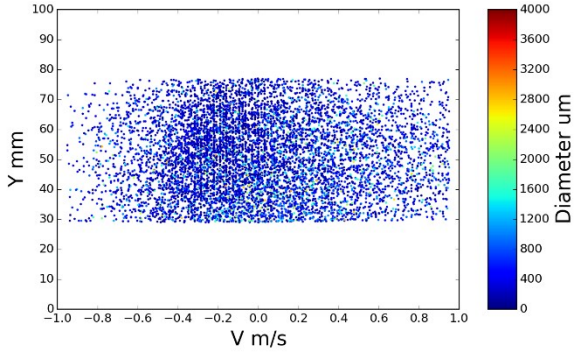


Figure B. 1159: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

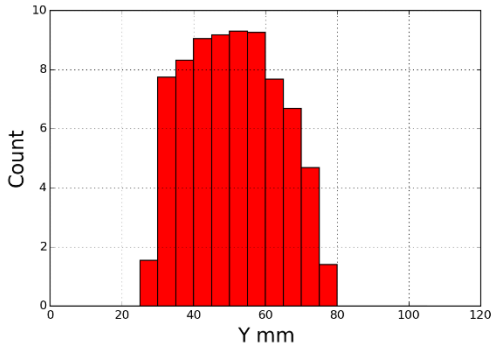


Figure B. 1157: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

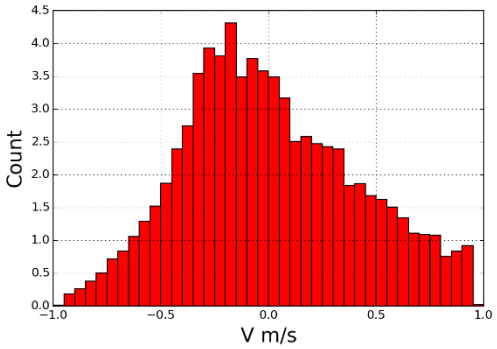


Figure B. 1160: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

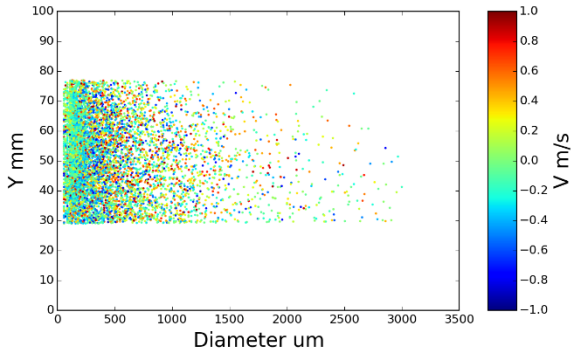


Figure B. 1158: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	38.51	36.23	57.2	3009	469.7	490.2	57.2	3025	463.5	482.1
40-60mm	73.01	67.64	57.2	3013	383.6	415.4	57.2	3007	373.3	406.2
60-80mm	40.29	38.2	57.2	3014	349.8	383.0	57.2	2981	328.1	360.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	151.82	142.08	57.2	3014	396.5	430.0	57.2	3025	384.1	418.8
			Height A (mm)				Height B (mm)			
Highest Particle			76.9930				76.9930			
Lowest Particle			29.0118				29.0118			

Table B. 127: 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	16.48	57.2	2985	644.8	559.5	57.2	2982	618.4	541.1	-0.940	0.950	0.010	0.300	-0.940	0.950	0.050	0.410
40-60mm	32.57	57.2	3007	512.5	475.8	57.2	3002	496.4	460.9	-0.920	0.920	-0.020	0.270	-0.950	0.950	0.020	0.410
60-80mm	19.08	57.2	2955	442.4	429.5	57.2	2981	426.4	415.6	-0.890	0.920	-0.020	0.240	-0.950	0.950	0.040	0.410
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	68.13	57.2	3007	524.9	491.0	57.2	3002	506.3	475.1	-0.940	0.950	-0.010	0.270	-0.950	0.950	0.030	0.410

Table B. 128: Matched Droplet Info

B.4.1.1 All Droplets for .LA Image

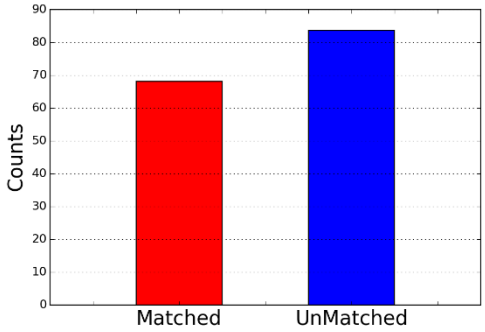


Figure B. 1161: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

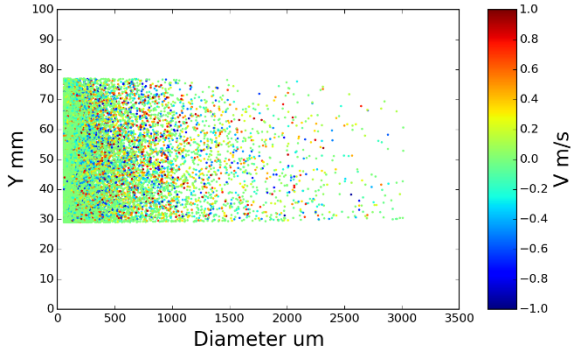


Figure B. 1164: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

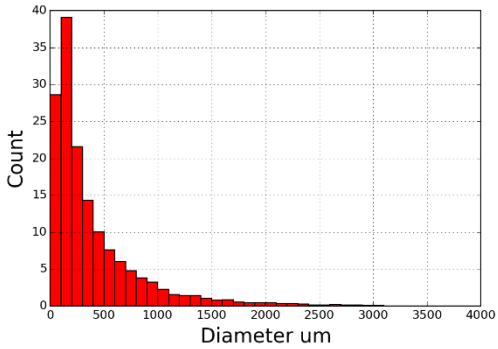


Figure B. 1162: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

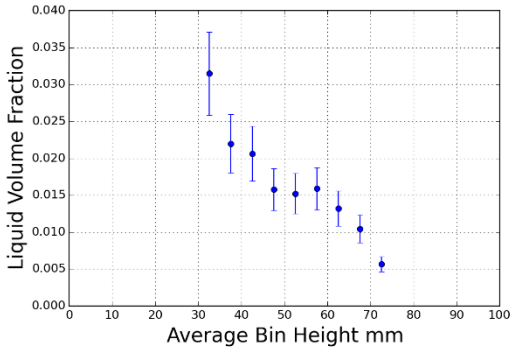


Figure B. 1165: Void Fraction R-123 55F 1700Btu 2550Lb Tri

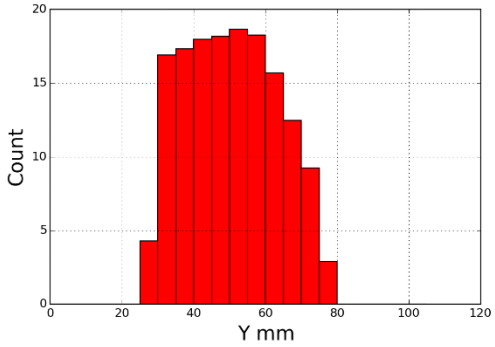


Figure B. 1163: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.1.1 All Droplets for .LB Image

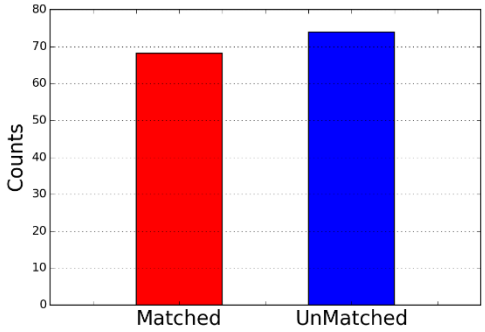


Figure B. 1166: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

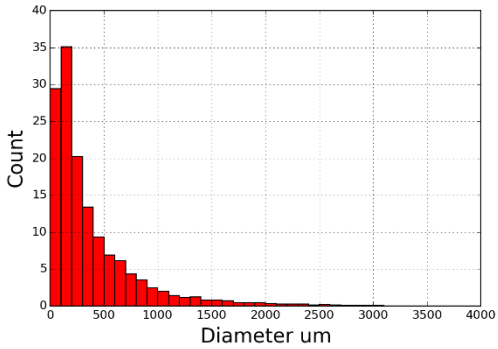


Figure B. 1167: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

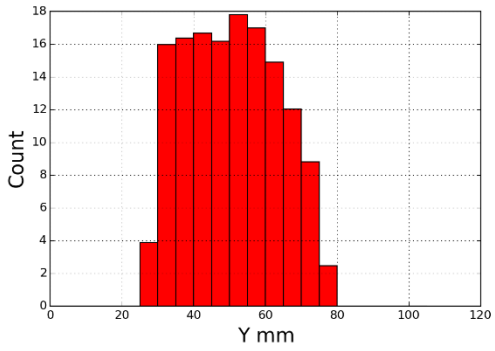


Figure B. 1168: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

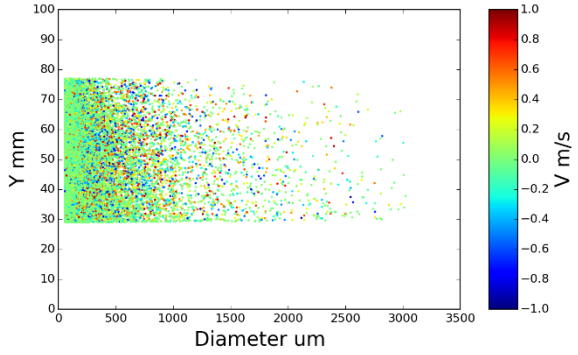


Figure B. 1169: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

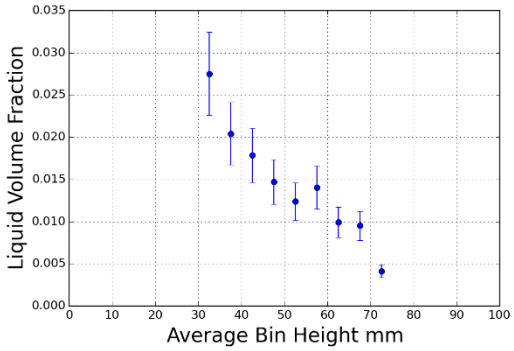


Figure B. 1170: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.1.1 Matched Only Droplets for .LA Image

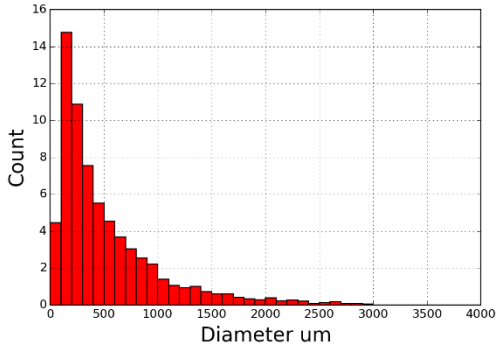


Figure B. 1171: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

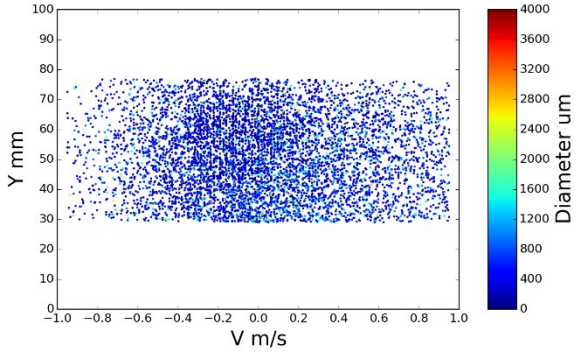


Figure B. 1174: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

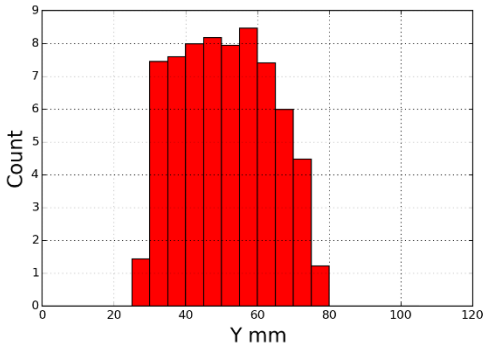


Figure B. 1172: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

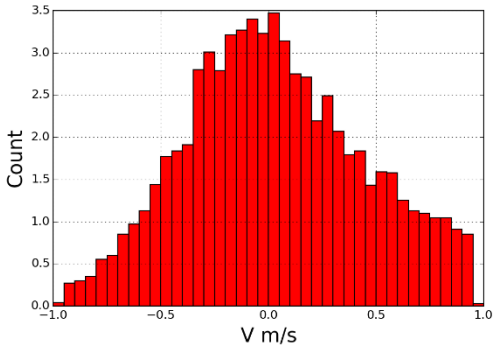


Figure B. 1175: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

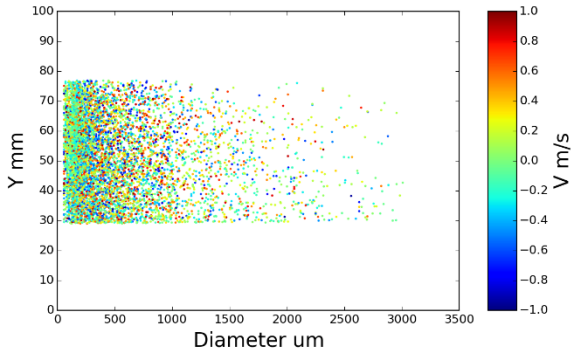


Figure B. 1173: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.1.1 Matched Only Droplets for .LB Image

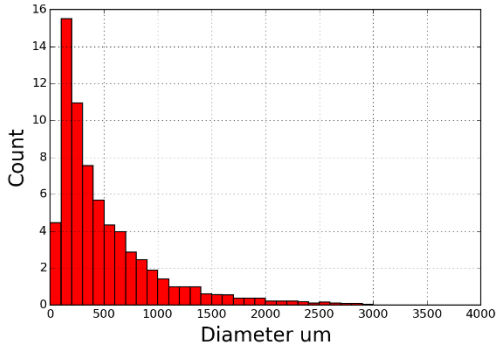


Figure B. 1176: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

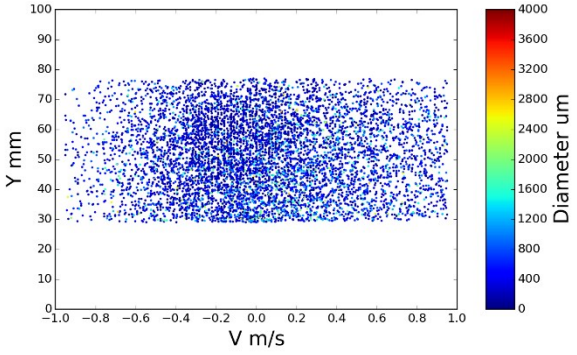


Figure B. 1179: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

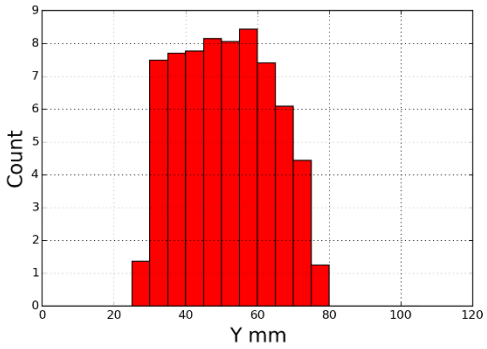


Figure B. 1177: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

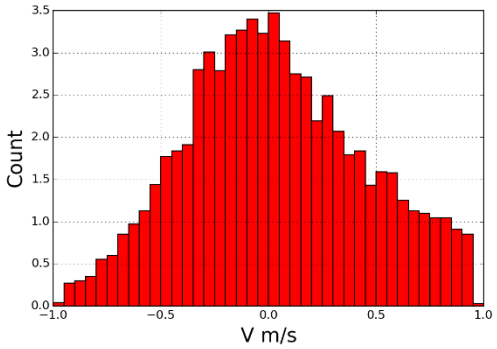


Figure B. 1180: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

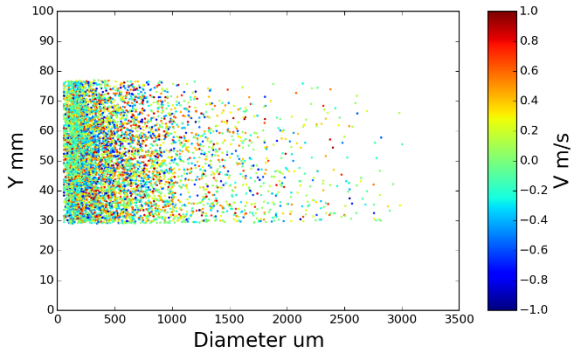


Figure B. 1178: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	30.45	29.45	57.2	3005	462.6	505.8	57.2	3031	463.1	508.1
40-60mm	63.15	60.92	57.2	3036	379.6	437.8	57.2	3036	371.0	421.1
60-80mm	35.7	33.89	57.2	3004	330.0	371.8	57.2	3034	324.8	354.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	129.32	124.28	57.2	3036	385.5	440.8	57.2	3036	380.2	430.1
			Height A (mm)				Height B (mm)			
Highest Particle			76.9692				76.9930			
Lowest Particle			29.0118				29.0118			

Table B. 129: 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	11.46	57.2	2957	670.7	589.7	57.2	3001	647.1	568.9	-0.940	0.930	0.020	0.300	-0.950	0.940	0.050	0.420
40-60mm	23.36	57.2	3036	542.9	504.7	57.2	3012	531.5	495.9	-0.940	0.940	-0.000	0.270	-0.950	0.950	0.030	0.420
60-80mm	13.92	57.2	3004	442.1	414.4	57.2	3034	434.9	407.6	-0.950	0.950	0.000	0.260	-0.940	0.950	0.030	0.430
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	48.74	57.2	3036	544.2	509.5	57.2	3034	531.1	497.2	-0.950	0.950	0.010	0.270	-0.950	0.950	0.030	0.420

Table B. 130: Matched Droplet Info

B.4.1.1 All Droplets for .LA Image

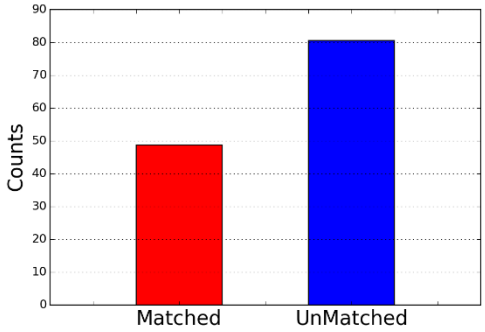


Figure B. 1181: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

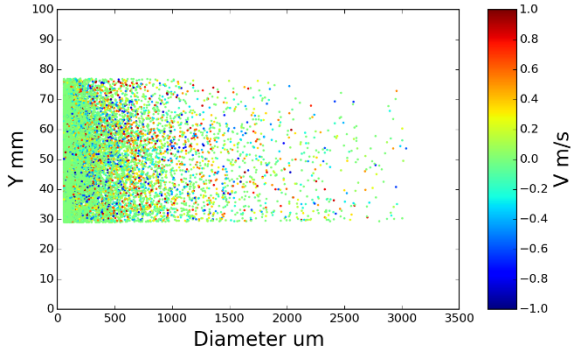


Figure B. 1184: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

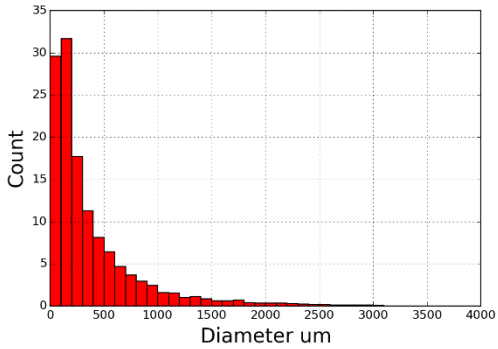


Figure B. 1182: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

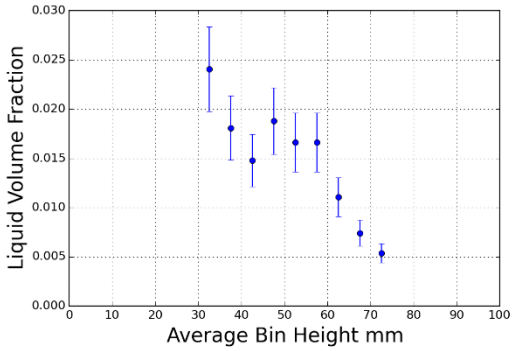


Figure B. 1185: Void Fraction R-123 55F 1700Btu 2550Lb Tri

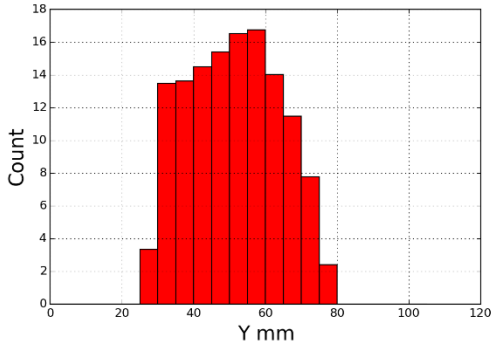


Figure B. 1183: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.1.1 All Droplets for .LB Image

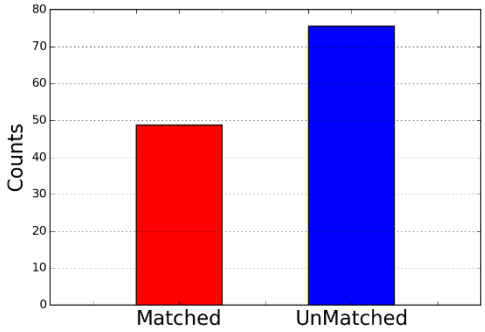


Figure B. 1186: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

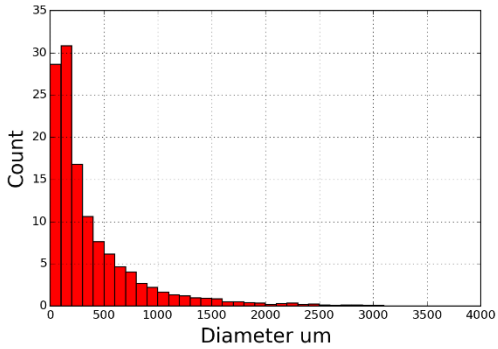


Figure B. 1187: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

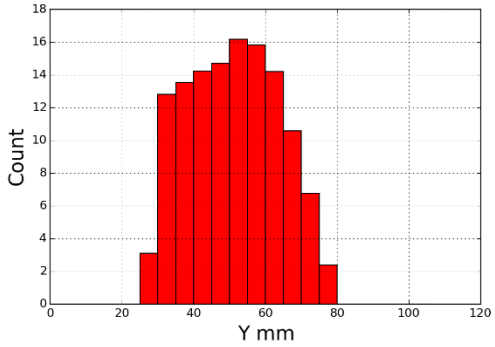


Figure B. 1188: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

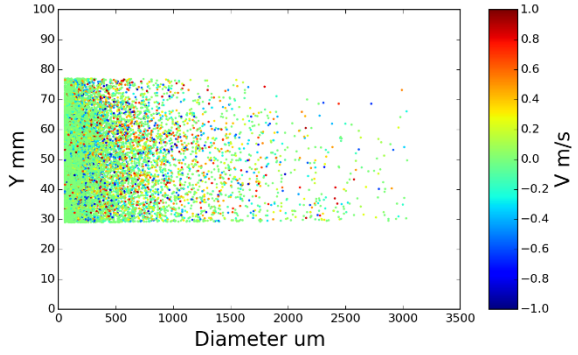


Figure B. 1189: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

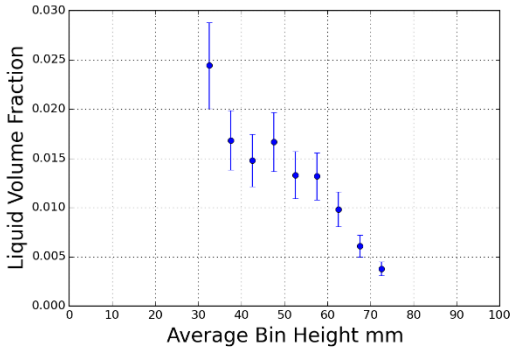


Figure B. 1190: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.1.1 Matched Only Droplets for .LA Image

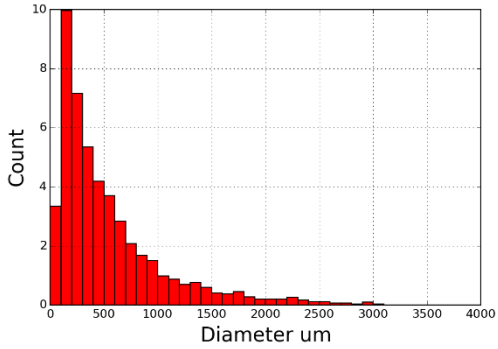


Figure B. 1191: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

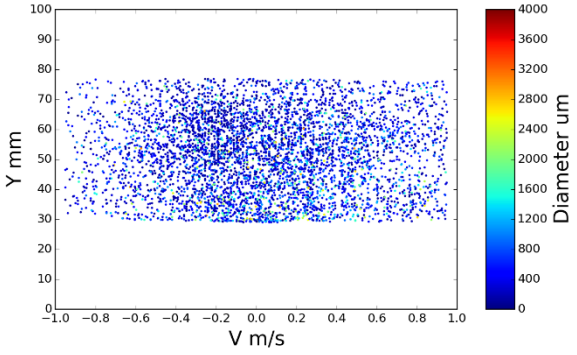


Figure B. 1194: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

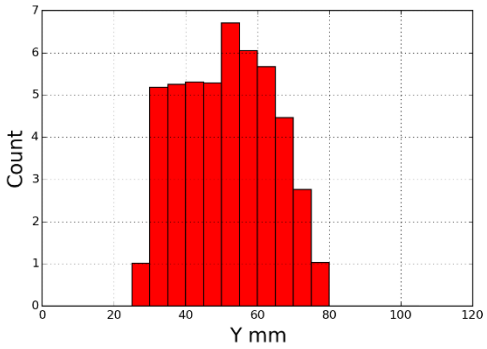


Figure B. 1192: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

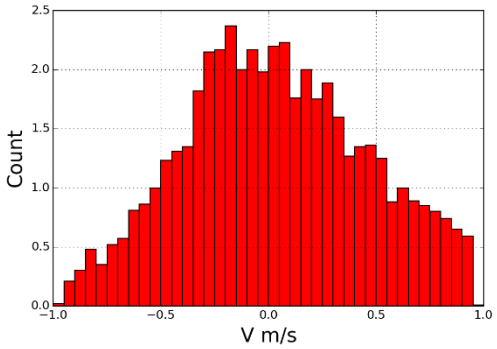


Figure B. 1195: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

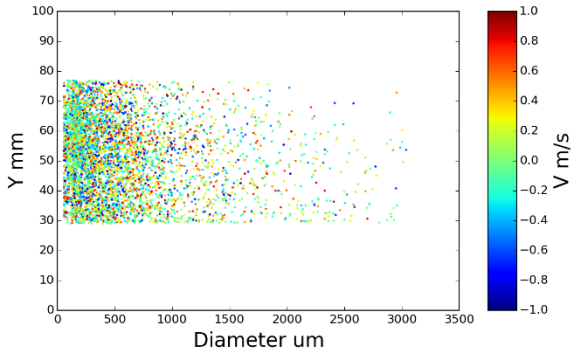


Figure B. 1193: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.1.1 Matched Only Droplets for .LB Image

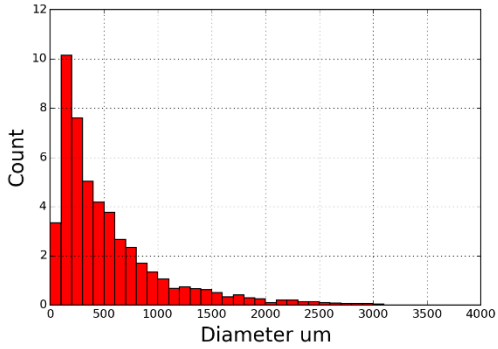


Figure B. 1196: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

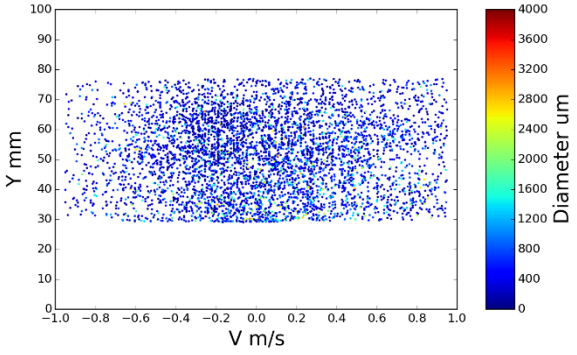


Figure B. 1199: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

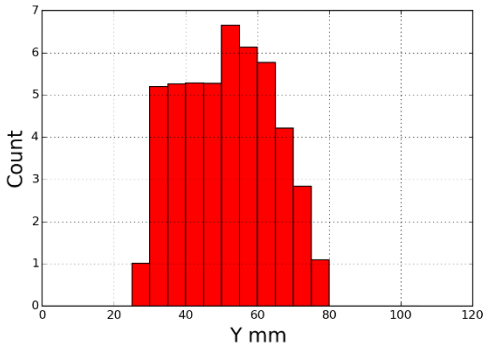


Figure B. 1197: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

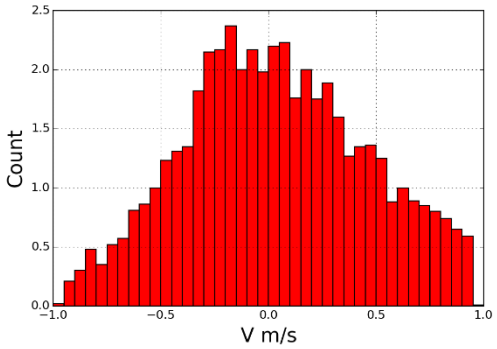


Figure B. 1200: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

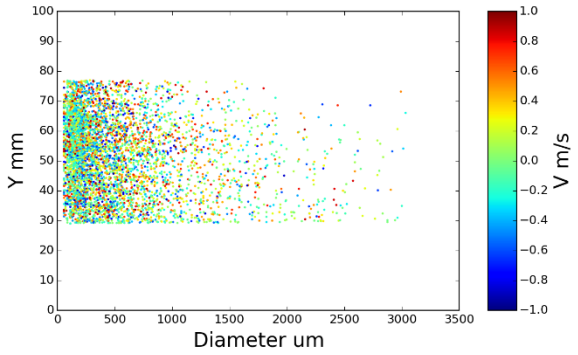


Figure B. 1198: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	25.9	27.31	57.2	3037	437.7	522.9	57.2	2996	405.1	510.6
40-60mm	56.69	59.16	57.2	3037	363.1	444.6	57.2	3008	343.9	428.0
60-80mm	30.19	34.57	57.2	3014	321.4	378.8	57.2	3030	285.1	357.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	112.82	121.09	57.2	3037	369.1	449.7	57.2	3030	340.9	432.2
			Height A (mm)				Height B (mm)			
Highest Particle			76.9930				76.9930			
Lowest Particle			29.0118				29.0118			

Table B. 131: 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	7.8	57.2	3037	666.4	621.2	57.2	2996	648.5	608.7	-0.920	0.910	0.030	0.340	-0.940	0.950	0.050	0.430
40-60mm	16.89	57.2	3037	555.1	535.6	57.2	3008	540.9	520.6	-0.950	0.940	0.030	0.310	-0.950	0.950	0.030	0.460
60-80mm	9.24	57.2	2866	464.6	446.8	57.2	2888	455.3	440.9	-0.950	0.900	-0.010	0.280	-0.950	0.950	-0.030	0.450
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	33.93	57.2	3037	556.0	539.4	57.2	3008	542.2	526.8	-0.950	0.940	0.020	0.310	-0.950	0.950	0.020	0.450

Table B. 132: Matched Droplet Info

B.4.1.1 All Droplets for .LA Image

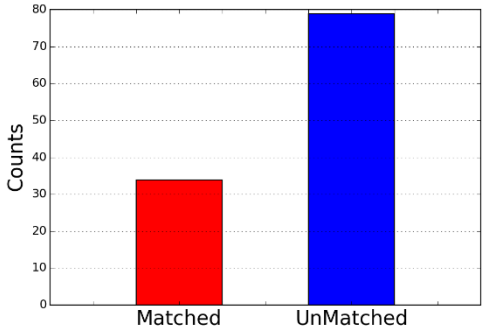


Figure B. 1201: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

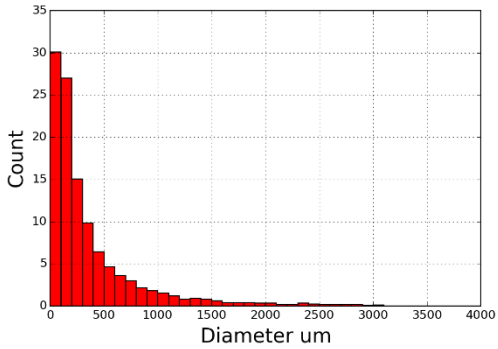


Figure B. 1202: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

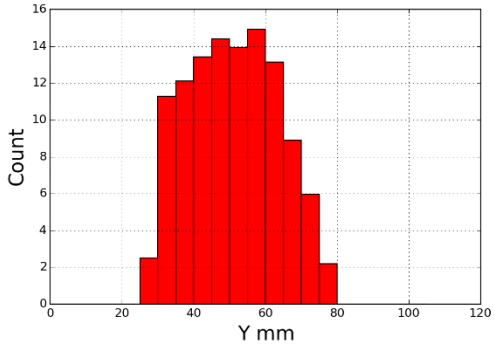


Figure B. 1203: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

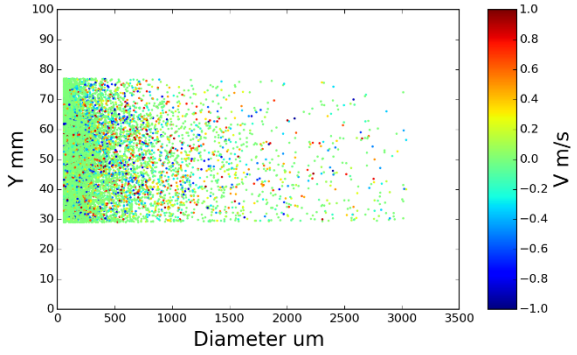


Figure B. 1204: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

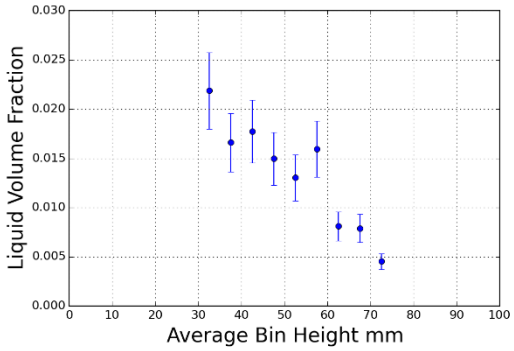


Figure B. 1205: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.1.1 All Droplets for .LB Image

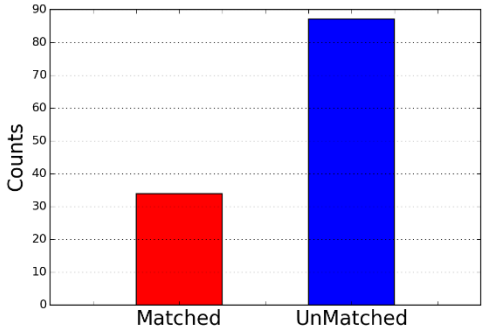


Figure B. 1206: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

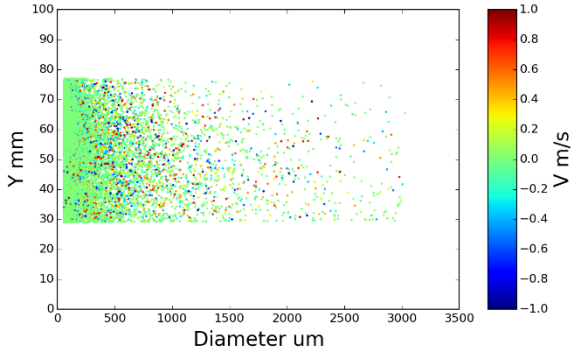


Figure B. 1209: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

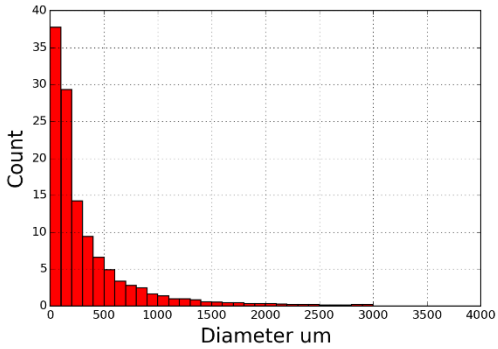


Figure B. 1207: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

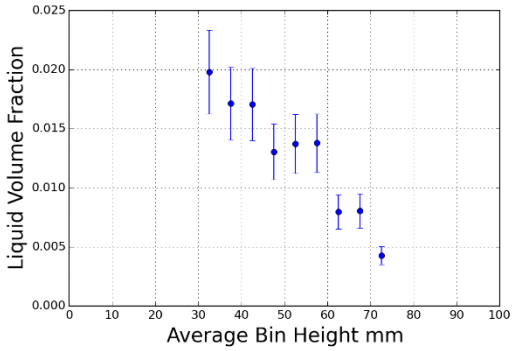


Figure B. 1210: Void Fraction R-123 55F 1700Btu 2550Lb Tri

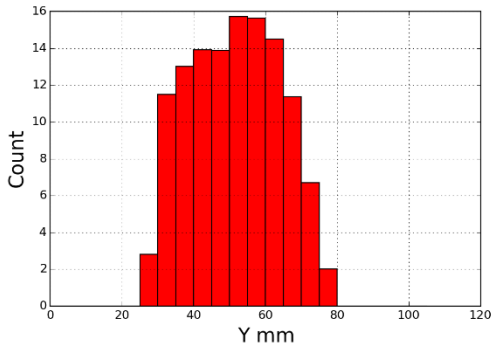


Figure B. 1208: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.1.1 Matched Only Droplets for .LA Image

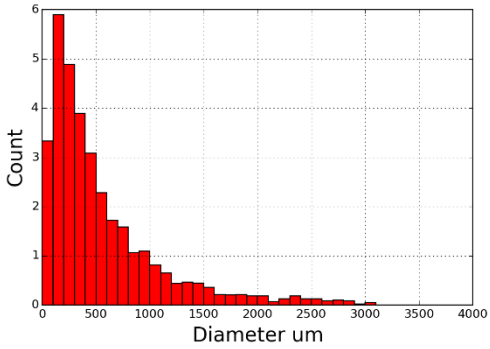


Figure B. 1211: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

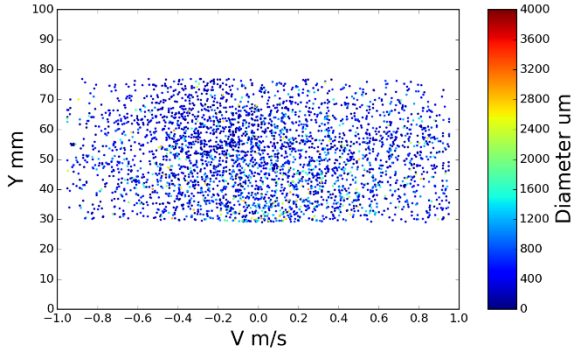


Figure B. 1214: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

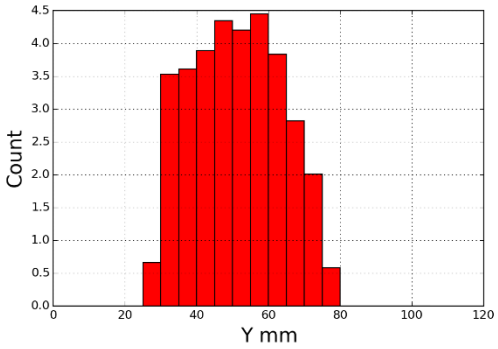


Figure B. 1212: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

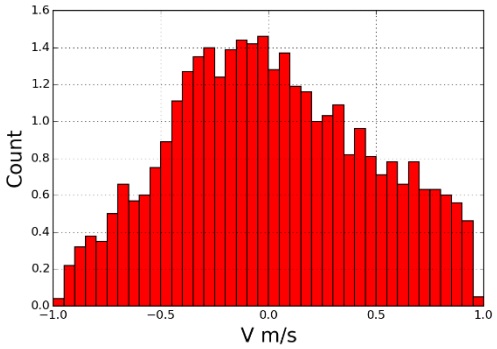


Figure B. 1215: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

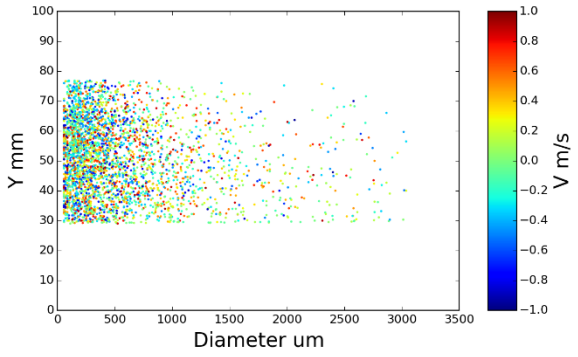


Figure B. 1213: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.1.1 Matched Only Droplets for .LB Image

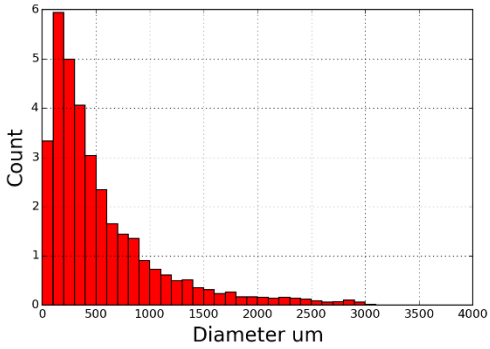


Figure B. 1216: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

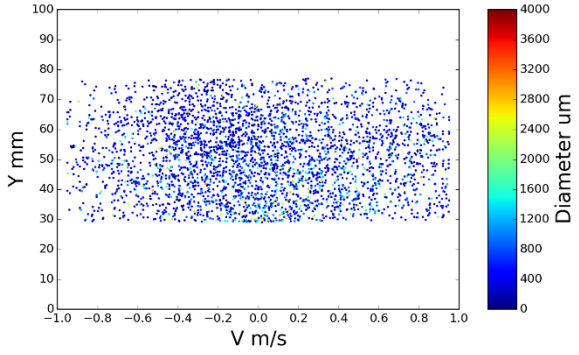


Figure B. 1219: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

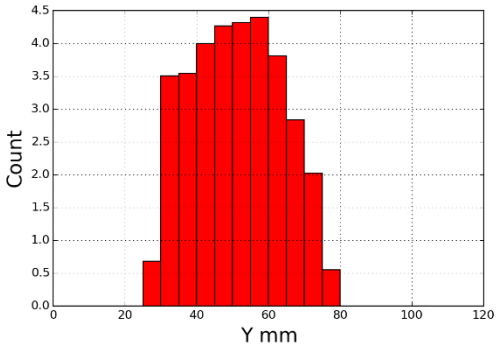


Figure B. 1217: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

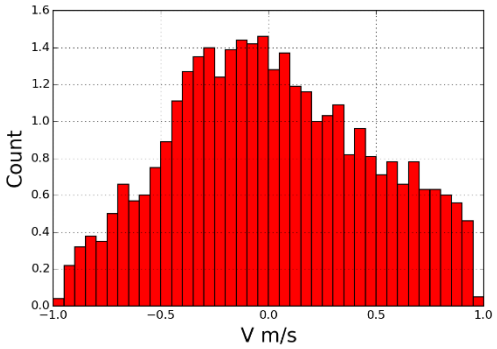


Figure B. 1220: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

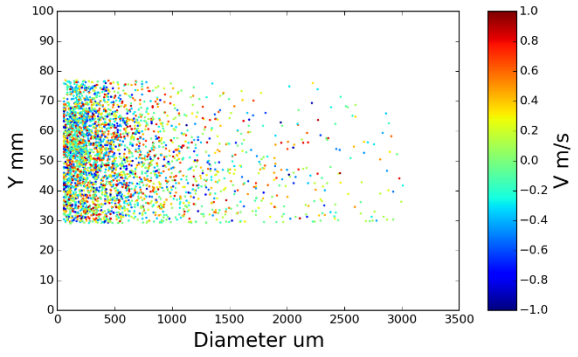


Figure B. 1218: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.1.2 Lens 50mm Mag 0_13x

B.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	20.99	21.06	128.7	3077	626.0	524.0	128.7	3029	623.9	523.0
40-60mm	40.38	40.39	128.7	3046	558.4	444.4	128.7	2979	556.2	445.3
60-80mm	25.6	25.12	128.7	3024	493.5	359.0	128.7	3069	499.9	361.4
80-100mm	8.14	8.22	128.7	1999	427.0	277.6	128.7	2008	420.2	285.4
All	95.11	94.79	128.7	3077	544.6	434.9	128.7	3069	544.5	436.2
			Height A (mm)				Height B (mm)			
Highest Particle			99.9736				99.9736			
Lowest Particle			30.0548				30.0548			

Table B. 133: 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	10.96	128.7	3027	740.0	565.4	128.7	3019	732.8	564.6	-0.940	0.920	-0.010	0.300	-0.940	0.950	-0.060	0.410
40-60mm	23.68	128.7	2892	645.3	476.7	128.7	2979	641.0	474.8	-0.930	0.930	-0.010	0.290	-0.950	0.950	-0.020	0.440
60-80mm	15.78	128.7	3024	564.5	379.1	128.7	2982	563.8	380.5	-0.950	0.930	-0.020	0.280	-0.950	0.950	-0.020	0.450
80-100mm	5.25	128.7	1999	487.1	295.8	128.7	2008	487.4	305.6	-0.930	0.870	-0.000	0.280	-0.920	0.930	0.030	0.460
All	55.67	128.7	3027	626.1	462.8	128.7	3019	623.0	462.7	-0.950	0.930	-0.010	0.290	-0.950	0.950	-0.030	0.440

Table B. 134: Matched Droplet Info

B.4.1.2 All Droplets for .LA Image

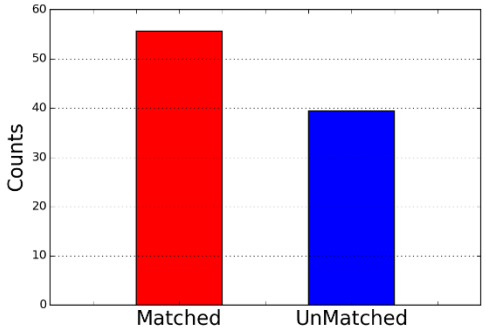


Figure B. 1221: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

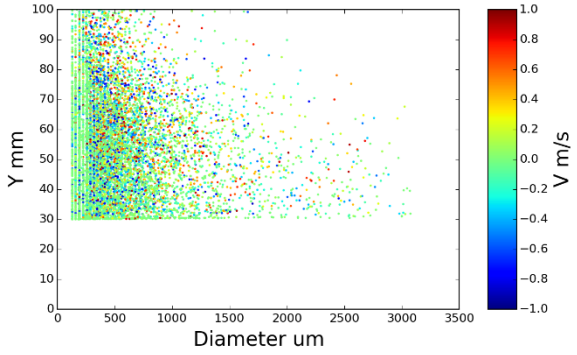


Figure B. 1224: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

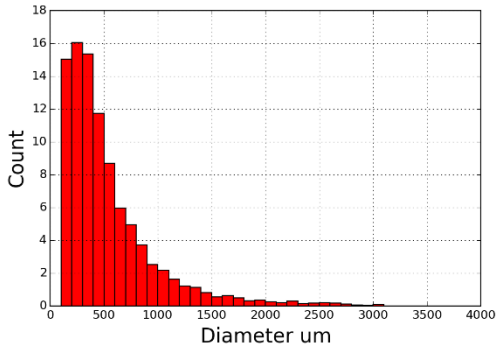


Figure B. 1222: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

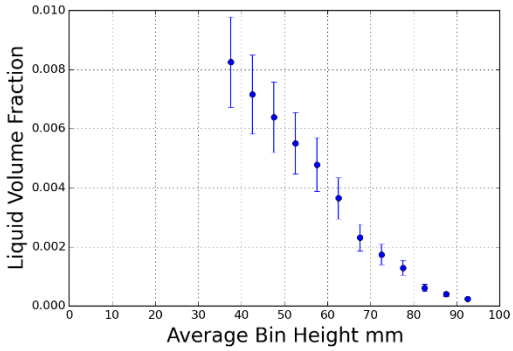


Figure B. 1225: Void Fraction R-123 55F 1700Btu 2550Lb Tri

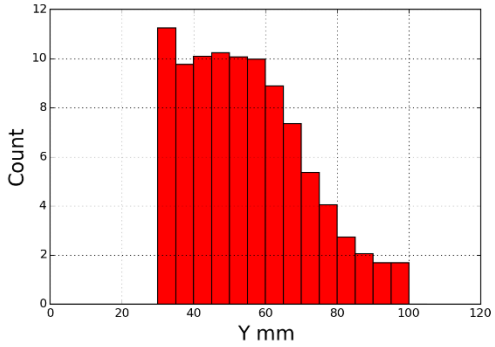


Figure B. 1223: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.1.2 All Droplets for .LB Image

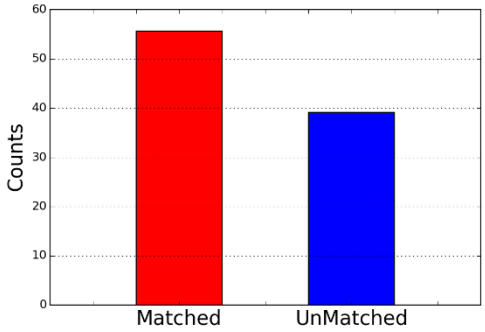


Figure B. 1226: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

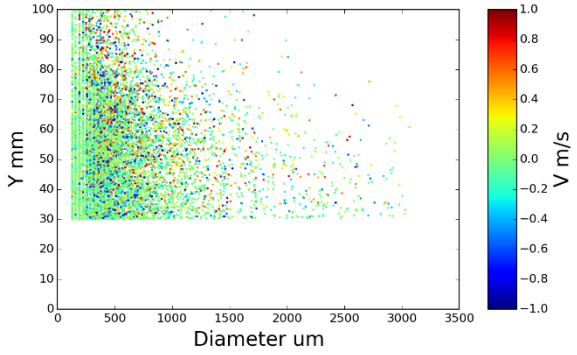


Figure B. 1229: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

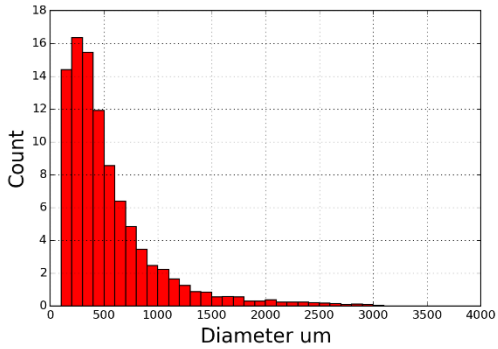


Figure B. 1227: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

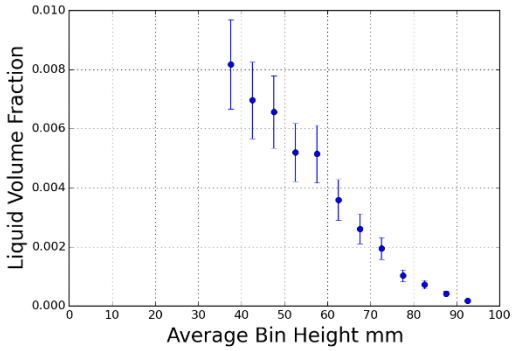


Figure B. 1230: Void Fraction R-123 55F 1700Btu 2550Lb Tri

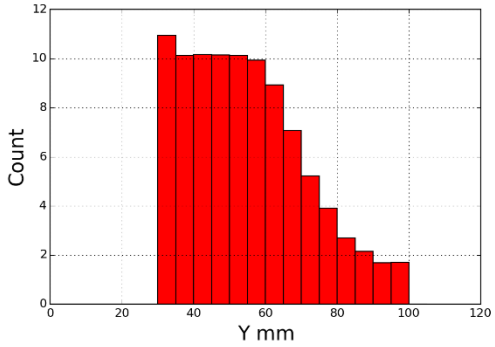


Figure B. 1228: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.1.2 Matched Only Droplets for .LA Image

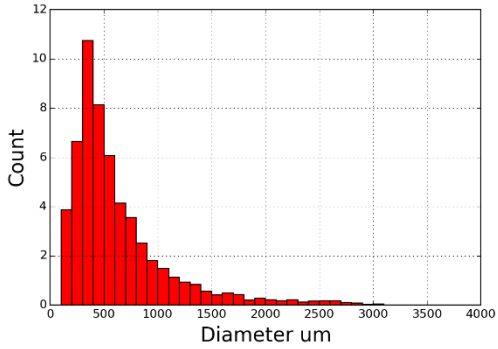


Figure B. 1231: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

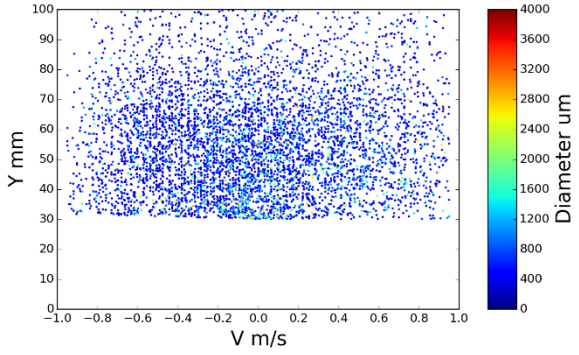


Figure B. 1234: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

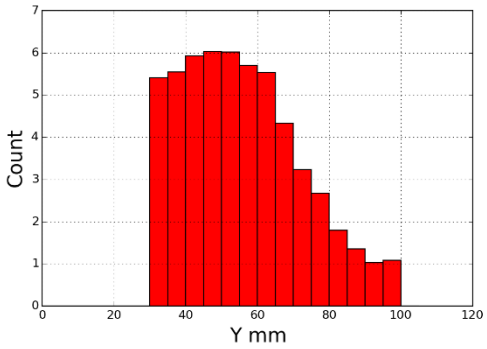


Figure B. 1232: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

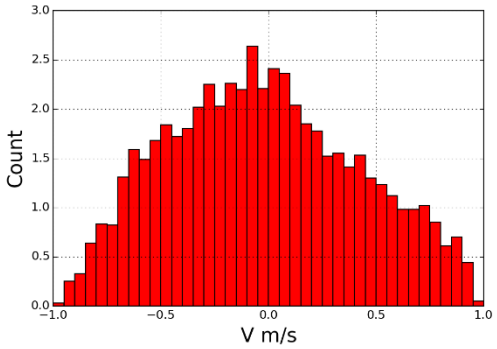


Figure B. 1235: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

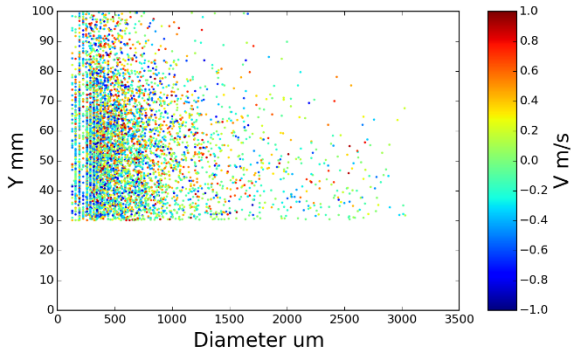


Figure B. 1233: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.1.2 Matched Only Droplets for .LB Image

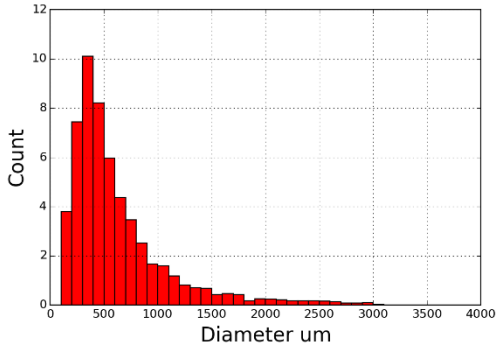


Figure B. 1236: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

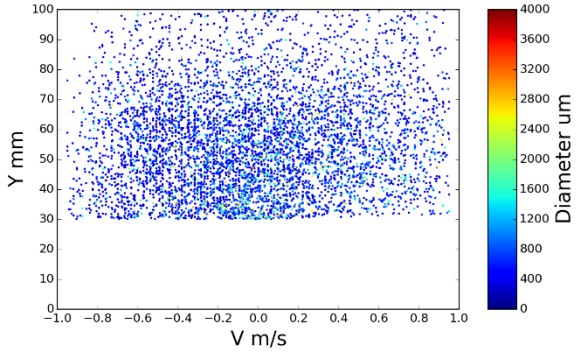


Figure B. 1239: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

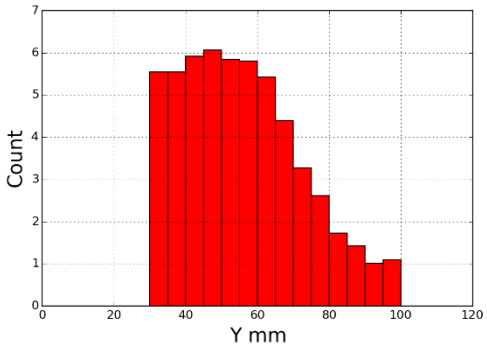


Figure B. 1237: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

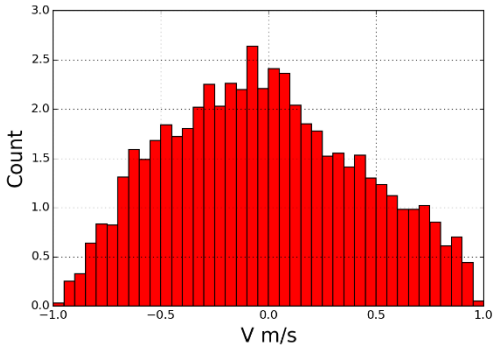


Figure B. 1240: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

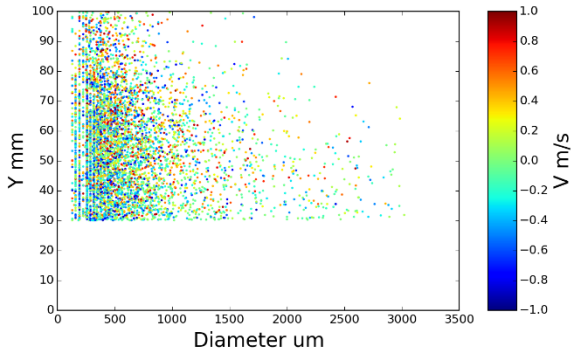


Figure B. 1238: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	26.32	26.58	128.7	3071	610.7	485.1	128.7	3036	616.1	491.6
40-60mm	47.27	47.74	128.7	3058	563.3	433.0	128.7	3012	563.9	439.6
60-80mm	29.38	29.3	128.7	3065	496.8	359.1	128.7	3046	493.1	356.3
80-100mm	9.39	9.42	128.7	2866	452.4	313.6	128.7	2836	454.0	323.2
All	112.36	113.04	128.7	3071	547.8	422.4	128.7	3046	548.7	427.5
			Height A (mm)				Height B (mm)			
Highest Particle			99.9736				99.9451			
Lowest Particle			30.0548				30.0548			

Table B. 135: 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	13.65	128.7	3006	695.6	504.4	128.7	3020	688.3	500.2	-0.930	0.950	-0.020	0.330	-0.940	0.950	0.030	0.410
40-60mm	27.13	128.7	3031	653.0	458.3	128.7	3012	651.4	462.9	-0.950	0.950	-0.010	0.300	-0.950	0.950	0.000	0.450
60-80mm	17.46	128.7	3014	573.9	379.2	128.7	3046	568.7	381.6	-0.950	0.950	-0.010	0.290	-0.940	0.950	-0.020	0.450
80-100mm	5.86	128.7	2866	520.2	334.7	128.7	2836	520.5	333.8	-0.910	0.950	-0.010	0.310	-0.940	0.940	0.040	0.460
All	64.1	128.7	3031	628.4	442.2	128.7	3046	624.8	443.7	-0.950	0.950	-0.010	0.310	-0.950	0.950	0.000	0.440

Table B. 136: Matched Droplet Info

B.4.1.2 All Droplets for .LA Image

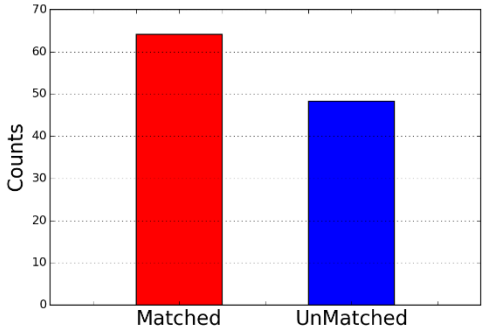


Figure B. 1241: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

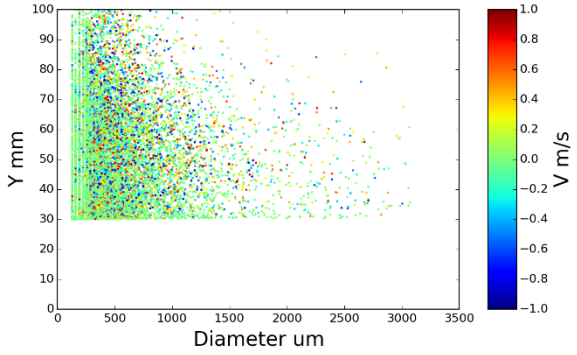


Figure B. 1244: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

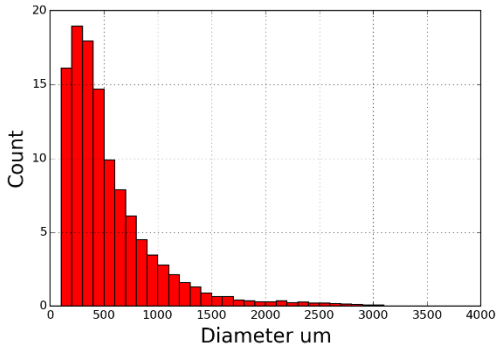


Figure B. 1242: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

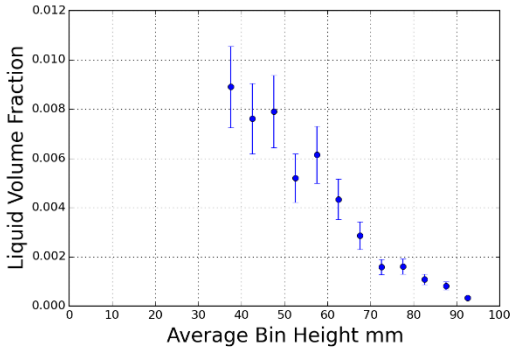


Figure B. 1245: Void Fraction R-123 55F 1700Btu 2550Lb Tri

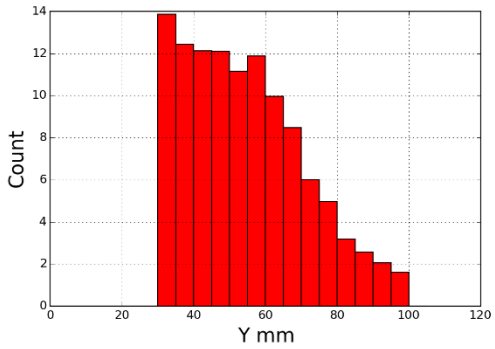


Figure B. 1243: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.1.2 All Droplets for .LB Image

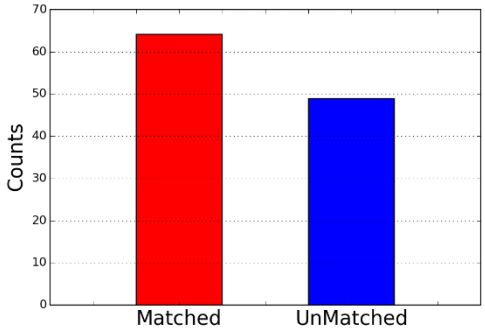


Figure B. 1246: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

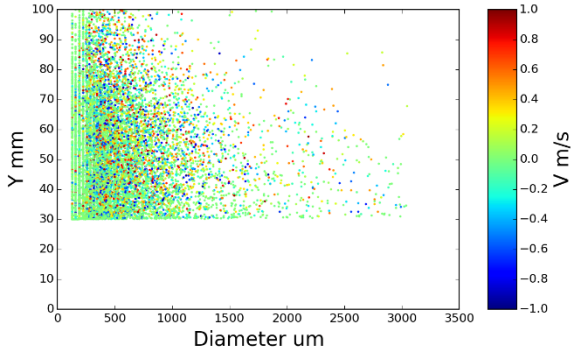


Figure B. 1249: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

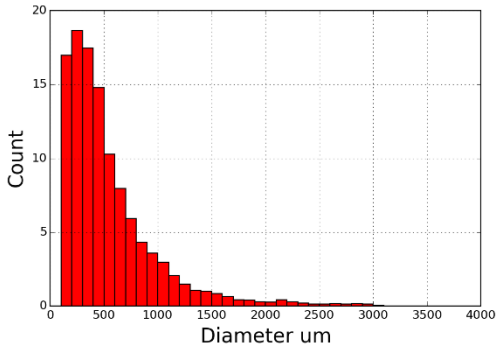


Figure B. 1247: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

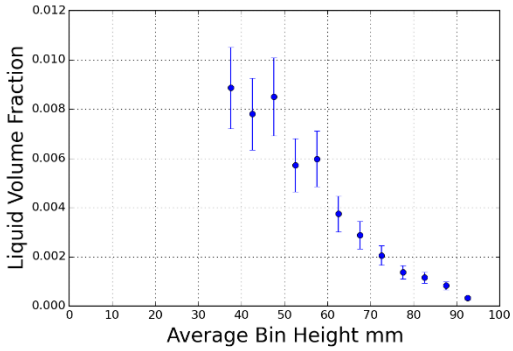


Figure B. 1250: Void Fraction R-123 55F 1700Btu 2550Lb Tri

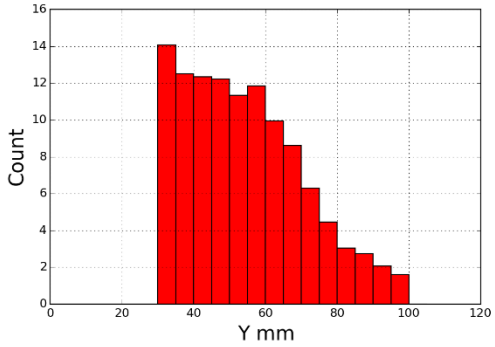


Figure B. 1248: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.1.2 Matched Only Droplets for .LA Image

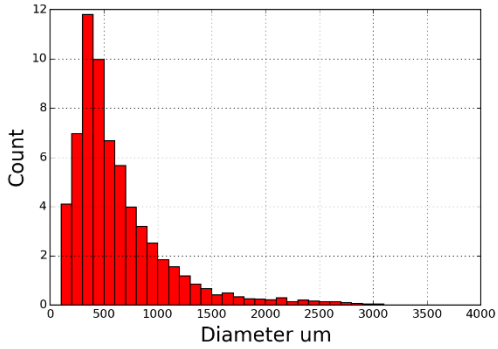


Figure B. 1251: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

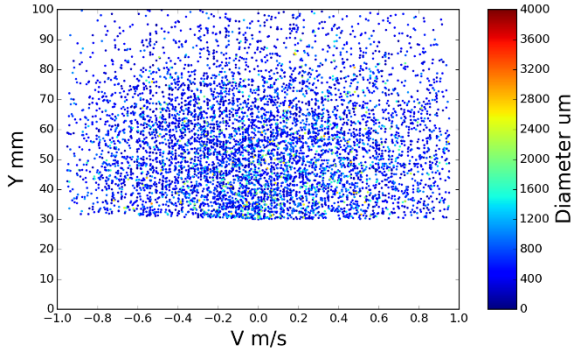


Figure B. 1254: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

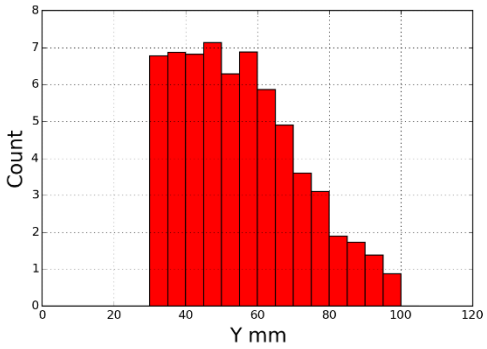


Figure B. 1252: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

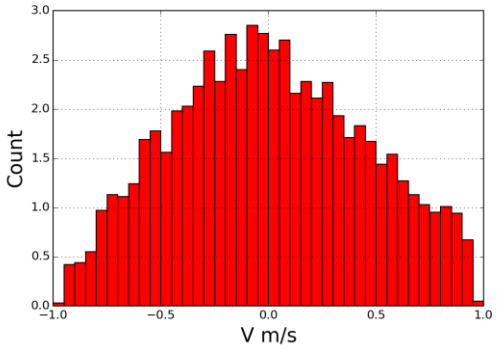


Figure B. 1255: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

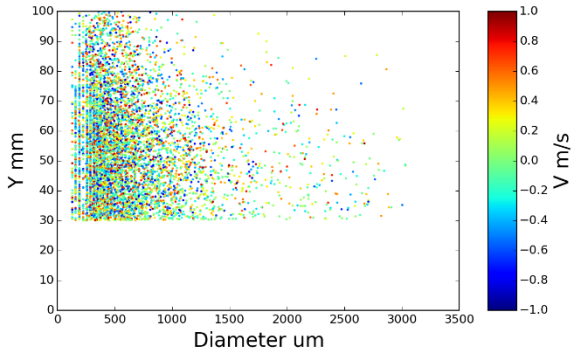


Figure B. 1253: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.1.2 Matched Only Droplets for .LB Image

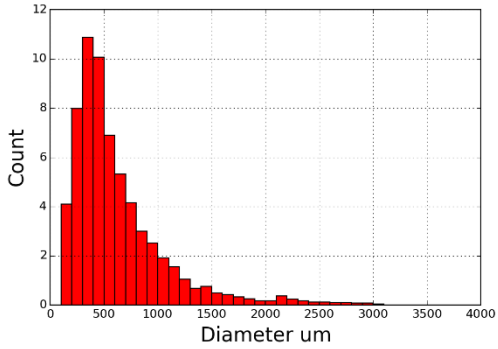


Figure B. 1256: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

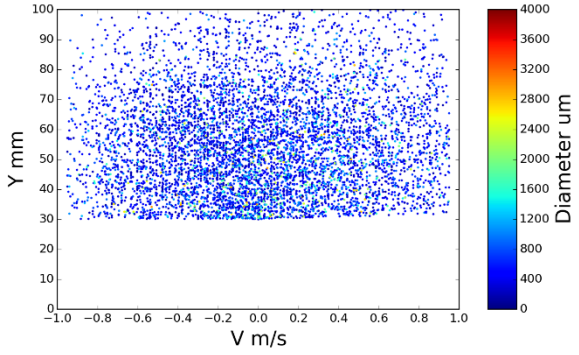


Figure B. 1259: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

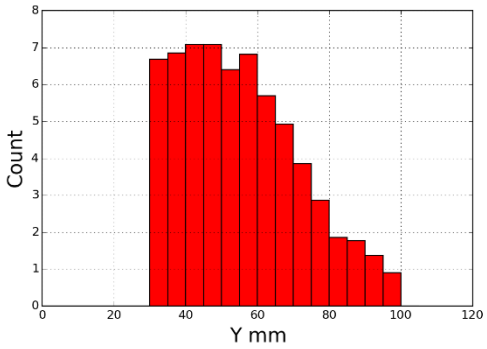


Figure B. 1257: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

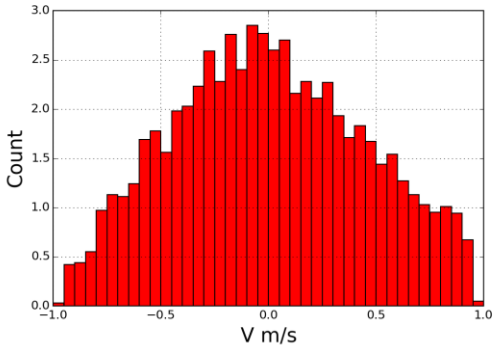


Figure B. 1260: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

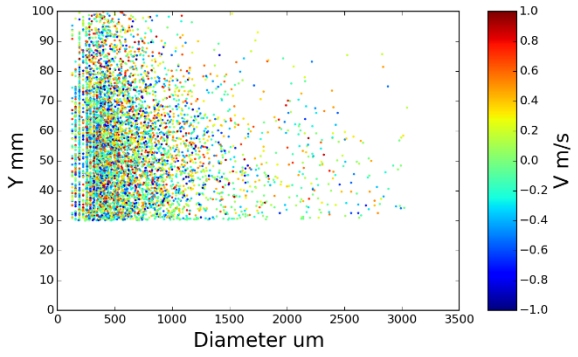


Figure B. 1258: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	28.34	28.18	128.7	3012	636.3	500.2	128.7	3073	630.4	494.3
40-60mm	48.91	48.77	128.7	3008	583.9	440.0	128.7	3020	590.3	446.4
60-80mm	29.92	29.7	128.7	2931	517.2	366.8	128.7	2982	517.0	376.2
80-100mm	10.12	9.85	128.7	2790	456.3	309.1	128.7	2738	463.1	312.9
All	117.29	116.5	128.7	3012	568.5	432.1	128.7	3073	570.6	435.4
			Height A (mm)				Height B (mm)			
Highest Particle			99.9736				99.9736			
Lowest Particle			30.0548				30.0548			

Table B. 137: 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	128.7	3012	762.7	546.0	128.7	3063	751.9	534.9	-0.950	0.950	-0.010	0.320	-0.950	0.940	0.020	0.430
40-60mm	27.64	128.7	3008	685.0	464.2	128.7	2933	679.0	466.7	-0.930	0.950	-0.000	0.310	-0.950	0.950	0.030	0.450
60-80mm	17.16	128.7	2931	598.3	391.7	128.7	2982	597.6	397.4	-0.930	0.950	-0.020	0.310	-0.950	0.950	0.050	0.470
80-100mm	6.08	128.7	2790	533.0	340.1	128.7	2738	531.8	339.8	-0.930	0.830	-0.000	0.300	-0.930	0.930	0.000	0.450
All	64.64	128.7	3012	664.2	460.7	128.7	3063	658.9	459.6	-0.950	0.950	-0.010	0.310	-0.950	0.950	0.030	0.450

Table B. 138: Matched Droplet Info

B.4.1.2 All Droplets for .LA Image

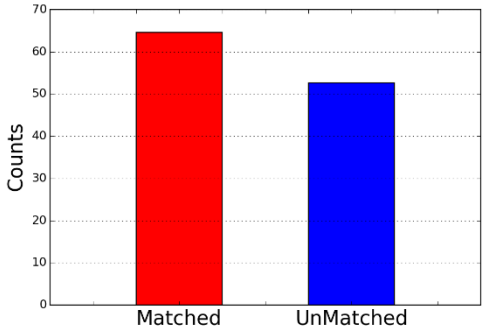


Figure B. 1261: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

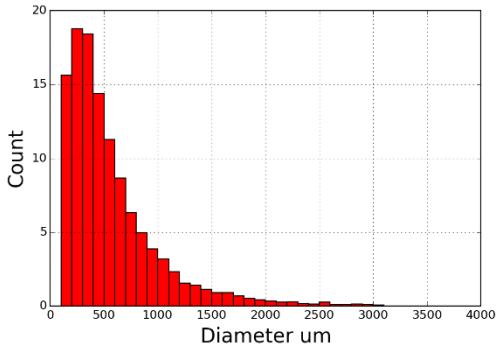


Figure B. 1262: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

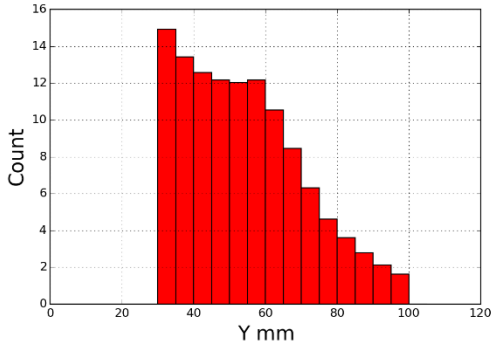


Figure B. 1263: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

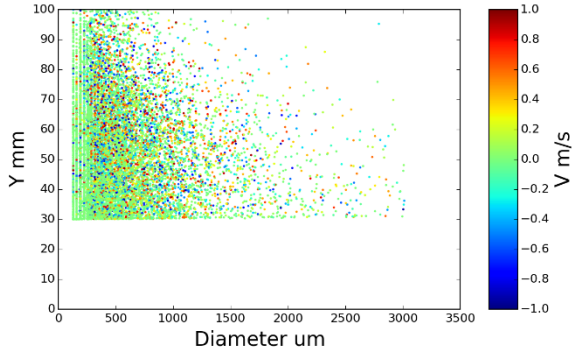


Figure B. 1264: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

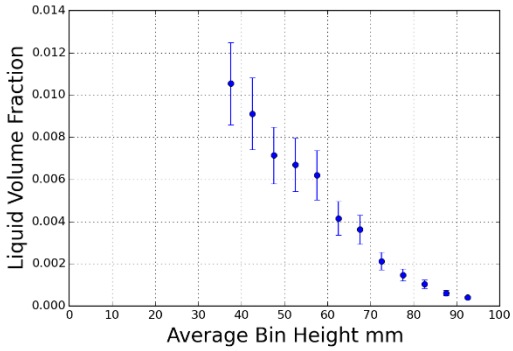


Figure B. 1265: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.1.2 All Droplets for .LB Image

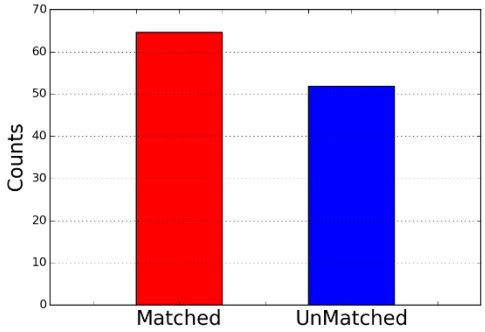


Figure B. 1266: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

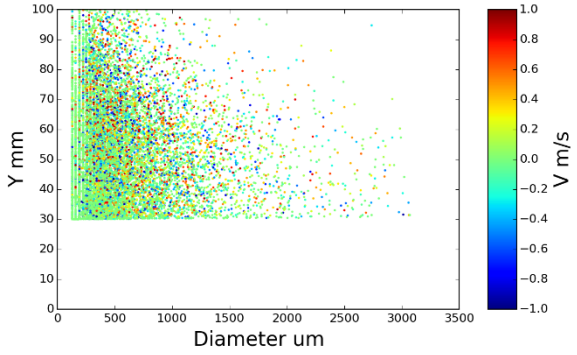


Figure B. 1269: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

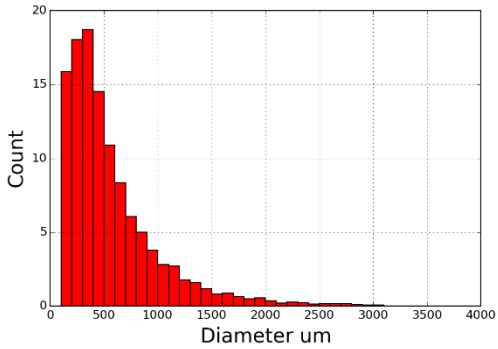


Figure B. 1267: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

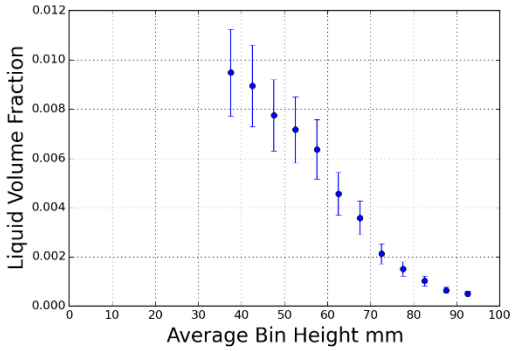


Figure B. 1270: Void Fraction R-123 55F 1700Btu 2550Lb Tri

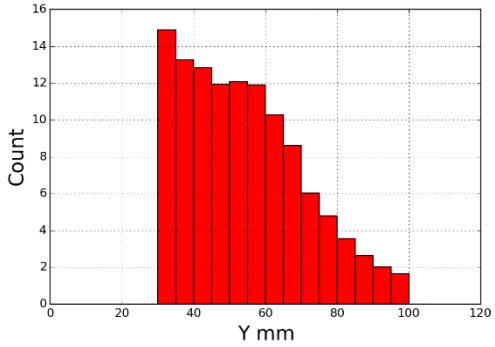


Figure B. 1268: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.1.2 Matched Only Droplets for .LA Image

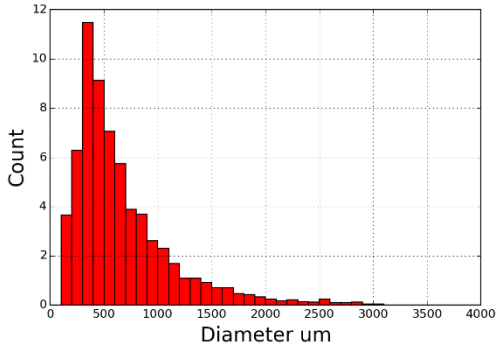


Figure B. 1271: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

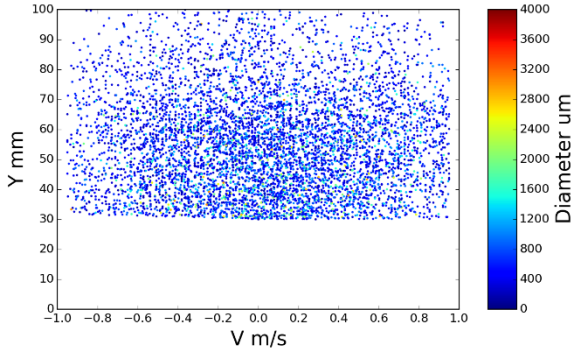


Figure B. 1274: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

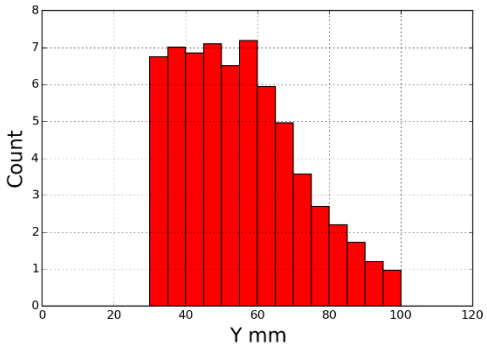


Figure B. 1272: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

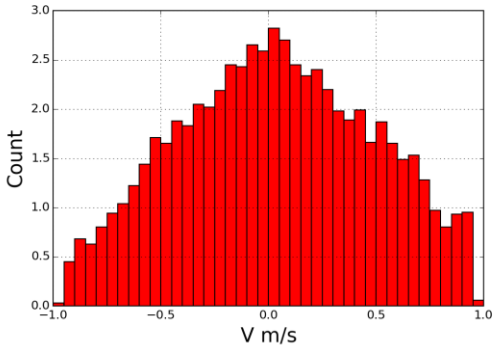


Figure B. 1275: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

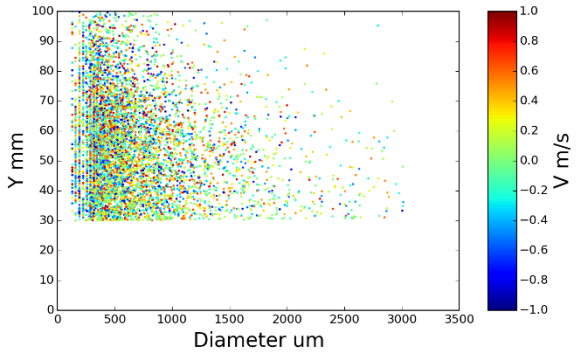


Figure B. 1273: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.1.2 Matched Only Droplets for .LB Image

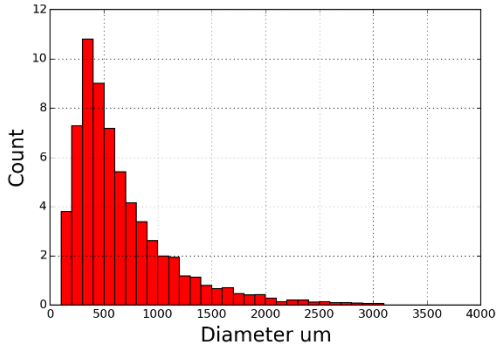


Figure B. 1276: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

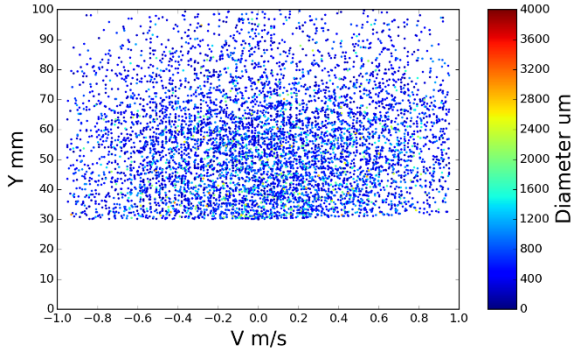


Figure B. 1279: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

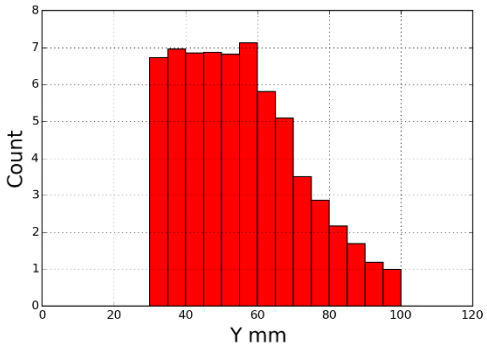


Figure B. 1277: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

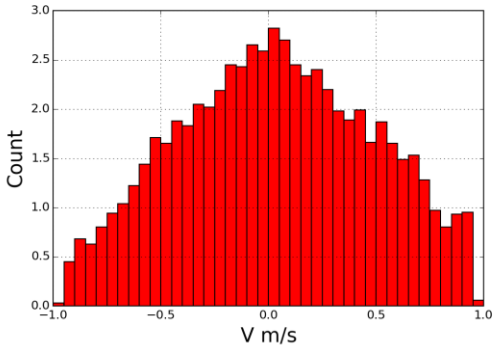


Figure B. 1280: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

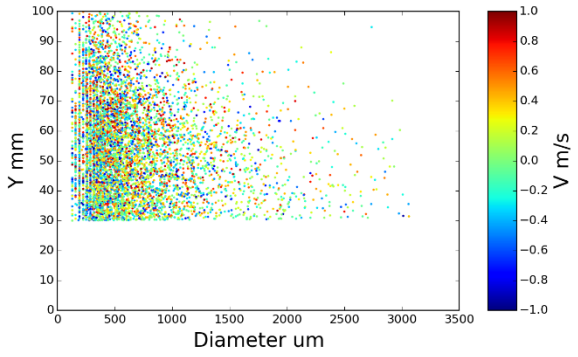


Figure B. 1278: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	23.5	24.54	128.7	3020	657.8	519.8	128.7	3050	641.0	524.9
40-60mm	47.02	53.32	128.7	3067	582.3	467.9	128.7	3065	552.3	474.3
60-80mm	30.3	37.61	128.7	2906	526.2	415.5	128.7	3014	501.0	429.4
80-100mm	8.72	9.35	128.7	2892	470.3	311.0	128.7	2952	479.4	345.1
All	109.54	124.83	128.7	3067	574.0	458.7	128.7	3065	548.8	466.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.9477				99.9451			
Lowest Particle			30.0548				30.0548			

Table B. 139: 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	8.65	128.7	2933	811.2	562.0	128.7	3046	796.6	561.6	-0.950	0.950	0.010	0.360	-0.950	0.950	0.060	0.440
40-60mm	16.75	128.7	3040	731.7	533.3	128.7	3065	718.8	526.2	-0.940	0.950	-0.000	0.360	-0.950	0.950	0.040	0.470
60-80mm	11.28	128.7	2906	658.1	467.0	128.7	3014	649.1	455.5	-0.950	0.950	-0.020	0.340	-0.950	0.950	0.030	0.480
80-100mm	3.27	128.7	1934	563.6	308.6	128.7	2080	554.9	308.6	-0.930	0.870	-0.030	0.330	-0.930	0.940	0.100	0.460
All	39.95	128.7	3040	714.4	511.8	128.7	3065	702.2	505.1	-0.950	0.950	-0.010	0.350	-0.950	0.950	0.040	0.470

Table B. 140: Matched Droplet Info

B.4.1.2 All Droplets for .LA Image

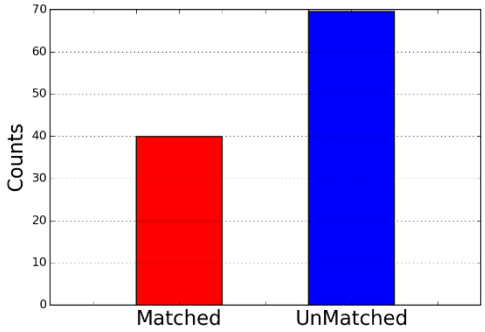


Figure B. 1281: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

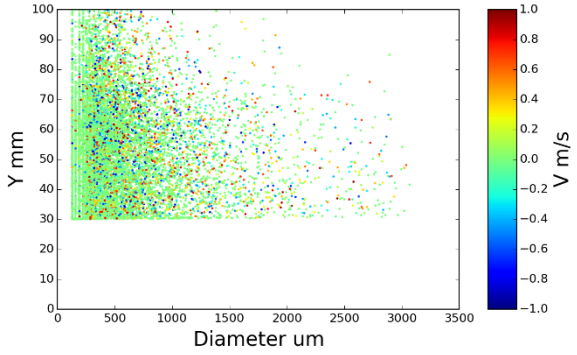


Figure B. 1284: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

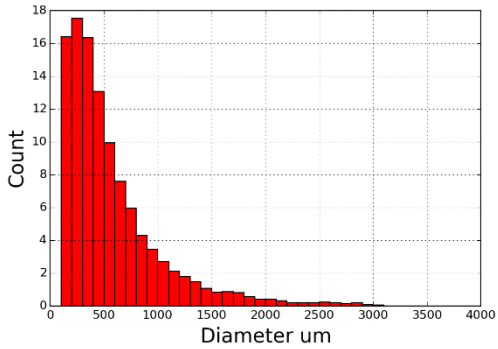


Figure B. 1282: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

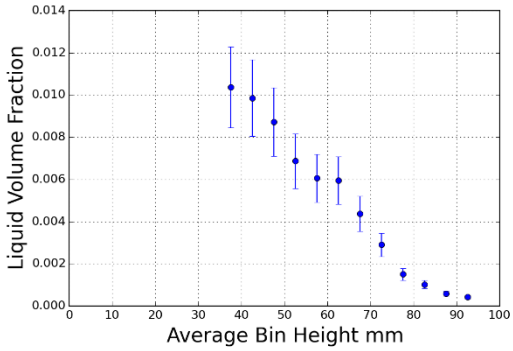


Figure B. 1285: Void Fraction R-123 55F 1700Btu 2550Lb Tri

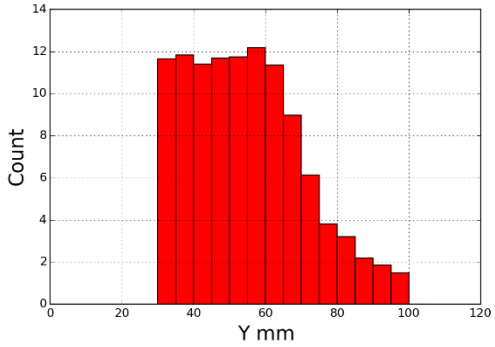


Figure B. 1283: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.1.2 All Droplets for .LB Image

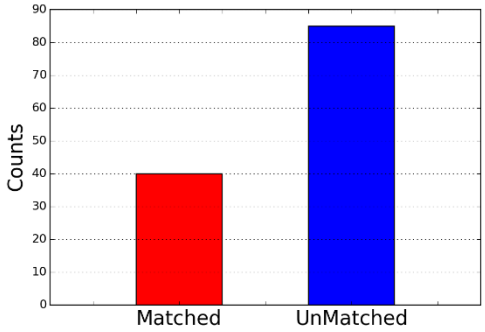


Figure B. 1286: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

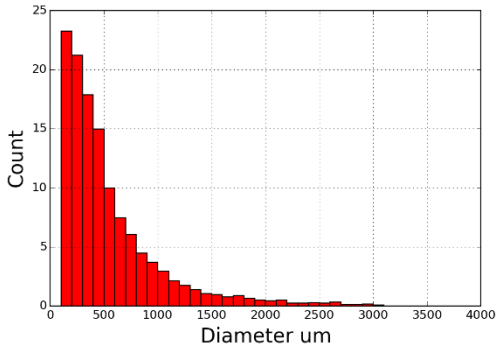


Figure B. 1287: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

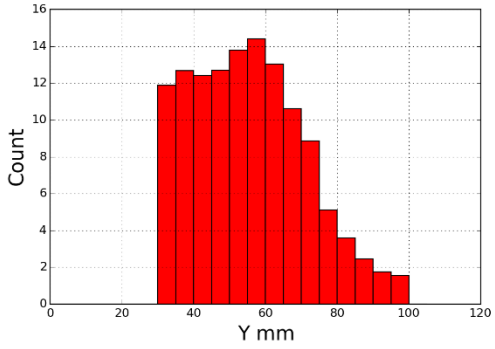


Figure B. 1288: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

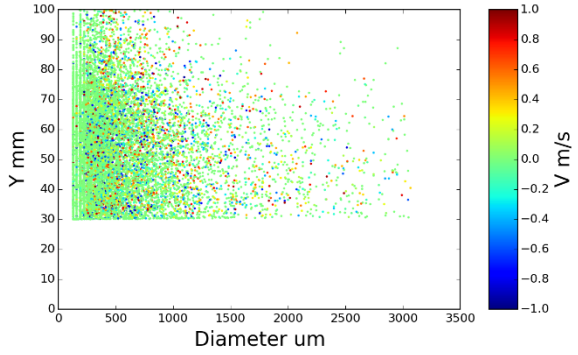


Figure B. 1289: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

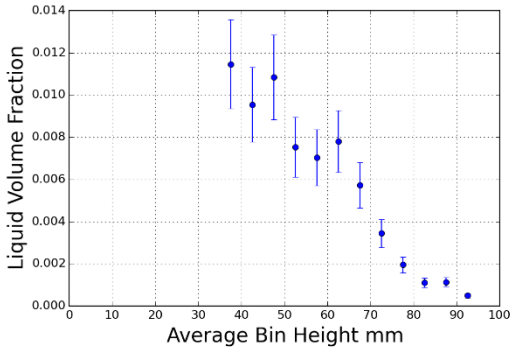


Figure B. 1290: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.1.2 Matched Only Droplets for .LA Image

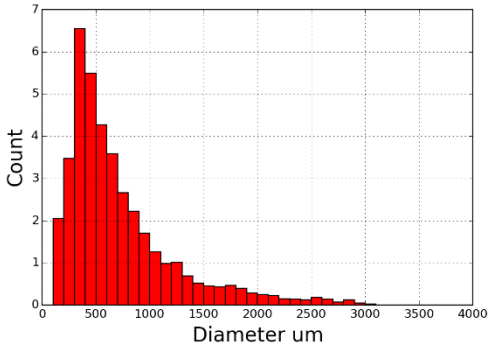


Figure B. 1291: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

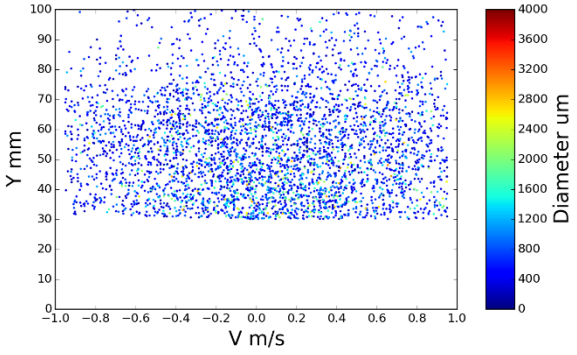


Figure B. 1294: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

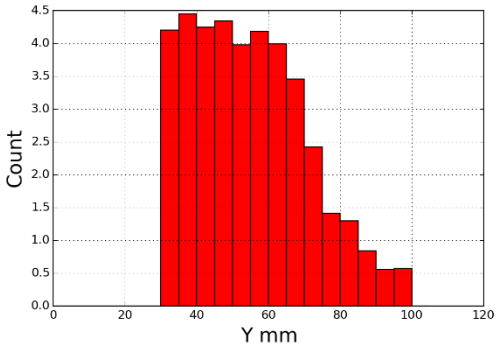


Figure B. 1292: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

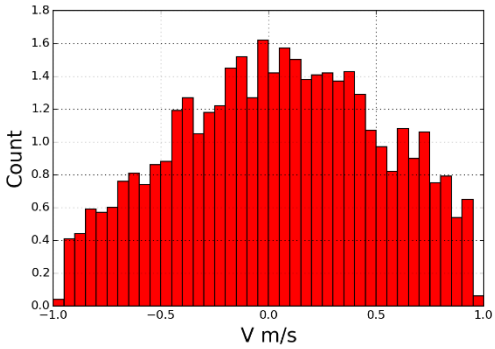


Figure B. 1295: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

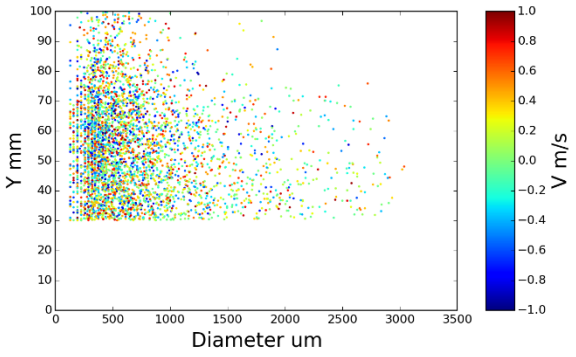


Figure B. 1293: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.1.2 Matched Only Droplets for .LB Image

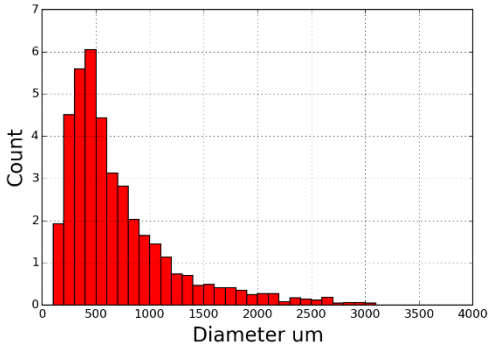


Figure B. 1296: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

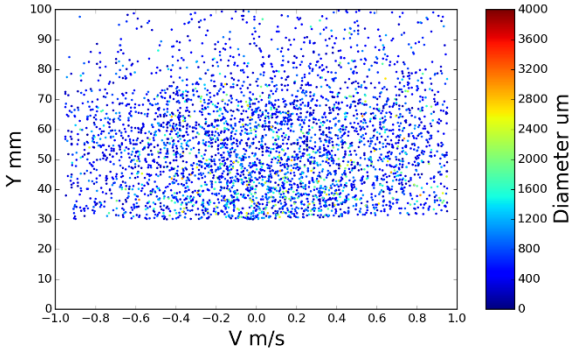


Figure B. 1299: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

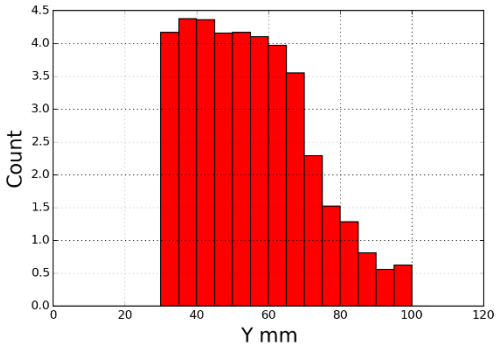


Figure B. 1297: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

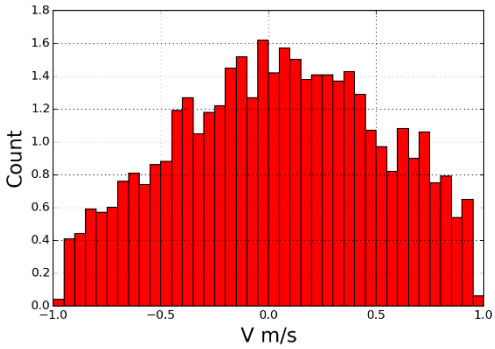


Figure B. 1300: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

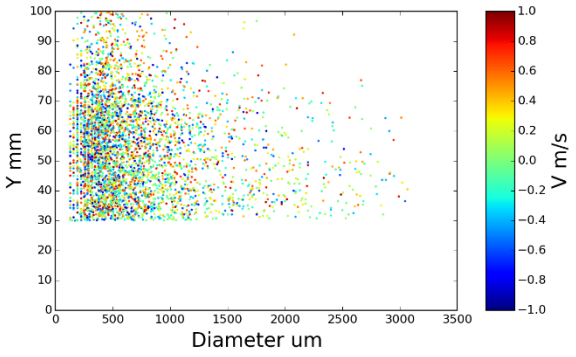


Figure B. 1298: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	16.12	16.04	128.7	3033	711.4	593.8	128.7	3072	704.7	593.2
40-60mm	33.95	31.91	128.7	3056	618.2	516.3	128.7	3069	626.2	517.8
60-80mm	21.77	19.92	128.7	3065	574.1	467.4	128.7	3012	557.1	452.9
80-100mm	8.97	6.3	128.7	2516	452.5	360.1	128.7	2583	499.4	343.1
All	80.91	74.17	128.7	3065	606.5	510.6	128.7	3072	613.9	510.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.9477				99.8952			
Lowest Particle			30.0548				30.0548			

Table B. 141: 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	5.02	128.7	3033	916.9	651.4	128.7	3046	906.8	664.3	-0.940	0.940	-0.010	0.330	-0.930	0.950	0.070	0.420
40-60mm	11.81	128.7	2942	766.8	541.3	128.7	3034	748.3	538.0	-0.940	0.940	0.030	0.320	-0.950	0.950	0.020	0.450
60-80mm	7.41	128.7	2992	712.3	501.1	128.7	3012	707.1	504.1	-0.920	0.920	-0.020	0.330	-0.950	0.950	0.040	0.480
80-100mm	2.42	128.7	2509	620.9	389.9	128.7	2583	611.8	397.6	-0.920	0.860	0.010	0.310	-0.930	0.940	0.080	0.460
All	26.66	128.7	3033	766.7	548.0	128.7	3046	753.8	550.2	-0.940	0.940	0.010	0.330	-0.950	0.950	0.040	0.460

Table B. 142: Matched Droplet Info

B.4.1.2 All Droplets for .LA Image

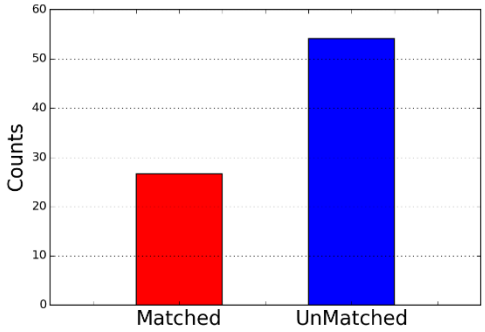


Figure B. 1301: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

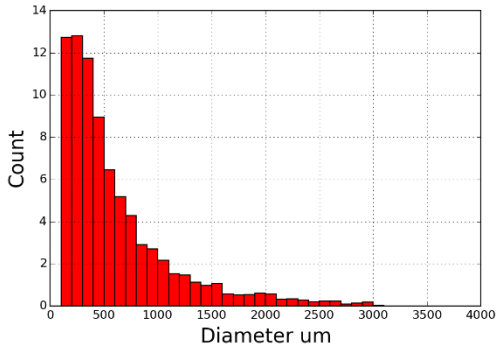


Figure B. 1302: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

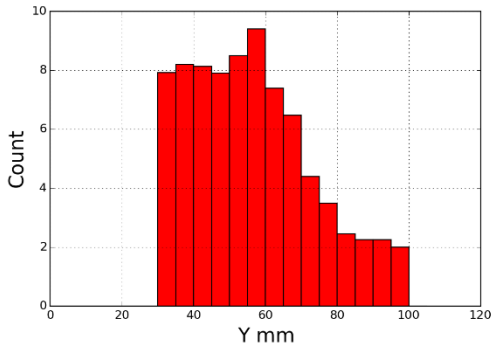


Figure B. 1303: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

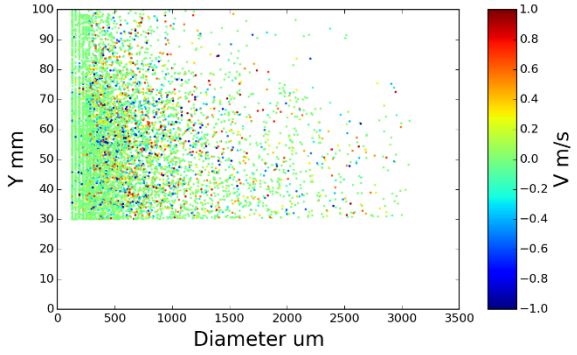


Figure B. 1304: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

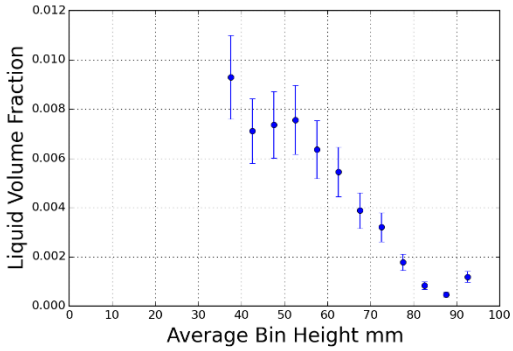


Figure B. 1305: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.1.2 All Droplets for .LB Image

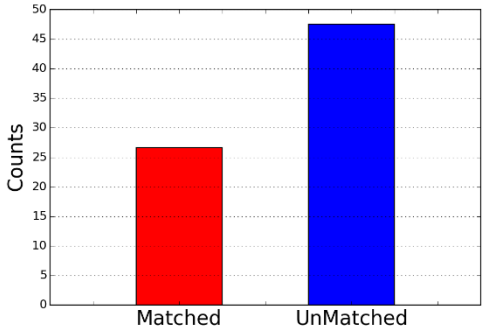


Figure B. 1306: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

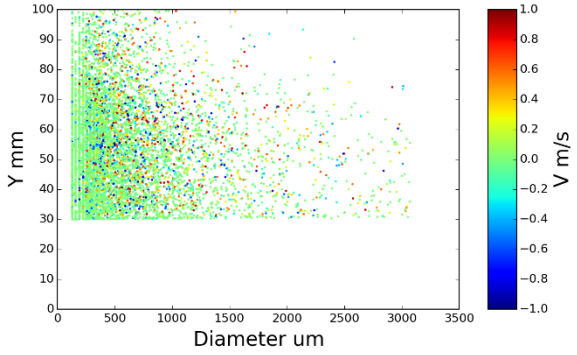


Figure B. 1309: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

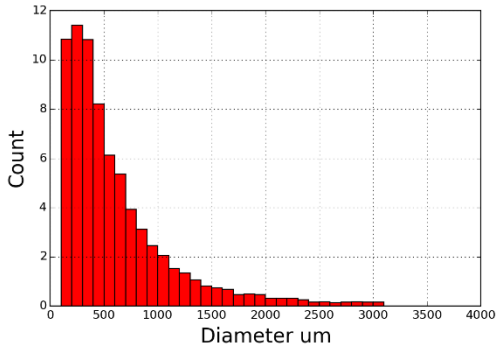


Figure B. 1307: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

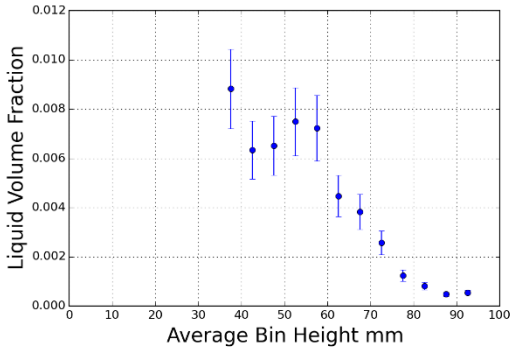


Figure B. 1310: Void Fraction R-123 55F 1700Btu 2550Lb Tri

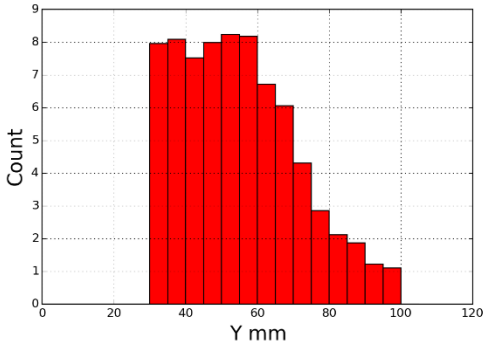


Figure B. 1308: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.1.2 Matched Only Droplets for .LA Image

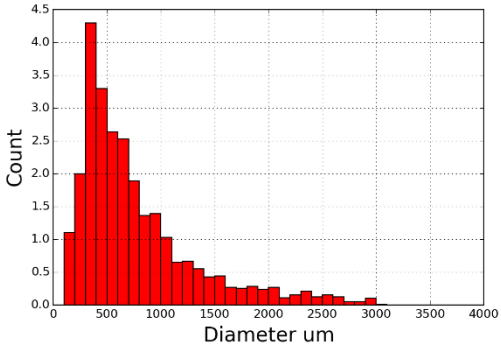


Figure B. 1311: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

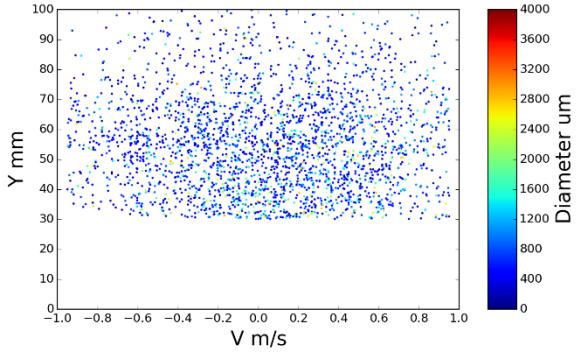


Figure B. 1314: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

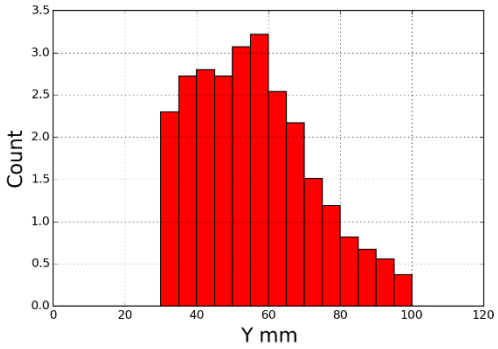


Figure B. 1312: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

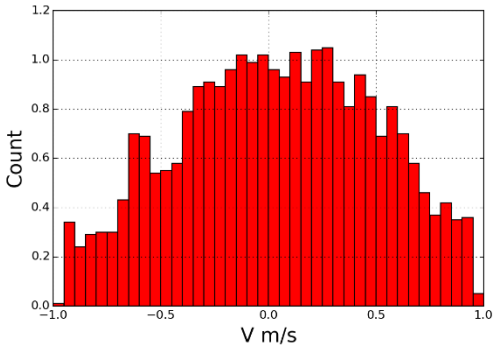


Figure B. 1315: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

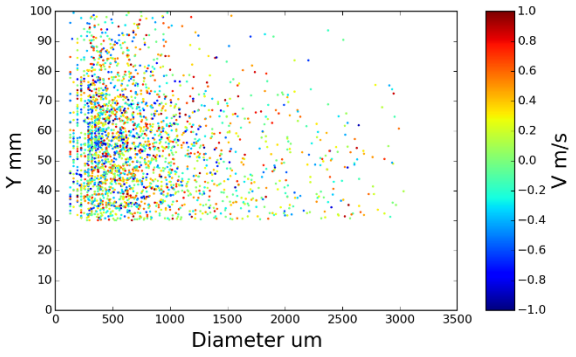


Figure B. 1313: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.1.2 Matched Only Droplets for .LB Image

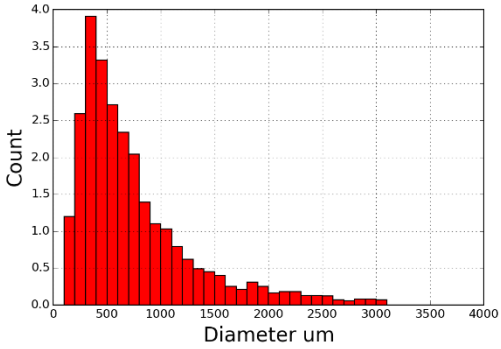


Figure B. 1316: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

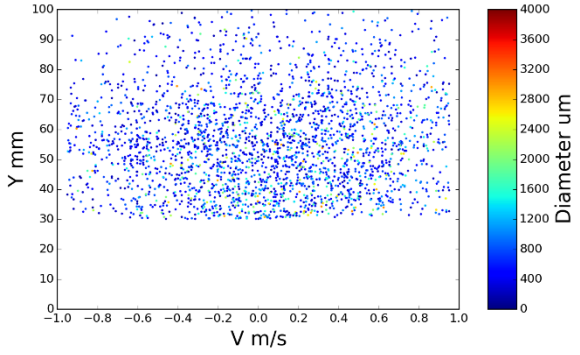


Figure B. 1319: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

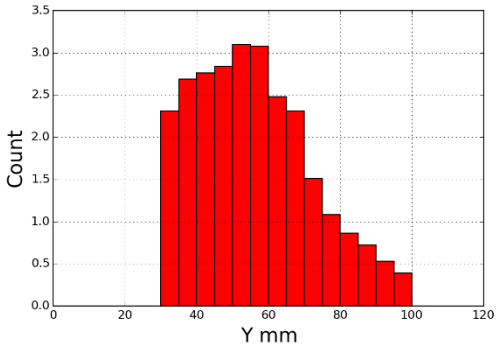


Figure B. 1317: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

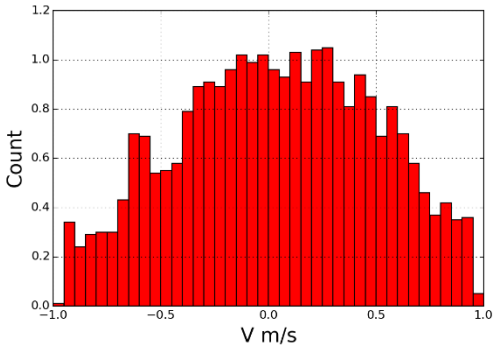


Figure B. 1320: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

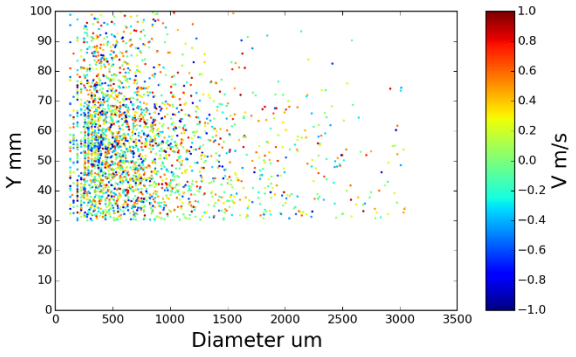


Figure B. 1318: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.2 Liquid Level 2

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	18220 / 2.296
Ref Mass Flow (lb/hr) / (kg/s)	293 / 0.037
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	2855 / 3.872
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	1410 / 4.45
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.9 / 13.26
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	56.5 / 13.63
Total Bundle Q (Btu/hr) / (kW)	30314 / 8.88
Total Bundle & Preboiler Q (Btu/hr) / (kW)	30314 / 8.88
Top Two Rows HTC Ratio	1.088
Bundle Inlet Quality	-0.08
Bundle Exit Quality	1.28

Table B. 143: Thermal Conditions

B.4.2.1 Lens 100mm Mag 0_29x

B.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	5.89	6.12	57.2	1331	216.5	174.4	57.2	1334	219.5	181.2
40-60mm	9.78	9.67	57.2	1924	218.4	202.6	57.2	2121	219.1	204.3
60-80mm	4.18	4.45	57.2	689.2	192.7	134.5	57.2	756.6	184.8	134.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	19.85	20.24	57.2	1924	212.4	182.1	57.2	2121	211.7	184.6
			Height A (mm)				Height B (mm)			
Highest Particle			76.9676				76.9042			
Lowest Particle			29.0245				29.0224			

Table B. 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	3.46	57.2	1331	256.3	190.0	57.2	1334	258.8	193.1	-0.790	0.810	-0.010	0.260	-0.910	0.940	0.060	0.340
40-60mm	5.77	57.2	1924	266.1	226.0	57.2	2121	264.1	228.1	-0.910	0.880	0.010	0.230	-0.820	0.930	0.120	0.320
60-80mm	2.83	57.2	689.2	220.4	143.4	57.2	756.6	217.4	144.1	-0.840	0.670	-0.000	0.210	-0.900	0.890	0.070	0.310
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	12.06	57.2	1924	252.6	199.9	57.2	2121	251.5	201.9	-0.910	0.880	-0.000	0.230	-0.910	0.940	0.090	0.320

Table B. 145: Matched Droplet Info

B.4.2.1 All Droplets for .LA Image

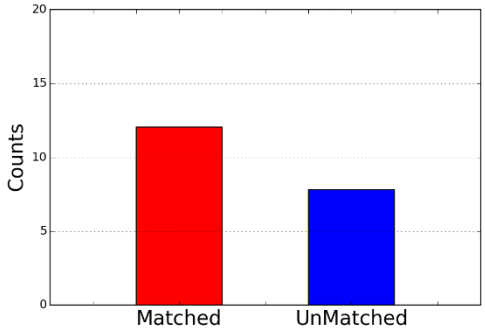


Figure B. 1321: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

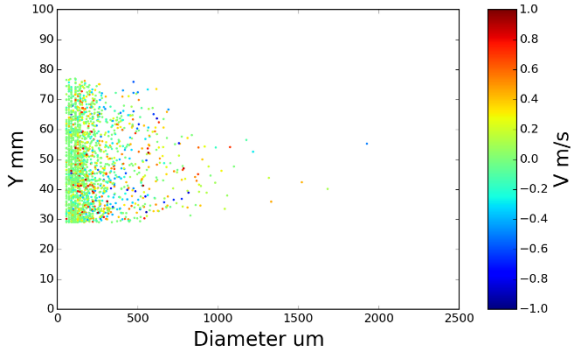


Figure B. 1324: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

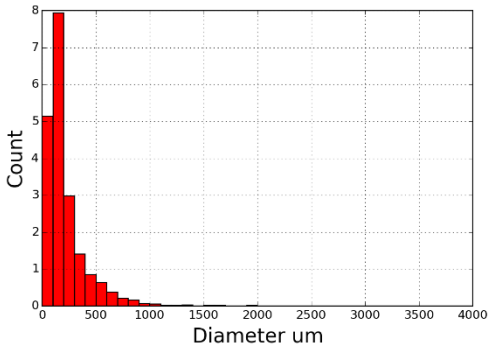


Figure B. 1322: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

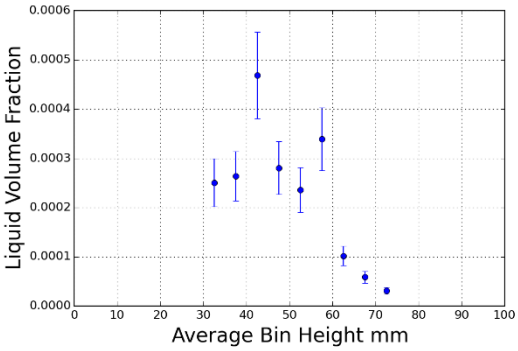


Figure B. 1325: Void Fraction R-123 55F 1700Btu 2550Lb Tri

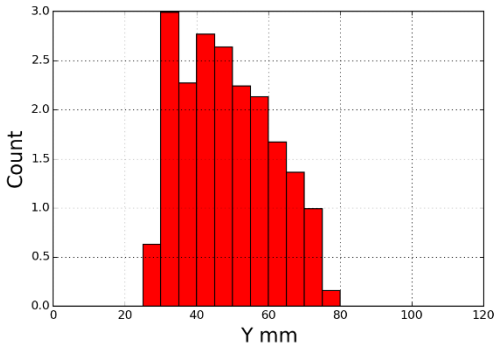


Figure B. 1323: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.2.1 All Droplets for .LB Image

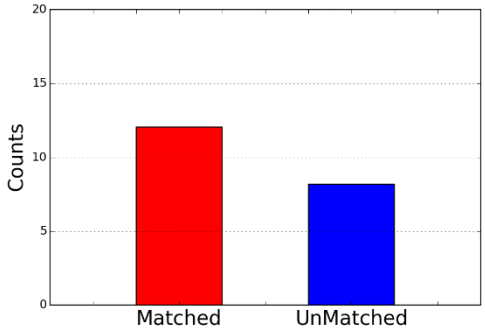


Figure B. 1326: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

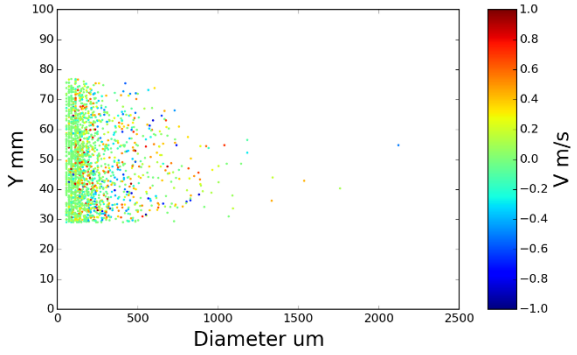


Figure B. 1329: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

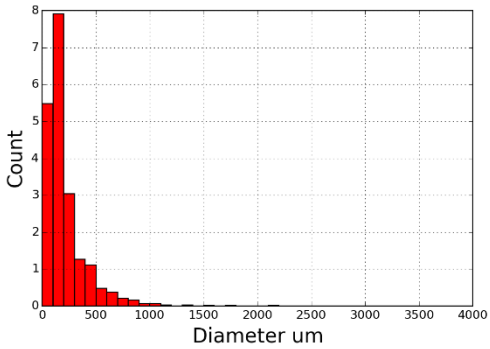


Figure B. 1327: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

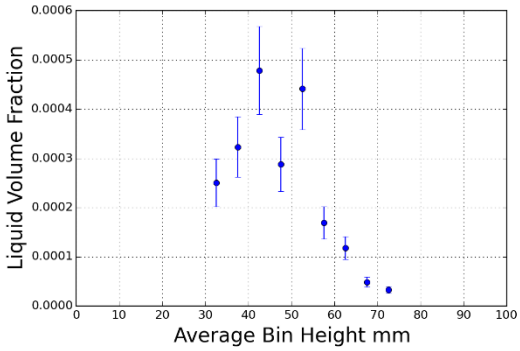


Figure B. 1330: Void Fraction R-123 55F 1700Btu 2550Lb Tri

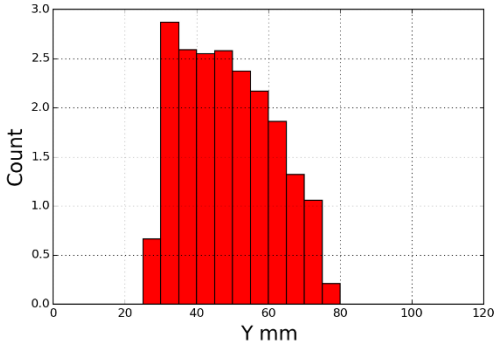


Figure B. 1328: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.2.1 Matched Only Droplets for .LA Image

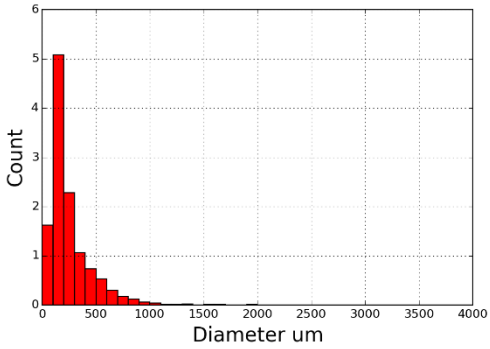


Figure B. 1331: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

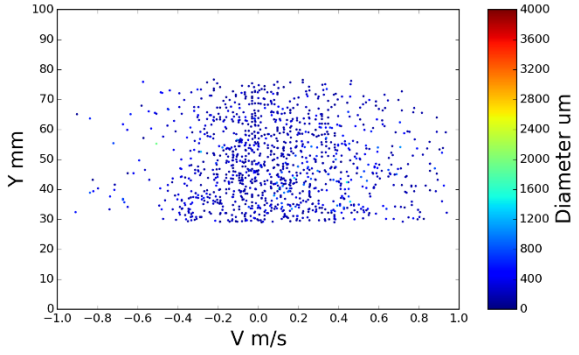


Figure B. 1334: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

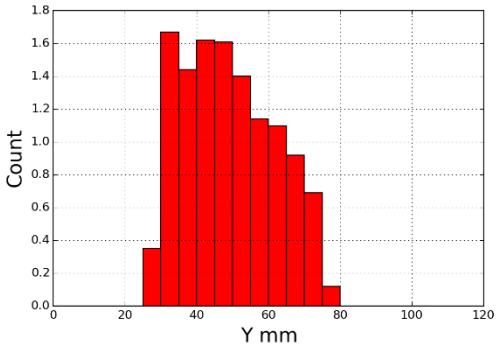


Figure B. 1332: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

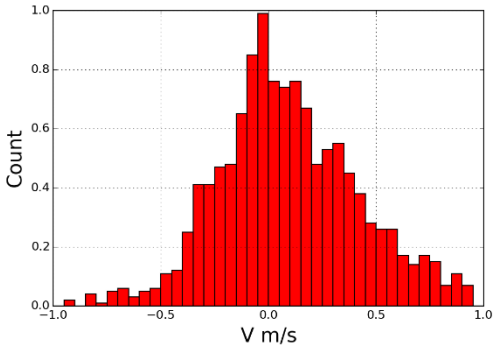


Figure B. 1335: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

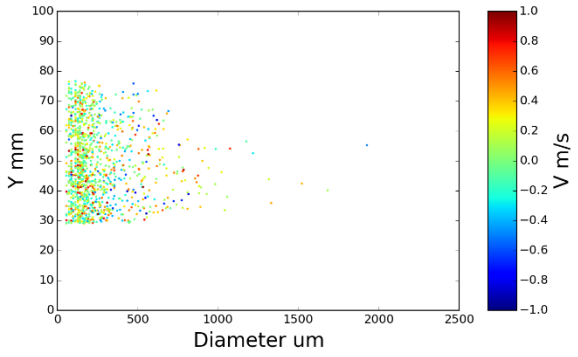


Figure B. 1333: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.2.1 Matched Only Droplets for .LB Image

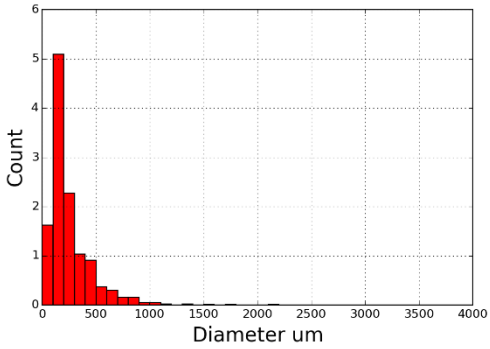


Figure B. 1336: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

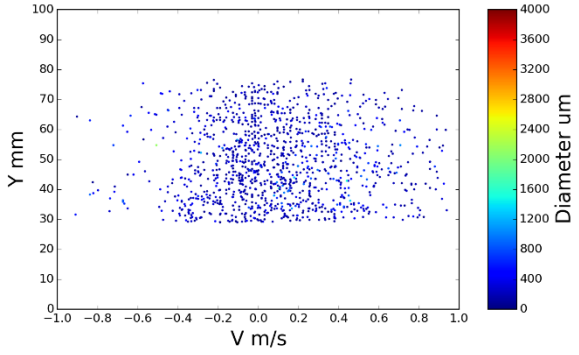


Figure B. 1339: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

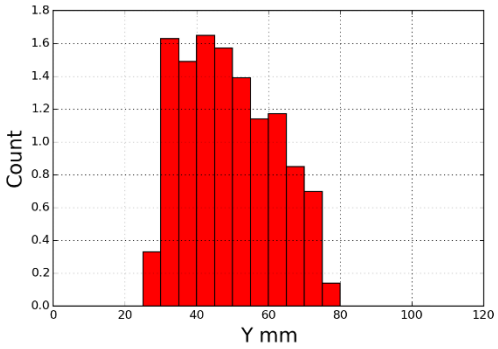


Figure B. 1337: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

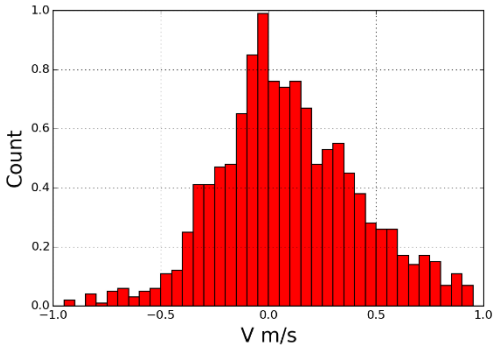


Figure B. 1340: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

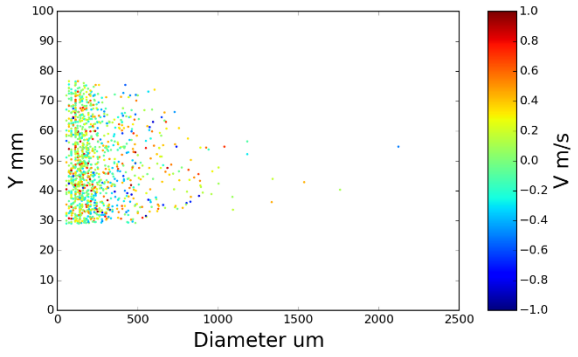


Figure B. 1338: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	4.6	5.21	57.2	1750	251.4	222.8	57.2	1736	233.2	205.8
40-60mm	7.21	7.88	57.2	1891	246.2	226.7	57.2	1794	235.3	222.1
60-80mm	3.58	3.61	57.2	1360	219.0	177.1	57.2	1320	218.8	180.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	15.39	16.7	57.2	1891	241.4	215.3	57.2	1794	231.1	208.8
			Height A (mm)				Height B (mm)			
Highest Particle			76.8016				76.9468			
Lowest Particle			29.0245				29.0224			

Table B. 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	2.87	57.2	1750	309.9	239.5	57.2	1736	304.4	230.4	-0.870	0.930	-0.020	0.270	-0.860	0.940	-0.040	0.370
40-60mm	4.49	57.2	1891	303.9	250.6	57.2	1794	302.4	252.9	-0.750	0.770	-0.030	0.220	-0.910	0.950	-0.050	0.340
60-80mm	2.14	57.2	1360	257.5	188.7	57.2	1320	260.5	190.8	-0.830	0.770	-0.060	0.220	-0.820	0.940	-0.010	0.310
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	9.5	57.2	1891	295.3	235.5	57.2	1794	293.5	234.0	-0.870	0.930	-0.030	0.240	-0.910	0.950	-0.030	0.340

Table B. 147: Matched Droplet Info

B.4.2.1 All Droplets for .LA Image

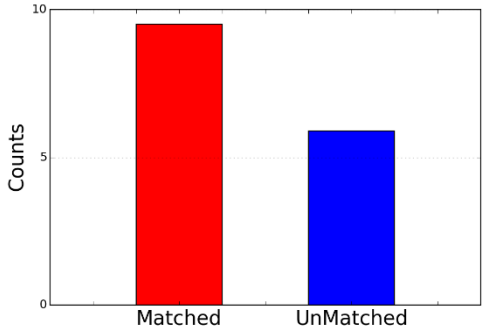


Figure B. 1341: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

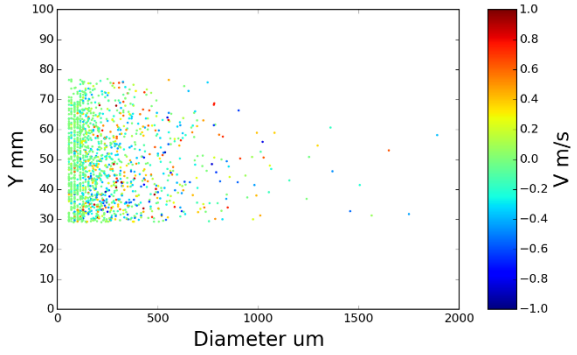


Figure B. 1344: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

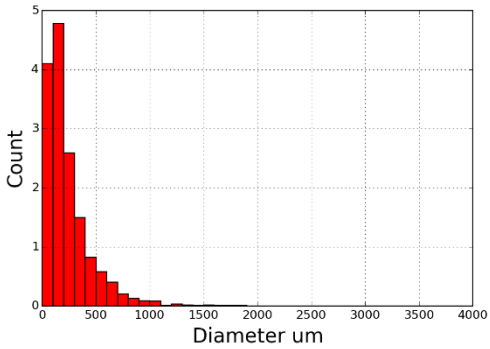


Figure B. 1342: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

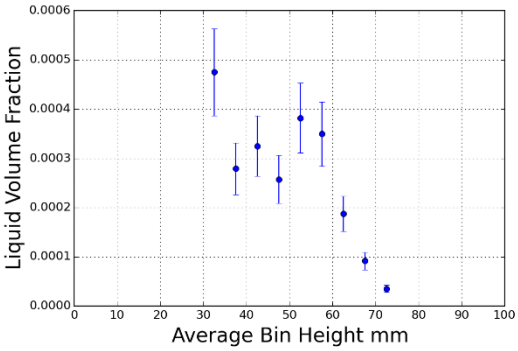


Figure B. 1345: Void Fraction R-123 55F 1700Btu 2550Lb Tri

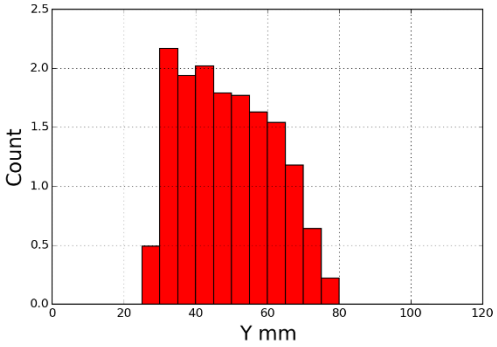


Figure B. 1343: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.2.1 All Droplets for .LB Image

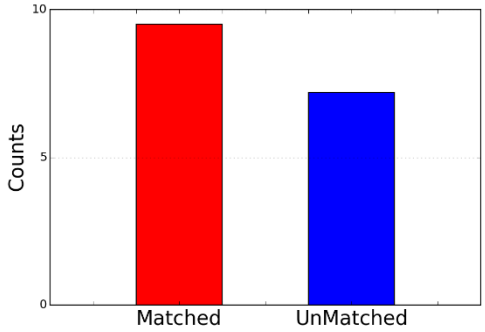


Figure B. 1346: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

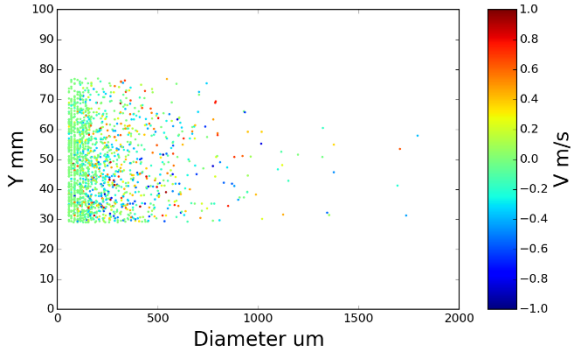


Figure B. 1349: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

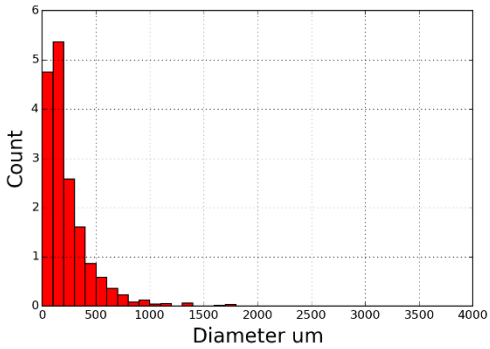


Figure B. 1347: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

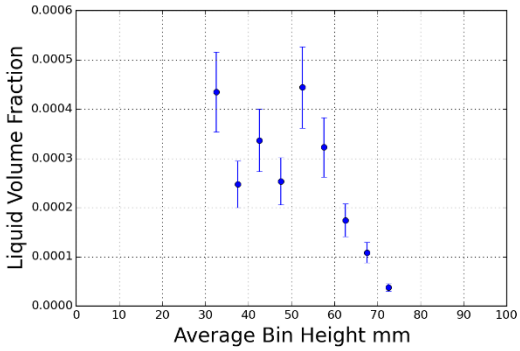


Figure B. 1350: Void Fraction R-123 55F 1700Btu 2550Lb Tri

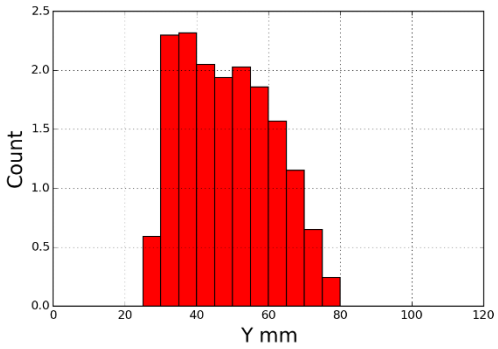


Figure B. 1348: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.2.1 Matched Only Droplets for .LA Image

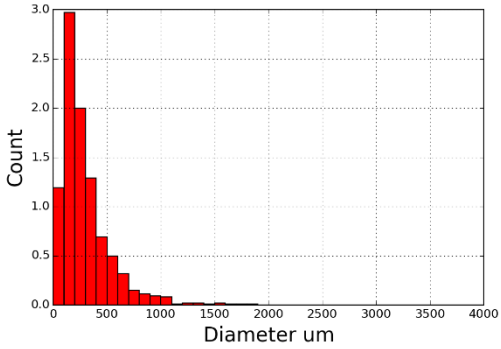


Figure B. 1351: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

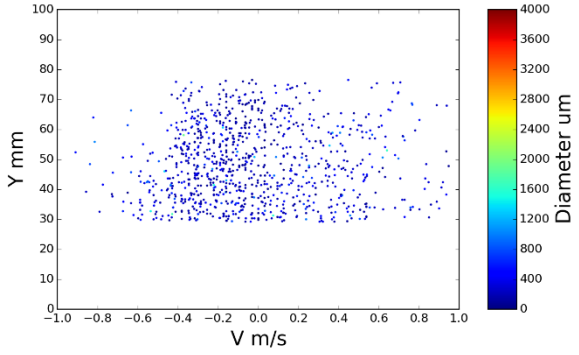


Figure B. 1354: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

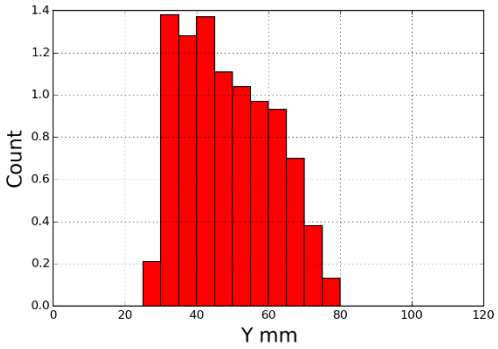


Figure B. 1352: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

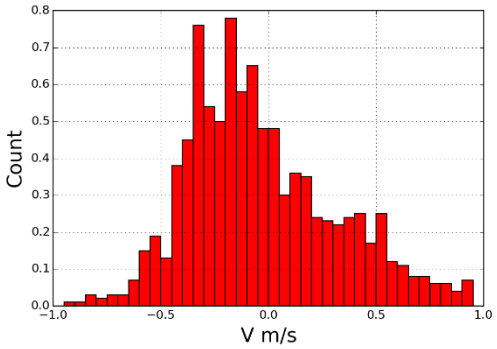


Figure B. 1355: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

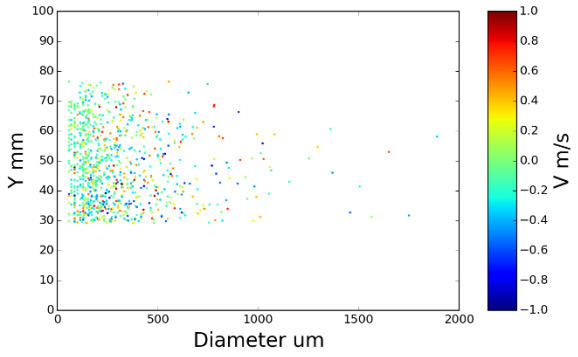


Figure B. 1353: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.2.1 Matched Only Droplets for .LB Image

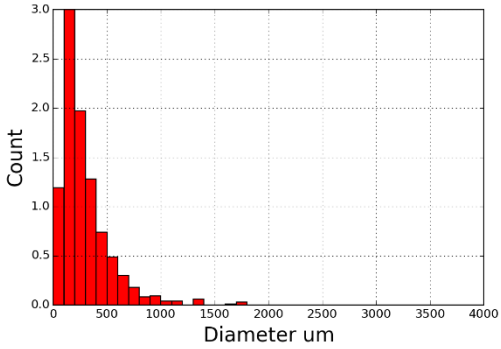


Figure B. 1356: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

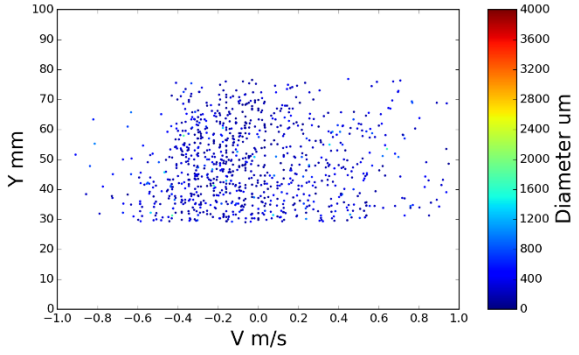


Figure B. 1359: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

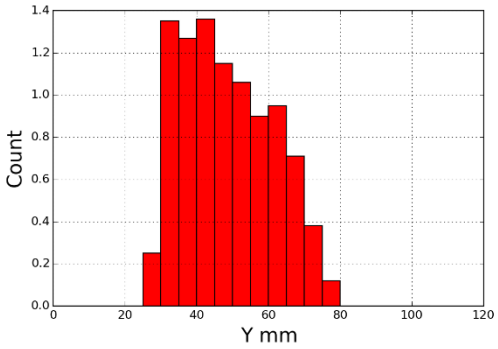


Figure B. 1357: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

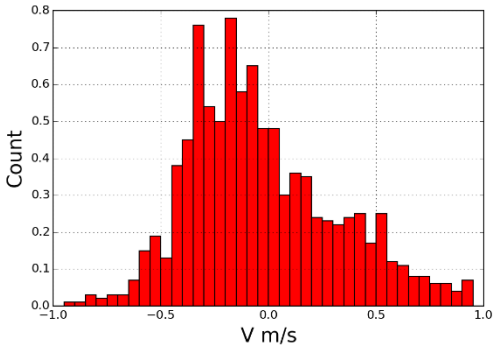


Figure B. 1360: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

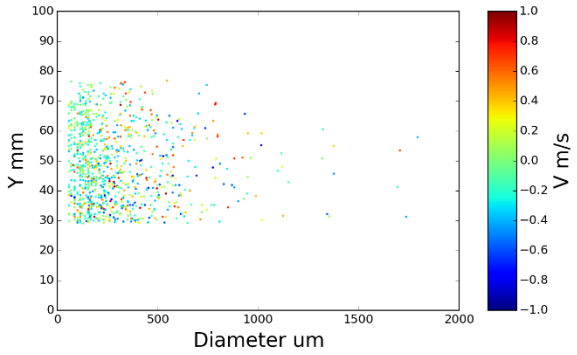


Figure B. 1358: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	3.17	3.24	80.9	2722	302.6	260.7	80.9	2666	313.6	273.0
40-60mm	4.13	4.46	85.8	1642	308.8	260.6	80.9	1554	287.1	238.8
60-80mm	1.55	1.64	85.8	1031	285.2	206.6	80.9	1065	261.7	200.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	8.85	9.34	80.9	2722	302.4	252.2	80.9	2666	291.9	245.9
			Height A (mm)				Height B (mm)			
Highest Particle			77.0478				77.2743			
Lowest Particle			29.3311				29.3398			

Table B. 148: 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	2.1	80.9	1248	311.0	211.9	80.9	1436	324.4	225.1	-0.750	0.770	-0.040	0.300	-0.950	0.810	-0.100	0.370
40-60mm	3.05	85.8	1568	316.4	231.3	85.8	1553	315.5	232.4	-0.710	0.850	-0.030	0.240	-0.950	0.940	-0.080	0.330
60-80mm	1.15	85.8	1031	292.0	196.8	85.8	1065	284.1	202.6	-0.540	0.670	-0.050	0.200	-0.790	0.620	-0.070	0.270
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	6.3	80.9	1568	310.2	219.1	80.9	1553	312.9	225.4	-0.750	0.850	-0.040	0.250	-0.950	0.940	-0.080	0.330

Table B. 149: Matched Droplet Info

B.4.2.1 All Droplets for .LA Image

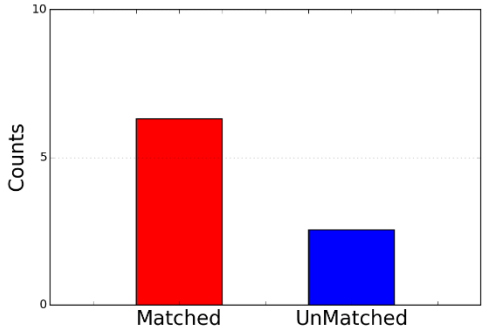


Figure B. 1361: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

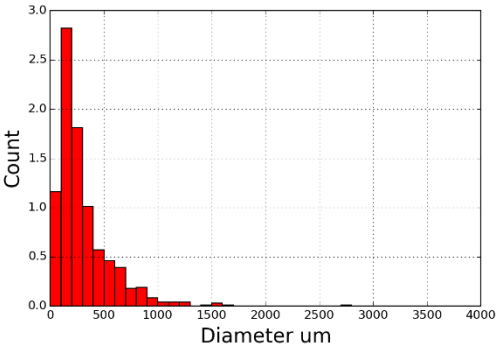


Figure B. 1362: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

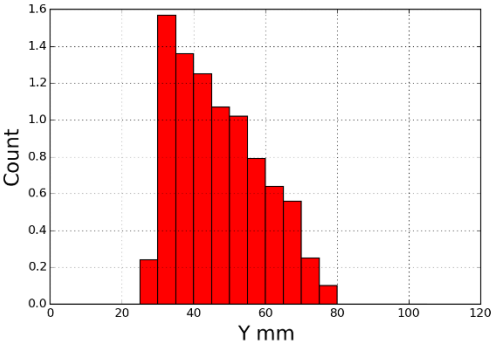


Figure B. 1363: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

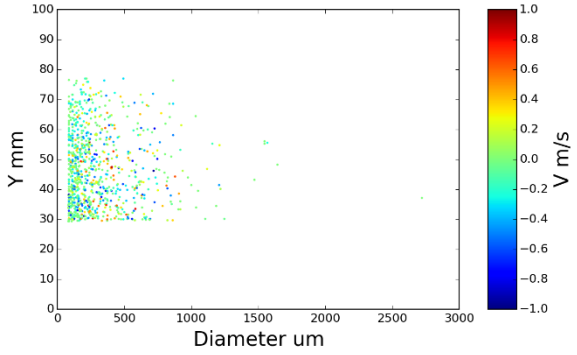


Figure B. 1364: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

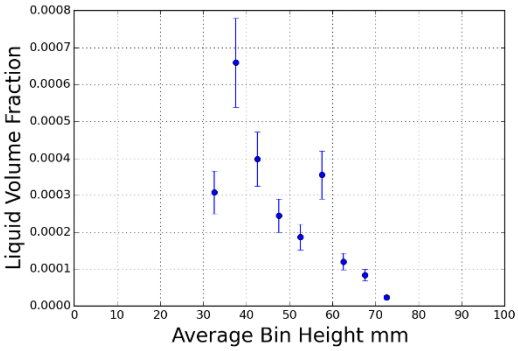


Figure B. 1365: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.2.1 All Droplets for .LB Image

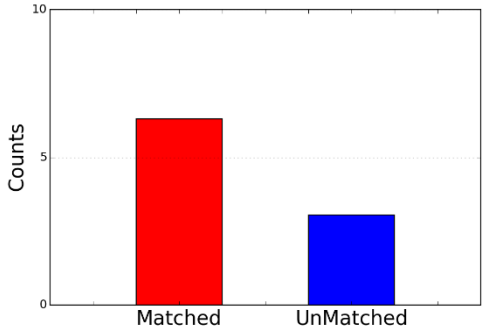


Figure B. 1366: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

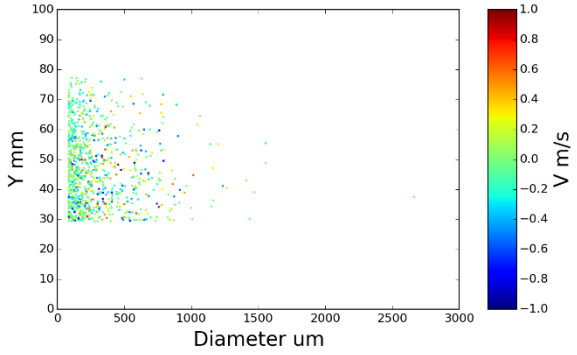


Figure B. 1369: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

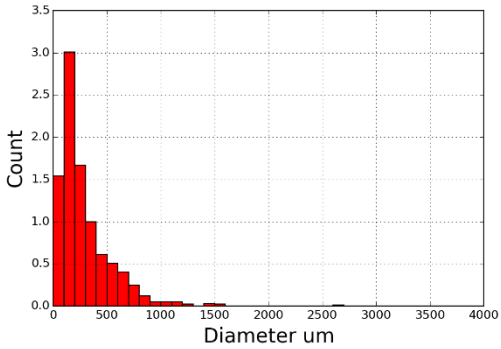


Figure B. 1367: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

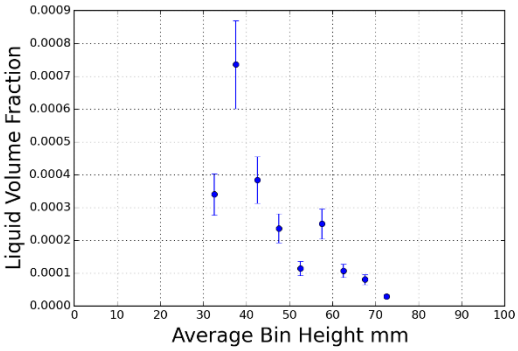


Figure B. 1370: Void Fraction R-123 55F 1700Btu 2550Lb Tri

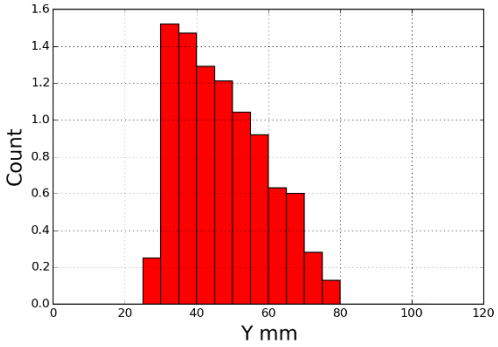


Figure B. 1368: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.2.1 Matched Only Droplets for .LA Image

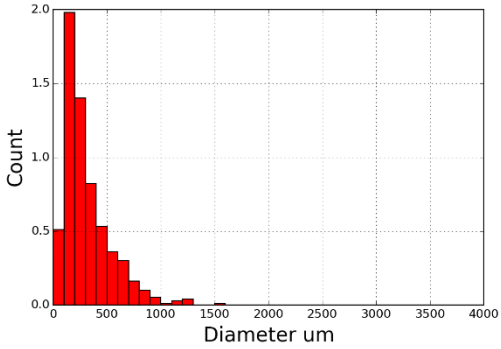


Figure B. 1371: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

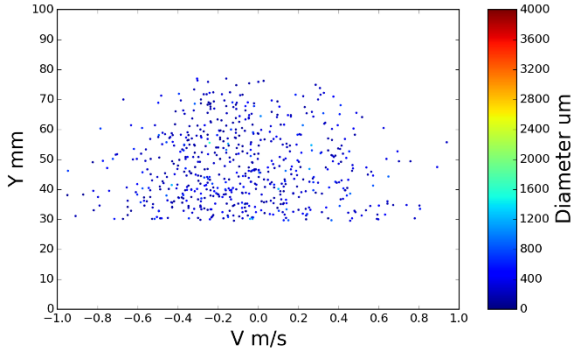


Figure B. 1374: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

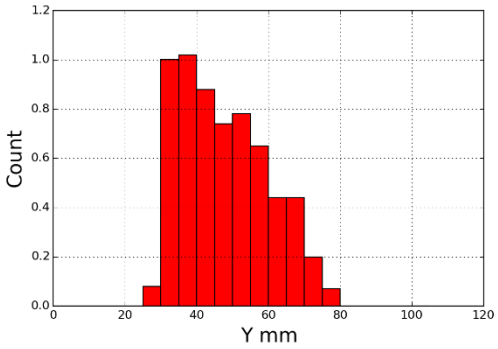


Figure B. 1372: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

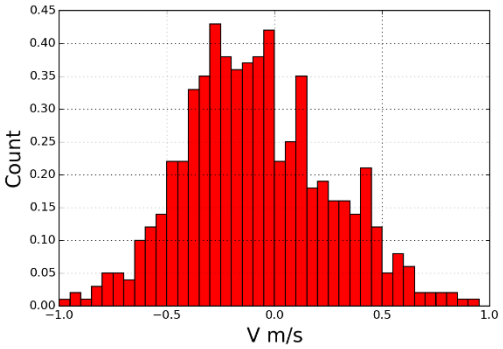


Figure B. 1375: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

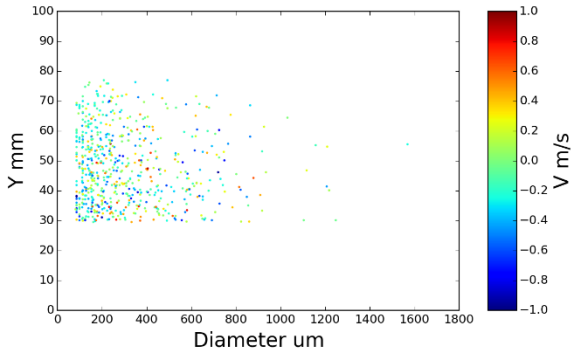


Figure B. 1373: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.2.1 Matched Only Droplets for .LB Image

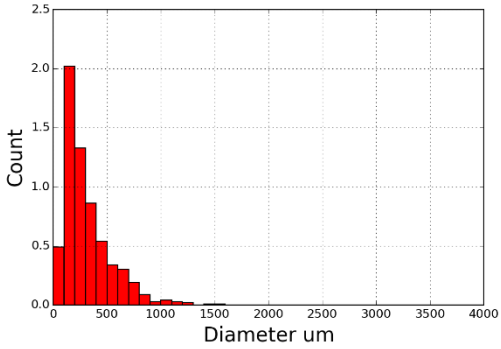


Figure B. 1376: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

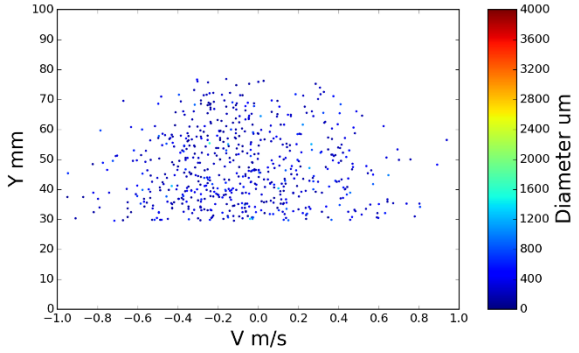


Figure B. 1379: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

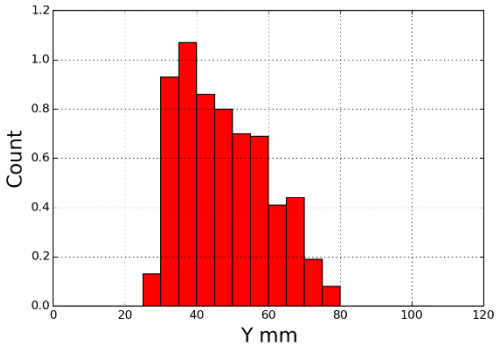


Figure B. 1377: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

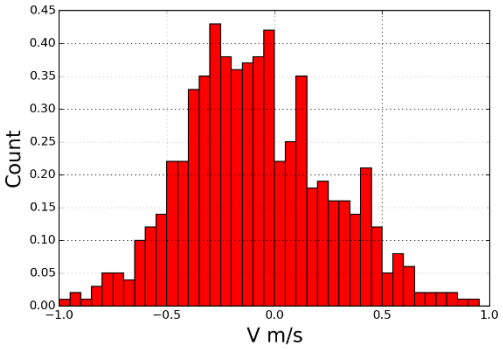


Figure B. 1380: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

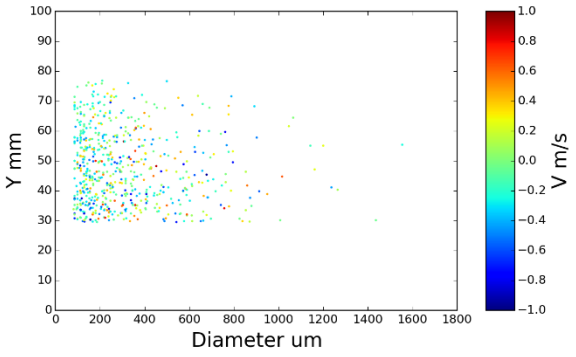


Figure B. 1378: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	8.31	1.87	57.2	1316	177.6	168.2	57.2	1221	318.1	249.5
40-60mm	15.26	4.29	57.2	1670	145.9	166.1	57.2	2278	264.1	241.8
60-80mm	24.29	2.1	57.2	2406	138.3	136.3	57.2	980.1	228.2	174.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	47.93	8.26	57.2	2406	147.5	152.8	57.2	2278	267.2	230.7
			Height A (mm)				Height B (mm)			
Highest Particle			76.9956				77.1603			
Lowest Particle			29.0527				29.2585			

Table B. 150: 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	0.7	85.8	1214	359.0	234.2	85.8	1221	363.5	239.3	-0.860	0.790	-0.070	0.360	-0.800	0.840	0.040	0.380
40-60mm	1.13	85.8	1240	358.3	223.0	85.8	1189	359.4	227.4	-0.840	0.770	-0.010	0.290	-0.890	0.760	-0.040	0.360
60-80mm	0.62	57.2	850.6	279.8	199.3	57.2	856.8	280.6	192.5	-0.920	0.440	-0.040	0.260	-0.780	0.810	-0.030	0.370
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	2.45	57.2	1240	338.6	223.2	57.2	1221	340.7	225.4	-0.920	0.790	-0.040	0.310	-0.890	0.840	-0.010	0.370

Table B. 151: Matched Droplet Info

B.4.2.1 All Droplets for .LA Image

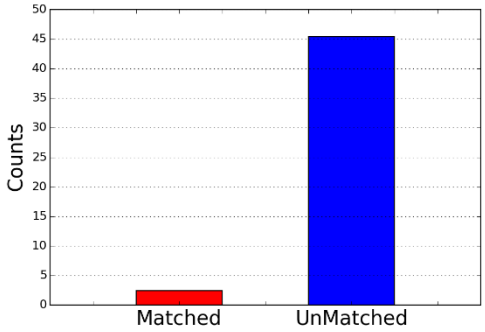


Figure B. 1381: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

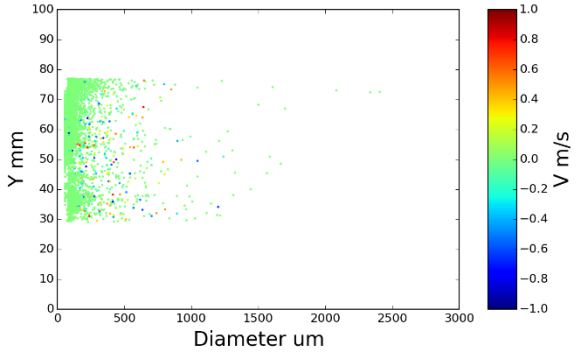


Figure B. 1384: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

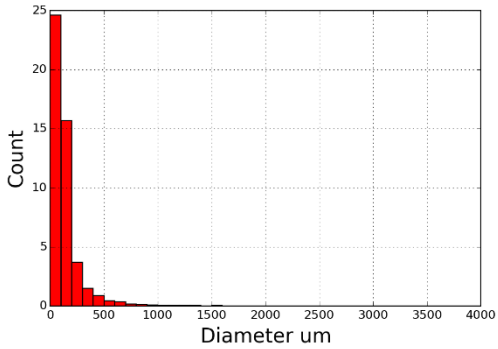


Figure B. 1382: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

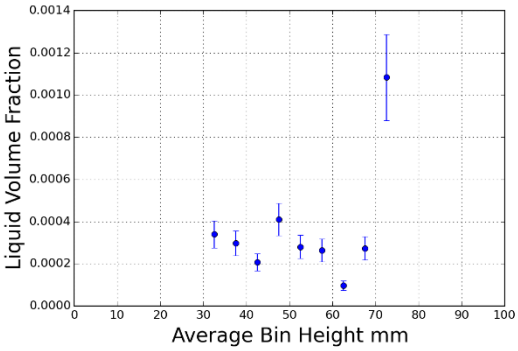


Figure B. 1385: Void Fraction R-123 55F 1700Btu 2550Lb Tri

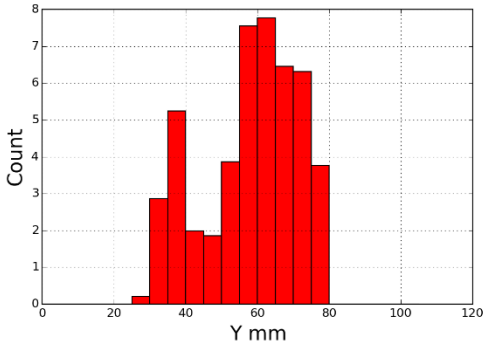


Figure B. 1383: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.2.1 All Droplets for .LB Image

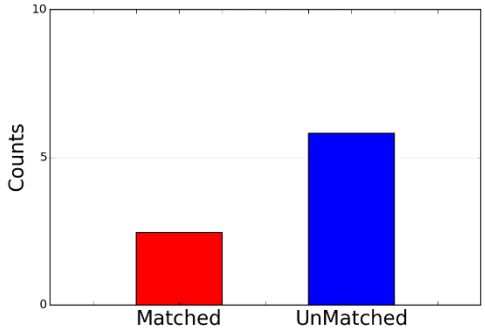


Figure B. 1386: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

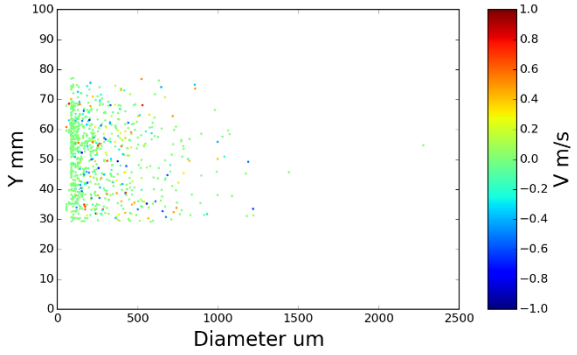


Figure B. 1389: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

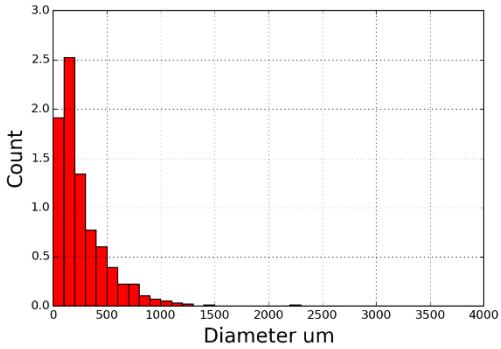


Figure B. 1387: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

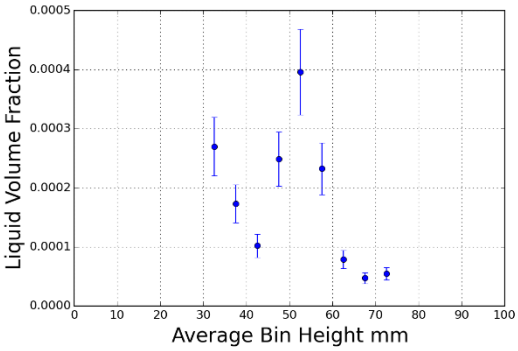


Figure B. 1390: Void Fraction R-123 55F 1700Btu 2550Lb Tri

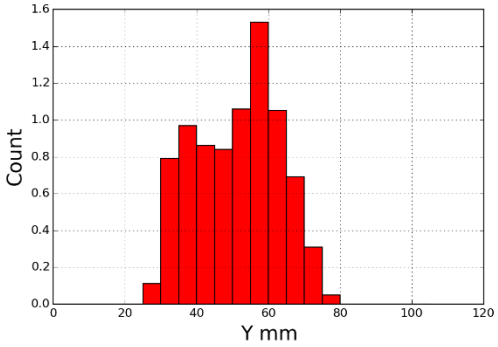


Figure B. 1388: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.2.1 Matched Only Droplets for .LA Image

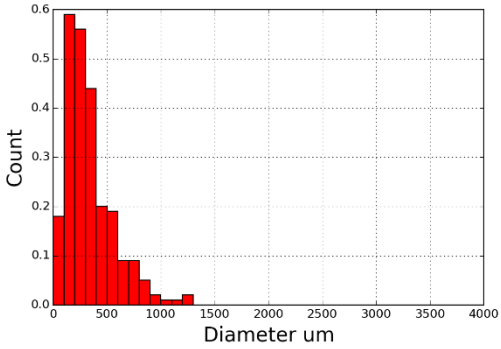


Figure B. 1391: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

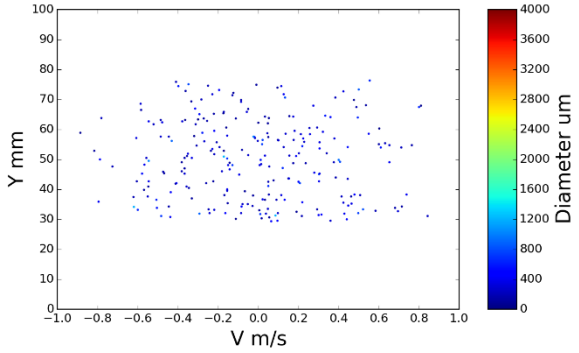


Figure B. 1394: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

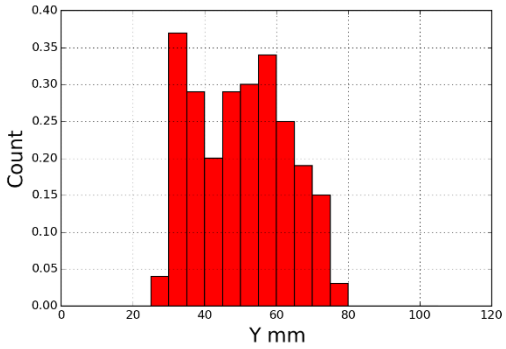


Figure B. 1392: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

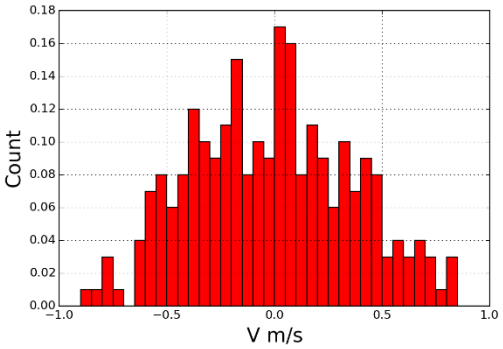


Figure B. 1395: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

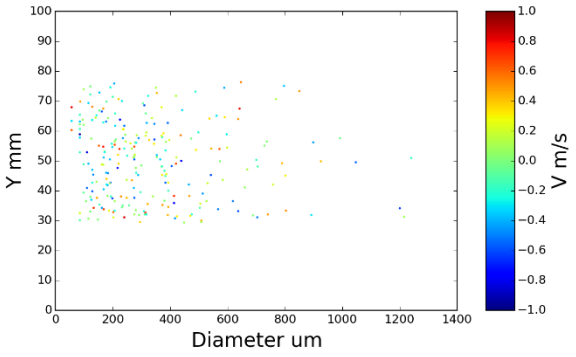


Figure B. 1393: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.2.1 Matched Only Droplets for .LB Image

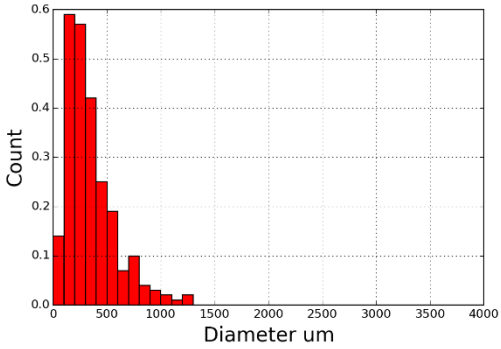


Figure B. 1396: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

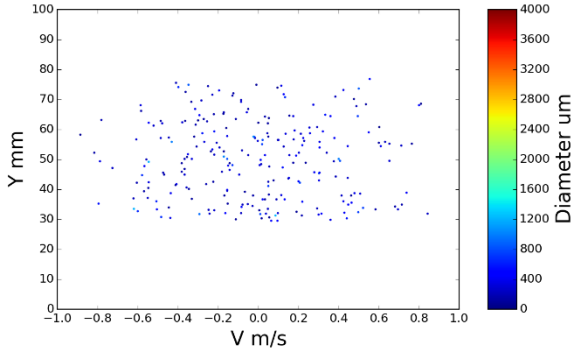


Figure B. 1399: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

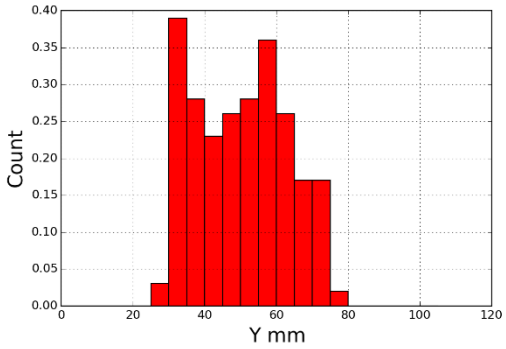


Figure B. 1397: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

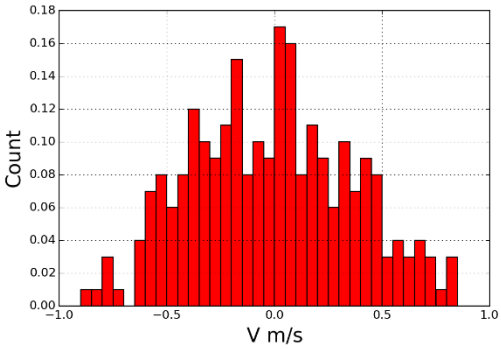


Figure B. 1400: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

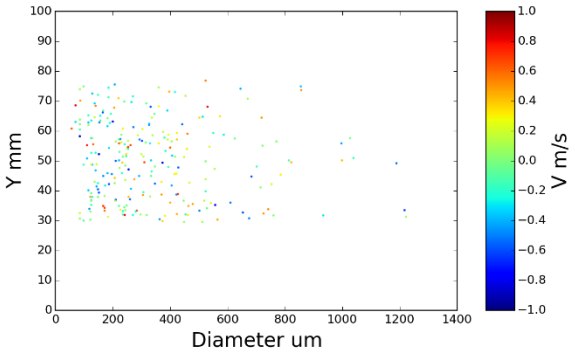


Figure B. 1398: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	8.96	0.89	75.7	1361	159.3	122.1	85.8	1213	321.5	233.2
40-60mm	25.44	3.93	57.2	2844	154.7	133.4	75.7	1296	210.0	188.8
60-80mm	27.95	1.75	57.2	1627	151.5	101.5	80.9	2150	196.6	233.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	62.47	6.57	57.2	2844	154.0	118.5	75.7	2150	221.6	211.6
			Height A (mm)				Height B (mm)			
Highest Particle			77.0969				77.1659			
Lowest Particle			29.4071				29.6067			

Table B. 152: 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	0.28	85.8	987.6	389.7	243.3	85.8	1213	375.5	273.8	-0.390	0.340	-0.130	0.220	-0.630	0.940	-0.050	0.360
40-60mm	0.84	80.9	1114	320.9	189.0	85.8	1279	324.2	214.7	-0.480	0.820	-0.020	0.260	-0.810	0.850	0.080	0.400
60-80mm	0.36	85.8	1612	275.4	260.4	85.8	1667	283.0	271.9	-0.510	0.820	0.020	0.280	-0.740	0.860	0.060	0.370
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	1.48	80.9	1612	322.9	222.2	85.8	1667	323.6	243.8	-0.510	0.820	-0.030	0.270	-0.810	0.940	0.050	0.390

Table B. 153: Matched Droplet Info

B.4.2.1 All Droplets for .LA Image

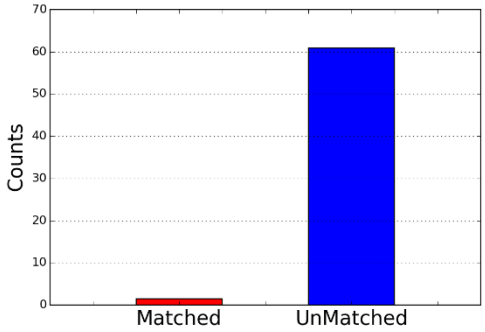


Figure B. 1401: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

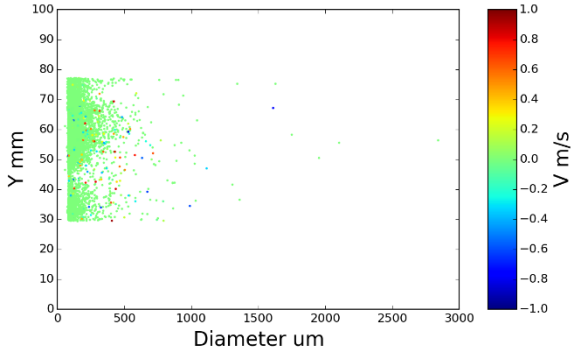


Figure B. 1404: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

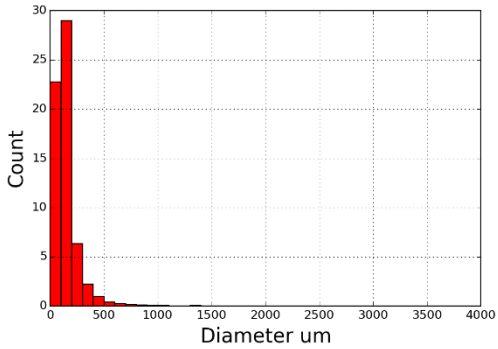


Figure B. 1402: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

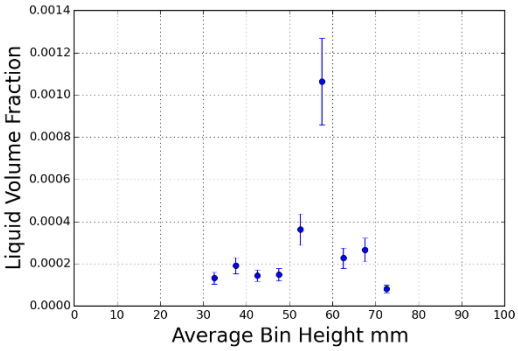


Figure B. 1405: Void Fraction R-123 55F 1700Btu 2550Lb Tri

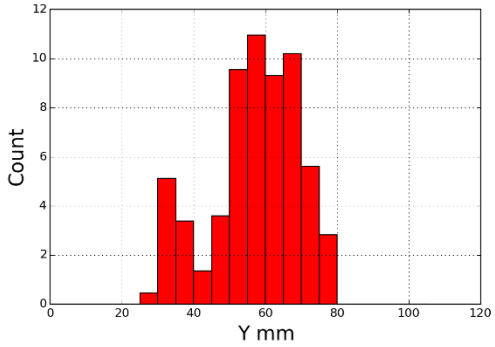


Figure B. 1403: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.2.1 All Droplets for .LB Image

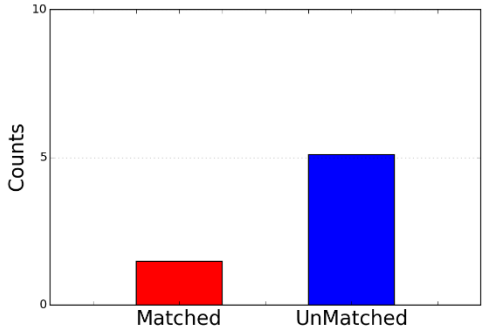


Figure B. 1406: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

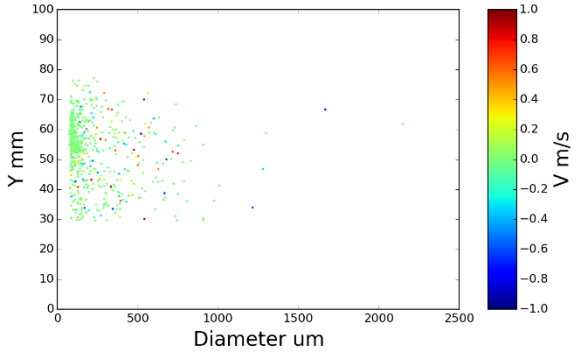


Figure B. 1409: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

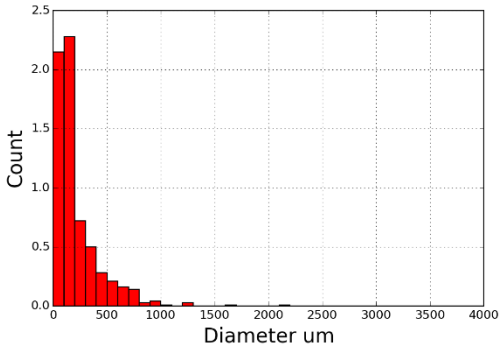


Figure B. 1407: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

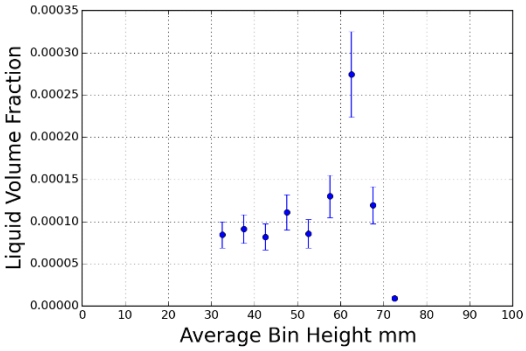


Figure B. 1410: Void Fraction R-123 55F 1700Btu 2550Lb Tri

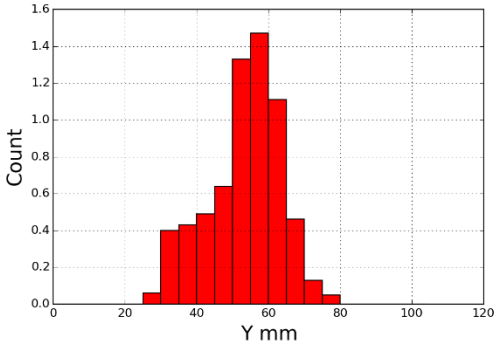


Figure B. 1408: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.2.1 Matched Only Droplets for .LA Image

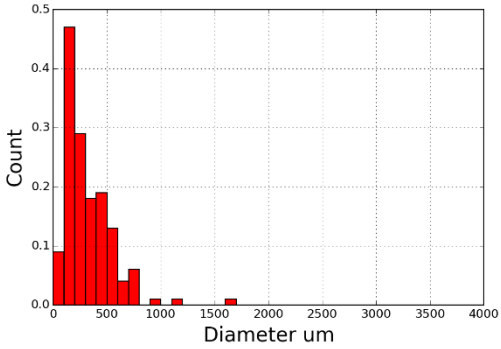


Figure B. 1411: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

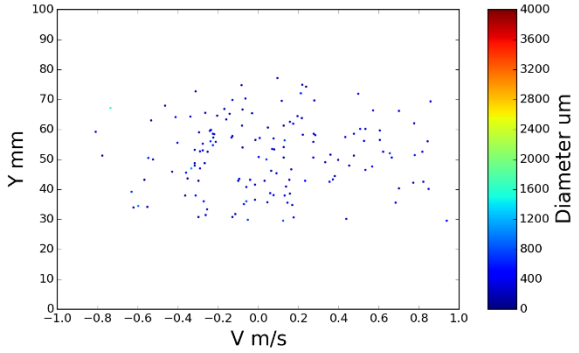


Figure B. 1414: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

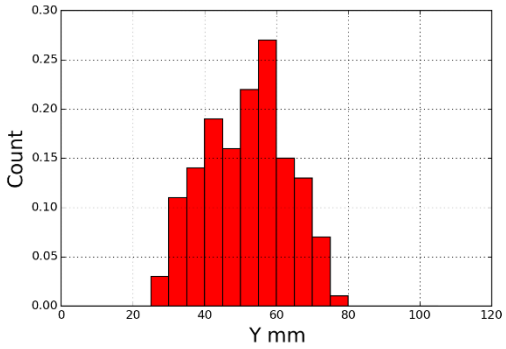


Figure B. 1412: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

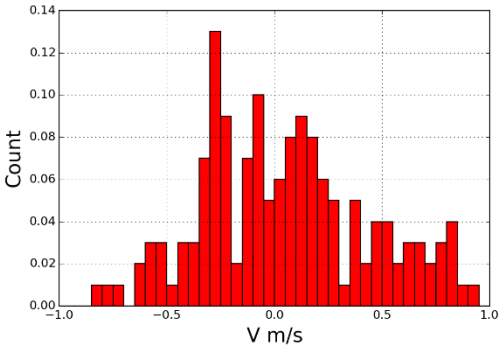


Figure B. 1415: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

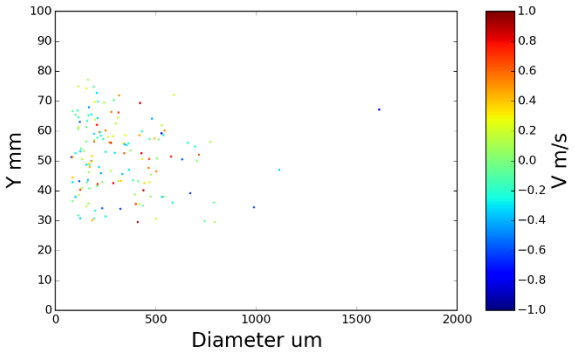


Figure B. 1413: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.2.1 Matched Only Droplets for .LB Image

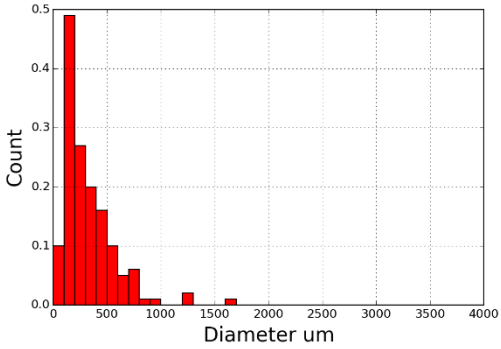


Figure B. 1416: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

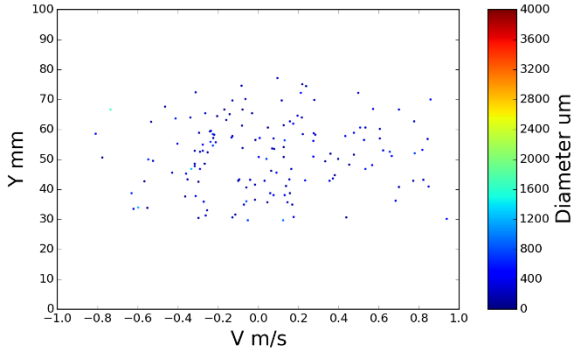


Figure B. 1419: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

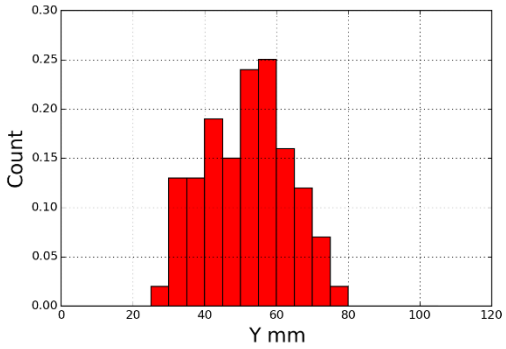


Figure B. 1417: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

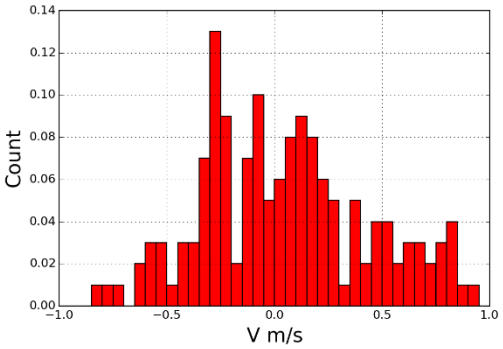


Figure B. 1420: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

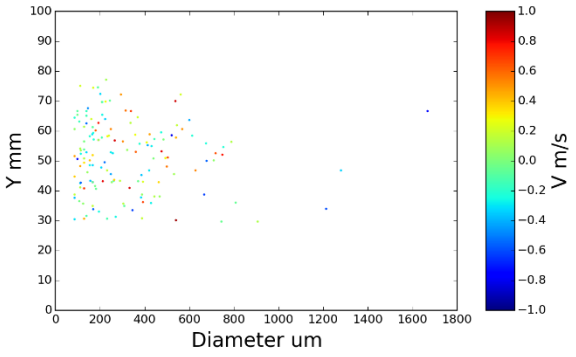


Figure B. 1418: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.2.2 Lens 50mm Mag 0_13x

B.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	6.55	6.54	128.7	1998	386.4	223.1	128.7	1909	384.8	222.6
40-60mm	4.31	4.45	128.7	2060	368.8	215.3	128.7	1950	359.0	212.4
60-80mm	1.64	1.6	128.7	1488	346.3	198.5	128.7	1534	353.0	209.0
80-100mm	0.3	0.32	157.6	600.2	311.0	102.8	128.7	766.8	323.9	127.5
All	12.8	12.91	128.7	2060	373.5	216.0	128.7	1950	370.4	216.2
			Height A (mm)				Height B (mm)			
Highest Particle			96.8940				99.9451			
Lowest Particle			20.0746				20.0746			

Table B. 154: 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	3.89	128.7	1998	441.2	217.4	128.7	1909	439.7	217.6	-0.940	0.930	0.020	0.340	-0.850	0.950	0.060	0.360
40-60mm	2.68	128.7	2060	431.1	227.0	128.7	1950	428.1	222.2	-0.660	0.790	0.040	0.270	-0.910	0.860	0.040	0.340
60-80mm	0.92	128.7	1488	419.6	221.2	128.7	1534	421.2	232.4	-0.490	0.590	0.040	0.230	-0.630	0.920	0.030	0.350
80-100mm	0.2	157.6	600.2	333.1	104.9	128.7	766.8	352.5	134.4	-0.530	0.360	0.010	0.220	-0.410	0.700	0.030	0.300
All	7.69	128.7	2060	432.3	219.8	128.7	1950	430.9	219.7	-0.940	0.930	0.030	0.300	-0.910	0.950	0.050	0.350

Table B. 155: Matched Droplet Info

B.4.2.2 All Droplets for .LA Image

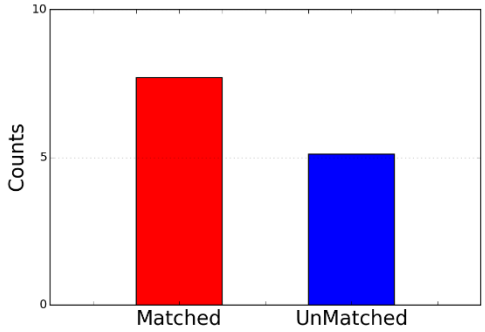


Figure B. 1421: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

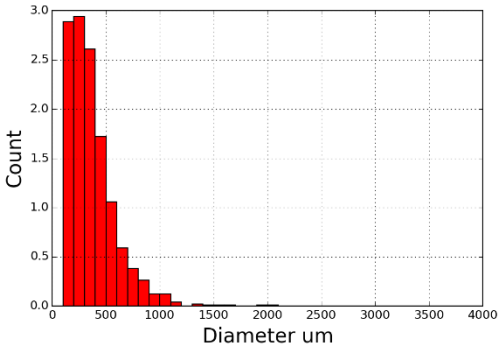


Figure B. 1422: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

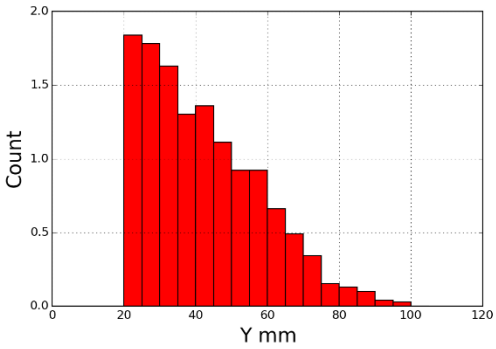


Figure B. 1423: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

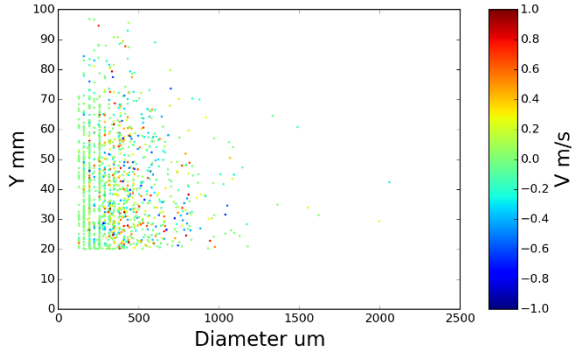


Figure B. 1424: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

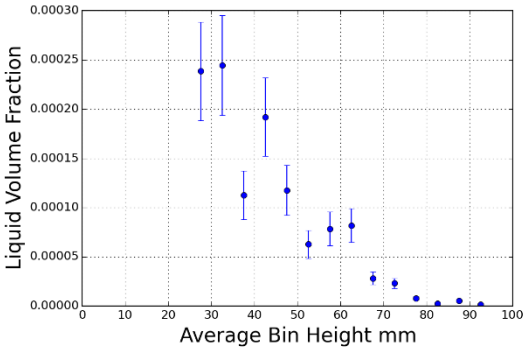


Figure B. 1425: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.2.2 All Droplets for .LB Image

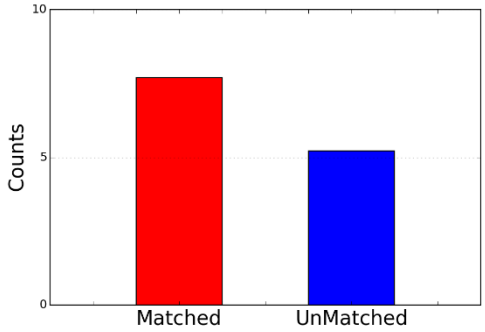


Figure B. 1426: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

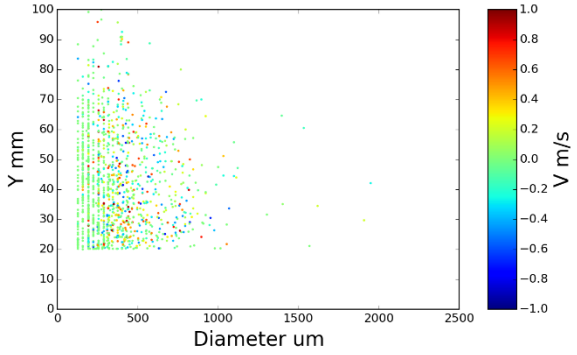


Figure B. 1429: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

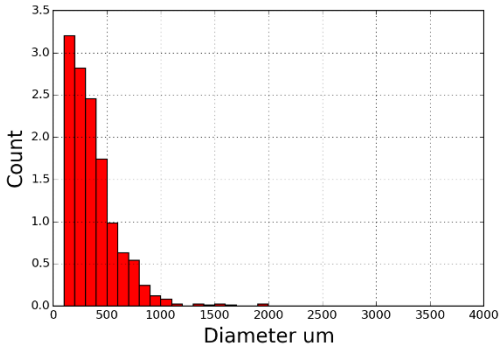


Figure B. 1427: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

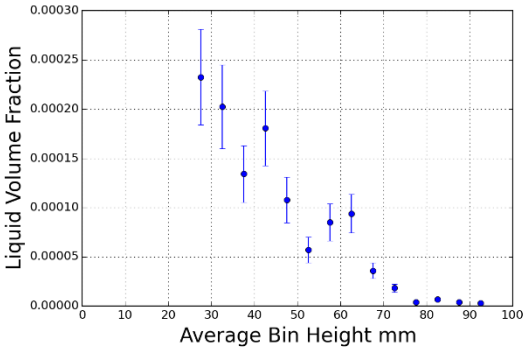


Figure B. 1430: Void Fraction R-123 55F 1700Btu 2550Lb Tri

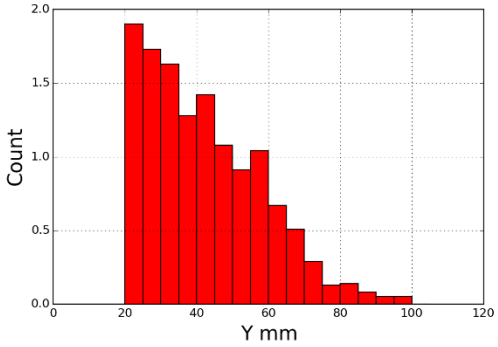


Figure B. 1428: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.2.2 Matched Only Droplets for .LA Image

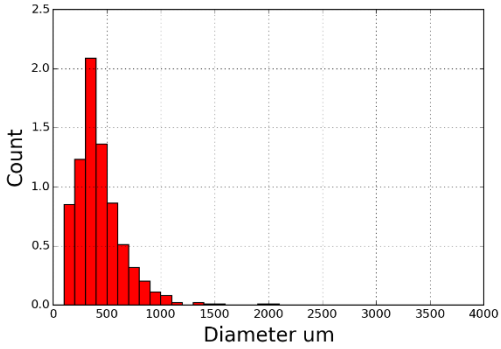


Figure B. 1431: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

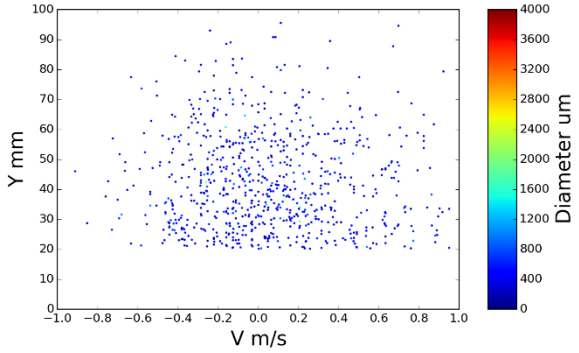


Figure B. 1434: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

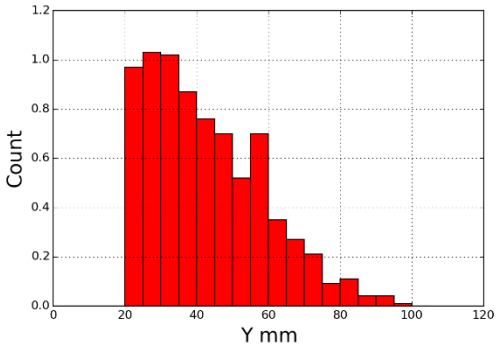


Figure B. 1432: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

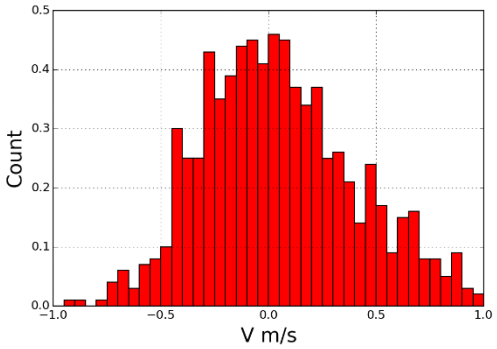


Figure B. 1435: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

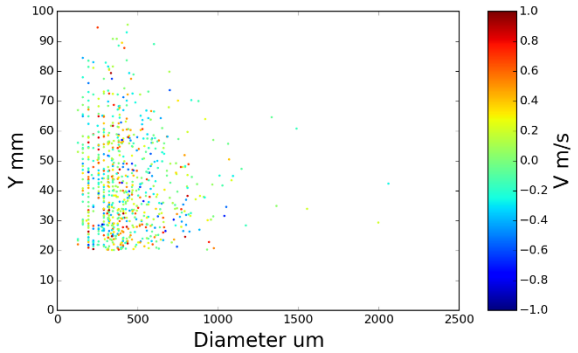


Figure B. 1433: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.2.2 Matched Only Droplets for .LB Image

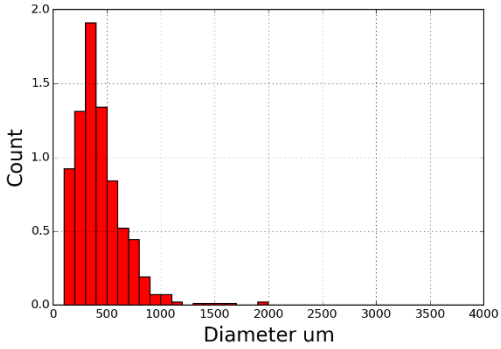


Figure B. 1436: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

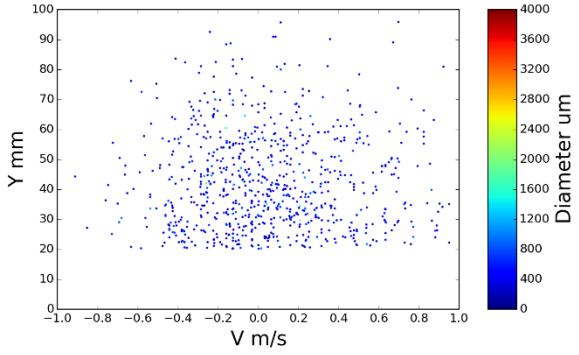


Figure B. 1439: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

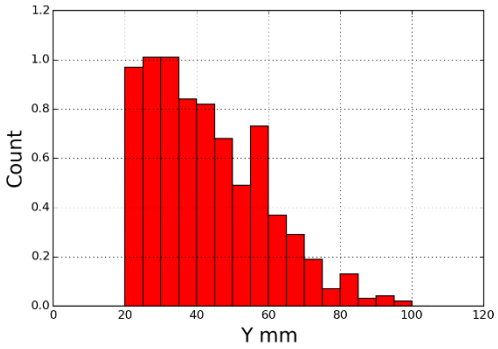


Figure B. 1437: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

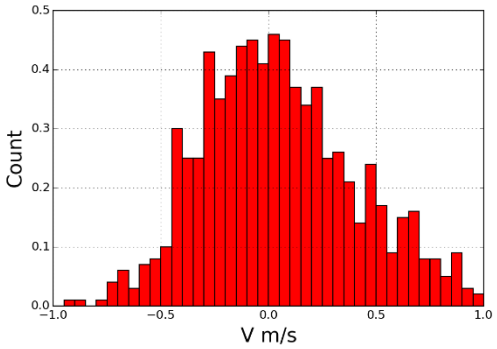


Figure B. 1440: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

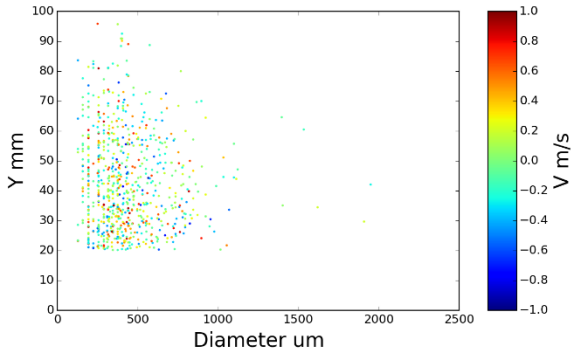


Figure B. 1438: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	5.8	5.82	128.7	1579	412.9	254.7	128.7	1683	409.6	251.5
40-60mm	4.05	3.91	128.7	1614	403.7	239.9	128.7	1439	406.5	239.8
60-80mm	1.32	1.32	128.7	1248	379.3	205.4	128.7	1350	388.7	214.6
80-100mm	0.19	0.22	128.7	796.0	404.9	175.1	128.7	702.0	372.6	172.6
All	11.36	11.27	128.7	1614	405.6	243.2	128.7	1683	405.4	242.2
			Height A (mm)				Height B (mm)			
Highest Particle			93.6147				94.7268			
Lowest Particle			20.1009				20.0746			

Table B. 156: 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	3.22	128.7	1579	500.6	270.9	128.7	1683	499.4	272.3	-0.900	0.920	-0.020	0.330	-0.950	0.950	-0.010	0.390
40-60mm	2.24	128.7	1614	508.5	257.9	128.7	1439	502.1	250.7	-0.870	0.690	-0.010	0.280	-0.840	0.900	-0.030	0.430
60-80mm	0.79	157.6	1248	464.7	213.6	157.6	1350	469.8	222.8	-0.560	0.930	0.010	0.250	-0.730	0.780	-0.020	0.370
80-100mm	0.16	222.9	796.0	445.0	160.9	193.1	702.0	437.6	156.2	-0.330	0.450	0.020	0.220	-0.560	0.740	0.080	0.350
All	6.41	128.7	1614	497.6	258.1	128.7	1683	495.1	257.2	-0.900	0.930	-0.010	0.300	-0.950	0.950	-0.010	0.400

Table B. 157: Matched Droplet Info

B.4.2.2 All Droplets for .LA Image

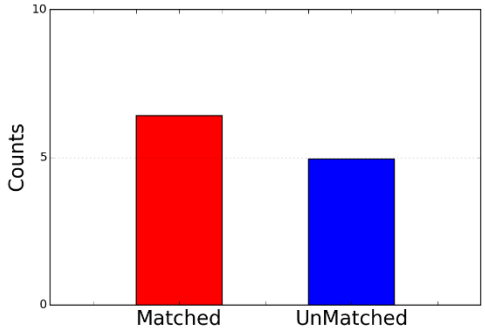


Figure B. 1441: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

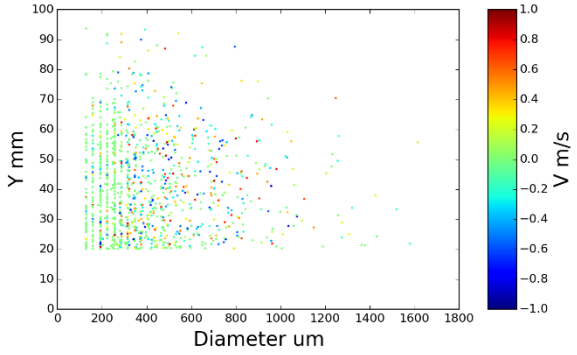


Figure B. 1444: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

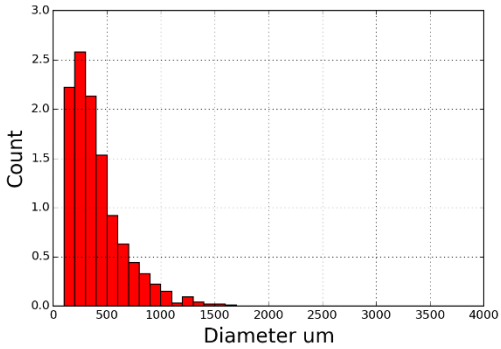


Figure B. 1442: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

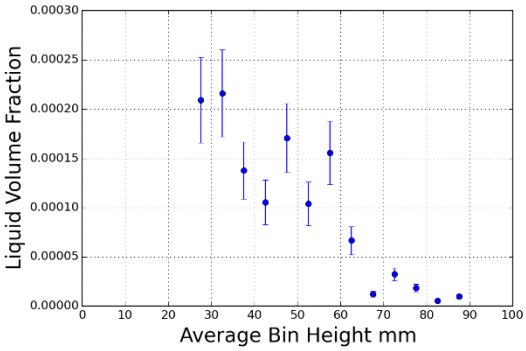


Figure B. 1445: Void Fraction R-123 55F 1700Btu 2550Lb Tri

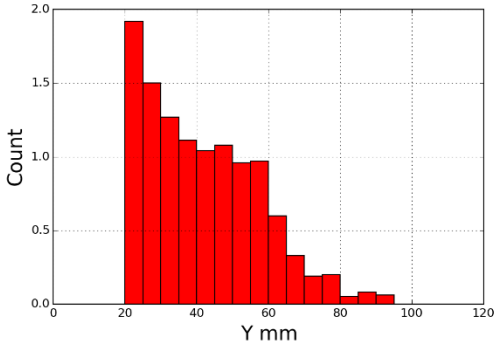


Figure B. 1443: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.2.2 All Droplets for .LB Image

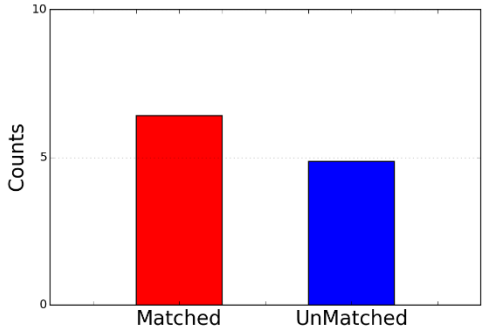


Figure B. 1446: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

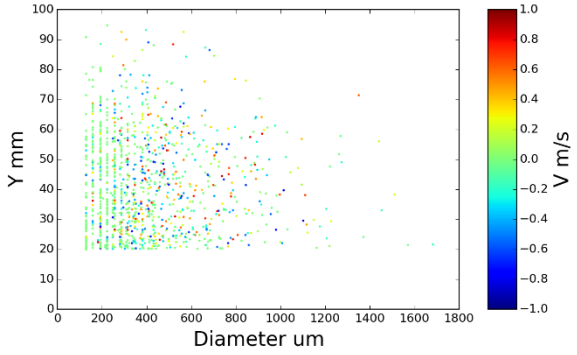


Figure B. 1449: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

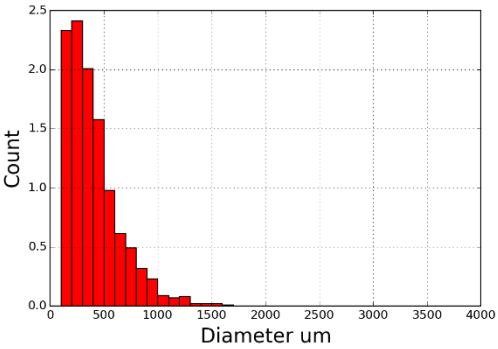


Figure B. 1447: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

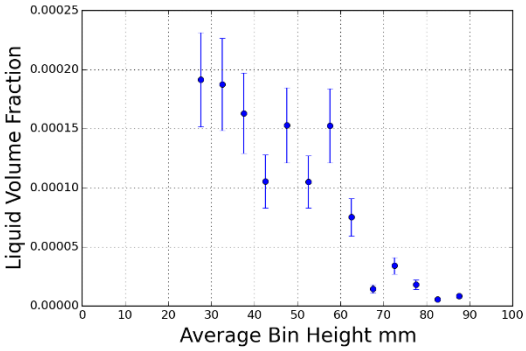


Figure B. 1450: Void Fraction R-123 55F 1700Btu 2550Lb Tri

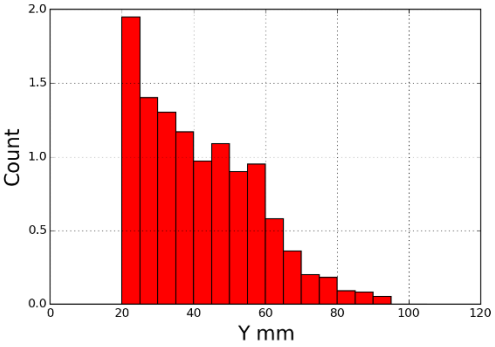


Figure B. 1448: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.2.2 Matched Only Droplets for .LA Image

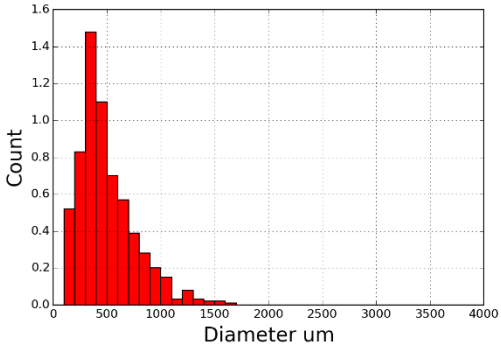


Figure B. 1451: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

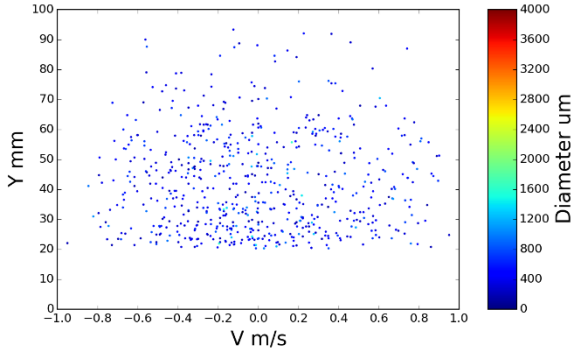


Figure B. 1454: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

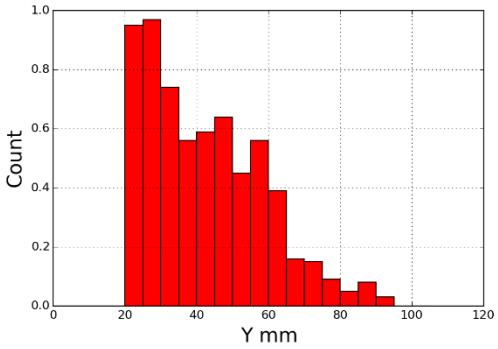


Figure B. 1452: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

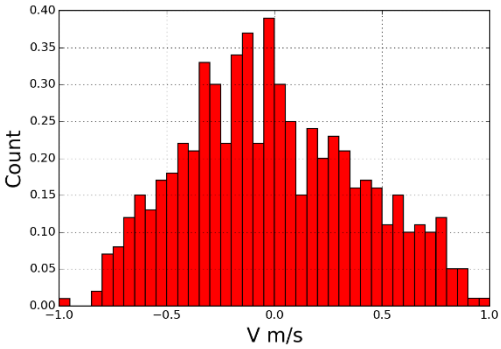


Figure B. 1455: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

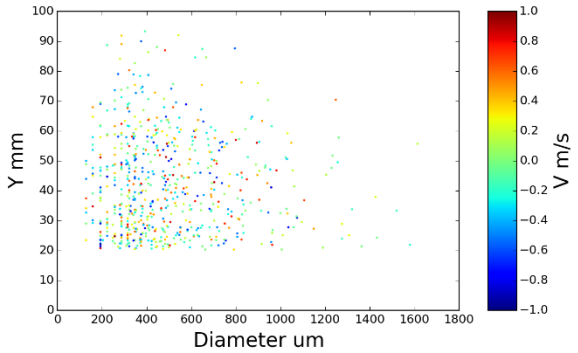


Figure B. 1453: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.2.2 Matched Only Droplets for .LB Image

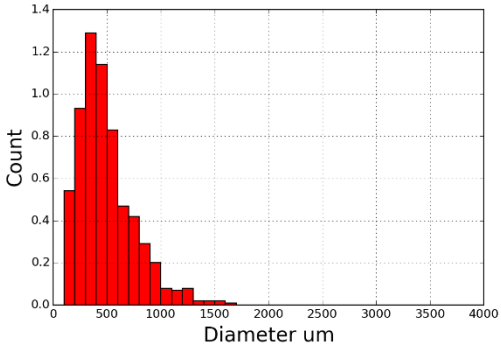


Figure B. 1456: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

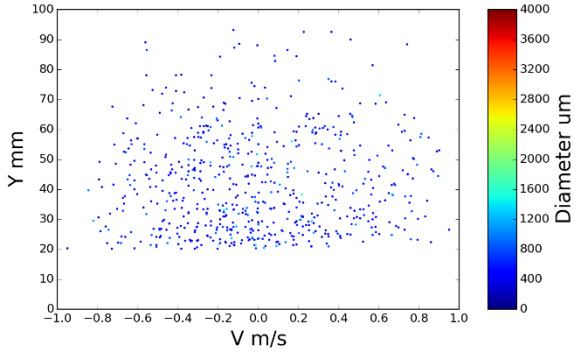


Figure B. 1459: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

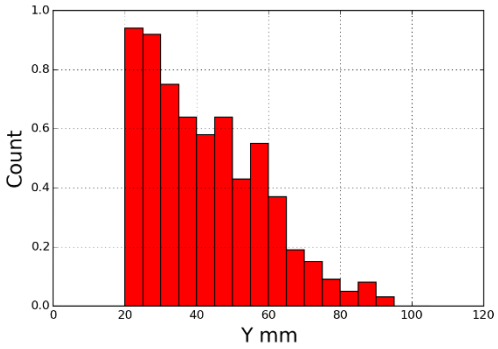


Figure B. 1457: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

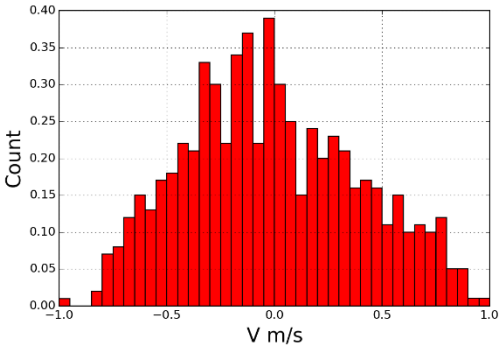


Figure B. 1460: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

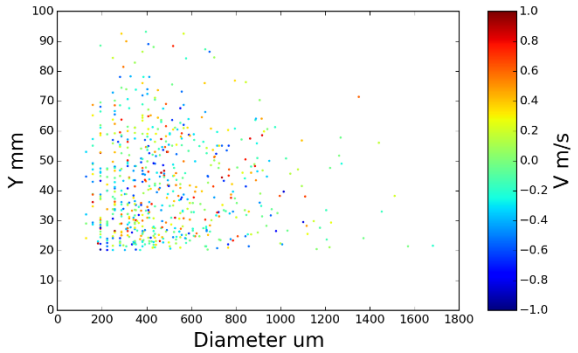


Figure B. 1458: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	4.88	5.1	128.7	3038	453.3	319.7	128.7	2992	441.8	314.3
40-60mm	3.62	3.67	128.7	2345	430.1	299.5	128.7	2624	432.3	310.1
60-80mm	1.25	1.25	128.7	1597	414.2	259.9	128.7	1391	434.3	264.7
80-100mm	0.17	0.15	128.7	1609	465.6	322.6	128.7	1679	479.5	365.2
All	9.92	10.17	128.7	3038	440.1	305.8	128.7	2992	438.0	308.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.8143				93.8999			
Lowest Particle			20.1031				20.1005			

Table B. 158: 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	2.74	128.7	3038	547.4	354.9	128.7	2992	550.3	354.3	-0.880	0.840	-0.020	0.340	-0.910	0.890	-0.020	0.380
40-60mm	1.95	128.7	2345	516.6	339.1	128.7	2624	510.6	358.3	-0.690	0.730	-0.020	0.290	-0.950	0.890	0.010	0.390
60-80mm	0.75	128.7	1597	495.9	284.7	128.7	1391	506.2	289.7	-0.700	0.500	-0.050	0.240	-0.850	0.670	-0.040	0.350
80-100mm	0.12	257.4	1609	556.6	341.7	257.4	1679	579.0	378.5	-0.410	0.430	-0.020	0.250	-0.820	0.680	-0.030	0.400
All	5.56	128.7	3038	529.9	340.9	128.7	2992	531.0	349.0	-0.880	0.840	-0.020	0.310	-0.950	0.890	-0.010	0.380

Table B. 159: Matched Droplet Info

B.4.2.2 All Droplets for .LA Image

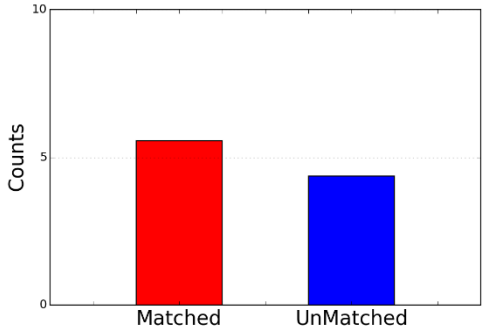


Figure B. 1461: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

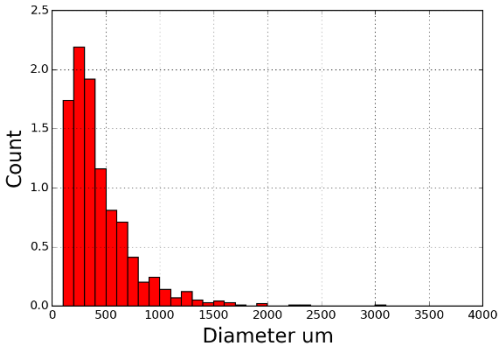


Figure B. 1462: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

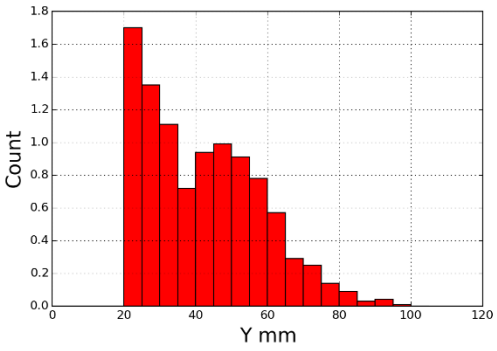


Figure B. 1463: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

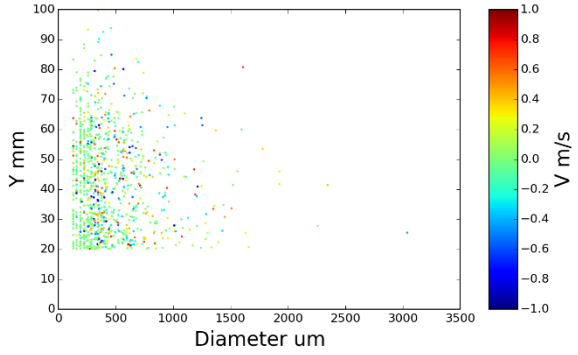


Figure B. 1464: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

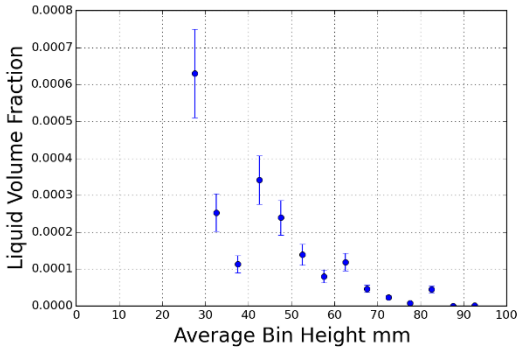


Figure B. 1465: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.2.2 All Droplets for .LB Image

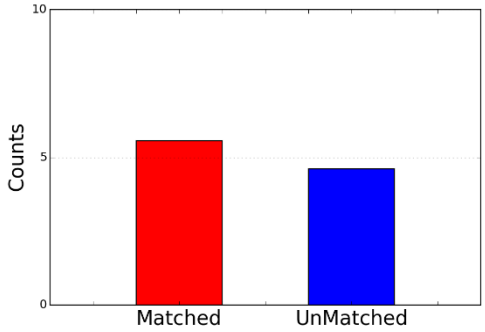


Figure B. 1466: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

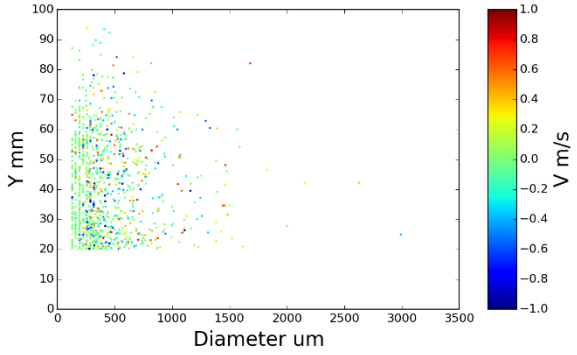


Figure B. 1469: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

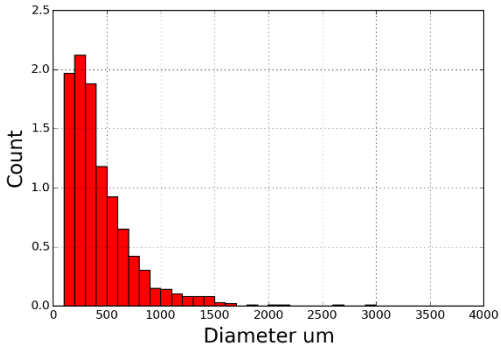


Figure B. 1467: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

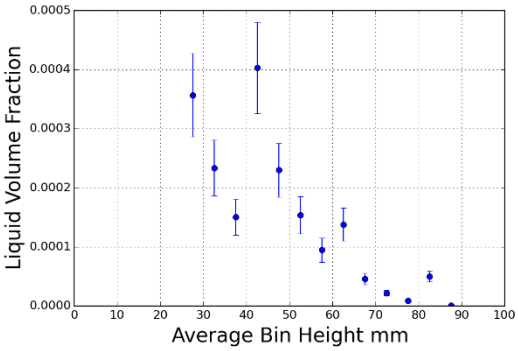


Figure B. 1470: Void Fraction R-123 55F 1700Btu 2550Lb Tri

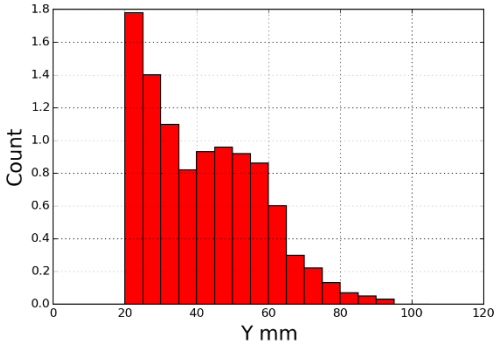


Figure B. 1468: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.2.2 Matched Only Droplets for .LA Image

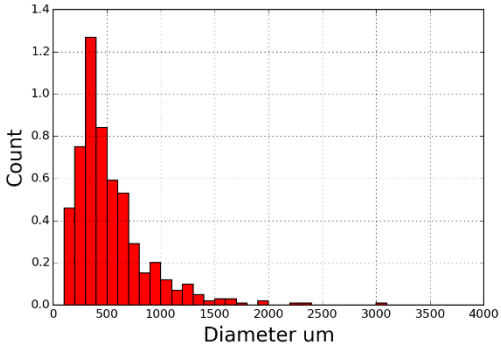


Figure B. 1471: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

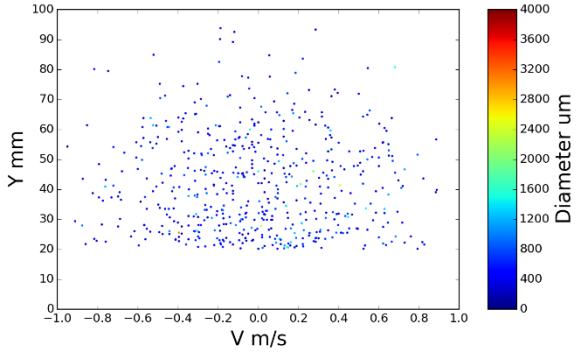


Figure B. 1474: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

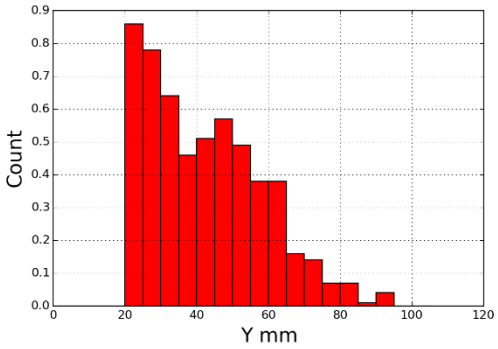


Figure B. 1472: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

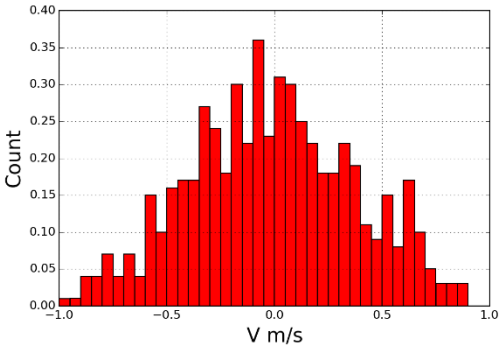


Figure B. 1475: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

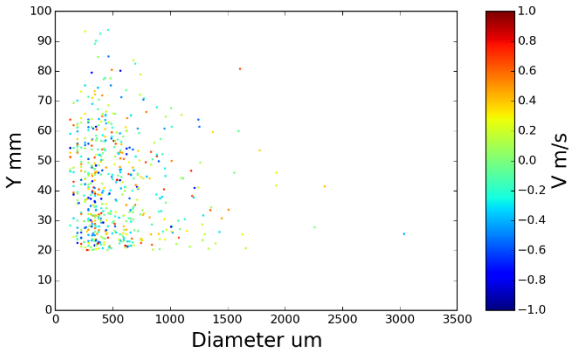


Figure B. 1473: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.2.2 Matched Only Droplets for .LB Image

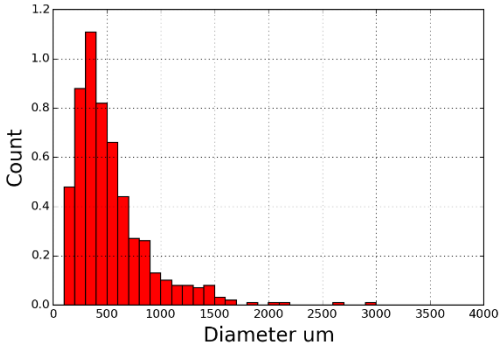


Figure B. 1476: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

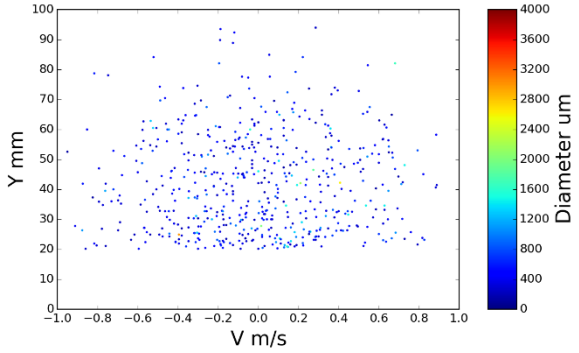


Figure B. 1479: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

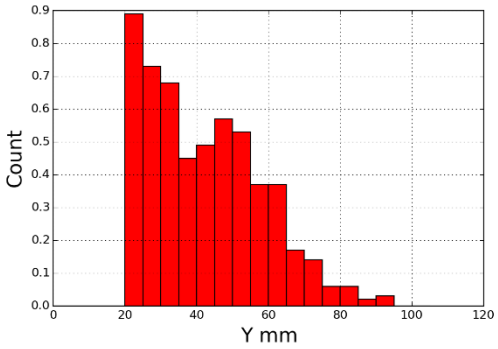


Figure B. 1477: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

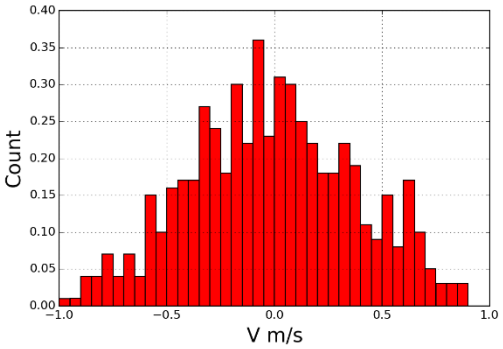


Figure B. 1480: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

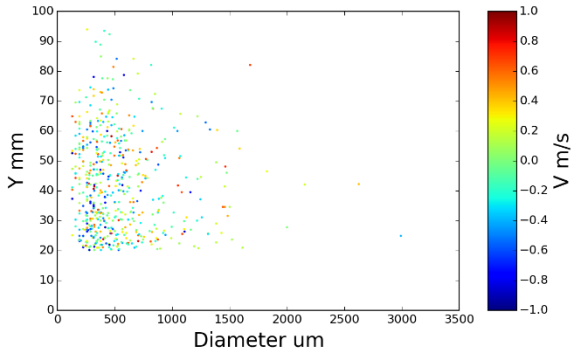


Figure B. 1478: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	2.68	2.9	182.2	2043	484.3	307.7	128.7	1587	464.6	279.0
40-60mm	6.2	5.78	170.4	2209	377.6	263.4	157.6	2094	383.3	271.1
60-80mm	4.43	2.05	182.2	1983	369.9	236.8	170.4	1212	339.1	197.7
80-100mm	1.84	0.13	182.2	1004	323.1	152.0	193.3	519.4	362.3	97.5
All	15.15	10.86	170.4	2209	387.6	258.1	128.7	2094	396.4	263.4
			Height A (mm)				Height B (mm)			
Highest Particle			98.1377				95.9771			
Lowest Particle			20.1242				20.1242			

Table B. 160: 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	0.98	193.3	1331	538.4	260.6	193.3	1446	546.9	279.1	-0.890	0.720	-0.110	0.370	-0.790	0.890	0.060	0.360
40-60mm	0.82	193.3	1348	526.0	279.3	193.3	1649	541.6	295.6	-0.910	0.780	-0.020	0.320	-0.820	0.950	0.090	0.410
60-80mm	0.41	193.3	1112	547.6	245.2	193.3	1212	538.5	265.0	-0.760	0.630	-0.060	0.260	-0.750	0.880	0.020	0.440
80-100mm	0.01	412.5	412.5	412.5	0.0	407.4	407.4	407.4	0.0	0.100	0.100	0.100	0.000	0.310	0.310	0.310	0.000
All	2.22	193.3	1348	534.9	264.6	193.3	1649	542.8	282.4	-0.910	0.780	-0.070	0.340	-0.820	0.950	0.070	0.390

Table B. 161: Matched Droplet Info

B.4.2.2 All Droplets for .LA Image

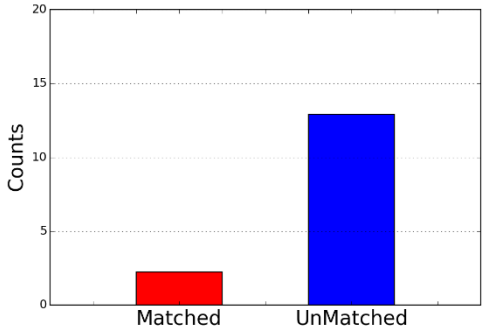


Figure B. 1481: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

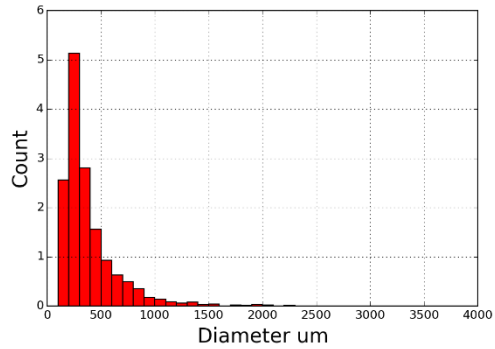


Figure B. 1482: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

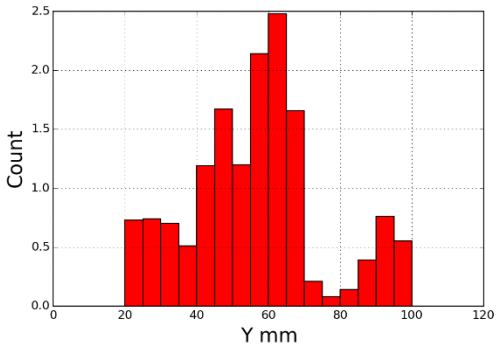


Figure B. 1483: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

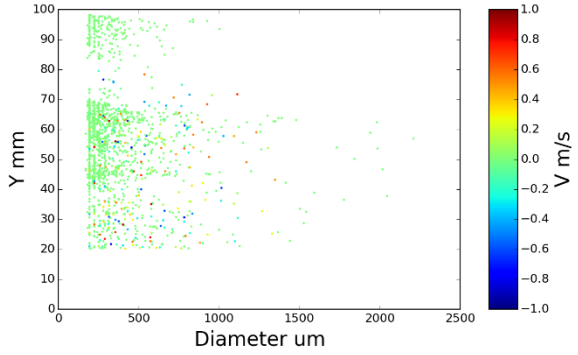


Figure B. 1484: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

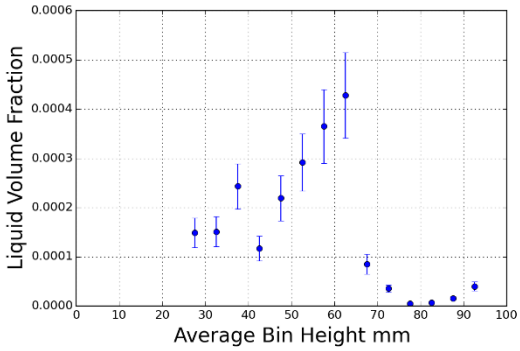


Figure B. 1485: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.2.2 All Droplets for .LB Image

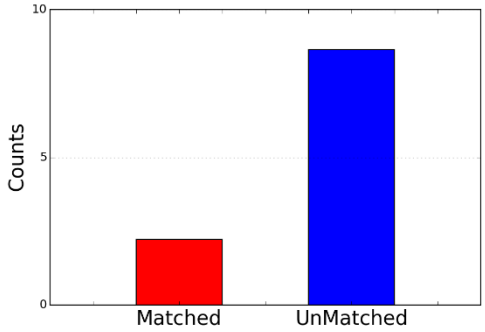


Figure B. 1486: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

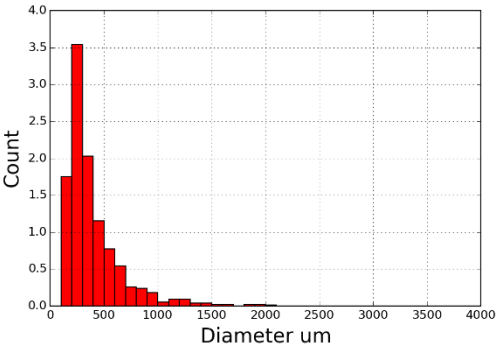


Figure B. 1487: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

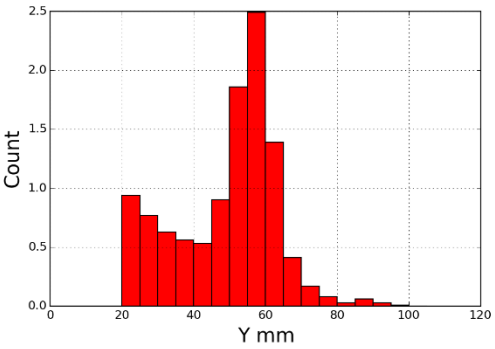


Figure B. 1488: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

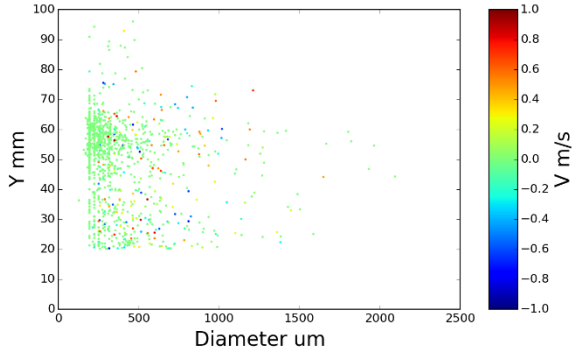


Figure B. 1489: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

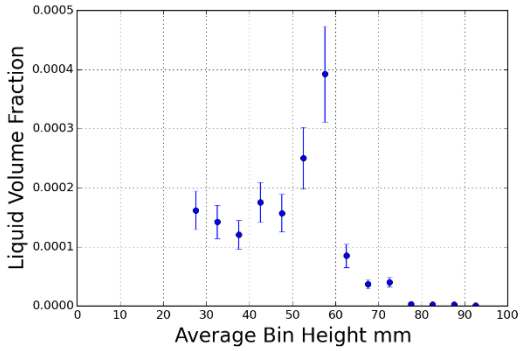


Figure B. 1490: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.2.2 Matched Only Droplets for .LA Image

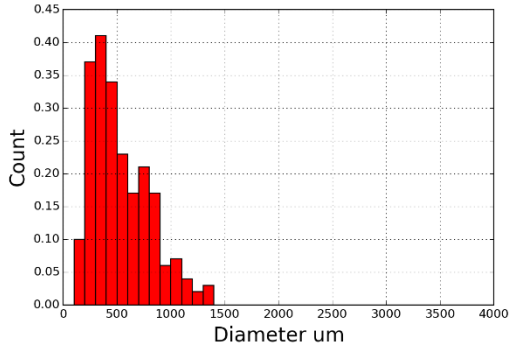


Figure B. 1491: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

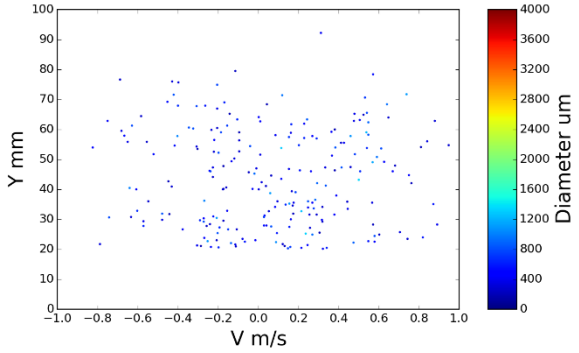


Figure B. 1494: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

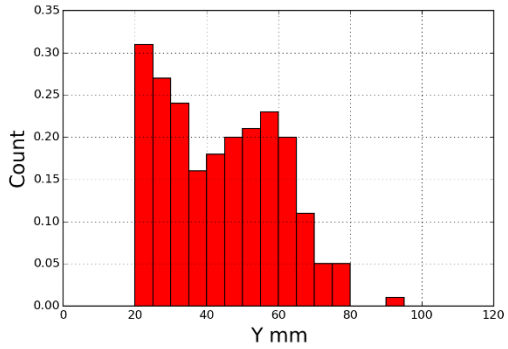


Figure B. 1492: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

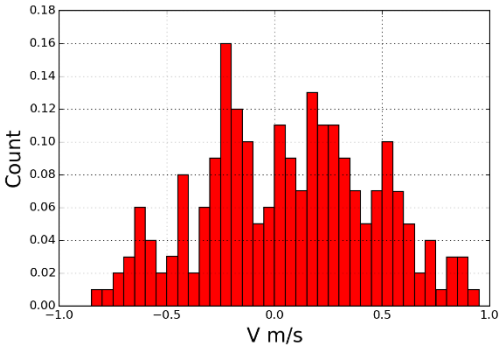


Figure B. 1495: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

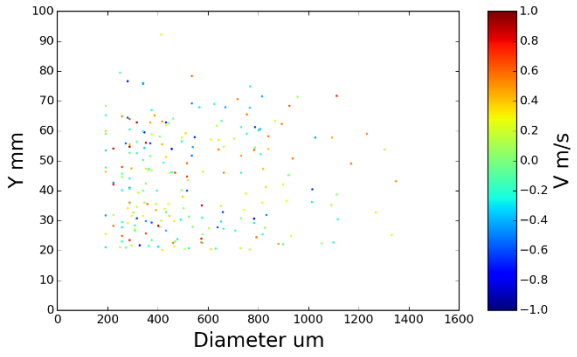


Figure B. 1493: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.2.2 Matched Only Droplets for .LB Image

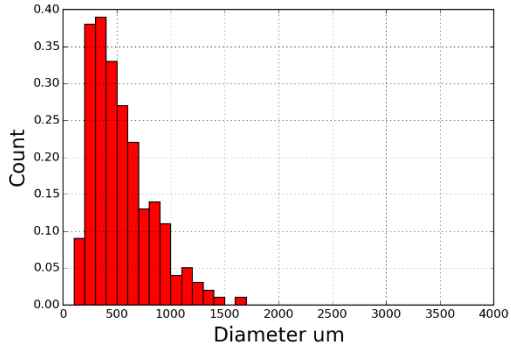


Figure B. 1496: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

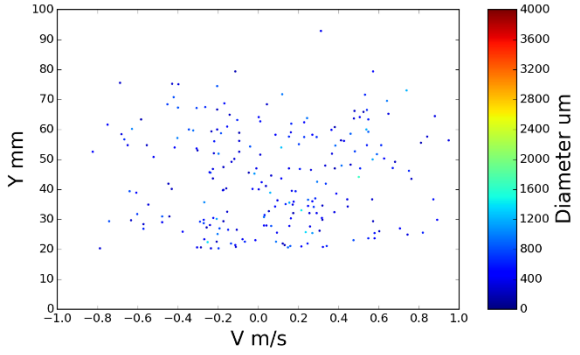


Figure B. 1499: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

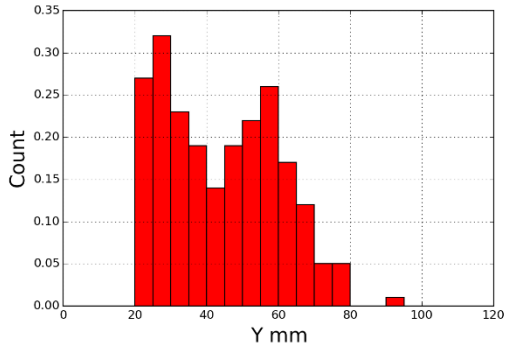


Figure B. 1497: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

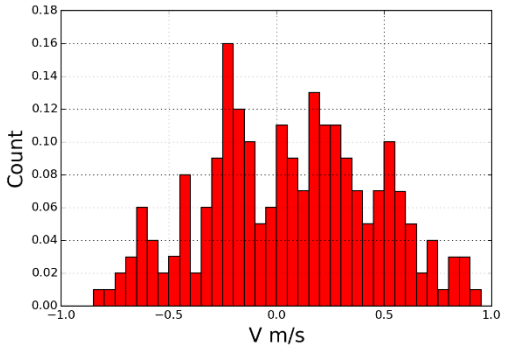


Figure B. 1500: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

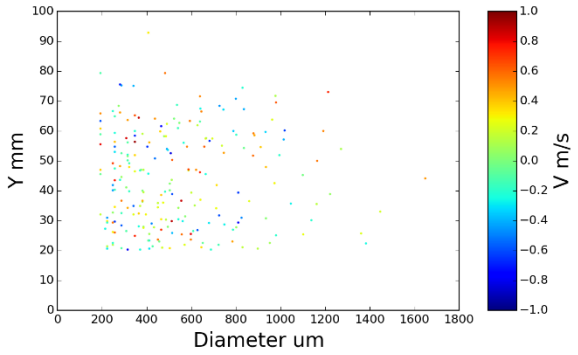


Figure B. 1498: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	2.67	1.28	182.2	2082	365.6	240.9	182.2	2004	447.8	264.6
40-60mm	1.2	0.99	157.6	2078	442.3	356.4	193.1	2093	471.9	361.0
60-80mm	2.67	0.39	157.6	2388	353.1	209.6	182.2	1469	409.7	224.7
80-100mm	1.64	0.02	182.2	734.5	290.6	105.3	249.5	322.1	285.8	36.3
All	8.18	2.68	157.6	2388	357.8	236.9	182.2	2093	449.9	299.3
			Height A (mm)				Height B (mm)			
Highest Particle			98.0521				89.2317			
Lowest Particle			20.1031				20.1446			

Table B. 162: 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	0.43	193.3	786.3	425.2	186.1	182.2	822.5	434.1	189.4	-0.690	0.540	-0.010	0.280	-0.910	0.840	-0.000	0.410
40-60mm	0.37	193.3	1279	460.8	261.3	193.3	1520	513.6	323.4	-0.920	0.710	-0.050	0.330	-0.600	0.840	0.080	0.370
60-80mm	0.14	193.3	681.8	382.6	124.2	213.7	705.7	437.2	152.7	-0.520	0.310	-0.120	0.220	-0.640	0.130	-0.170	0.230
80-100mm	0.01	302.1	302.1	302.1	0.0	322.1	322.1	322.1	0.0	0.030	0.030	0.030	0.000	-0.150	-0.150	-0.150	0.000
All	0.95	193.3	1279	431.5	213.1	182.2	1520	461.9	244.1	-0.920	0.710	-0.040	0.290	-0.910	0.840	0.000	0.380

Table B. 163: Matched Droplet Info

B.4.2.2 All Droplets for .LA Image

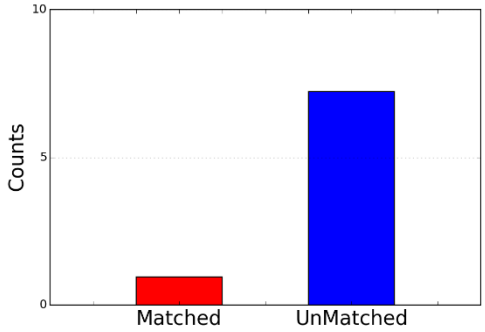


Figure B. 1501: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

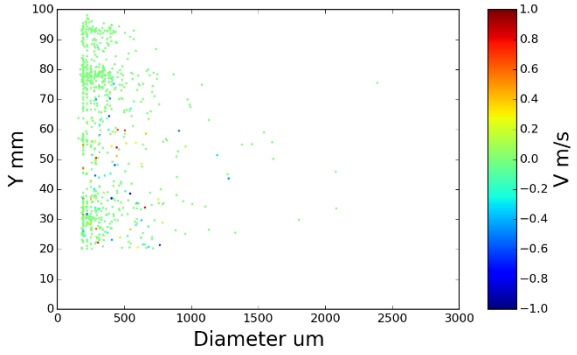


Figure B. 1504: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

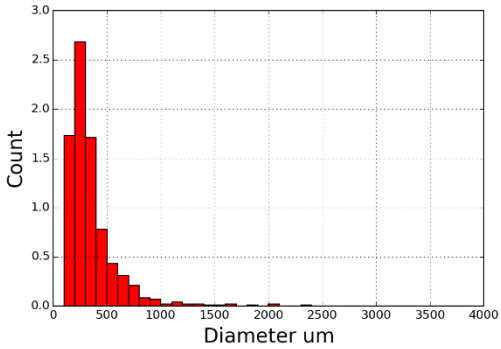


Figure B. 1502: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

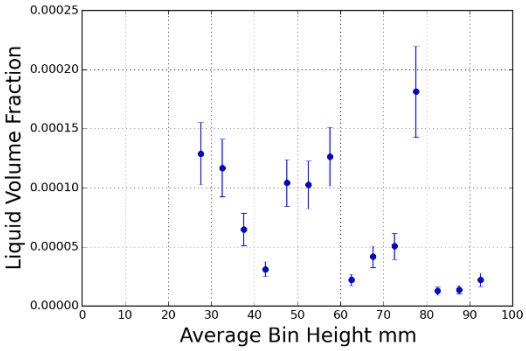


Figure B. 1505: Void Fraction R-123 55F 1700Btu 2550Lb Tri

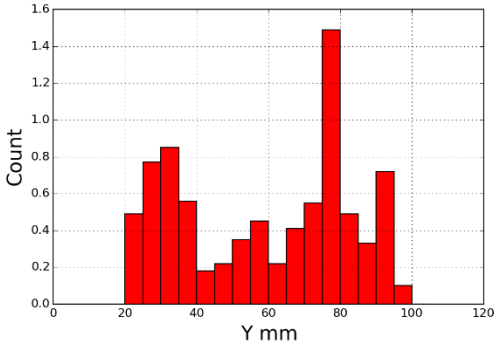


Figure B. 1503: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.2.2 All Droplets for .LB Image

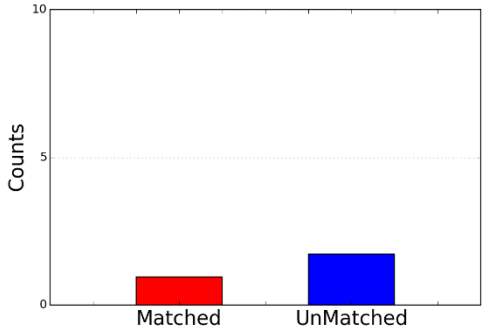


Figure B. 1506: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

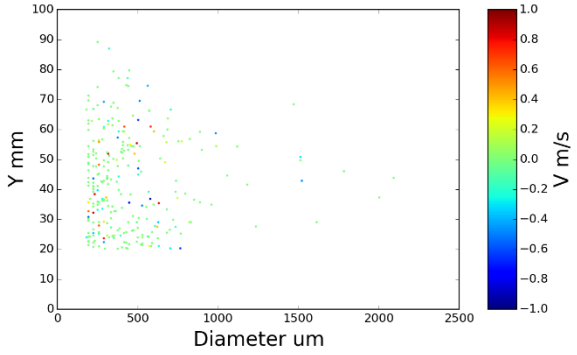


Figure B. 1509: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

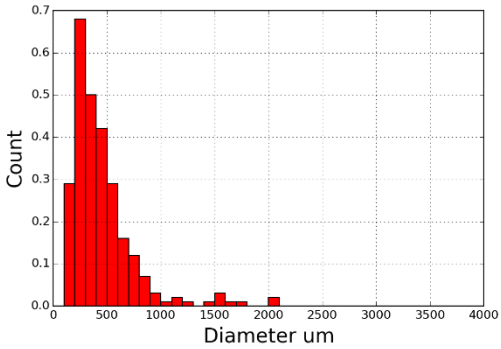


Figure B. 1507: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

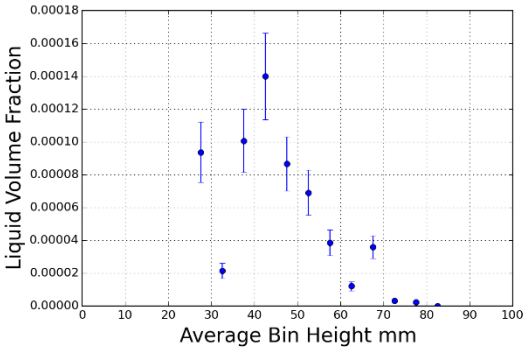


Figure B. 1510: Void Fraction R-123 55F 1700Btu 2550Lb Tri

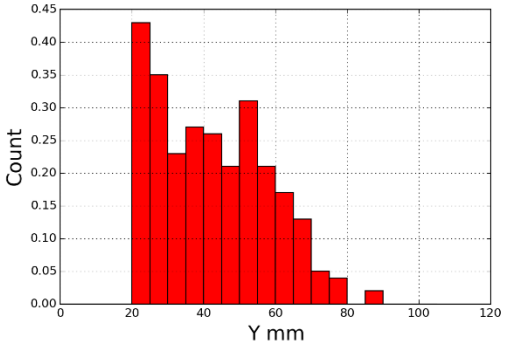


Figure B. 1508: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.2.2 Matched Only Droplets for .LA Image

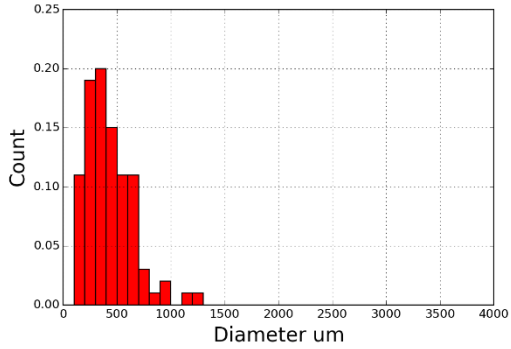


Figure B. 1511: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

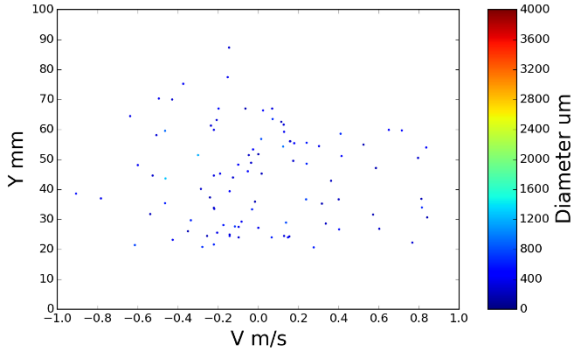


Figure B. 1514: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

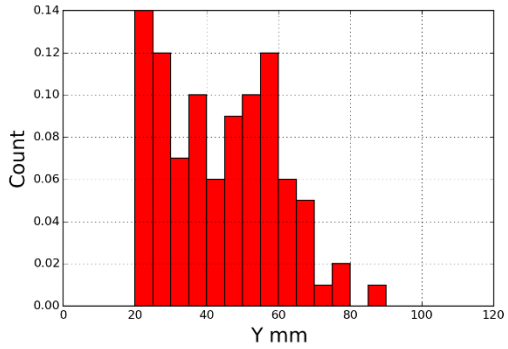


Figure B. 1512: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

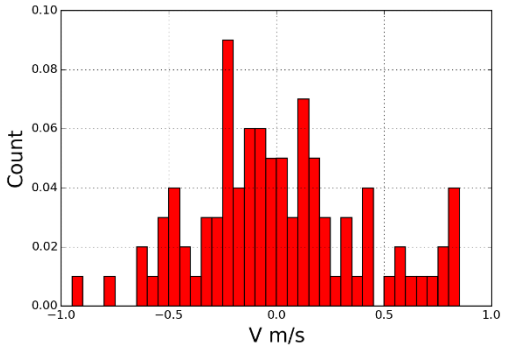


Figure B. 1515: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

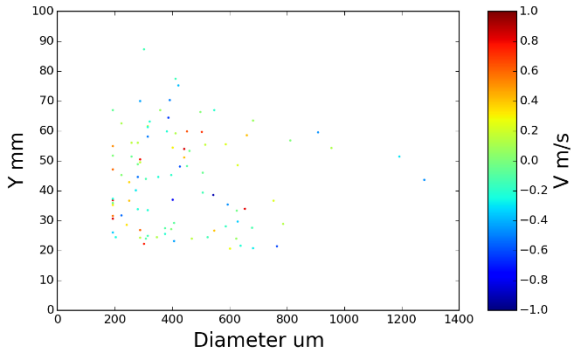


Figure B. 1513: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.2.2 Matched Only Droplets for .LB Image

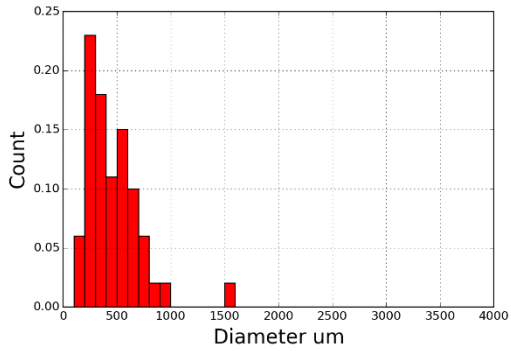


Figure B. 1516: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

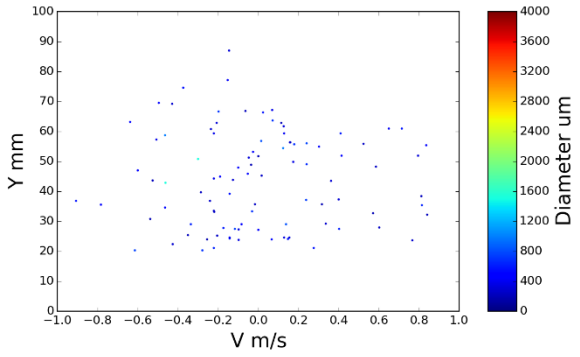


Figure B. 1519: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

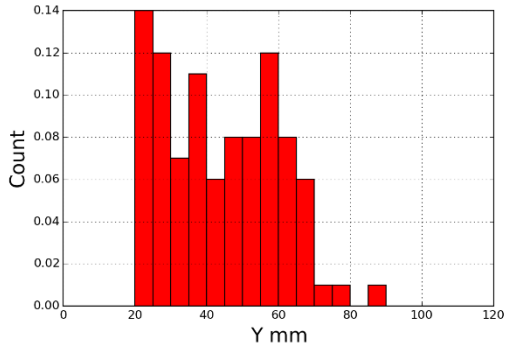


Figure B. 1517: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

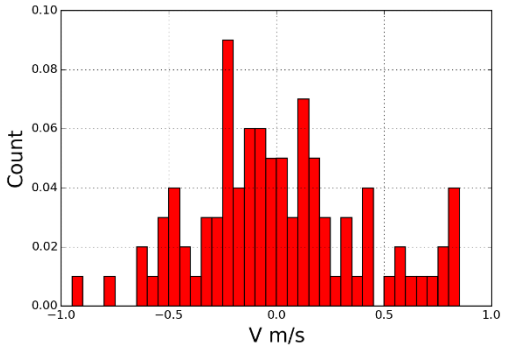


Figure B. 1520: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

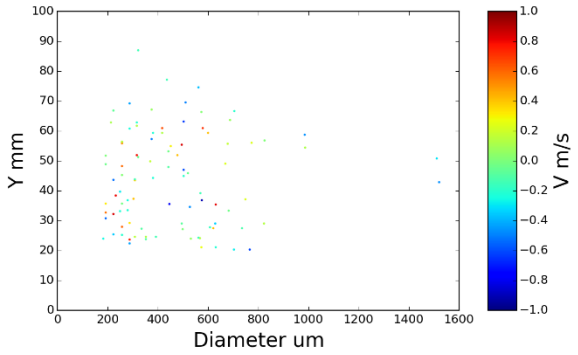


Figure B. 1518: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.3 Liquid Level 3

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	18216 / 2.295
Ref Mass Flow (lb/hr) / (kg/s)	297 / 0.037
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	2889 / 3.919
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	1095 / 3.45
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.6 / 13.09
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	56.1 / 13.40
Total Bundle Q (Btu/hr) / (kW)	23076 / 6.76
Total Bundle & Preboiler Q (Btu/hr) / (kW)	23076 / 6.76
Top Two Rows HTC Ratio	0.525
Bundle Inlet Quality	-0.09
Bundle Exit Quality	0.94

Table B. 164: Thermal Conditions

B.4.3.1 Lens 100mm Mag 0_29x

B.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	0.09	0.11	85.8	415.3	188.1	112.6	85.8	419.3	177.6	102.5
40-60mm	0.21	0.2	85.8	519.4	167.5	103.4	85.8	446.6	164.7	93.6
60-80mm	0.13	0.11	85.8	469.0	154.9	107.1	85.8	461.9	178.9	107.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	0.43	0.42	85.8	519.4	168.0	107.1	85.8	461.9	171.8	99.9
			Height A (mm)				Height B (mm)			
Highest Particle			72.4998				72.4851			
Lowest Particle			29.7112				29.6605			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	0.06	114.4	415.3	193.8	103.3	114.4	419.3	196.5	102.9	-0.220	0.350	0.040	0.180	-0.200	0.620	0.130	0.290
40-60mm	0.14	85.8	311.9	172.3	70.6	85.8	317.1	169.8	70.3	-0.190	0.340	0.040	0.150	-0.270	0.540	0.020	0.220
60-80mm	0.09	85.8	469.0	182.5	118.5	85.8	461.9	195.0	111.8	-0.170	0.680	0.060	0.260	-0.370	0.540	0.080	0.280
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	0.29	85.8	469.0	179.9	95.1	85.8	461.9	183.1	92.8	-0.220	0.680	0.050	0.200	-0.370	0.620	0.060	0.260

Table B. 166: Matched Droplet Info

B.4.3.1 All Droplets for .LA Image

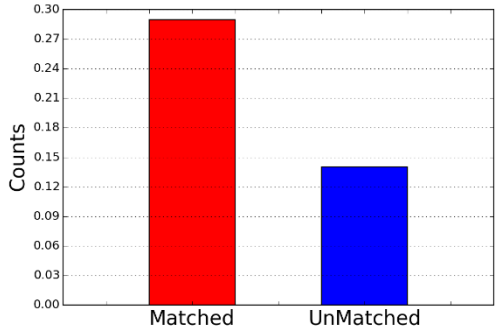


Figure B. 1521: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

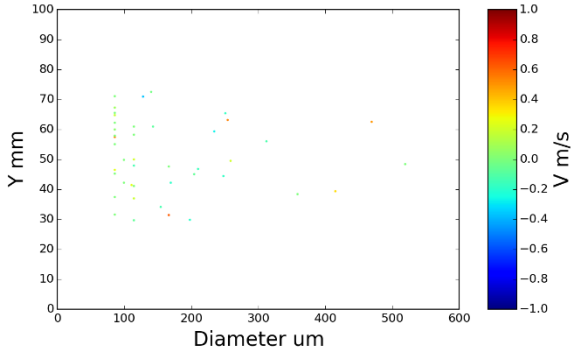


Figure B. 1524: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

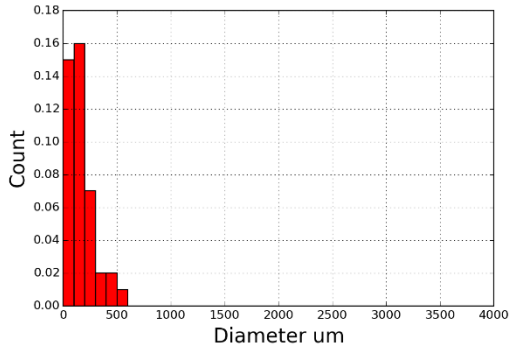


Figure B. 1522: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

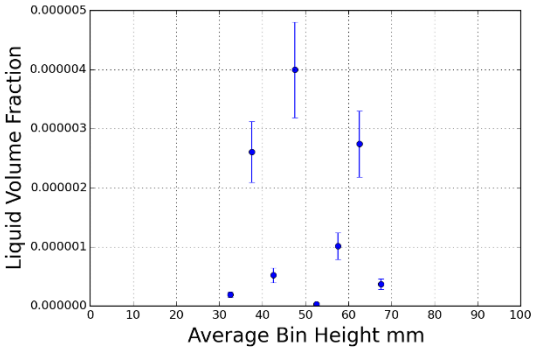


Figure B. 1525: Void Fraction R-123 55F 1700Btu 2550Lb Tri

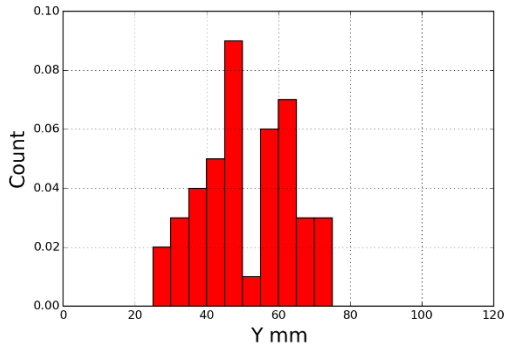


Figure B. 1523: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.3.1 All Droplets for .LB Image

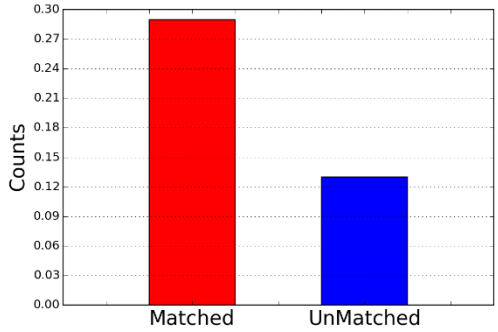


Figure B. 1526: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

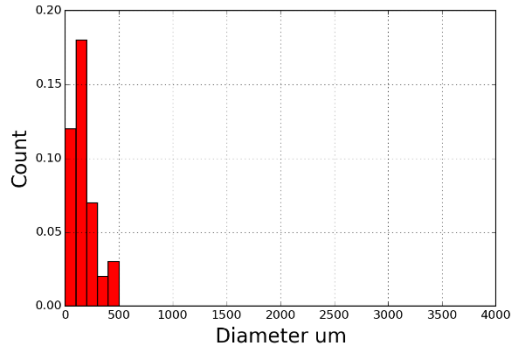


Figure B. 1527: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

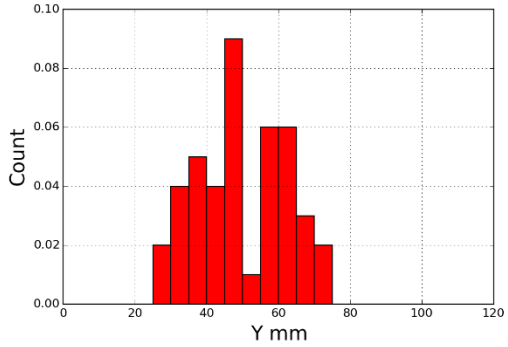


Figure B. 1528: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

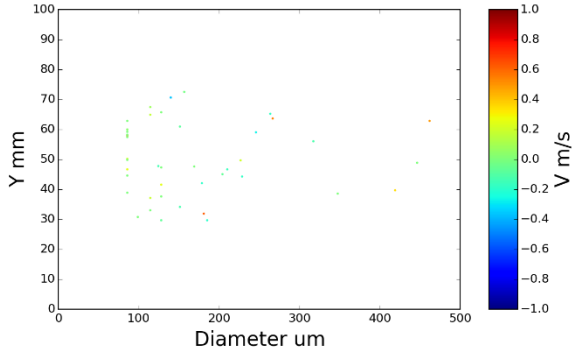


Figure B. 1529: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

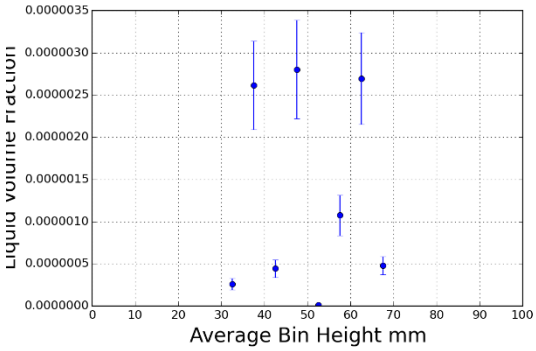


Figure B. 1530: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.3.1 Matched Only Droplets for .LA Image

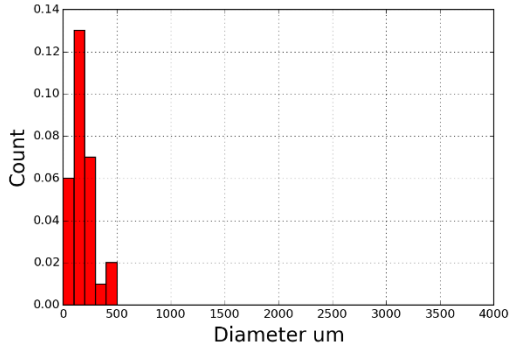


Figure B. 1531: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

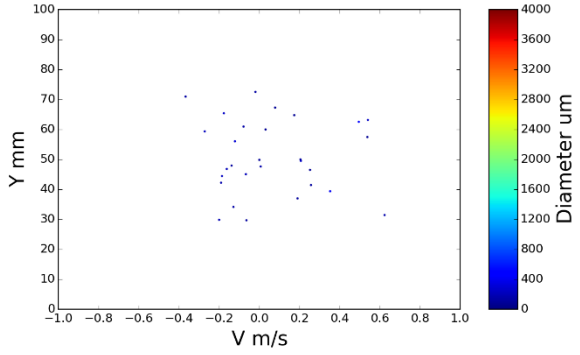


Figure B. 1534: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

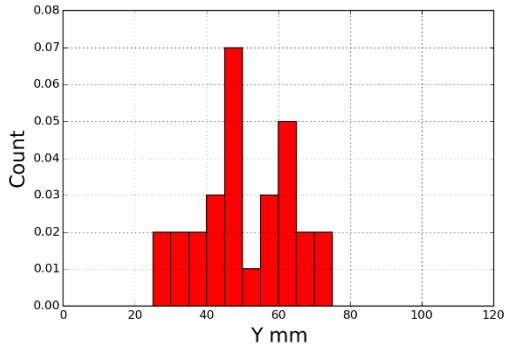


Figure B. 1532: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

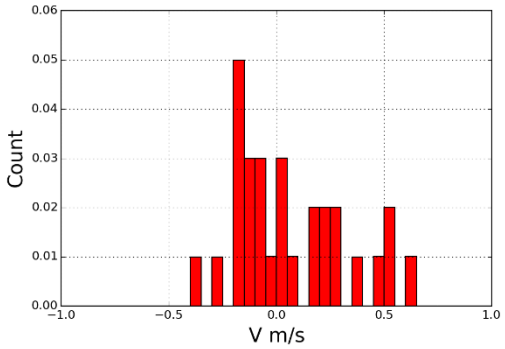


Figure B. 1535: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

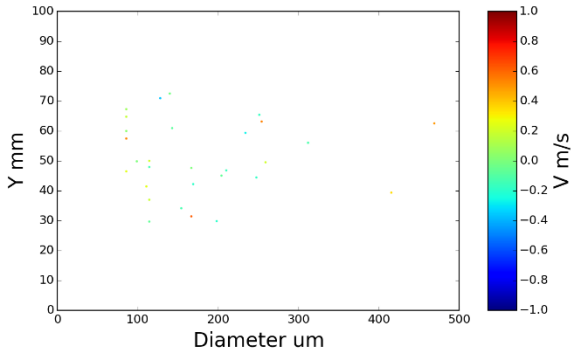


Figure B. 1533: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.3.1 Matched Only Droplets for .LB Image

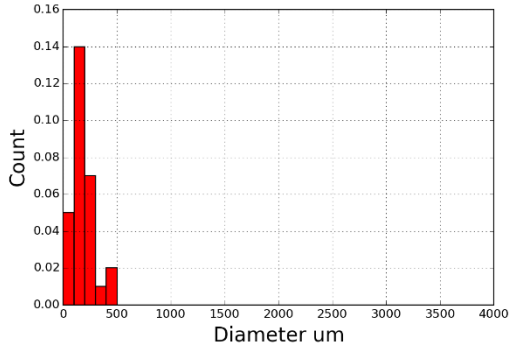


Figure B. 1536: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

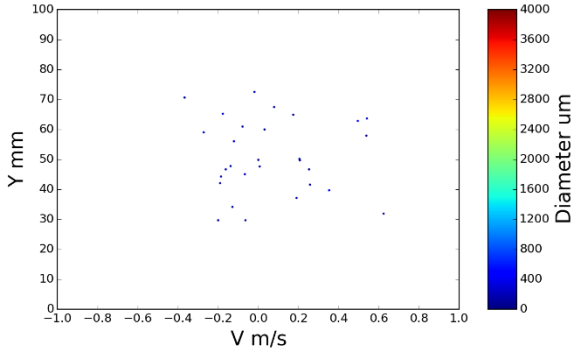


Figure B. 1539: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

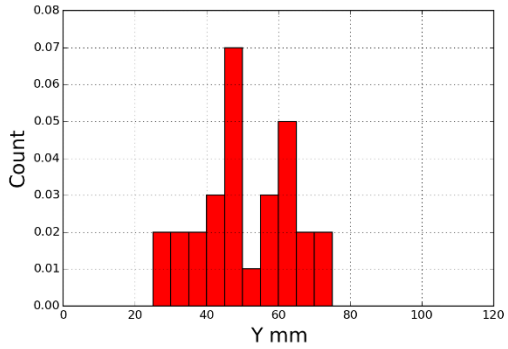


Figure B. 1537: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

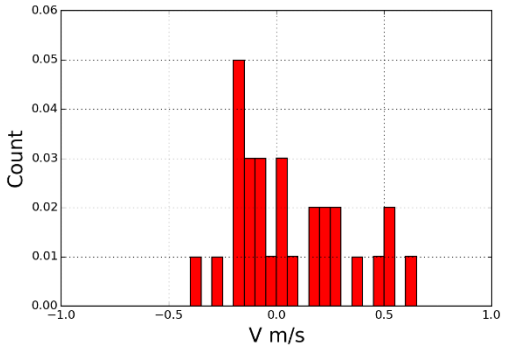


Figure B. 1540: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

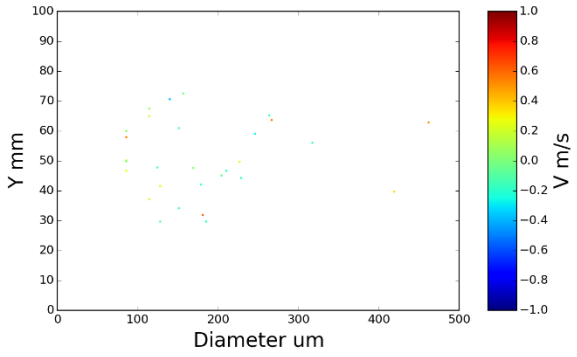


Figure B. 1538: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	0.04	0.03	124.6	178.6	154.6	20.3	114.4	161.8	142.5	20.3
40-60mm	0.08	0.04	85.8	124.6	94.2	14.8	99.0	140.1	120.3	15.3
60-80mm	0.02	0.0	114.4	114.4	114.4	0.0	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	0.14	0.07	85.8	178.6	114.3	30.6	99.0	161.8	129.8	20.8
			Height A (mm)				Height B (mm)			
Highest Particle			72.3837				59.9925			
Lowest Particle			30.2920				30.3953			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	0.02	124.6	148.6	136.6	12.0	114.4	161.8	138.1	23.7	-0.180	-0.010	-0.100	0.080	-0.260	0.130	-0.070	0.200
40-60mm	0.03	85.8	124.6	108.3	16.4	99.0	140.1	120.3	15.3	-0.170	0.050	-0.070	0.090	-0.280	-0.060	-0.180	0.090
60-80mm	0.01	114.4	114.4	114.4	0.0	10000	-1000.0	114.4	0.0	-0.060	-0.060	-0.060	0.000	-0.060	-0.060	-0.060	0.000
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	0.06	85.8	148.6	118.7	18.6	99.0	161.8	126.2	20.3	-0.180	0.050	-0.080	0.080	-0.280	0.130	-0.120	0.140

Table B. 168: Matched Droplet Info

B.4.3.1 All Droplets for .LA Image

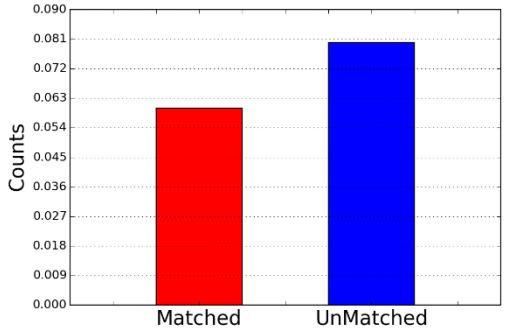


Figure B. 1541: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

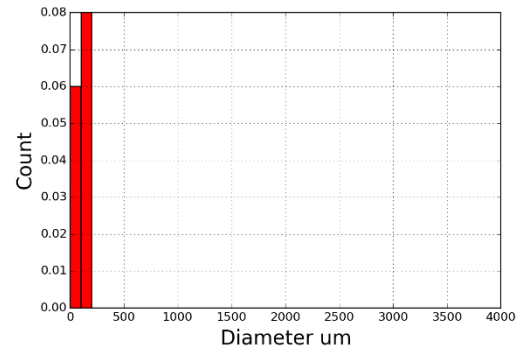


Figure B. 1542: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

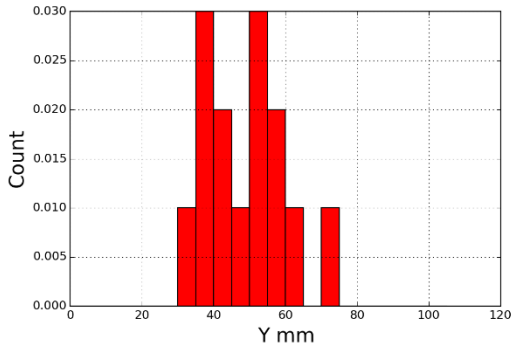


Figure B. 1543: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

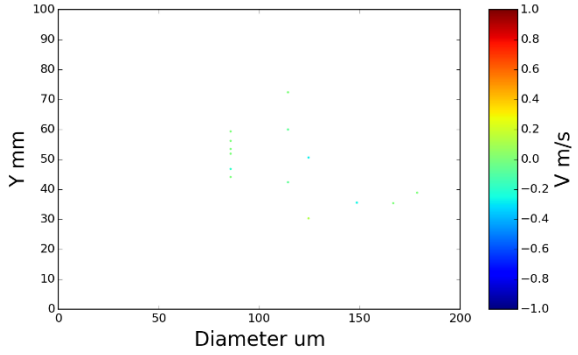


Figure B. 1544: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

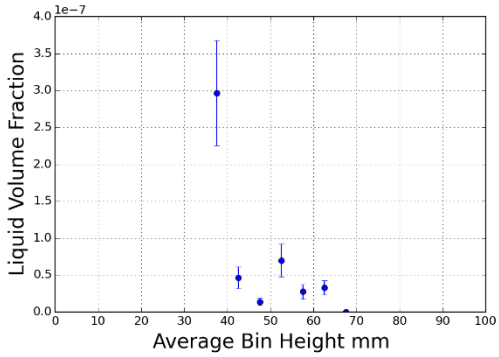


Figure B. 1545: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.3.1 All Droplets for .LB Image

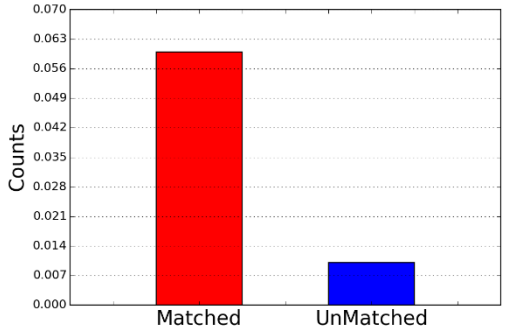


Figure B. 1546: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

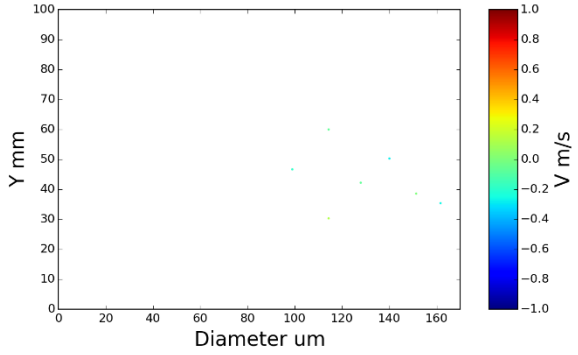


Figure B. 1549: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

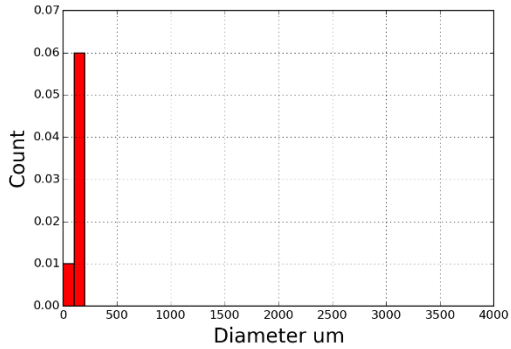


Figure B. 1547: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

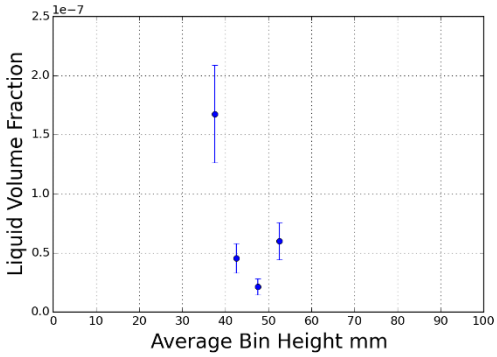


Figure B. 1550: Void Fraction R-123 55F 1700Btu 2550Lb Tri

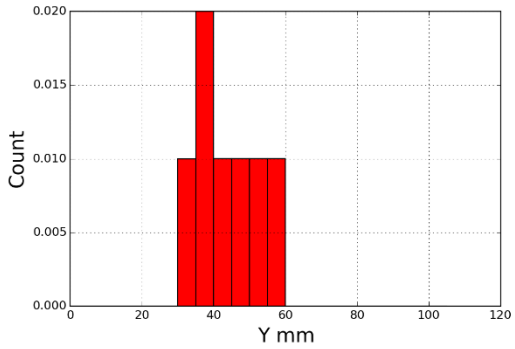


Figure B. 1548: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.3.1 Matched Only Droplets for .LA Image

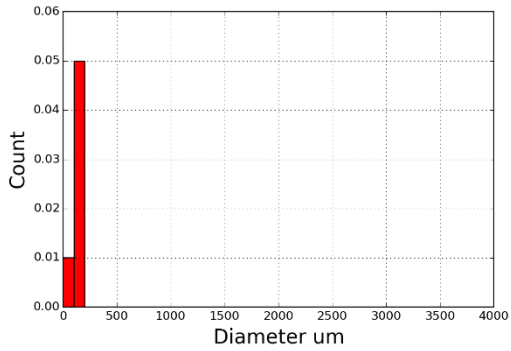


Figure B. 1551: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

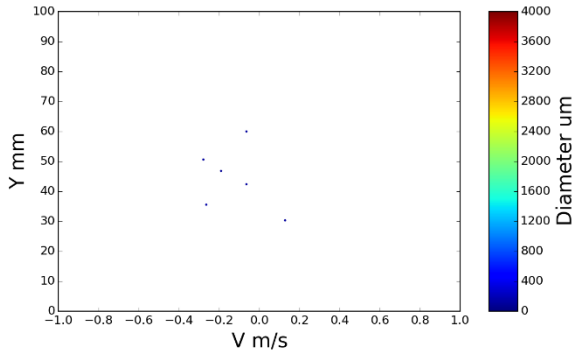


Figure B. 1554: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

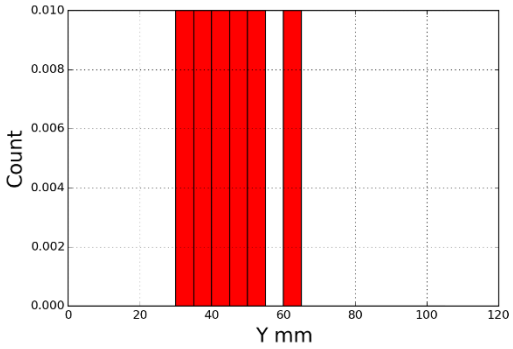


Figure B. 1552: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

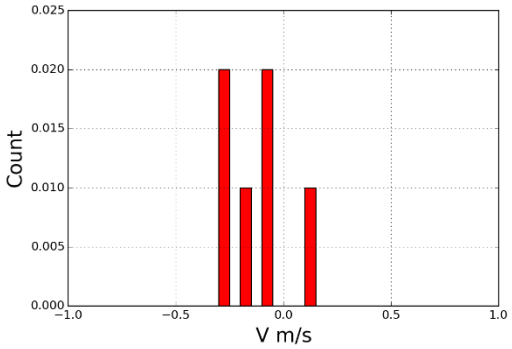


Figure B. 1555: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

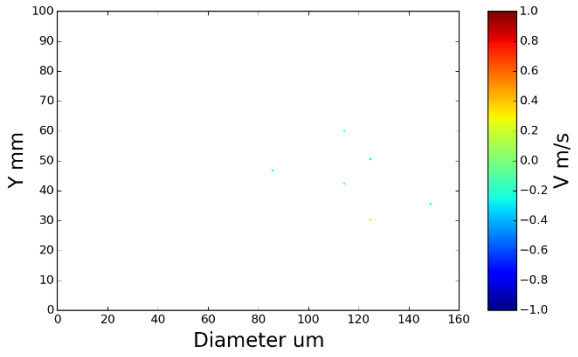


Figure B. 1553: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.3.1 Matched Only Droplets for .LB Image

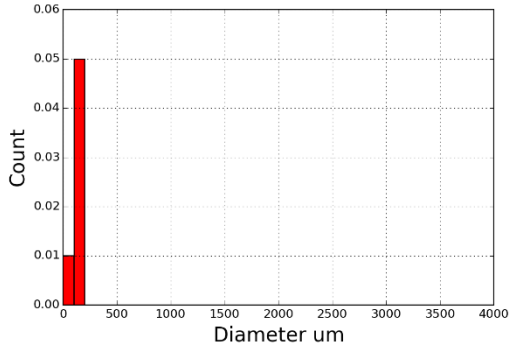


Figure B. 1556: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

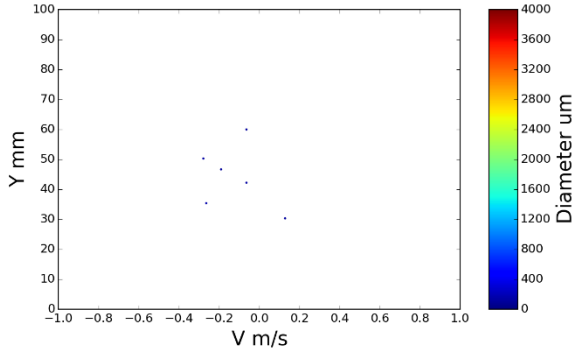


Figure B. 1559: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

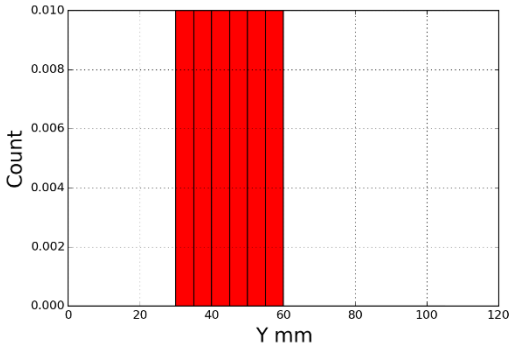


Figure B. 1557: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

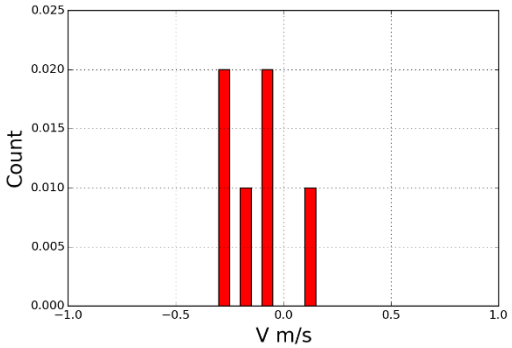


Figure B. 1560: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

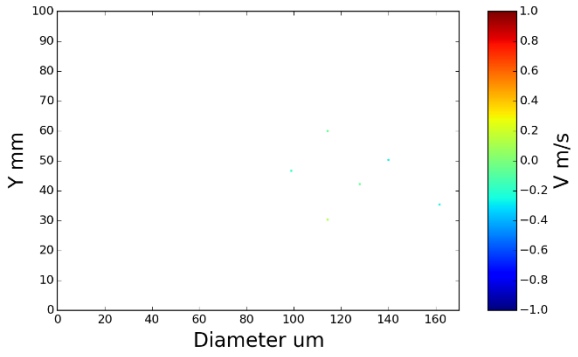


Figure B. 1558: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	0.02	0.03	110.7	258.9	184.8	74.1	178.6	215.9	200.9	16.1
40-60mm	0.03	0.05	114.4	159.2	136.9	18.3	85.8	143.0	108.1	27.3
60-80mm	0.02	0.02	114.4	193.9	154.2	39.8	99.0	191.8	145.4	46.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	0.07	0.1	110.7	258.9	155.5	50.6	85.8	215.9	143.4	50.0
			Height A (mm)				Height B (mm)			
Highest Particle			64.0298				63.9080			
Lowest Particle			29.4704				30.8770			

Table B. 169: 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40-60mm	0.01	137.1	137.1	137.1	0.0	140.1	140.1	140.1	0.0	-0.050	-0.050	-0.050	0.000	-0.210	-0.210	-0.210	0.000
60-80mm	0.01	193.9	193.9	193.9	0.0	191.8	191.8	191.8	0.0	-0.060	-0.060	-0.060	0.000	-0.150	-0.150	-0.150	0.000
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	0.02	137.1	193.9	165.5	28.4	140.1	191.8	165.9	25.9	-0.060	-0.050	-0.050	0.000	-0.210	-0.150	-0.180	0.030

Table B. 170: Matched Droplet Info

B.4.3.1 All Droplets for .LA Image

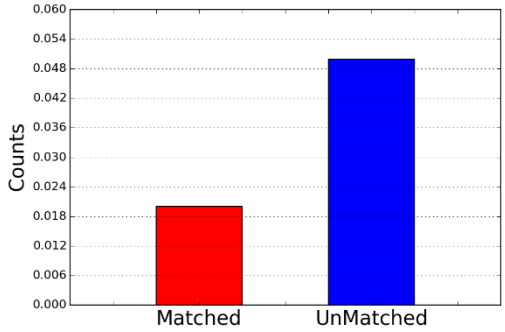


Figure B. 1561: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

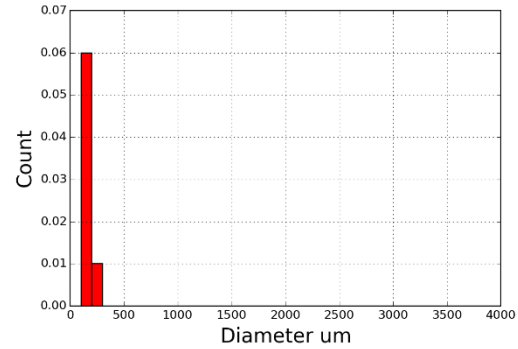


Figure B. 1562: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

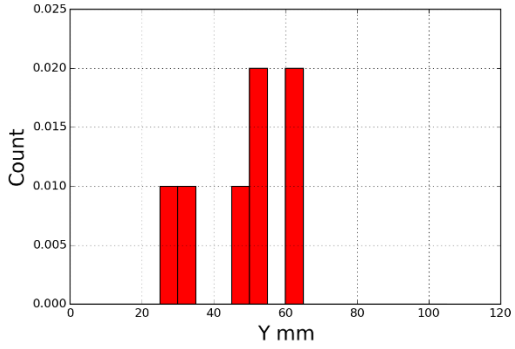


Figure B. 1563: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

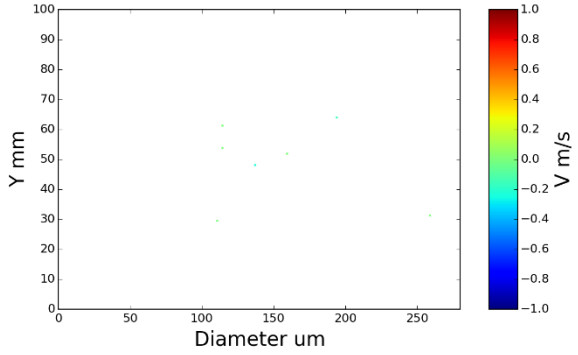


Figure B. 1564: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

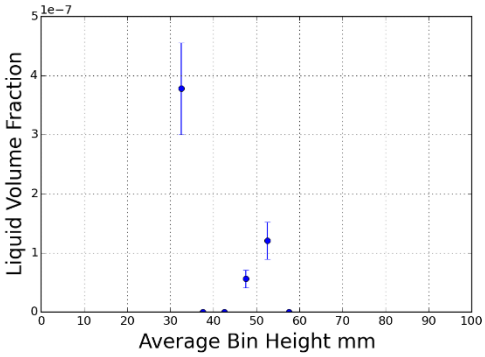


Figure B. 1565: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.3.1 All Droplets for .LB Image

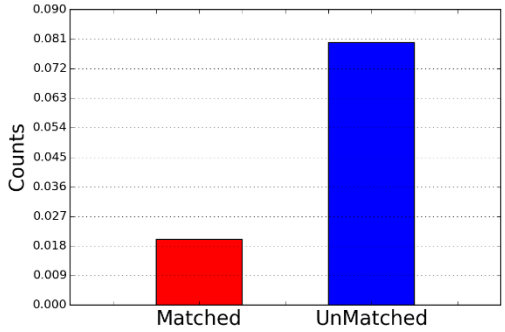


Figure B. 1566: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

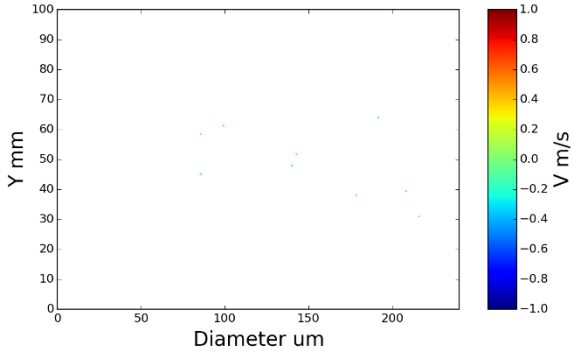


Figure B. 1569: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

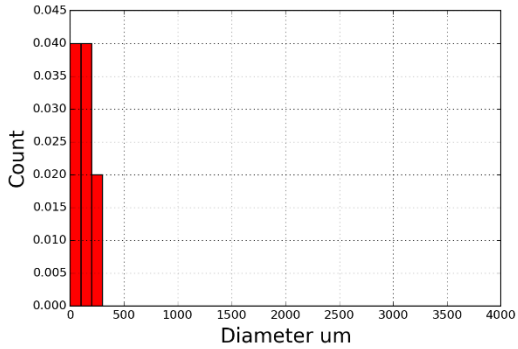


Figure B. 1567: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

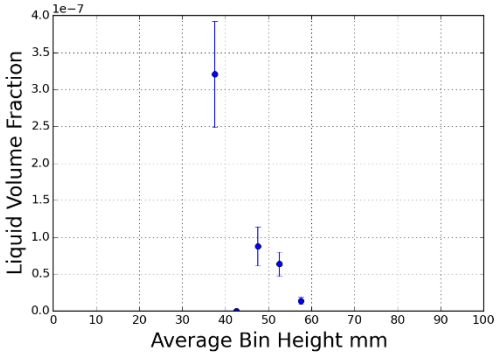


Figure B. 1570: Void Fraction R-123 55F 1700Btu 2550Lb Tri

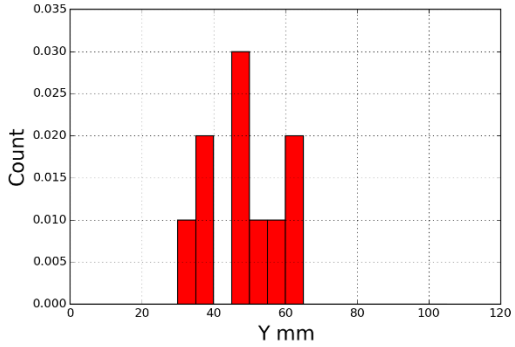


Figure B. 1568: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.3.1 Matched Only Droplets for .LA Image

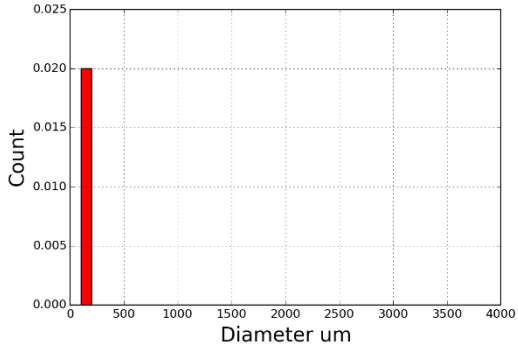


Figure B. 1571: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

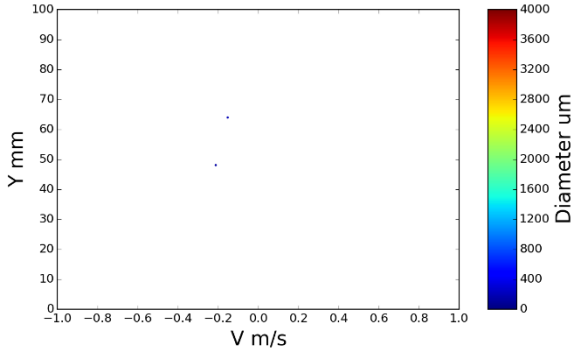


Figure B. 1574: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

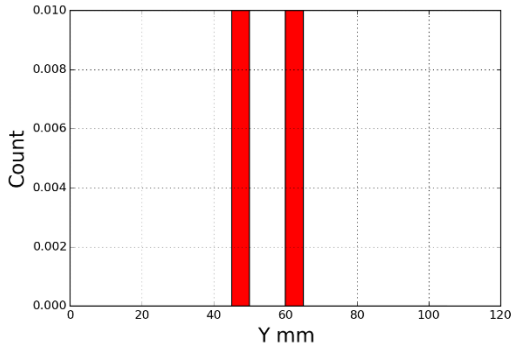


Figure B. 1572: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

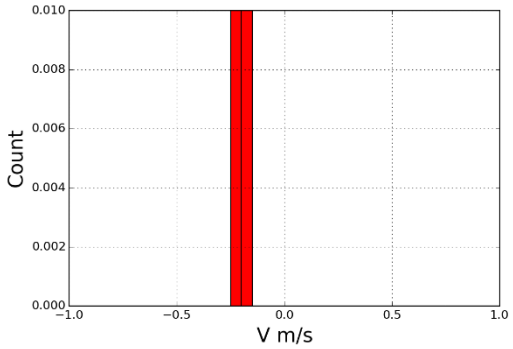


Figure B. 1575: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

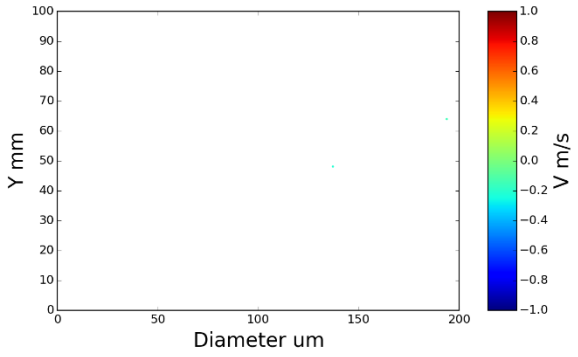


Figure B. 1573: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.3.1 Matched Only Droplets for .LB Image

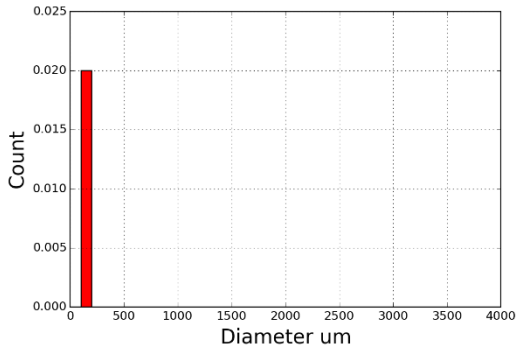


Figure B. 1576: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

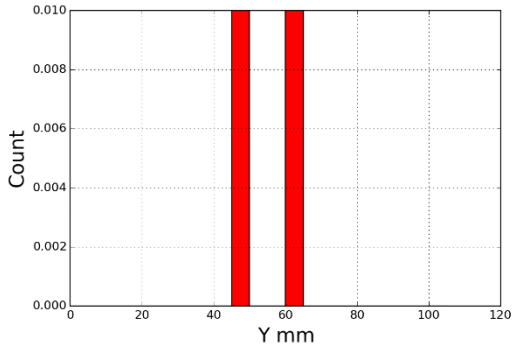


Figure B. 1577: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

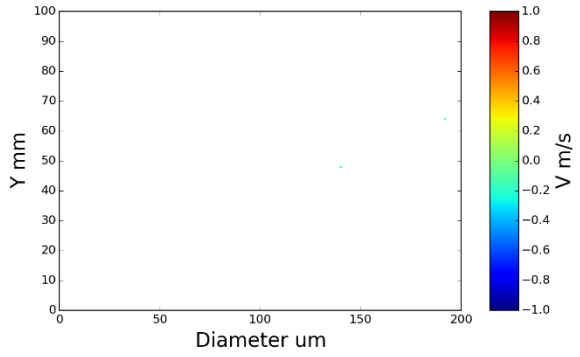


Figure B. 1578: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

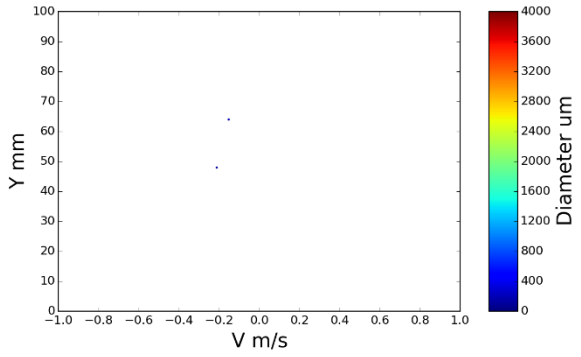


Figure B. 1579: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

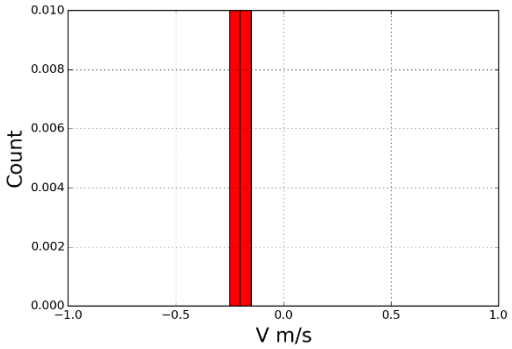


Figure B. 1580: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

B.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	0.04	0.03	114.4	548.5	281.4	177.2	124.6	403.4	284.7	117.5
40-60mm	0.03	0.03	85.8	284.5	175.6	82.2	99.0	283.1	173.1	79.3
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	0.07	0.06	85.8	548.5	236.1	153.6	99.0	403.4	228.9	114.7
			Height A (mm)				Height B (mm)			
Highest Particle			59.1309				59.2576			
Lowest Particle			34.5567				34.4445			

Table B. 171: 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	0.01	114.4	114.4	114.4	0.0	10000	-1000.0	114.4	0.0	0.160	0.160	0.160	0.000	0.260	0.260	0.260	0.000
40-60mm	0.01	284.5	284.5	284.5	0.0	137.1	283.1	210.1	73.0	-0.060	-0.060	-0.060	0.000	-0.380	-0.380	-0.380	0.000
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	0.02	114.4	284.5	199.4	85.1	137.1	283.1	210.1	73.0	-0.060	0.160	0.050	0.110	-0.380	0.260	-0.060	0.320

Table B. 172: Matched Droplet Info

B.4.3.1 All Droplets for .LA Image

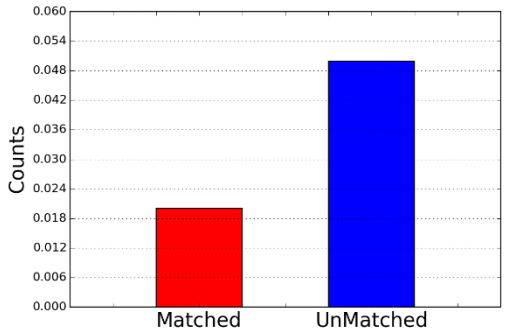


Figure B. 1581: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

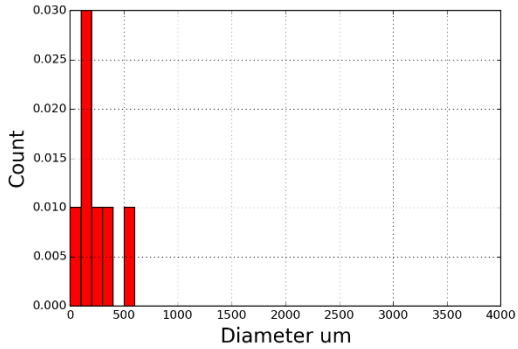


Figure B. 1582: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

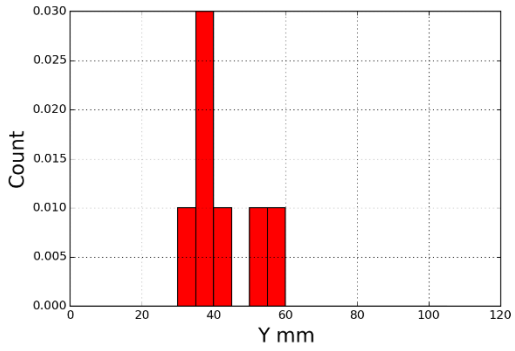


Figure B. 1583: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

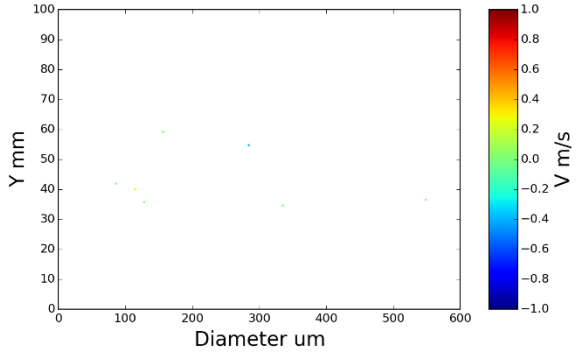


Figure B. 1584: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

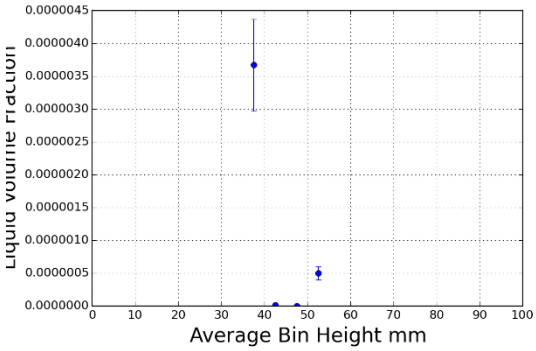


Figure B. 1585: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.3.1 All Droplets for .LB Image

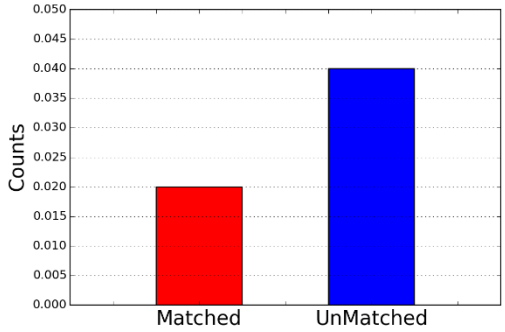


Figure B. 1586: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

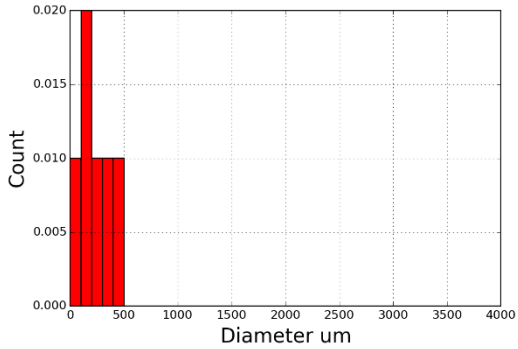


Figure B. 1587: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

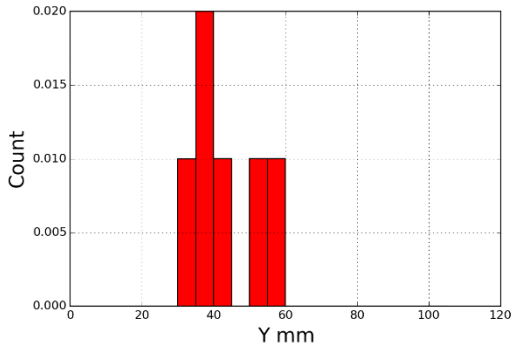


Figure B. 1588: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

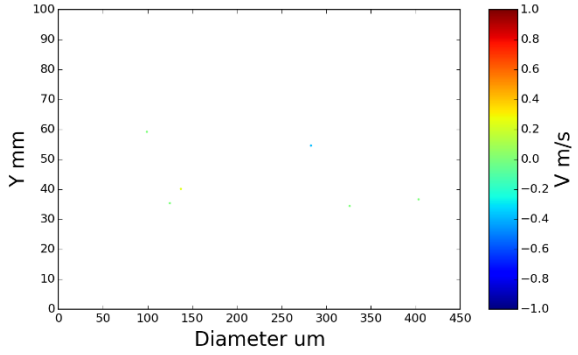


Figure B. 1589: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

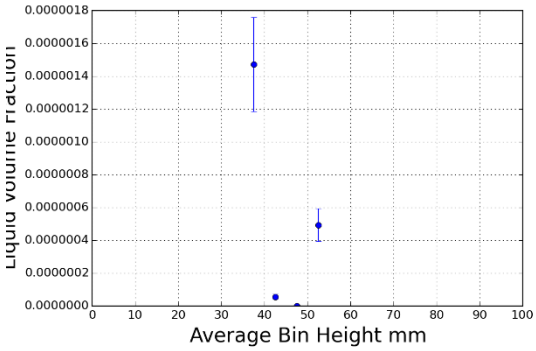


Figure B. 1590: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.3.1 Matched Only Droplets for .LA Image

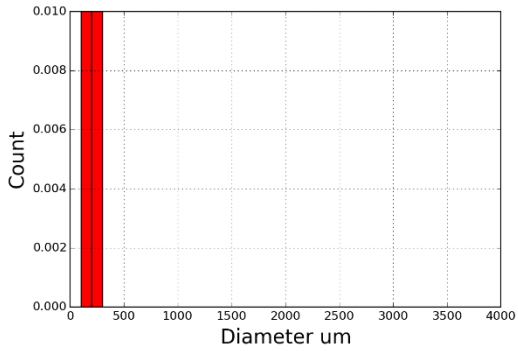


Figure B. 1591: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

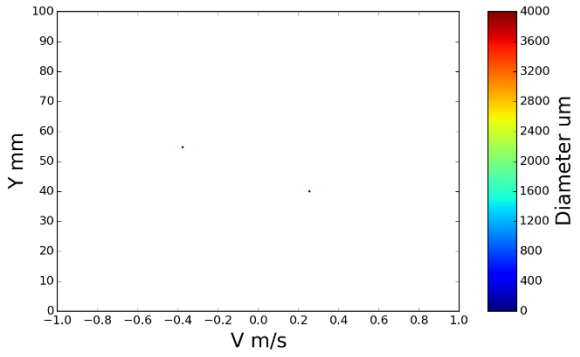


Figure B. 1594: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

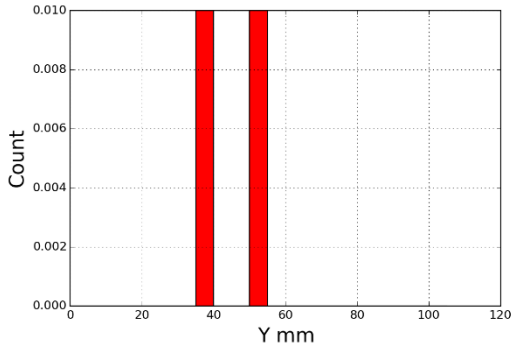


Figure B. 1592: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

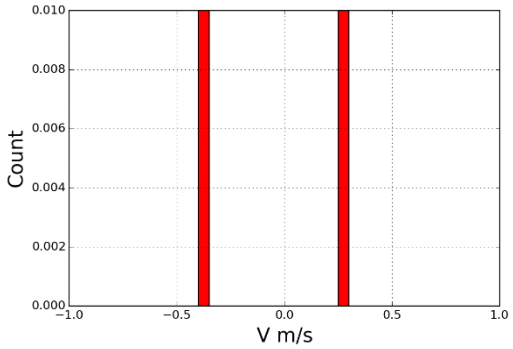


Figure B. 1595: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

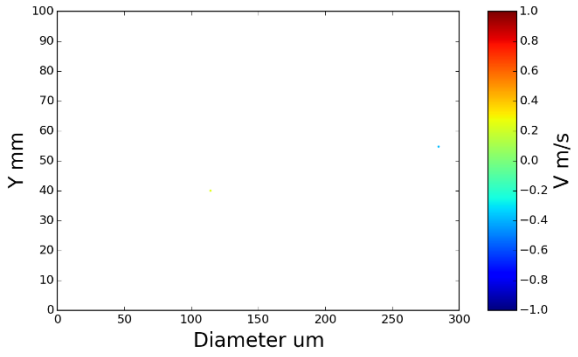


Figure B. 1593: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.3.1 Matched Only Droplets for .LB Image

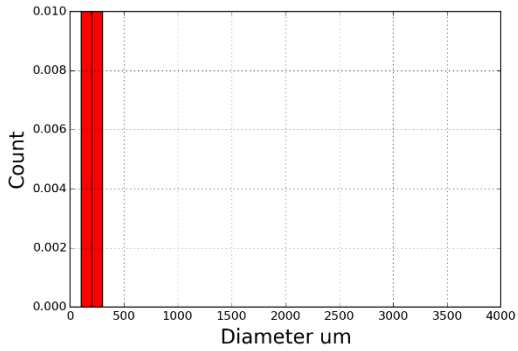


Figure B. 1596: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

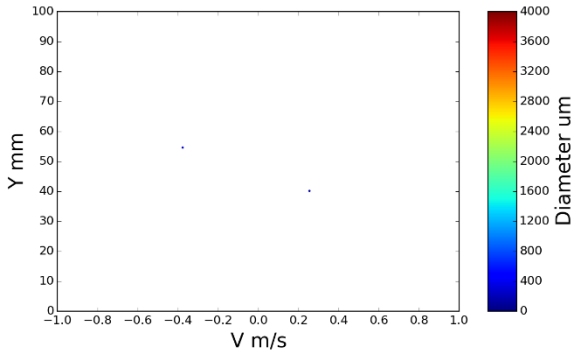


Figure B. 1599: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

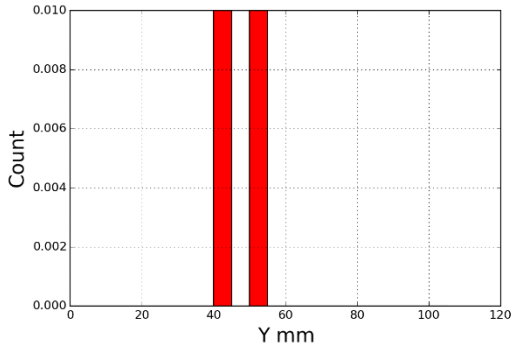


Figure B. 1597: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

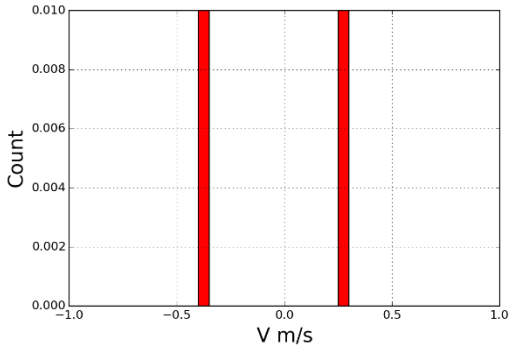


Figure B. 1600: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

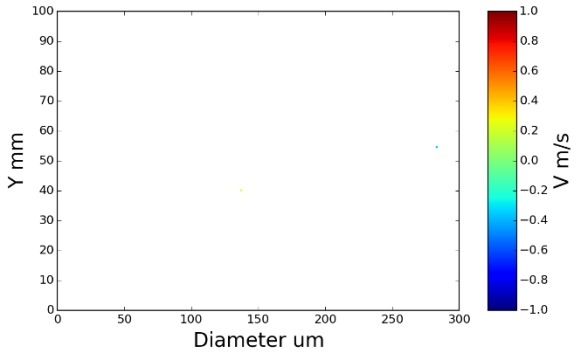


Figure B. 1598: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	0.04	0.03	85.8	166.7	116.5	30.7	85.8	154.0	108.5	32.1
40-60mm	0.05	0.05	85.8	449.4	220.7	142.5	99.0	445.7	226.3	141.8
60-80mm	0.03	0.03	183.1	469.8	335.5	117.8	185.3	402.3	319.1	95.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	0.12	0.11	85.8	469.8	214.7	138.3	85.8	445.7	219.5	134.1
			Height A (mm)				Height B (mm)			
Highest Particle			69.4957				70.0088			
Lowest Particle			30.6592				31.0266			

Table B. 173: 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	0.02	99.0	166.7	132.9	33.8	85.8	154.0	119.9	34.1	-0.820	-0.130	-0.470	0.350	0.460	0.620	0.540	0.080
40-60mm	0.04	85.8	449.4	243.9	150.6	99.0	445.7	254.2	145.6	-0.130	0.220	0.010	0.140	-0.150	0.170	-0.050	0.130
60-80mm	0.02	183.1	353.7	268.4	85.3	185.3	369.5	277.4	92.1	-0.450	0.020	-0.210	0.240	-0.070	-0.010	-0.040	0.030
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	0.08	85.8	449.4	222.3	127.3	85.8	445.7	226.4	130.0	-0.820	0.220	-0.170	0.310	-0.150	0.620	0.100	0.270

Table B. 174: Matched Droplet Info

B.4.3.1 All Droplets for .LA Image

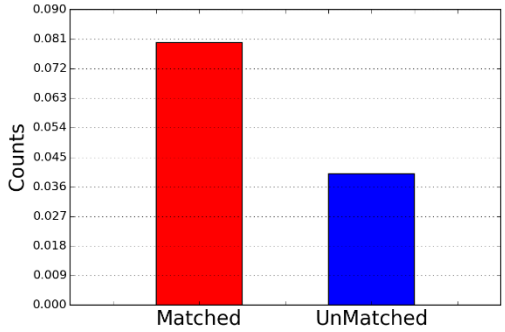


Figure B. 1601: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

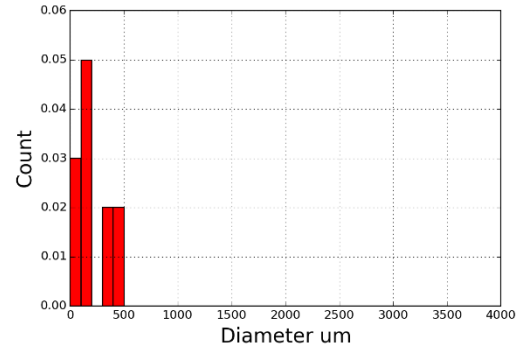


Figure B. 1602: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

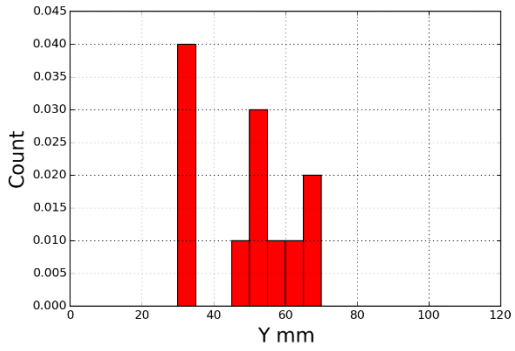


Figure B. 1603: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

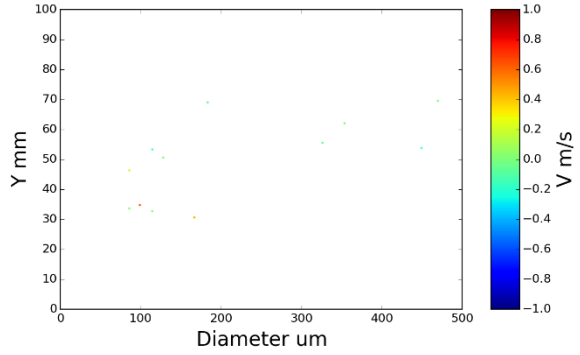


Figure B. 1604: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

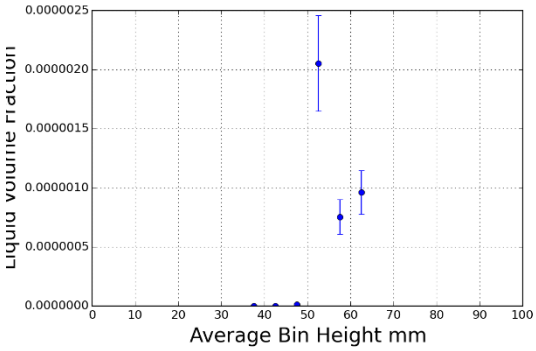


Figure B. 1605: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.3.1 All Droplets for .LB Image

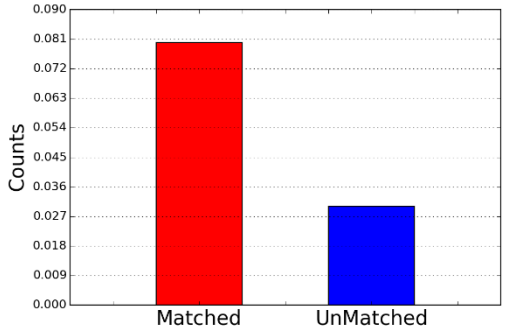


Figure B. 1606: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

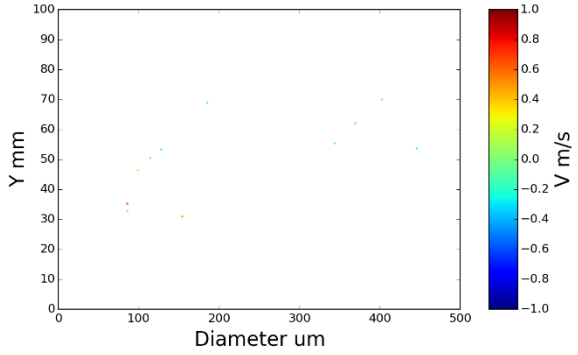


Figure B. 1609: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

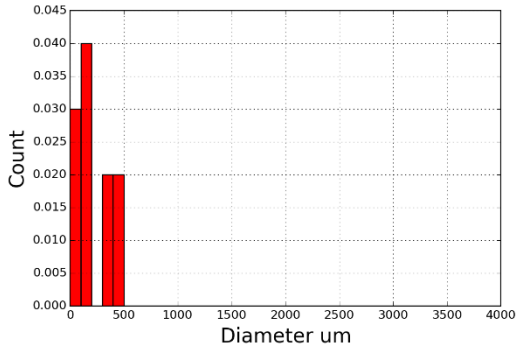


Figure B. 1607: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

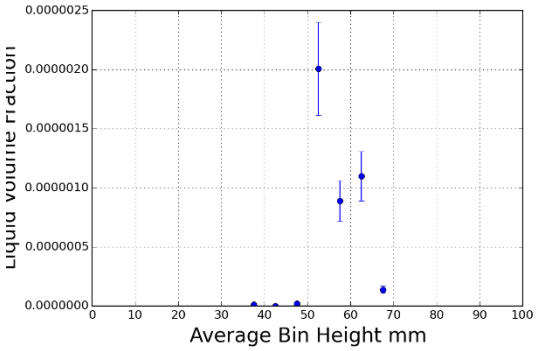


Figure B. 1610: Void Fraction R-123 55F 1700Btu 2550Lb Tri

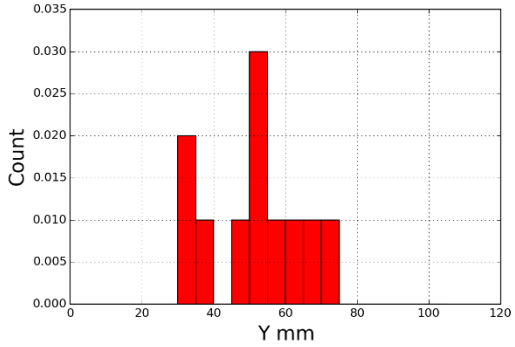


Figure B. 1608: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.3.1 Matched Only Droplets for .LA Image

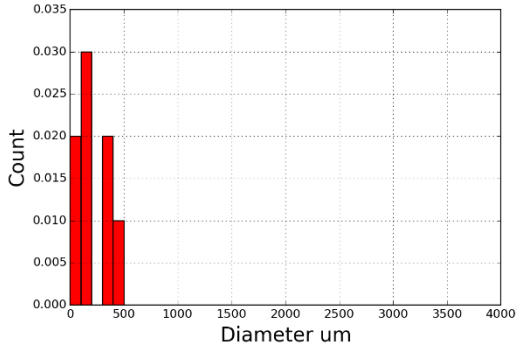


Figure B. 1611: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

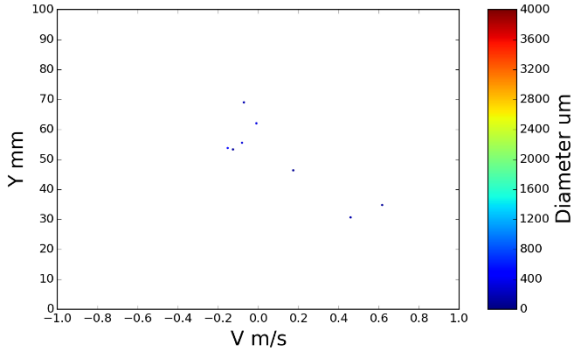


Figure B. 1614: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

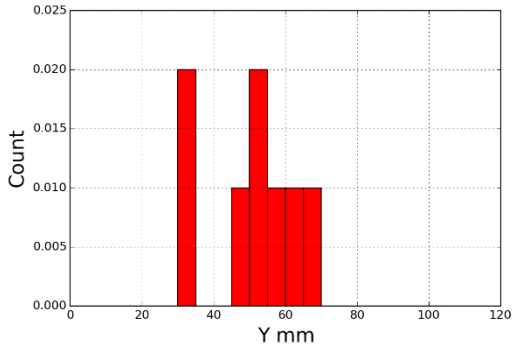


Figure B. 1612: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

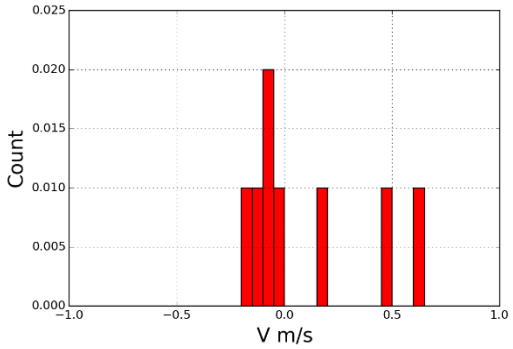


Figure B. 1615: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

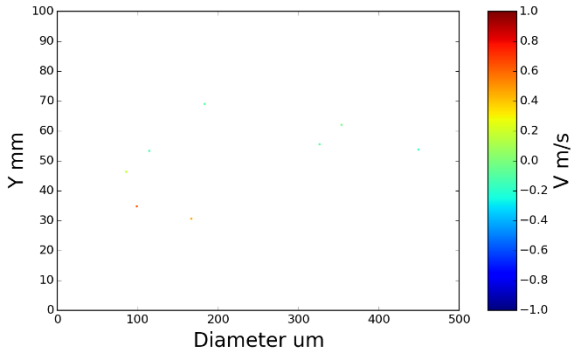


Figure B. 1613: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.3.1 Matched Only Droplets for .LB Image

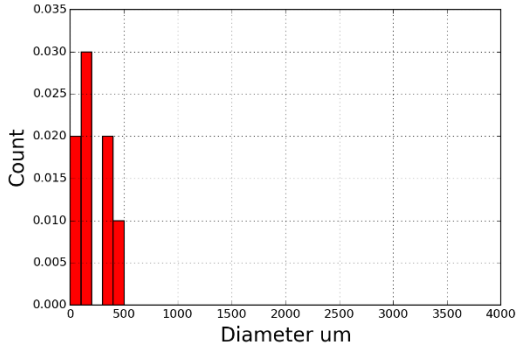


Figure B. 1616: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

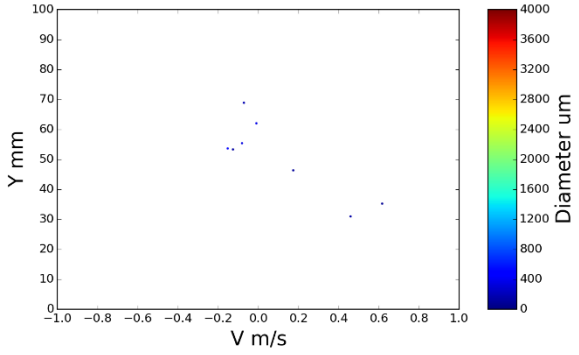


Figure B. 1619: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

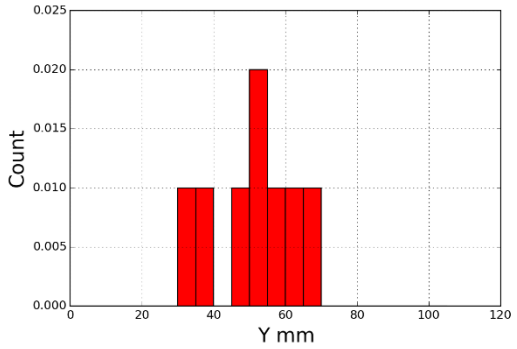


Figure B. 1617: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

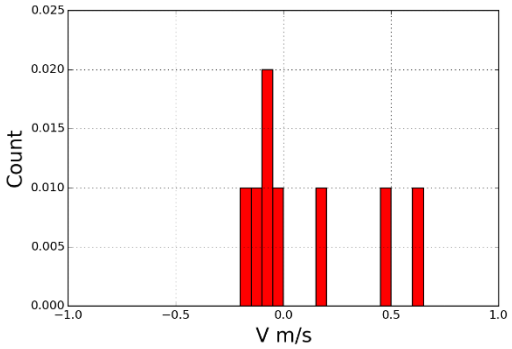


Figure B. 1620: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

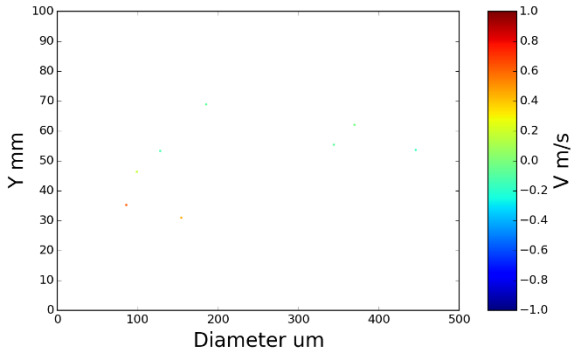


Figure B. 1618: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.3.2 Lens 50mm Mag 0_13x

B.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	0.26	0.24	193.1	1195	425.8	231.2	193.3	904.2	421.1	191.1
20-40mm	0.16	0.16	193.3	849.8	351.4	209.2	157.6	847.3	348.9	207.9
40-60mm	0.06	0.06	257.7	412.5	339.2	62.5	257.7	432.1	331.5	59.6
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	0.48	0.46	193.1	1195	390.2	213.4	157.6	904.2	384.3	189.9
			Height A (mm)				Height B (mm)			
Highest Particle			57.2898				56.9187			
Lowest Particle			7.2998				7.3569			

Table B. 175: 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	0.17	193.3	852.2	439.9	192.6	193.3	904.2	441.6	198.2	-0.410	0.780	0.120	0.270	-0.480	0.920	0.110	0.350
20-40mm	0.09	193.3	849.8	368.3	215.5	223.2	847.3	378.2	206.7	-0.250	0.170	-0.060	0.150	-0.320	0.130	-0.090	0.150
40-60mm	0.05	257.7	412.5	349.4	63.8	288.1	432.1	346.2	54.3	-0.090	0.320	0.050	0.140	-0.430	0.220	-0.050	0.240
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	0.31	193.3	852.2	404.5	189.8	193.3	904.2	407.8	189.5	-0.410	0.780	0.060	0.240	-0.480	0.920	0.030	0.300

Table B. 176: Matched Droplet Info

B.4.3.2 All Droplets for .LA Image

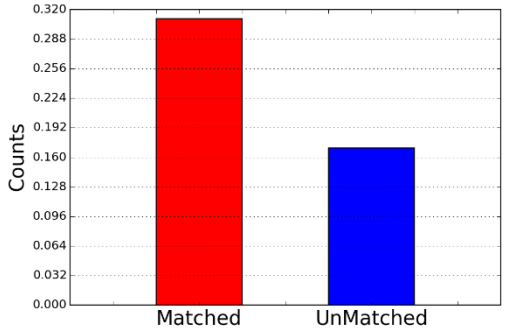


Figure B. 1621: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

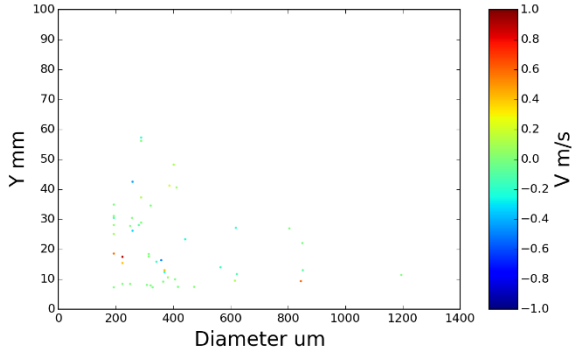


Figure B. 1624: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

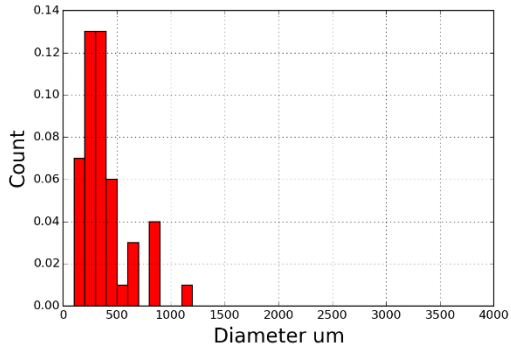


Figure B. 1622: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

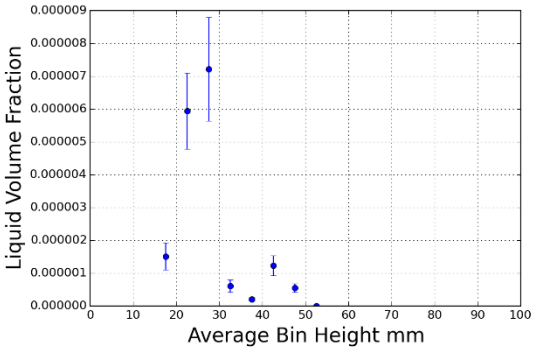


Figure B. 1625: Void Fraction R-123 55F 1700Btu 2550Lb Tri

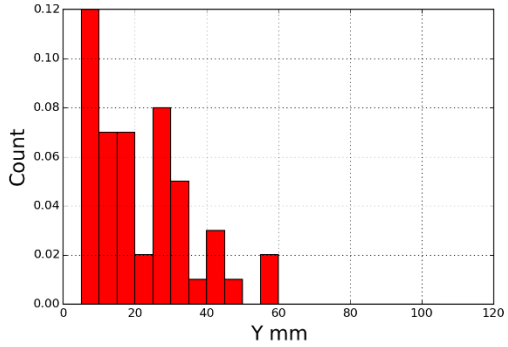


Figure B. 1623: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.3.2 All Droplets for .LB Image

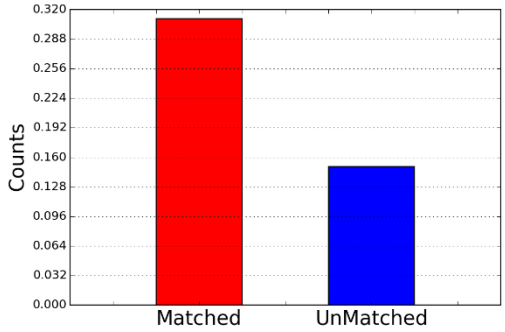


Figure B. 1626: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

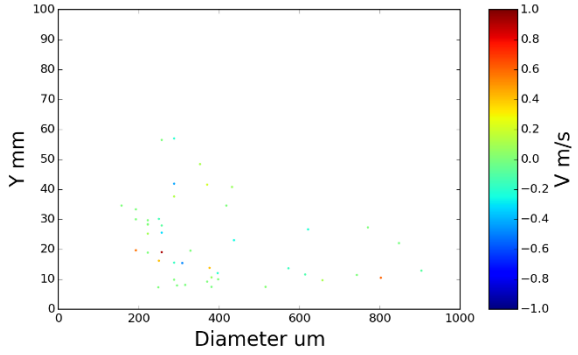


Figure B. 1629: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

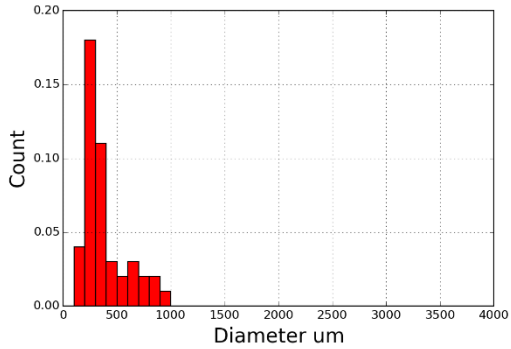


Figure B. 1627: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

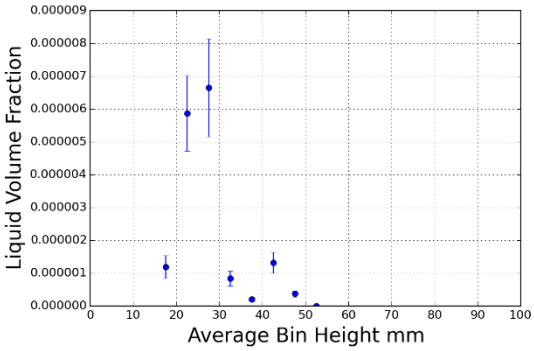


Figure B. 1630: Void Fraction R-123 55F 1700Btu 2550Lb Tri

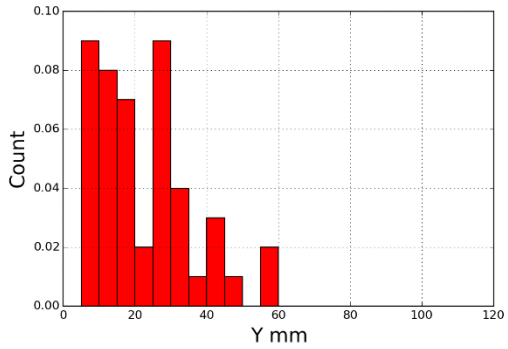


Figure B. 1628: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.3.2 Matched Only Droplets for .LA Image

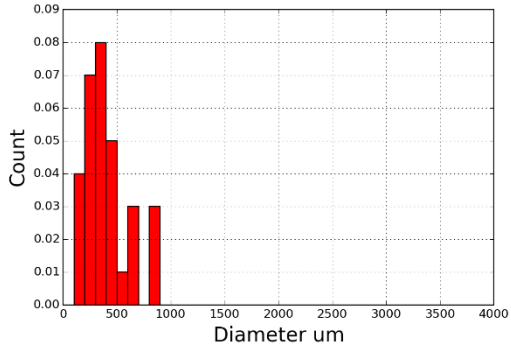


Figure B. 1631: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

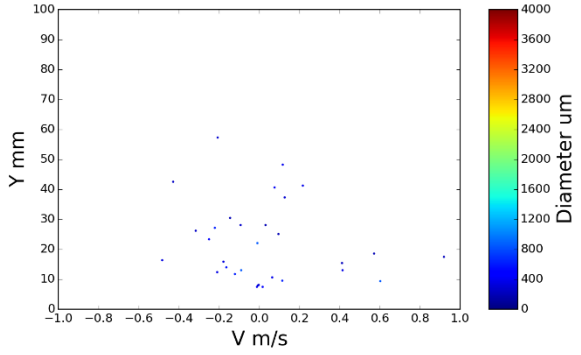


Figure B. 1634: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

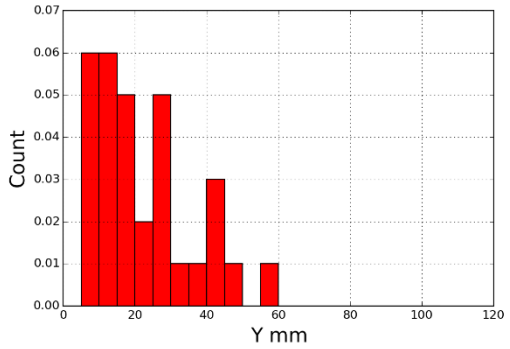


Figure B. 1632: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

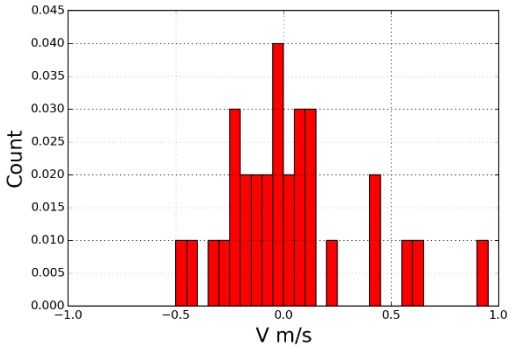


Figure B. 1635: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

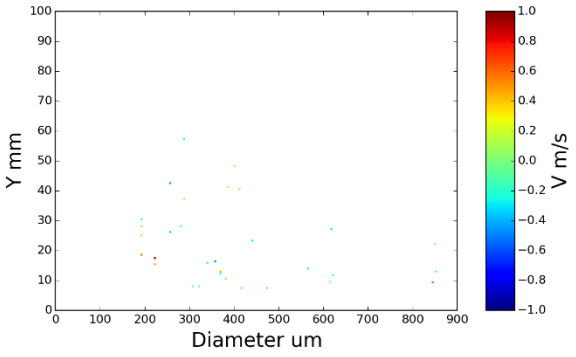


Figure B. 1633: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.3.2 Matched Only Droplets for .LB Image

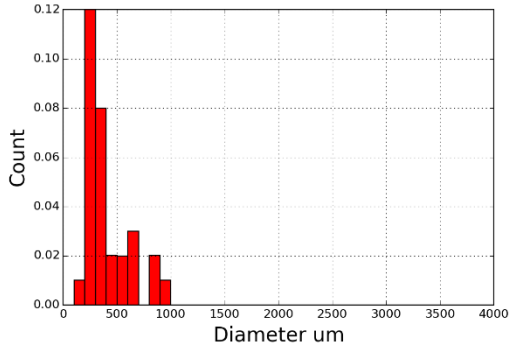


Figure B. 1636: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

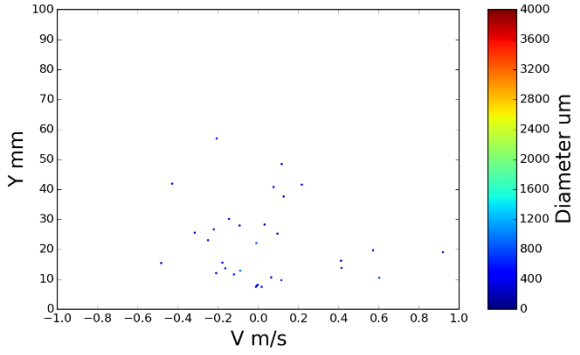


Figure B. 1639: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

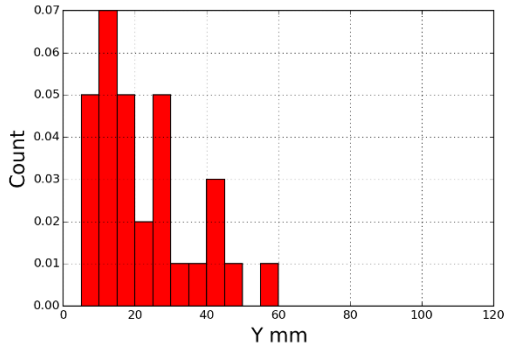


Figure B. 1637: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

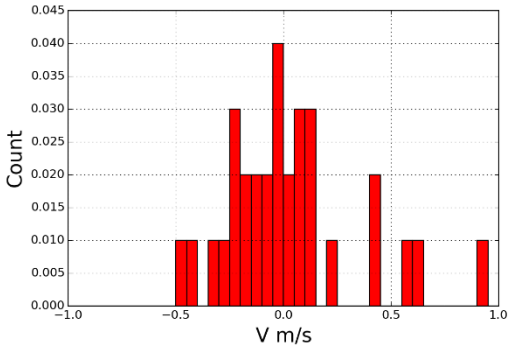


Figure B. 1640: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

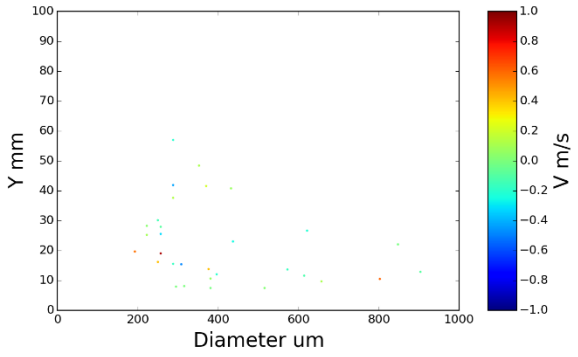


Figure B. 1638: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	0.45	0.51	182.2	1207	513.2	282.8	182.2	1163	472.5	276.5
20-40mm	0.14	0.12	193.3	817.4	354.9	167.9	193.3	871.5	379.4	211.8
40-60mm	0.05	0.05	193.3	469.0	261.3	106.8	193.3	446.3	262.7	94.8
60-80mm	0.01	0.01	257.7	257.7	257.7	0.0	193.3	193.3	193.3	0.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	0.65	0.69	182.2	1207	455.8	265.1	182.2	1163	437.1	263.7
			Height A (mm)				Height B (mm)			
Highest Particle			64.7115				65.0826			
Lowest Particle			6.1170				5.6805			

Table B. 177: 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	0.33	182.2	1151	520.4	273.2	193.3	1163	530.8	281.6	-0.590	0.870	-0.100	0.340	-0.600	0.700	0.130	0.260
20-40mm	0.09	193.3	817.4	375.4	178.8	193.3	871.5	404.6	223.7	-0.640	0.250	-0.070	0.240	-0.650	0.540	-0.070	0.340
40-60mm	0.03	193.3	257.7	214.7	30.4	193.3	257.7	214.7	30.4	-0.130	0.000	-0.040	0.060	-0.410	-0.290	-0.350	0.050
60-80mm	0.01	257.7	257.7	257.7	0.0	193.3	193.3	193.3	0.0	-0.020	-0.020	-0.020	0.000	0.210	0.210	0.210	0.000
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	0.46	182.2	1151	466.4	262.0	193.3	1163	475.4	274.7	-0.640	0.870	-0.090	0.300	-0.650	0.700	0.060	0.300

Table B. 178: Matched Droplet Info

B.4.3.2 All Droplets for .LA Image

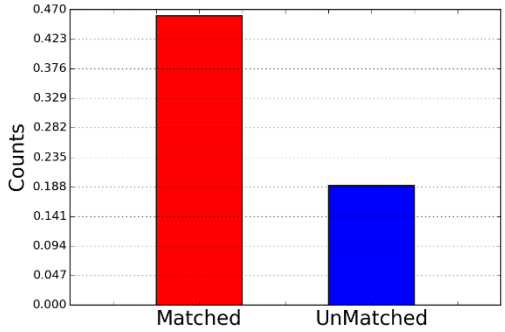


Figure B. 1641: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

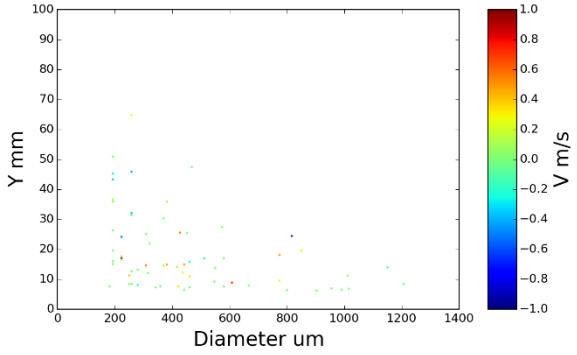


Figure B. 1644: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

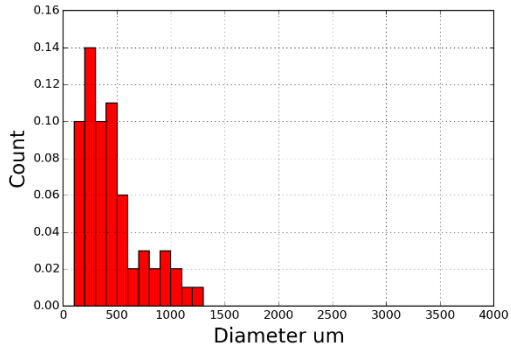


Figure B. 1642: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

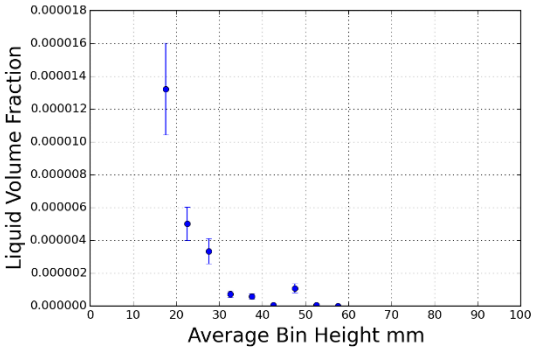


Figure B. 1645: Void Fraction R-123 55F 1700Btu 2550Lb Tri

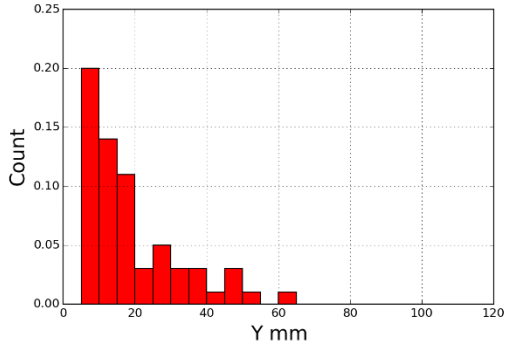


Figure B. 1643: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.3.2 All Droplets for .LB Image

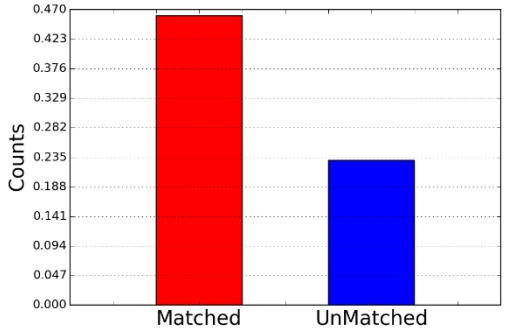


Figure B. 1646: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

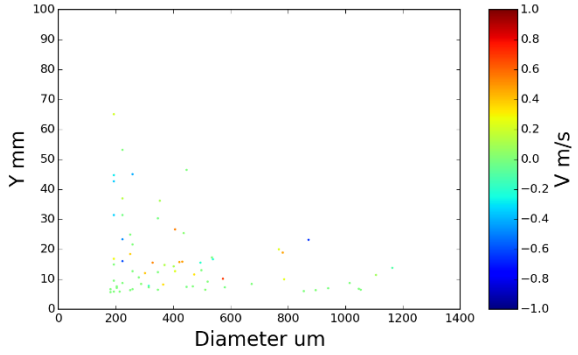


Figure B. 1649: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

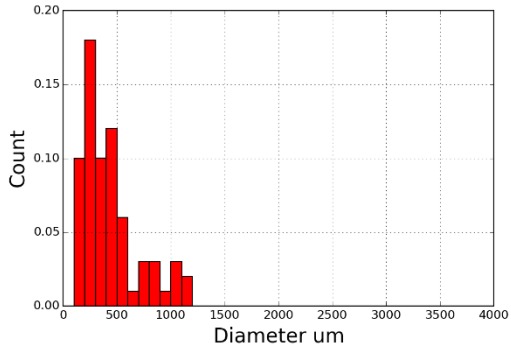


Figure B. 1647: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

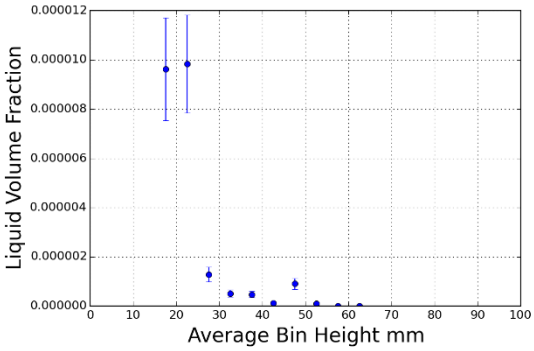


Figure B. 1650: Void Fraction R-123 55F 1700Btu 2550Lb Tri

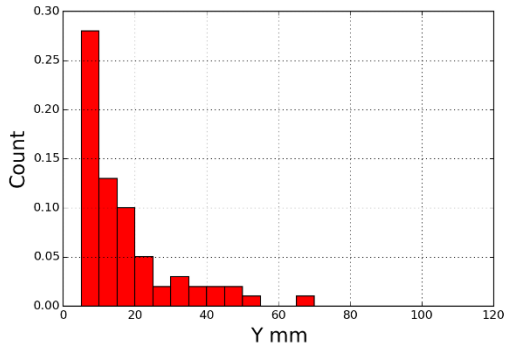


Figure B. 1648: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.3.2 Matched Only Droplets for .LA Image

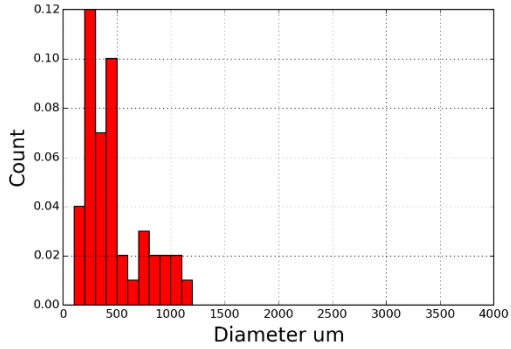


Figure B. 1651: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

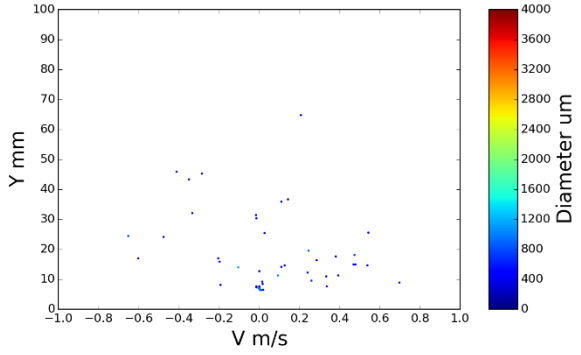


Figure B. 1654: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

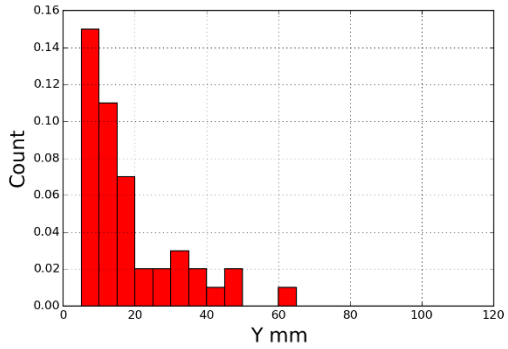


Figure B. 1652: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

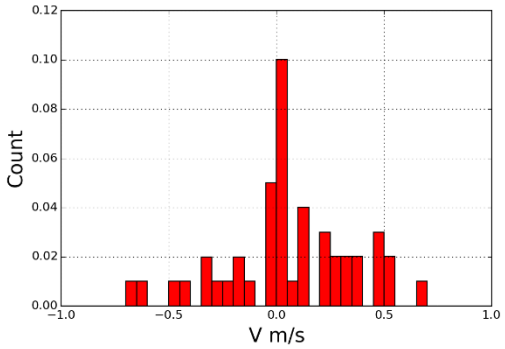


Figure B. 1655: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

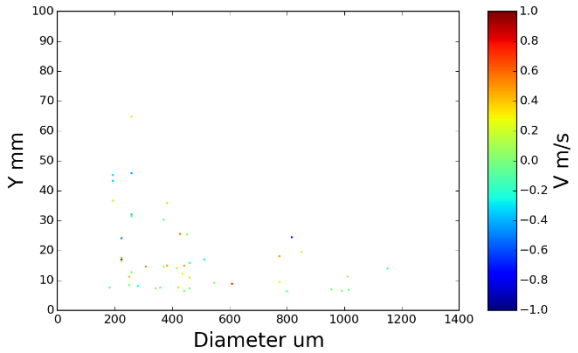


Figure B. 1653: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.3.2 Matched Only Droplets for .LB Image

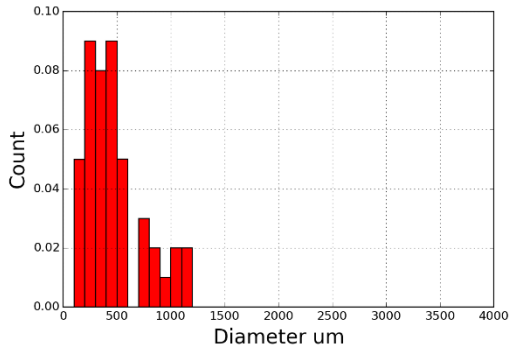


Figure B. 1656: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

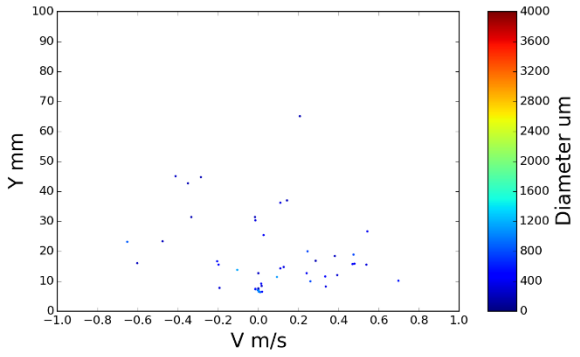


Figure B. 1659: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

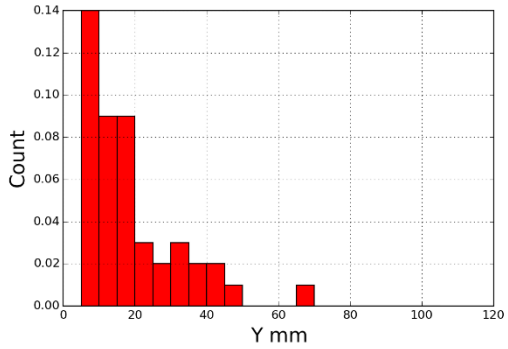


Figure B. 1657: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

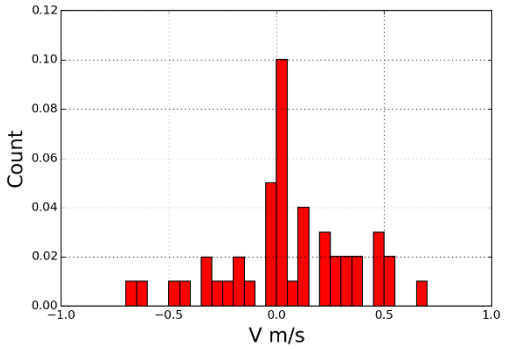


Figure B. 1660: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

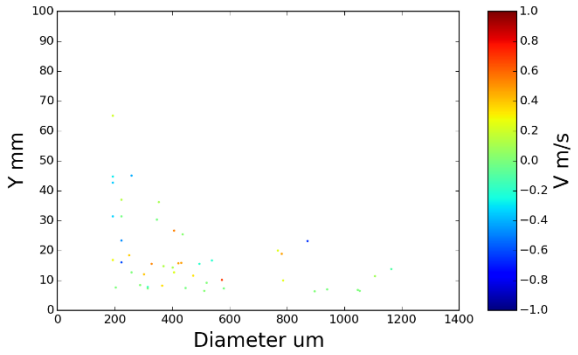


Figure B. 1658: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	0.09	0.14	308.9	687.8	440.9	134.9	223.2	690.8	421.1	136.5
20-40mm	0.04	0.05	213.7	334.7	264.9	49.5	193.3	370.1	276.3	70.6
40-60mm	0.03	0.02	241.0	436.9	311.9	88.7	322.1	370.1	346.1	24.0
60-80mm	0.02	0.02	223.2	407.4	315.3	92.1	257.7	436.9	347.3	89.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	0.18	0.23	213.7	687.8	366.3	133.2	193.3	690.8	376.7	129.3
			Height A (mm)				Height B (mm)			
Highest Particle			72.8754				72.5899			
Lowest Particle			5.4392				5.5149			

Table B. 179: 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	308.9	687.8	453.4	138.1	288.1	690.8	459.0	145.6	-0.890	0.680	0.020	0.420	-0.270	0.220	0.020	0.150
20-40mm	0.04	213.7	334.7	264.9	49.5	193.3	370.1	281.0	78.3	-0.670	0.350	-0.220	0.390	-0.210	0.350	-0.030	0.230
40-60mm	0.01	257.7	257.7	257.7	0.0	322.1	322.1	322.1	0.0	0.360	0.360	0.360	0.000	-0.140	-0.140	-0.140	0.000
60-80mm	0.02	223.2	407.4	315.3	92.1	257.7	436.9	347.3	89.6	-0.200	-0.080	-0.140	0.060	-0.600	-0.160	-0.380	0.220
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	0.15	213.7	687.8	371.7	140.8	193.3	690.8	387.5	142.3	-0.890	0.680	-0.040	0.400	-0.600	0.350	-0.060	0.220

Table B. 180: Matched Droplet Info

B.4.3.2 All Droplets for .LA Image

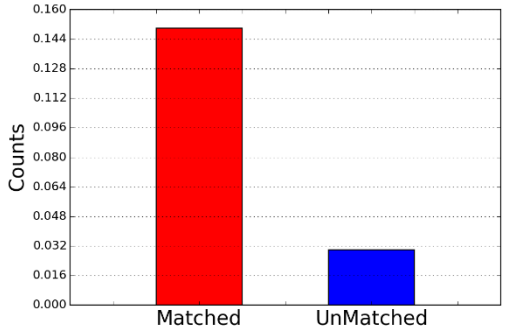


Figure B. 1661: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

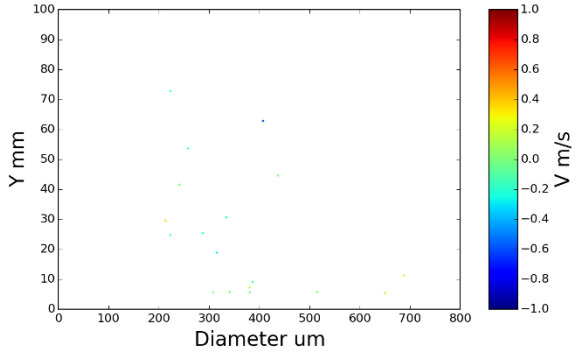


Figure B. 1664: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

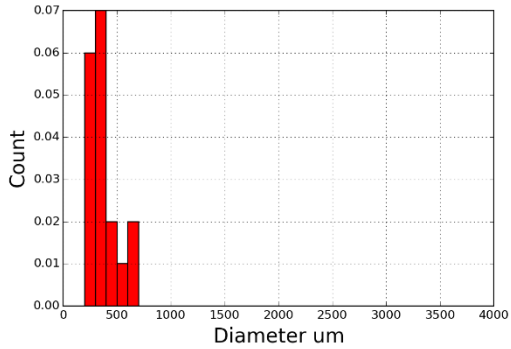


Figure B. 1662: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

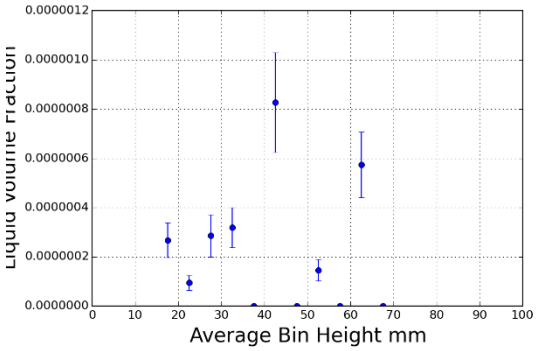


Figure B. 1665: Void Fraction R-123 55F 1700Btu 2550Lb Tri

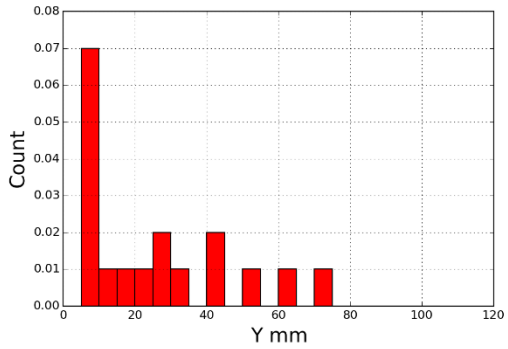


Figure B. 1663: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.3.2 All Droplets for .LB Image

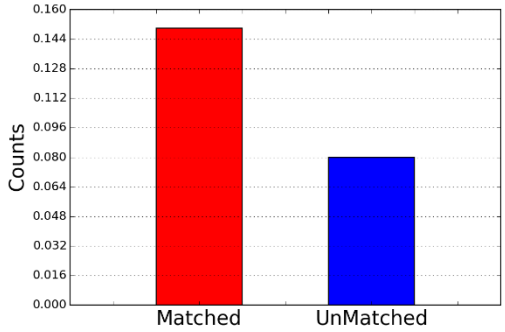


Figure B. 1666: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

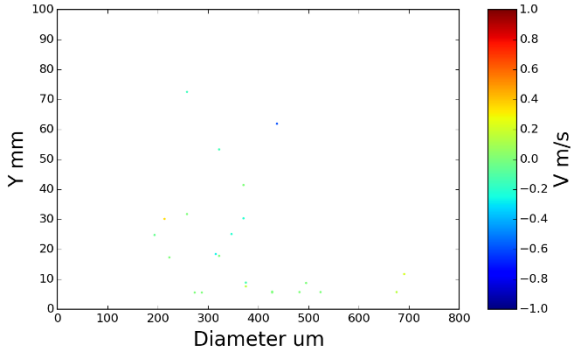


Figure B. 1669: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

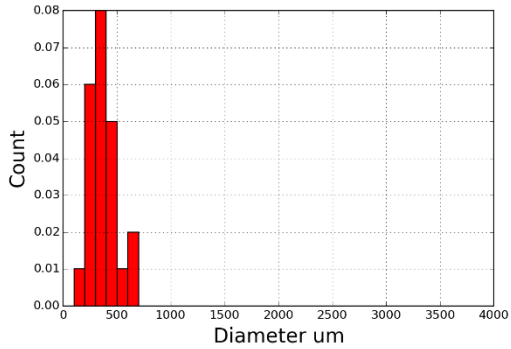


Figure B. 1667: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

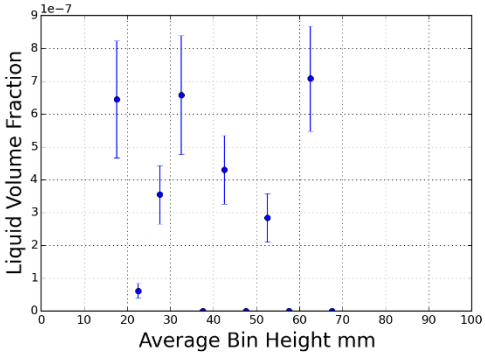


Figure B. 1670: Void Fraction R-123 55F 1700Btu 2550Lb Tri

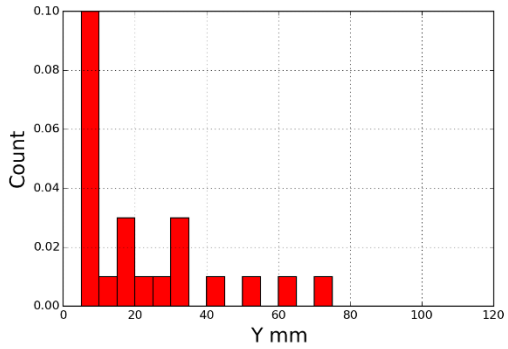


Figure B. 1668: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.3.2 Matched Only Droplets for .LA Image

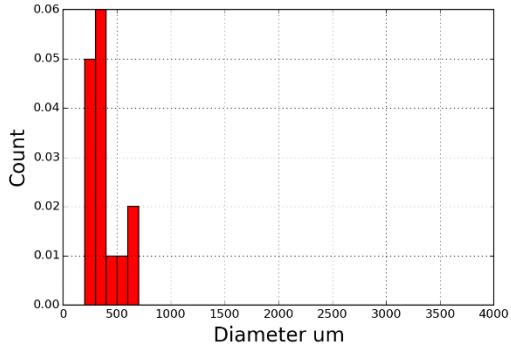


Figure B. 1671: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

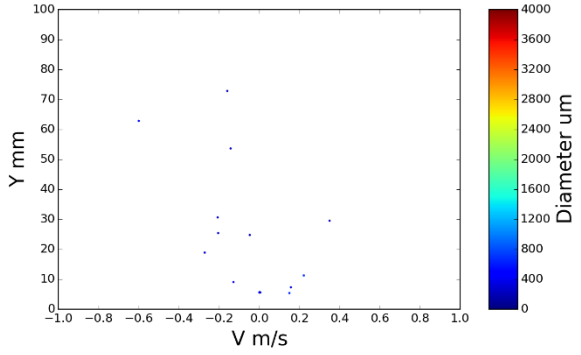


Figure B. 1674: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

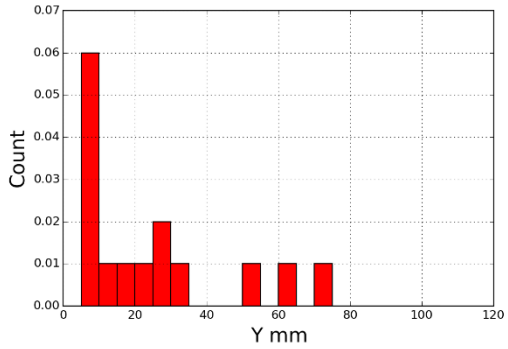


Figure B. 1672: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

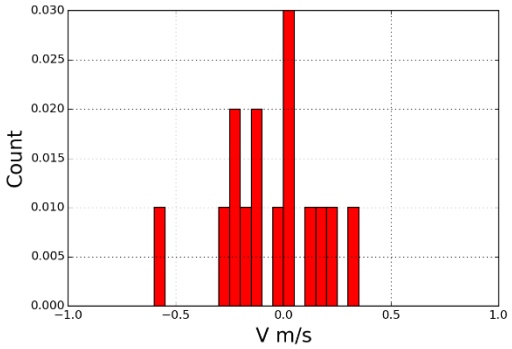


Figure B. 1675: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

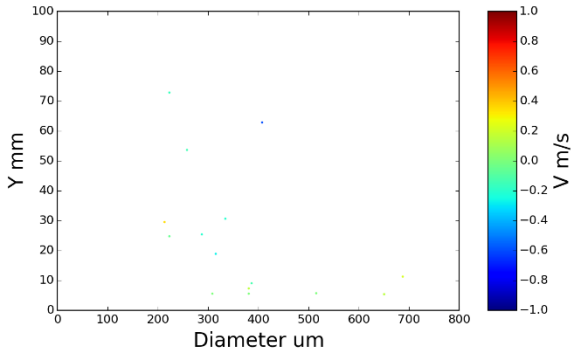


Figure B. 1673: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.3.2 Matched Only Droplets for .LB Image

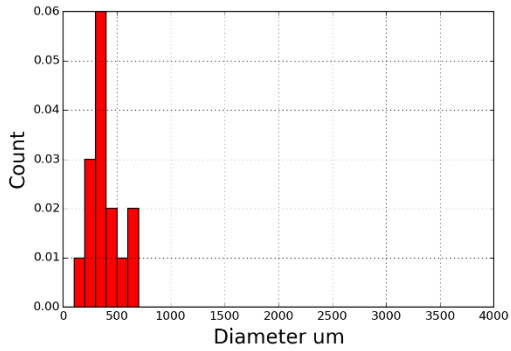


Figure B. 1676: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

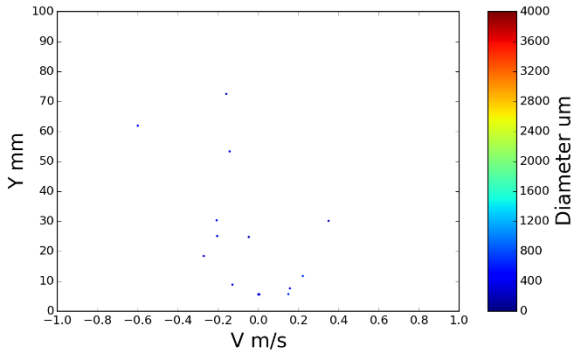


Figure B. 1679: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

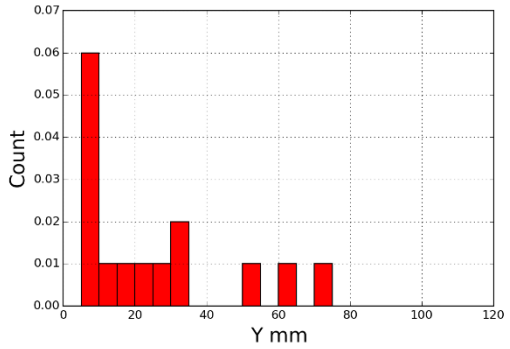


Figure B. 1677: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

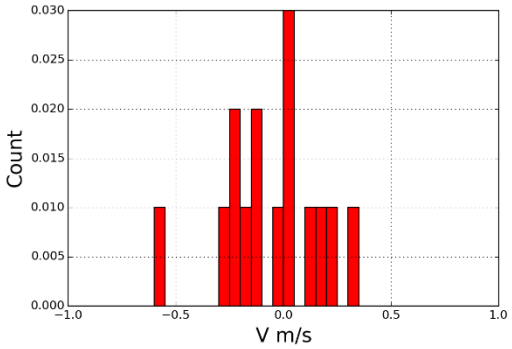


Figure B. 1680: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

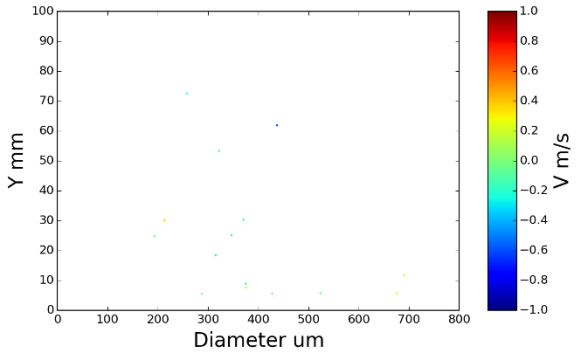


Figure B. 1678: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	0.13	0.13	193.3	1078	442.4	296.2	223.2	1045	437.6	276.9
20-40mm	0.03	0.04	280.8	1238	599.7	451.0	273.3	1120	583.1	330.4
40-60mm	0.03	0.03	352.8	407.4	382.3	22.5	334.7	386.5	369.2	24.4
60-80mm	0.01	0.01	257.7	257.7	257.7	0.0	257.7	257.7	257.7	0.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	0.2	0.21	193.3	1238	447.7	305.9	223.2	1120	447.0	273.0
			Height A (mm)				Height B (mm)			
Highest Particle			63.2272				62.9417			
Lowest Particle			5.2523				5.4875			

Table B. 181: 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	193.3	1078	445.6	298.6	223.2	1045	451.2	286.4	-0.540	0.240	-0.280	0.250	-0.560	0.270	-0.100	0.270
20-40mm	0.01	280.8	280.8	280.8	0.0	273.3	273.3	273.3	0.0	-0.160	-0.160	-0.160	0.000	-0.290	-0.290	-0.290	0.000
40-60mm	0.01	386.5	386.5	386.5	0.0	386.5	386.5	386.5	0.0	0.220	0.220	0.220	0.000	-0.100	-0.100	-0.100	0.000
60-80mm	0.01	257.7	257.7	257.7	0.0	257.7	257.7	257.7	0.0	-0.190	-0.190	-0.190	0.000	-0.160	-0.160	-0.160	0.000
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	0.09	193.3	1078	399.9	254.3	223.2	1045	402.8	245.9	-0.540	0.240	-0.200	0.260	-0.560	0.270	-0.130	0.230

Table B. 182: Matched Droplet Info

B.4.3.2 All Droplets for .LA Image

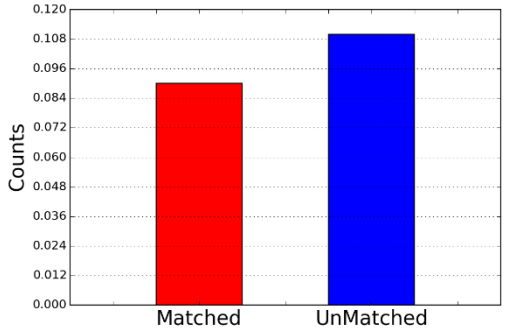


Figure B. 1681: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

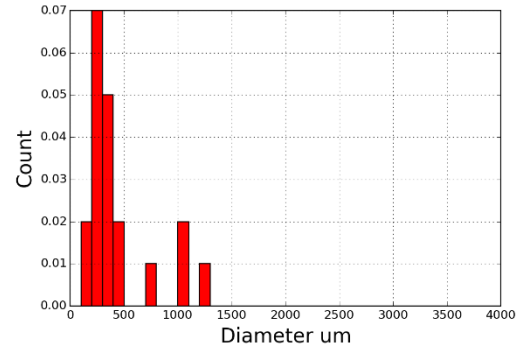


Figure B. 1682: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

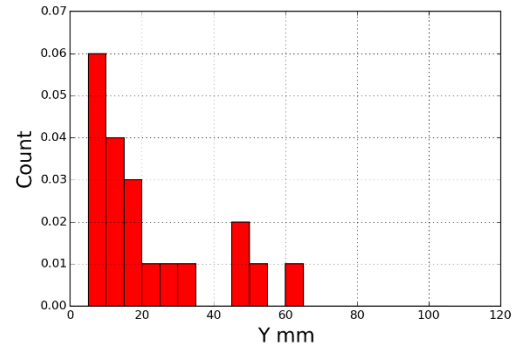


Figure B. 1683: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

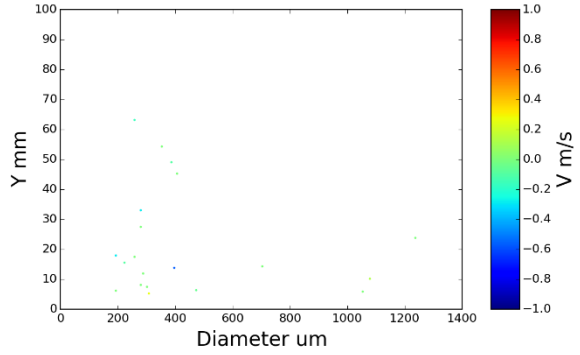


Figure B. 1684: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

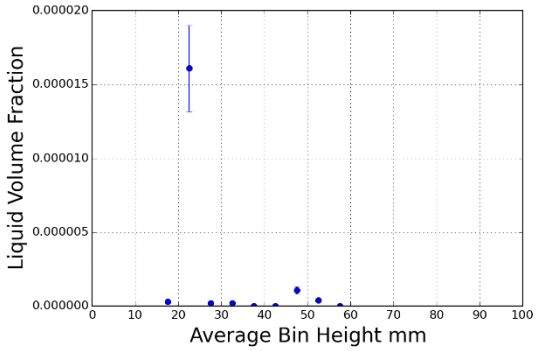


Figure B. 1685: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.3.2 All Droplets for .LB Image

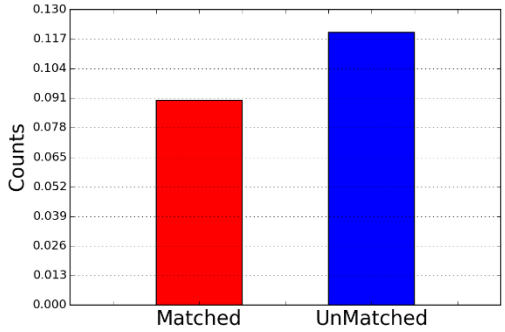


Figure B. 1686: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

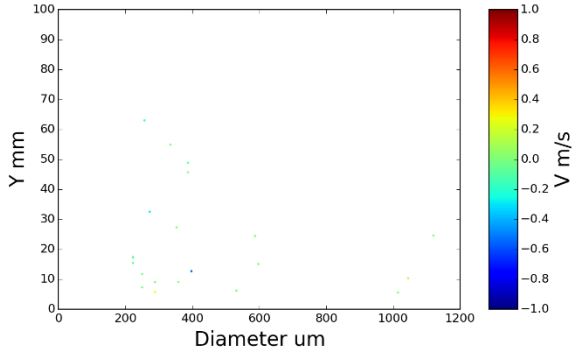


Figure B. 1689: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

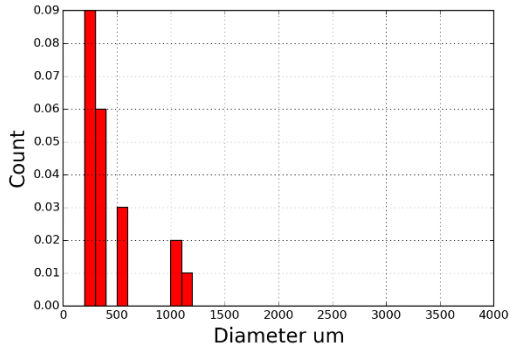


Figure B. 1687: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

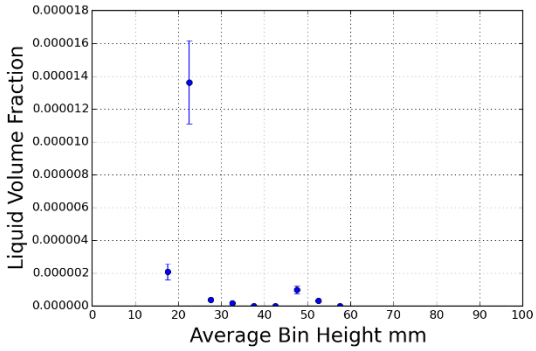


Figure B. 1690: Void Fraction R-123 55F 1700Btu 2550Lb Tri

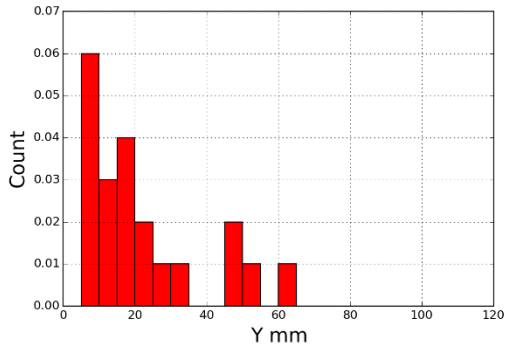


Figure B. 1688: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.3.2 Matched Only Droplets for .LA Image

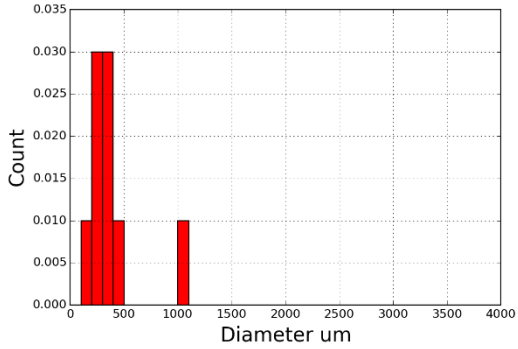


Figure B. 1691: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

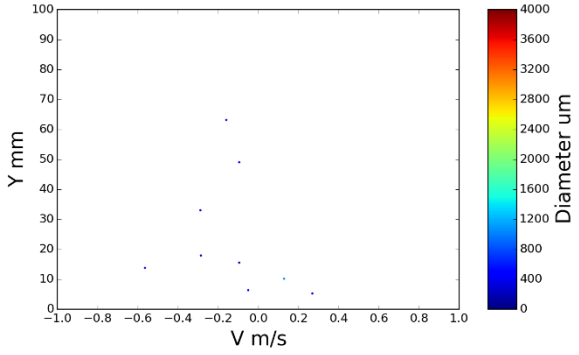


Figure B. 1694: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

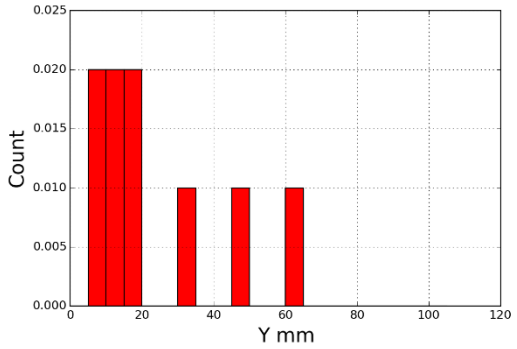


Figure B. 1692: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

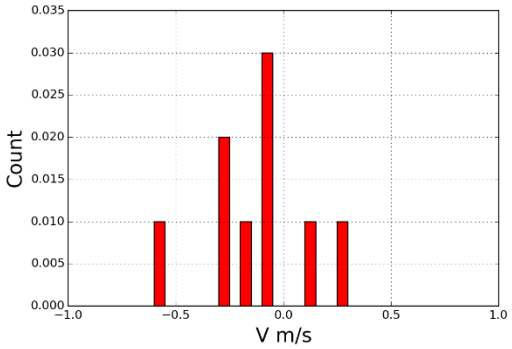


Figure B. 1695: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

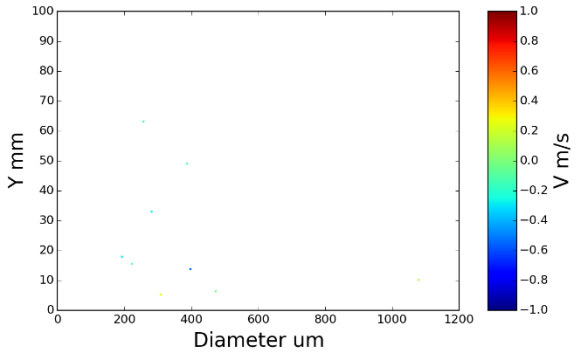


Figure B. 1693: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.3.2 Matched Only Droplets for .LB Image

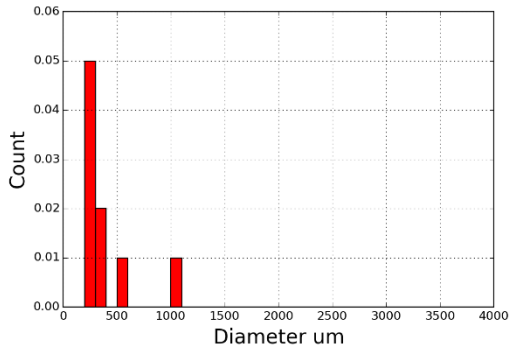


Figure B. 1696: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

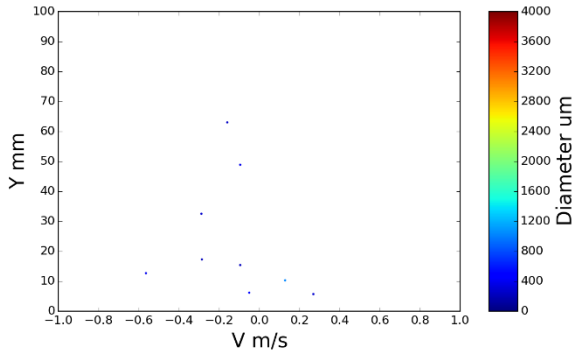


Figure B. 1699: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

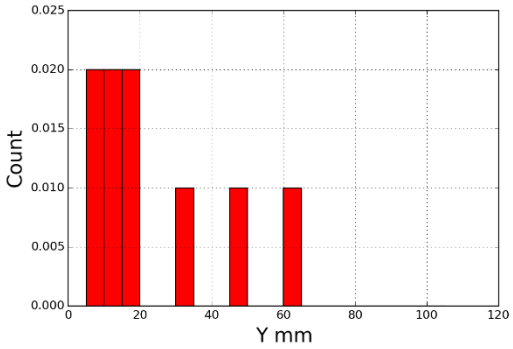


Figure B. 1697: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

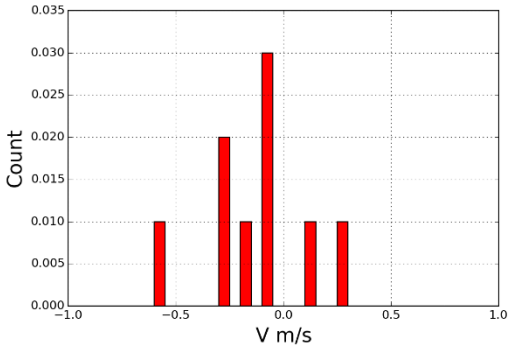


Figure B. 1700: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

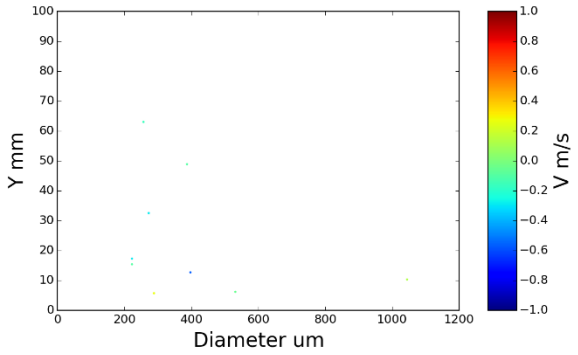


Figure B. 1698: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.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	0.06	0.05	182.2	678.7	409.7	162.7	302.1	690.8	461.2	127.8
20-40mm	0.03	0.03	193.3	223.2	203.2	14.1	223.2	446.3	306.3	99.6
40-60mm	0.01	0.01	257.7	257.7	257.7	0.0	288.1	288.1	288.1	0.0
60-80mm	0.01	0.0	193.3	193.3	193.3	0.0	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	0.11	0.09	182.2	678.7	319.9	156.3	223.2	690.8	390.4	136.7
			Height A (mm)				Height B (mm)			
Highest Particle			63.8837				47.1278			
Lowest Particle			5.1666				8.1613			

Table B. 183: 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	0.03	346.9	678.7	484.3	141.3	302.1	690.8	488.8	159.1	0.360	0.850	0.590	0.200	-0.470	0.050	-0.140	0.230
20-40mm	0.02	193.3	223.2	208.2	14.9	223.2	249.5	236.3	13.2	-0.250	0.170	-0.040	0.210	0.060	0.400	0.230	0.170
40-60mm	0.01	257.7	257.7	257.7	0.0	288.1	288.1	288.1	0.0	0.170	0.170	0.170	0.000	-0.410	-0.410	-0.410	0.000
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	0.06	193.3	678.7	354.5	164.9	223.2	690.8	371.2	163.8	-0.250	0.850	0.310	0.340	-0.470	0.400	-0.060	0.300

Table B. 184: Matched Droplet Info

B.4.3.2 All Droplets for .LA Image

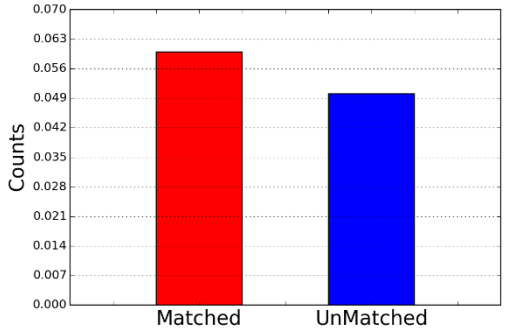


Figure B. 1701: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

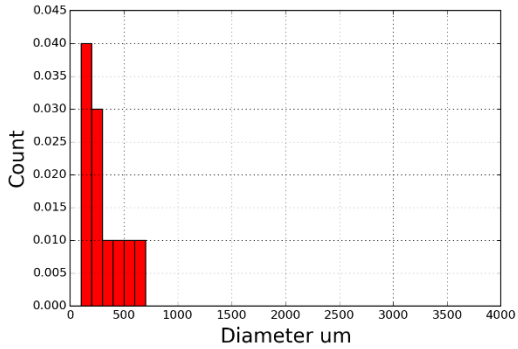


Figure B. 1702: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

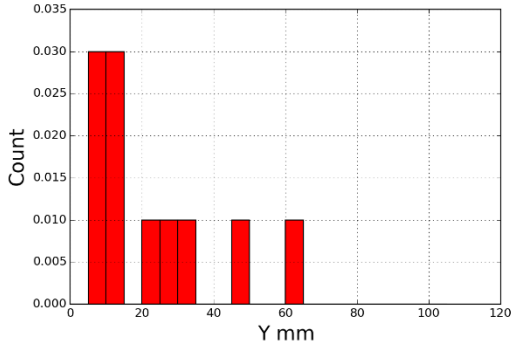


Figure B. 1703: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

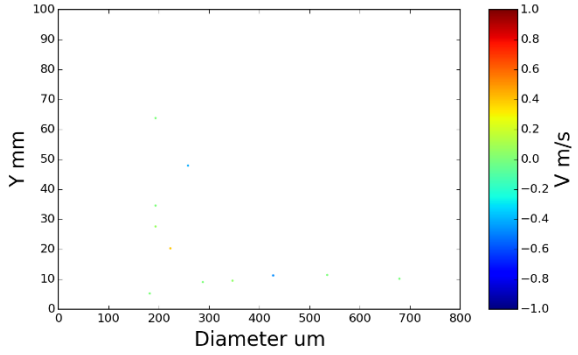


Figure B. 1704: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

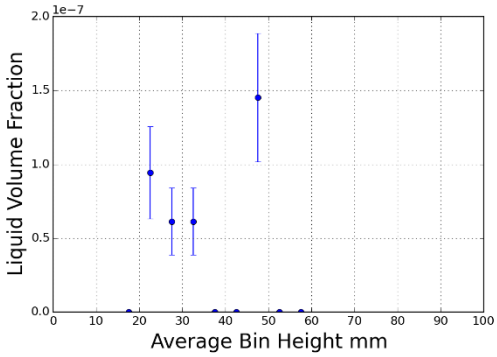


Figure B. 1705: Void Fraction R-123 55F 1700Btu 2550Lb Tri

B.4.3.2 All Droplets for .LB Image

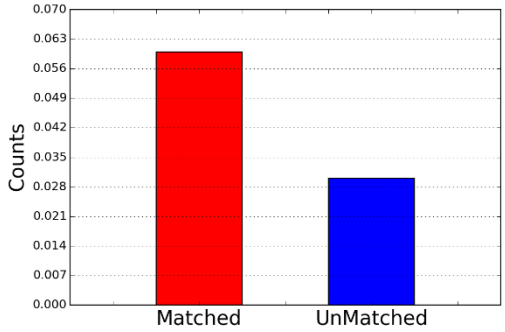


Figure B. 1706: CHC Count Comparison R-123 55F 1700Btu 2550Lb Tri

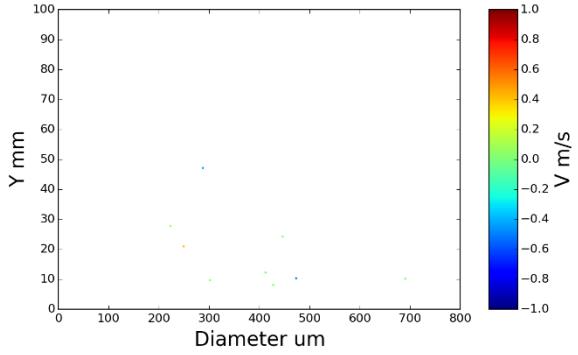


Figure B. 1709: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

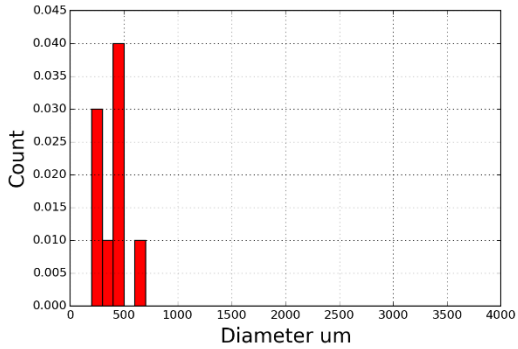


Figure B. 1707: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

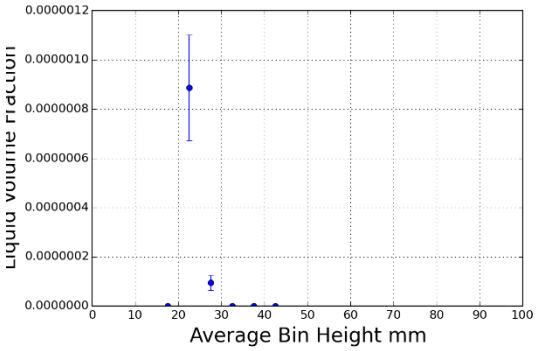


Figure B. 1710: Void Fraction R-123 55F 1700Btu 2550Lb Tri

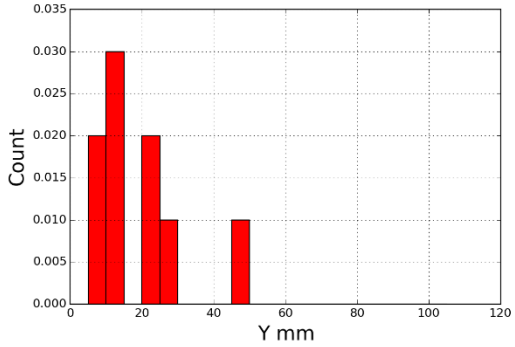


Figure B. 1708: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

B.4.3.2 Matched Only Droplets for .LA Image

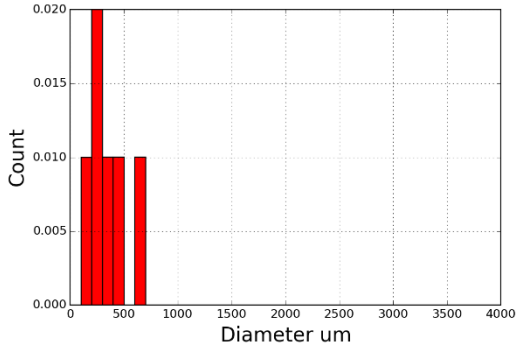


Figure B. 1711: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

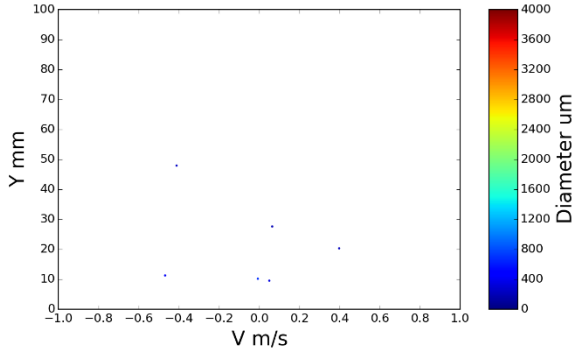


Figure B. 1714: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

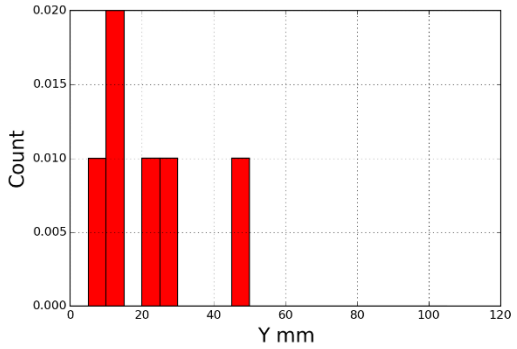


Figure B. 1712: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

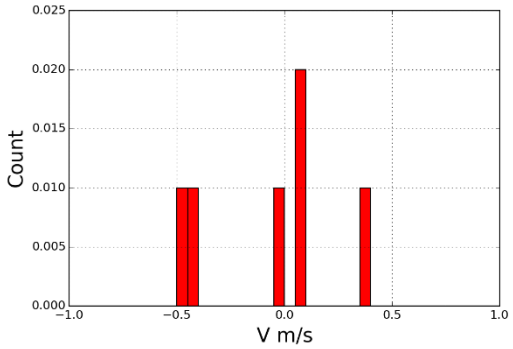


Figure B. 1715: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

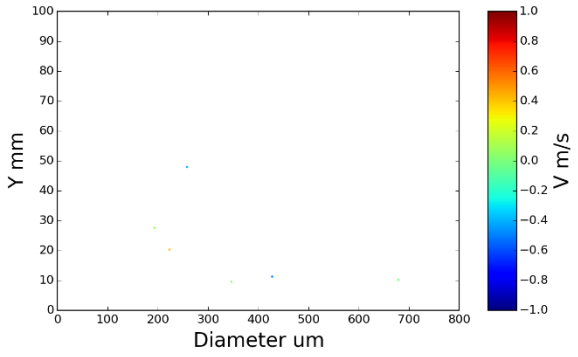


Figure B. 1713: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.4.3.2 Matched Only Droplets for .LB Image

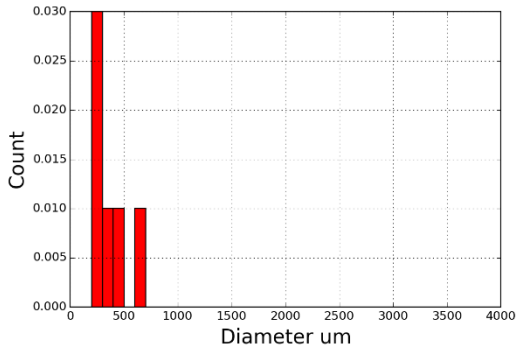


Figure B. 1716: Droplet Diameter Histogram R-123 55F 1700Btu 2550Lb Tri

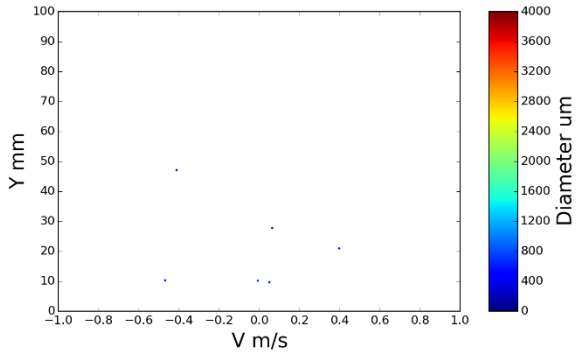


Figure B. 1719: Droplet Height vs Vertical Velocity R-123 55F 1700Btu 2550Lb Tri

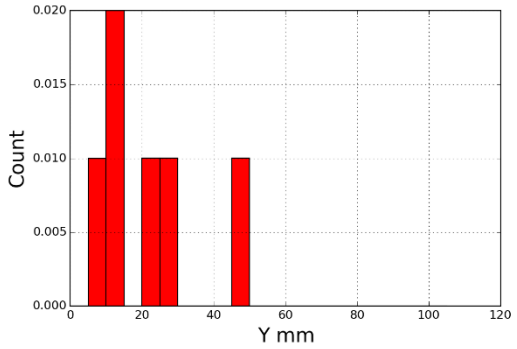


Figure B. 1717: Droplet Height Histogram R-123 55F 1700Btu 2550Lb Tri

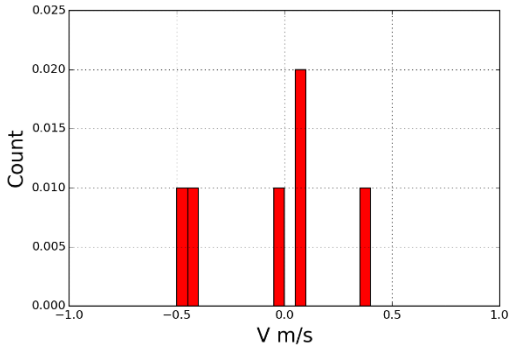


Figure B. 1720: Droplet Vertical Velocity Histogram R-123 55F 1700Btu 2550Lb Tri

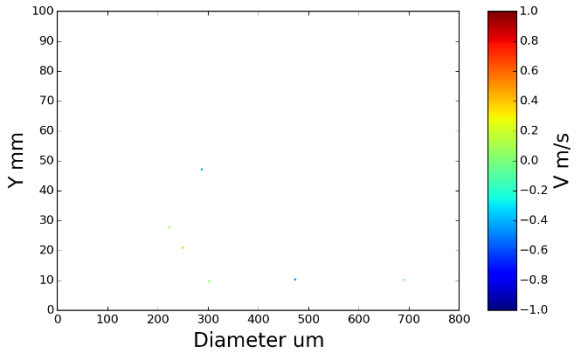


Figure B. 1718: Droplet Height vs Diameter R-123 55F 1700Btu 2550Lb Tri

B.5 - 1556 R-123 55F 3500Btu 7500Lb Tri

B.5.1 Liquid Level 1

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	18233 / 2.297
Ref Mass Flow (lb/hr) / (kg/s)	829 / 0.105
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	8074 / 10.950
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	3488 / 11.00
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.3 / 12.95
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	56.0 / 13.35
Total Bundle Q (Btu/hr) / (kW)	69139 / 20.26
Total Bundle & Preboiler Q (Btu/hr) / (kW)	69139 / 20.26
Top Two Rows HTC Ratio	1.126
Bundle Inlet Quality	-0.13
Bundle Exit Quality	0.98

Table B. 185: Thermal Conditions

B.5.1.1 Lens 100mm Mag 0_29x

B.5.1.1 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	69.26	69.91	75.6	3945	519.8	617.1	75.6	3949	513.0	606.2
40-60mm	154.26	156.9	75.6	3936	477.8	543.2	75.6	3937	467.6	534.2
60-80mm	117.62	119.65	75.6	3790	411.1	427.6	80.8	3853	406.0	427.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	341.14	346.46	75.6	3945	463.3	524.9	75.6	3949	455.5	517.7
			Height A (mm)				Height B (mm)			
Highest Particle			77.1132				77.1146			
Lowest Particle			29.1560				29.1433			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	36.29	80.8	3855	671.7	668.5	75.6	3924	662.5	669.8	-1.180	1.190	-0.060	0.350	-1.180	1.190	0.050	0.470
40-60mm	89.45	80.8	3851	567.1	562.3	80.8	3930	562.6	566.8	-1.190	1.190	-0.070	0.330	-1.180	1.190	0.100	0.500
60-80mm	76.31	80.8	3764	474.0	457.4	80.8	3853	469.3	455.3	-1.190	1.190	-0.090	0.300	-1.190	1.190	0.120	0.480
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	202.05	80.8	3855	550.7	551.6	75.6	3930	545.1	552.8	-1.190	1.190	-0.080	0.320	-1.190	1.190	0.100	0.490

B.5.1.1 Table B. 187: Matched Droplet Info

All Droplets for .LA Image

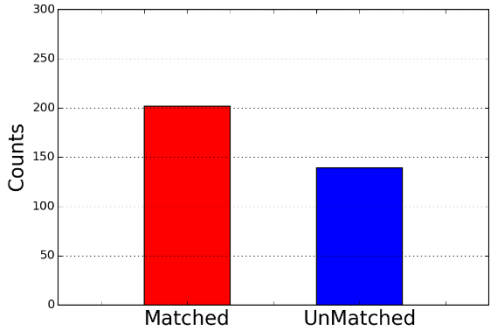


Figure B. 1721: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

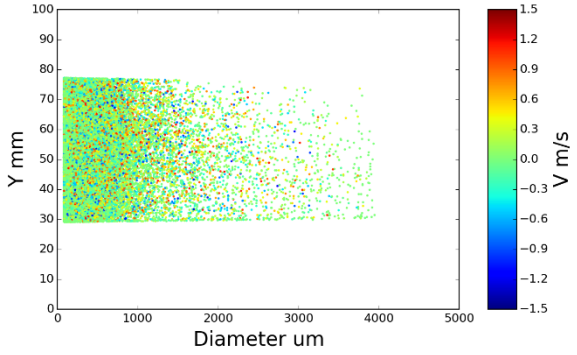


Figure B. 1724: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

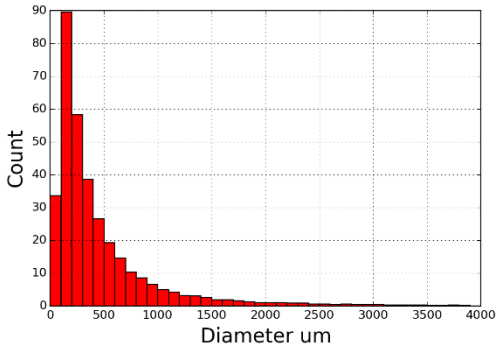


Figure B. 1722: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

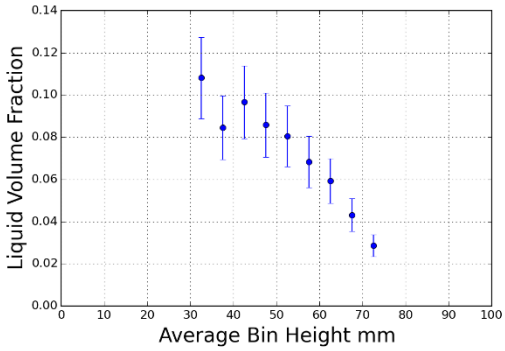


Figure B. 1725: Void Fraction R-123 55F 3500Btu 7500Lb Tri

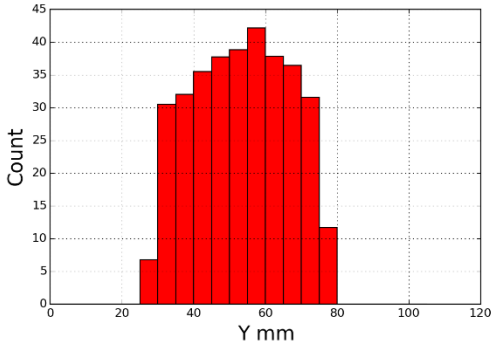


Figure B. 1723: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.1.1 All Droplets for .LB Image

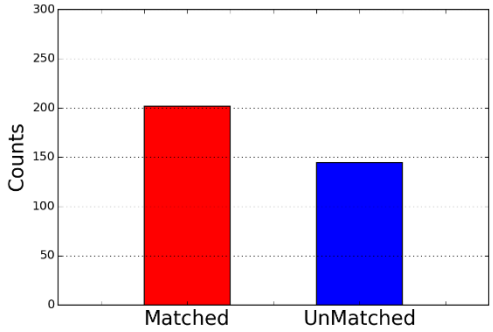


Figure B. 1726: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

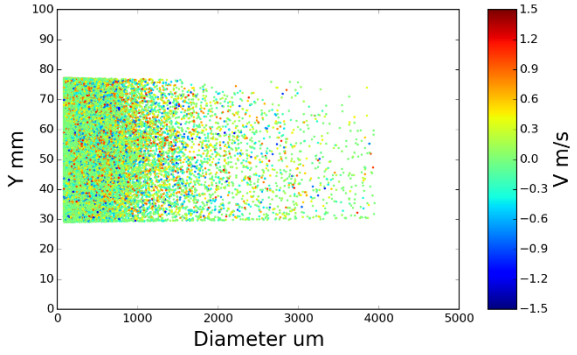


Figure B. 1729: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

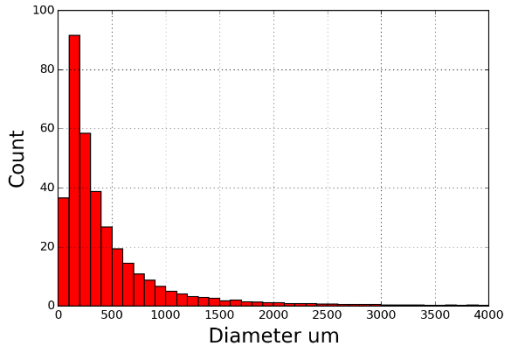


Figure B. 1727: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

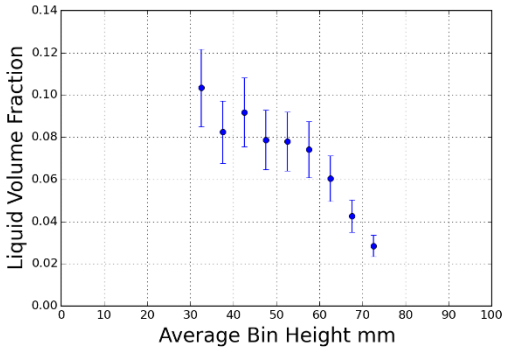


Figure B. 1730: Void Fraction R-123 55F 3500Btu 7500Lb Tri

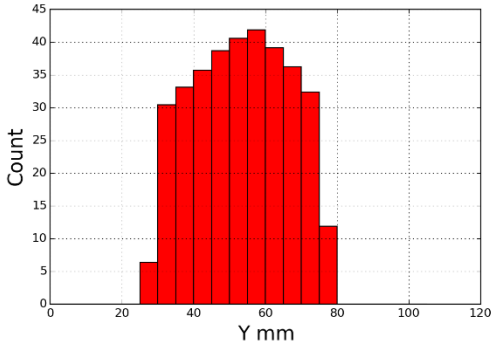


Figure B. 1728: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.1.1 Matched Only Droplets for .LA Image

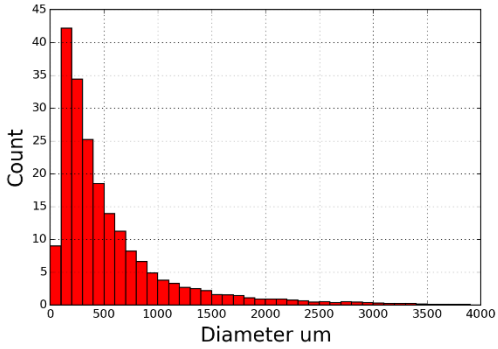


Figure B. 1731: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

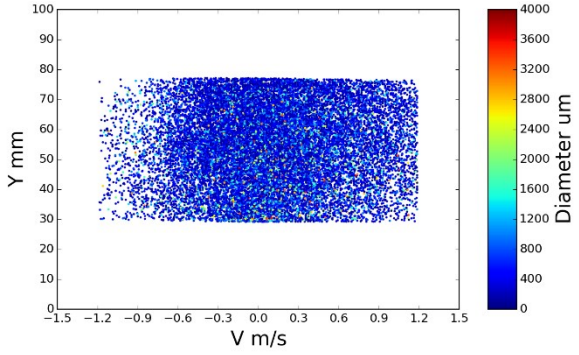


Figure B. 1734: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

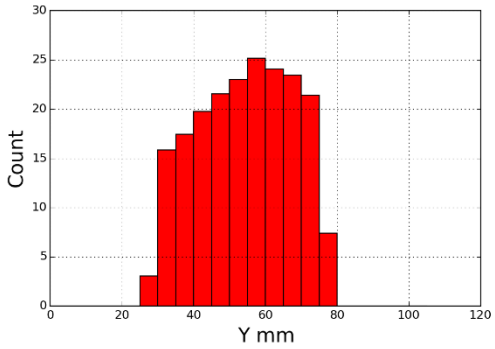


Figure B. 1732: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

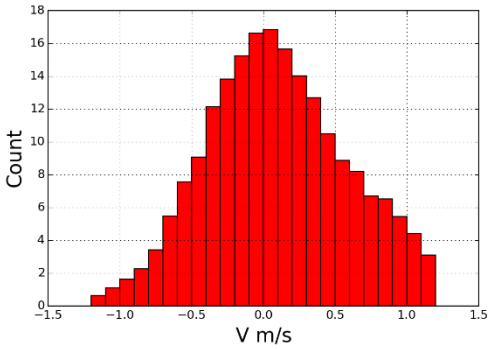


Figure B. 1735: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

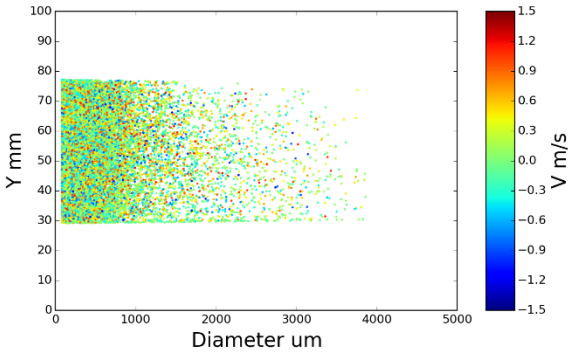


Figure B. 1733: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.1.1 Matched Only Droplets for .LB Image

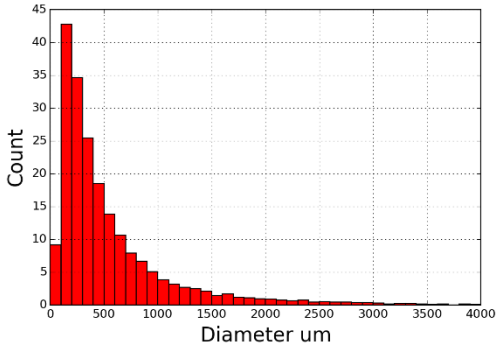


Figure B. 1736: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

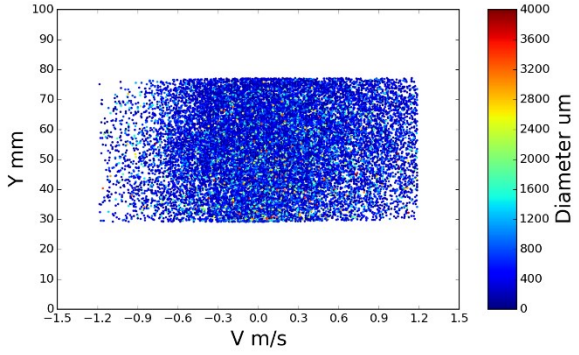


Figure B. 1739: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

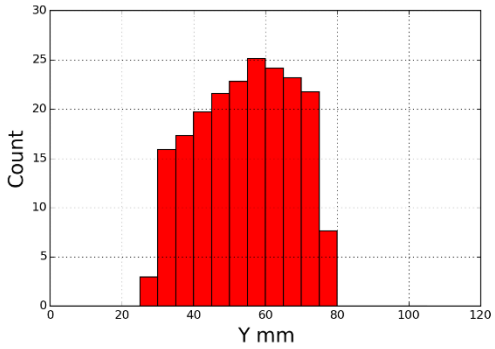


Figure B. 1737: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

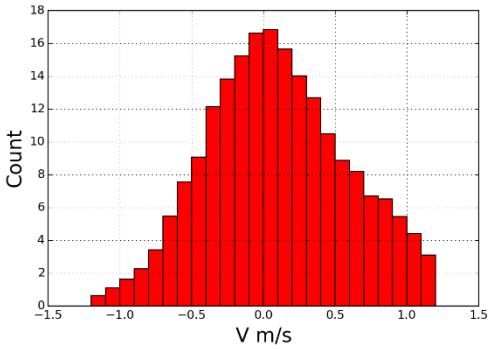


Figure B. 1740: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

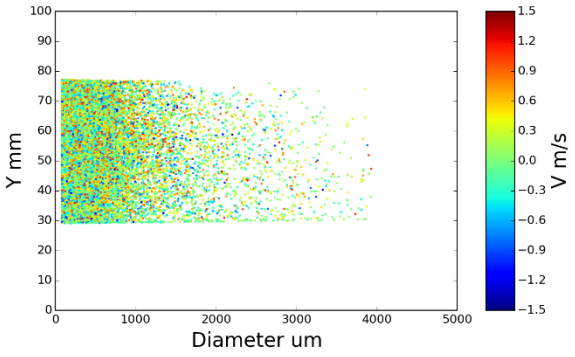


Figure B. 1738: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.1.1 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	56.61	57.43	75.6	3912	607.7	652.5	75.6	3930	607.6	664.7
40-60mm	134.12	136.48	75.6	3936	546.9	581.4	75.6	3933	539.8	574.9
60-80mm	112.01	114.35	75.6	3947	449.4	456.8	75.6	3934	445.0	459.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	302.74	308.26	75.6	3947	522.2	556.9	75.6	3934	517.2	557.3
			Height A (mm)				Height B (mm)			
Highest Particle			77.1247				77.1132			
Lowest Particle			29.1433				29.1546			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	29.27	80.8	3812	795.7	697.7	80.8	3918	792.8	712.7	-1.190	1.180	-0.040	0.340	-1.190	1.190	0.110	0.470
40-60mm	77.86	80.8	3845	674.0	609.7	80.8	3933	668.4	613.2	-1.180	1.190	-0.070	0.310	-1.190	1.190	0.120	0.500
60-80mm	71.71	80.8	3912	528.2	493.0	80.8	3934	523.1	492.9	-1.180	1.190	-0.090	0.300	-1.190	1.190	0.120	0.490
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	178.84	80.8	3912	635.5	590.3	80.8	3934	629.9	594.4	-1.190	1.190	-0.070	0.310	-1.190	1.190	0.120	0.490

Table B. 189: Matched Droplet Info

B.5.1.1 All Droplets for .LA Image

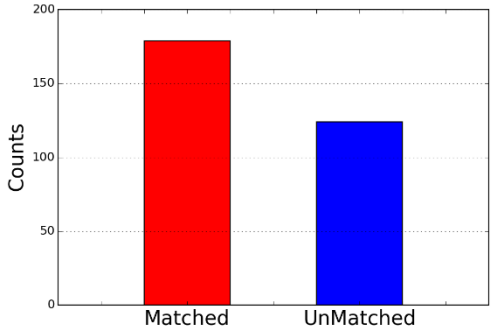


Figure B. 1741: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

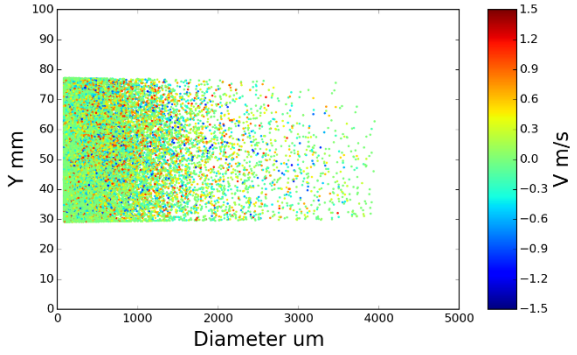


Figure B. 1744: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

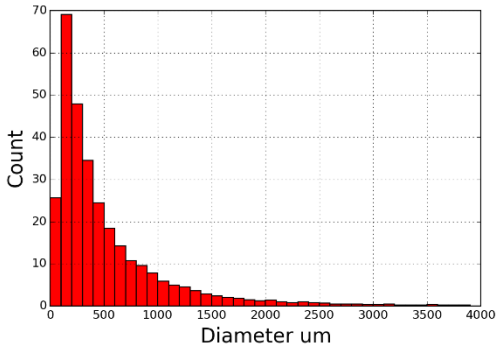


Figure B. 1742: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

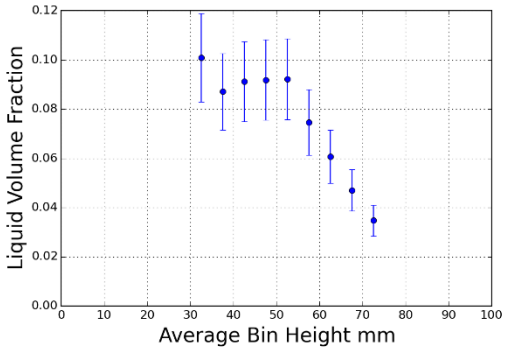


Figure B. 1745: Void Fraction R-123 55F 3500Btu 7500Lb Tri

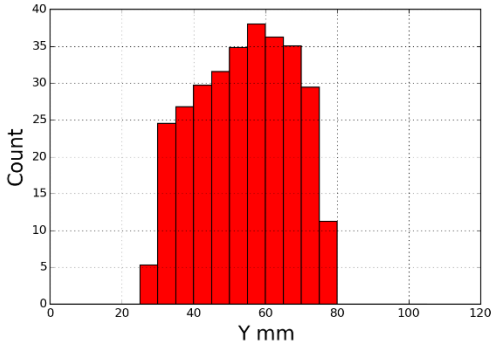


Figure B. 1743: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.1.1 All Droplets for .LB Image

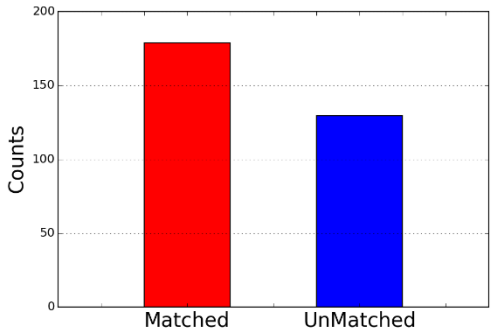


Figure B. 1746: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

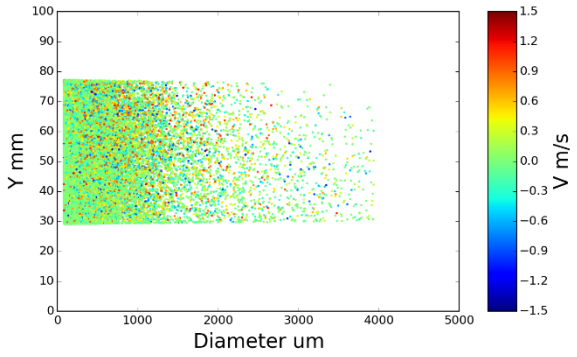


Figure B. 1749: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

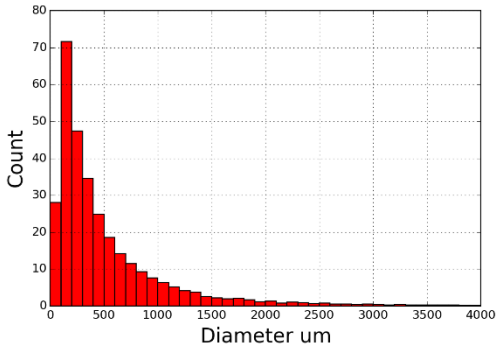


Figure B. 1747: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

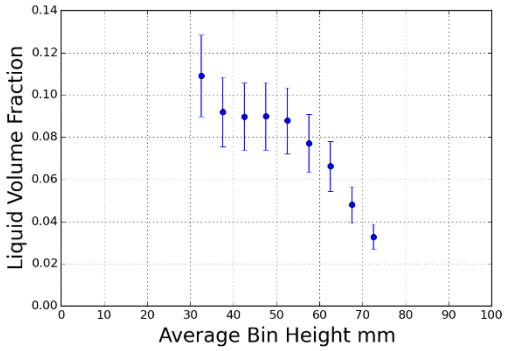


Figure B. 1750: Void Fraction R-123 55F 3500Btu 7500Lb Tri

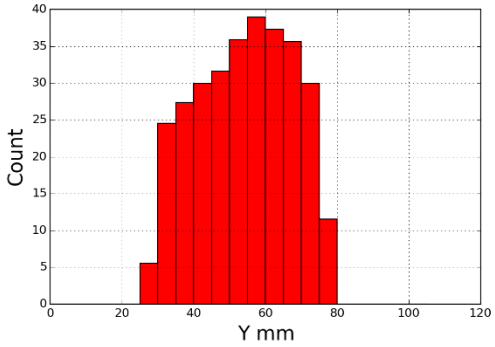


Figure B. 1748: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.1.1 Matched Only Droplets for .LA Image

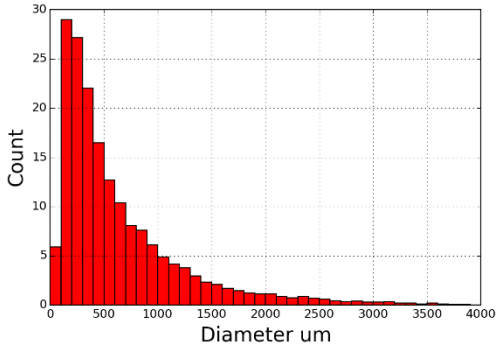


Figure B. 1751: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

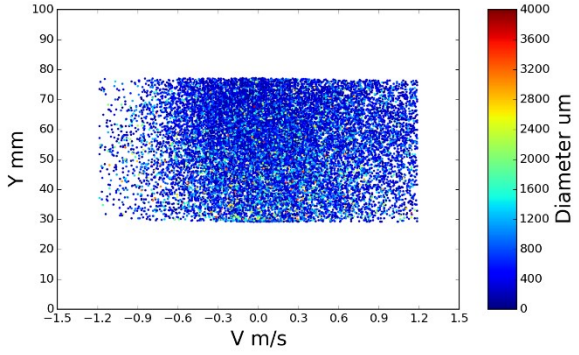


Figure B. 1754: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

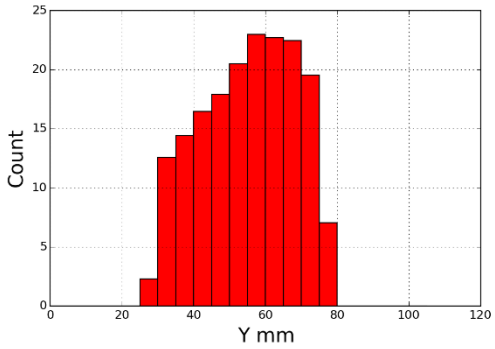


Figure B. 1752: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

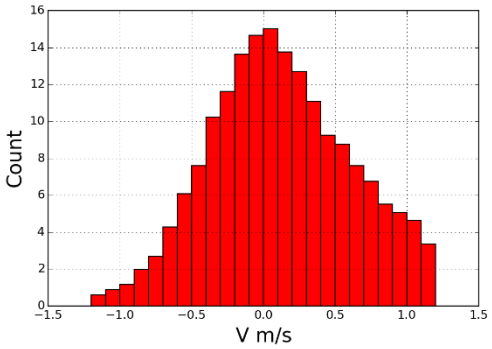


Figure B. 1755: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

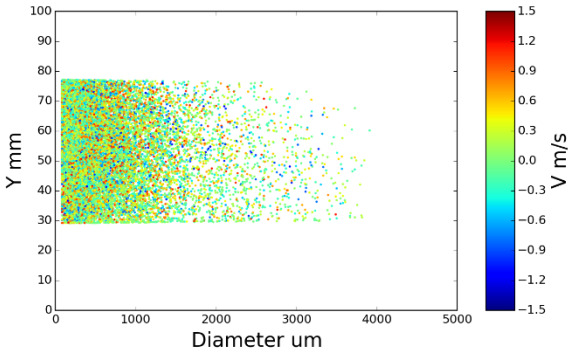


Figure B. 1753: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.1.1 Matched Only Droplets for .LB Image

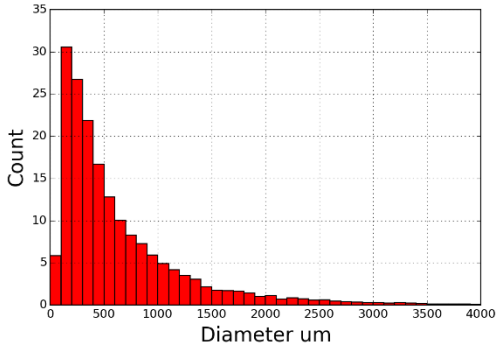


Figure B. 1756: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

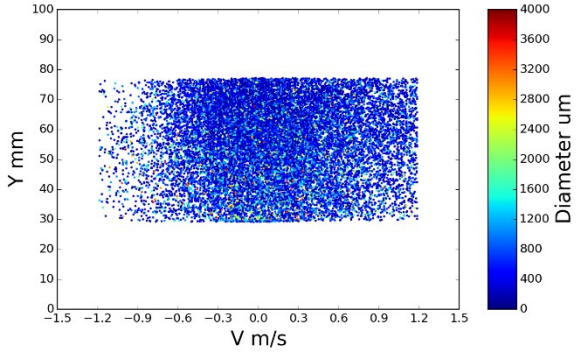


Figure B. 1759: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

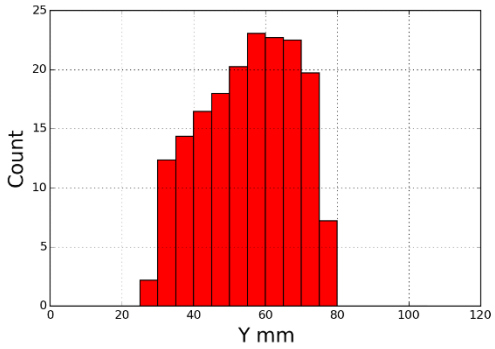


Figure B. 1757: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

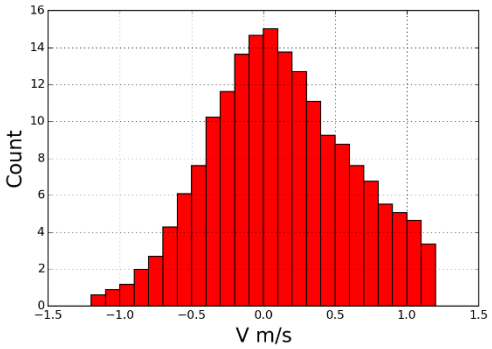


Figure B. 1760: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

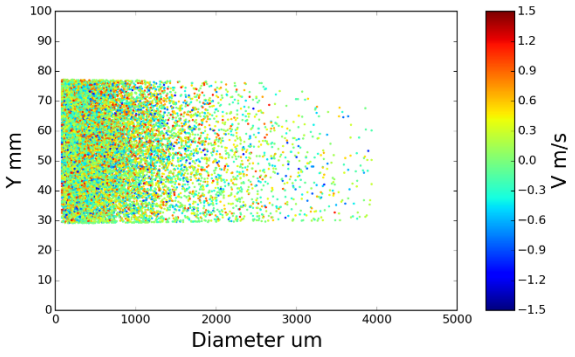


Figure B. 1758: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.1.1 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	40.44	42.07	75.6	3939	709.1	749.8	75.6	3939	692.0	752.8
40-60mm	103.51	106.19	75.6	3944	589.2	620.8	75.6	3939	569.3	610.7
60-80mm	96.38	96.81	75.6	3941	457.1	477.6	75.6	3928	453.0	473.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	240.33	245.07	75.6	3944	556.4	600.3	75.6	3939	544.4	595.5
			Height A (mm)				Height B (mm)			
Highest Particle			77.1163				77.1121			
Lowest Particle			29.1433				29.1560			

Table B. 190: 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	20.25	80.8	3910	961.7	803.3	80.8	3920	960.7	819.9	-1.180	1.190	-0.020	0.320	-1.190	1.190	0.130	0.490
40-60mm	56.93	80.8	3881	744.5	656.6	75.6	3939	736.9	661.4	-1.190	1.190	-0.060	0.320	-1.190	1.190	0.100	0.510
60-80mm	58.98	80.8	3836	549.4	511.4	80.8	3928	543.5	508.8	-1.190	1.190	-0.070	0.310	-1.170	1.190	0.100	0.490
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	136.16	80.8	3910	692.3	640.5	75.6	3939	685.8	644.6	-1.190	1.190	-0.060	0.310	-1.190	1.190	0.100	0.500

Table B. 191: Matched Droplet Info

B.5.1.1 All Droplets for .LA Image

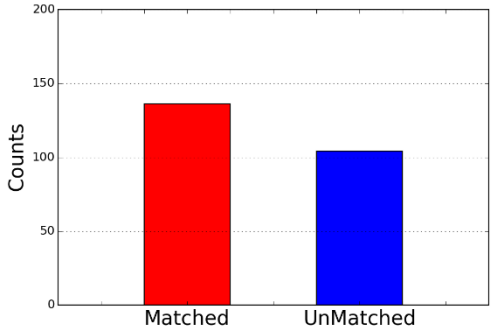


Figure B. 1761: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

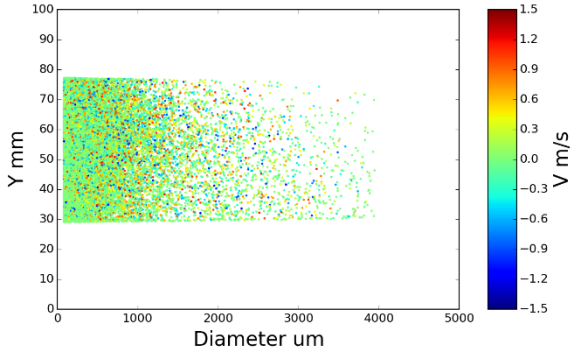


Figure B. 1764: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

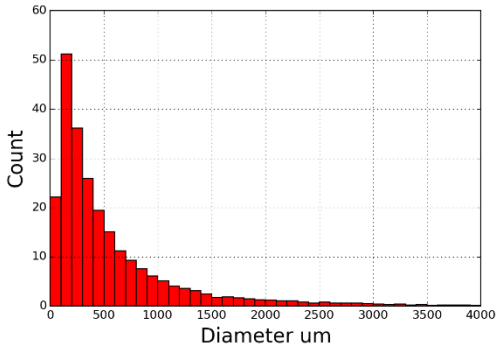


Figure B. 1762: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

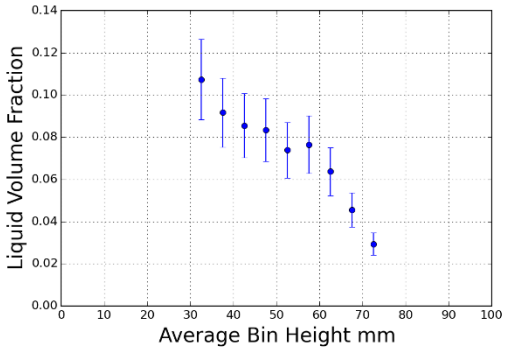


Figure B. 1765: Void Fraction R-123 55F 3500Btu 7500Lb Tri

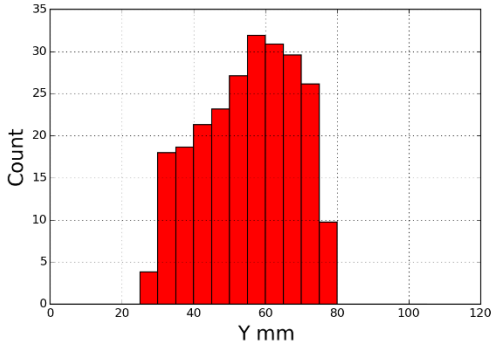


Figure B. 1763: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.1.1 All Droplets for .LB Image

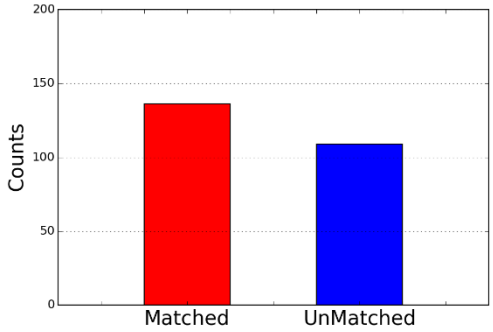


Figure B. 1766: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

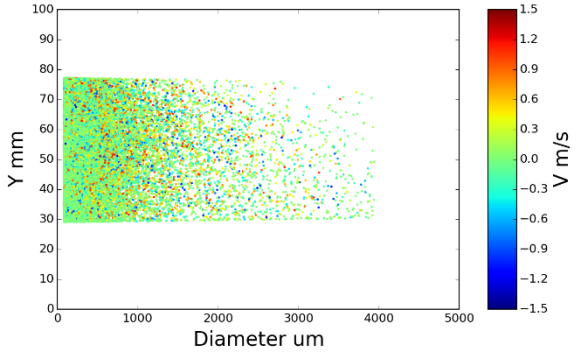


Figure B. 1769: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

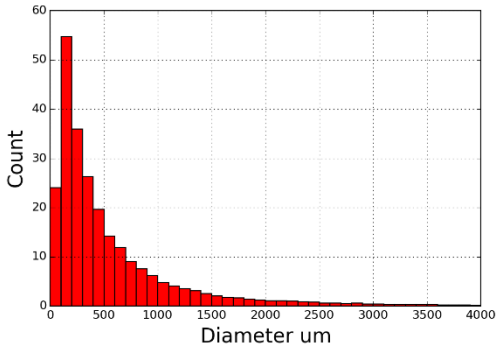


Figure B. 1767: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

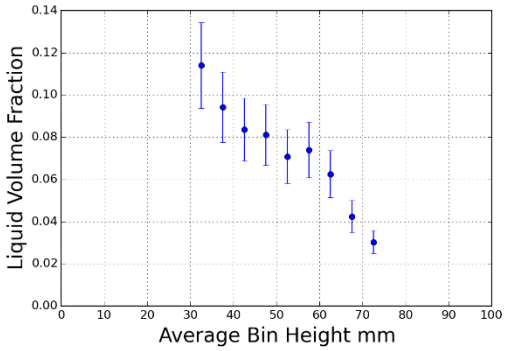


Figure B. 1770: Void Fraction R-123 55F 3500Btu 7500Lb Tri

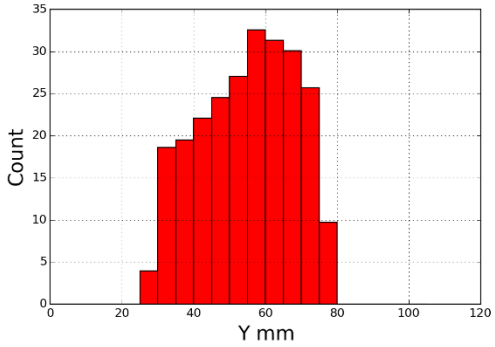


Figure B. 1768: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.1.1 Matched Only Droplets for .LA Image

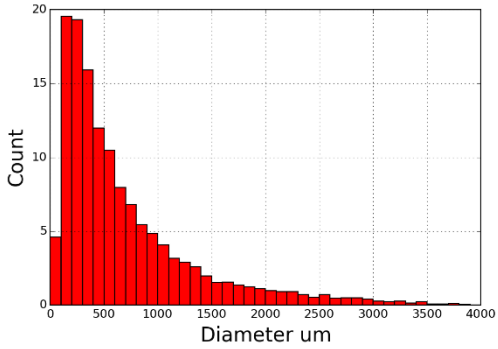


Figure B. 1771: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

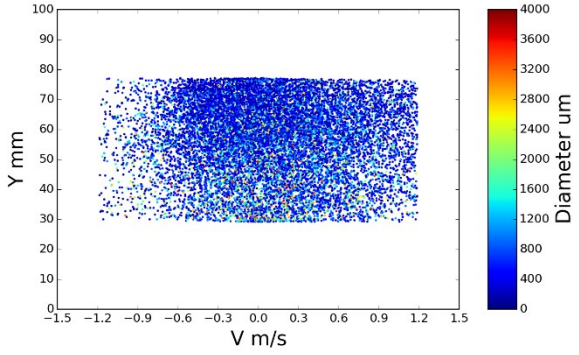


Figure B. 1774: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

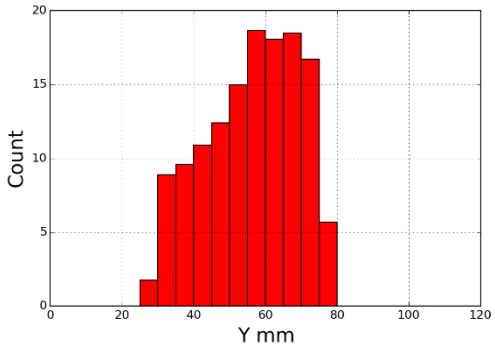


Figure B. 1772: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

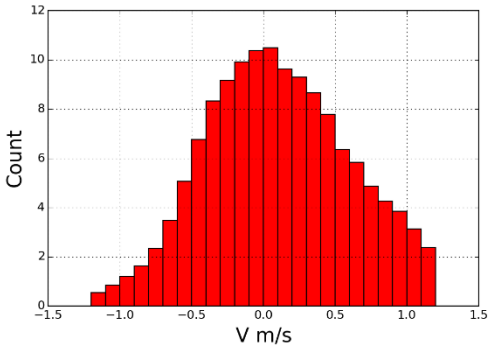


Figure B. 1775: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

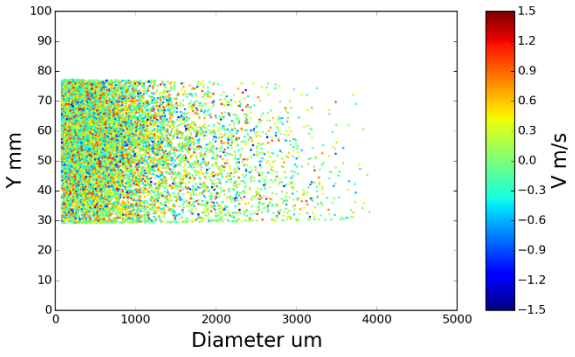


Figure B. 1773: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.1.1 Matched Only Droplets for .LB Image

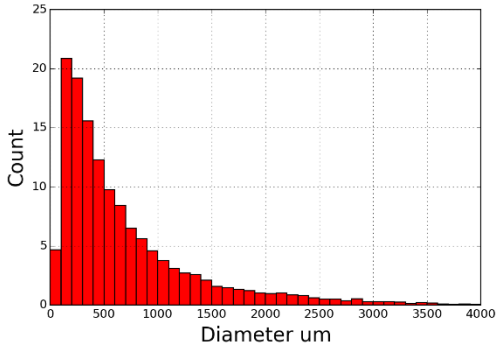


Figure B. 1776: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

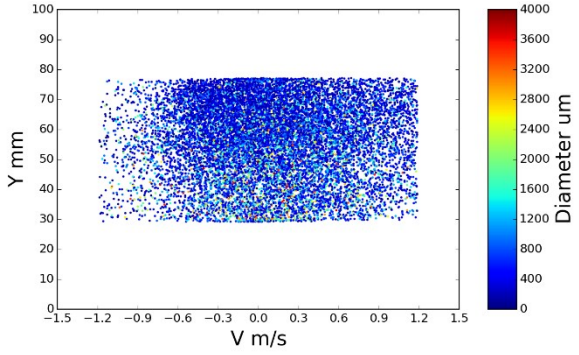


Figure B. 1779: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

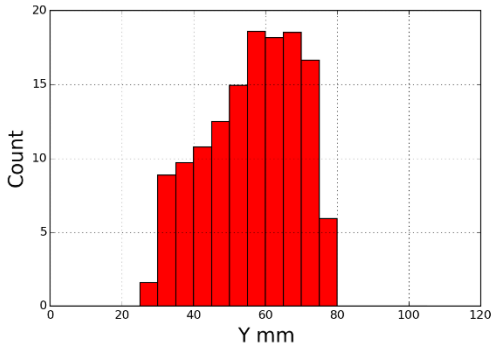


Figure B. 1777: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

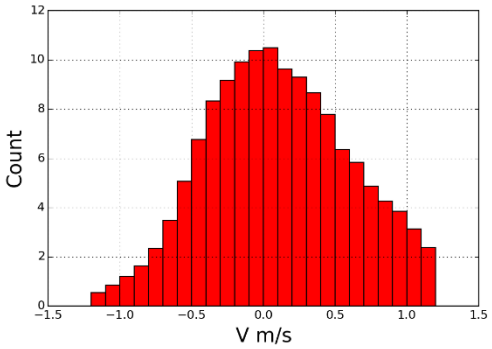


Figure B. 1780: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

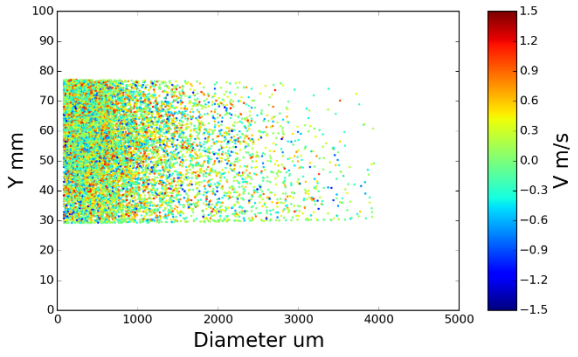


Figure B. 1778: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.1.2 Lens 50mm Mag 0_13x

B.5.1.2 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	41.97	42.64	182.2	3992	755.3	691.8	182.2	3993	756.1	688.0
40-60mm	102.01	100.18	182.2	3990	667.8	584.5	182.2	3991	673.2	581.9
60-80mm	86.6	86.41	182.2	3855	575.8	465.9	170.4	3968	575.9	470.7
80-100mm	39.22	39.71	182.2	3844	476.2	331.2	182.2	3621	470.9	324.5
All	270.05	269.22	182.2	3992	623.7	544.4	170.4	3993	624.9	543.7
			Height A (mm)				Height B (mm)			
Highest Particle			100.0898				100.0898			
Lowest Particle			30.1382				30.1668			

Table B. 192: 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	22.44	182.2	3776	847.5	693.3	182.2	3993	827.3	694.6	-1.180	1.180	-0.060	0.420	-1.180	1.180	0.050	0.520
40-60mm	58.58	182.2	3951	738.4	599.9	182.2	3991	727.3	599.1	-1.180	1.180	-0.080	0.400	-1.180	1.180	0.090	0.530
60-80mm	54.47	182.2	3855	636.3	498.6	182.2	3952	626.6	494.6	-1.180	1.180	-0.090	0.380	-1.180	1.180	0.100	0.520
80-100mm	27.08	182.2	3530	518.2	351.9	182.2	3526	512.2	344.5	-1.150	1.150	-0.100	0.320	-1.140	1.180	0.110	0.520
All	162.64	182.2	3951	682.4	556.8	182.2	3993	670.9	553.5	-1.180	1.180	-0.090	0.380	-1.180	1.180	0.090	0.520

Table B. 193: Matched Droplet Info

B.5.1.2 All Droplets for .LA Image

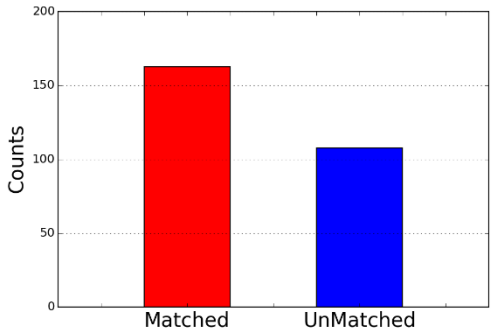


Figure B. 1781: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

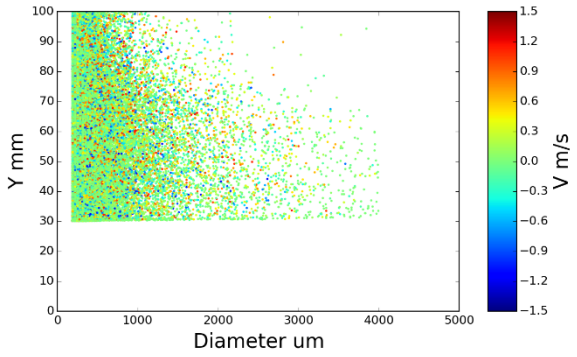


Figure B. 1784: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

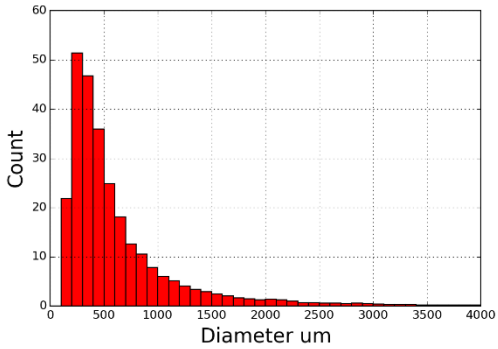


Figure B. 1782: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

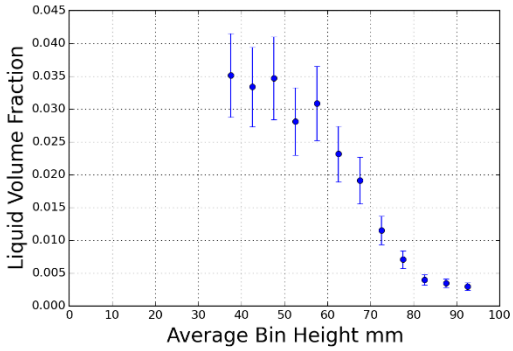


Figure B. 1785: Void Fraction R-123 55F 3500Btu 7500Lb Tri

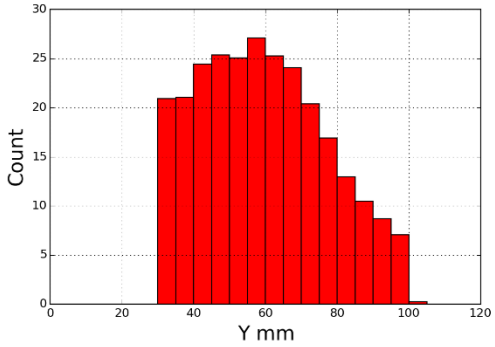


Figure B. 1783: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.1.2 All Droplets for .LB Image

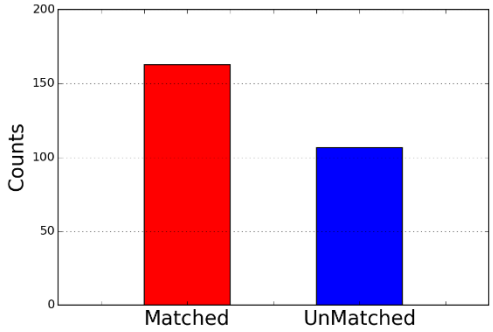


Figure B. 1786: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

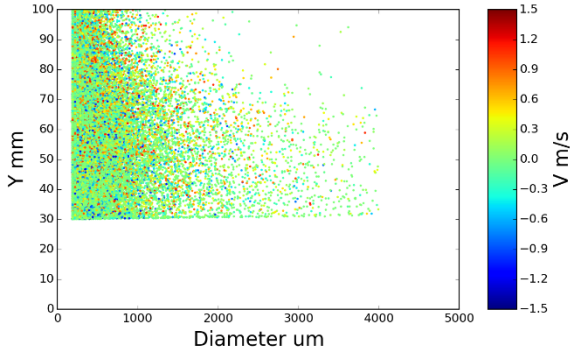


Figure B. 1789: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

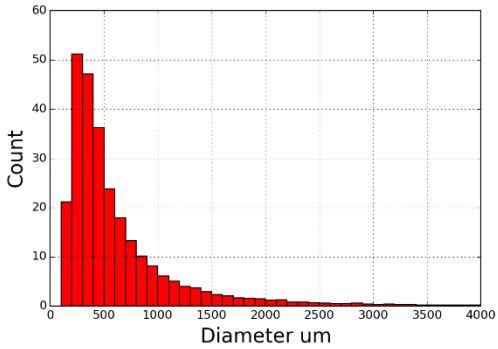


Figure B. 1787: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

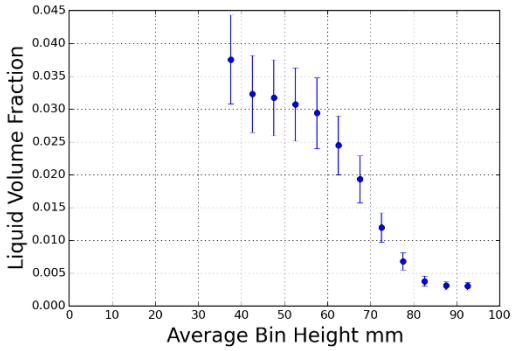


Figure B. 1790: Void Fraction R-123 55F 3500Btu 7500Lb Tri

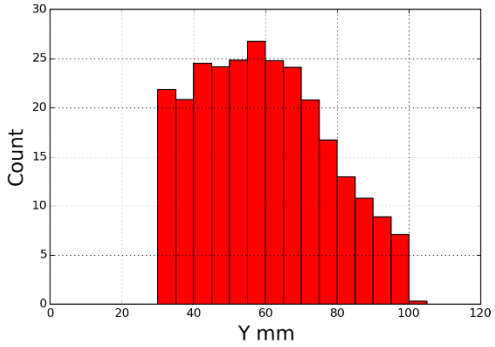


Figure B. 1788: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.1.2 Matched Only Droplets for .LA Image

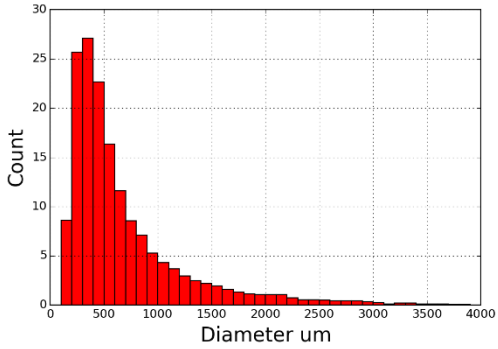


Figure B. 1791: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

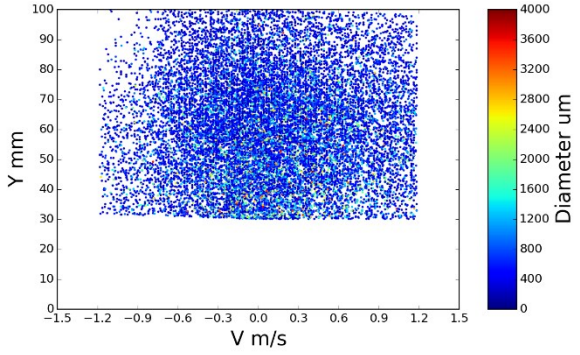


Figure B. 1794: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

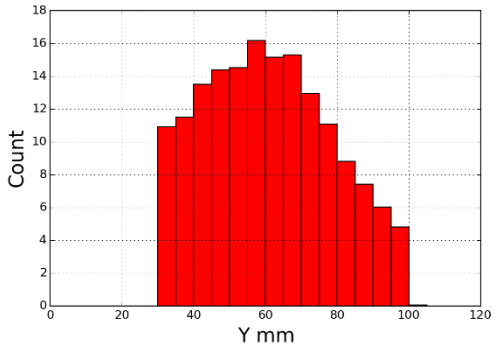


Figure B. 1792: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

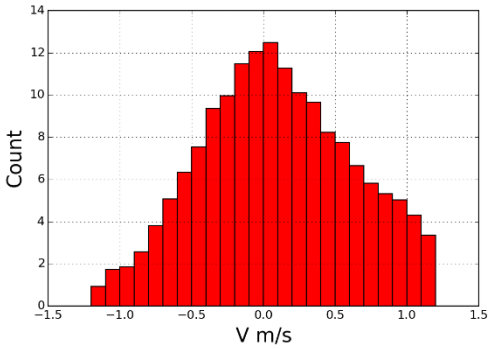


Figure B. 1795: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

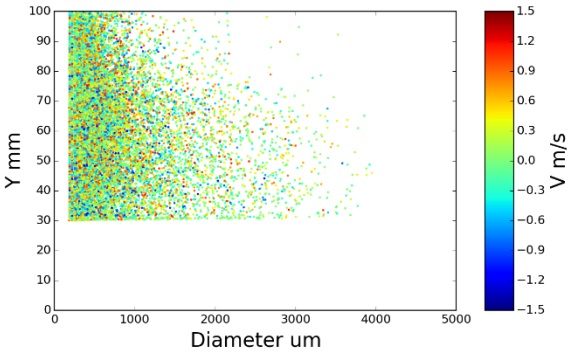


Figure B. 1793: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.1.2 Matched Only Droplets for .LB Image

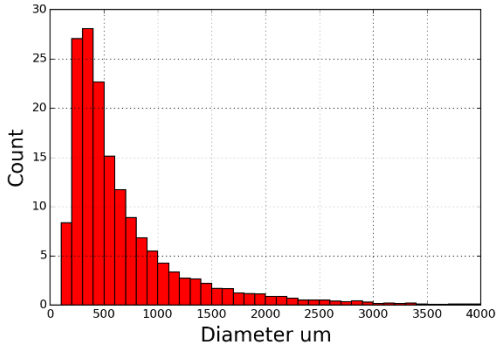


Figure B. 1796: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

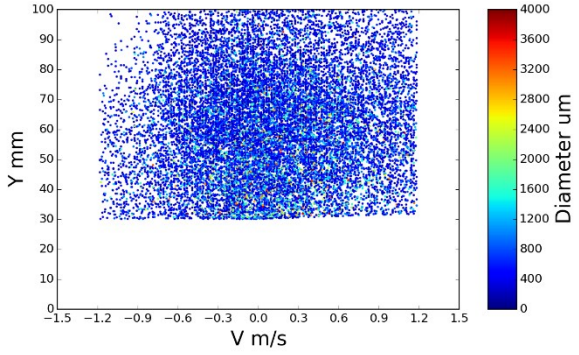


Figure B. 1799: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

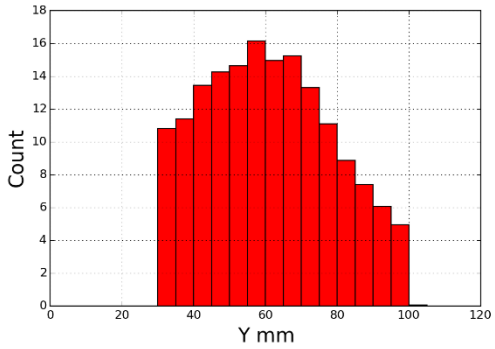


Figure B. 1797: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

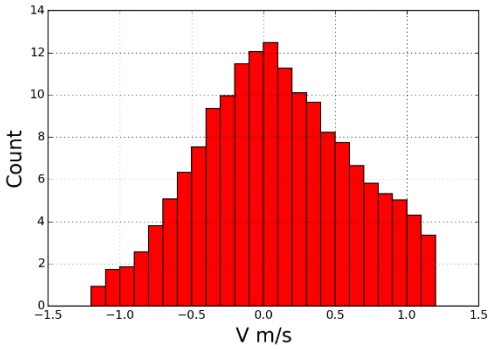


Figure B. 1800: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

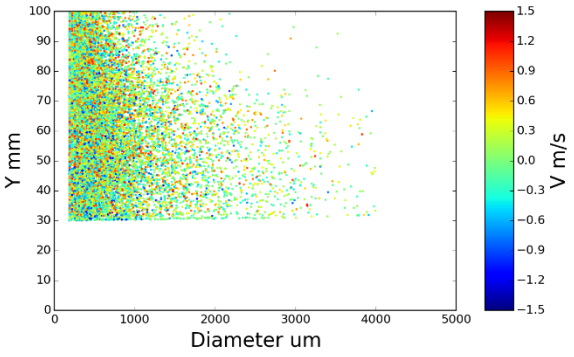


Figure B. 1798: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.1.2 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	42.78	43.12	182.2	3937	788.5	680.6	182.2	3971	797.9	693.8
40-60mm	104.14	102.3	182.2	3986	705.6	595.6	182.2	3938	704.8	590.2
60-80mm	95.68	95.65	182.2	3966	606.1	481.6	182.2	3953	606.2	484.1
80-100mm	47.61	47.64	182.2	3220	500.6	331.3	182.2	3337	501.5	329.7
All	290.52	289.05	182.2	3986	651.0	546.0	182.2	3971	652.1	547.0
			Height A (mm)				Height B (mm)			
Highest Particle			100.0976				100.0898			
Lowest Particle			30.1620				30.1590			

Table B. 194: 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	21.88	182.2	3937	927.2	707.8	182.2	3895	920.0	729.6	-1.180	1.180	-0.060	0.430	-1.180	1.180	0.080	0.510
40-60mm	58.13	182.2	3810	802.9	623.1	182.2	3932	787.5	625.3	-1.180	1.180	-0.070	0.420	-1.180	1.180	0.090	0.560
60-80mm	58.62	182.2	3686	677.2	511.7	182.2	3946	666.2	509.6	-1.180	1.180	-0.080	0.390	-1.180	1.180	0.090	0.540
80-100mm	32.95	182.2	3220	549.1	354.9	182.2	3337	545.9	350.9	-1.180	1.160	-0.080	0.340	-1.180	1.180	0.110	0.530
All	171.64	182.2	3937	726.9	568.3	182.2	3946	715.5	570.2	-1.180	1.180	-0.080	0.400	-1.180	1.180	0.090	0.540

Table B. 195: Matched Droplet Info

B.5.1.2 All Droplets for .LA Image

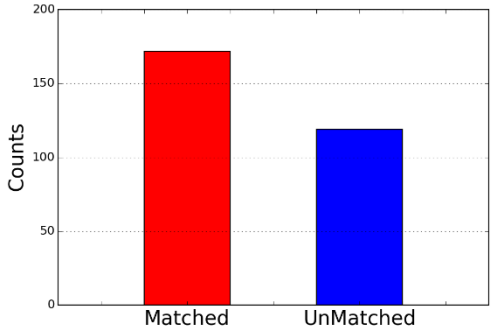


Figure B. 1801: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

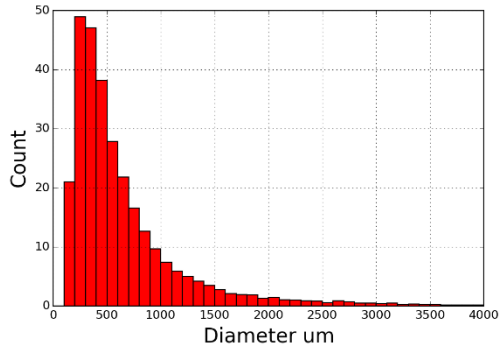


Figure B. 1802: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

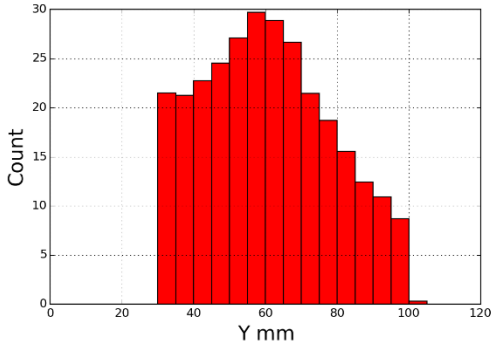


Figure B. 1803: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

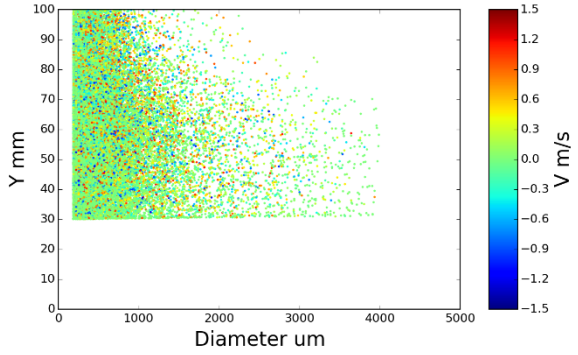


Figure B. 1804: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

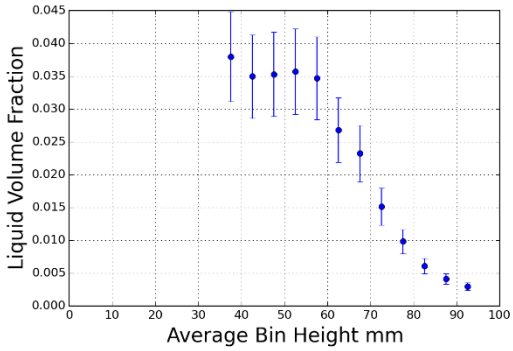


Figure B. 1805: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.1.2 All Droplets for .LB Image

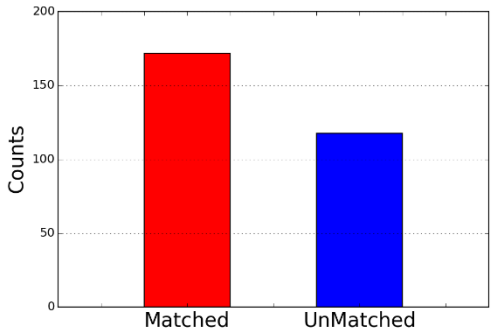


Figure B. 1806: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

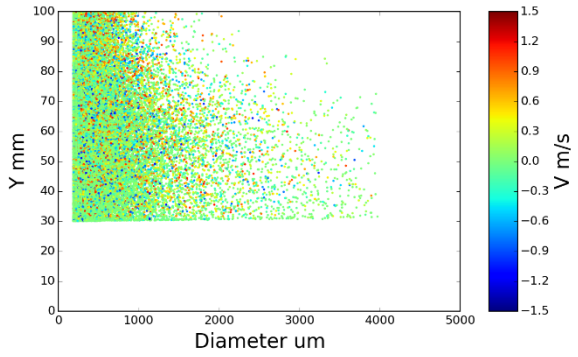


Figure B. 1809: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

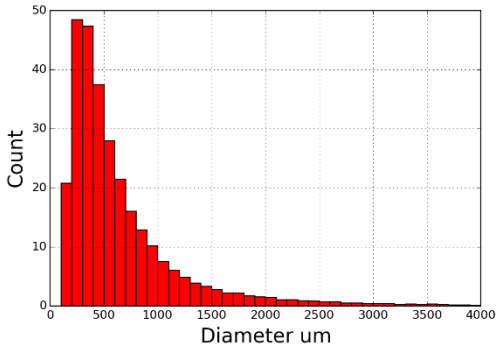


Figure B. 1807: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

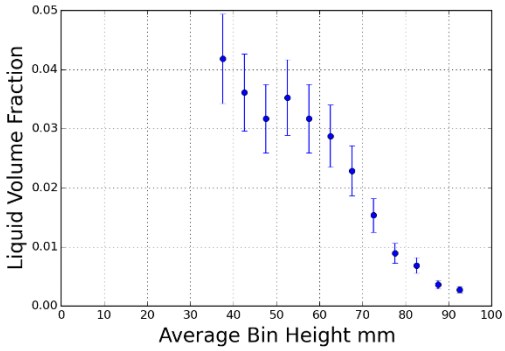


Figure B. 1810: Void Fraction R-123 55F 3500Btu 7500Lb Tri

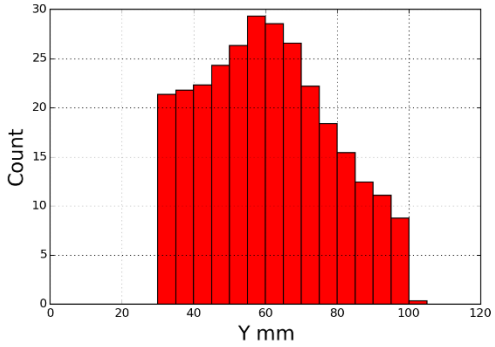


Figure B. 1808: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.1.2 Matched Only Droplets for .LA Image

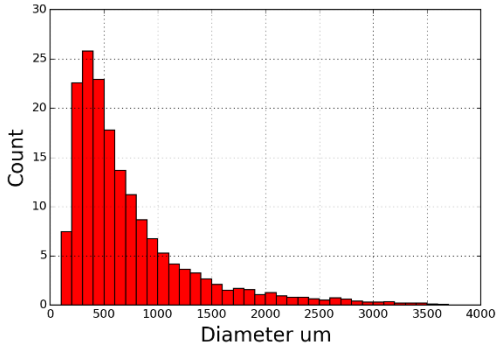


Figure B. 1811: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

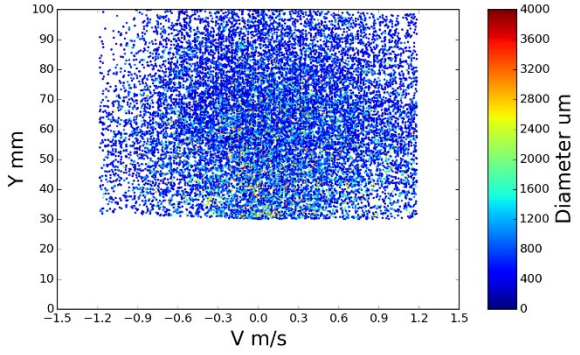


Figure B. 1814: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

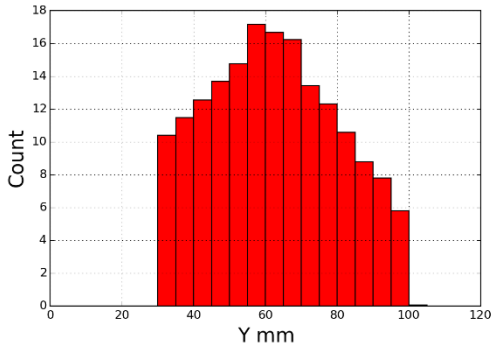


Figure B. 1812: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

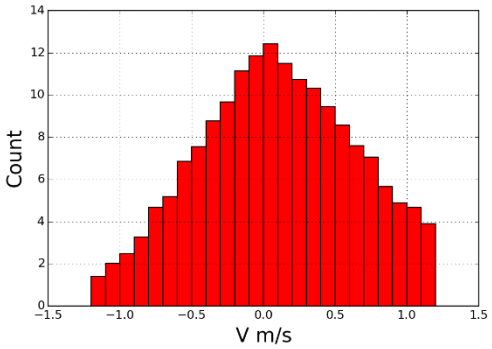


Figure B. 1815: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

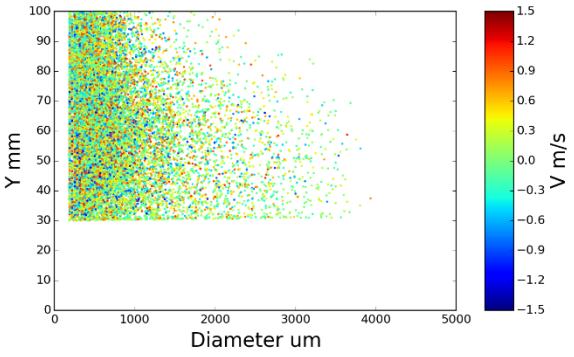


Figure B. 1813: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.1.2 Matched Only Droplets for .LB Image

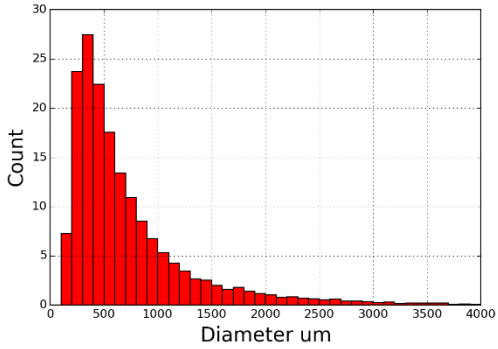


Figure B. 1816: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

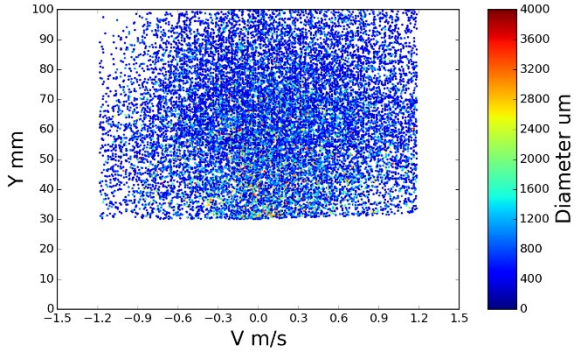


Figure B. 1819: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

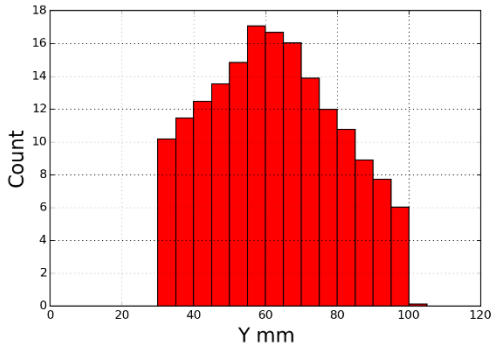


Figure B. 1817: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

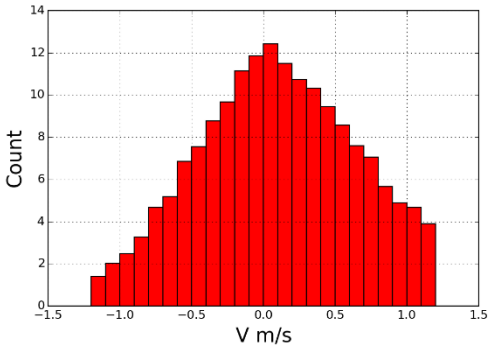


Figure B. 1820: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

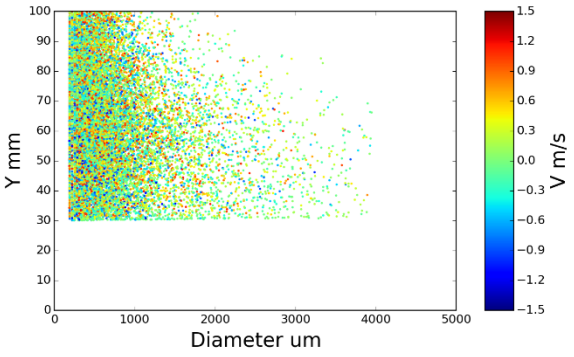


Figure B. 1818: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.1.2 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	33.32	33.81	182.2	3983	869.8	736.2	170.4	3994	860.6	727.5
40-60mm	88.46	87.45	170.4	3991	783.6	652.2	182.2	3970	782.6	653.5
60-80mm	84.31	83.58	182.2	3892	653.0	506.7	182.2	3911	656.1	514.5
80-100mm	41.49	41.03	182.2	3652	552.5	380.8	182.2	3757	550.7	381.3
All	247.82	246.16	170.4	3991	711.6	589.2	170.4	3994	711.2	590.7
			Height A (mm)				Height B (mm)			
Highest Particle			100.1183				100.0907			
Lowest Particle			30.1636				30.1632			

Table B. 196: 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	15.87	182.2	3633	1047	754.6	182.2	3994	1025	766.6	-1.180	1.150	-0.070	0.410	-1.180	1.180	0.070	0.500
40-60mm	47.25	182.2	3910	901.0	671.7	182.2	3970	884.4	675.7	-1.180	1.180	-0.060	0.410	-1.180	1.180	0.090	0.540
60-80mm	49.58	182.2	3880	744.2	537.8	182.2	3871	731.9	539.9	-1.180	1.180	-0.090	0.400	-1.180	1.180	0.090	0.540
80-100mm	27.08	182.2	3359	626.8	411.8	182.2	3355	614.6	405.6	-1.160	1.180	-0.080	0.340	-1.160	1.180	0.090	0.520
All	139.82	182.2	3910	808.7	608.1	182.2	3994	793.5	610.2	-1.180	1.180	-0.080	0.390	-1.180	1.180	0.090	0.530

Table B. 197: Matched Droplet Info

B.5.1.2 All Droplets for .LA Image

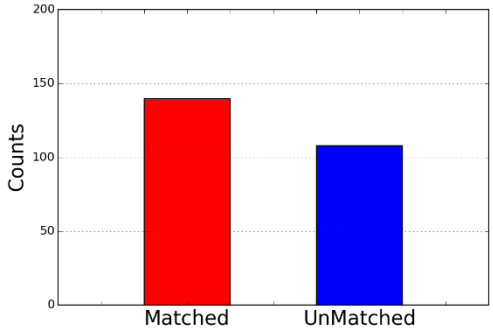


Figure B. 1821: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

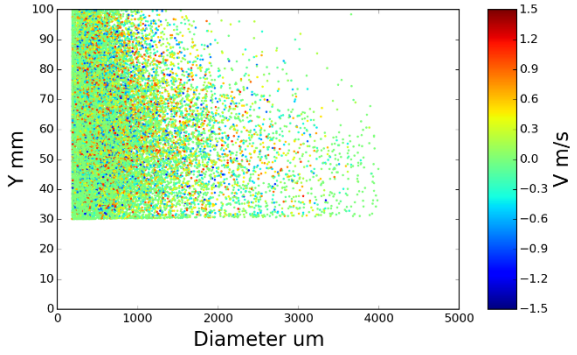


Figure B. 1824: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

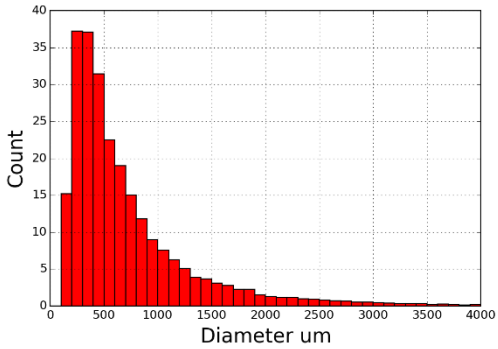


Figure B. 1822: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

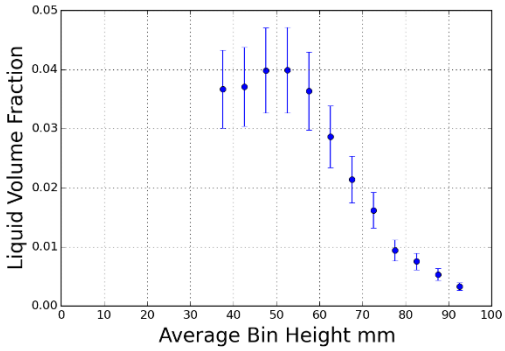


Figure B. 1825: Void Fraction R-123 55F 3500Btu 7500Lb Tri

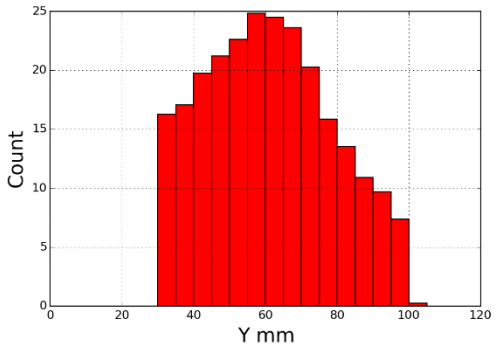


Figure B. 1823: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.1.2 All Droplets for .LB Image

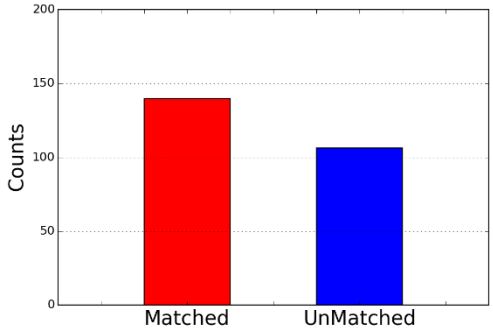


Figure B. 1826: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

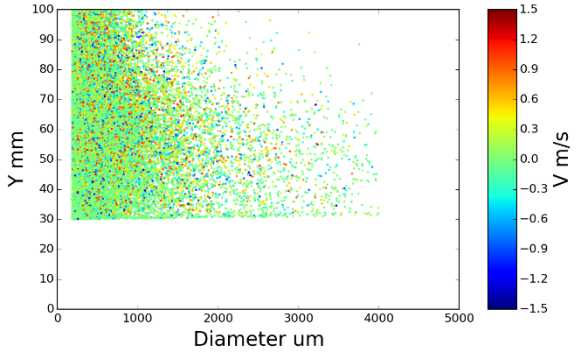


Figure B. 1829: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

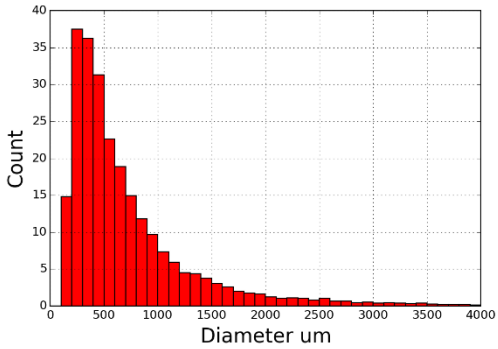


Figure B. 1827: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

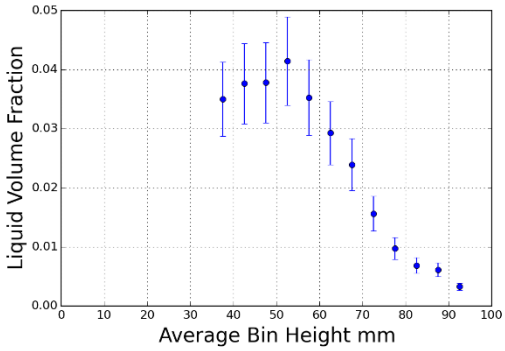


Figure B. 1830: Void Fraction R-123 55F 3500Btu 7500Lb Tri

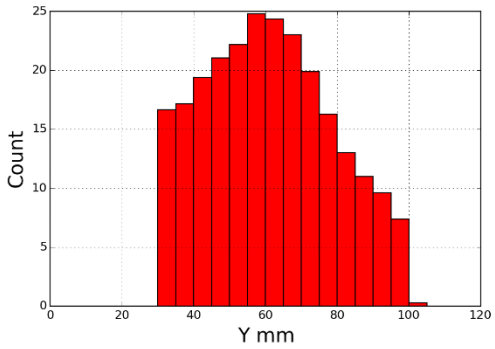


Figure B. 1828: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.1.2 Matched Only Droplets for .LA Image

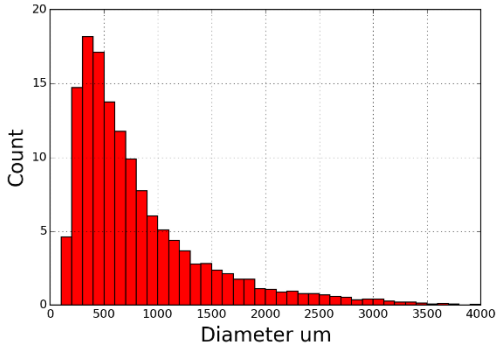


Figure B. 1831: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

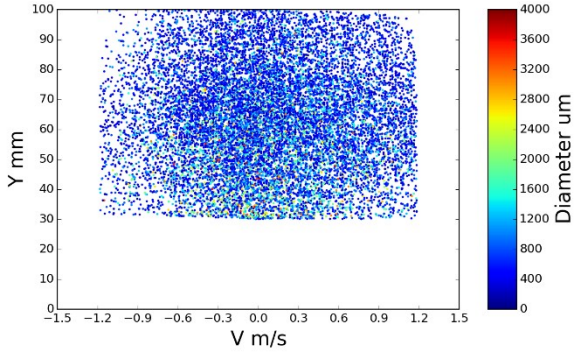


Figure B. 1834: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

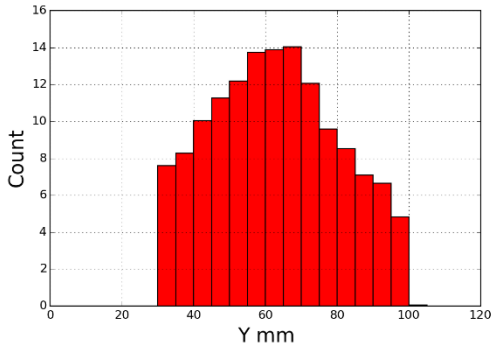


Figure B. 1832: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

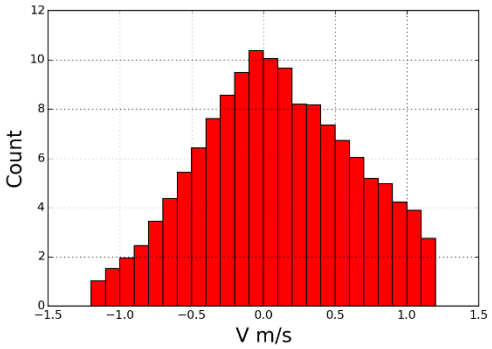


Figure B. 1835: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

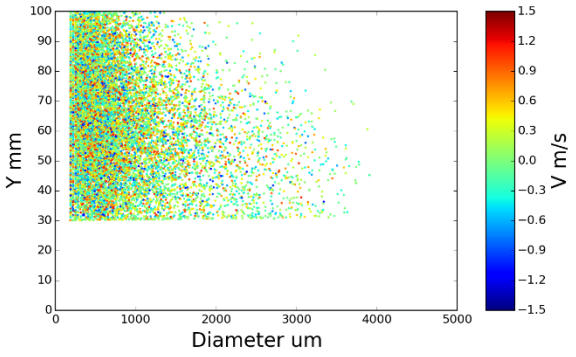


Figure B. 1833: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.1.2 Matched Only Droplets for .LB Image

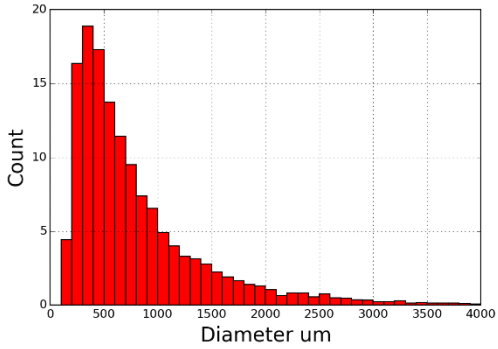


Figure B. 1836: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

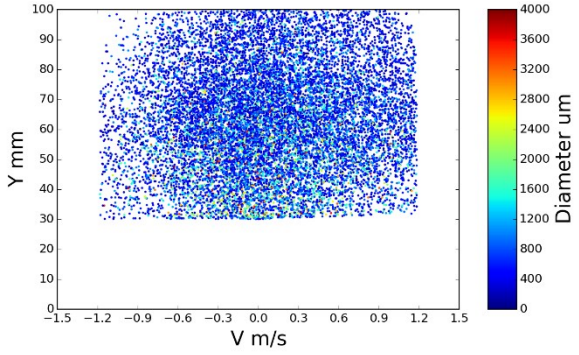


Figure B. 1839: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

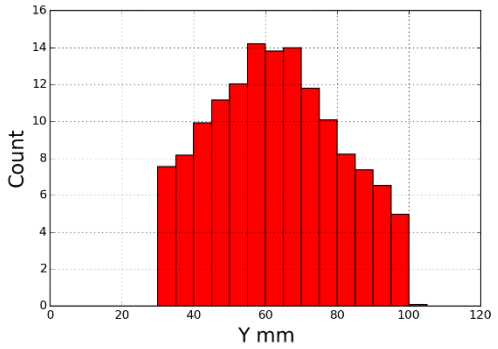


Figure B. 1837: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

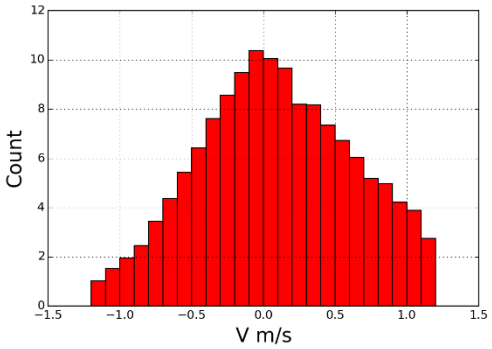


Figure B. 1840: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

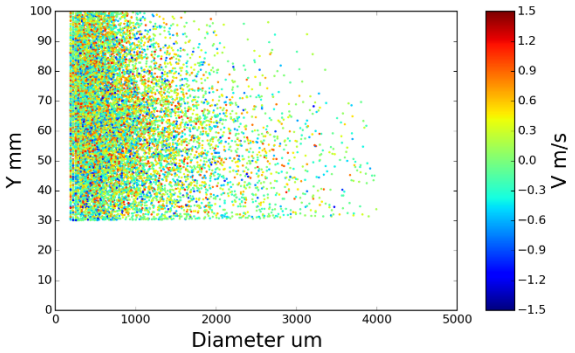


Figure B. 1838: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2 Liquid Level 2

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	18232 / 2.297
Ref Mass Flow (lb/hr) / (kg/s)	831 / 0.105
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	8093 / 10.975
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	3198 / 10.09
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	54.9 / 12.71
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	55.5 / 13.05
Total Bundle Q (Btu/hr) / (kW)	69319 / 20.32
Total Bundle & Preboiler Q (Btu/hr) / (kW)	68603 / 20.11
Top Two Rows HTC Ratio	1.049
Bundle Inlet Quality	-0.13
Bundle Exit Quality	0.97

Table B. 198: Thermal Conditions

B.5.2.1 Lens 100mm Mag 0_29x

B.5.2.1 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	16.17	15.91	75.6	3803	424.9	474.3	75.6	3833	430.2	483.9
40-60mm	28.55	29.22	80.8	3872	338.4	324.9	75.6	3816	335.2	321.8
60-80mm	17.9	18.08	80.8	2760	276.9	249.6	80.8	2755	274.2	250.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	62.62	63.21	75.6	3872	343.2	356.4	75.6	3833	341.7	357.8
			Height A (mm)				Height B (mm)			
Highest Particle			77.0994				77.1121			
Lowest Particle			29.1560				29.1542			

Table B. 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	12.13	80.8	3803	450.9	450.2	80.8	3833	454.7	463.2	-1.050	1.080	-0.040	0.300	-1.010	1.190	0.110	0.410
40-60mm	22.97	85.7	3271	361.0	311.0	75.6	3483	361.4	313.2	-1.030	1.140	-0.070	0.270	-1.150	1.190	0.130	0.410
60-80mm	14.75	80.8	2403	292.6	244.1	80.8	2399	292.1	249.6	-1.140	0.870	-0.100	0.240	-0.960	1.170	0.120	0.380
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	49.85	80.8	3803	362.7	338.9	75.6	3833	363.4	345.2	-1.140	1.140	-0.070	0.270	-1.150	1.190	0.120	0.400

Table B. 200: Matched Droplet Info

B.5.2.1 All Droplets for .LA Image

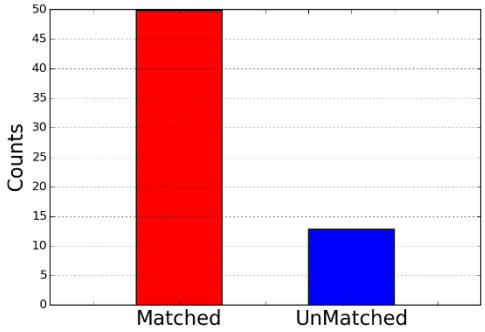


Figure B. 1841: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

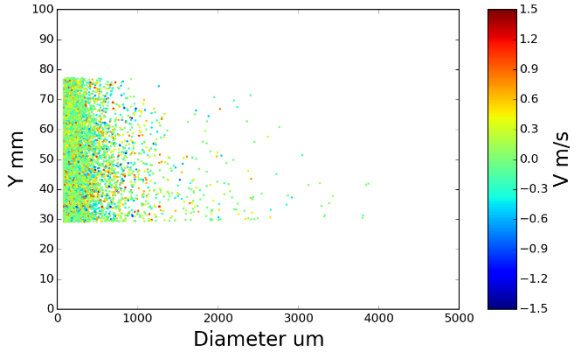


Figure B. 1844: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

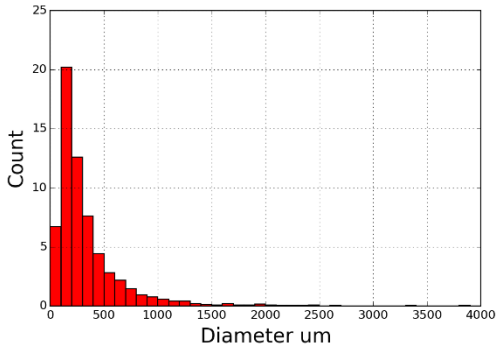


Figure B. 1842: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

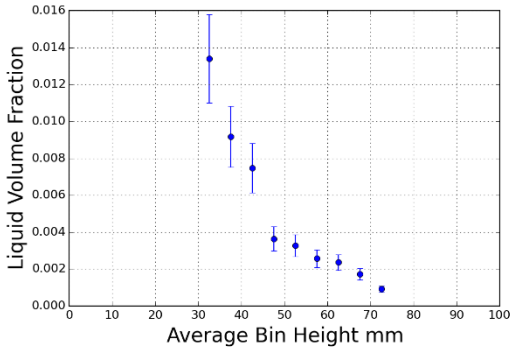


Figure B. 1845: Void Fraction R-123 55F 3500Btu 7500Lb Tri

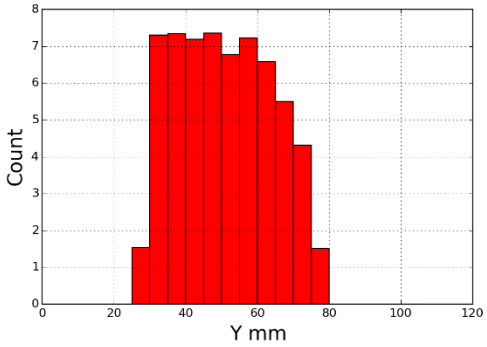


Figure B. 1843: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 All Droplets for .LB Image

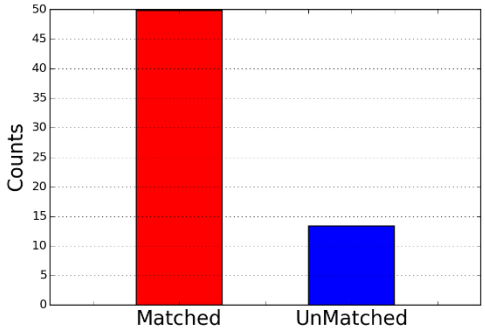


Figure B. 1846: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

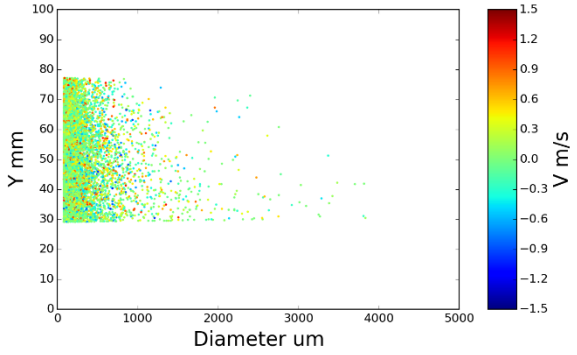


Figure B. 1849: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

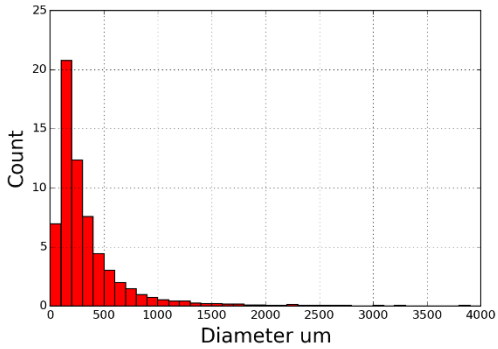


Figure B. 1847: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

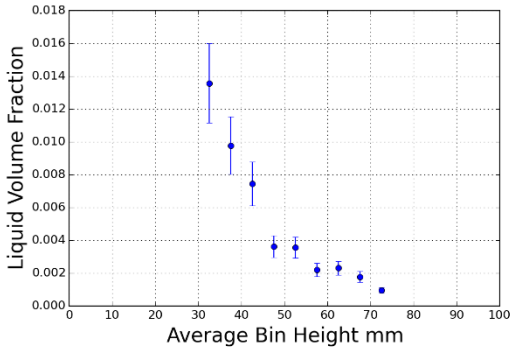


Figure B. 1850: Void Fraction R-123 55F 3500Btu 7500Lb Tri

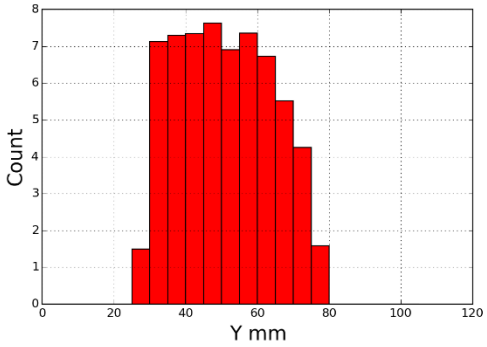


Figure B. 1848: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 Matched Only Droplets for .LA Image

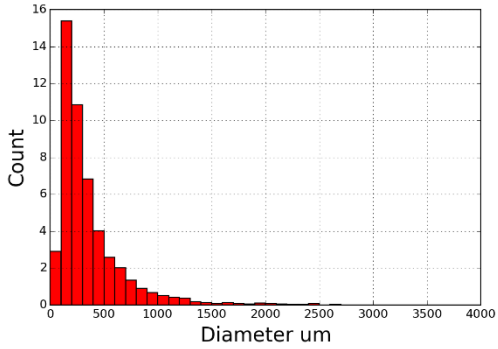


Figure B. 1851: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

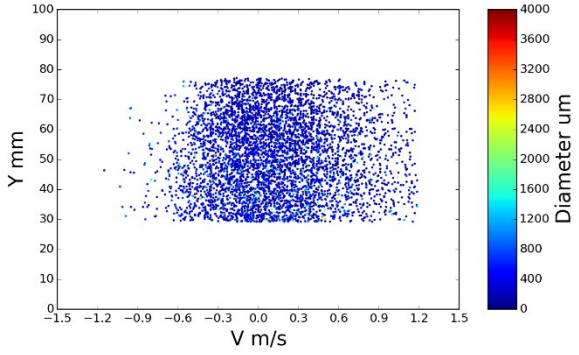


Figure B. 1854: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

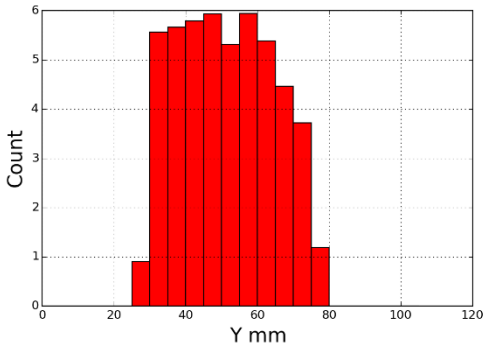


Figure B. 1852: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

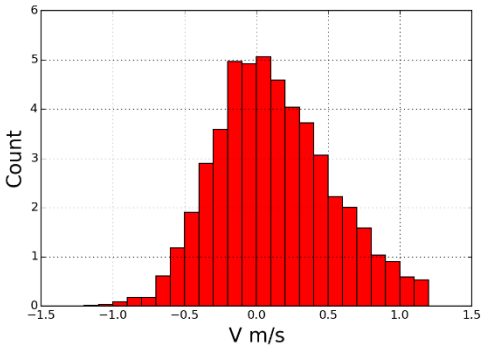


Figure B. 1855: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

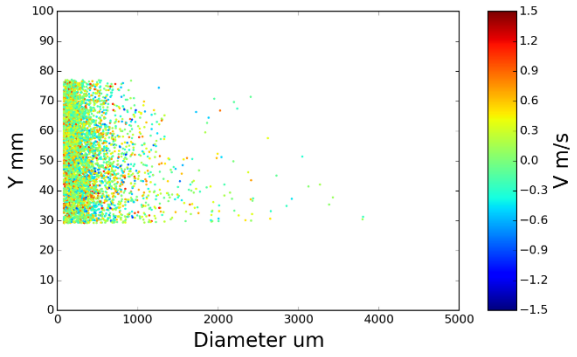


Figure B. 1853: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 Matched Only Droplets for .LB Image

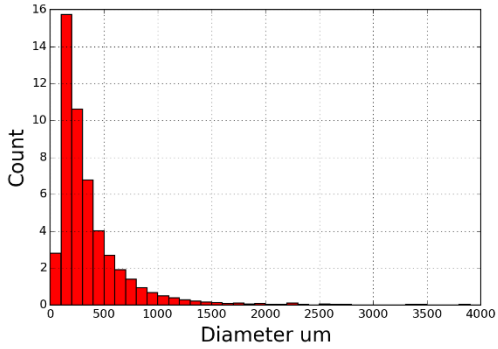


Figure B. 1856: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

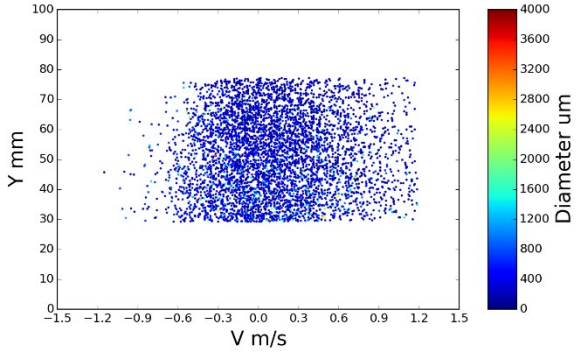


Figure B. 1859: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

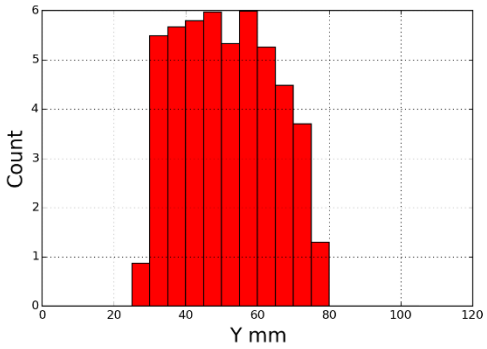


Figure B. 1857: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

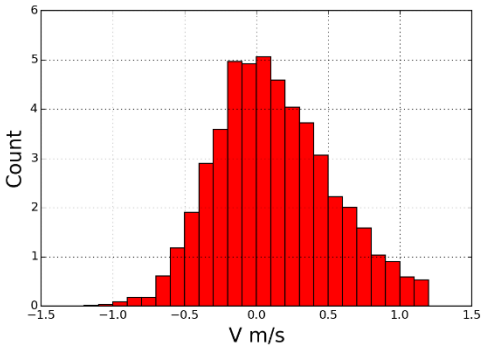


Figure B. 1860: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

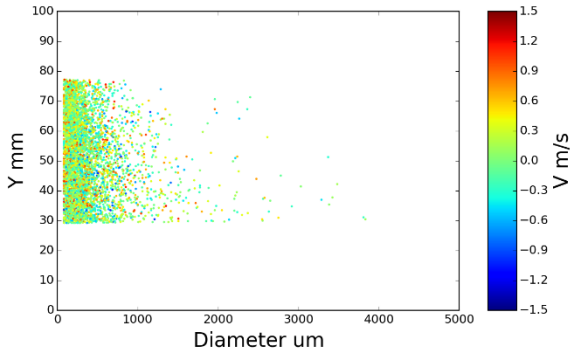


Figure B. 1858: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 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	17.29	17.88	75.6	3741	438.9	464.3	75.6	3569	432.1	465.0
40-60mm	35.09	36.22	80.8	3735	339.4	339.2	75.6	3658	332.7	339.9
60-80mm	19.78	20.06	80.8	3298	274.5	258.3	80.8	3216	270.2	255.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	72.16	74.16	75.6	3741	345.4	359.7	75.6	3658	339.8	359.9
			Height A (mm)				Height B (mm)			
Highest Particle			77.1121				77.0904			
Lowest Particle			29.1560				29.1433			

Table B. 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	12.9	85.7	3114	485.2	458.6	80.8	3220	488.1	473.7	-1.170	1.090	-0.070	0.310	-1.020	1.190	0.060	0.460
40-60mm	27.69	80.8	3236	365.3	336.8	80.8	3262	365.1	345.6	-1.180	1.140	-0.100	0.270	-1.040	1.190	0.030	0.440
60-80mm	15.71	80.8	3298	291.6	258.1	80.8	3216	290.7	257.2	-1.060	1.080	-0.140	0.250	-0.820	1.180	0.020	0.370
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	56.3	80.8	3298	372.2	356.8	80.8	3262	372.5	365.4	-1.180	1.140	-0.110	0.270	-1.040	1.190	0.040	0.420

Table B. 202: Matched Droplet Info

B.5.2.1 All Droplets for .LA Image

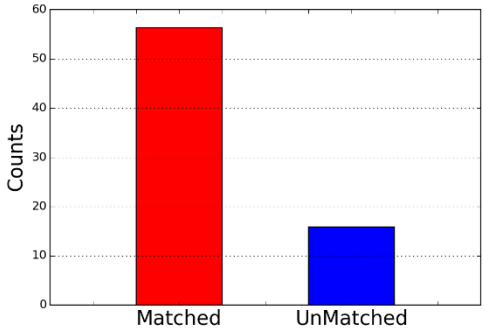


Figure B. 1861: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

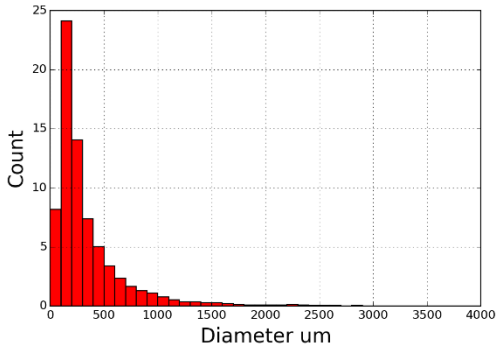


Figure B. 1862: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

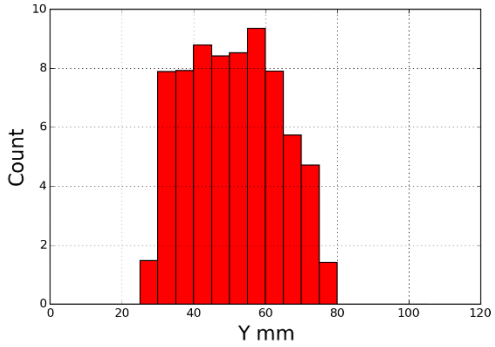


Figure B. 1863: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

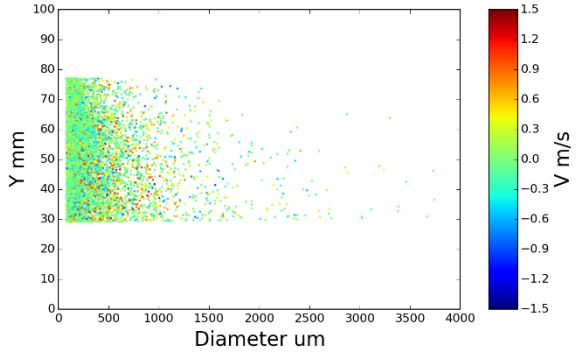


Figure B. 1864: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

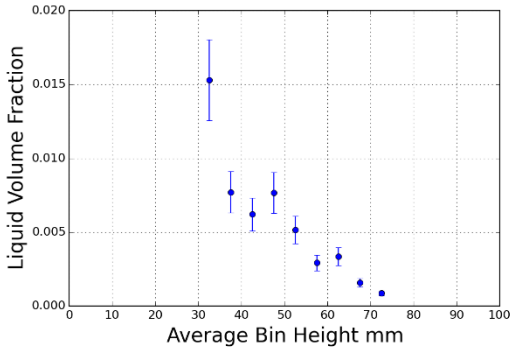


Figure B. 1865: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 All Droplets for .LB Image

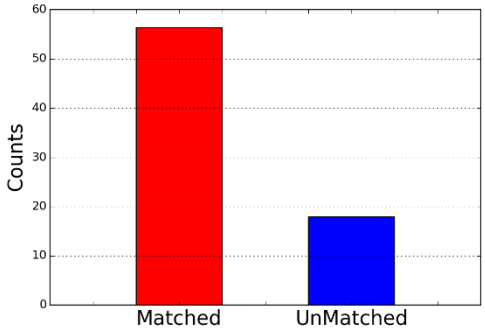


Figure B. 1866: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

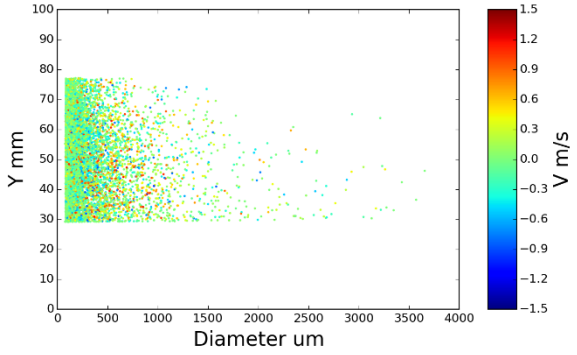


Figure B. 1869: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

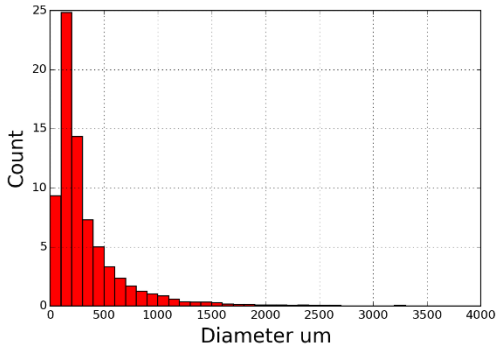


Figure B. 1867: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

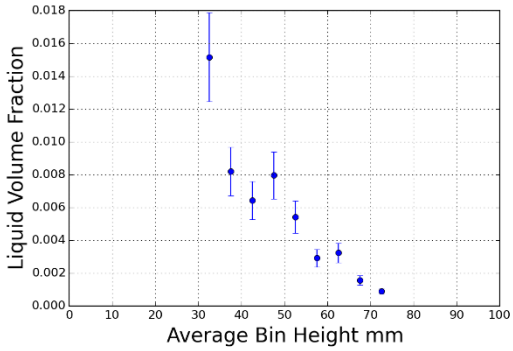


Figure B. 1870: Void Fraction R-123 55F 3500Btu 7500Lb Tri

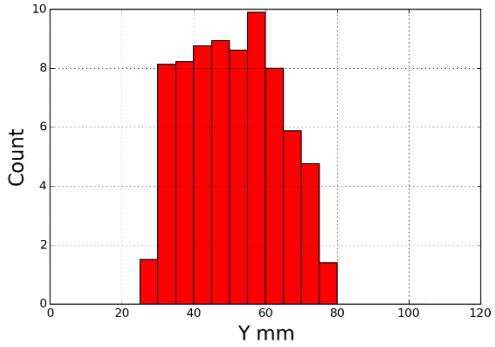


Figure B. 1868: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 Matched Only Droplets for .LA Image

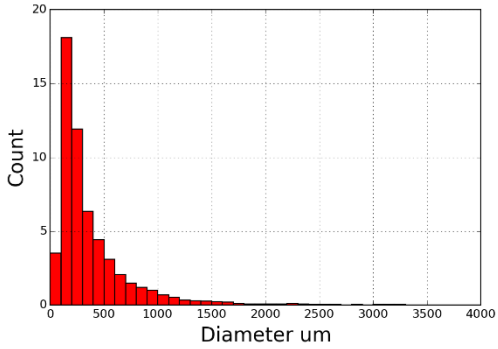


Figure B. 1871: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

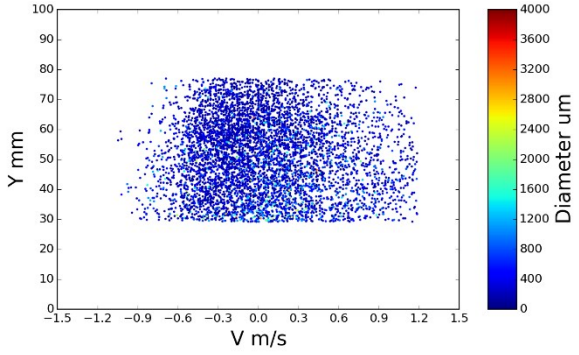


Figure B. 1874: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

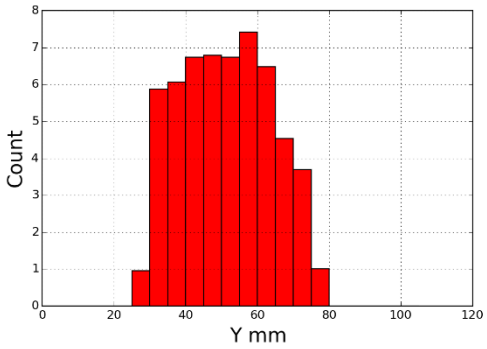


Figure B. 1872: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

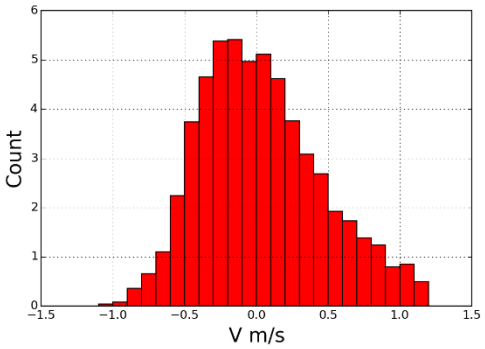


Figure B. 1875: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

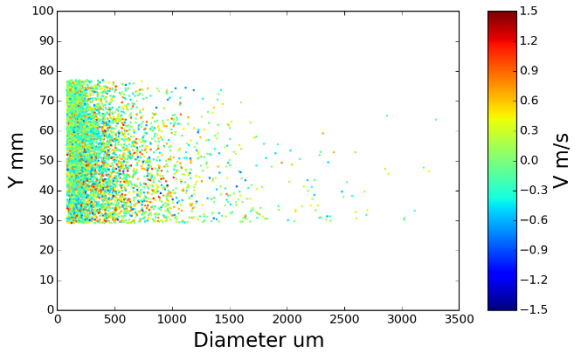


Figure B. 1873: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 Matched Only Droplets for .LB Image

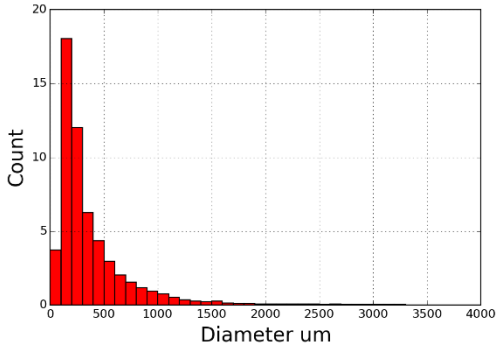


Figure B. 1876: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

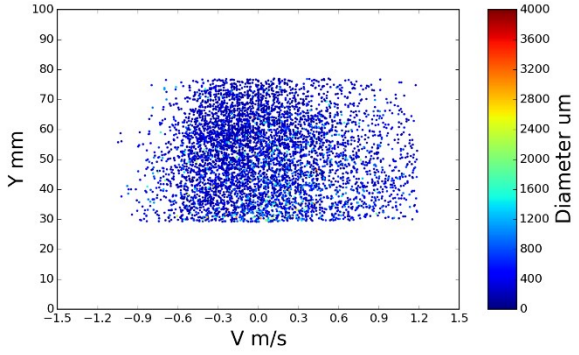


Figure B. 1879: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

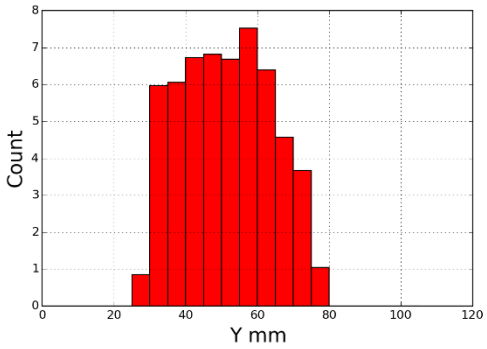


Figure B. 1877: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

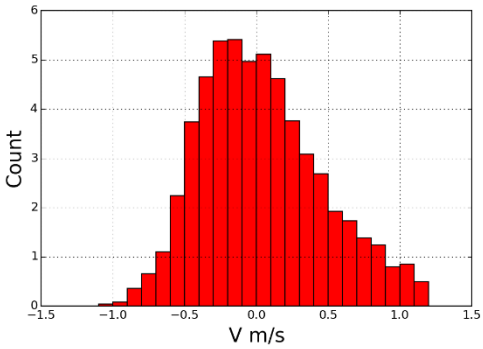


Figure B. 1880: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

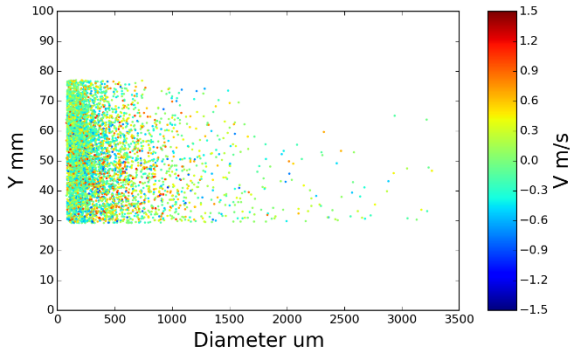


Figure B. 1878: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 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	13.14	13.59	80.8	3777	458.9	521.9	80.8	3761	454.6	516.0
40-60mm	27.67	28.43	80.8	3658	347.2	372.4	75.6	3419	334.3	361.2
60-80mm	14.46	14.76	80.8	3572	287.9	301.2	80.8	3596	282.4	295.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	55.27	56.78	80.8	3777	358.2	402.1	75.6	3761	349.6	394.6
			Height A (mm)				Height B (mm)			
Highest Particle			77.0741				77.0994			
Lowest Particle			29.1560				29.1528			

Table B. 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	9.53	80.8	3514	513.4	512.6	80.8	3726	514.7	521.0	-1.140	1.090	-0.060	0.300	-1.040	1.170	0.010	0.460
40-60mm	20.58	80.8	3407	381.0	366.4	80.8	3419	379.7	371.1	-1.170	1.090	-0.140	0.290	-1.180	1.190	-0.040	0.450
60-80mm	10.93	80.8	3572	316.4	301.0	80.8	3596	312.2	301.1	-1.110	0.890	-0.200	0.280	-1.000	1.160	-0.060	0.390
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	41.04	80.8	3572	394.5	396.8	80.8	3726	392.9	401.7	-1.170	1.090	-0.130	0.290	-1.180	1.190	-0.030	0.440

Table B. 204: Matched Droplet Info

B.5.2.1 All Droplets for .LA Image

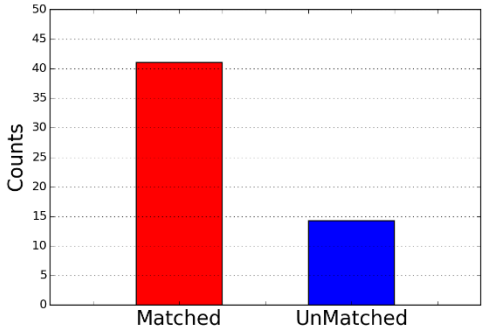


Figure B. 1881: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

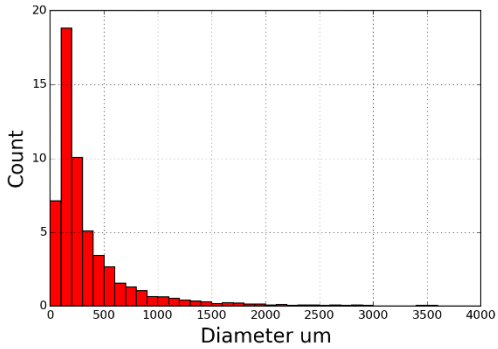


Figure B. 1882: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

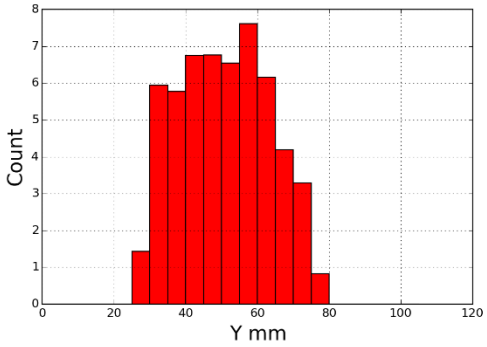


Figure B. 1883: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

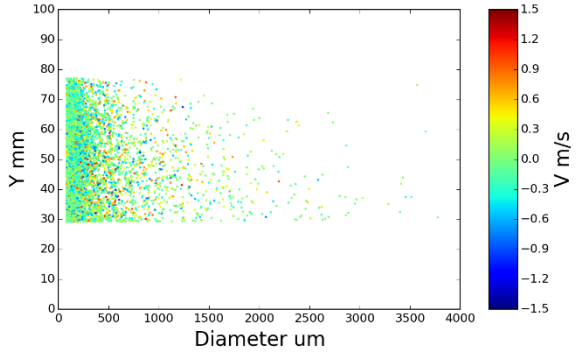


Figure B. 1884: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

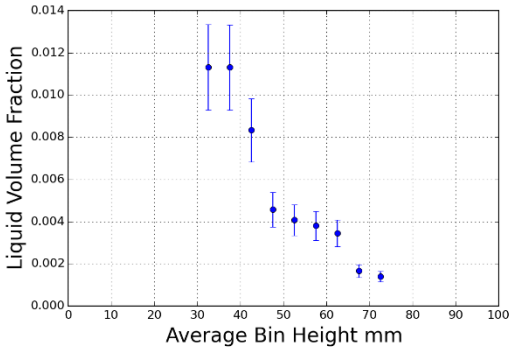


Figure B. 1885: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 All Droplets for .LB Image

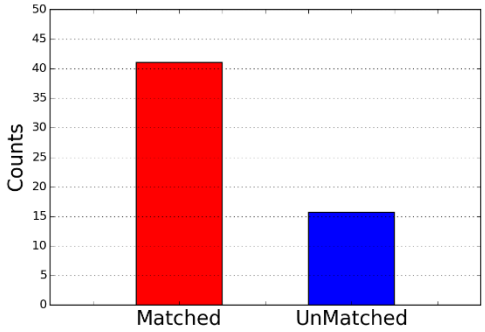


Figure B. 1886: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

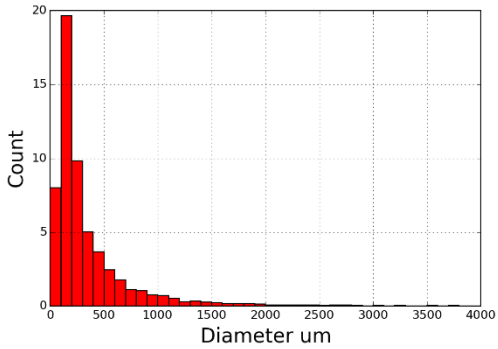


Figure B. 1887: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

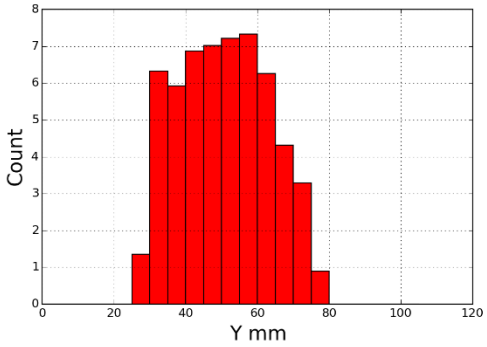


Figure B. 1888: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

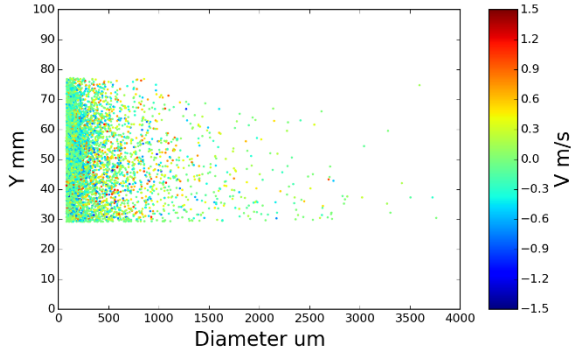


Figure B. 1889: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

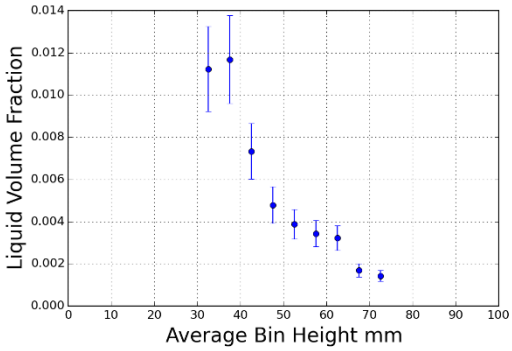


Figure B. 1890: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 Matched Only Droplets for .LA Image

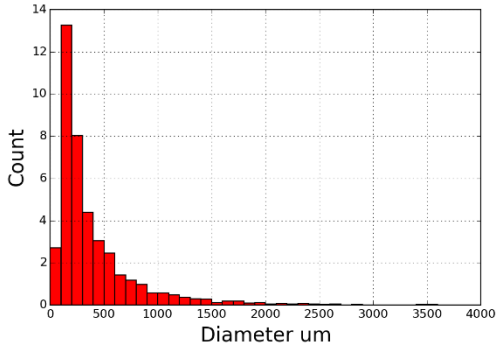


Figure B. 1891: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

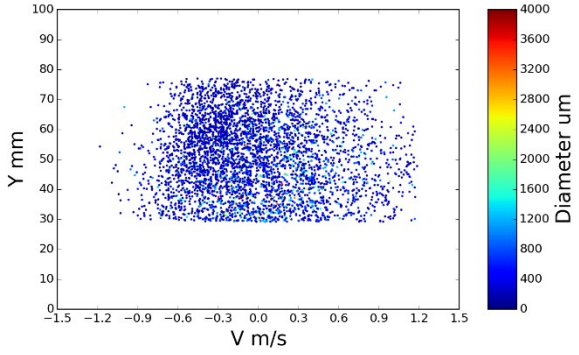


Figure B. 1894: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

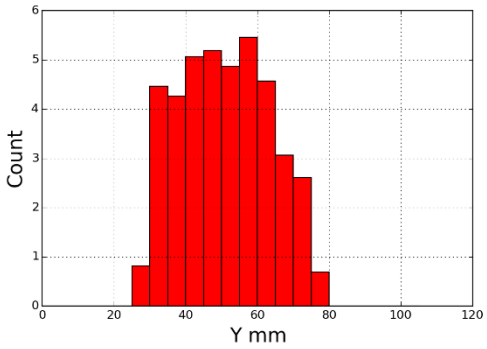


Figure B. 1892: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

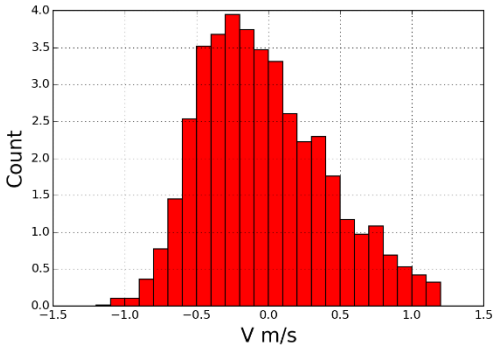


Figure B. 1895: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

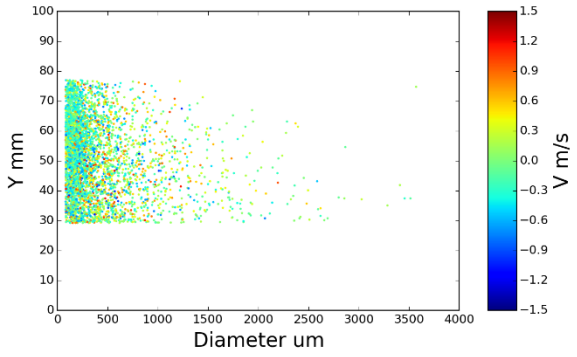


Figure B. 1893: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 Matched Only Droplets for .LB Image

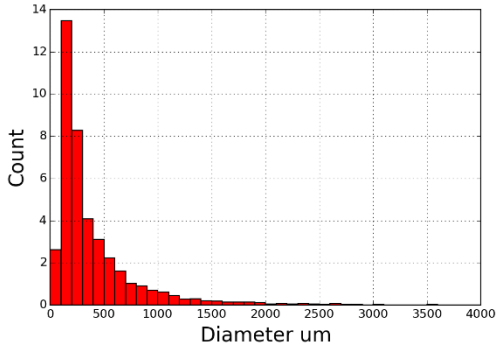


Figure B. 1896: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

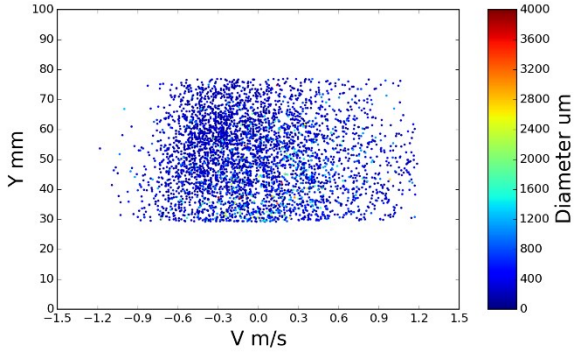


Figure B. 1899: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

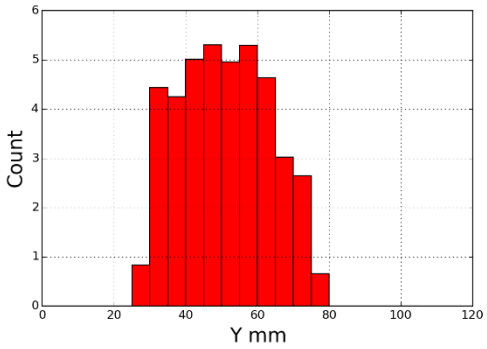


Figure B. 1897: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

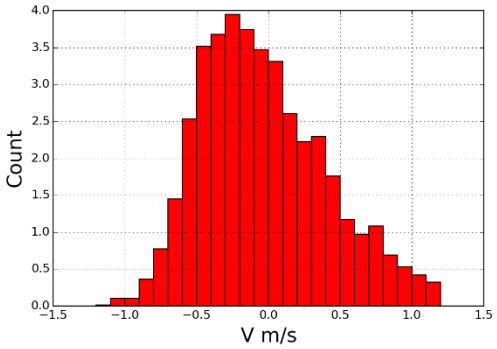


Figure B. 1900: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

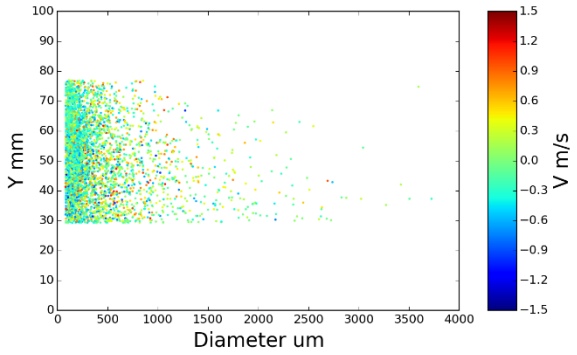


Figure B. 1898: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 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	11.4	11.16	75.6	3929	431.0	522.0	75.6	3819	432.7	520.8
40-60mm	52.18	36.16	75.6	3870	229.7	310.6	75.6	3622	254.7	334.3
60-80mm	40.03	26.88	75.6	3465	178.7	202.3	75.6	2799	185.0	212.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	103.62	74.2	75.6	3929	232.2	316.0	75.6	3819	256.2	343.6
			Height A (mm)				Height B (mm)			
Highest Particle			77.0741				77.0807			
Lowest Particle			29.1560				29.1560			

Table B. 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	5.11	80.8	3610	558.0	543.4	80.8	3819	545.2	560.4	-1.170	1.160	-0.110	0.370	-1.180	1.190	0.010	0.510
40-60mm	12.3	80.8	3171	373.3	381.6	80.8	3283	367.2	386.8	-1.190	1.180	-0.130	0.460	-1.190	1.190	-0.010	0.540
60-80mm	7.61	80.8	2808	275.5	272.6	80.8	2799	266.6	268.7	-1.190	1.190	-0.180	0.500	-1.190	1.190	-0.090	0.550
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	25.02	80.8	3610	381.3	405.4	80.8	3819	373.6	412.2	-1.190	1.190	-0.140	0.450	-1.190	1.190	-0.030	0.540

Table B. 206: Matched Droplet Info

B.5.2.1 All Droplets for .LA Image

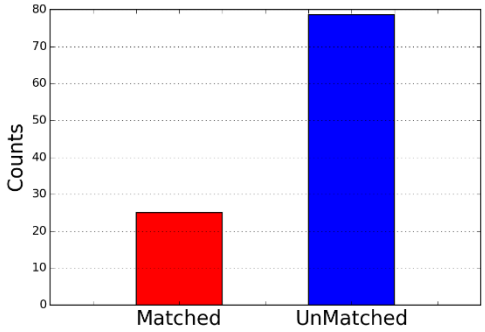


Figure B. 1901: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

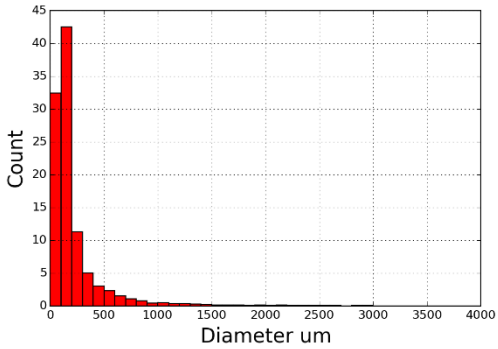


Figure B. 1902: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

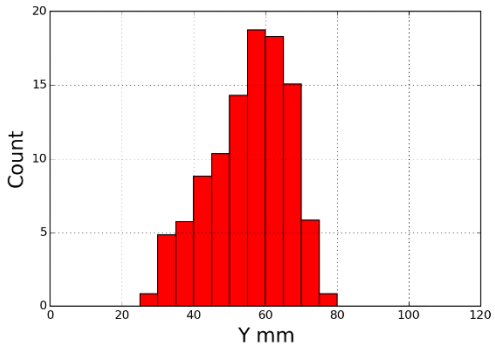


Figure B. 1903: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

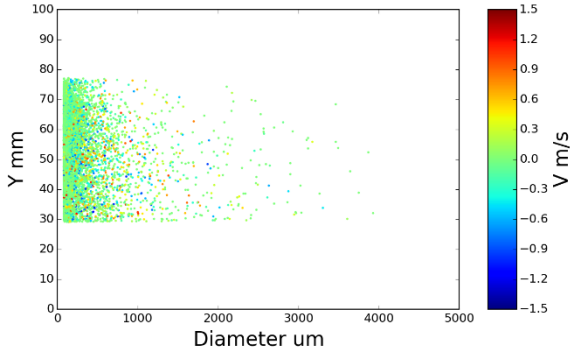


Figure B. 1904: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

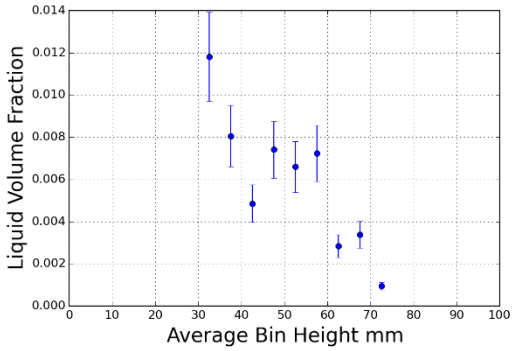


Figure B. 1905: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 All Droplets for .LB Image

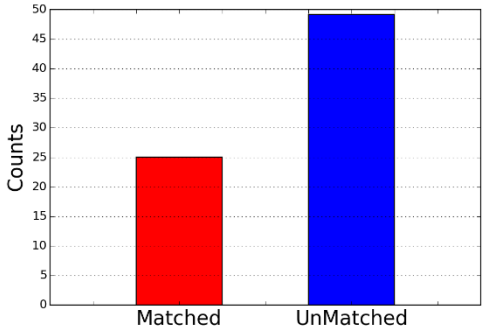


Figure B. 1906: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

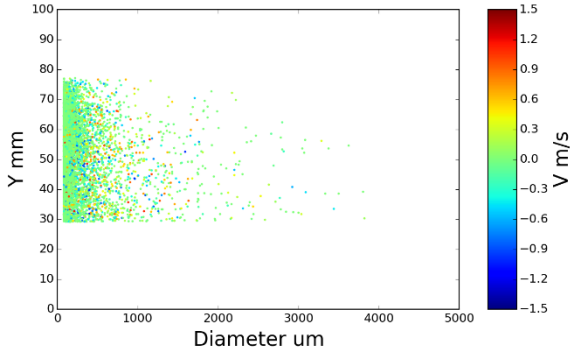


Figure B. 1909: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

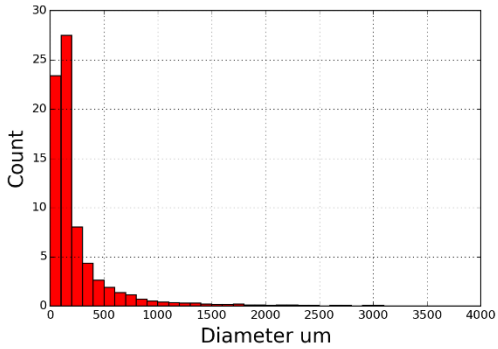


Figure B. 1907: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

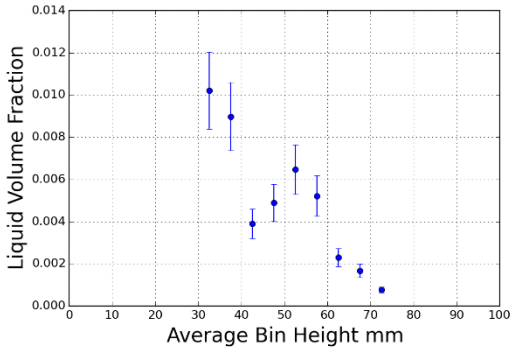


Figure B. 1910: Void Fraction R-123 55F 3500Btu 7500Lb Tri

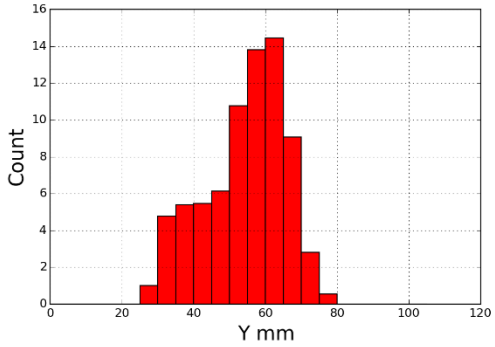


Figure B. 1908: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 Matched Only Droplets for .LA Image

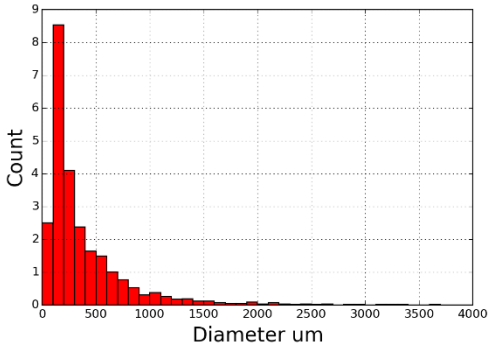


Figure B. 1911: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

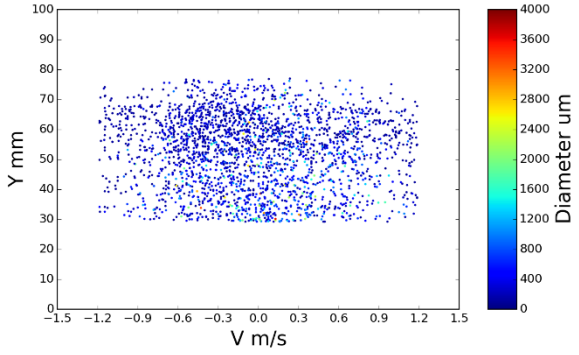


Figure B. 1914: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

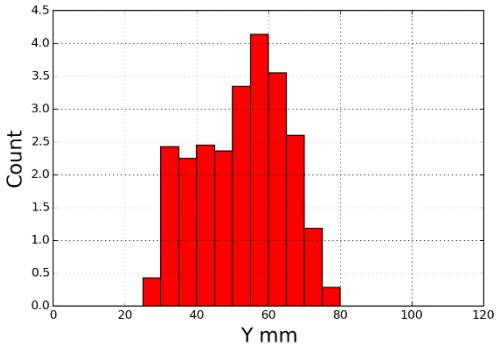


Figure B. 1912: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

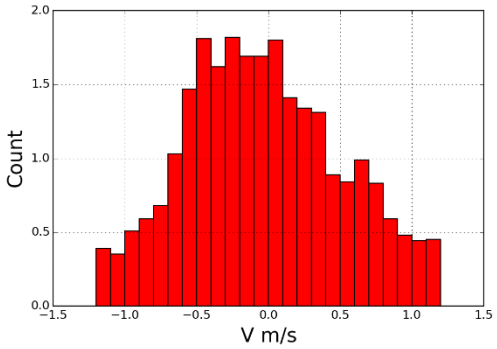


Figure B. 1915: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

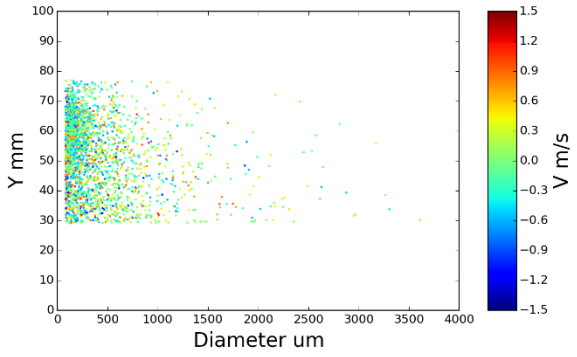


Figure B. 1913: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 Matched Only Droplets for .LB Image

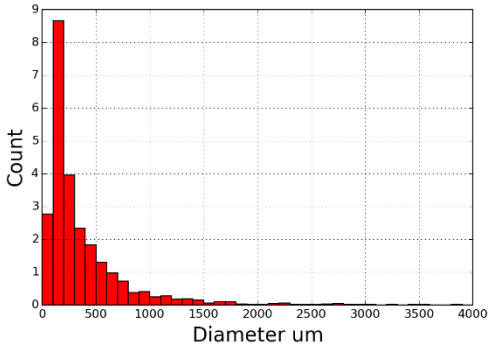


Figure B. 1916: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

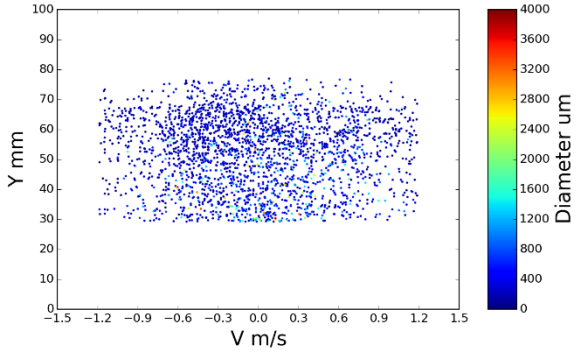


Figure B. 1919: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

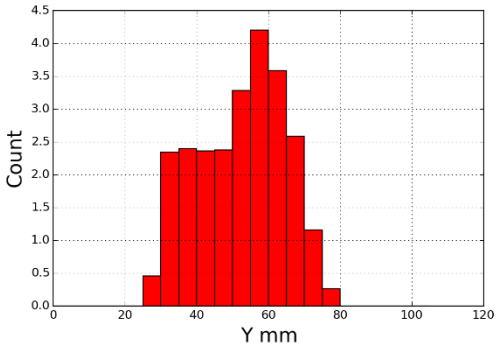


Figure B. 1917: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

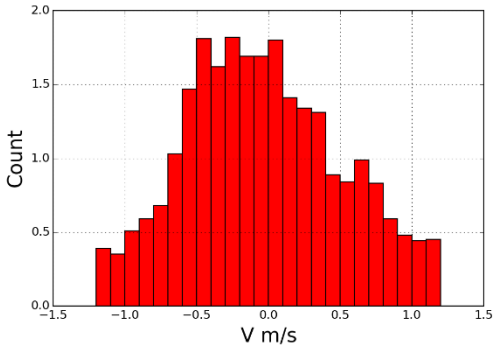


Figure B. 1920: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

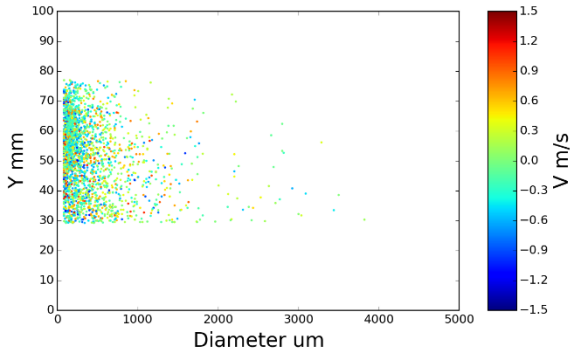


Figure B. 1918: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 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	7.63	6.39	75.6	3506	405.1	553.0	75.6	3767	473.2	626.4
40-60mm	47.47	12.92	75.6	3772	207.2	279.3	80.8	3665	355.3	422.2
60-80mm	28.48	6.55	75.6	3185	174.4	203.7	75.6	1823	280.7	259.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	83.58	25.86	75.6	3772	214.1	300.4	75.6	3767	365.5	455.9
			Height A (mm)				Height B (mm)			
Highest Particle			76.9996				77.0532			
Lowest Particle			29.1560				29.1560			

Table B. 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	2.8	80.8	3467	606.1	621.3	85.7	3693	606.1	652.2	-1.110	1.150	-0.050	0.360	-1.190	1.170	-0.010	0.440
40-60mm	5.61	80.8	2814	432.0	391.2	80.8	2982	424.0	399.8	-1.150	1.170	-0.110	0.350	-1.180	1.190	-0.040	0.450
60-80mm	2.9	85.7	2072	352.9	302.6	75.6	1823	341.5	290.5	-1.080	1.080	-0.150	0.280	-1.100	1.070	-0.060	0.410
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	11.31	80.8	3467	454.9	451.1	75.6	3693	447.7	464.0	-1.150	1.170	-0.100	0.340	-1.190	1.190	-0.040	0.440

Table B. 208: Matched Droplet Info

B.5.2.1 All Droplets for .LA Image

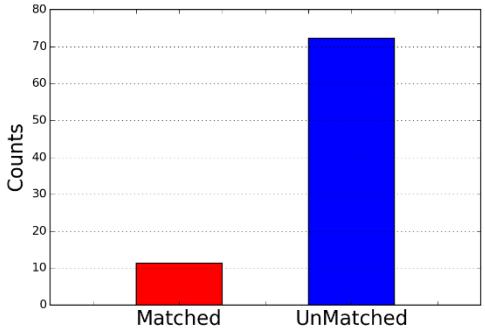


Figure B. 1921: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

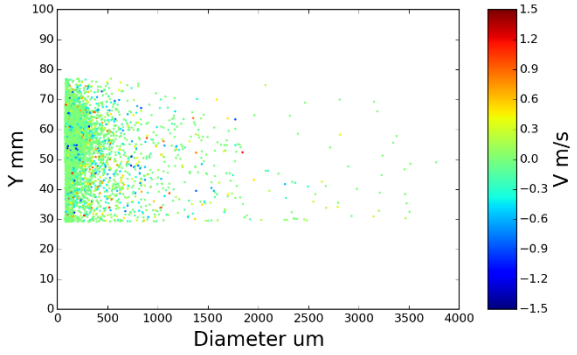


Figure B. 1924: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

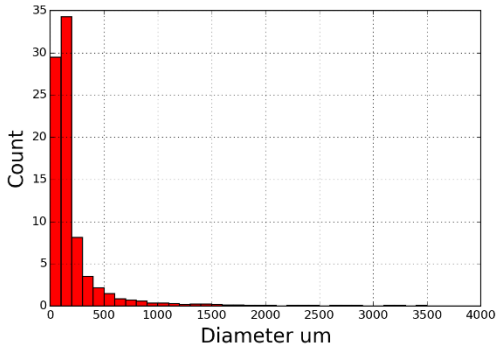


Figure B. 1922: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

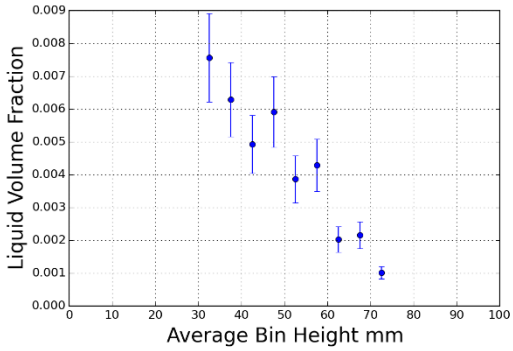


Figure B. 1925: Void Fraction R-123 55F 3500Btu 7500Lb Tri

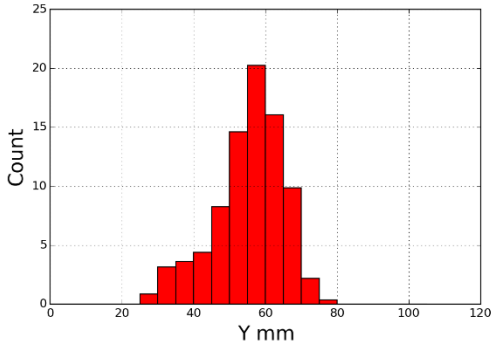


Figure B. 1923: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 All Droplets for .LB Image

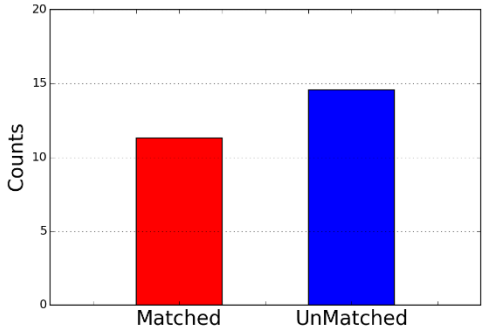


Figure B. 1926: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

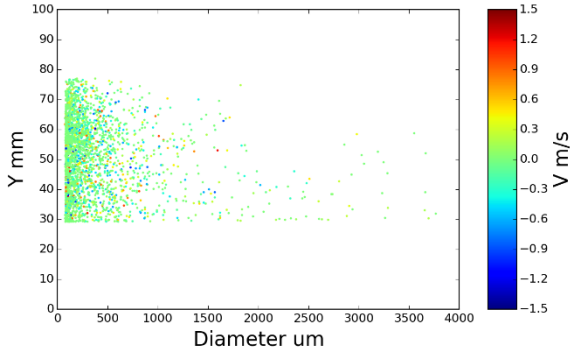


Figure B. 1929: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

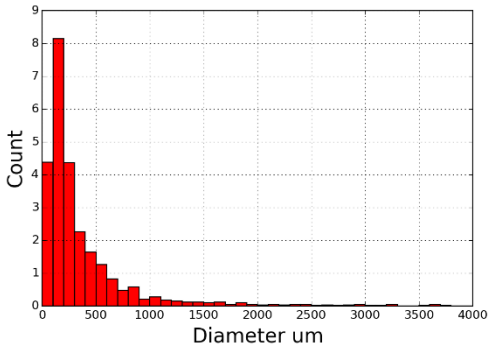


Figure B. 1927: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

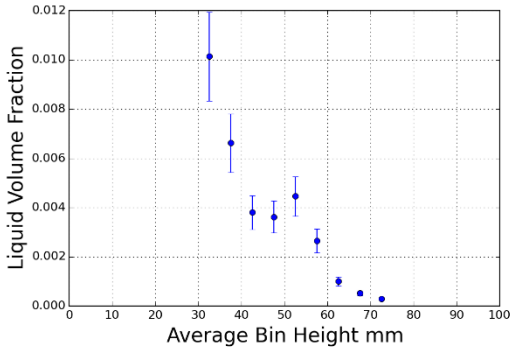


Figure B. 1930: Void Fraction R-123 55F 3500Btu 7500Lb Tri

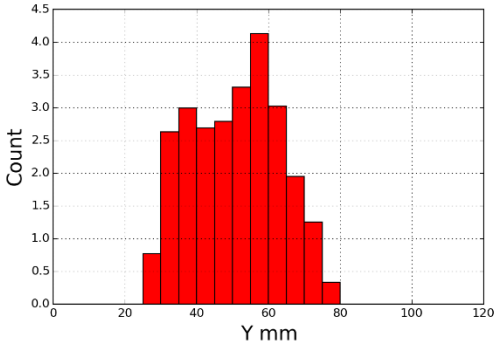


Figure B. 1928: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 Matched Only Droplets for .LA Image

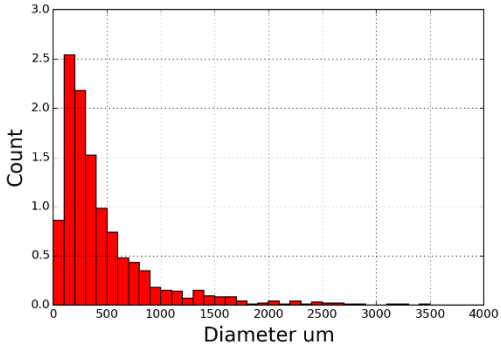


Figure B. 1931: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

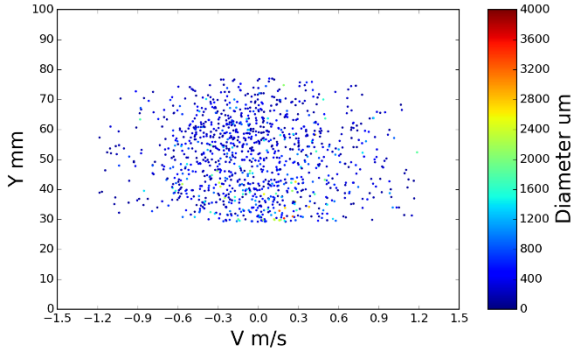


Figure B. 1934: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

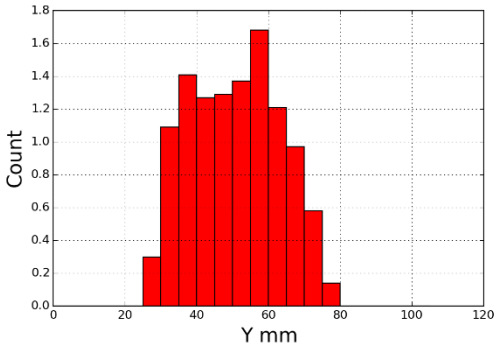


Figure B. 1932: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

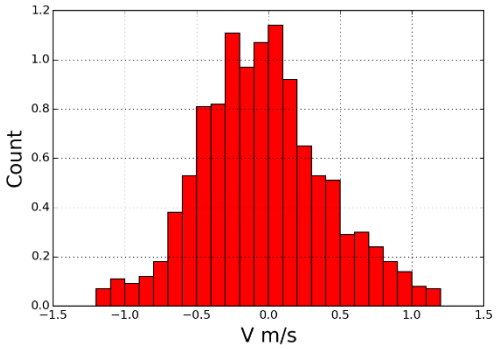


Figure B. 1935: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

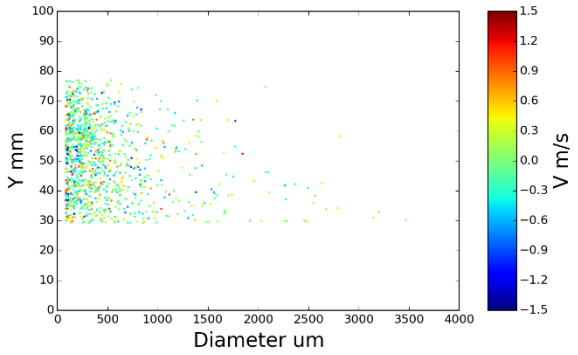


Figure B. 1933: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.1 Matched Only Droplets for .LB Image

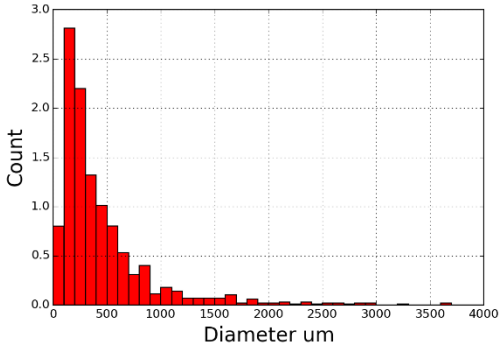


Figure B. 1936: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

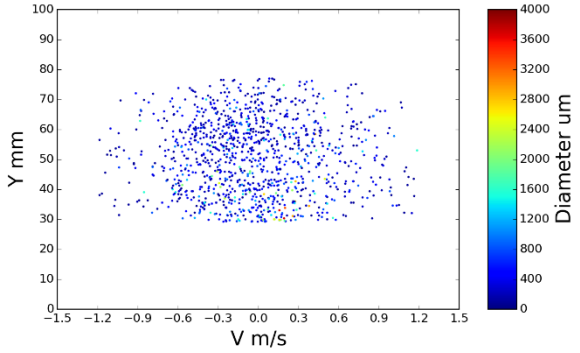


Figure B. 1939: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

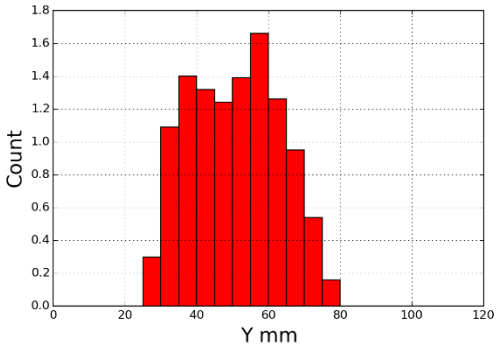


Figure B. 1937: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

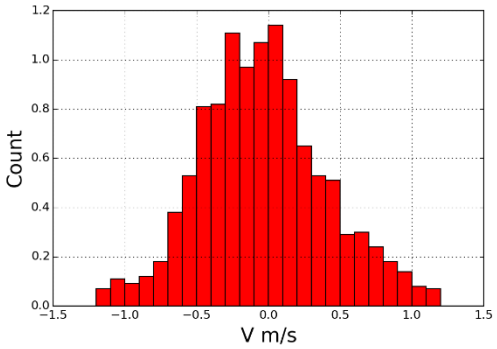


Figure B. 1940: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

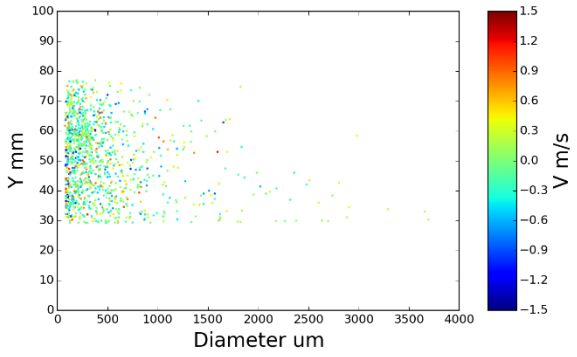


Figure B. 1938: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 Lens 50mm Mag 0_13x

B.5.2.2 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	21.36	21.37	182.2	3873	636.4	535.4	182.2	3834	639.5	543.4
40-60mm	18.37	18.04	182.2	3846	499.4	383.6	170.4	3667	500.7	384.3
60-80mm	11.23	11.21	182.2	3325	423.8	279.6	182.2	3224	426.6	276.6
80-100mm	2.96	2.87	193.2	1567	370.9	198.7	193.2	1555	369.6	199.5
All	53.97	53.53	182.2	3873	530.8	436.5	170.4	3834	533.5	441.0
			Height A (mm)				Height B (mm)			
Highest Particle			100.1183				100.1469			
Lowest Particle			20.1764				20.1721			

Table B. 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	16.19	182.2	3873	655.5	516.7	182.2	3834	657.5	525.0	-1.060	1.130	-0.040	0.310	-1.140	1.180	0.080	0.390
40-60mm	14.78	193.2	3530	521.8	374.9	182.2	3667	524.2	378.9	-1.160	1.140	-0.070	0.290	-1.090	1.180	0.170	0.410
60-80mm	8.95	182.2	2827	448.4	266.0	193.2	2829	442.8	260.3	-1.130	0.960	-0.090	0.270	-1.100	1.180	0.120	0.430
80-100mm	2.39	193.2	1567	393.4	210.6	193.2	1555	391.1	208.9	-0.890	0.500	-0.140	0.240	-0.850	1.100	0.050	0.340
All	42.34	182.2	3873	550.0	420.4	182.2	3834	549.6	424.4	-1.160	1.140	-0.070	0.290	-1.140	1.180	0.120	0.410

Table B. 210: Matched Droplet Info

B.5.2.2 All Droplets for .LA Image

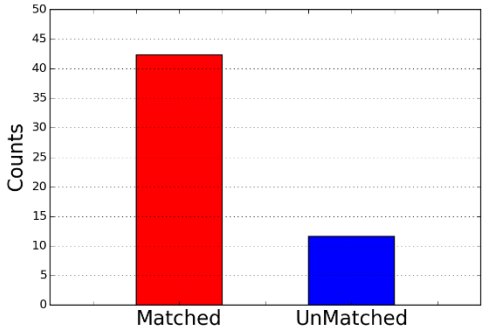


Figure B. 1941: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

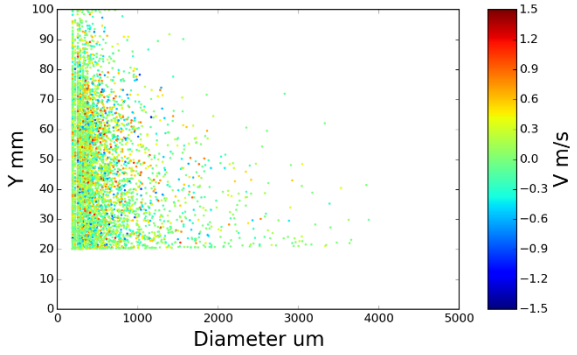


Figure B. 1944: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

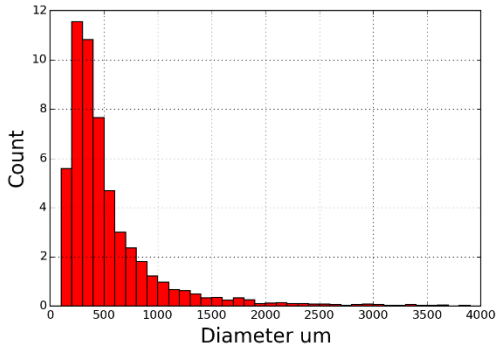


Figure B. 1942: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

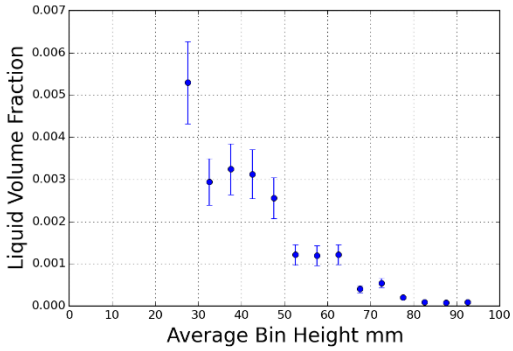


Figure B. 1945: Void Fraction R-123 55F 3500Btu 7500Lb Tri

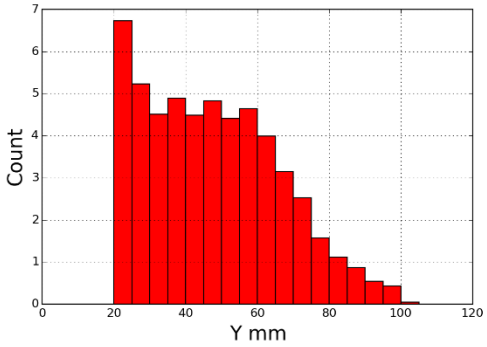


Figure B. 1943: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 All Droplets for .LB Image

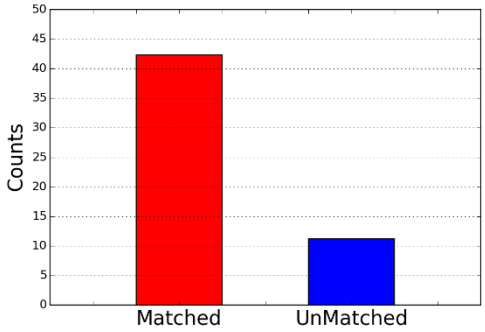


Figure B. 1946: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

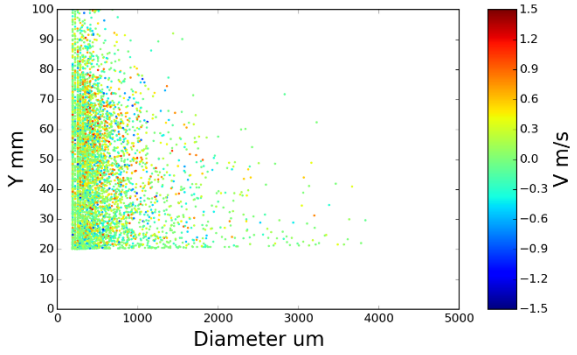


Figure B. 1949: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

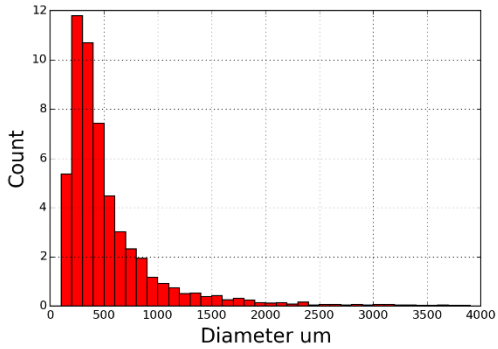


Figure B. 1947: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

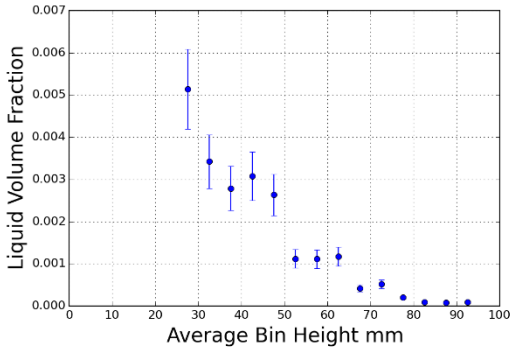


Figure B. 1950: Void Fraction R-123 55F 3500Btu 7500Lb Tri

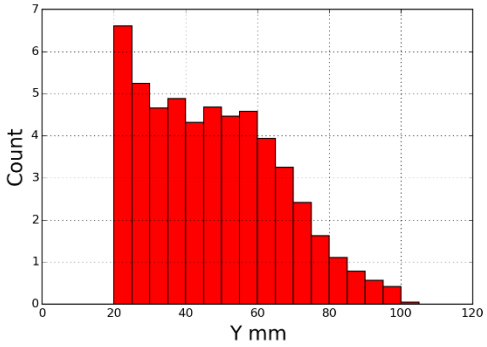


Figure B. 1948: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 Matched Only Droplets for .LA Image

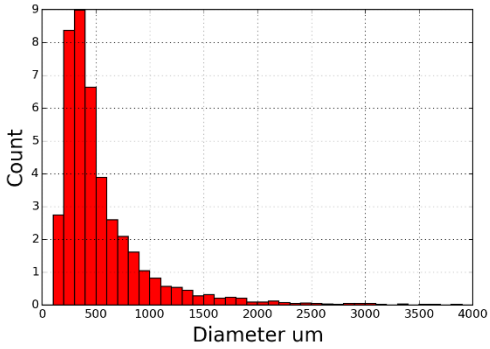


Figure B. 1951: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

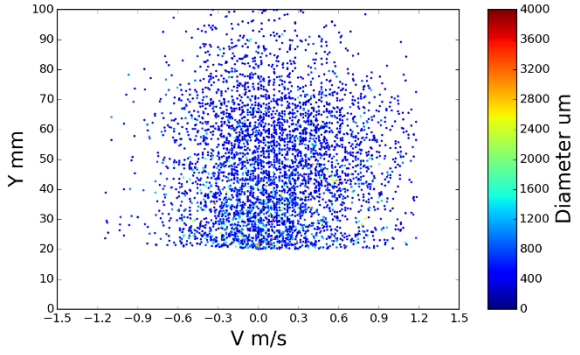


Figure B. 1954: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

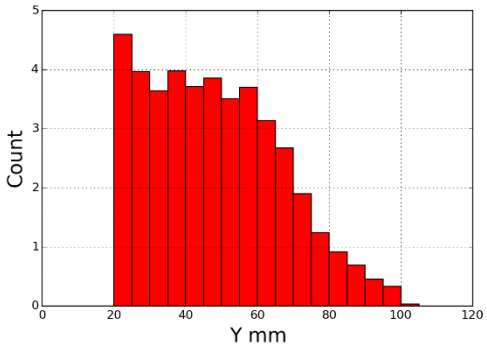


Figure B. 1952: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

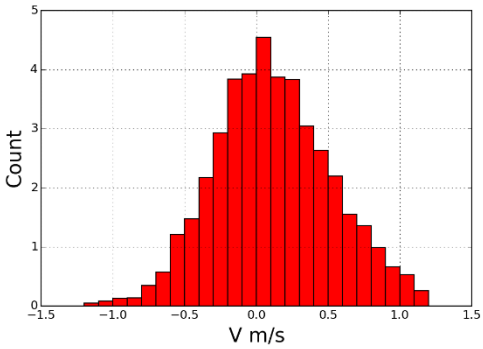


Figure B. 1955: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

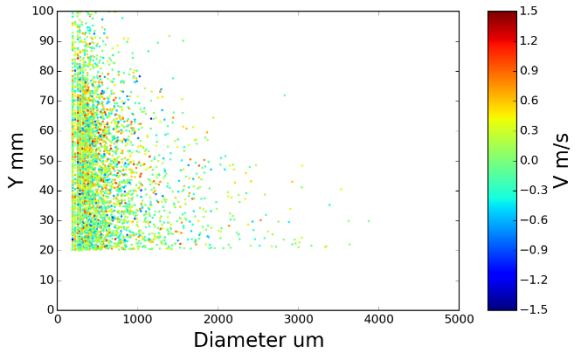


Figure B. 1953: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 Matched Only Droplets for .LB Image

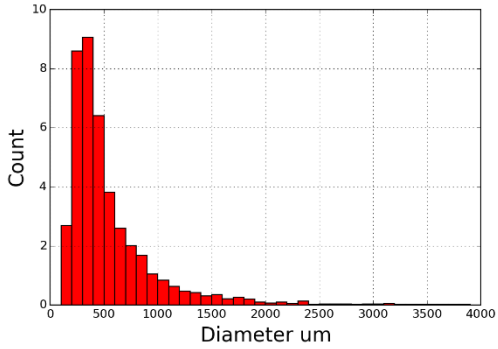


Figure B. 1956: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

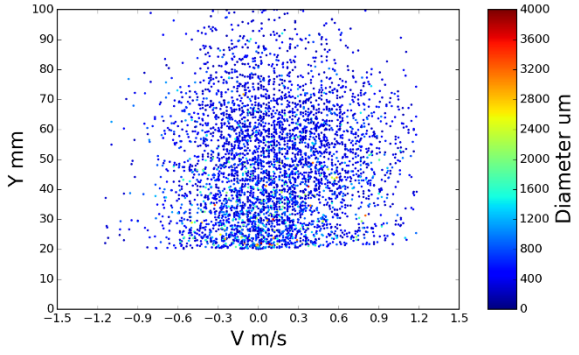


Figure B. 1959: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

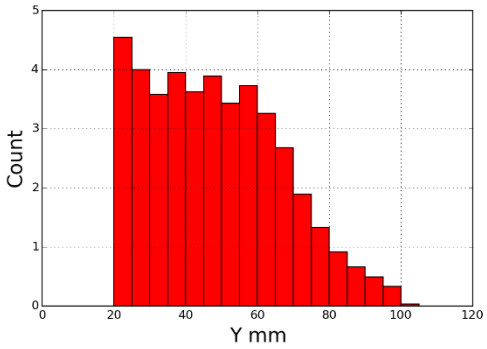


Figure B. 1957: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

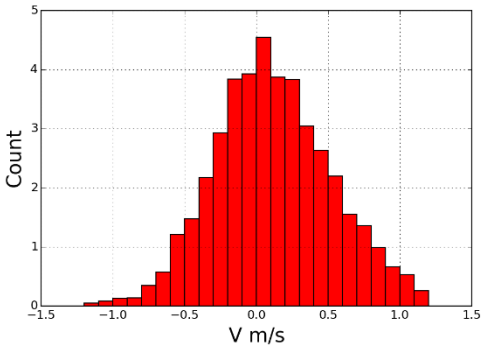


Figure B. 1960: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

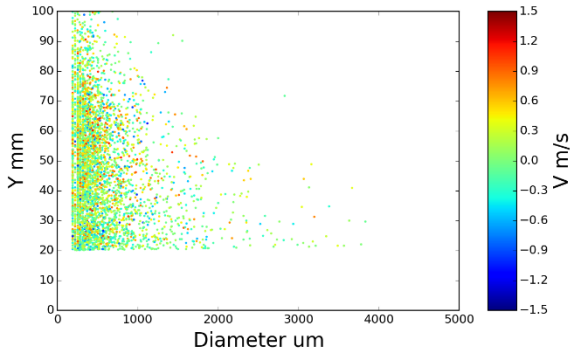


Figure B. 1958: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 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	25.55	25.69	182.2	3960	625.9	546.4	182.2	3905	629.8	561.6
40-60mm	22.02	21.73	182.2	3562	507.5	378.6	182.2	3572	508.5	380.1
60-80mm	12.02	12.0	182.2	2823	428.5	260.4	182.2	2821	427.7	259.7
80-100mm	2.25	2.33	193.2	1660	402.9	224.4	193.2	1623	396.6	225.9
All	61.87	61.78	182.2	3960	537.1	442.6	182.2	3905	538.9	451.6
			Height A (mm)				Height B (mm)			
Highest Particle			100.1469				100.0925			
Lowest Particle			20.1778				20.1778			

Table B. 211: 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	18.97	182.2	3917	676.8	553.1	182.2	3905	677.3	564.6	-1.140	1.160	-0.040	0.330	-1.120	1.180	0.060	0.430
40-60mm	17.21	182.2	3544	545.6	382.7	193.2	3572	542.2	385.8	-1.140	1.150	-0.090	0.300	-1.100	1.180	0.040	0.450
60-80mm	9.53	193.2	2823	461.7	266.1	193.2	2821	456.7	265.4	-1.140	1.080	-0.140	0.280	-1.020	1.170	0.040	0.450
80-100mm	1.75	193.2	1660	434.5	231.4	193.2	1623	431.1	231.9	-1.030	0.550	-0.160	0.270	-0.720	1.160	-0.010	0.410
All	47.48	182.2	3917	577.0	446.4	182.2	3905	574.5	453.0	-1.140	1.160	-0.090	0.310	-1.120	1.180	0.040	0.440

Table B. 212: Matched Droplet Info

B.5.2.2 All Droplets for .LA Image

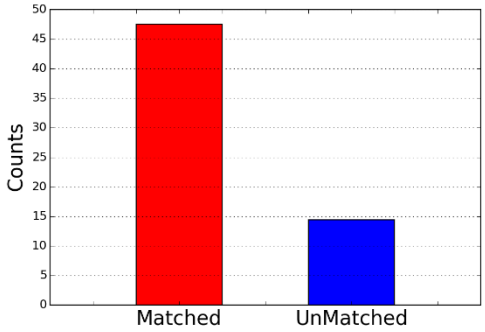


Figure B. 1961: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

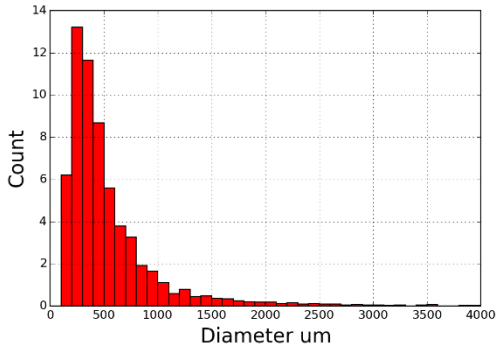


Figure B. 1962: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

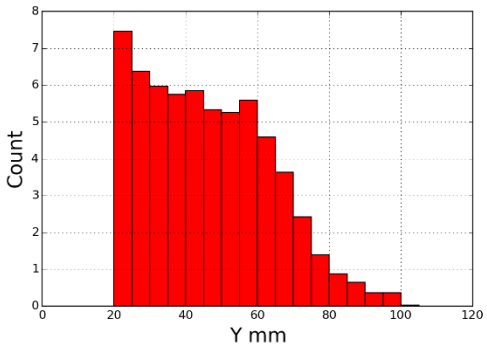


Figure B. 1963: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

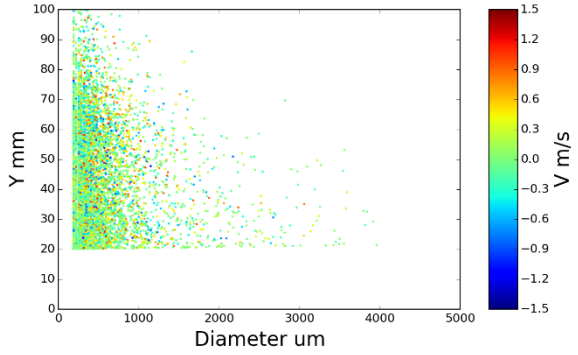


Figure B. 1964: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

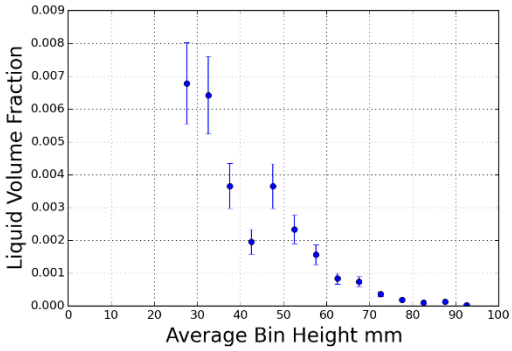


Figure B. 1965: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 All Droplets for .LB Image

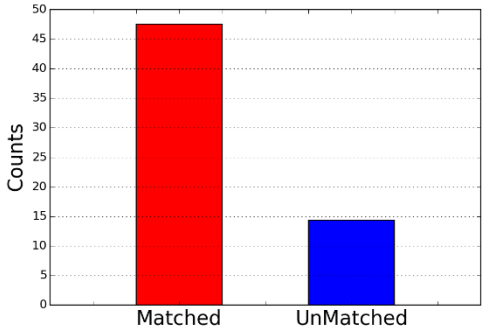


Figure B. 1966: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

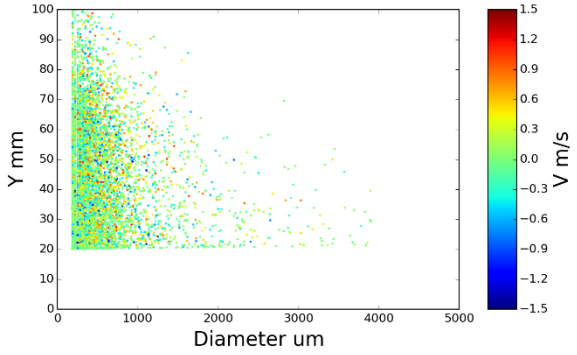


Figure B. 1969: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

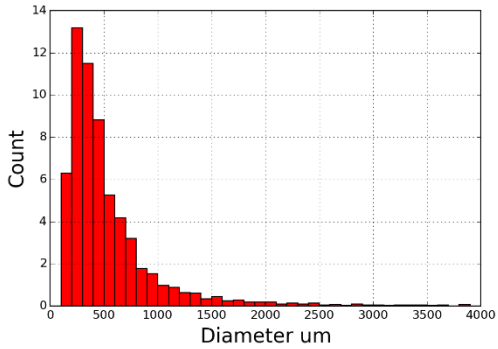


Figure B. 1967: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

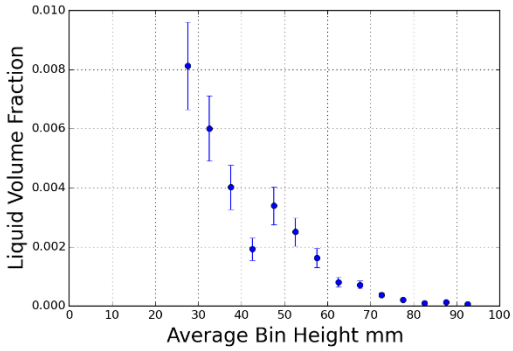


Figure B. 1970: Void Fraction R-123 55F 3500Btu 7500Lb Tri

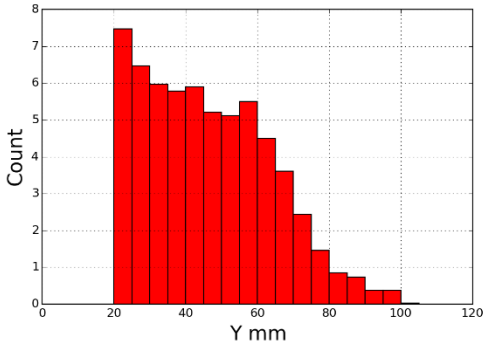


Figure B. 1968: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 Matched Only Droplets for .LA Image

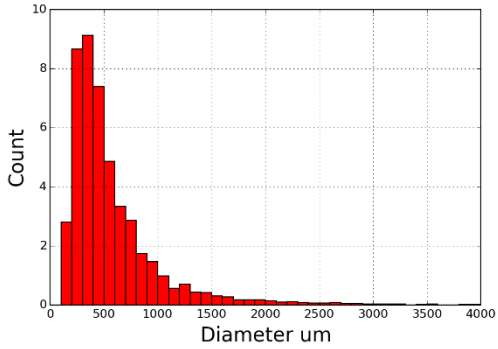


Figure B. 1971: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

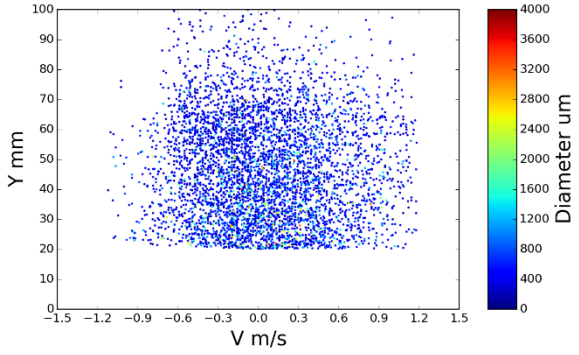


Figure B. 1974: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

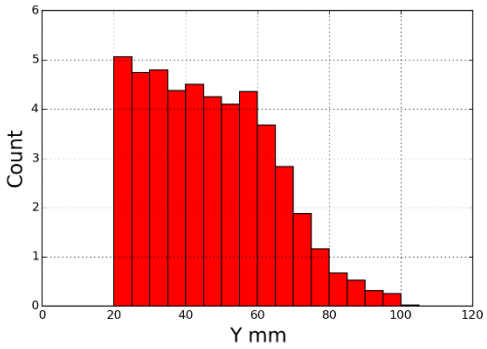


Figure B. 1972: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

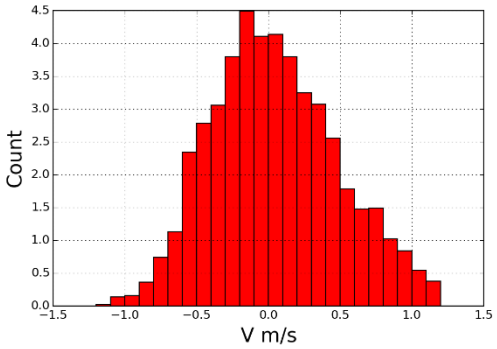


Figure B. 1975: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

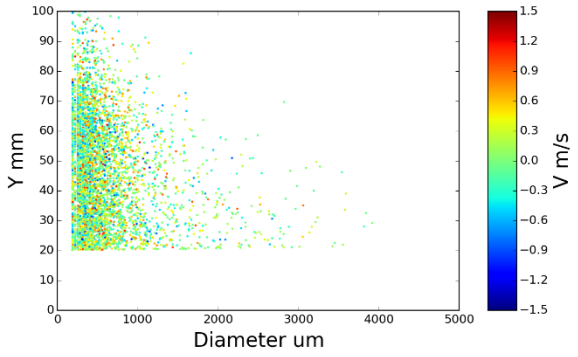


Figure B. 1973: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 Matched Only Droplets for .LB Image

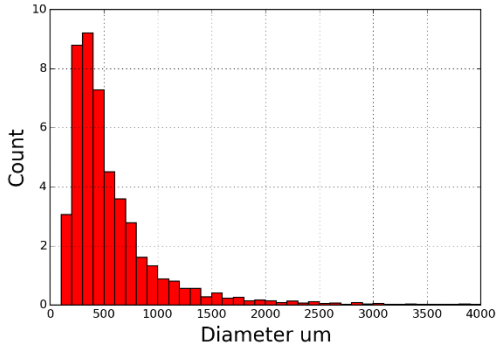


Figure B. 1976: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

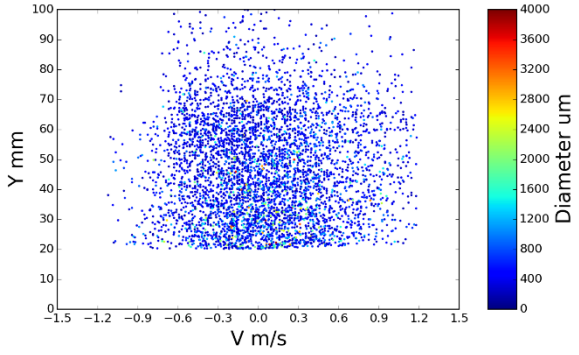


Figure B. 1979: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

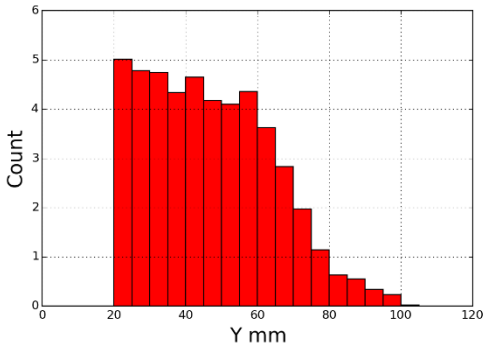


Figure B. 1977: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

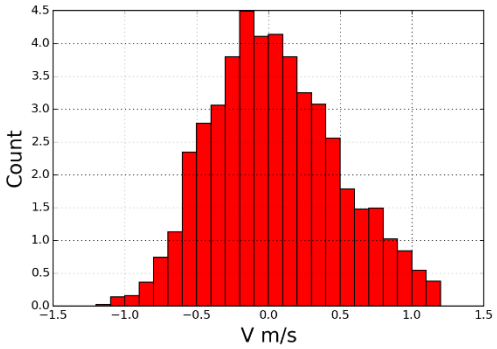


Figure B. 1980: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

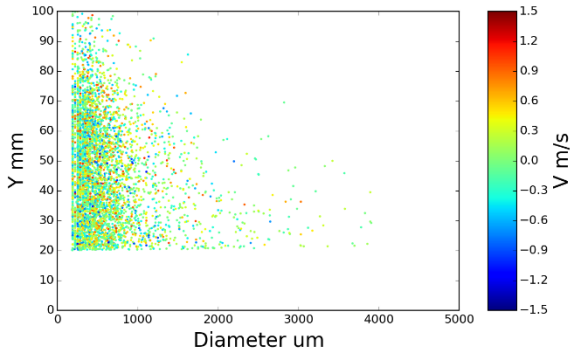


Figure B. 1978: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 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	24.53	24.02	182.2	3939	674.0	566.1	182.2	3883	681.5	556.3
40-60mm	18.62	18.8	182.2	3896	551.7	450.1	182.2	3350	545.2	438.3
60-80mm	9.58	9.74	182.2	2467	459.8	294.8	182.2	2465	451.1	288.6
80-100mm	2.2	2.26	182.2	2876	436.9	288.8	193.2	2784	432.4	281.0
All	54.93	54.84	182.2	3939	585.7	487.6	182.2	3883	583.4	477.8
			Height A (mm)				Height B (mm)			
Highest Particle			99.5798				100.0898			
Lowest Particle			20.1778				20.1778			

Table B. 213: 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	17.23	182.2	3656	728.1	546.4	182.2	3735	729.5	550.2	-1.120	1.160	-0.040	0.350	-1.170	1.180	0.070	0.440
40-60mm	14.07	193.2	3328	599.3	452.7	182.2	3350	596.8	450.3	-1.160	1.170	-0.110	0.310	-1.100	1.180	-0.020	0.470
60-80mm	7.43	193.2	2251	504.6	302.6	193.2	2465	497.0	305.4	-1.160	1.140	-0.150	0.320	-1.160	1.160	-0.000	0.460
80-100mm	1.74	193.2	1711	461.6	250.4	193.2	1647	459.9	244.4	-0.930	0.800	-0.140	0.340	-0.820	1.110	0.000	0.420
All	40.47	182.2	3656	630.9	475.8	182.2	3735	628.8	477.5	-1.160	1.170	-0.090	0.330	-1.170	1.180	0.020	0.460

Table B. 214: Matched Droplet Info

B.5.2.2 All Droplets for .LA Image

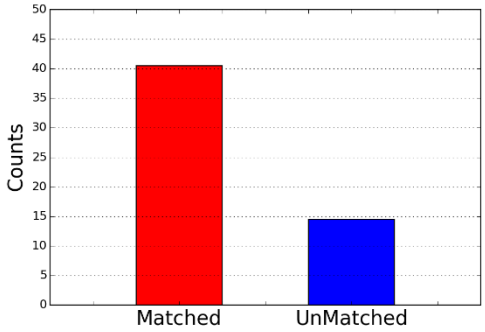


Figure B. 1981: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

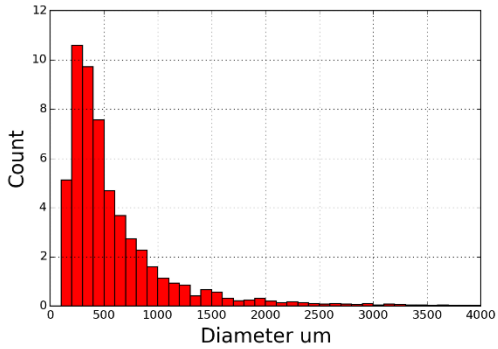


Figure B. 1982: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

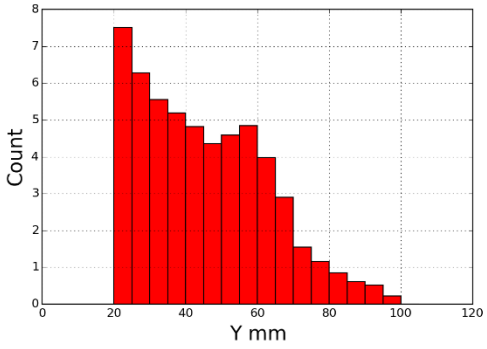


Figure B. 1983: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

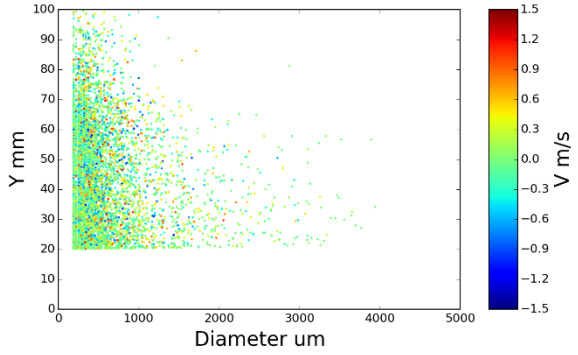


Figure B. 1984: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

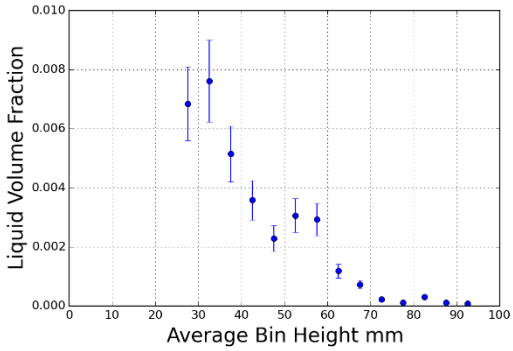


Figure B. 1985: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 All Droplets for .LB Image

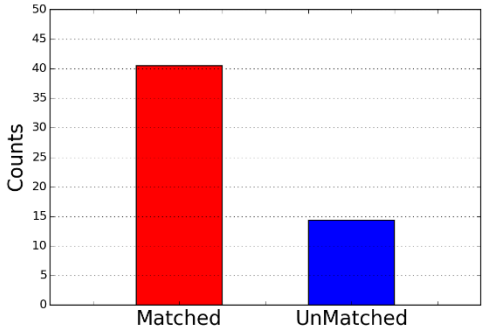


Figure B. 1986: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

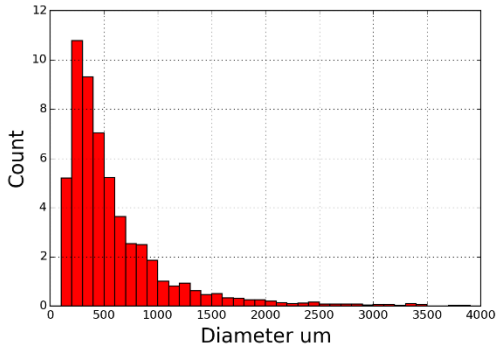


Figure B. 1987: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

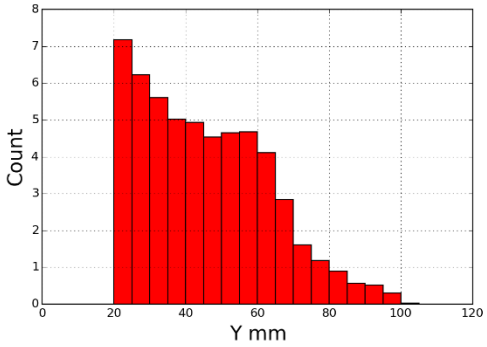


Figure B. 1988: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

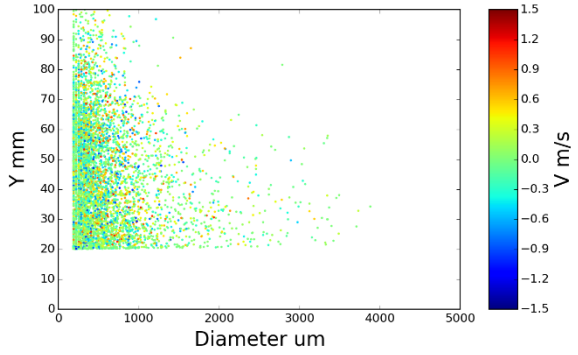


Figure B. 1989: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

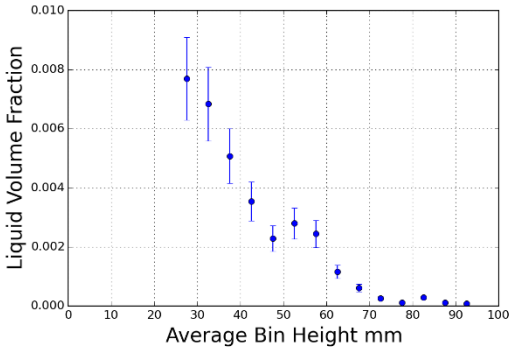


Figure B. 1990: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 Matched Only Droplets for .LA Image

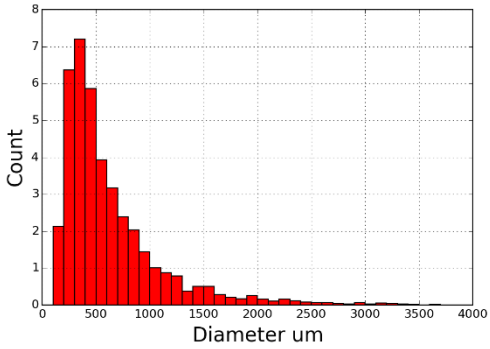


Figure B. 1991: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

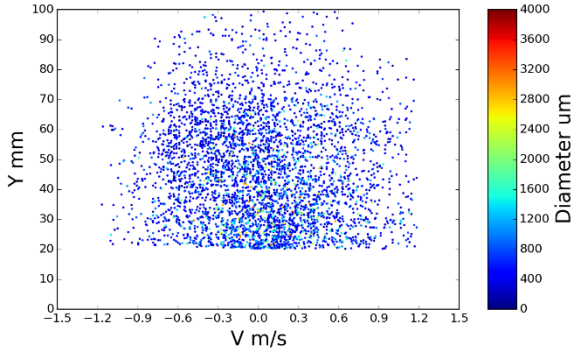


Figure B. 1994: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

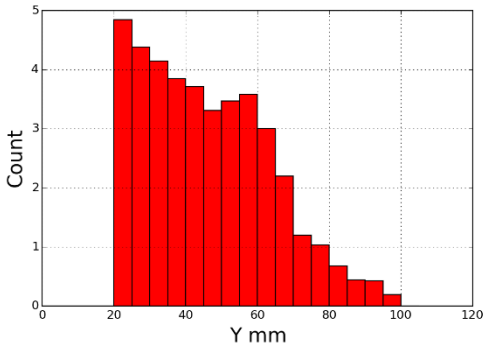


Figure B. 1992: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

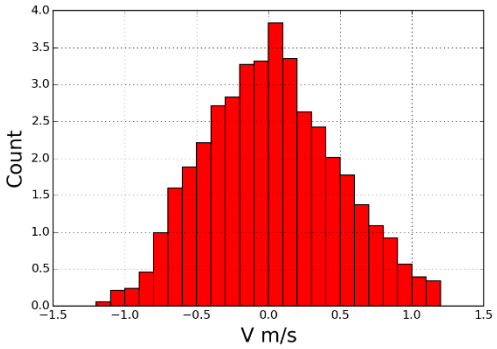


Figure B. 1995: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

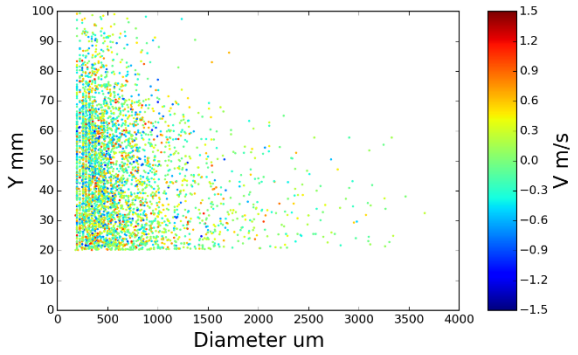


Figure B. 1993: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 Matched Only Droplets for .LB Image

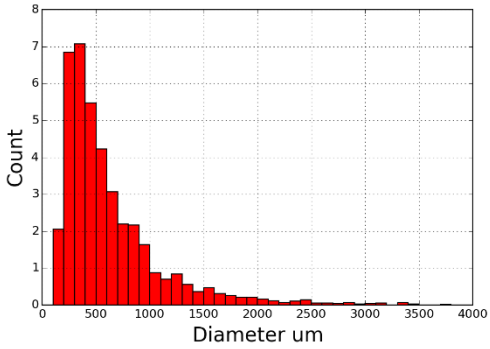


Figure B. 1996: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

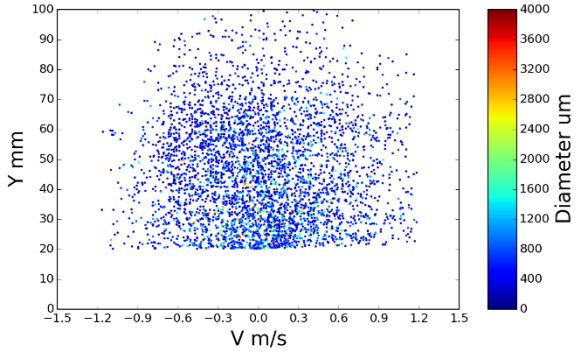


Figure B. 1999: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

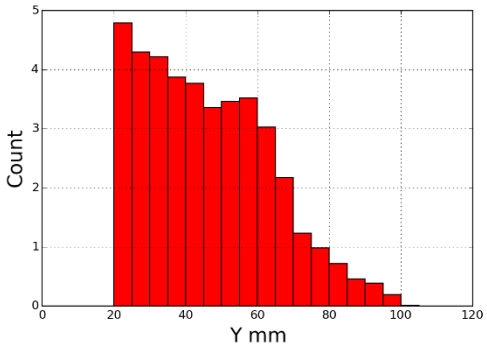


Figure B. 1997: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

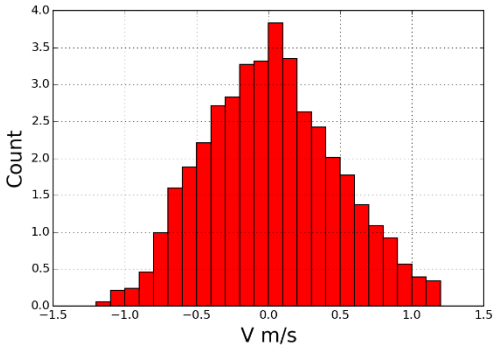


Figure B. 2000: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

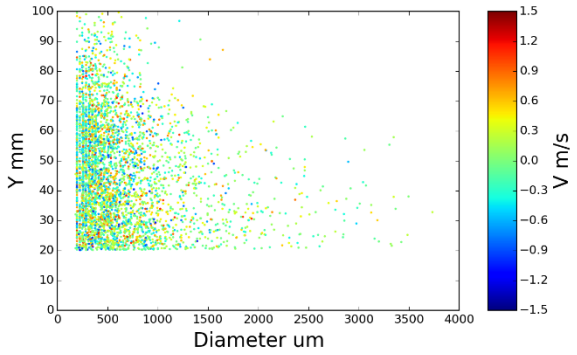


Figure B. 1998: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 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	22.09	18.22	170.4	3945	644.1	544.9	182.2	3982	700.3	580.3
40-60mm	22.26	15.57	170.4	3891	508.7	434.8	170.4	3546	576.5	463.5
60-80mm	18.52	8.42	170.4	2858	420.1	322.9	182.2	3533	483.8	359.2
80-100mm	7.27	3.03	170.4	2738	358.7	251.3	182.2	2772	389.3	274.4
All	70.18	45.24	170.4	3945	512.4	444.6	170.4	3982	596.5	498.4
			Height A (mm)				Height B (mm)			
Highest Particle			100.0718				99.3477			
Lowest Particle			20.1778				20.1778			

Table B. 215: 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	9.69	182.2	3662	787.8	564.7	182.2	3982	784.5	599.7	-1.160	1.160	-0.040	0.350	-1.160	1.180	0.070	0.480
40-60mm	8.11	182.2	2858	625.4	439.4	182.2	2854	633.5	456.7	-1.180	1.180	-0.100	0.350	-1.130	1.180	0.030	0.510
60-80mm	3.73	182.2	2486	581.8	361.4	182.2	2835	578.7	376.6	-1.140	1.050	-0.140	0.340	-1.110	1.170	-0.020	0.490
80-100mm	0.77	182.2	2738	531.9	421.3	193.2	2772	515.3	389.2	-1.020	0.810	-0.190	0.330	-0.690	1.120	0.010	0.390
All	22.3	182.2	3662	685.5	495.2	182.2	3982	685.6	518.8	-1.180	1.180	-0.080	0.350	-1.160	1.180	0.040	0.490

Table B. 216: Matched Droplet Info

B.5.2.2 All Droplets for .LA Image

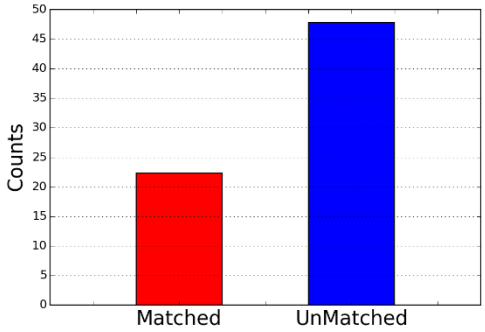


Figure B. 2001: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

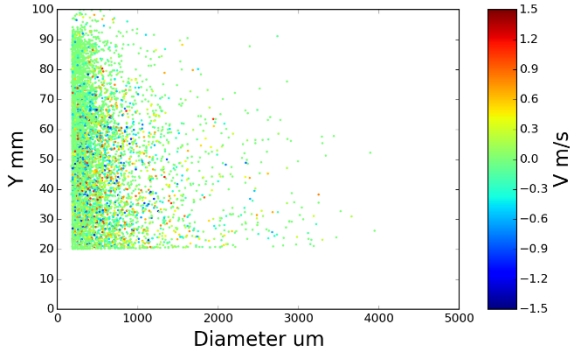


Figure B. 2004: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

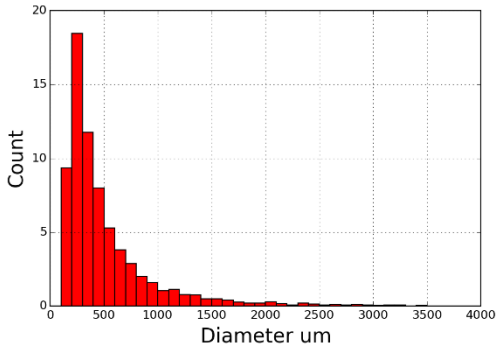


Figure B. 2002: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

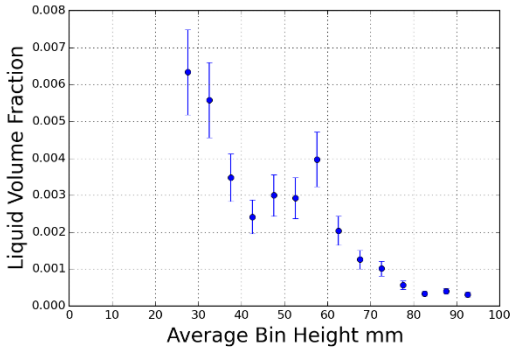


Figure B. 2005: Void Fraction R-123 55F 3500Btu 7500Lb Tri

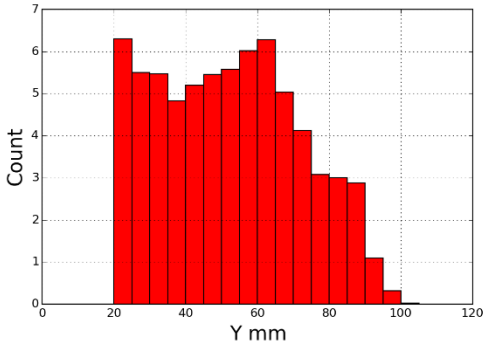


Figure B. 2003: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 All Droplets for .LB Image

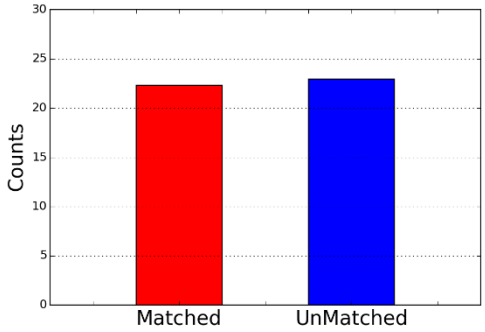


Figure B. 2006: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

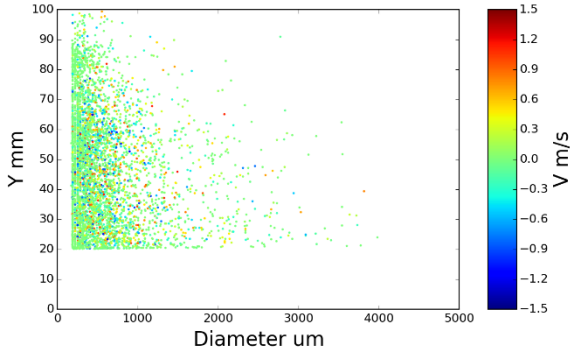


Figure B. 2009: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

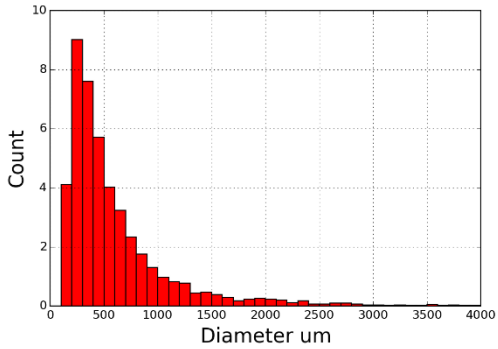


Figure B. 2007: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

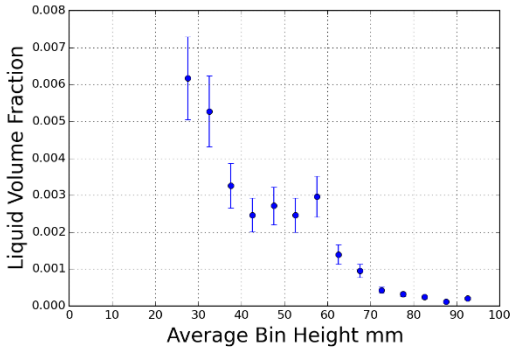


Figure B. 2010: Void Fraction R-123 55F 3500Btu 7500Lb Tri

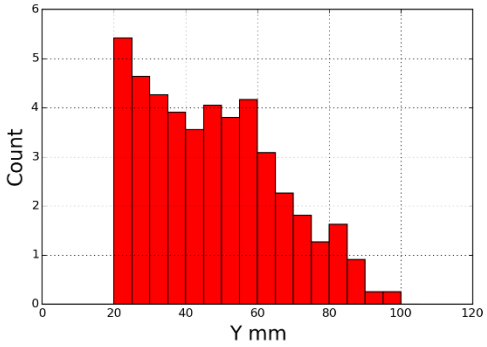


Figure B. 2008: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 Matched Only Droplets for .LA Image

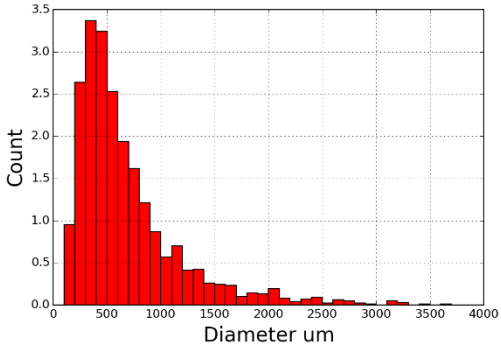


Figure B. 2011: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

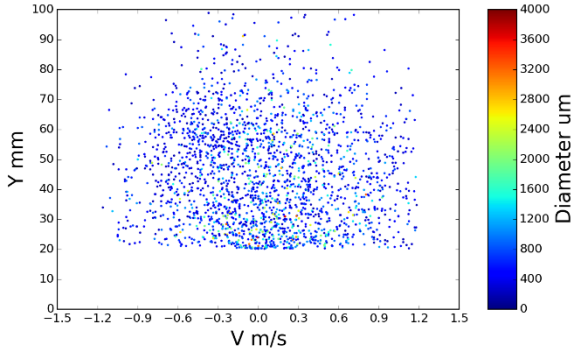


Figure B. 2014: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

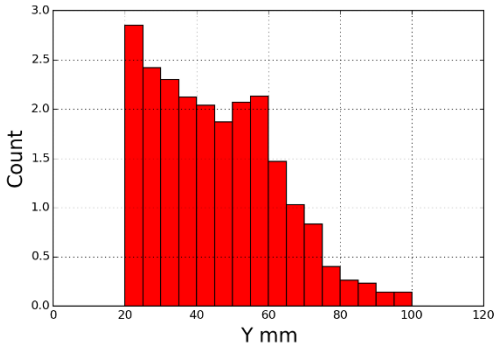


Figure B. 2012: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

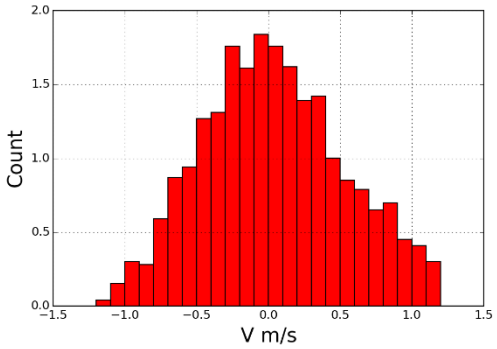


Figure B. 2015: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

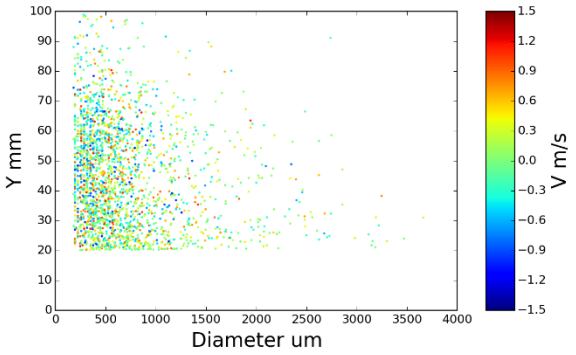


Figure B. 2013: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 Matched Only Droplets for .LB Image

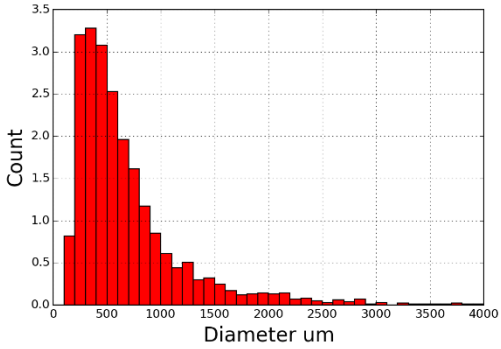


Figure B. 2016: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

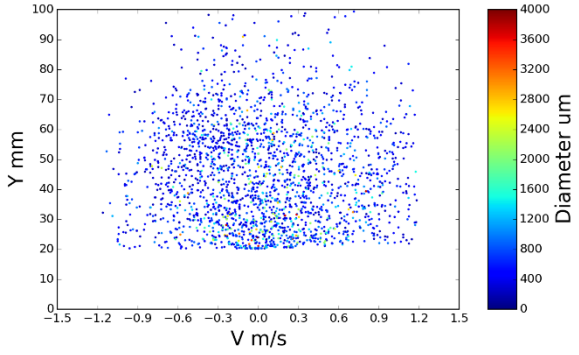


Figure B. 2019: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

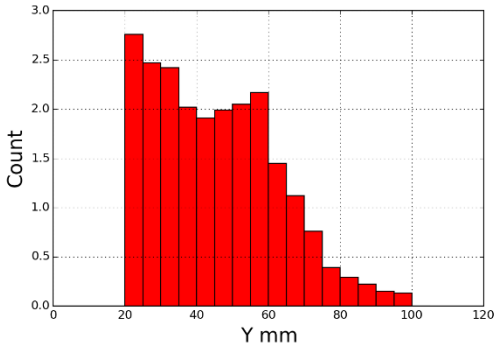


Figure B. 2017: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

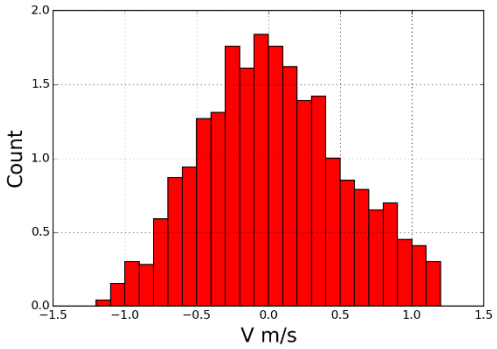


Figure B. 2020: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

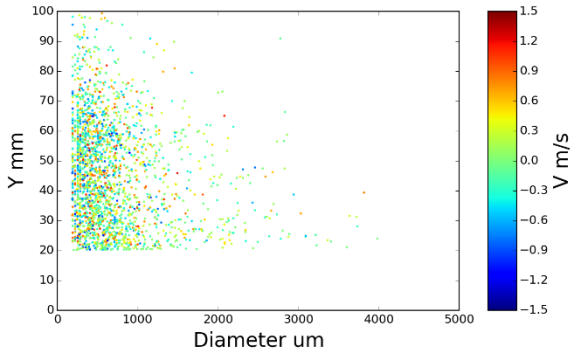


Figure B. 2018: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 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	17.18	12.92	170.4	3935	671.1	630.1	170.4	3978	769.7	695.9
40-60mm	18.55	14.17	170.4	3971	471.5	436.2	170.4	3860	516.4	470.0
60-80mm	18.7	8.51	170.4	2804	382.4	283.1	170.4	2776	447.4	344.0
80-100mm	5.7	0.98	170.4	2580	353.6	238.7	182.2	1926	439.3	283.8
All	60.16	36.59	170.4	3971	489.6	466.1	170.4	3978	587.6	552.4
			Height A (mm)				Height B (mm)			
Highest Particle			100.1469				100.1208			
Lowest Particle			20.1712				20.1778			

Table B. 217: 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	5.45	182.2	3587	912.2	669.2	182.2	3809	914.0	715.0	-1.040	1.130	-0.080	0.320	-1.160	1.180	0.020	0.430
40-60mm	4.62	193.2	3813	669.9	523.5	170.4	3860	665.1	548.5	-1.020	1.160	-0.110	0.340	-1.120	1.160	0.000	0.470
60-80mm	2.3	193.2	2788	584.0	384.1	193.2	2653	571.2	373.4	-1.080	1.160	-0.160	0.340	-1.160	1.090	0.010	0.480
80-100mm	0.44	193.2	1592	567.5	307.2	182.2	1926	564.0	348.3	-0.870	0.370	-0.250	0.300	-1.000	1.160	-0.070	0.470
All	12.82	182.2	3813	753.7	581.8	170.4	3860	751.2	613.7	-1.080	1.160	-0.110	0.330	-1.160	1.180	0.010	0.460

Table B. 218: Matched Droplet Info

B.5.2.2 All Droplets for .LA Image

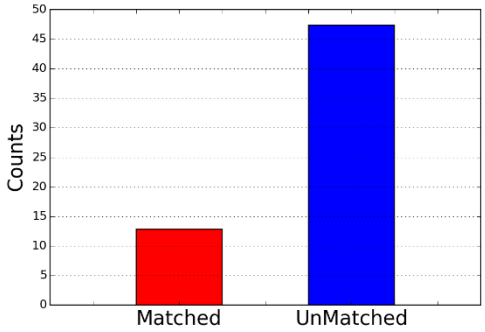


Figure B. 2021: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

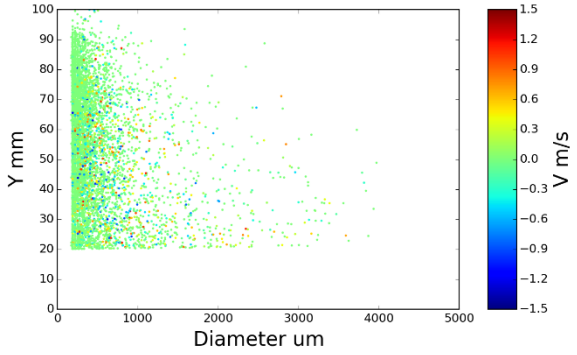


Figure B. 2024: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

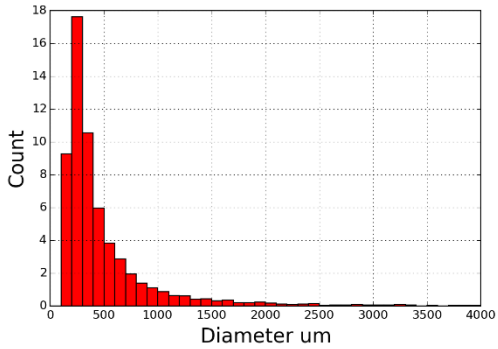


Figure B. 2022: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

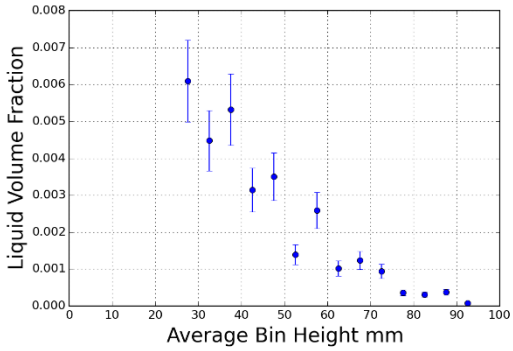


Figure B. 2025: Void Fraction R-123 55F 3500Btu 7500Lb Tri

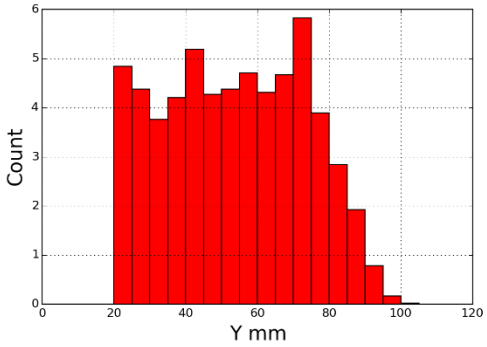


Figure B. 2023: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 All Droplets for .LB Image

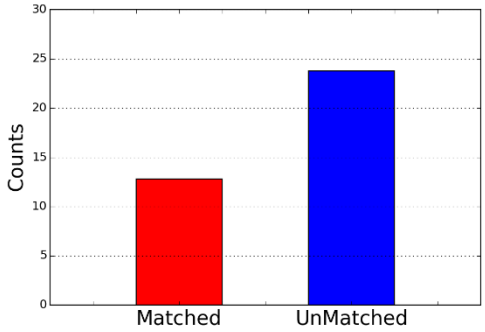


Figure B. 2026: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

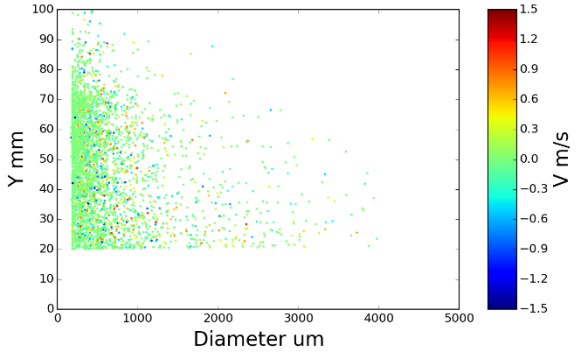


Figure B. 2029: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

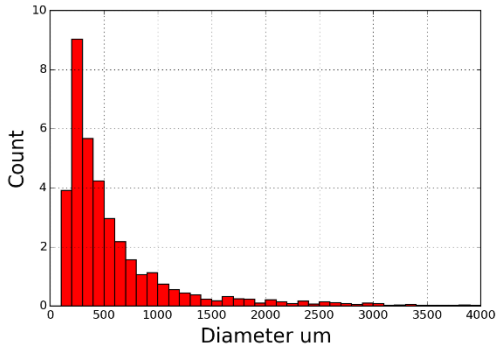


Figure B. 2027: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

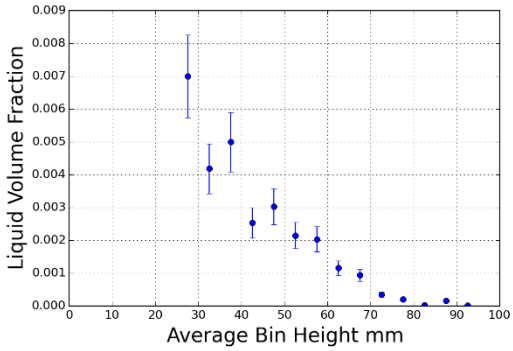


Figure B. 2030: Void Fraction R-123 55F 3500Btu 7500Lb Tri

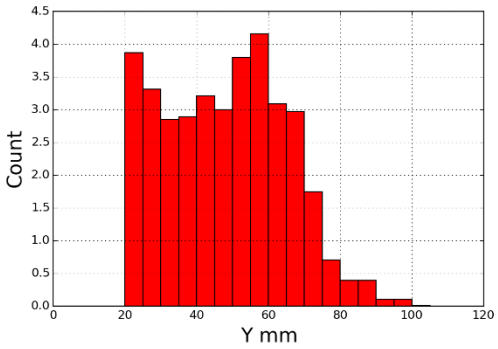


Figure B. 2028: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 Matched Only Droplets for .LA Image

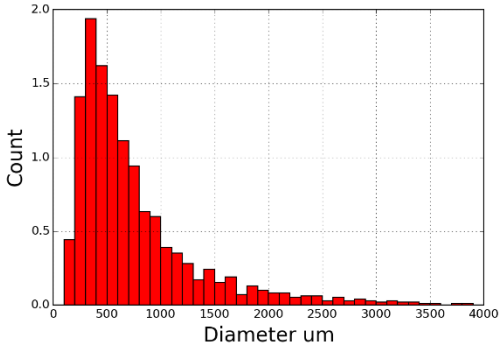


Figure B. 2031: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

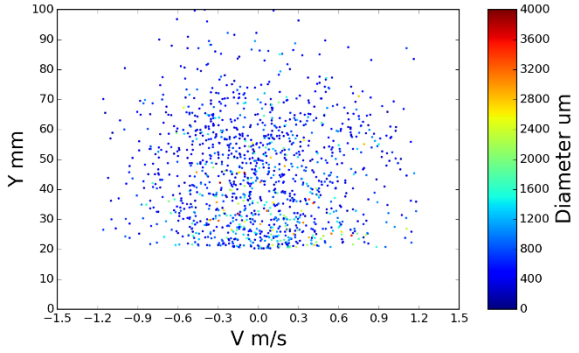


Figure B. 2034: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

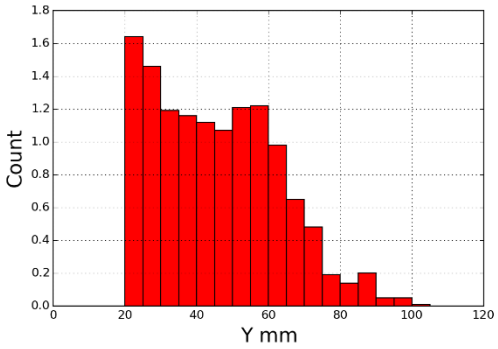


Figure B. 2032: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

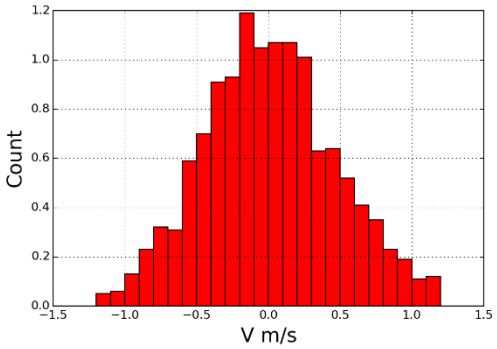


Figure B. 2035: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

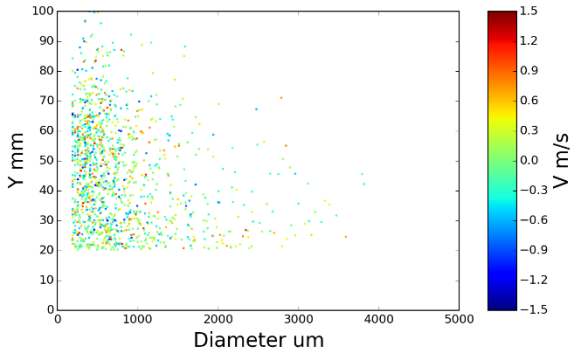


Figure B. 2033: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.2.2 Matched Only Droplets for .LB Image

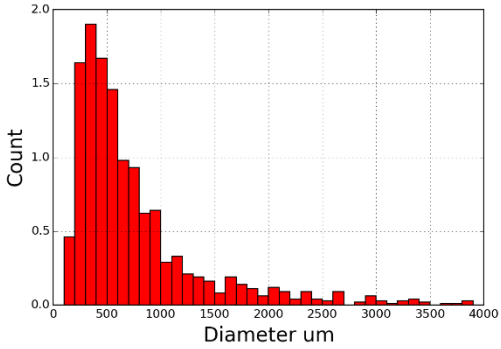


Figure B. 2036: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

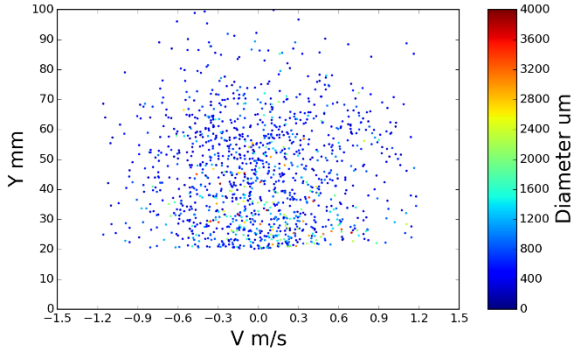


Figure B. 2039: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

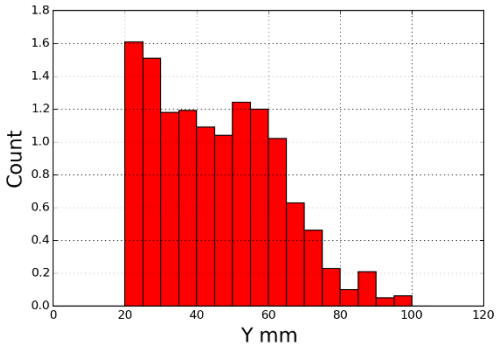


Figure B. 2037: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

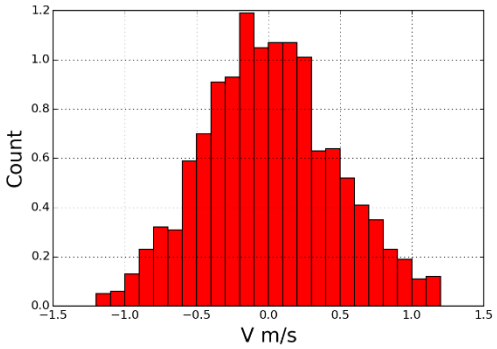


Figure B. 2040: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

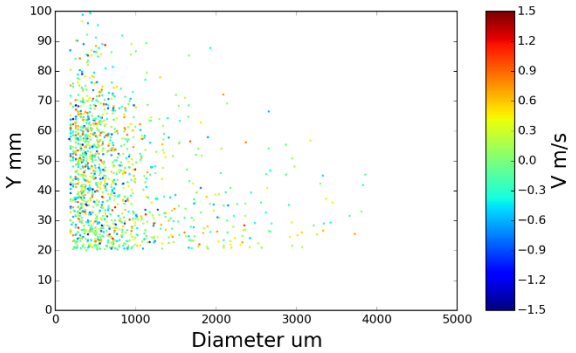


Figure B. 2038: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3 Liquid Level 3

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	18235 / 2.298
Ref Mass Flow (lb/hr) / (kg/s)	831 / 0.105
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	8093 / 10.975
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	2145 / 6.77
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	54.8 / 12.67
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	55.4 / 12.98
Total Bundle Q (Btu/hr) / (kW)	69246 / 20.29
Total Bundle & Preboiler Q (Btu/hr) / (kW)	68917 / 20.20
Top Two Rows HTC Ratio	0.634
Bundle Inlet Quality	-0.13
Bundle Exit Quality	0.97

Table B. 219: Thermal Conditions

B.5.3.1 Lens 100mm Mag 0_29x

B.5.3.1 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	1.7	1.79	85.7	1666	300.4	258.2	80.8	1687	297.6	258.9
40-60mm	3.66	3.75	80.8	886.6	228.1	162.5	85.7	932.4	224.7	162.6
60-80mm	1.98	1.99	85.7	928.4	204.2	140.7	85.7	927.5	200.4	139.7
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	7.34	7.53	80.8	1666	238.4	187.6	80.8	1687	235.6	188.6
			Height A (mm)				Height B (mm)			
Highest Particle			77.0994				76.7306			
Lowest Particle			29.1560				29.1560			

Table B. 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	1.32	85.7	1666	301.3	239.6	85.7	1687	308.6	247.9	-0.750	0.650	-0.080	0.220	-0.480	1.190	0.300	0.380
40-60mm	2.86	85.7	886.6	240.7	163.4	85.7	932.4	241.8	165.9	-0.710	0.590	-0.100	0.190	-0.470	1.190	0.310	0.340
60-80mm	1.61	85.7	928.4	198.6	124.1	85.7	927.5	195.1	125.6	-0.710	0.360	-0.110	0.170	-0.610	1.170	0.330	0.350
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	5.79	85.7	1666	242.8	178.5	85.7	1687	243.5	182.8	-0.750	0.650	-0.100	0.200	-0.610	1.190	0.320	0.350

Table B. 221: Matched Droplet Info

B.5.3.1 All Droplets for .LA Image

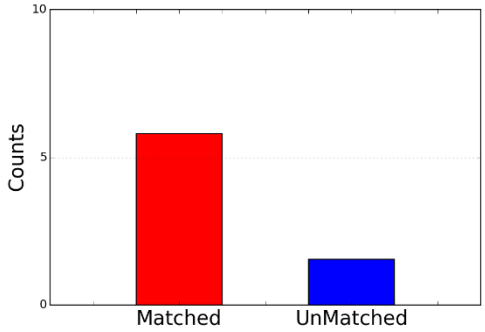


Figure B. 2041: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

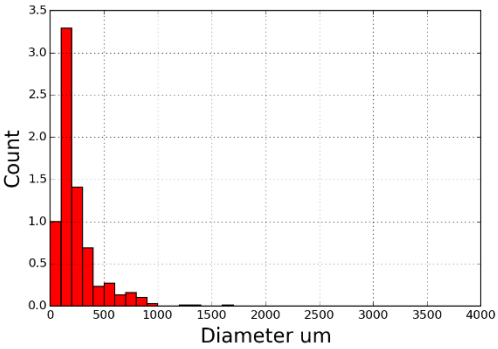


Figure B. 2042: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

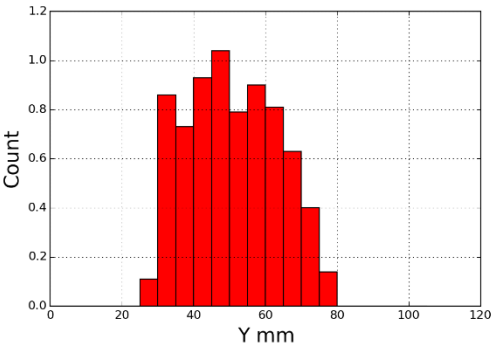


Figure B. 2043: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

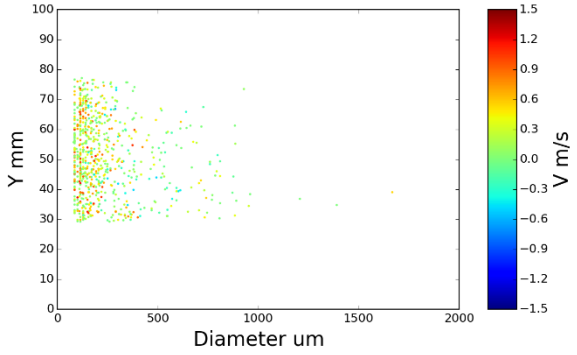


Figure B. 2044: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

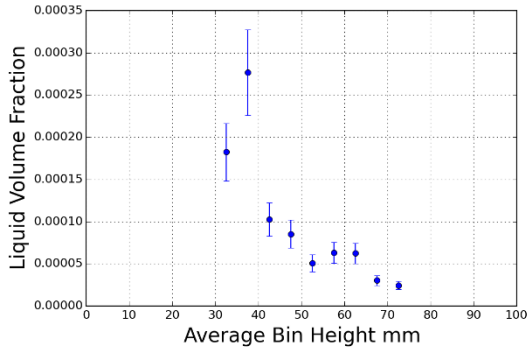


Figure B. 2045: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 All Droplets for .LB Image

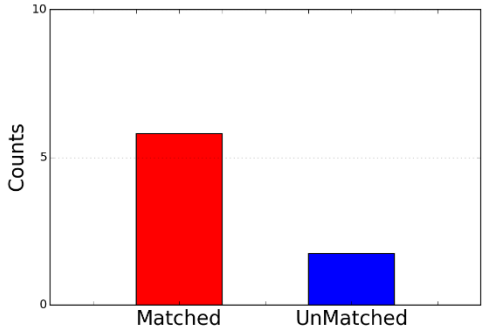


Figure B. 2046: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

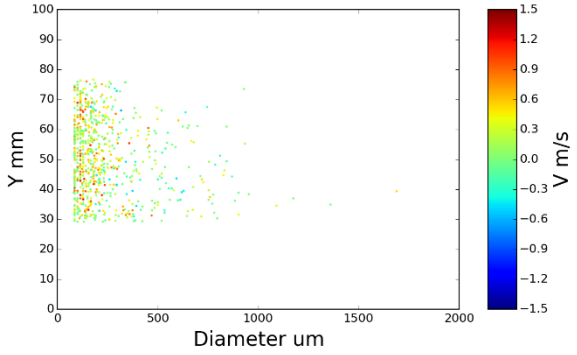


Figure B. 2049: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

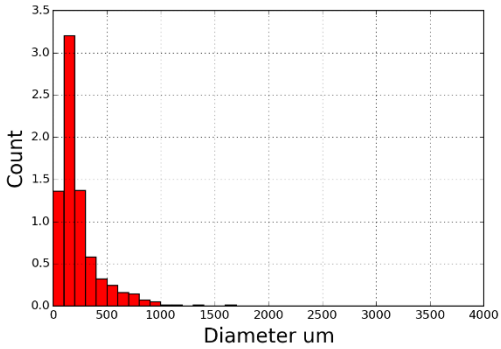


Figure B. 2047: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

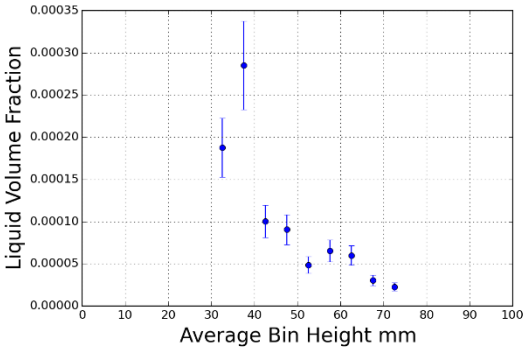


Figure B. 2050: Void Fraction R-123 55F 3500Btu 7500Lb Tri

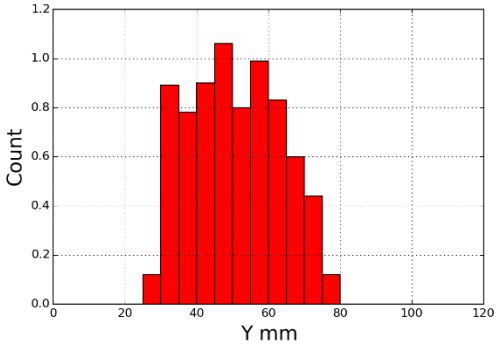


Figure B. 2048: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 Matched Only Droplets for .LA Image

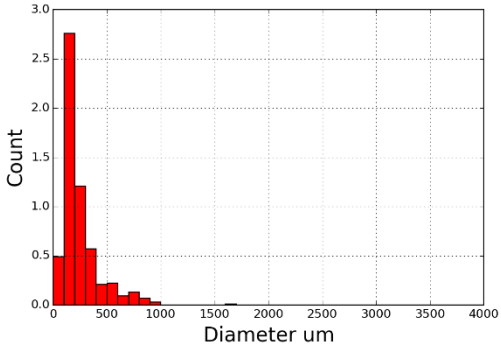


Figure B. 2051: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

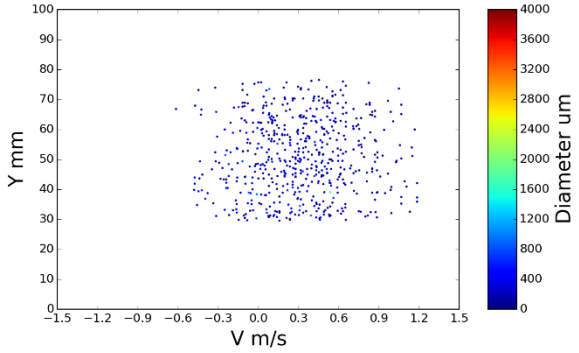


Figure B. 2054: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

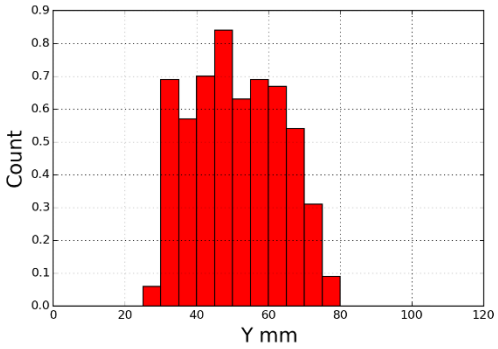


Figure B. 2052: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

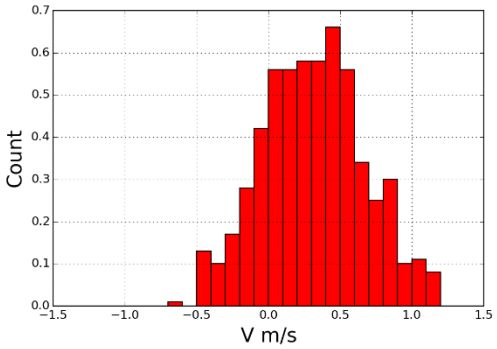


Figure B. 2055: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

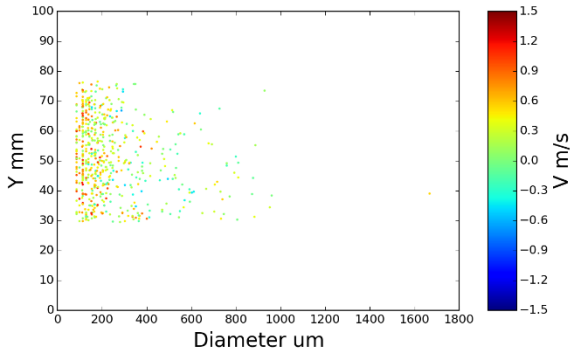


Figure B. 2053: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 Matched Only Droplets for .LB Image

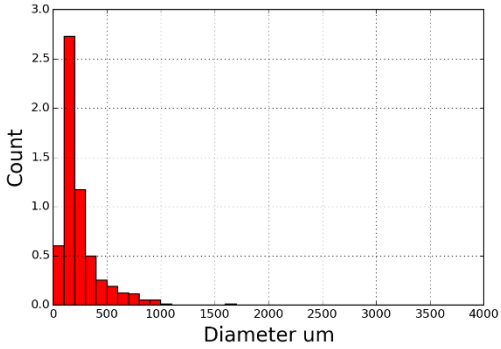


Figure B. 2056: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

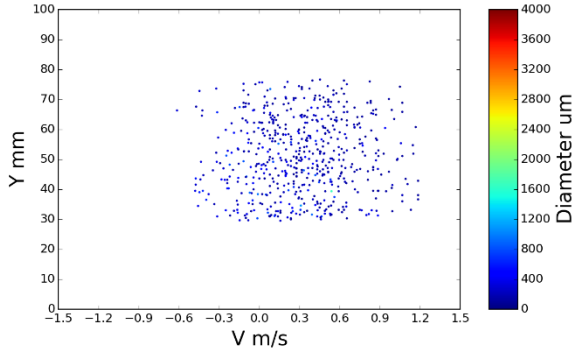


Figure B. 2059: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

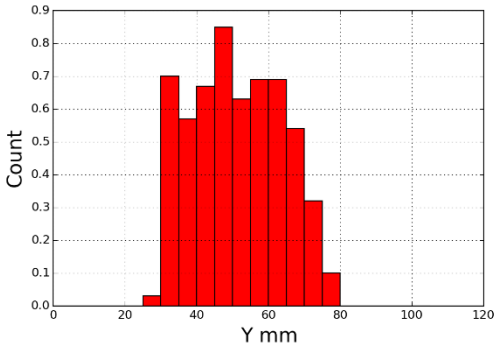


Figure B. 2057: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

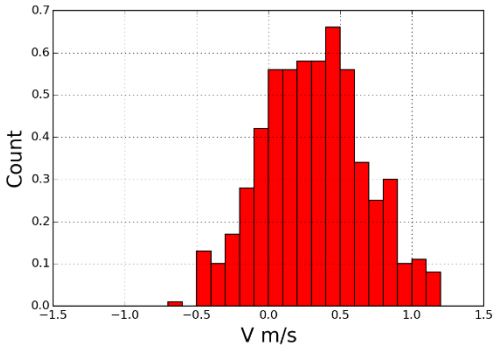


Figure B. 2060: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

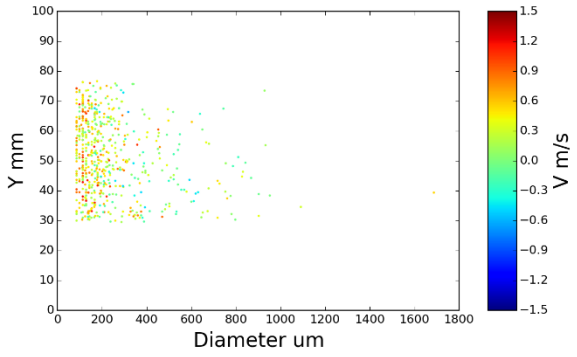


Figure B. 2058: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 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	2.09	1.93	80.8	1119	264.2	215.0	85.7	1238	273.4	228.0
40-60mm	3.54	3.63	80.8	1648	229.8	204.9	85.7	1683	226.6	203.7
60-80mm	2.08	2.17	85.7	1260	182.2	125.1	85.7	1216	174.8	121.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	7.71	7.73	80.8	1648	226.3	192.2	85.7	1683	223.8	194.7
			Height A (mm)				Height B (mm)			
Highest Particle			76.9875				77.1012			
Lowest Particle			29.1940				29.1852			

Table B. 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	1.42	85.7	1119	284.8	229.4	85.7	1238	290.5	245.3	-0.730	1.070	-0.070	0.270	-0.680	1.180	0.050	0.360
40-60mm	2.72	80.8	1643	231.8	189.7	85.7	1683	232.9	194.5	-0.670	0.550	-0.100	0.190	-0.810	0.950	-0.010	0.340
60-80mm	1.75	85.7	743.4	189.1	103.7	85.7	754.8	185.7	103.3	-0.630	0.620	-0.130	0.200	-0.630	0.870	0.010	0.320
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	5.89	80.8	1643	231.9	183.6	85.7	1683	232.4	191.0	-0.730	1.070	-0.100	0.220	-0.810	1.180	0.010	0.340

Table B. 223: Matched Droplet Info

B.5.3.1 All Droplets for .LA Image

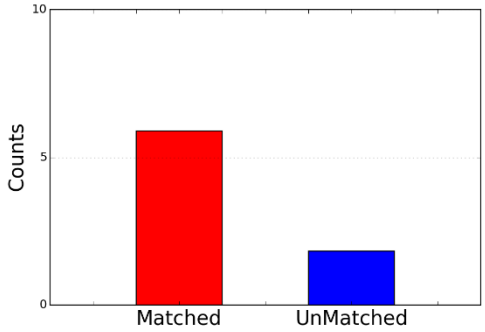


Figure B. 2061: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

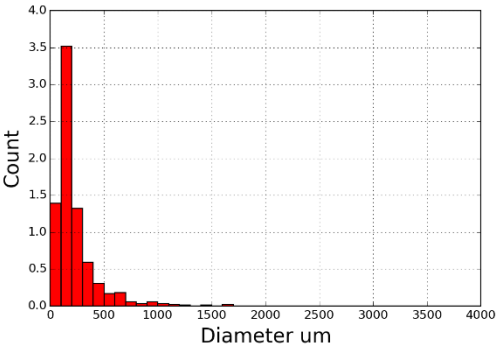


Figure B. 2062: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

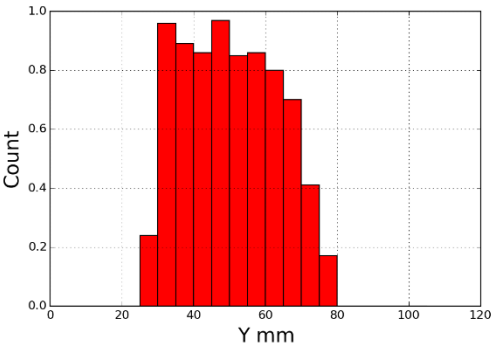


Figure B. 2063: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

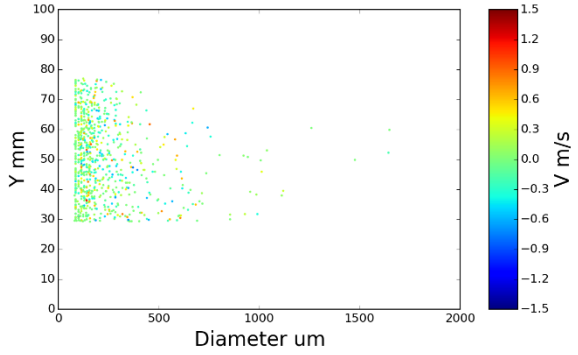


Figure B. 2064: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

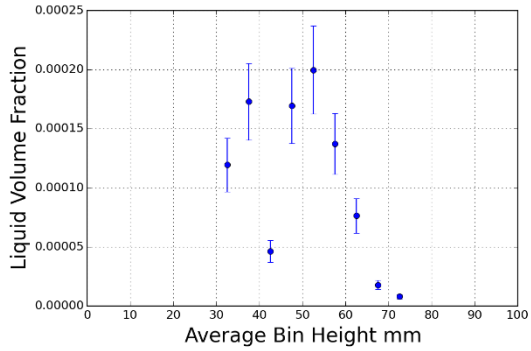


Figure B. 2065: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 All Droplets for .LB Image

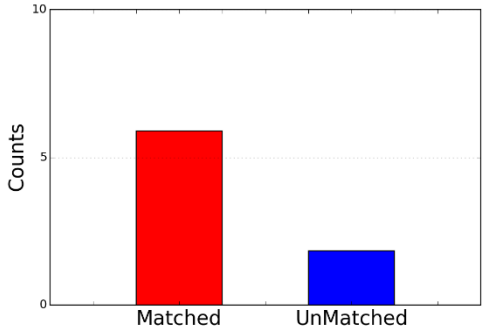


Figure B. 2066: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

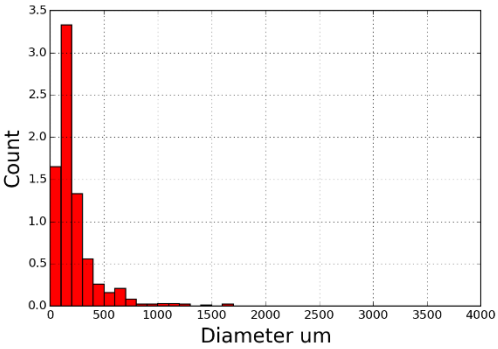


Figure B. 2067: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

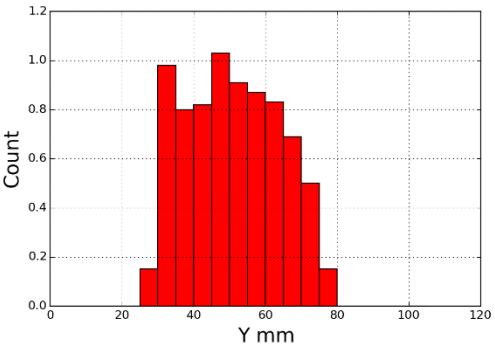


Figure B. 2068: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

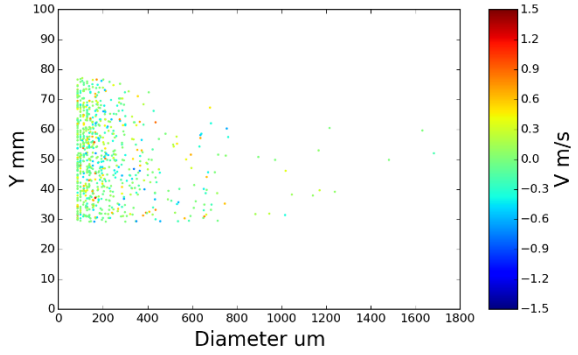


Figure B. 2069: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

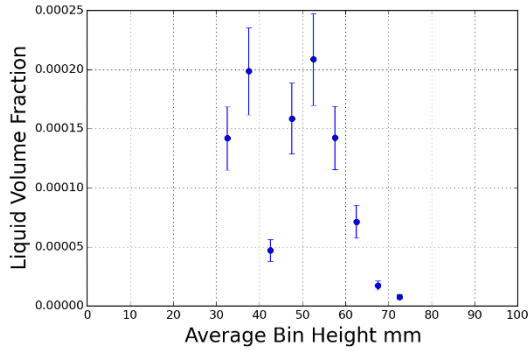


Figure B. 2070: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 Matched Only Droplets for .LA Image

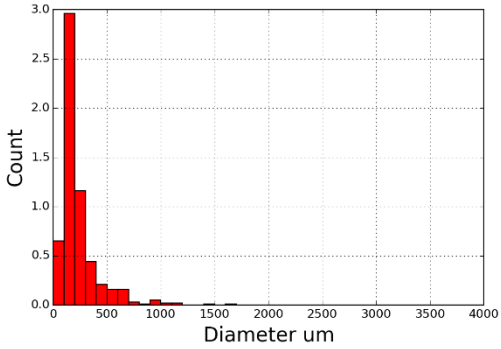


Figure B. 2071: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

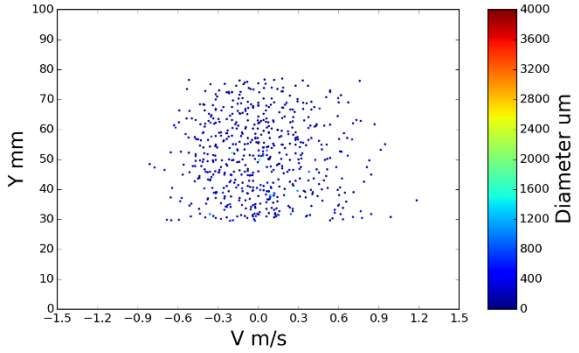


Figure B. 2074: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

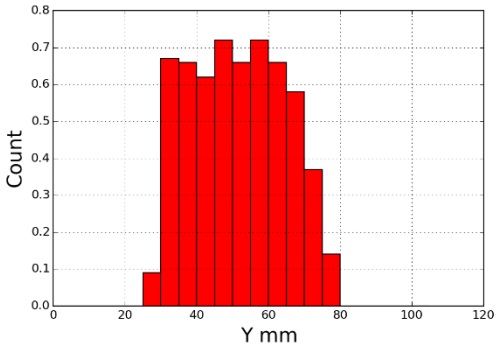


Figure B. 2072: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

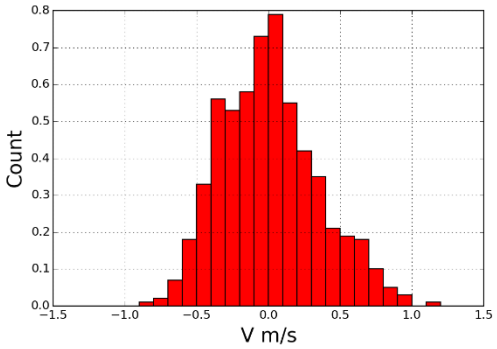


Figure B. 2075: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

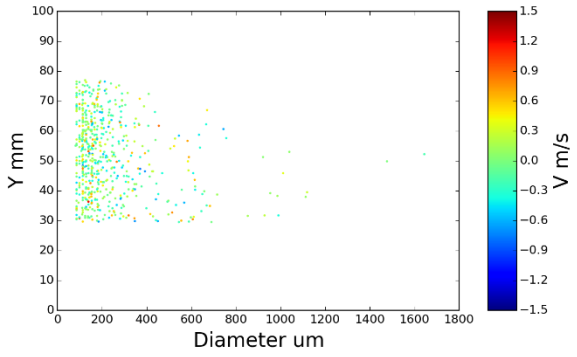


Figure B. 2073: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 Matched Only Droplets for .LB Image

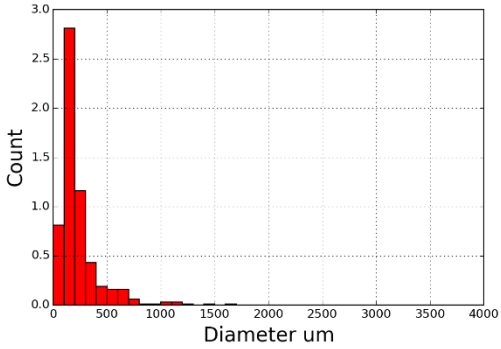


Figure B. 2076: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

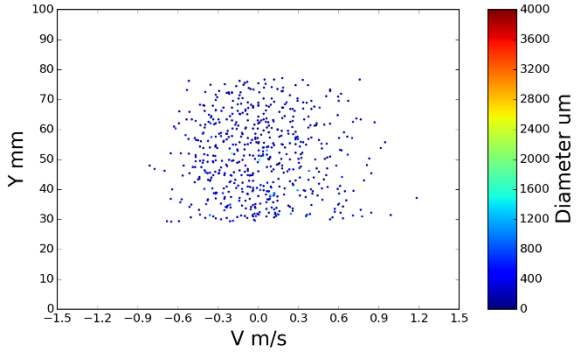


Figure B. 2079: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

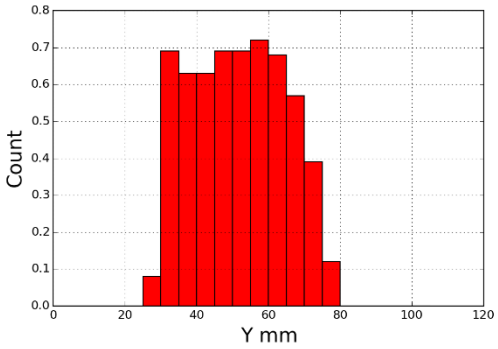


Figure B. 2077: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

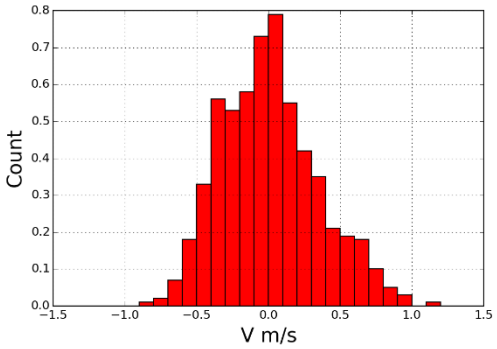


Figure B. 2080: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

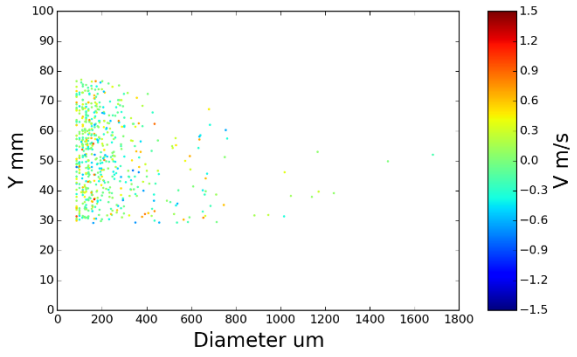


Figure B. 2078: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 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	1.13	1.15	80.8	1536	319.0	285.8	80.8	1485	323.7	287.4
40-60mm	2.43	2.38	80.8	1447	248.3	218.5	85.7	1432	249.7	212.4
60-80mm	1.32	1.42	80.8	1450	192.4	172.1	85.7	910.7	174.4	129.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	4.88	4.95	80.8	1536	249.5	229.6	80.8	1485	245.3	220.3
			Height A (mm)				Height B (mm)			
Highest Particle			76.8462				76.6183			
Lowest Particle			29.1788				29.2825			

Table B. 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	0.8	85.7	1294	329.2	243.5	85.7	1350	341.5	256.7	-0.670	0.500	-0.130	0.240	-0.900	1.110	-0.070	0.440
40-60mm	1.68	85.7	1430	260.9	209.6	85.7	1432	261.5	213.9	-0.900	0.250	-0.190	0.180	-0.690	1.020	-0.130	0.350
60-80mm	0.93	85.7	458.9	173.9	85.2	85.7	545.8	175.3	91.8	-0.560	0.160	-0.220	0.160	-0.630	0.680	-0.180	0.270
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	3.41	85.7	1430	253.2	201.6	85.7	1432	256.8	209.3	-0.900	0.500	-0.180	0.190	-0.900	1.110	-0.130	0.360

Table B. 225: Matched Droplet Info

B.5.3.1 All Droplets for .LA Image

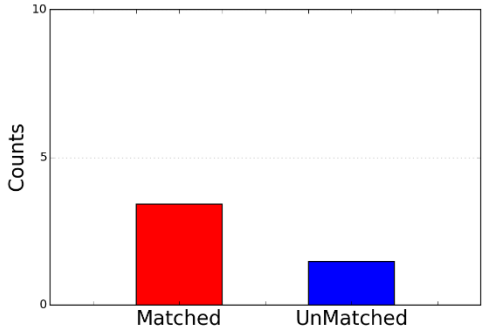


Figure B. 2081: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

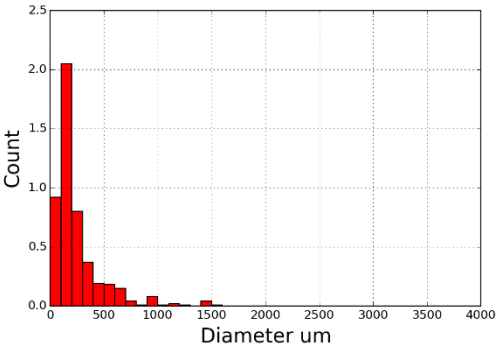


Figure B. 2082: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

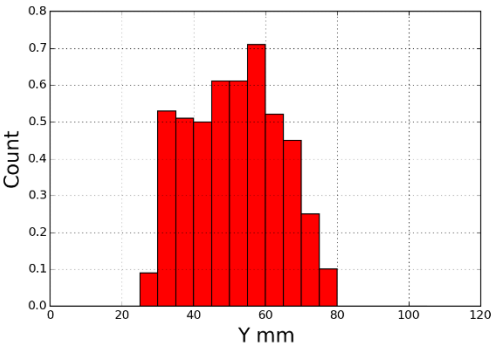


Figure B. 2083: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

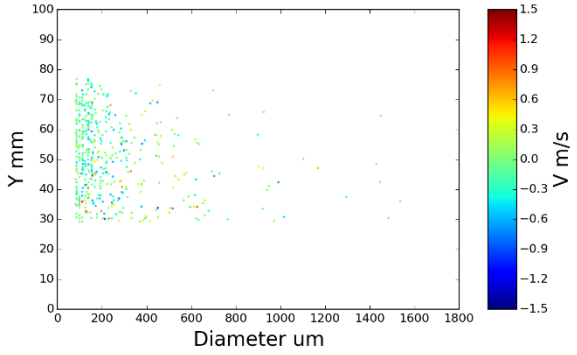


Figure B. 2084: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

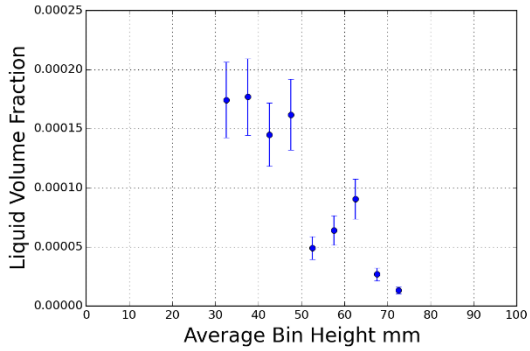


Figure B. 2085: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 All Droplets for .LB Image

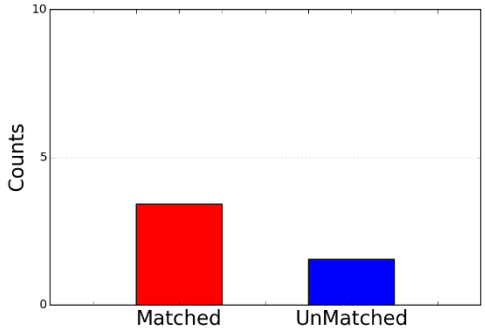


Figure B. 2086: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

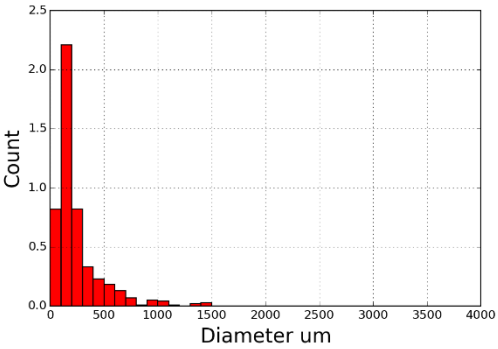


Figure B. 2087: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

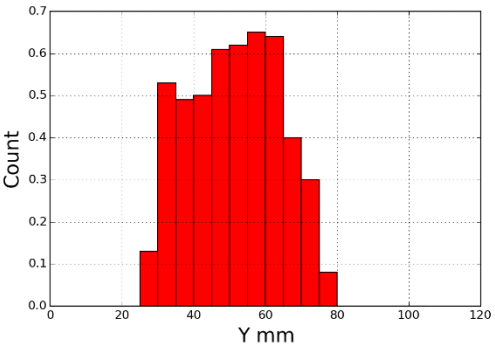


Figure B. 2088: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

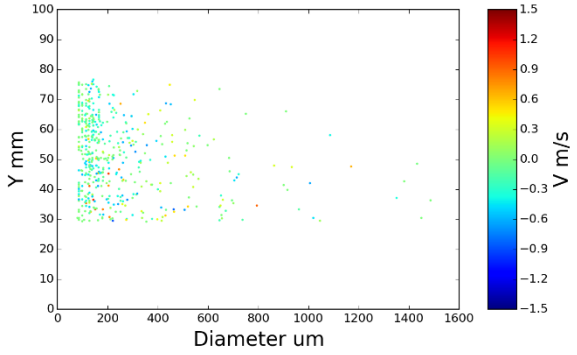


Figure B. 2089: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

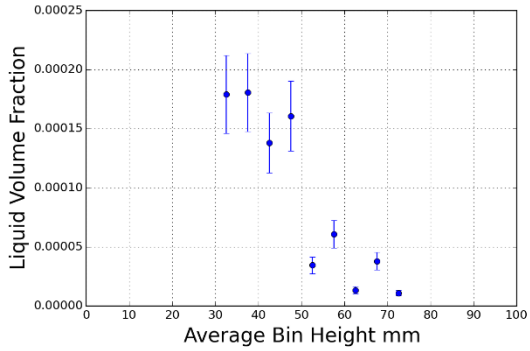


Figure B. 2090: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 Matched Only Droplets for .LA Image

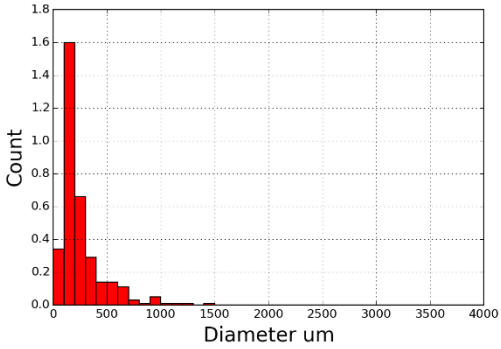


Figure B. 2091: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

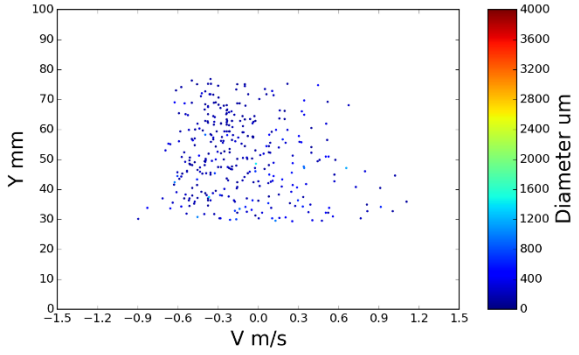


Figure B. 2094: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

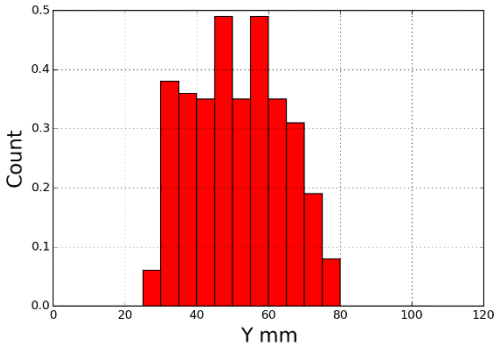


Figure B. 2092: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

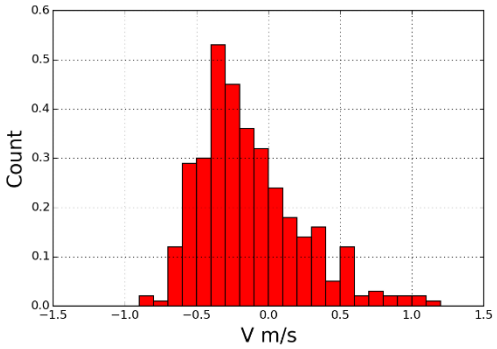


Figure B. 2095: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

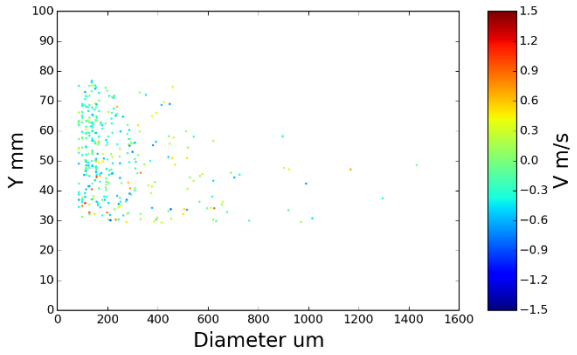


Figure B. 2093: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 Matched Only Droplets for .LB Image

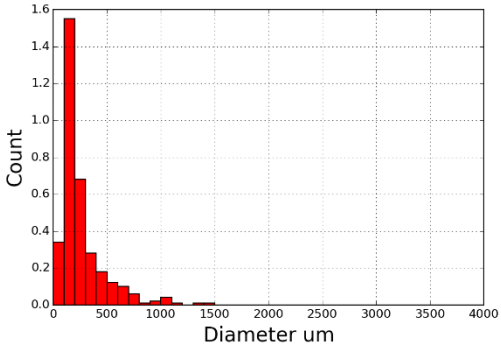


Figure B. 2096: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

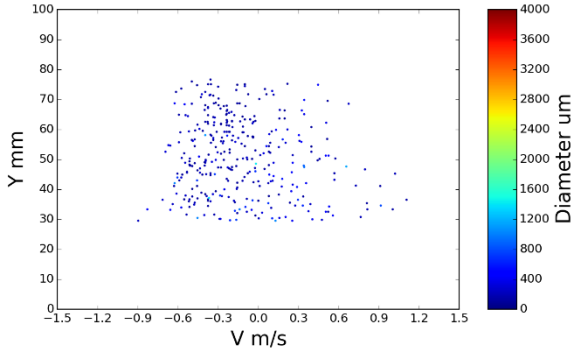


Figure B. 2099: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

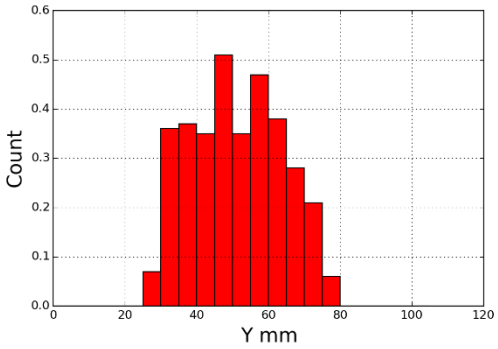


Figure B. 2097: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

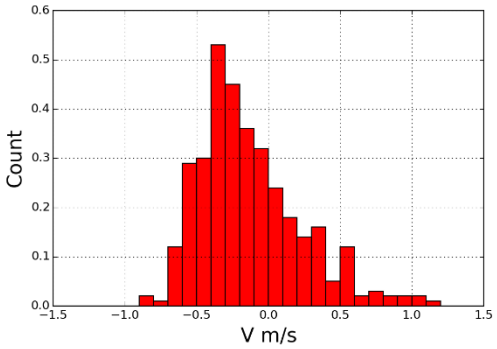


Figure B. 2100: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

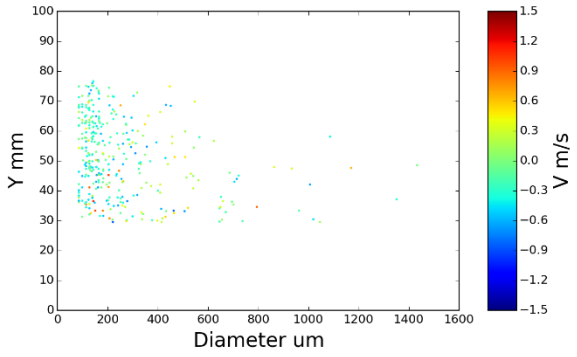


Figure B. 2098: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 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	0.58	0.54	80.8	2167	359.4	369.8	90.3	2184	397.0	369.9
40-60mm	1.31	1.23	85.7	2397	232.0	253.6	80.8	2625	240.8	261.7
60-80mm	0.83	0.8	85.7	602.7	166.9	106.7	85.7	663.9	171.6	111.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	2.72	2.57	80.8	2397	239.3	261.4	80.8	2625	252.1	268.1
			Height A (mm)				Height B (mm)			
Highest Particle			76.4158				76.3904			
Lowest Particle			29.1813				29.2432			

Table B. 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	0.33	85.7	2167	356.2	356.6	99.0	2184	374.5	371.4	-0.760	0.700	-0.130	0.310	-0.800	0.930	0.040	0.450
40-60mm	0.79	85.7	2397	243.8	276.3	80.8	2625	250.9	301.7	-0.710	0.350	-0.250	0.220	-0.700	0.780	-0.190	0.330
60-80mm	0.59	85.7	584.1	170.9	102.7	85.7	663.9	174.0	113.8	-0.590	0.270	-0.260	0.180	-0.770	0.420	-0.230	0.300
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	1.71	85.7	2397	240.4	260.2	80.8	2625	248.2	279.5	-0.760	0.700	-0.230	0.240	-0.800	0.930	-0.160	0.360

Table B. 227: Matched Droplet Info

B.5.3.1 All Droplets for .LA Image

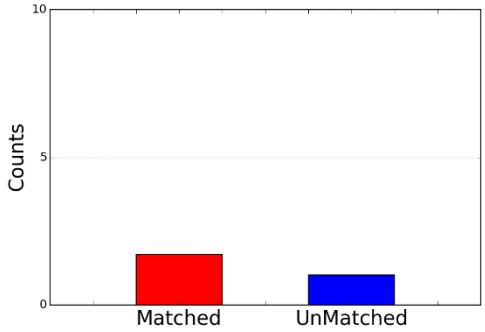


Figure B. 2101: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

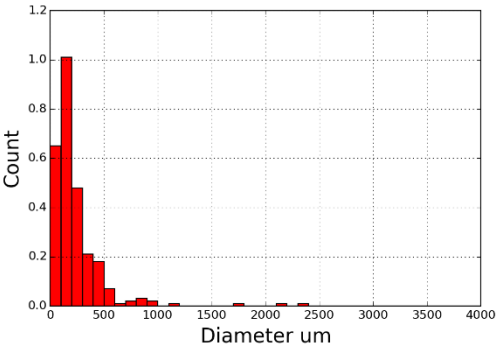


Figure B. 2102: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

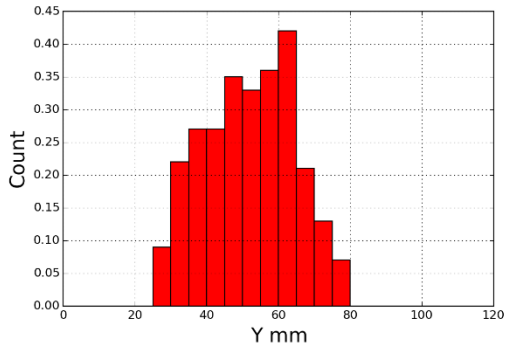


Figure B. 2103: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

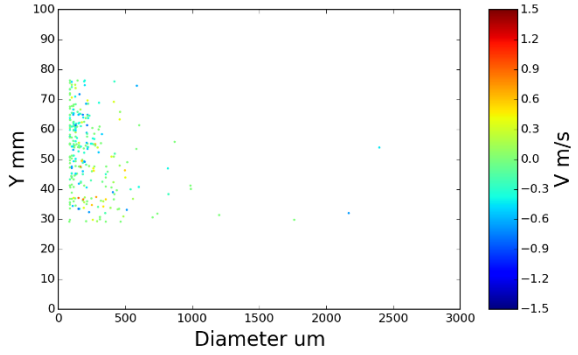


Figure B. 2104: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

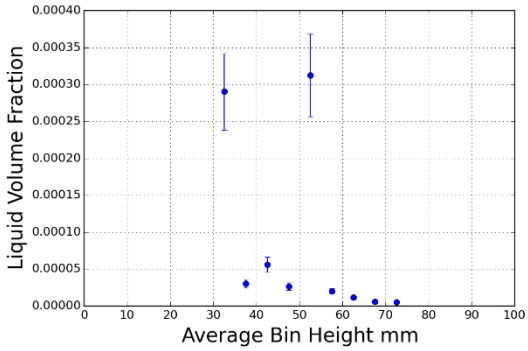


Figure B. 2105: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 All Droplets for .LB Image

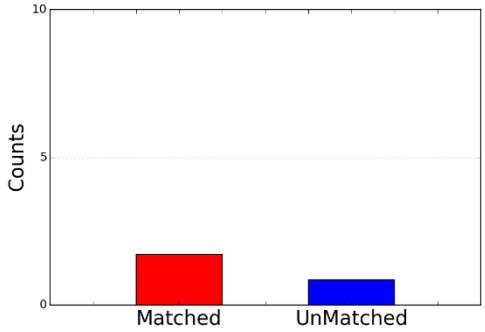


Figure B. 2106: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

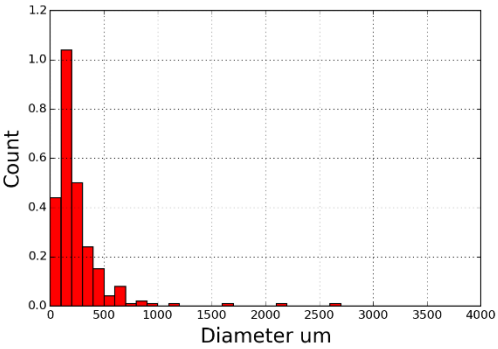


Figure B. 2107: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

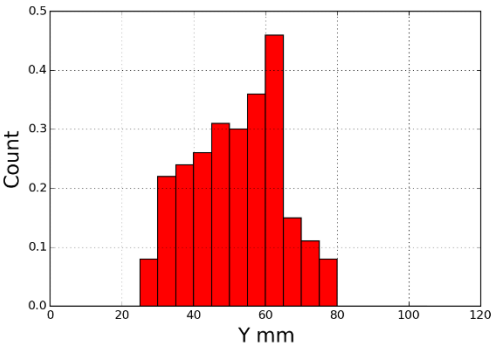


Figure B. 2108: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

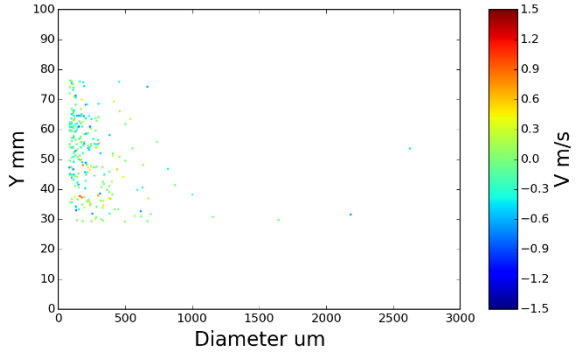


Figure B. 2109: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

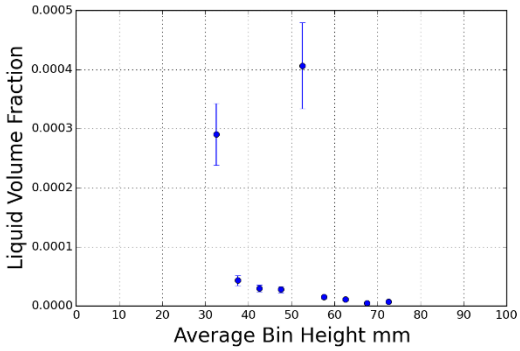


Figure B. 2110: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 Matched Only Droplets for .LA Image

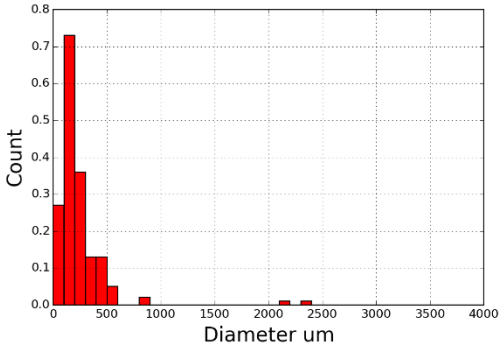


Figure B. 2111: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

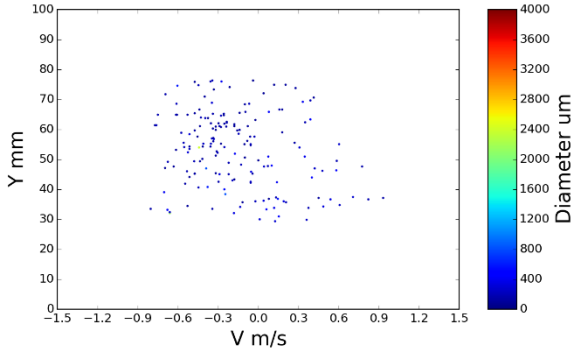


Figure B. 2114: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

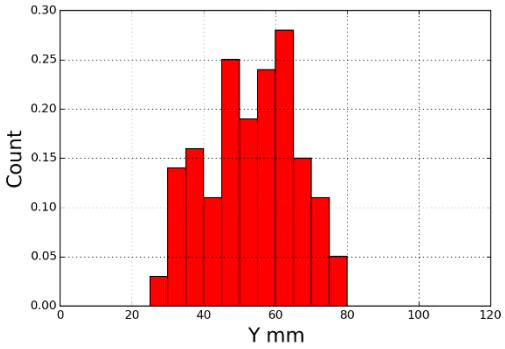


Figure B. 2112: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

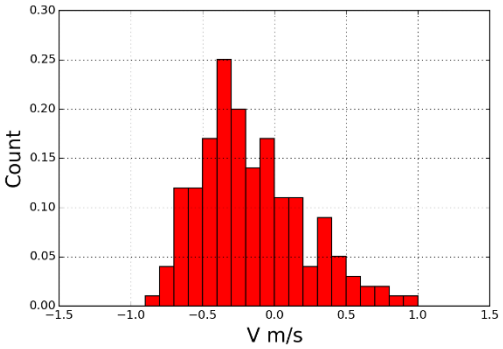


Figure B. 2115: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

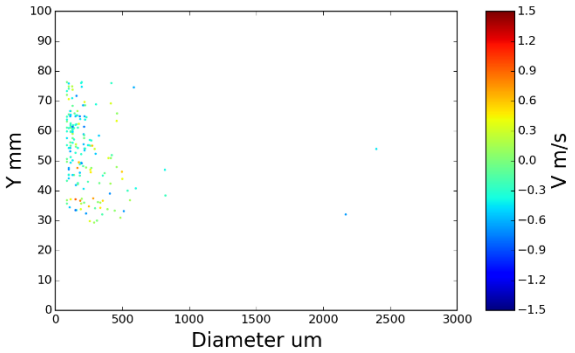


Figure B. 2113: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 Matched Only Droplets for .LB Image

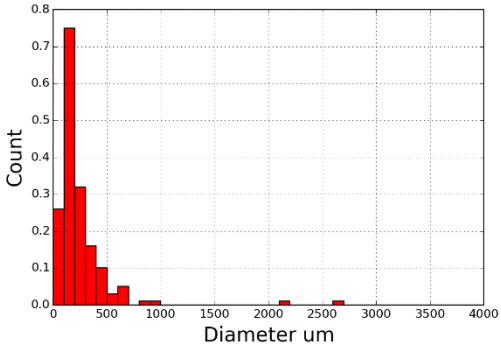


Figure B. 2116: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

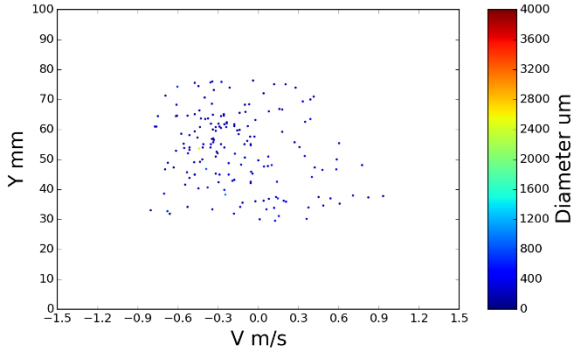


Figure B. 2119: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

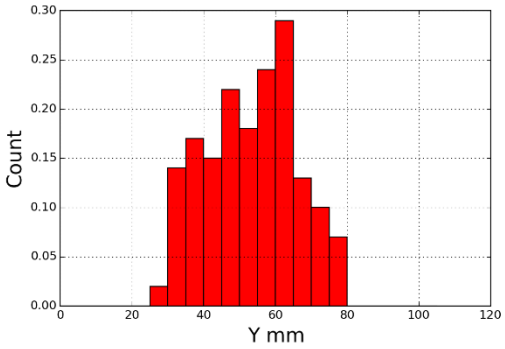


Figure B. 2117: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

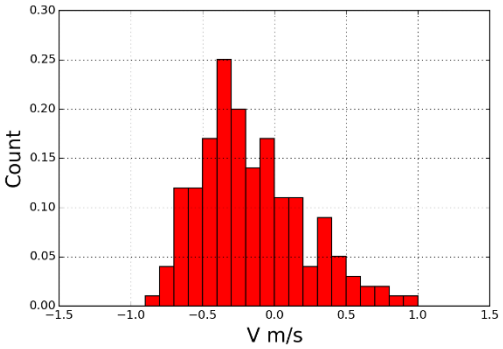


Figure B. 2120: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

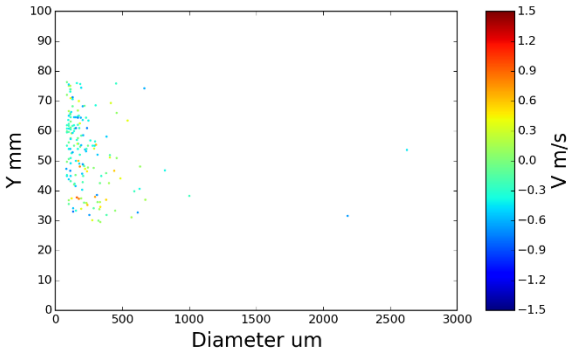


Figure B. 2118: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 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	0.4	0.38	80.8	2026	352.1	328.2	85.7	2014	359.9	336.4
40-60mm	1.0	1.01	80.8	1325	305.7	254.6	85.7	1300	306.8	252.9
60-80mm	0.54	0.54	80.8	806.1	265.9	165.4	85.7	914.7	271.7	188.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	1.94	1.93	80.8	2026	304.2	253.2	85.7	2014	307.4	258.0
			Height A (mm)				Height B (mm)			
Highest Particle			76.7467				76.9240			
Lowest Particle			29.4507				29.2538			

Table B. 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	0.23	80.8	642.0	341.8	184.4	99.0	727.9	370.2	188.3	-0.470	0.660	-0.120	0.270	-0.770	0.490	-0.040	0.370
40-60mm	0.66	85.7	1047	295.2	230.7	85.7	1141	304.9	236.2	-0.690	0.350	-0.160	0.200	-0.650	1.110	0.020	0.360
60-80mm	0.39	114.3	806.1	280.1	167.9	106.9	914.7	288.4	182.1	-0.900	0.070	-0.240	0.170	-0.670	0.600	-0.010	0.350
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	1.28	80.8	1047	299.0	206.4	85.7	1141	311.1	214.9	-0.900	0.660	-0.180	0.210	-0.770	1.110	0.000	0.360

Table B. 229: Matched Droplet Info

B.5.3.1 All Droplets for .LA Image

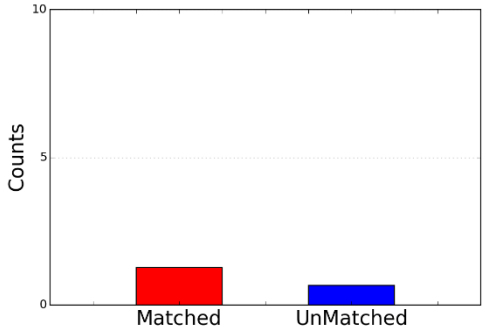


Figure B. 2121: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

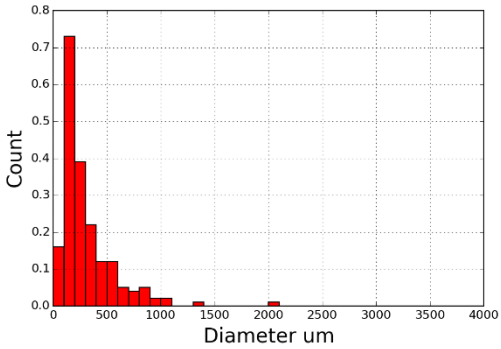


Figure B. 2122: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

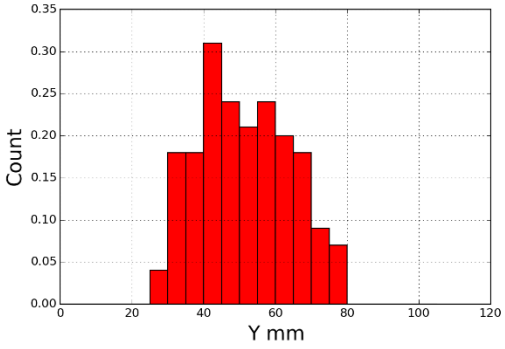


Figure B. 2123: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

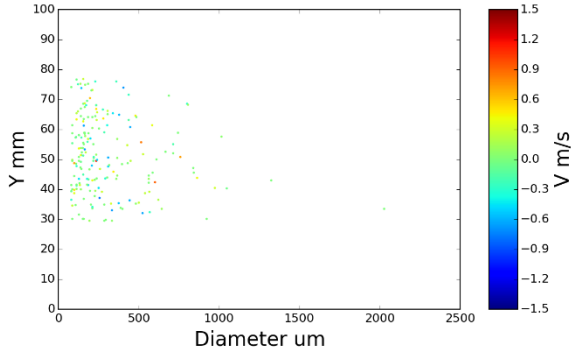


Figure B. 2124: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

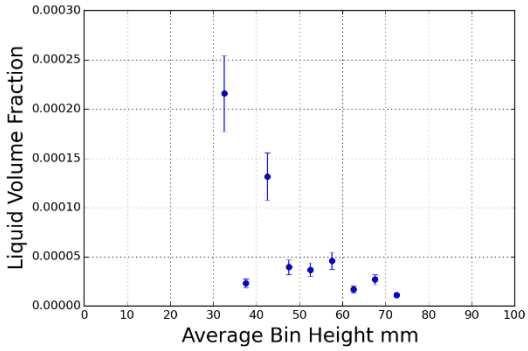


Figure B. 2125: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 All Droplets for .LB Image

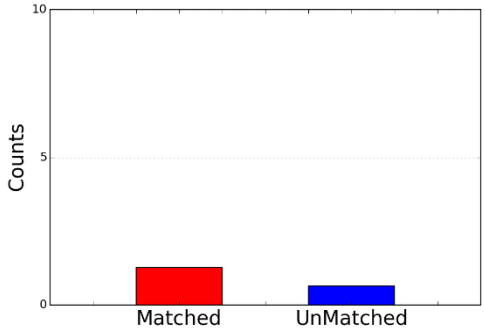


Figure B. 2126: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

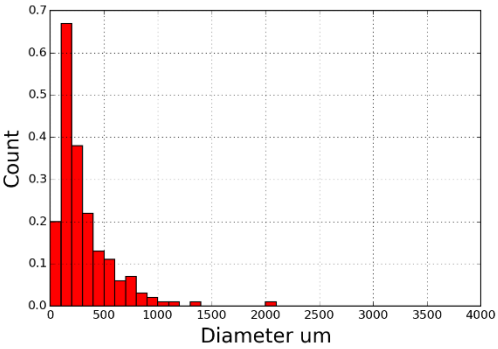


Figure B. 2127: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

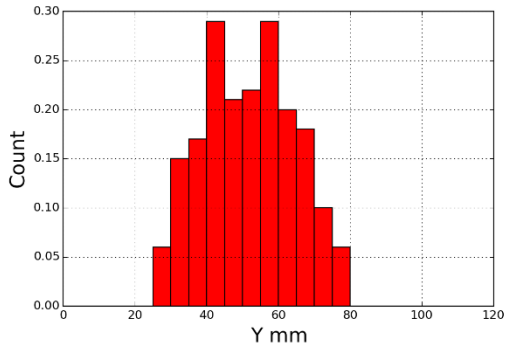


Figure B. 2128: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

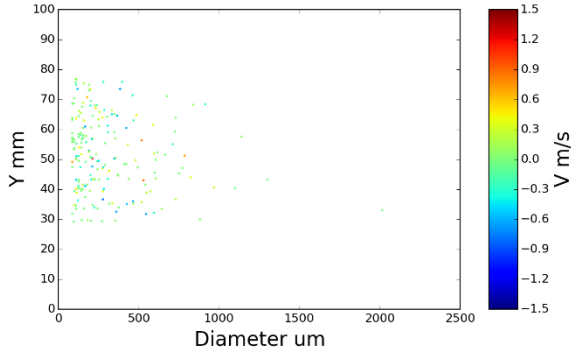


Figure B. 2129: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

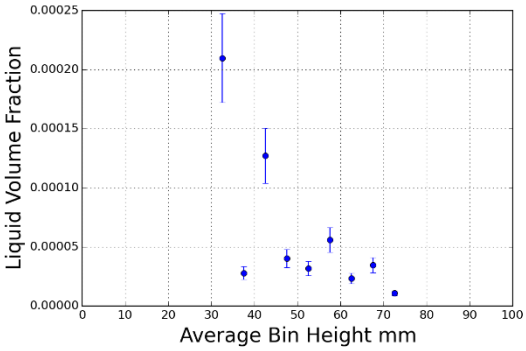


Figure B. 2130: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 Matched Only Droplets for .LA Image

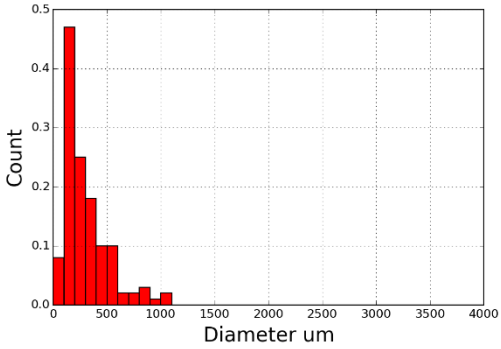


Figure B. 2131: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

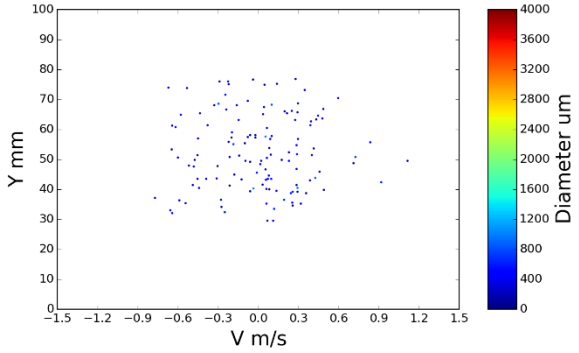


Figure B. 2134: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

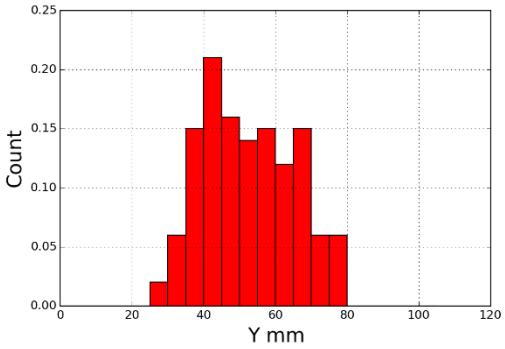


Figure B. 2132: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

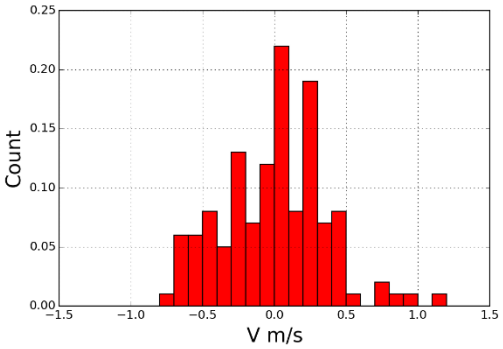


Figure B. 2135: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

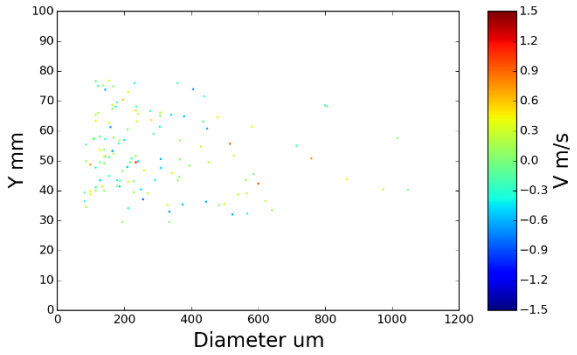


Figure B. 2133: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.1 Matched Only Droplets for .LB Image

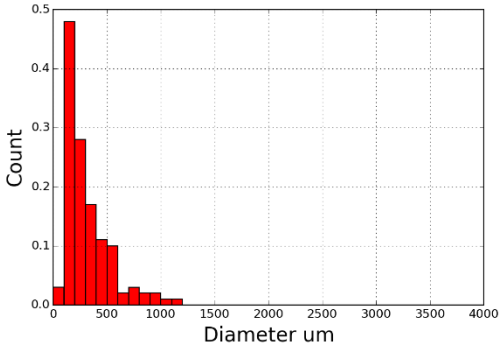


Figure B. 2136: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

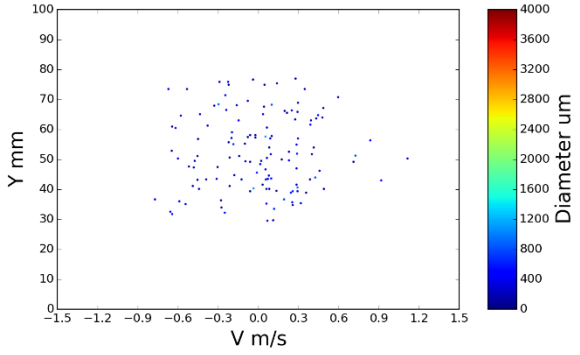


Figure B. 2139: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

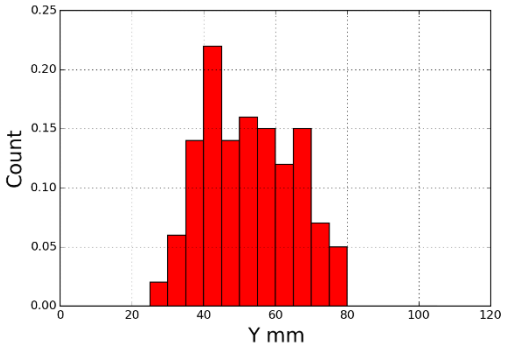


Figure B. 2137: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

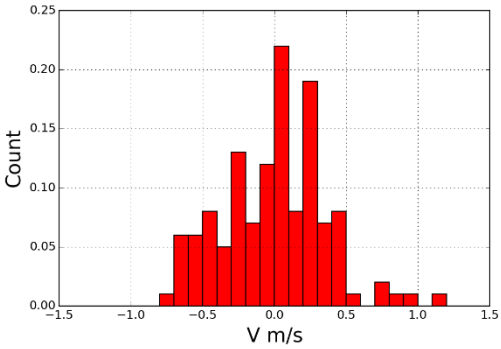


Figure B. 2140: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

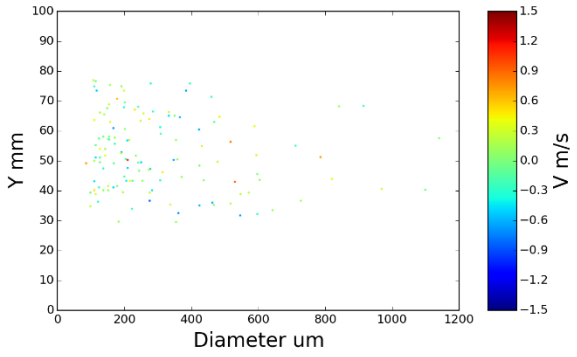


Figure B. 2138: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 Lens 50mm Mag 0_13x

B.5.3.2 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	1.31	1.48	182.2	2281	596.8	372.1	182.2	2827	566.3	375.8
20-40mm	1.33	1.38	193.2	1840	496.0	272.0	193.2	1846	482.0	275.5
40-60mm	1.03	1.06	193.2	3412	857.8	1011	193.2	3426	850.0	992.0
60-80mm	0.46	0.53	170.4	572.5	320.0	102.6	193.2	498.9	323.1	90.6
80-100mm	0.08	0.07	193.2	346.9	242.2	50.4	193.2	315.5	224.2	43.6
All	4.22	4.53	170.4	3412	591.1	589.7	182.2	3426	572.5	574.9
			Height A (mm)				Height B (mm)			
Highest Particle			100.0483100.1469							
Lowest Particle			7.04947.0779							

Table B. 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	0.97	193.2	2281	605.8	363.1	193.2	2827	619.8	406.7	-1.000	0.590	-0.120	0.240	-0.690	0.960	0.110	0.360
20-40mm	1.07	193.2	1840	498.4	268.3	193.2	1846	508.7	279.9	-0.820	0.650	-0.090	0.240	-0.770	1.180	0.100	0.390
40-60mm	0.78	193.2	3245	668.3	830.3	193.2	3426	714.9	919.0	-0.670	0.730	-0.100	0.200	-0.630	0.910	0.160	0.330
60-80mm	0.33	193.2	572.5	332.9	98.0	193.2	498.9	328.0	85.8	-0.310	0.300	-0.090	0.130	-0.330	0.850	0.220	0.270
80-100mm	0.07	193.2	346.9	249.2	50.1	193.2	315.5	224.2	43.6	-0.320	0.000	-0.110	0.100	-0.240	0.520	0.140	0.240
All	3.22	193.2	3245	549.5	493.6	193.2	3426	562.1	535.6	-1.000	0.730	-0.100	0.220	-0.770	1.180	0.130	0.360

Table B. 231: Matched Droplet Info

B.5.3.2 All Droplets for .LA Image

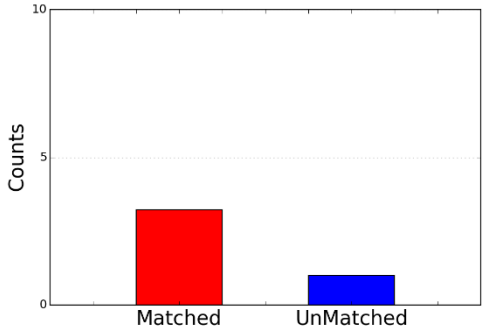


Figure B. 2141: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

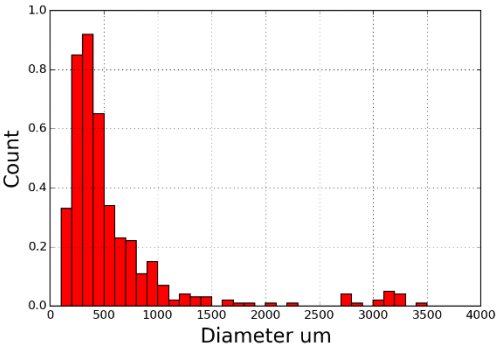


Figure B. 2142: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

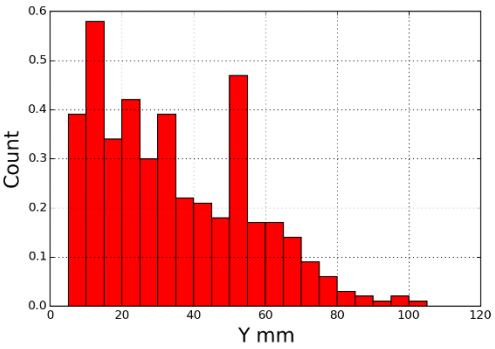


Figure B. 2143: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

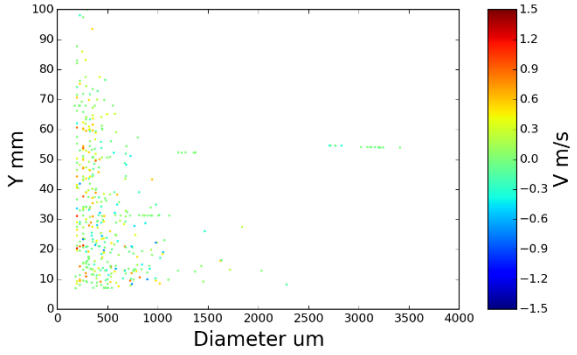


Figure B. 2144: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

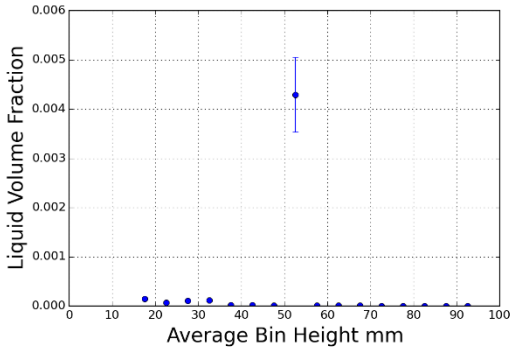


Figure B. 2145: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 All Droplets for .LB Image

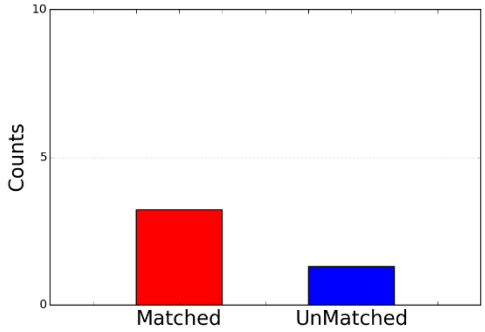


Figure B. 2146: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

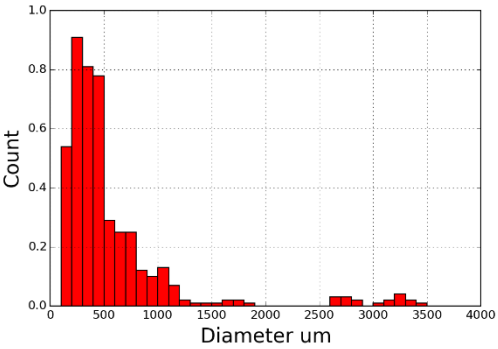


Figure B. 2147: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

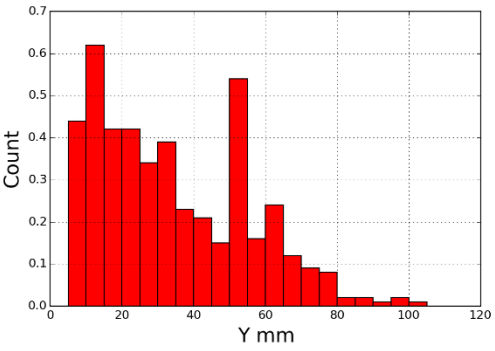


Figure B. 2148: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

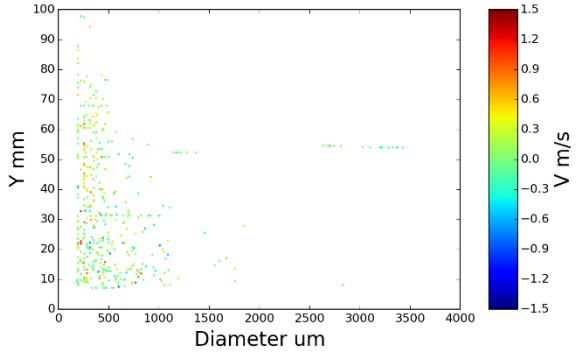


Figure B. 2149: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

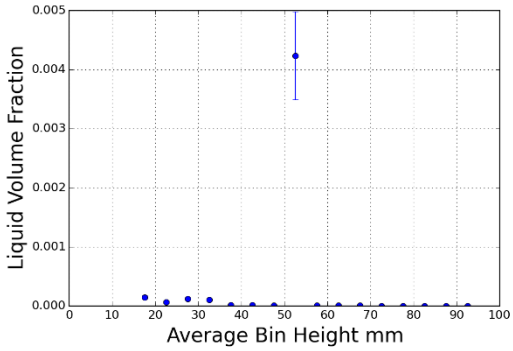


Figure B. 2150: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 Matched Only Droplets for .LA Image

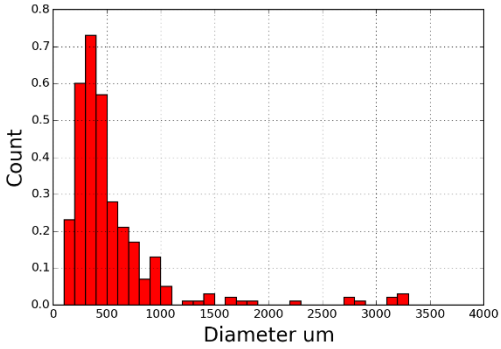


Figure B. 2151: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

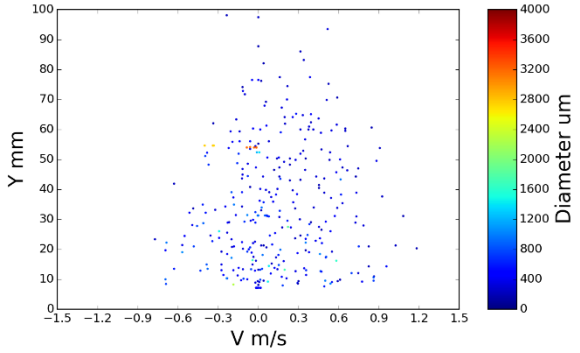


Figure B. 2154: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

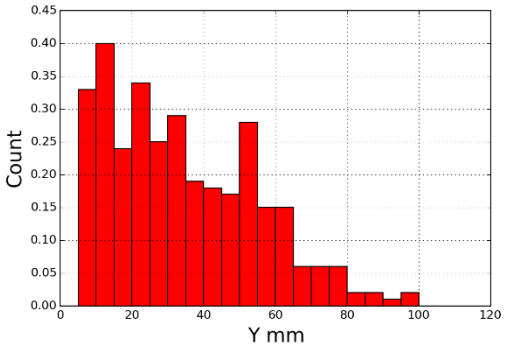


Figure B. 2152: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

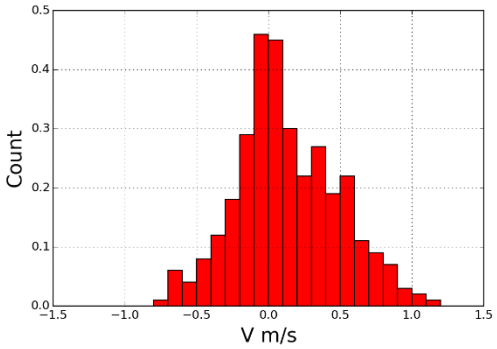


Figure B. 2155: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

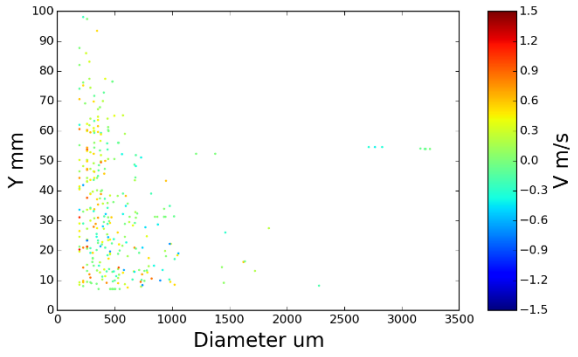


Figure B. 2153: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 Matched Only Droplets for .LB Image

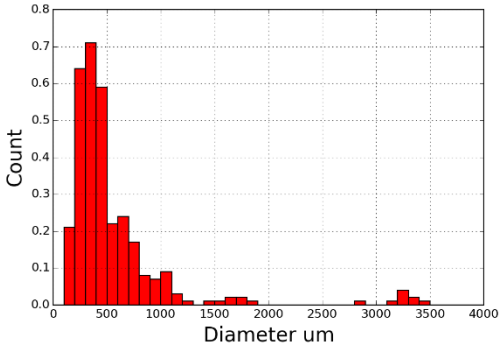


Figure B. 2156: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

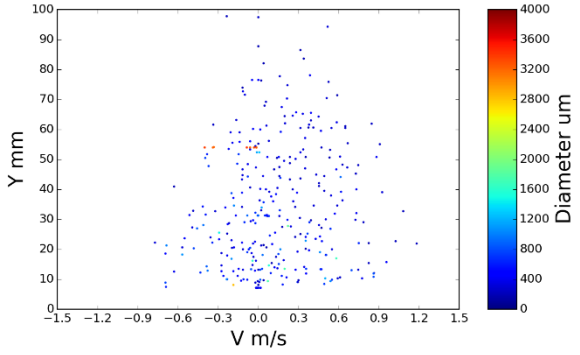


Figure B. 2159: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

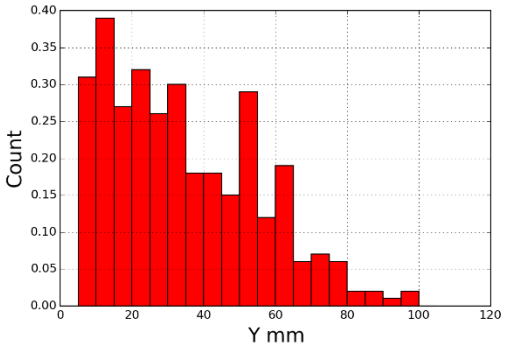


Figure B. 2157: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

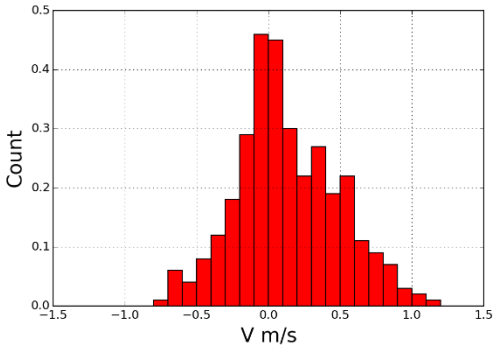


Figure B. 2160: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

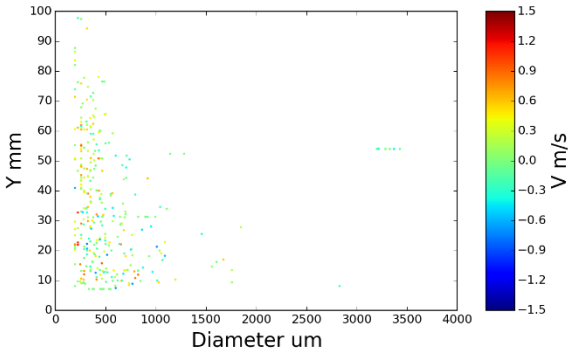


Figure B. 2158: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 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	2.21	2.27	193.2	2344	541.1	293.4	182.2	2281	526.0	291.1
20-40mm	1.87	2.04	182.2	1915	435.9	256.9	193.2	1992	416.5	257.0
40-60mm	1.47	1.52	193.2	1159	399.6	190.7	193.2	1359	399.6	190.9
60-80mm	0.68	0.68	193.2	922.2	377.0	167.1	193.2	922.2	379.8	166.6
80-100mm	0.08	0.06	193.2	684.7	386.5	162.4	249.4	690.7	439.5	152.6
All	6.31	6.57	182.2	2344	457.3	256.3	182.2	2281	446.8	254.4
			Height A (mm)				Height B (mm)			
Highest Particle			94.8801				95.2099			
Lowest Particle			6.1932				6.1271			

Table B. 232: 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	1.49	193.2	1363	539.1	248.7	193.2	1386	544.8	258.4	-1.140	0.760	-0.080	0.270	-1.110	1.100	0.080	0.380
20-40mm	1.52	193.2	1915	466.6	269.6	193.2	1992	469.4	272.3	-0.790	0.730	-0.100	0.250	-0.830	0.970	0.100	0.370
40-60mm	1.18	193.2	1159	411.7	187.7	193.2	1359	421.3	190.7	-1.010	0.430	-0.120	0.230	-0.620	0.950	0.120	0.350
60-80mm	0.57	193.2	922.2	399.7	169.8	193.2	922.2	389.2	168.3	-0.710	0.240	-0.120	0.180	-1.180	1.100	0.030	0.380
80-100mm	0.07	213.6	684.7	414.1	155.1	249.4	690.7	439.5	152.6	-0.560	-0.020	-0.150	0.180	-0.480	0.430	0.010	0.330
All	4.83	193.2	1915	466.9	239.2	193.2	1992	470.4	243.8	-1.140	0.760	-0.100	0.250	-1.180	1.100	0.090	0.370

Table B. 233: Matched Droplet Info

B.5.3.2 All Droplets for .LA Image

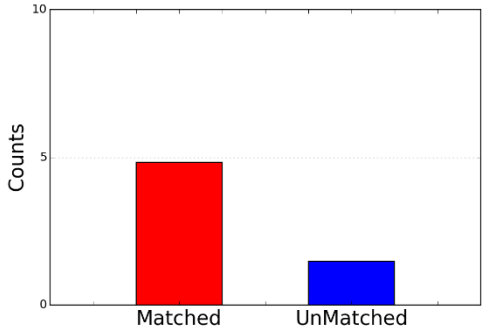


Figure B. 2161: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

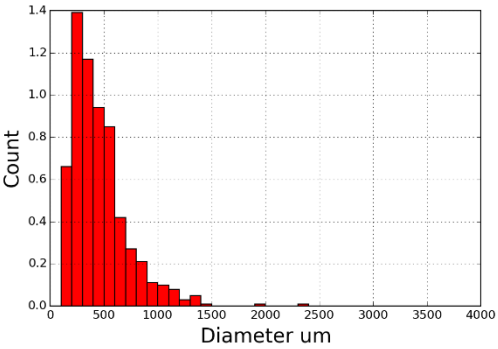


Figure B. 2162: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

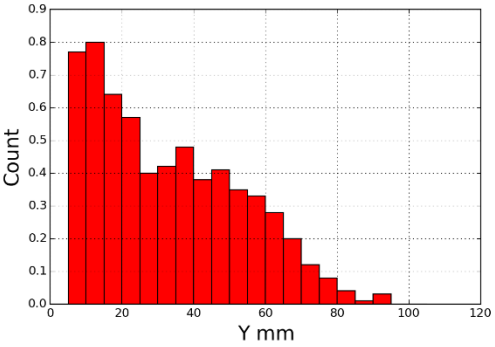


Figure B. 2163: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

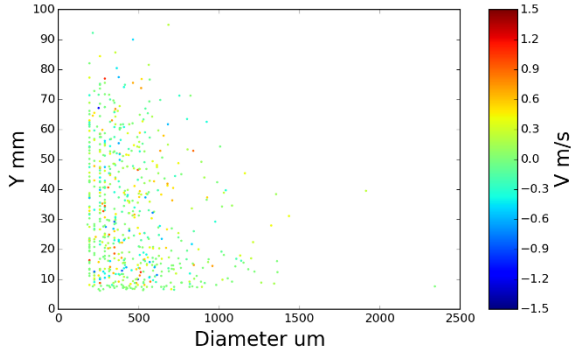


Figure B. 2164: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

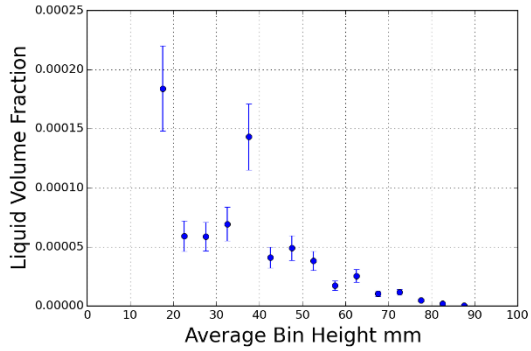


Figure B. 2165: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 All Droplets for .LB Image

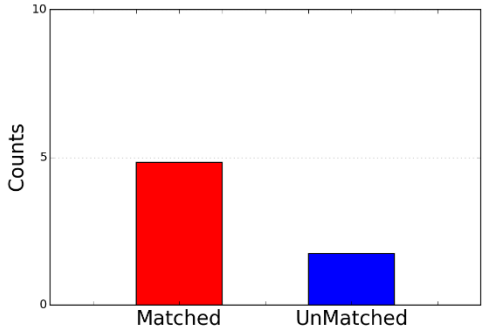


Figure B. 2166: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

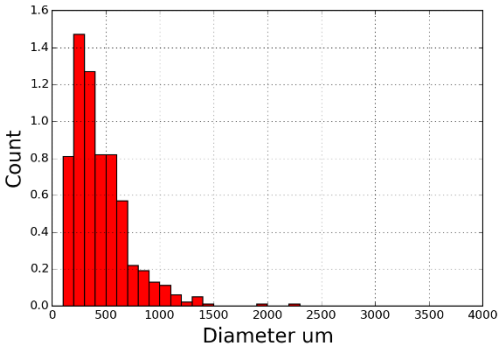


Figure B. 2167: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

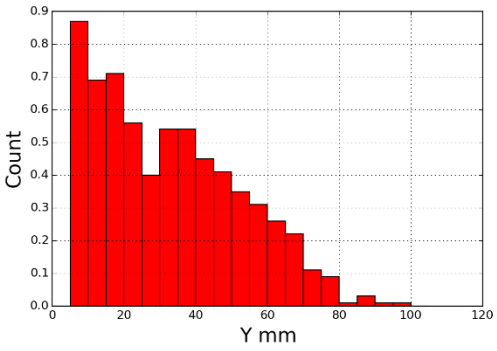


Figure B. 2168: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

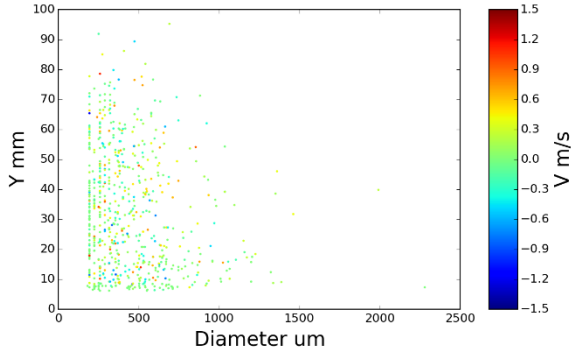


Figure B. 2169: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

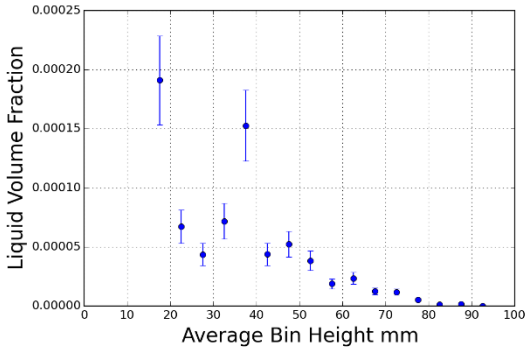


Figure B. 2170: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 Matched Only Droplets for .LA Image

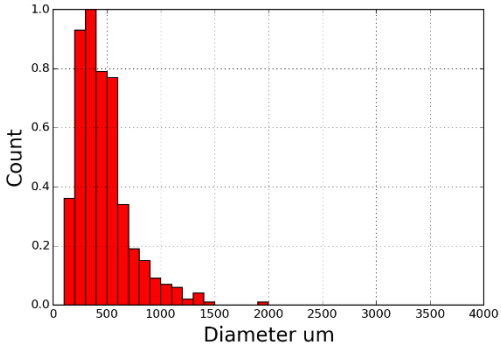


Figure B. 2171: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

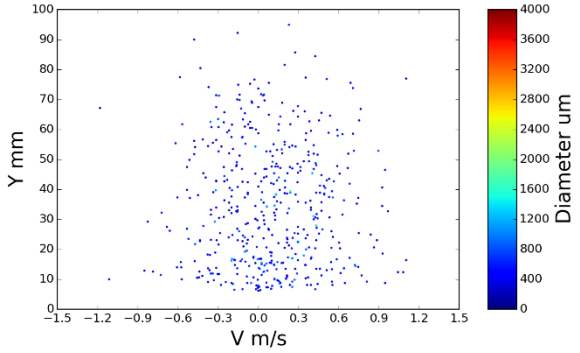


Figure B. 2174: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

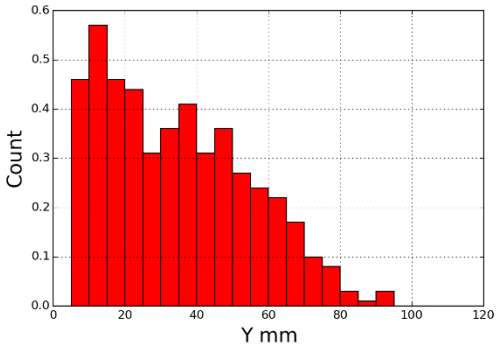


Figure B. 2172: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

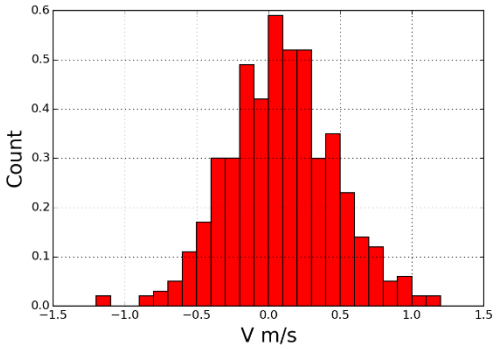


Figure B. 2175: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

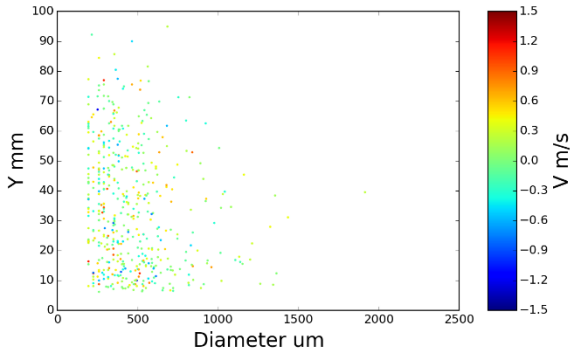


Figure B. 2173: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 Matched Only Droplets for .LB Image

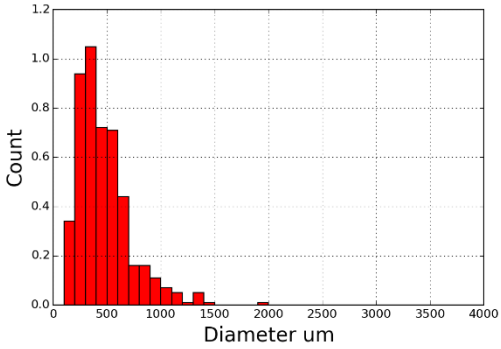


Figure B. 2176: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

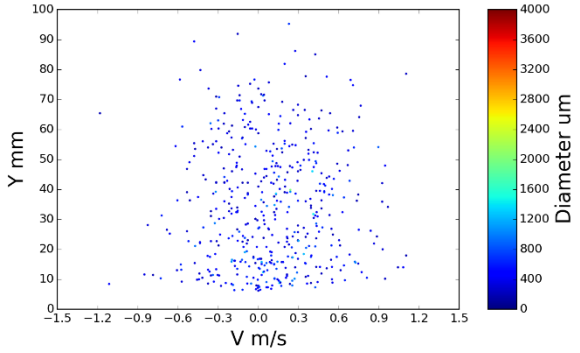


Figure B. 2179: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

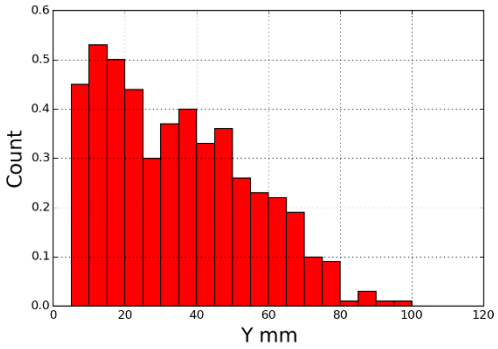


Figure B. 2177: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

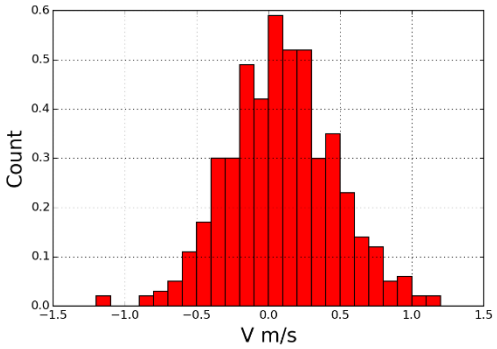


Figure B. 2180: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

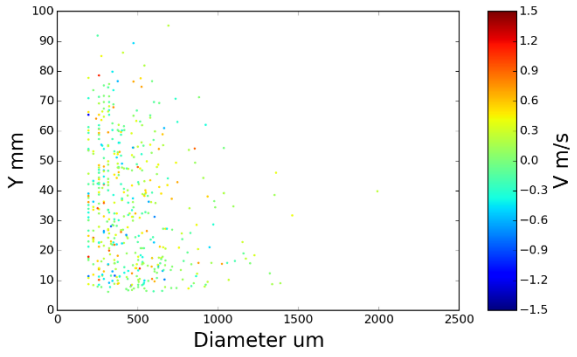


Figure B. 2178: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 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	2.32	2.3	182.2	2437	538.1	351.2	193.2	2440	543.7	348.5
20-40mm	1.2	1.3	193.2	2400	541.5	344.9	193.2	1964	513.5	324.0
40-60mm	1.11	1.24	193.2	1729	513.4	322.8	193.2	1613	480.6	315.2
60-80mm	0.36	0.4	193.2	1343	376.6	248.2	193.2	1296	372.0	238.7
80-100mm	0.07	0.04	193.2	3951	760.8	1303	193.2	322.0	247.0	47.7
All	5.06	5.28	182.2	3951	525.1	371.5	193.2	2440	506.2	330.3
			Height A (mm)				Height B (mm)			
Highest Particle			92.7670				84.2889			
Lowest Particle			5.2686				5.2323			

Table B. 234: 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	1.64	182.2	2437	547.4	336.3	193.2	2440	556.8	344.4	-0.940	0.940	-0.080	0.270	-0.810	1.010	0.020	0.380
20-40mm	0.8	193.2	1430	545.8	291.2	193.2	1454	538.1	297.4	-0.780	0.340	-0.110	0.220	-0.860	0.940	0.030	0.400
40-60mm	0.83	193.2	1622	519.7	291.3	193.2	1613	531.0	304.0	-0.820	0.400	-0.120	0.160	-0.840	0.940	0.020	0.410
60-80mm	0.25	193.2	1012	378.9	211.7	193.2	1050	390.4	207.8	-0.430	0.300	-0.120	0.180	-0.750	1.020	-0.070	0.360
80-100mm	0.05	193.2	288.0	236.3	37.5	193.2	322.0	247.0	47.7	-0.730	0.160	-0.390	0.300	-0.720	0.510	-0.140	0.440
All	3.57	182.2	2437	524.5	311.2	193.2	2440	530.2	318.5	-0.940	0.940	-0.100	0.230	-0.860	1.020	0.010	0.390

Table B. 235: Matched Droplet Info

B.5.3.2 All Droplets for .LA Image

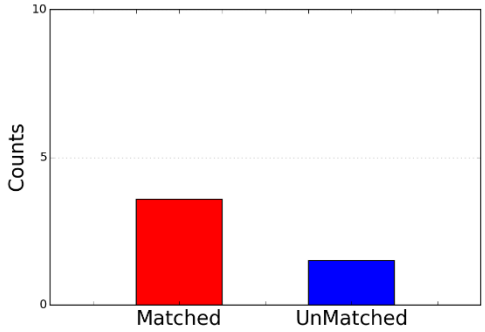


Figure B. 2181: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

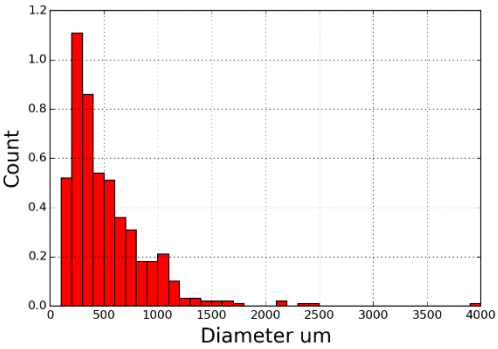


Figure B. 2182: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

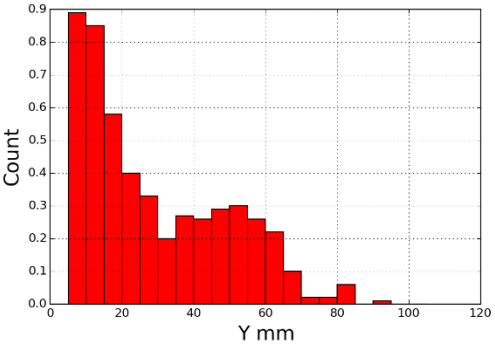


Figure B. 2183: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

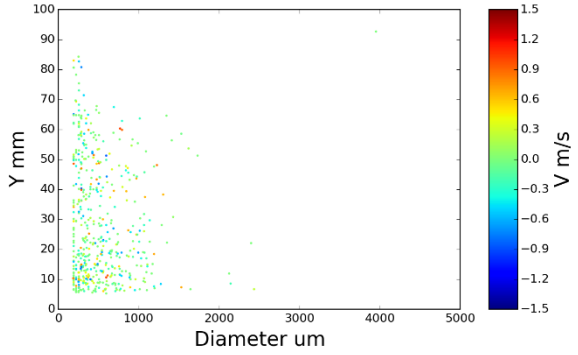


Figure B. 2184: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

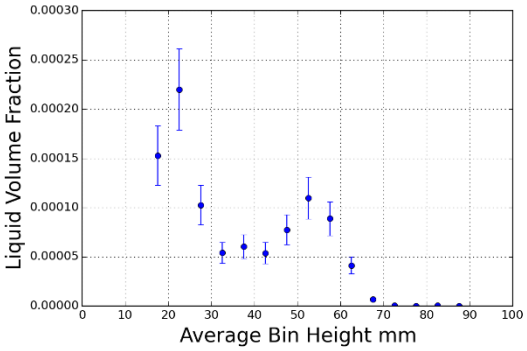


Figure B. 2185: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 All Droplets for .LB Image

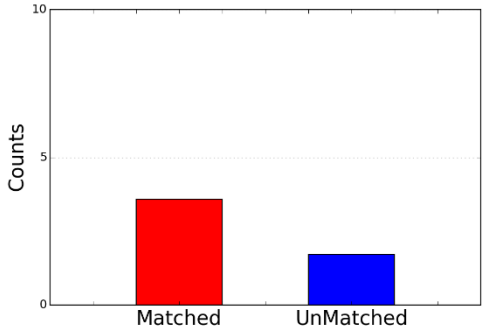


Figure B. 2186: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

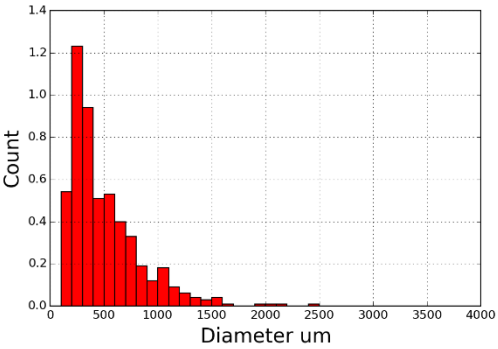


Figure B. 2187: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

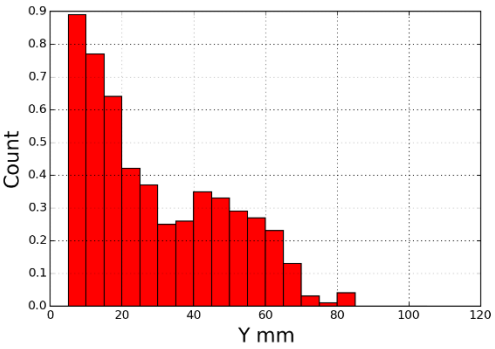


Figure B. 2188: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

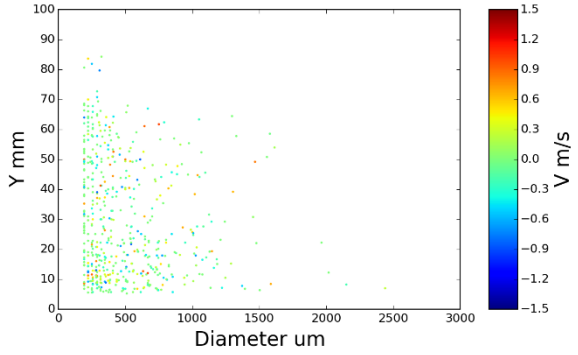


Figure B. 2189: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

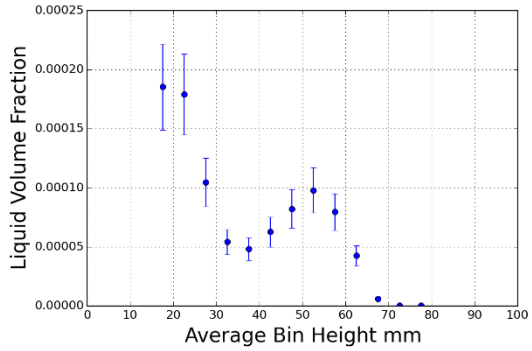


Figure B. 2190: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 Matched Only Droplets for .LA Image

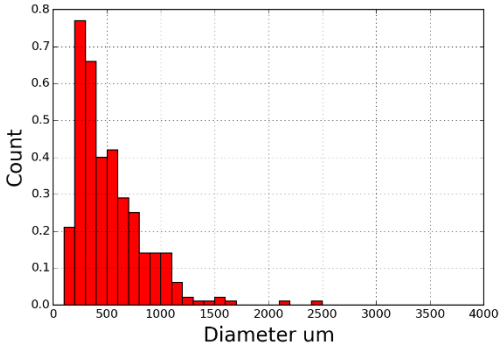


Figure B. 2191: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

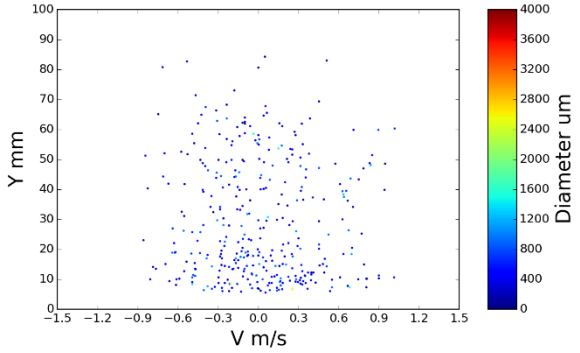


Figure B. 2194: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

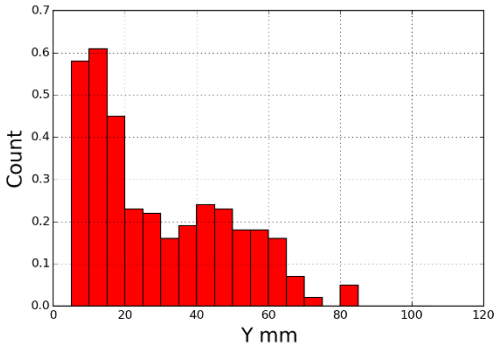


Figure B. 2192: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

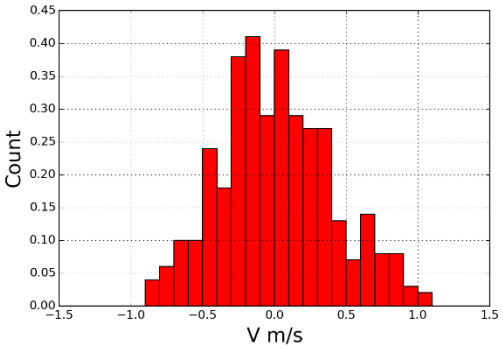


Figure B. 2195: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

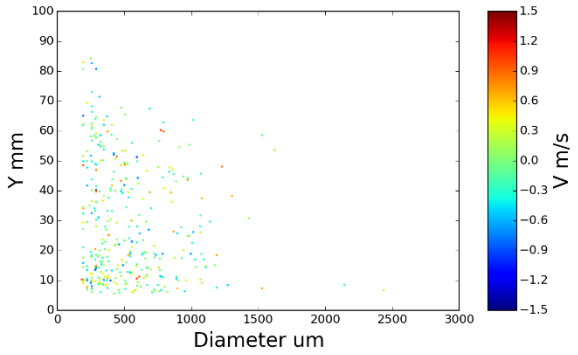


Figure B. 2193: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 Matched Only Droplets for .LB Image

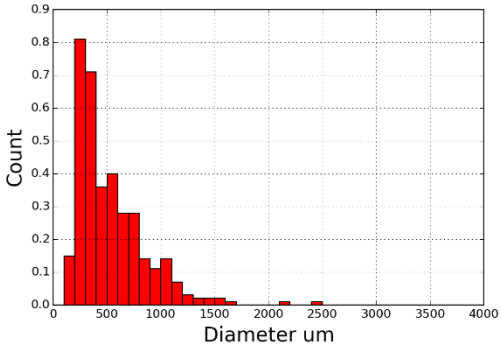


Figure B. 2196: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

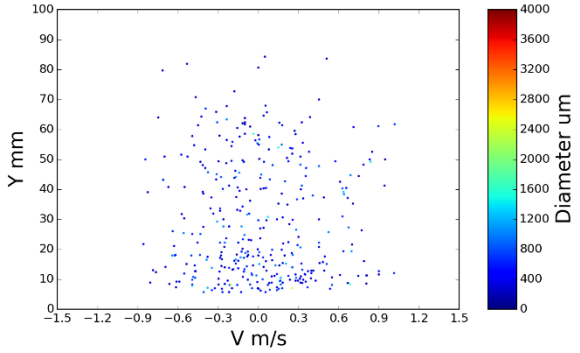


Figure B. 2199: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

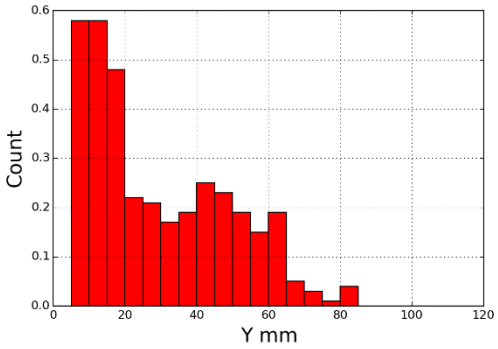


Figure B. 2197: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

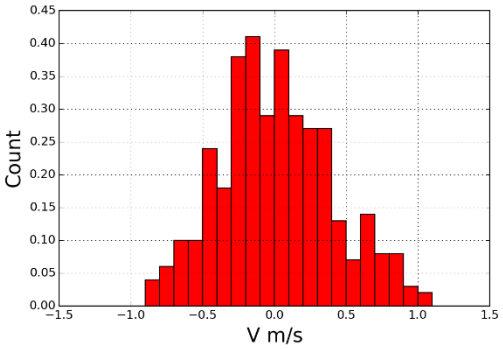


Figure B. 2200: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

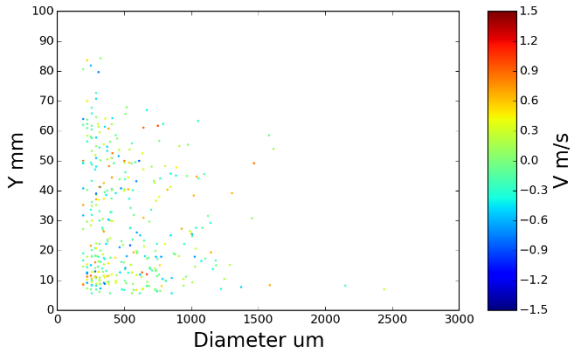


Figure B. 2198: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 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	2.01	1.83	182.2	2227	556.1	358.1	193.2	2183	585.5	362.2
20-40mm	0.76	0.78	193.2	1413	540.8	278.1	193.2	1509	522.9	265.9
40-60mm	0.52	0.56	193.2	1898	481.5	347.5	193.2	1894	485.2	332.6
60-80mm	0.22	0.18	193.2	1296	474.2	309.0	193.2	953.1	465.0	251.6
80-100mm	0.01	0.01	257.6	257.6	257.6	0.0	223.1	223.1	223.1	0.0
All	3.52	3.36	182.2	2227	535.8	338.9	193.2	2183	546.7	334.6
			Height A (mm)				Height B (mm)			
Highest Particle			85.6485				84.9636			
Lowest Particle			5.1635				5.1617			

Table B. 236: 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	1.27	182.2	2130	593.0	349.9	193.2	2183	596.8	360.6	-0.960	0.700	-0.080	0.260	-0.940	0.940	0.040	0.360
20-40mm	0.52	193.2	1413	559.6	255.6	193.2	1509	568.0	260.5	-0.810	0.620	-0.130	0.270	-0.930	0.810	-0.050	0.400
40-60mm	0.34	193.2	1898	506.9	325.2	193.2	1894	506.1	323.1	-0.430	0.270	-0.150	0.180	-0.970	1.110	-0.110	0.450
60-80mm	0.17	193.2	1296	496.7	296.4	223.1	878.4	460.1	231.9	-0.710	0.120	-0.180	0.220	-0.890	0.880	-0.170	0.390
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	2.3	182.2	2130	565.6	325.3	193.2	2183	567.3	330.2	-0.960	0.700	-0.110	0.250	-0.970	1.110	-0.020	0.390

Table B. 237: Matched Droplet Info

B.5.3.2 All Droplets for .LA Image

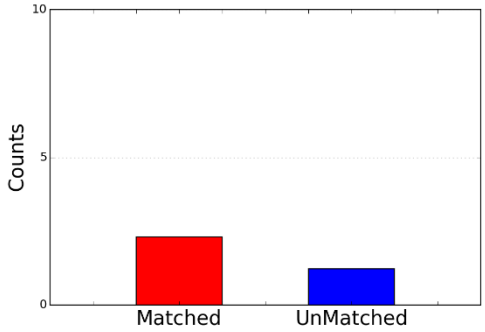


Figure B. 2201: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

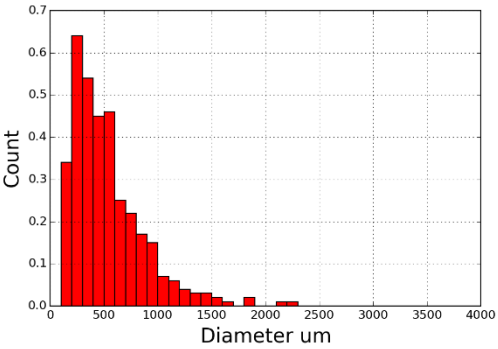


Figure B. 2202: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

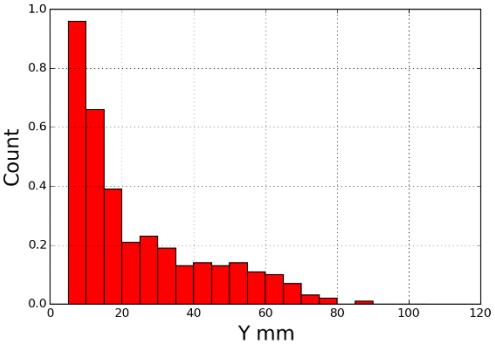


Figure B. 2203: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

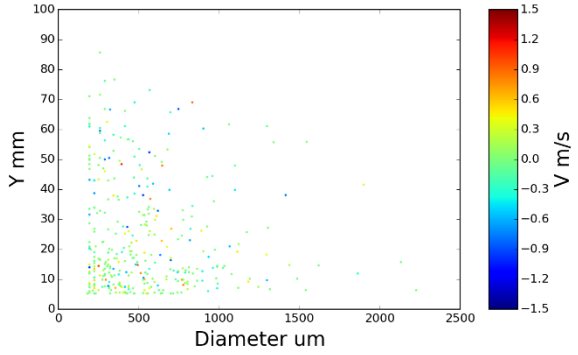


Figure B. 2204: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

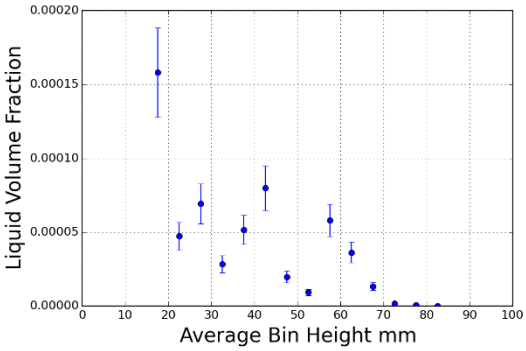


Figure B. 2205: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 All Droplets for .LB Image

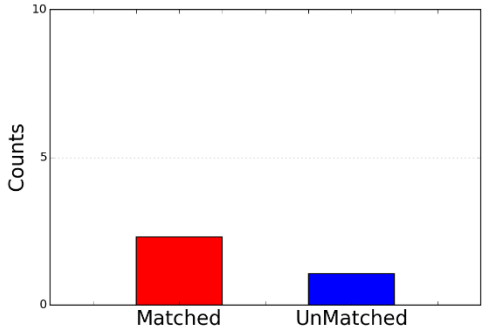


Figure B. 2206: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

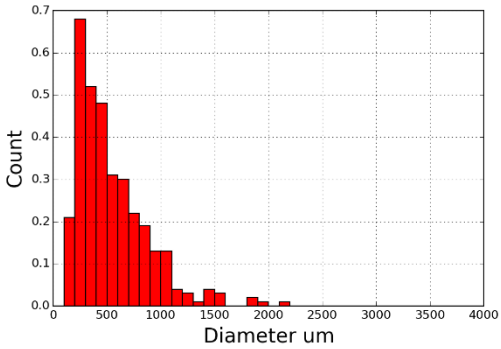


Figure B. 2207: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

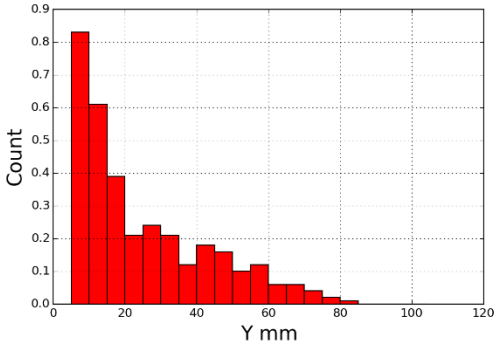


Figure B. 2208: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

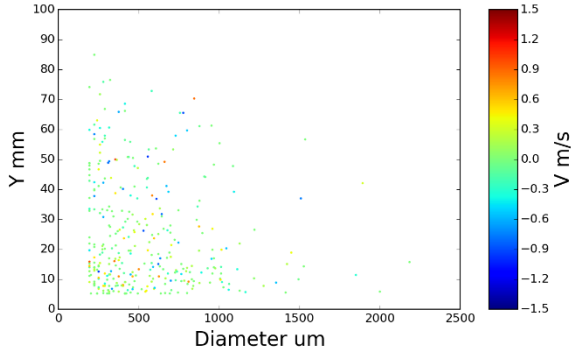


Figure B. 2209: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

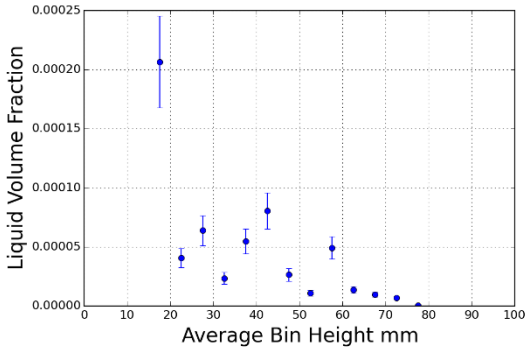


Figure B. 2210: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 Matched Only Droplets for .LA Image

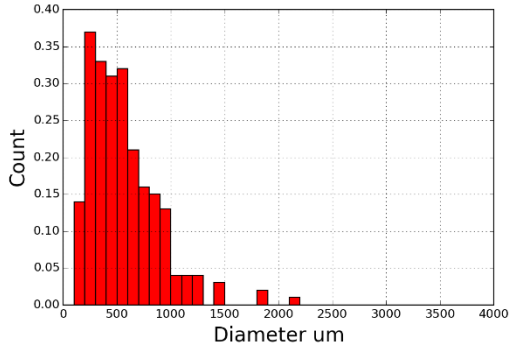


Figure B. 2211: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

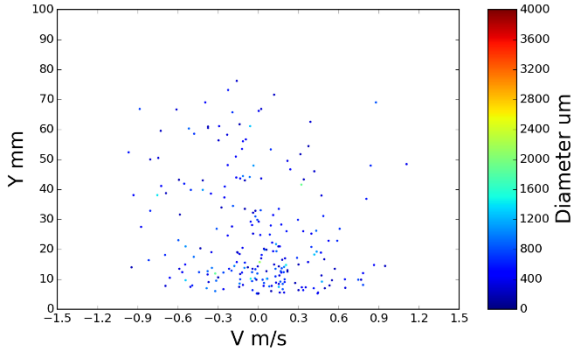


Figure B. 2214: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

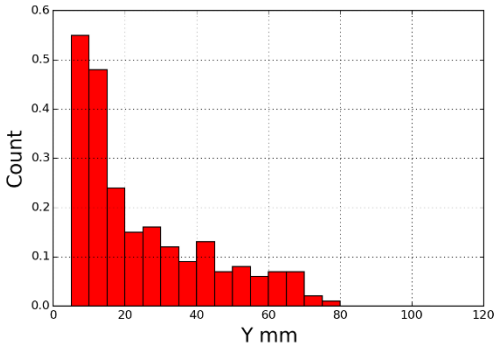


Figure B. 2212: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

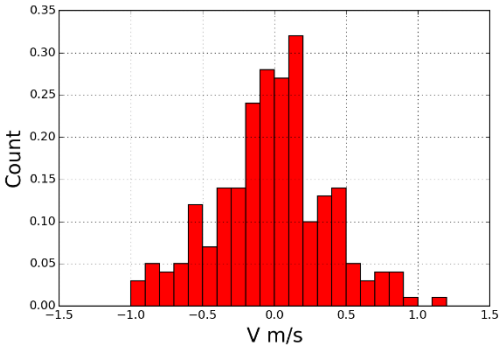


Figure B. 2215: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

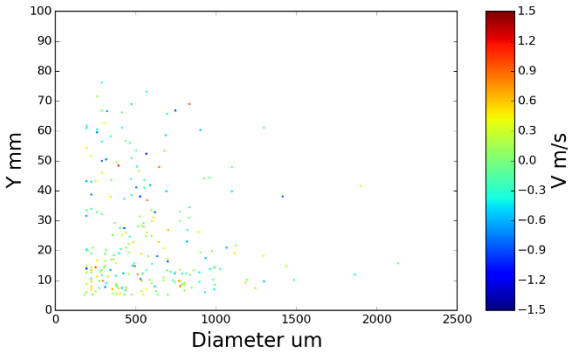


Figure B. 2213: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 Matched Only Droplets for .LB Image

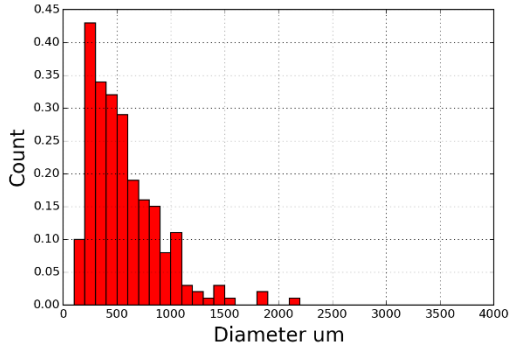


Figure B. 2216: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

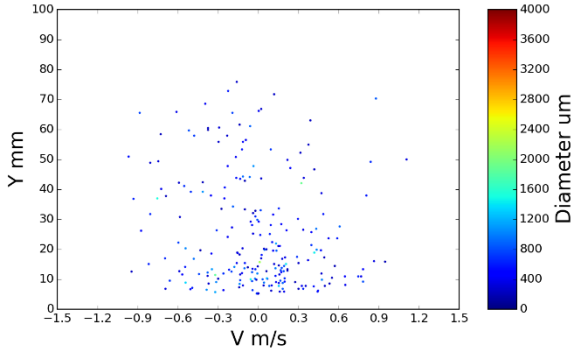


Figure B. 2219: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

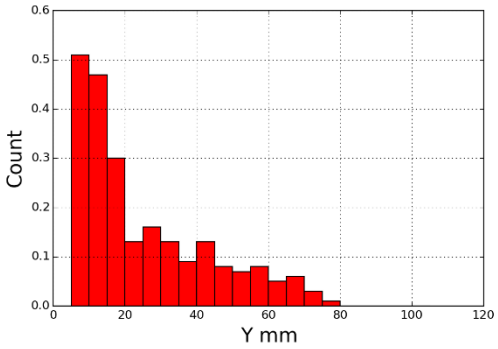


Figure B. 2217: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

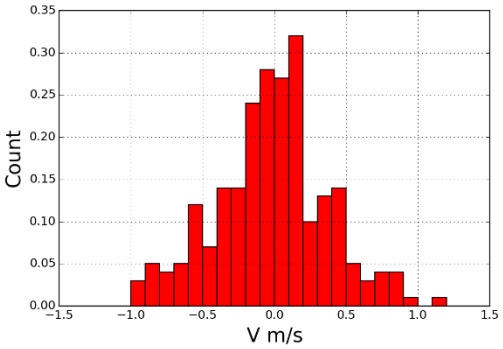


Figure B. 2220: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

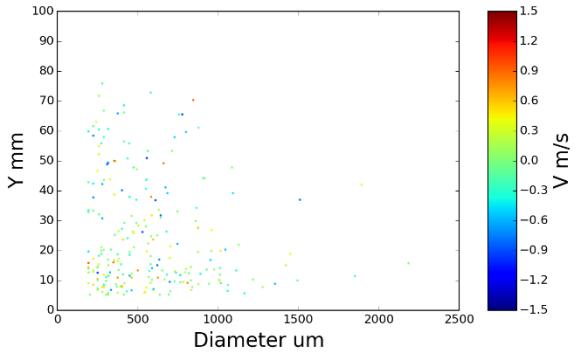


Figure B. 2218: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 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	1.45	1.31	193.2	1774	629.7	360.7	193.2	1854	649.9	368.7
20-40mm	0.81	0.69	182.2	1675	554.2	337.3	193.2	1660	583.5	349.0
40-60mm	0.45	0.45	193.2	2044	572.5	422.6	193.2	1955	584.4	402.9
60-80mm	0.2	0.19	193.2	904.0	393.7	215.4	182.2	910.9	412.6	221.7
80-100mm	0.02	0.0	193.2	600.8	397.0	203.8	-	-	-	-
All	2.93	2.64	182.2	2044	582.4	361.6	182.2	1955	604.3	366.5
			Height A (mm)				Height B (mm)			
Highest Particle			93.2116				73.7314			
Lowest Particle			5.1626				5.1829			

Table B. 238: 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	0.72	193.2	1774	659.3	308.2	193.2	1854	666.9	325.3	-0.910	0.790	-0.110	0.300	-0.890	0.970	0.010	0.380
20-40mm	0.41	249.4	1675	720.1	343.6	223.1	1660	701.7	374.8	-0.930	0.310	-0.170	0.240	-0.780	1.050	0.000	0.410
40-60mm	0.33	193.2	1420	554.5	311.9	193.2	1609	560.3	326.8	-0.670	0.290	-0.150	0.260	-0.770	0.540	-0.150	0.340
60-80mm	0.17	193.2	904.0	426.1	218.0	182.2	910.9	438.0	227.2	-0.470	0.420	-0.100	0.230	-0.670	0.310	-0.190	0.230
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	1.63	193.2	1774	629.0	322.8	182.2	1854	631.0	340.5	-0.930	0.790	-0.130	0.270	-0.890	1.050	-0.040	0.380

Table B. 239: Matched Droplet Info

B.5.3.2 All Droplets for .LA Image

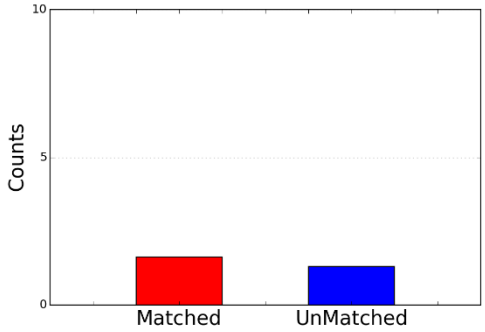


Figure B. 2221: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

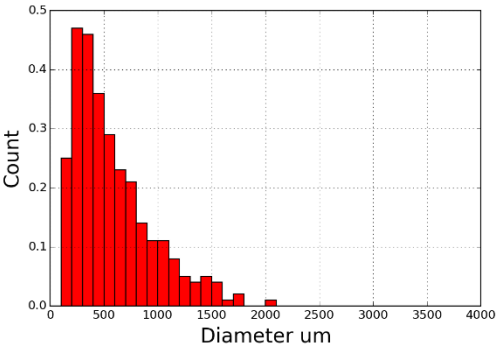


Figure B. 2222: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

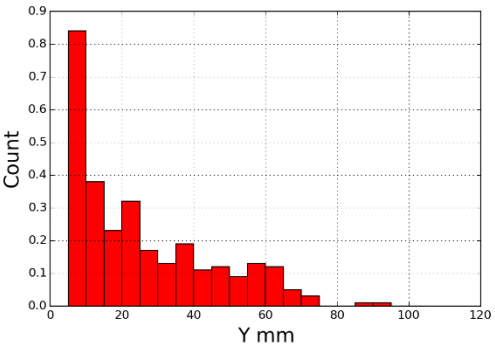


Figure B. 2223: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

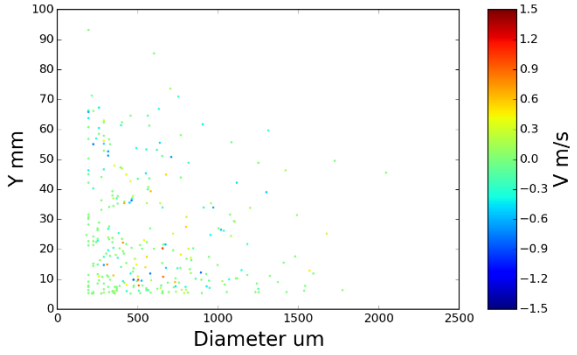


Figure B. 2224: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

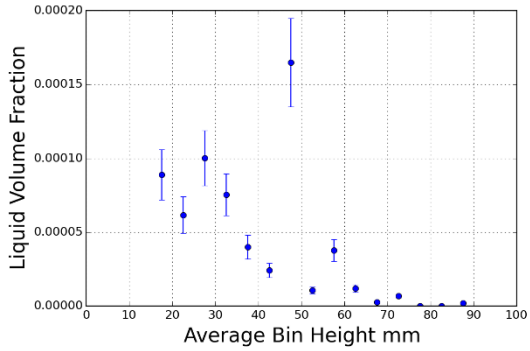


Figure B. 2225: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 All Droplets for .LB Image

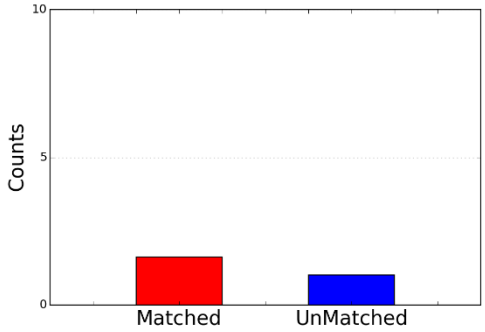


Figure B. 2226: CHC Count Comparison R-123 55F 3500Btu 7500Lb Tri

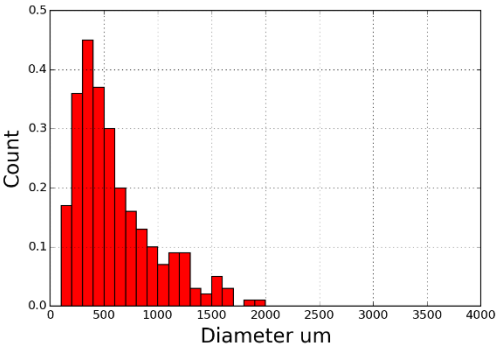


Figure B. 2227: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

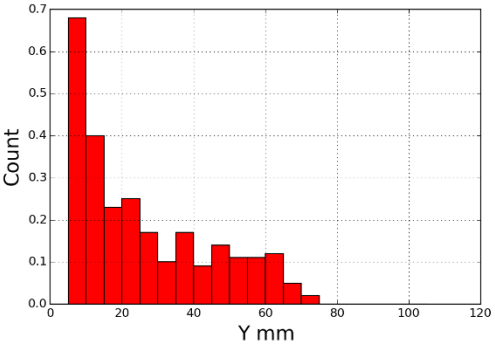


Figure B. 2228: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

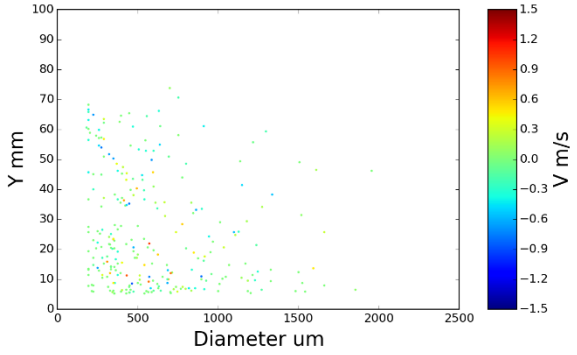


Figure B. 2229: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

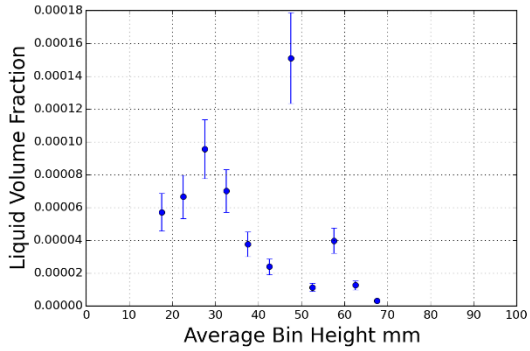


Figure B. 2230: Void Fraction R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 Matched Only Droplets for .LA Image

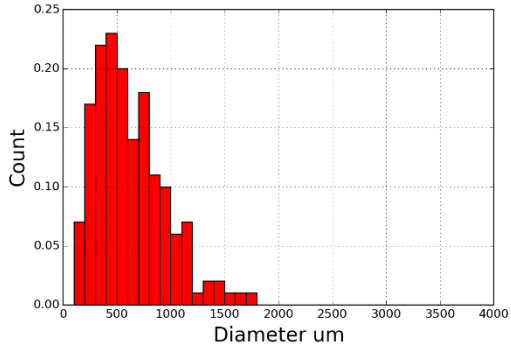


Figure B. 2231: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

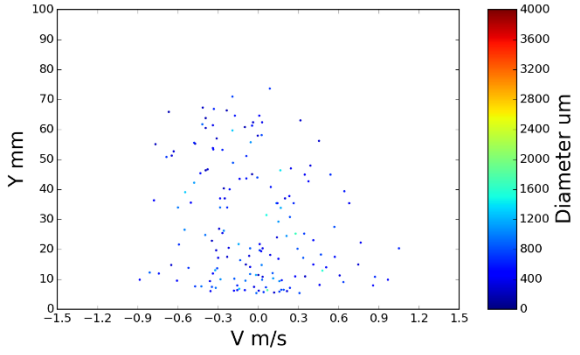


Figure B. 2234: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

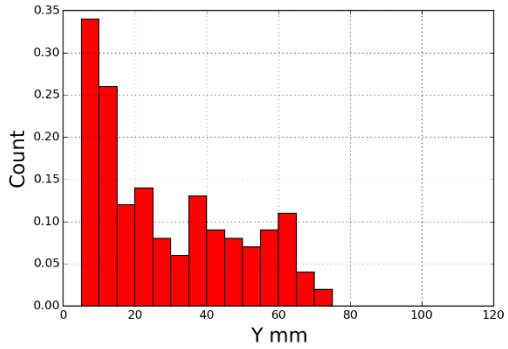


Figure B. 2232: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

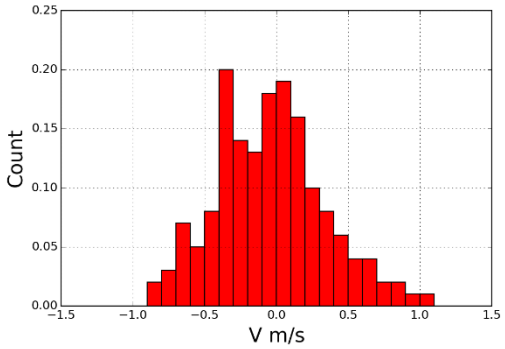


Figure B. 2235: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

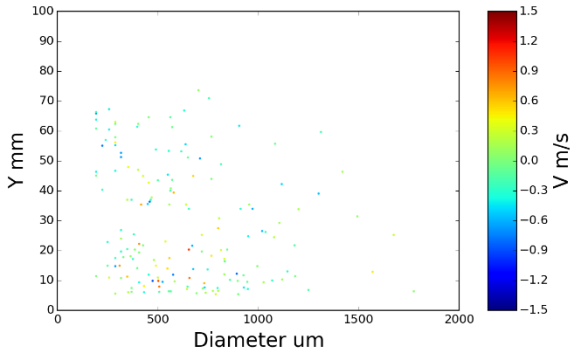


Figure B. 2233: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.5.3.2 Matched Only Droplets for .LB Image

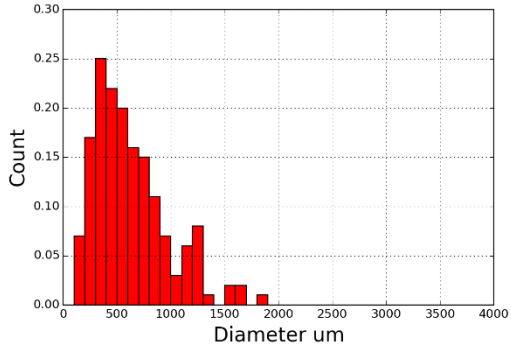


Figure B. 2236: Droplet Diameter Histogram R-123 55F 3500Btu 7500Lb Tri

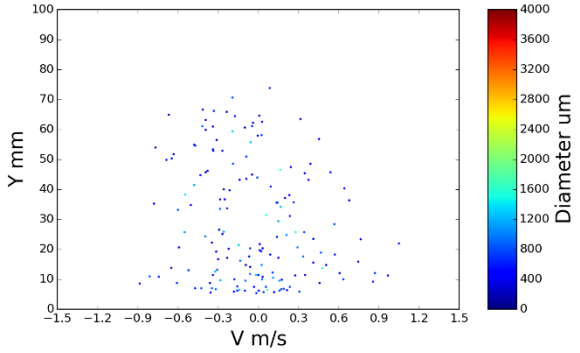


Figure B. 2239: Droplet Height vs Vertical Velocity R-123 55F 3500Btu 7500Lb Tri

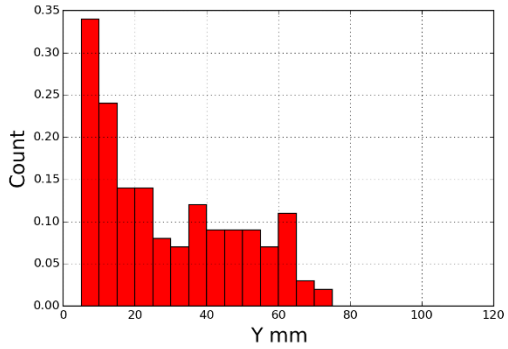


Figure B. 2237: Droplet Height Histogram R-123 55F 3500Btu 7500Lb Tri

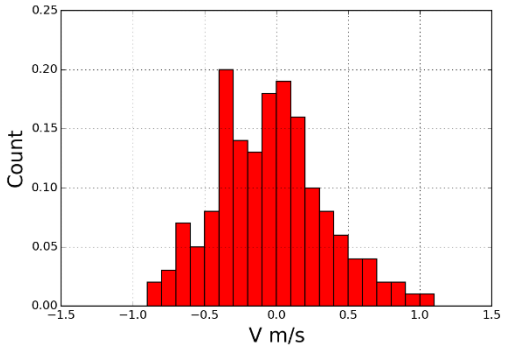


Figure B. 2240: Droplet Vertical Velocity Histogram R-123 55F 3500Btu 7500Lb Tri

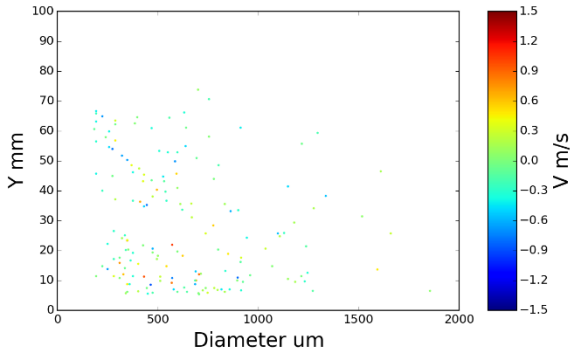


Figure B. 2238: Droplet Height vs Diameter R-123 55F 3500Btu 7500Lb Tri

B.6 - 1556 R-123 55F 5000Btu 15000Lb Tri

B.6.1 Liquid Level 1

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	11287 / 1.422
Ref Mass Flow (lb/hr) / (kg/s)	1634 / 0.206
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15906 / 21.573
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4917 / 15.51
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.2 / 12.86
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	56.2 / 13.46
Total Bundle Q (Btu/hr) / (kW)	136690 / 40.06
Total Bundle & Preboiler Q (Btu/hr) / (kW)	136690 / 40.06
Top Two Rows HTC Ratio	1.067
Bundle Inlet Quality	-0.12
Bundle Exit Quality	0.99

Table B. 240: Thermal Conditions

B.6.1.1 Lens 100mm Mag 0_29x

B.6.1.1 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	85.24	87.6	57.1	3033	498.3	546.4	57.1	3037	503.3	562.6
40-60mm	180.61	190.35	57.1	3038	486.2	506.5	57.1	3038	468.7	505.0
60-80mm	154.9	166.41	57.1	3021	449.4	443.6	57.1	3037	425.4	437.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	420.84	444.46	57.1	3038	475.1	493.4	57.1	3038	459.3	494.1
			Height A (mm)				Height B (mm)			
Highest Particle			76.9981				76.9981			
Lowest Particle			29.0167				29.0167			

Table B. 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	29.87	57.1	3033	775.5	661.3	57.1	3033	774.0	662.3	-1.570	1.580	-0.050	0.430	-1.580	1.580	0.120	0.550
40-60mm	75.63	57.1	3038	669.7	562.2	57.1	3025	660.1	554.8	-1.580	1.580	-0.090	0.410	-1.580	1.580	0.190	0.560
60-80mm	73.77	57.1	3021	583.4	476.0	57.1	3020	574.2	470.8	-1.580	1.580	-0.110	0.370	-1.580	1.580	0.270	0.550
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	179.27	57.1	3038	651.9	551.4	57.1	3033	643.4	546.6	-1.580	1.580	-0.090	0.400	-1.580	1.580	0.210	0.560

B.6.1.1 Table B. 242: Matched Droplet Info

All Droplets for .LA Image

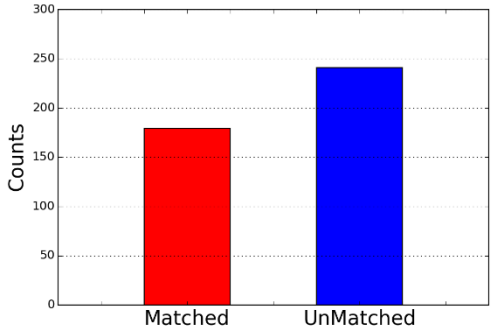


Figure B. 2241: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

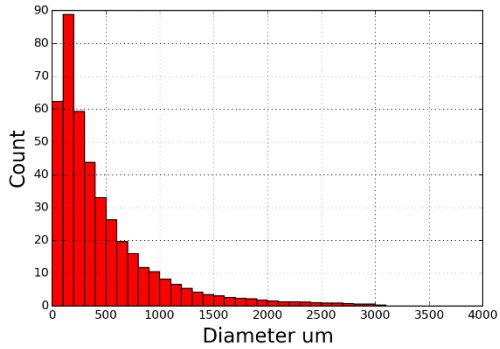


Figure B. 2242: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

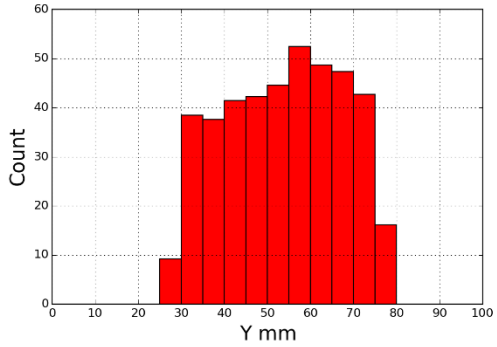


Figure B. 2243: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

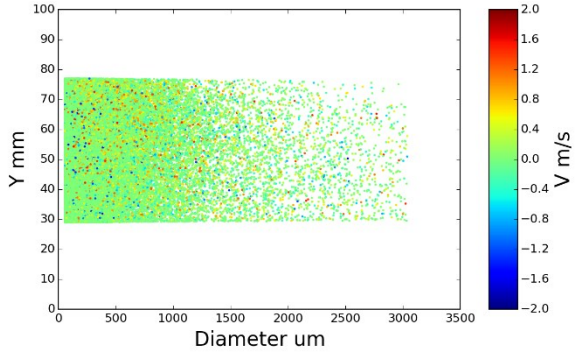


Figure B. 2244: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

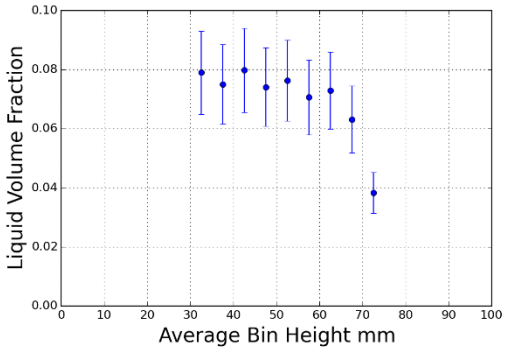


Figure B. 2245: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.1.1 All Droplets for .LB Image

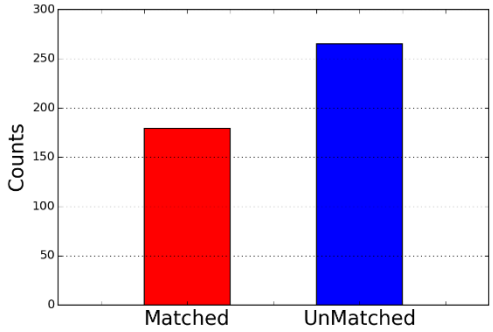


Figure B. 2246: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

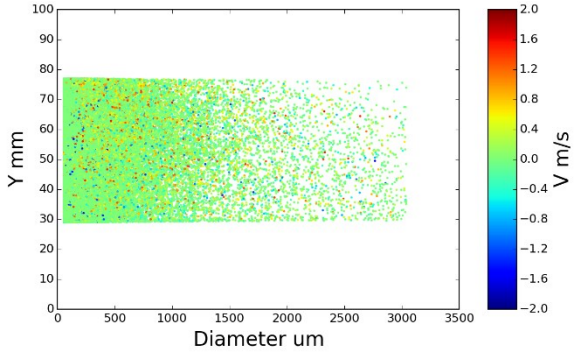


Figure B. 2249: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

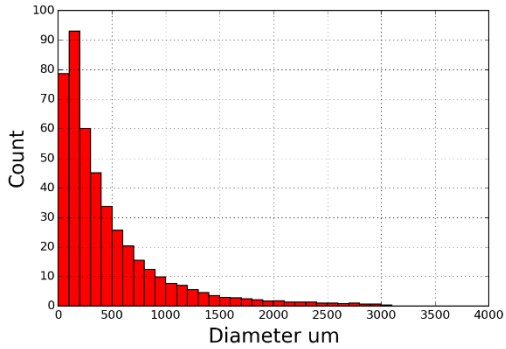


Figure B. 2247: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

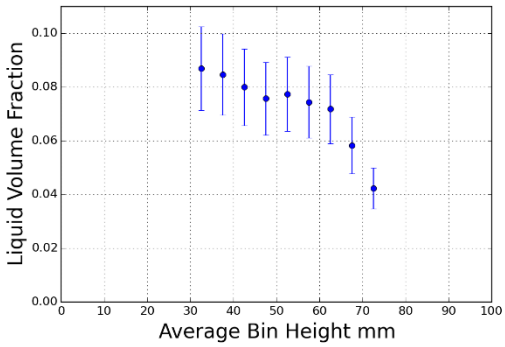


Figure B. 2250: Void Fraction R-123 55F 5000Btu 15000Lb Tri

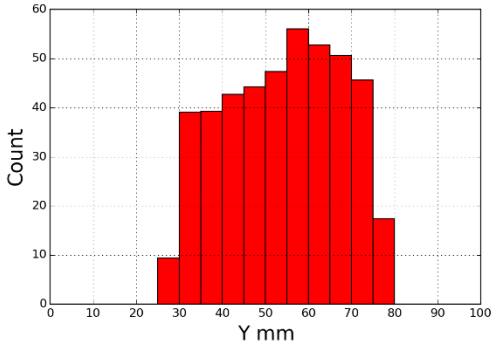


Figure B. 2248: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.1.1 Matched Only Droplets for .LA Image

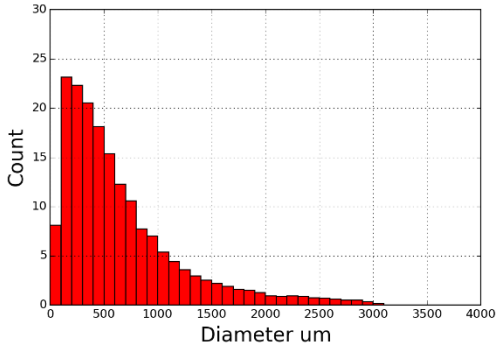


Figure B. 2251: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

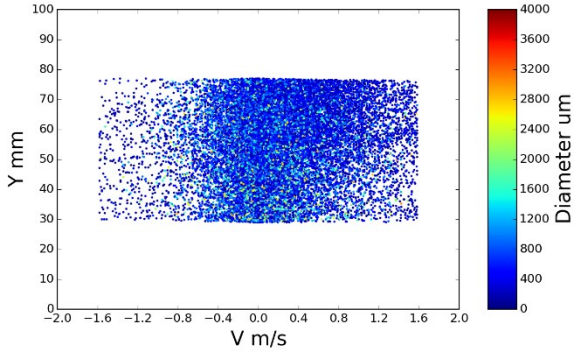


Figure B. 2254: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

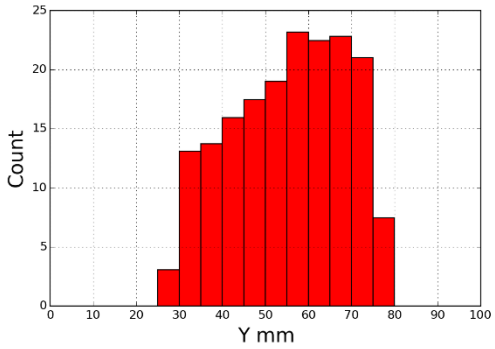


Figure B. 2252: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

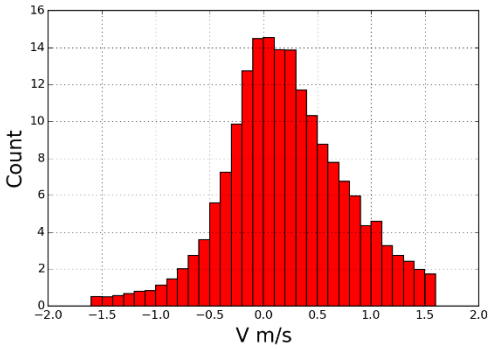


Figure B. 2255: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

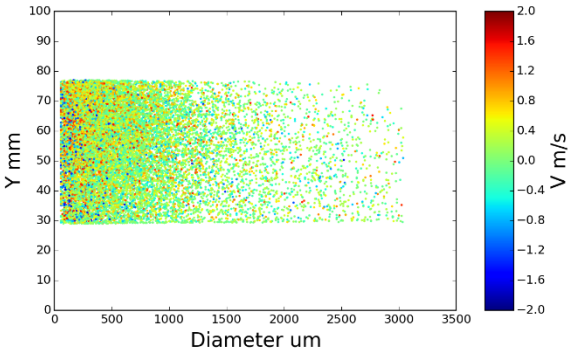


Figure B. 2253: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.1.1 Matched Only Droplets for .LB Image

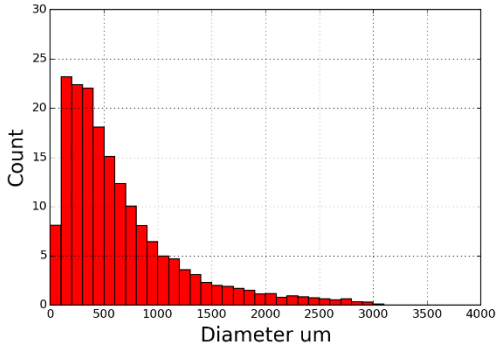


Figure B. 2256: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

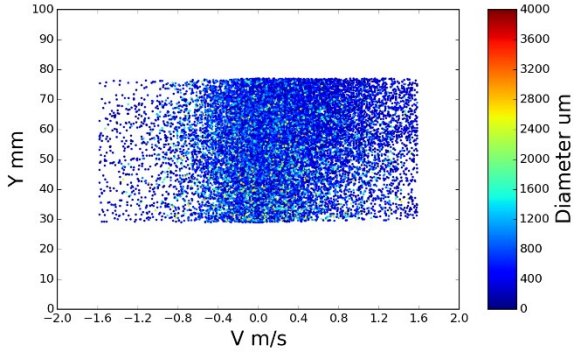


Figure B. 2259: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

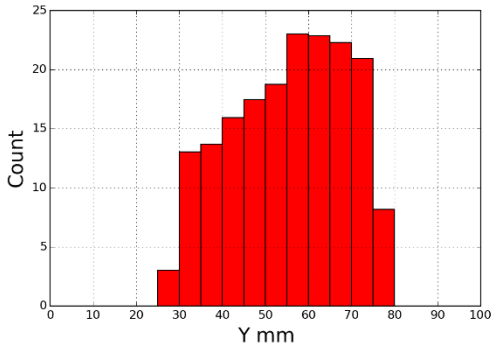


Figure B. 2257: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

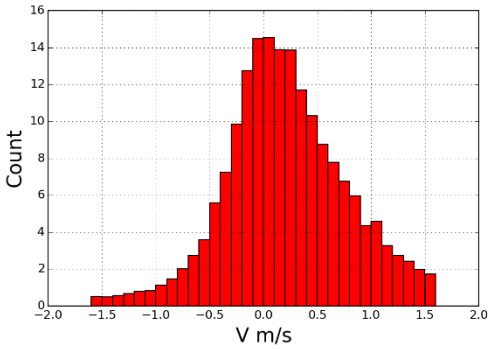


Figure B. 2260: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

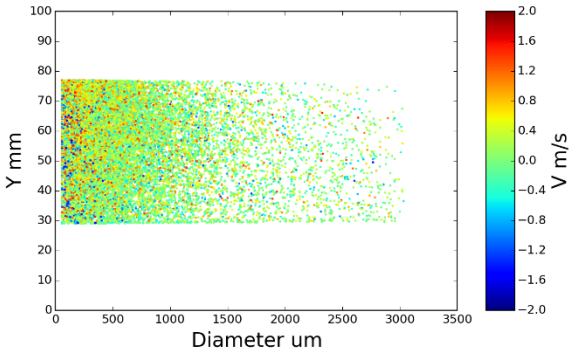


Figure B. 2258: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.1.1 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	47.51	49.12	57.1	3019	658.2	649.4	57.1	3036	631.7	652.0
40-60mm	125.51	133.19	57.1	3038	596.9	595.6	57.1	3037	568.1	592.8
60-80mm	129.49	139.37	57.1	3036	508.3	496.5	57.1	3038	482.7	496.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	302.79	321.76	57.1	3038	568.6	567.5	57.1	3038	540.8	565.7
			Height A (mm)				Height B (mm)			
Highest Particle			76.9981				76.9981			
Lowest Particle			29.0167				29.0167			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	14.74	57.1	3019	1076	738.5	57.1	3036	1066	737.4	-1.530	1.560	-0.040	0.350	-1.560	1.570	0.110	0.500
40-60mm	46.12	57.1	3038	870.4	652.5	57.1	3031	860.8	650.0	-1.580	1.570	-0.080	0.380	-1.580	1.580	0.200	0.560
60-80mm	53.4	57.1	2986	696.5	545.2	57.1	3032	686.0	541.5	-1.580	1.580	-0.120	0.350	-1.580	1.580	0.220	0.560
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	114.26	57.1	3038	815.6	630.7	57.1	3036	804.8	627.6	-1.580	1.580	-0.100	0.360	-1.580	1.580	0.200	0.550

Table B. 244: Matched Droplet Info

B.6.1.1 All Droplets for .LA Image

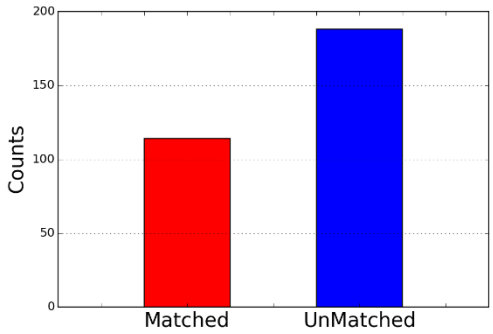


Figure B. 2261: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

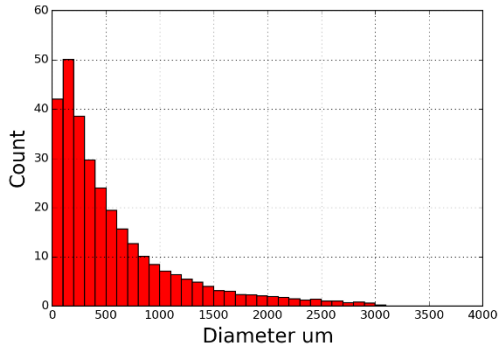


Figure B. 2262: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

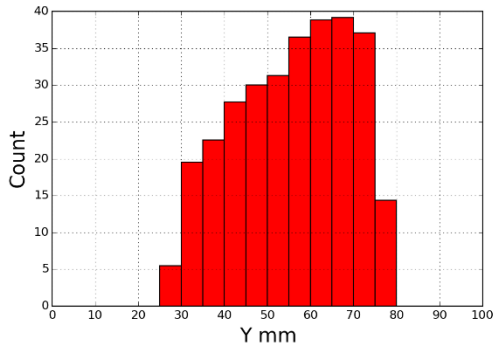


Figure B. 2263: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

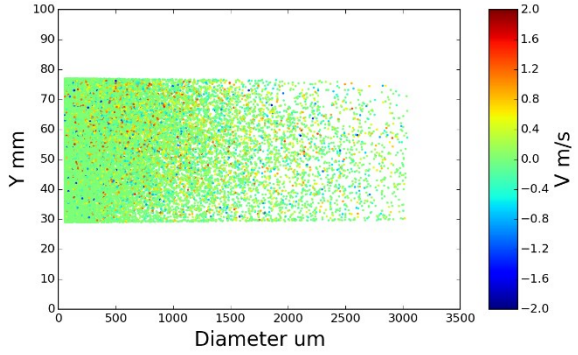


Figure B. 2264: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

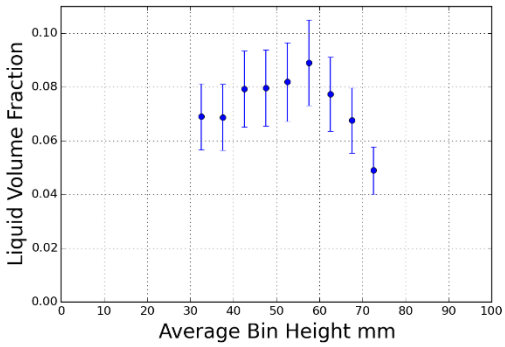


Figure B. 2265: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.1.1 All Droplets for .LB Image

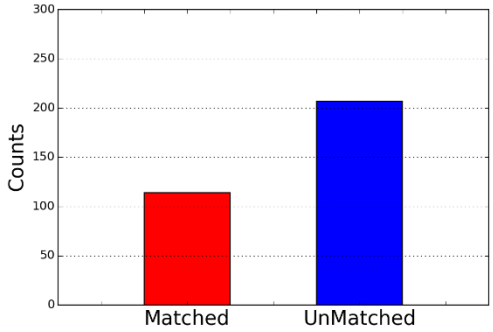


Figure B. 2266: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

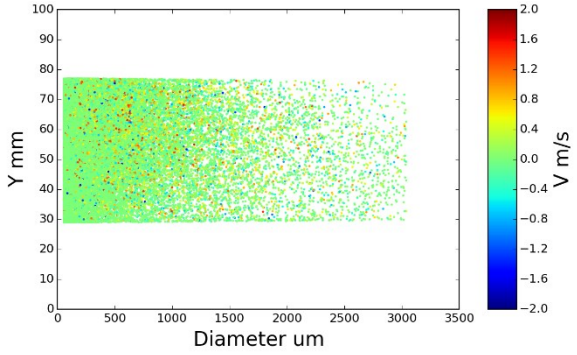


Figure B. 2269: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

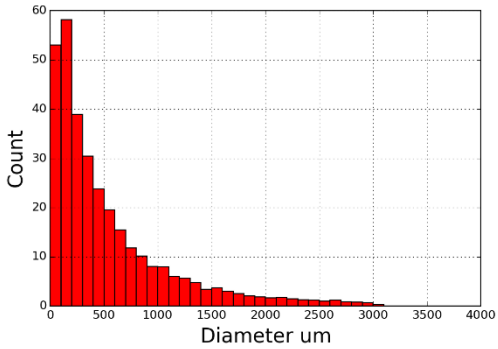


Figure B. 2267: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

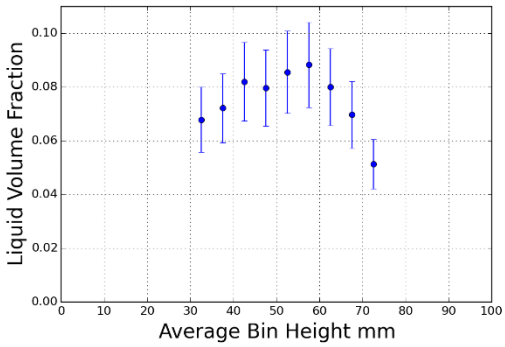


Figure B. 2270: Void Fraction R-123 55F 5000Btu 15000Lb Tri

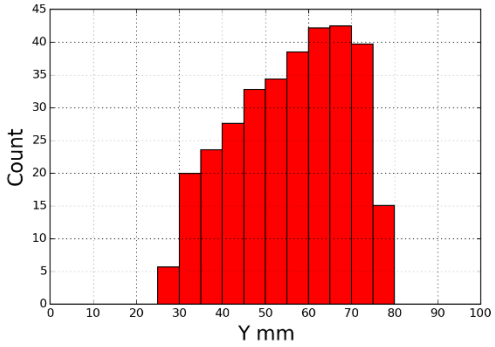


Figure B. 2268: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.1.1 Matched Only Droplets for .LA Image

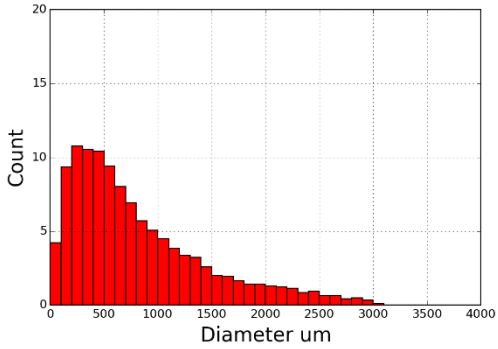


Figure B. 2271: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

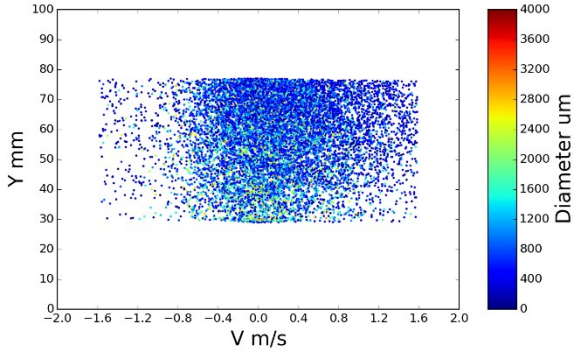


Figure B. 2274: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

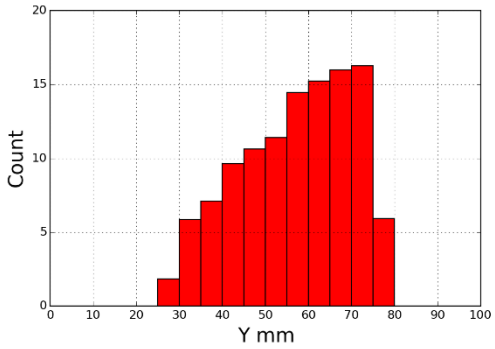


Figure B. 2272: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

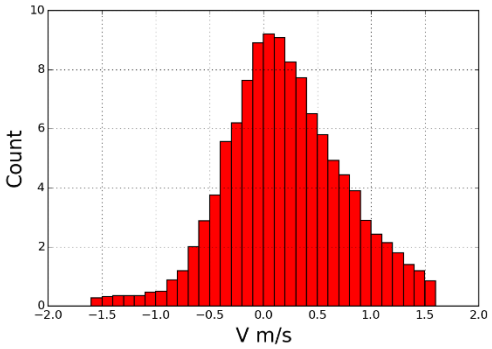


Figure B. 2275: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

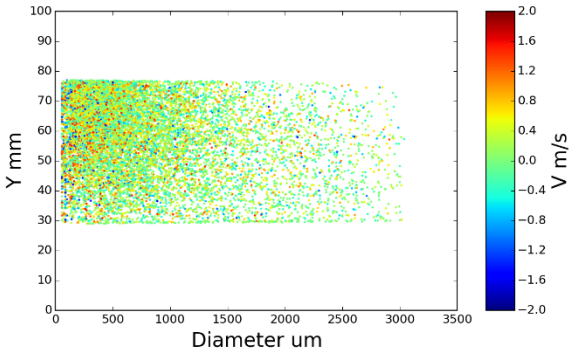


Figure B. 2273: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.1.1 Matched Only Droplets for .LB Image

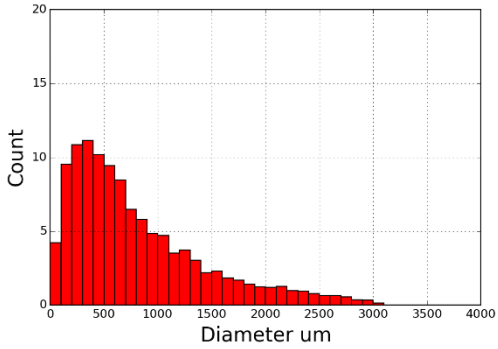


Figure B. 2276: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

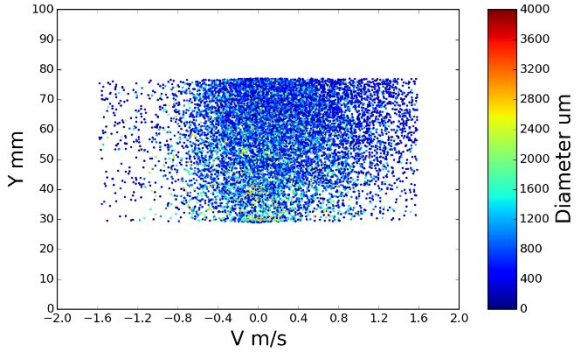


Figure B. 2279: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

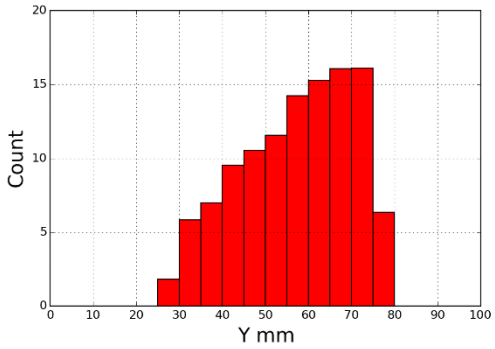


Figure B. 2277: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

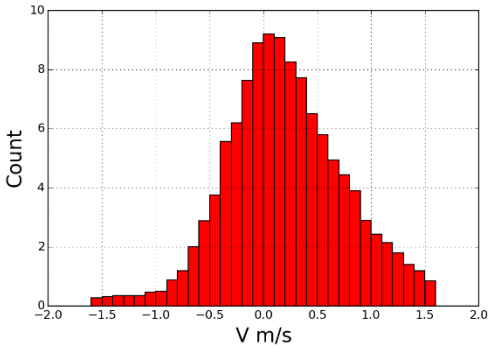


Figure B. 2280: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

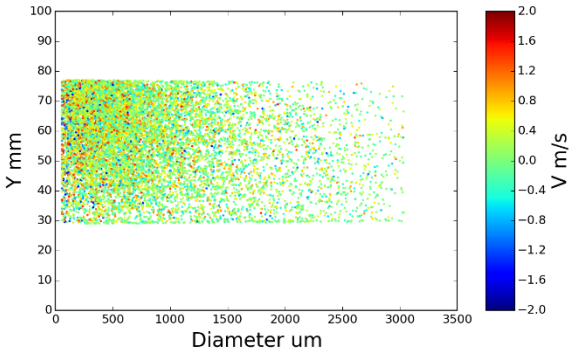


Figure B. 2278: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.1.1 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	35.15	37.76	57.1	3034	658.2	690.7	57.1	3025	614.2	680.3
40-60mm	92.92	104.02	57.1	3038	615.9	641.2	57.1	3038	556.9	622.2
60-80mm	103.84	111.01	57.1	3032	516.7	531.6	57.1	3033	487.6	525.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	232.05	252.92	57.1	3038	577.9	605.6	57.1	3038	535.0	593.3
			Height A (mm)				Height B (mm)			
Highest Particle			76.9981				76.9981			
Lowest Particle			29.0167				29.0167			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	10.8	57.1	3034	1134	775.5	57.1	3009	1126	771.4	-1.550	1.580	-0.050	0.390	-1.540	1.570	0.120	0.520
40-60mm	33.71	57.1	3023	950.5	710.2	57.1	3038	935.6	703.1	-1.580	1.560	-0.090	0.370	-1.580	1.580	0.120	0.540
60-80mm	42.89	57.1	3026	734.7	592.3	57.1	2983	723.2	584.2	-1.580	1.580	-0.120	0.360	-1.580	1.580	0.160	0.550
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	87.4	57.1	3034	867.3	679.1	57.1	3038	854.4	671.9	-1.580	1.580	-0.100	0.370	-1.580	1.580	0.140	0.540

Table B. 246: Matched Droplet Info

B.6.1.1 All Droplets for .LA Image

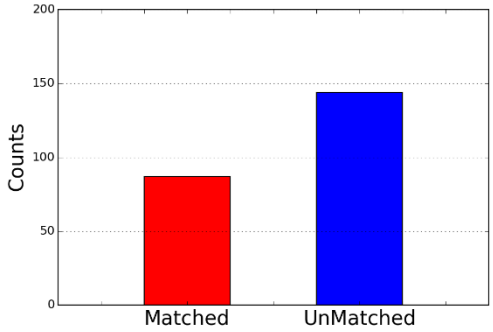


Figure B. 2281: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

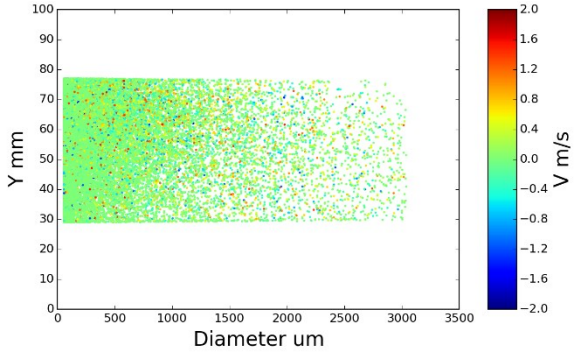


Figure B. 2284: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

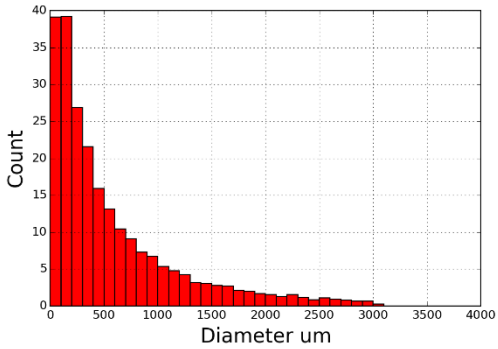


Figure B. 2282: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

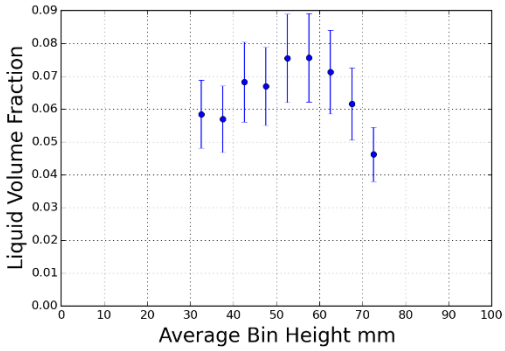


Figure B. 2285: Void Fraction R-123 55F 5000Btu 15000Lb Tri

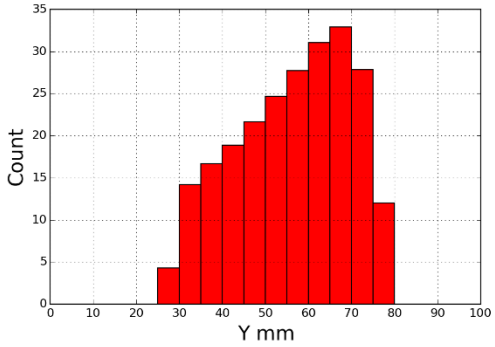


Figure B. 2283: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.1.1 All Droplets for .LB Image

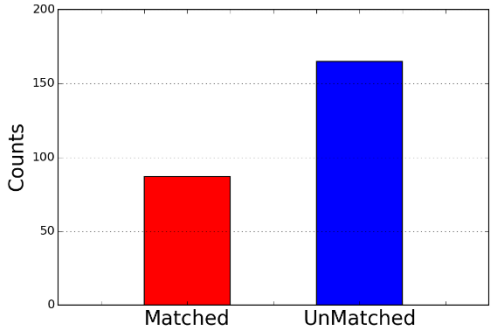


Figure B. 2286: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

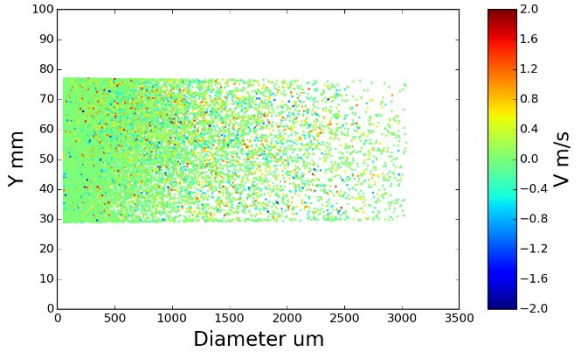


Figure B. 2289: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

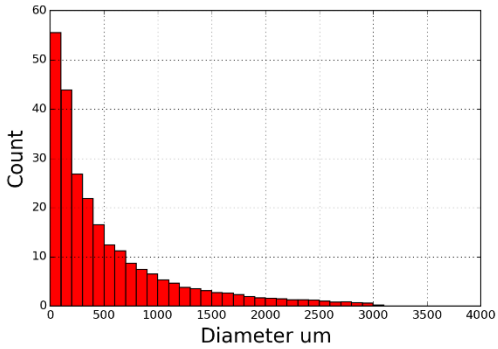


Figure B. 2287: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

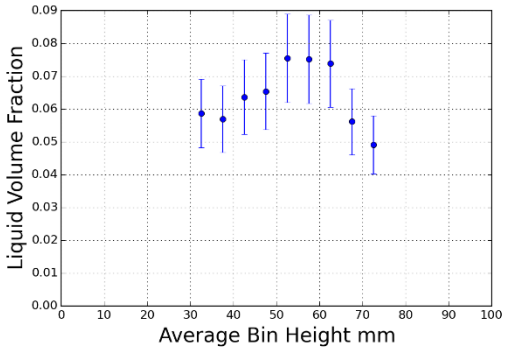


Figure B. 2290: Void Fraction R-123 55F 5000Btu 15000Lb Tri

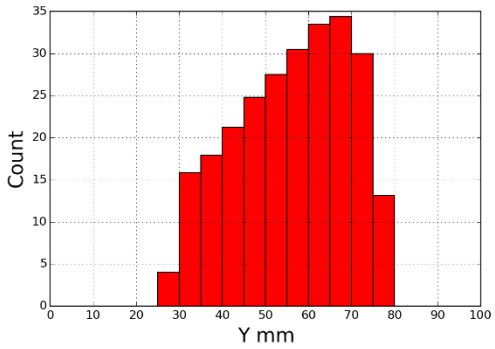


Figure B. 2288: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.1.1 Matched Only Droplets for .LA Image

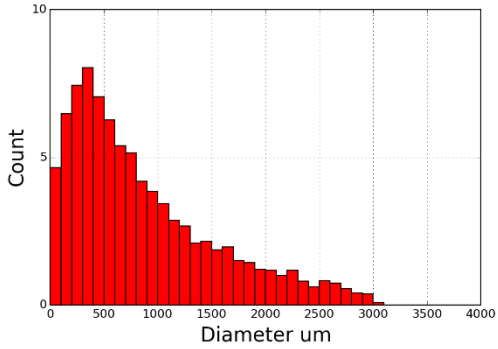


Figure B. 2291: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

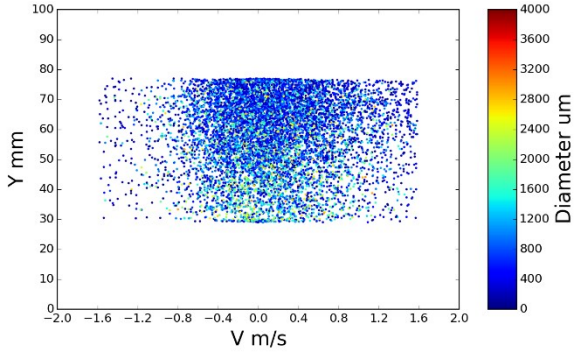


Figure B. 2294: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

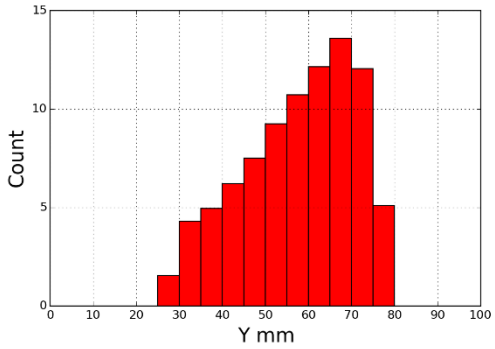


Figure B. 2292: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

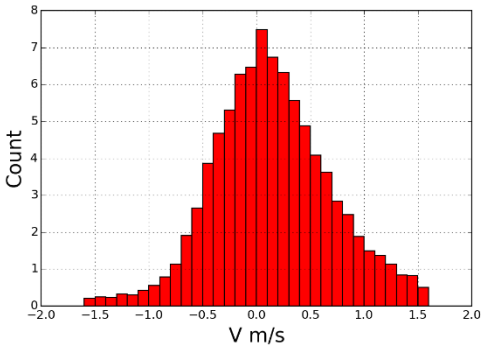


Figure B. 2295: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

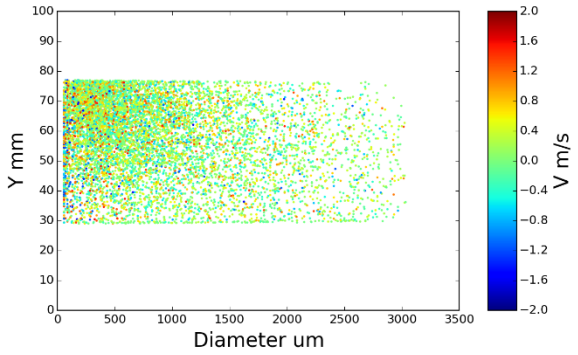


Figure B. 2293: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.1.1 Matched Only Droplets for .LB Image

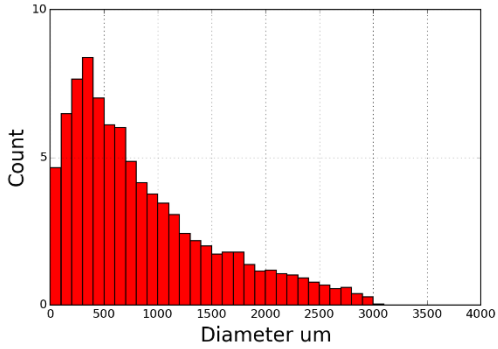


Figure B. 2296: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

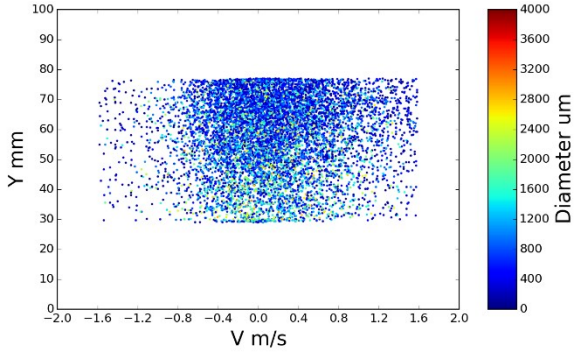


Figure B. 2299: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

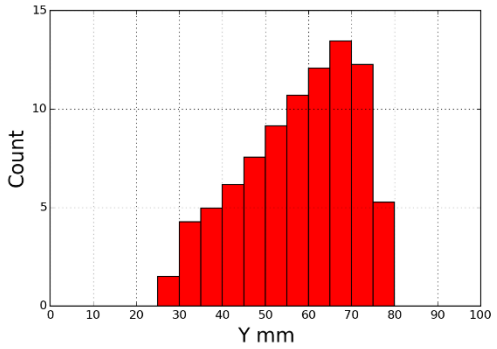


Figure B. 2297: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

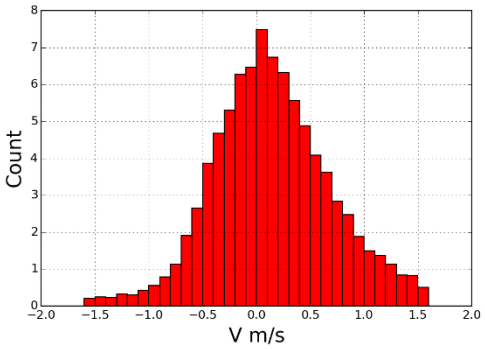


Figure B. 2300: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

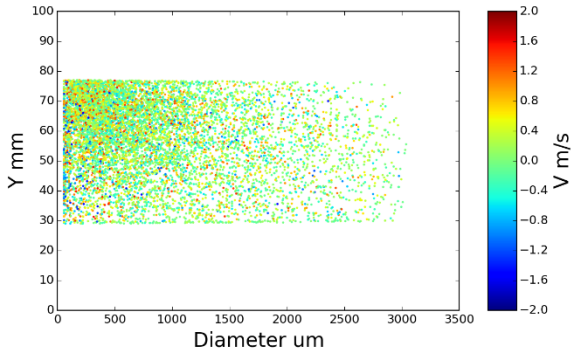


Figure B. 2298: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.1.2 Lens 50mm Mag 0_13x

B.6.1.2 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	55.43	56.37	128.6	6803	865.6	951.1	128.6	6728	849.8	930.0
40-60mm	129.06	127.89	128.6	6835	750.5	743.0	128.6	6832	754.5	741.9
60-80mm	127.49	127.19	128.6	6186	598.5	481.1	128.6	6682	605.5	487.7
80-100mm	73.15	72.69	128.6	3962	468.8	319.3	128.6	3599	467.7	316.6
All	385.13	384.14	128.6	6835	663.3	654.3	128.6	6832	664.9	651.2
			Height A (mm)				Height B (mm)			
Highest Particle			99.9780				99.9780			
Lowest Particle			30.0390				30.0390			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	21.38	128.6	6722	1158	1129	128.6	6728	1144	1118	-1.550	1.550	-0.050	0.550	-1.550	1.550	0.070	0.610
40-60mm	56.97	128.6	6809	917.3	820.8	128.6	6832	908.1	818.6	-1.550	1.550	-0.080	0.510	-1.550	1.550	0.110	0.620
60-80mm	63.08	128.6	6186	706.2	523.5	128.6	5949	700.6	525.2	-1.550	1.550	-0.130	0.470	-1.550	1.550	0.140	0.600
80-100mm	40.63	128.6	3962	547.4	335.9	128.6	3455	538.4	330.1	-1.550	1.550	-0.140	0.400	-1.550	1.550	0.140	0.550
All	182.06	128.6	6809	789.9	719.2	128.6	6832	780.2	714.3	-1.550	1.550	-0.110	0.480	-1.550	1.550	0.120	0.600

Table B. 248: Matched Droplet Info

B.6.1.2 All Droplets for .LA Image

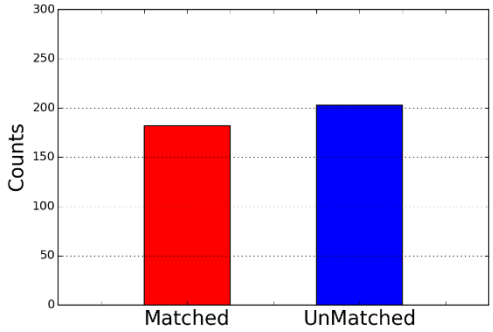


Figure B. 2301: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

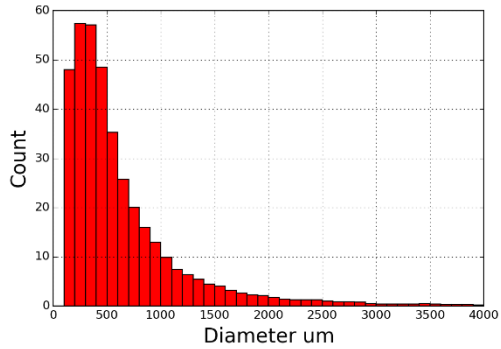


Figure B. 2302: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

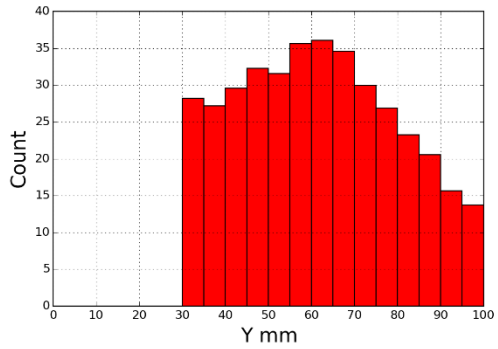


Figure B. 2303: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

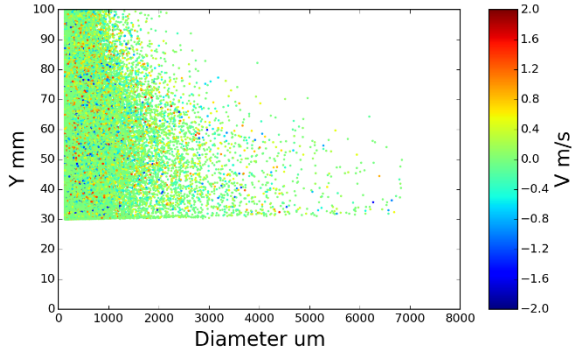


Figure B. 2304: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

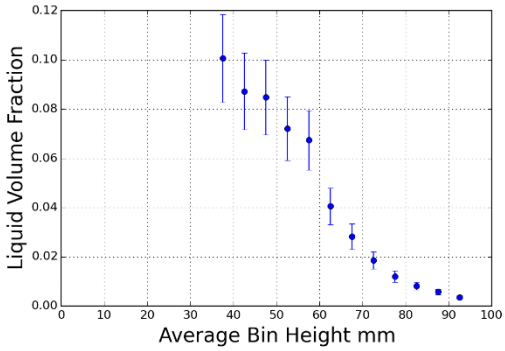


Figure B. 2305: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.1.2 All Droplets for .LB Image

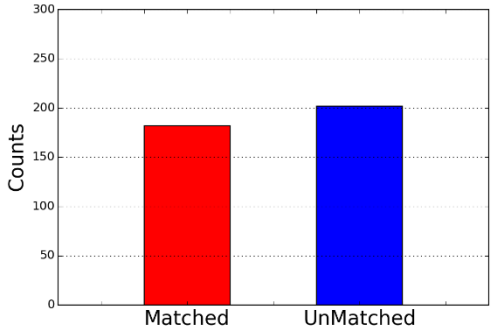


Figure B. 2306: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

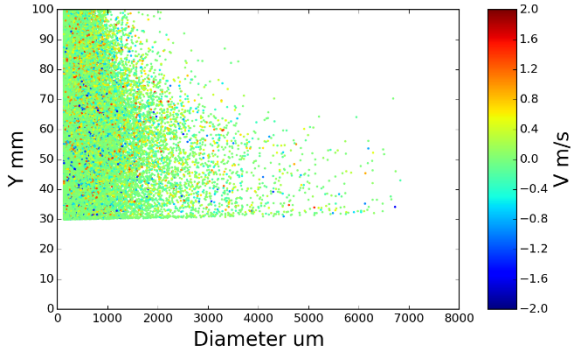


Figure B. 2309: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

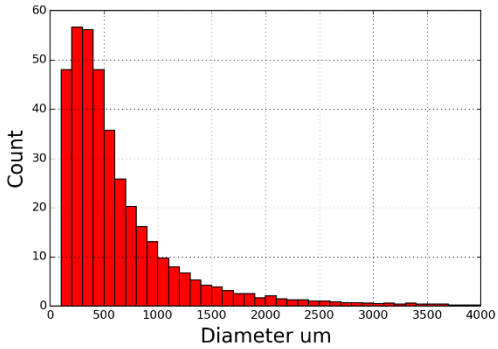


Figure B. 2307: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

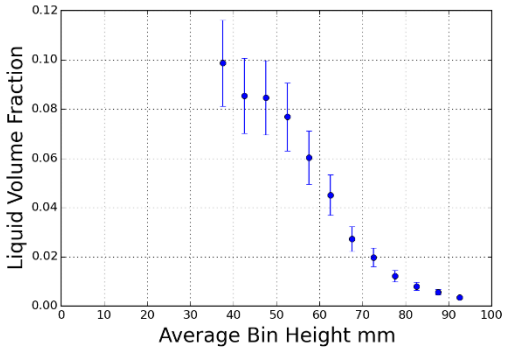


Figure B. 2310: Void Fraction R-123 55F 5000Btu 15000Lb Tri

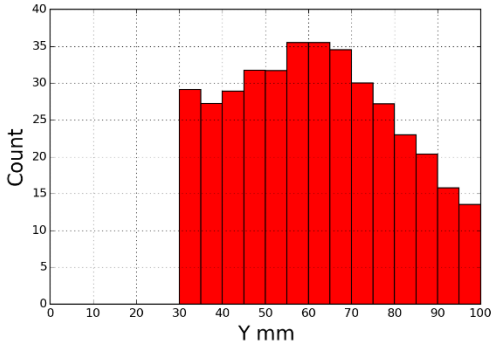


Figure B. 2308: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.1.2 Matched Only Droplets for .LA Image

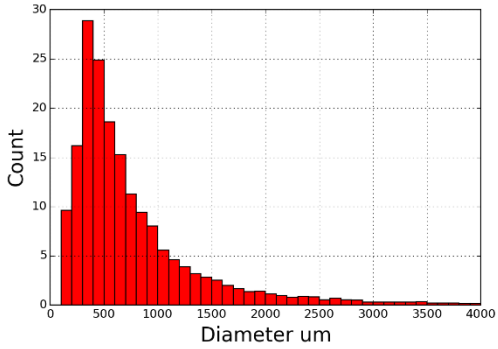


Figure B. 2311: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

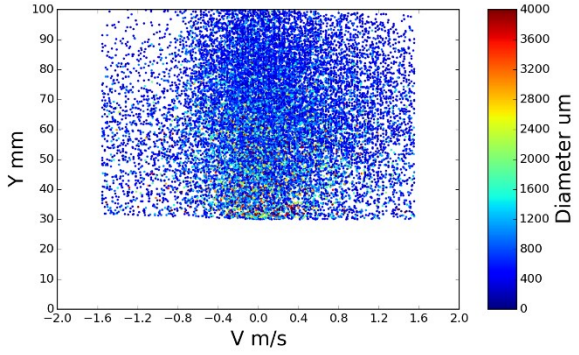


Figure B. 2314: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

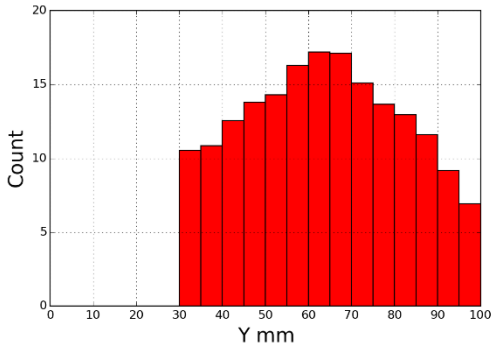


Figure B. 2312: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

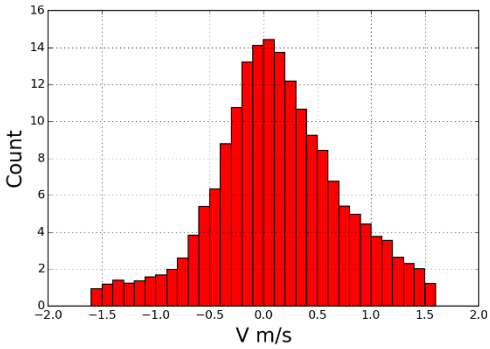


Figure B. 2315: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

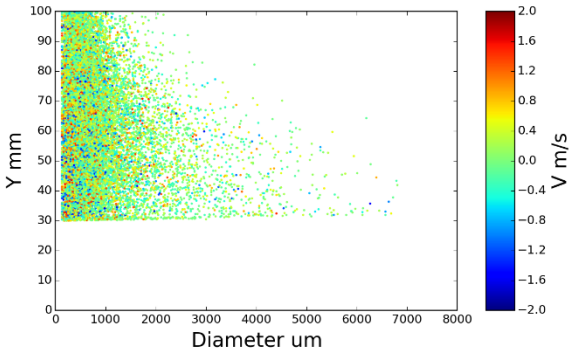


Figure B. 2313: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.1.2 Matched Only Droplets for .LB Image

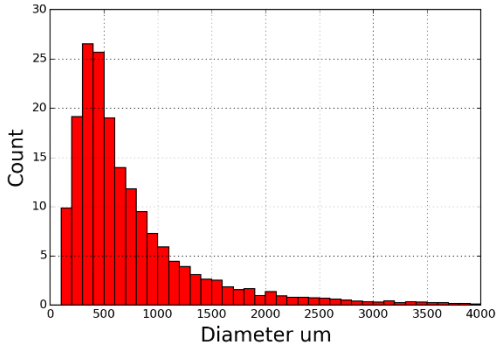


Figure B. 2316: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

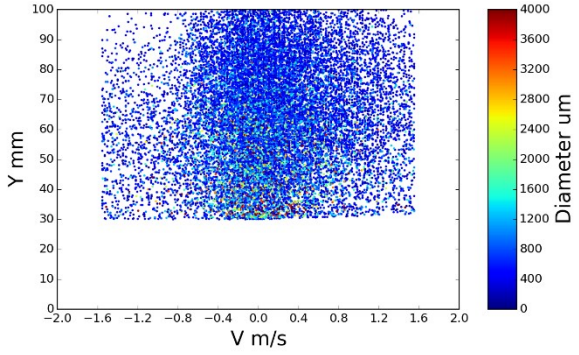


Figure B. 2319: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

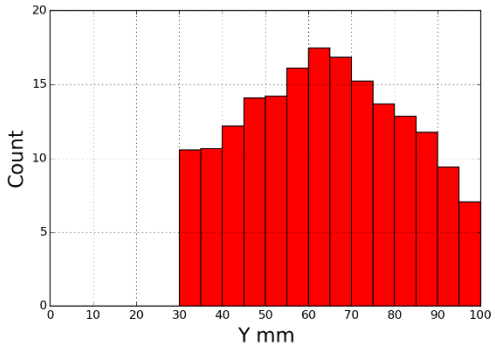


Figure B. 2317: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

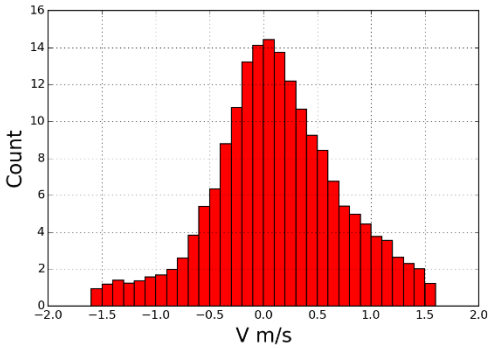


Figure B. 2320: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

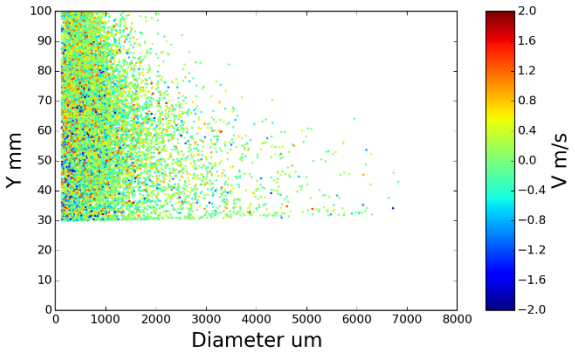


Figure B. 2318: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.1.2 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	38.48	38.8	128.6	3066	815.1	663.6	128.6	3069	832.3	675.0
40-60mm	100.68	99.6	128.6	3074	764.9	591.0	128.6	3078	770.3	598.8
60-80mm	113.76	113.93	128.6	3074	640.4	477.3	128.6	3077	639.0	479.3
80-100mm	66.44	65.64	128.6	3034	496.7	342.5	128.6	2975	498.6	338.6
All	319.36	317.97	128.6	3074	670.8	529.8	128.6	3078	674.7	535.4
			Height A (mm)				Height B (mm)			
Highest Particle			99.9780				99.9780			
Lowest Particle			30.0390				30.0390			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	13.19	128.6	3066	1101	729.2	128.6	3062	1096	732.6	-1.540	1.550	-0.060	0.490	-1.540	1.550	0.100	0.580
40-60mm	43.18	128.6	3074	926.6	621.4	128.6	3078	918.5	620.5	-1.550	1.550	-0.080	0.500	-1.550	1.550	0.120	0.590
60-80mm	57.06	128.6	3074	755.1	501.0	128.6	3077	747.5	499.2	-1.550	1.550	-0.110	0.450	-1.550	1.550	0.160	0.590
80-100mm	36.26	128.6	3034	584.6	360.8	128.6	2955	579.0	357.8	-1.540	1.550	-0.130	0.370	-1.550	1.550	0.120	0.550
All	149.69	128.6	3074	793.7	556.8	128.6	3078	785.6	555.0	-1.550	1.550	-0.100	0.450	-1.550	1.550	0.130	0.580

Table B. 250: Matched Droplet Info

B.6.1.2 All Droplets for .LA Image

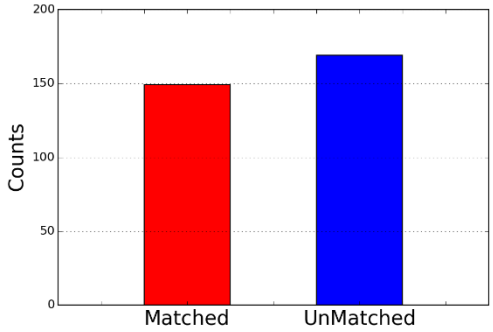


Figure B. 2321: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

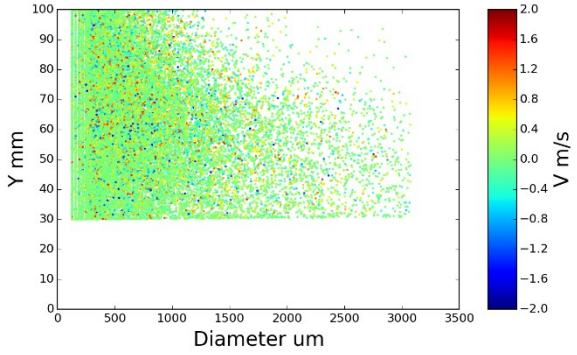


Figure B. 2324: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

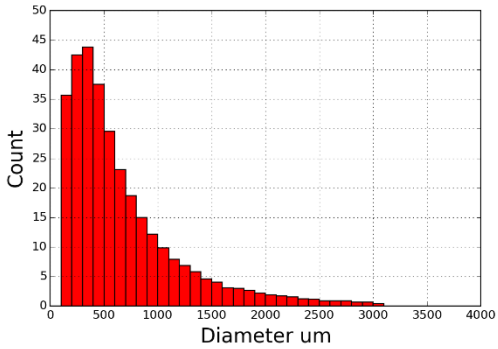


Figure B. 2322: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

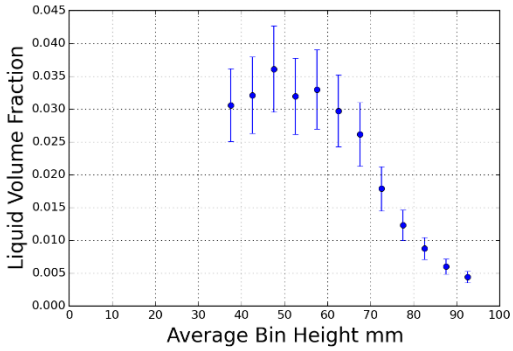


Figure B. 2325: Void Fraction R-123 55F 5000Btu 15000Lb Tri

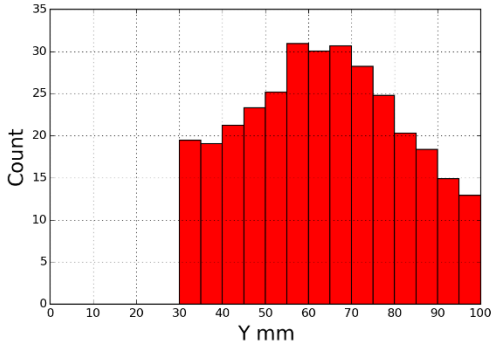


Figure B. 2323: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.1.2 All Droplets for .LB Image

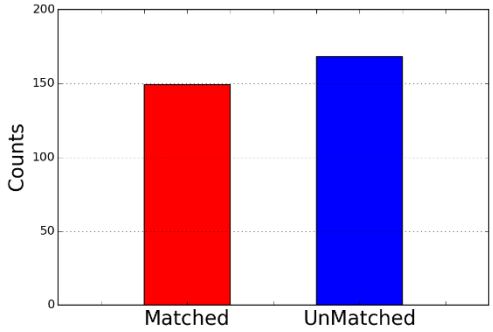


Figure B. 2326: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

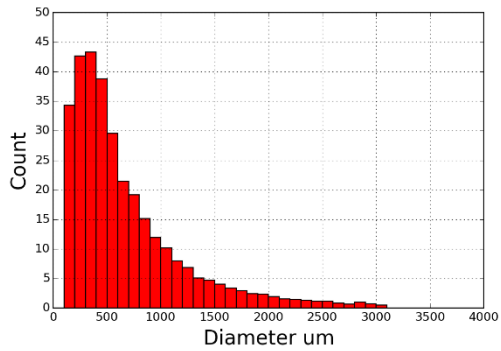


Figure B. 2327: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

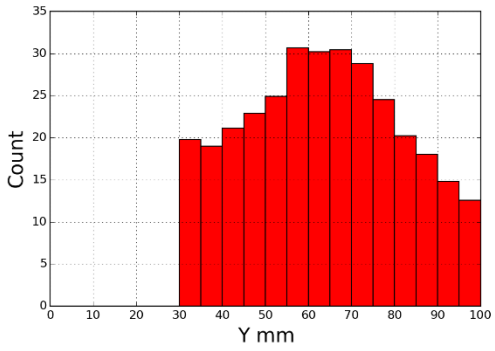


Figure B. 2328: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

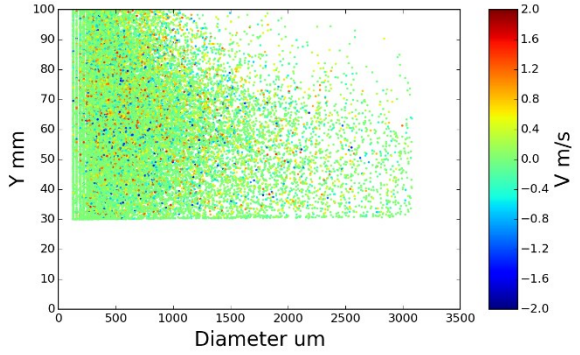


Figure B. 2329: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

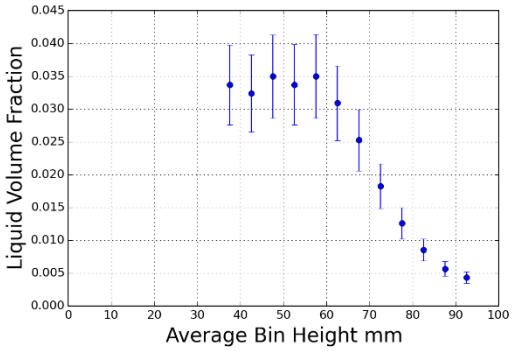


Figure B. 2330: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.1.2 Matched Only Droplets for .LA Image

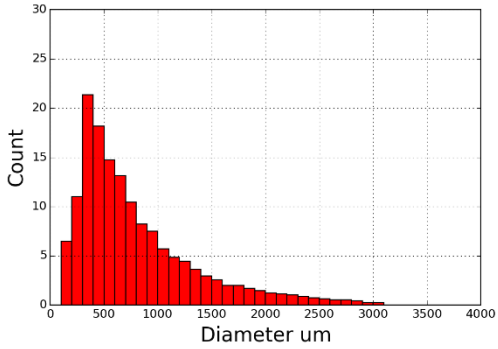


Figure B. 2331: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

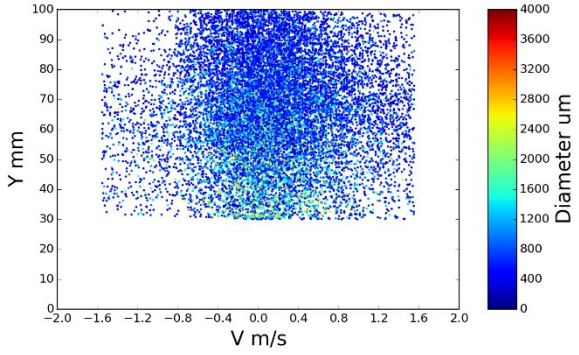


Figure B. 2334: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

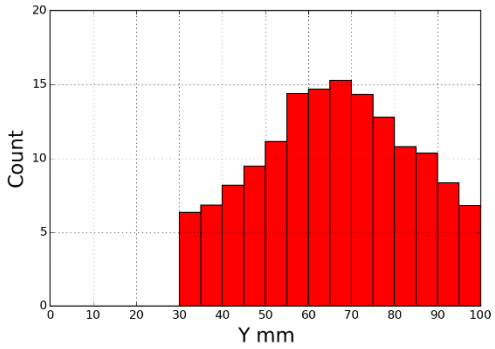


Figure B. 2332: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

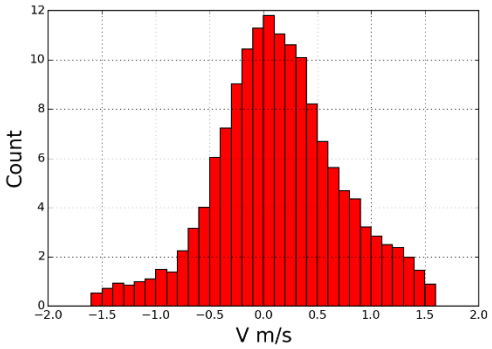


Figure B. 2335: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

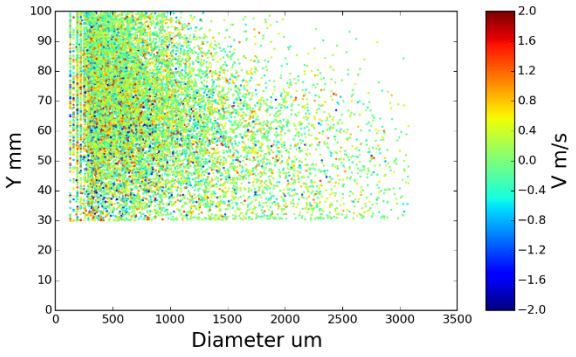


Figure B. 2333: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.1.2 Matched Only Droplets for .LB Image

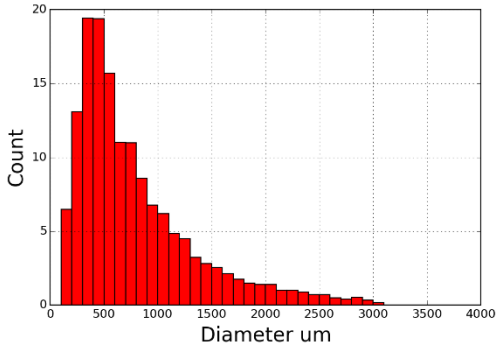


Figure B. 2336: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

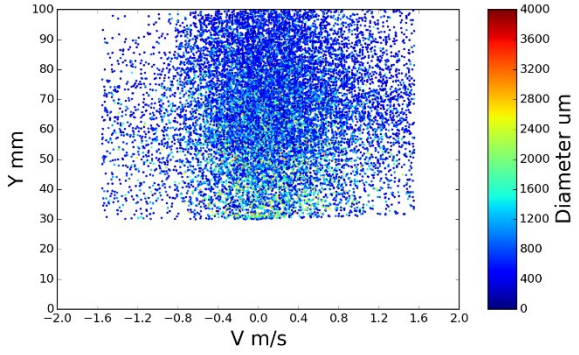


Figure B. 2339: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

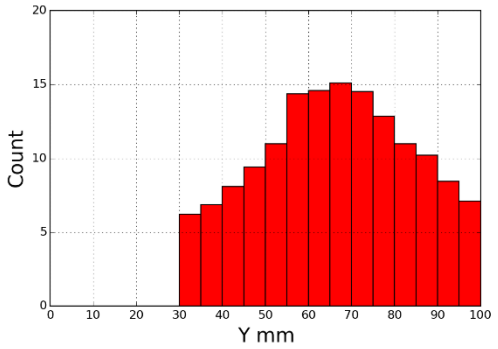


Figure B. 2337: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

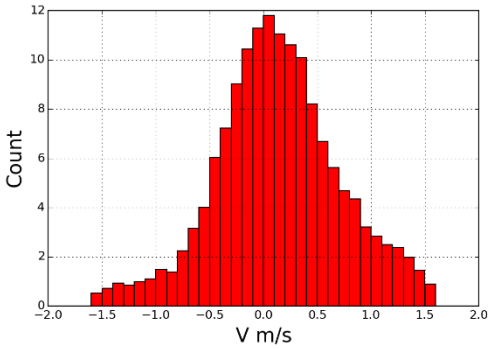


Figure B. 2340: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

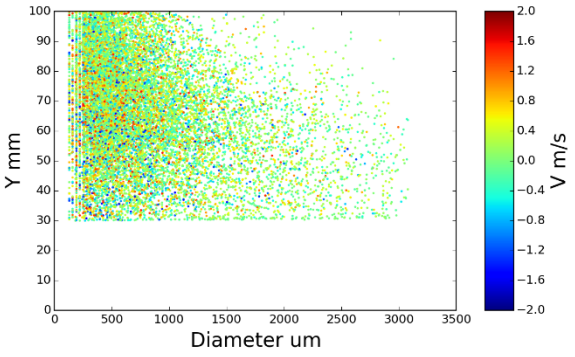


Figure B. 2338: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.1.2 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	26.86	26.88	128.6	3074	923.5	710.7	128.6	3075	952.0	733.4
40-60mm	74.42	76.31	128.6	3063	847.5	644.9	128.6	3072	831.7	639.8
60-80mm	93.31	92.65	128.6	3077	690.0	529.2	128.6	3072	686.4	531.1
80-100mm	55.1	54.56	128.6	2940	533.8	368.7	128.6	2977	534.5	373.5
All	249.7	250.4	128.6	3077	727.6	574.6	128.6	3075	726.1	578.5
			Height A (mm)				Height B (mm)			
Highest Particle			99.9780				99.9780			
Lowest Particle			30.0390				30.0390			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	9.04	128.6	3074	1283	772.9	128.6	3069	1268	767.7	-1.530	1.530	-0.040	0.440	-1.540	1.540	0.100	0.540
40-60mm	30.28	128.6	3063	1060	676.7	128.6	3072	1049	670.2	-1.550	1.550	-0.080	0.460	-1.550	1.550	0.100	0.590
60-80mm	42.58	128.6	3077	844.4	566.3	128.6	3064	834.8	560.5	-1.550	1.550	-0.130	0.450	-1.550	1.550	0.110	0.590
80-100mm	28.64	128.6	2940	643.0	397.4	128.6	2858	635.9	394.2	-1.550	1.550	-0.120	0.360	-1.550	1.550	0.110	0.550
All	110.54	128.6	3077	887.3	613.1	128.6	3072	876.4	606.6	-1.550	1.550	-0.110	0.430	-1.550	1.550	0.100	0.580

Table B. 252: Matched Droplet Info

B.6.1.2 All Droplets for .LA Image

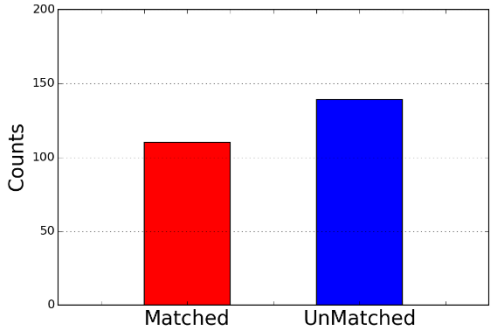


Figure B. 2341: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

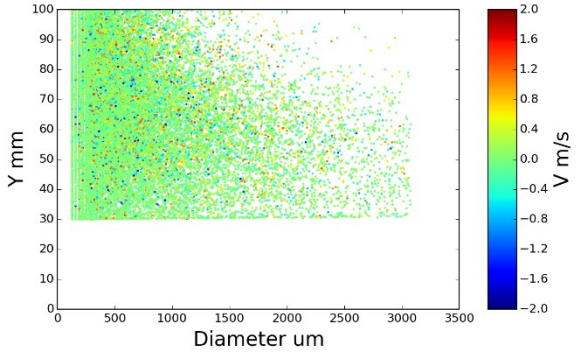


Figure B. 2344: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

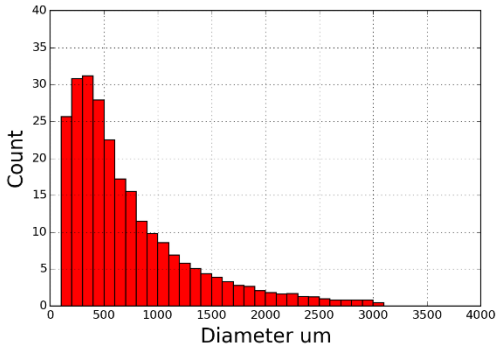


Figure B. 2342: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

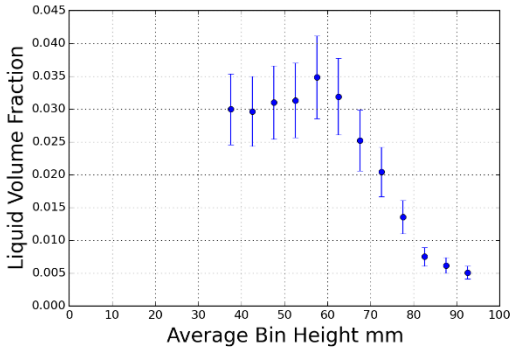


Figure B. 2345: Void Fraction R-123 55F 5000Btu 15000Lb Tri

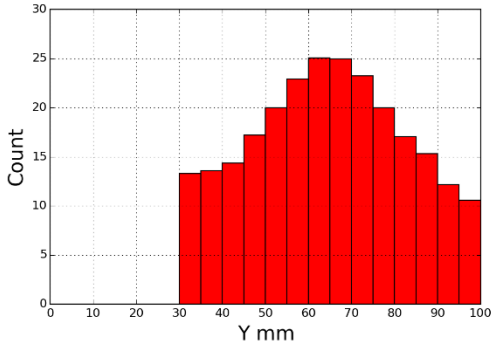


Figure B. 2343: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.1.2 All Droplets for .LB Image

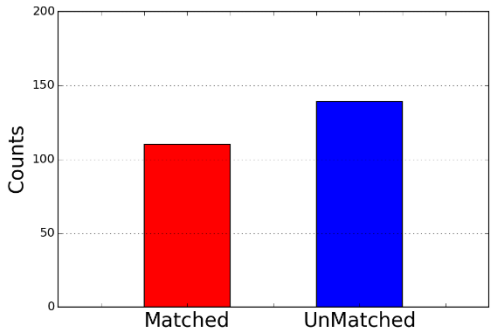


Figure B. 2346: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

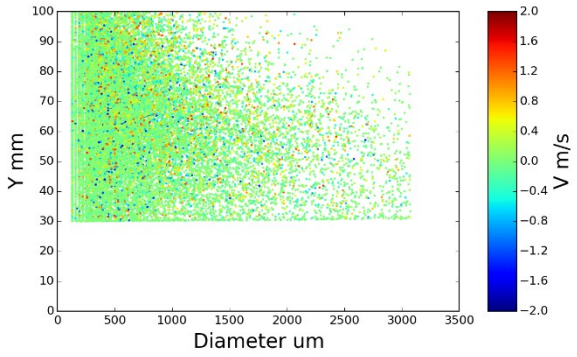


Figure B. 2349: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

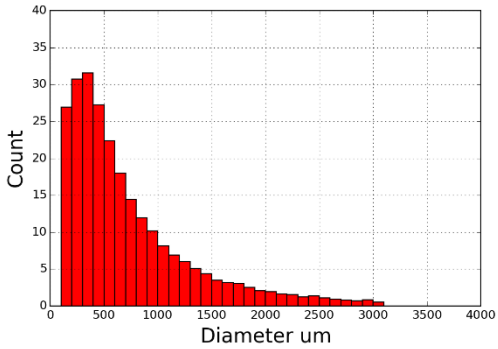


Figure B. 2347: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

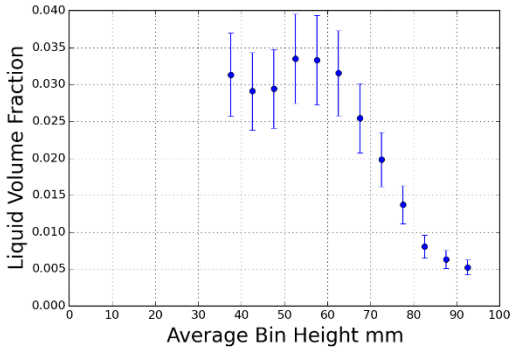


Figure B. 2350: Void Fraction R-123 55F 5000Btu 15000Lb Tri

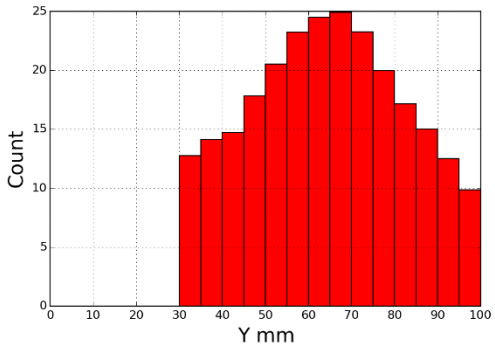


Figure B. 2348: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.1.2 Matched Only Droplets for .LA Image

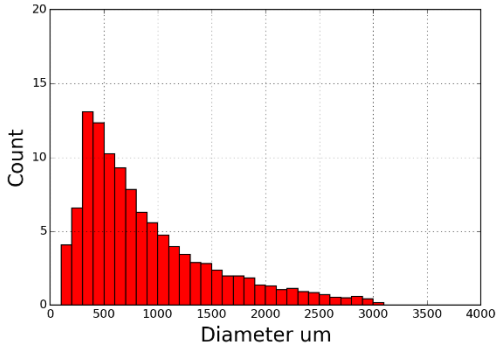


Figure B. 2351: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

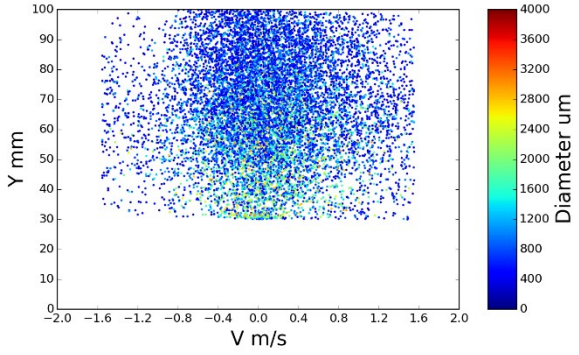


Figure B. 2354: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

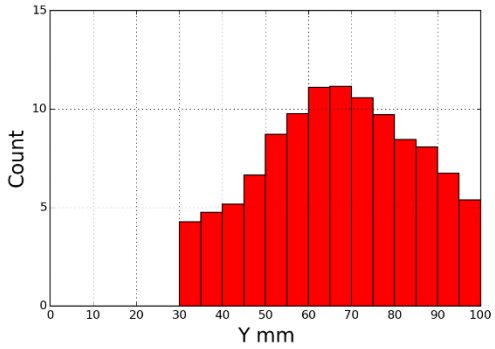


Figure B. 2352: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

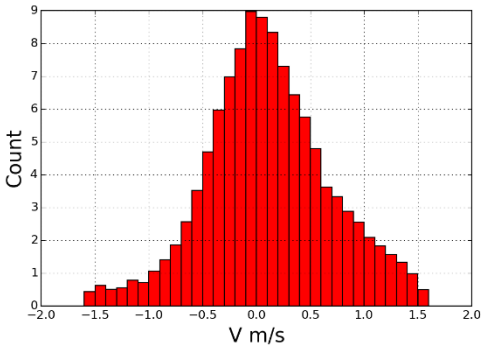


Figure B. 2355: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

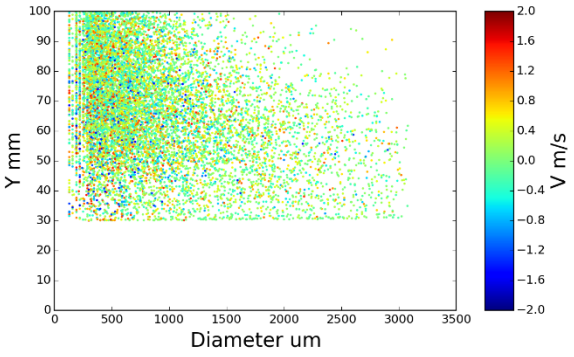


Figure B. 2353: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.1.2 Matched Only Droplets for .LB Image

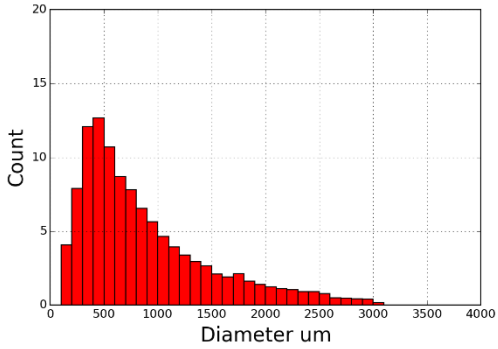


Figure B. 2356: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

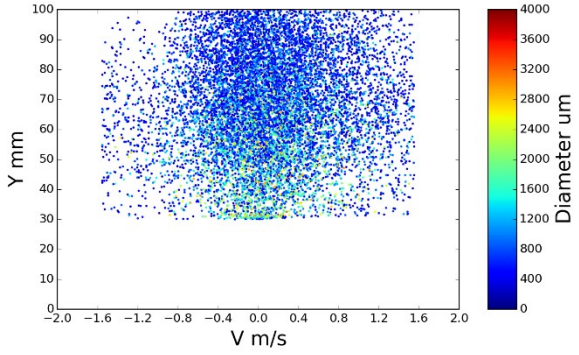


Figure B. 2359: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

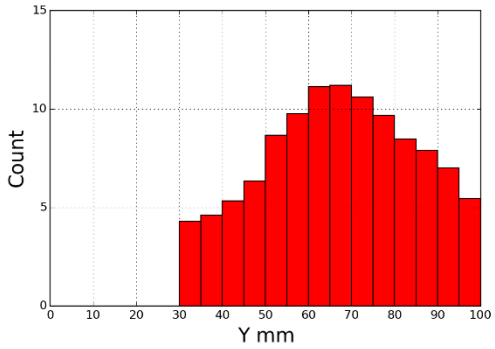


Figure B. 2357: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

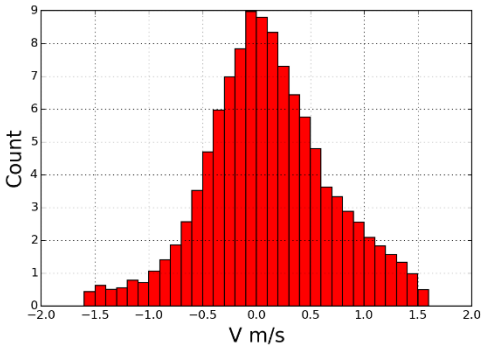


Figure B. 2360: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

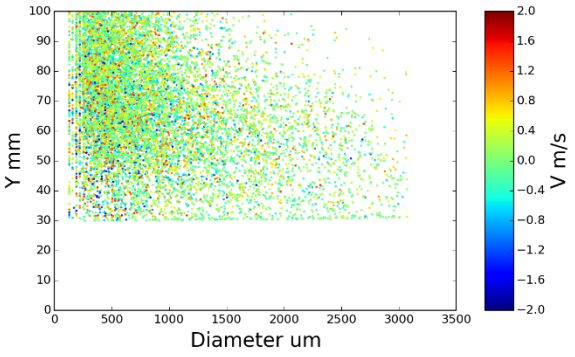


Figure B. 2358: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.2 Liquid Level 2

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	11975 / 1.509
Ref Mass Flow (lb/hr) / (kg/s)	1633 / 0.206
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15899 / 21.562
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4771 / 15.05
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.2 / 12.91
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	56.3 / 13.48
Total Bundle Q (Btu/hr) / (kW)	136900 / 40.12
Total Bundle & Preboiler Q (Btu/hr) / (kW)	136900 / 40.12
Top Two Rows HTC Ratio	1.029
Bundle Inlet Quality	-0.12
Bundle Exit Quality	0.99

Table B. 253: Thermal Conditions

B.6.2.1 Lens 100mm Mag 0_29x

B.6.2.1 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	79.26	80.52	57.1	3038	520.7	565.0	57.1	3028	508.5	563.6
40-60mm	145.8	154.99	57.1	3038	505.9	534.0	57.1	3037	481.6	532.5
60-80mm	115.58	130.21	57.1	3034	458.1	455.9	57.1	3022	422.0	447.7
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	340.71	365.8	57.1	3038	493.1	517.2	57.1	3037	466.3	512.5
			Height A (mm)				Height B (mm)			
Highest Particle			76.9981				76.9981			
Lowest Particle			29.0167				29.0167			

Table B. 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	29.35	57.1	3038	782.1	652.5	57.1	3022	776.5	653.1	-1.580	1.580	-0.080	0.420	-1.580	1.580	0.180	0.560
40-60mm	58.63	57.1	3025	713.8	589.6	57.1	3036	708.5	587.9	-1.580	1.580	-0.100	0.400	-1.580	1.580	0.270	0.580
60-80mm	51.5	57.1	3034	622.6	493.4	57.1	3022	612.7	486.9	-1.580	1.580	-0.130	0.370	-1.580	1.580	0.340	0.590
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	139.48	57.1	3038	694.5	573.8	57.1	3036	686.8	570.8	-1.580	1.580	-0.110	0.390	-1.580	1.580	0.280	0.580

Table B. 255: Matched Droplet Info

B.6.2.1 All Droplets for .LA Image

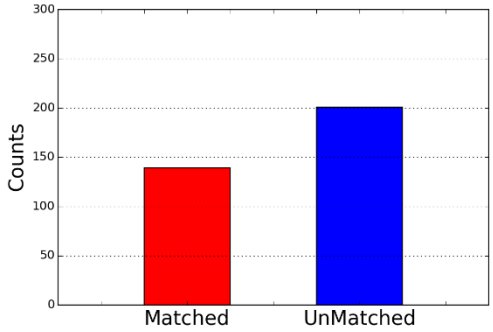


Figure B. 2361: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

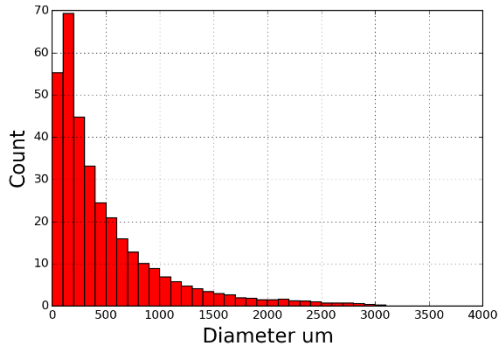


Figure B. 2362: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

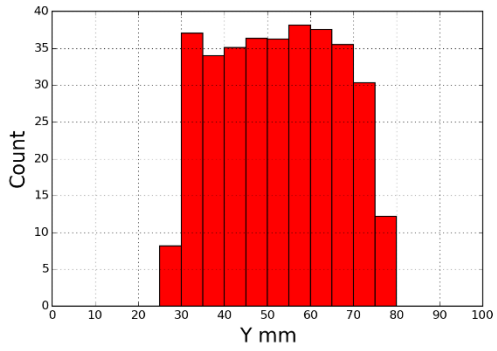


Figure B. 2363: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

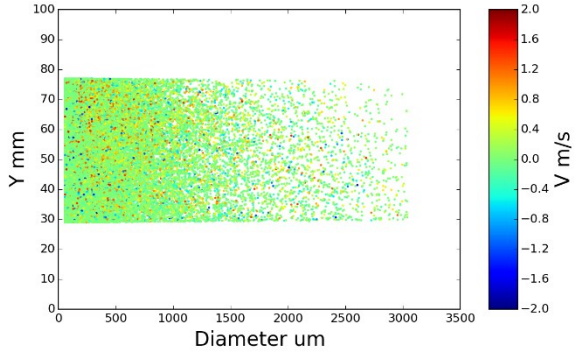


Figure B. 2364: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

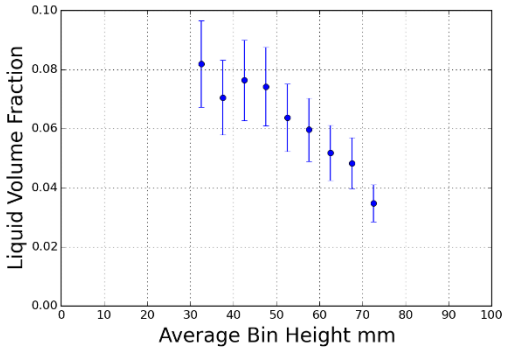


Figure B. 2365: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.2.1 All Droplets for .LB Image

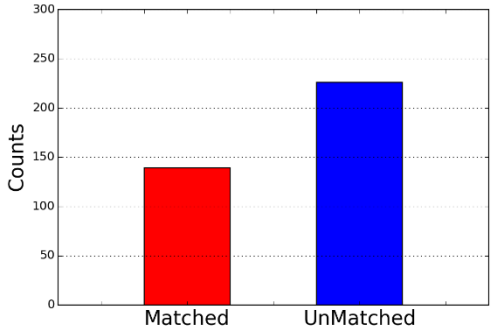


Figure B. 2366: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

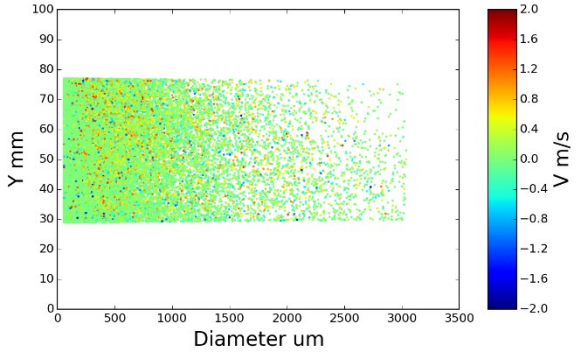


Figure B. 2369: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

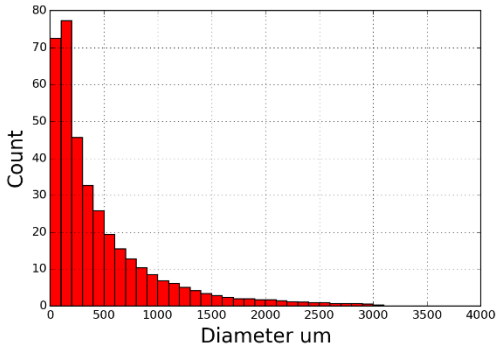


Figure B. 2367: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

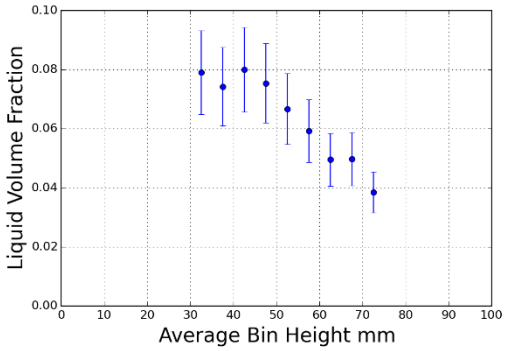


Figure B. 2370: Void Fraction R-123 55F 5000Btu 15000Lb Tri

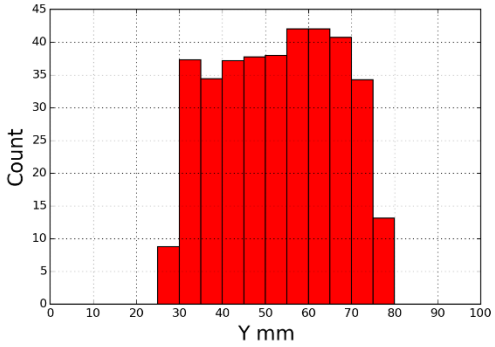


Figure B. 2368: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.2.1 Matched Only Droplets for .LA Image

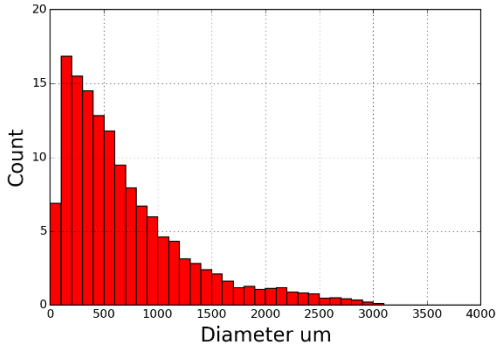


Figure B. 2371: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

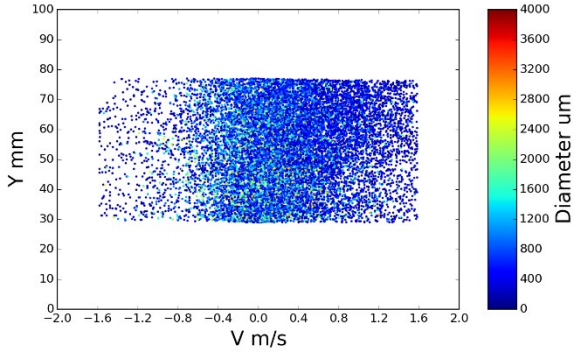


Figure B. 2374: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

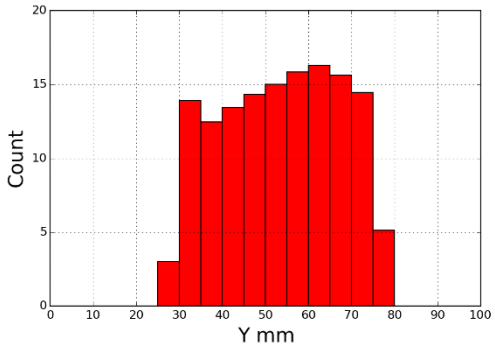


Figure B. 2372: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

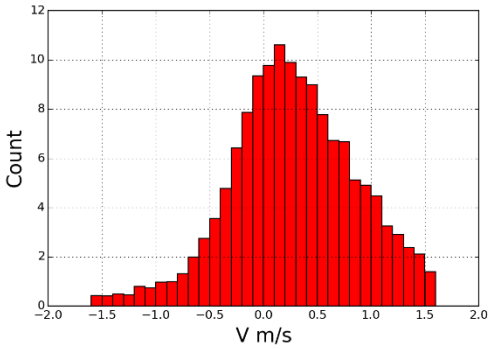


Figure B. 2375: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

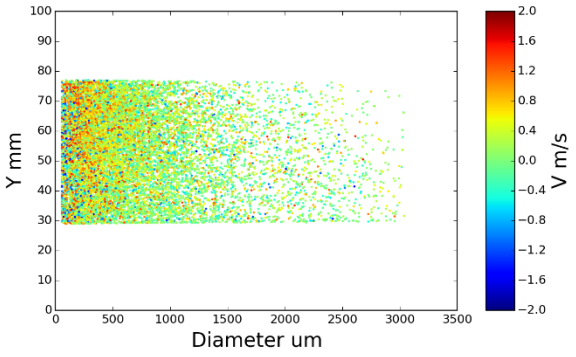


Figure B. 2373: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.2.1 Matched Only Droplets for .LB Image

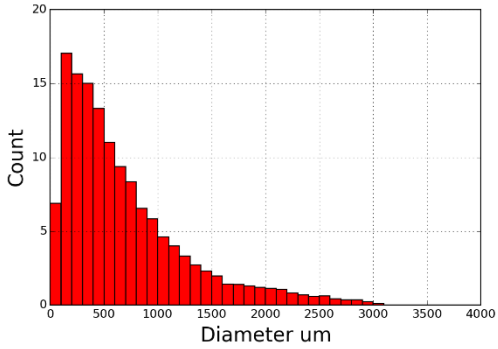


Figure B. 2376: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

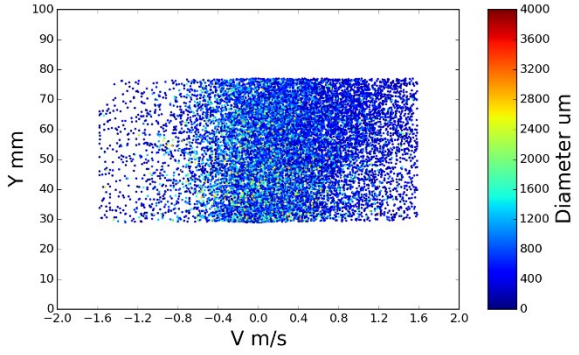


Figure B. 2379: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

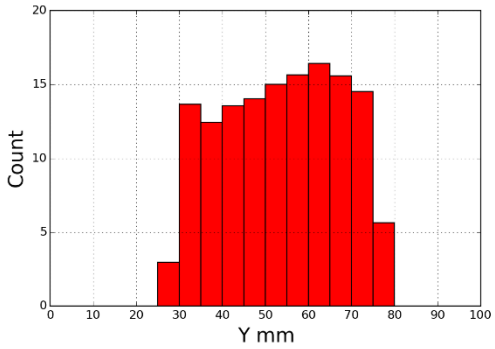


Figure B. 2377: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

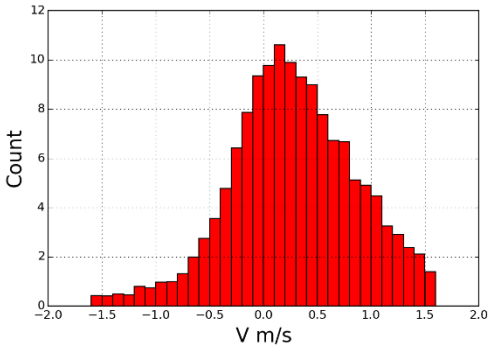


Figure B. 2380: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

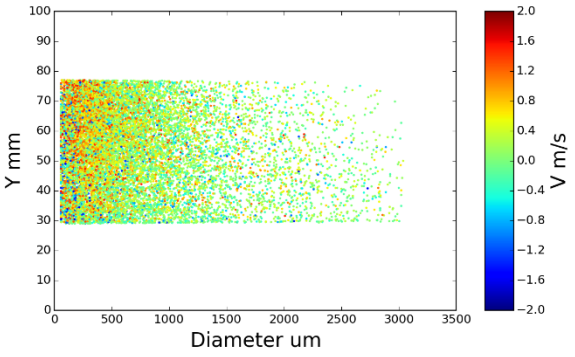


Figure B. 2378: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.2.1 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	54.26	55.74	57.1	3037	636.9	640.1	57.1	3030	618.1	629.5
40-60mm	114.69	118.45	57.1	3036	583.5	581.1	57.1	3034	565.3	581.9
60-80mm	101.04	105.62	57.1	3031	511.7	491.2	57.1	3029	493.1	495.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	270.04	279.86	57.1	3037	567.4	564.2	57.1	3034	548.6	563.2
			Height A (mm)				Height B (mm)			
Highest Particle			76.9981				76.9981			
Lowest Particle			29.0167				29.0167			

Table B. 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	21.01	57.1	3008	973.1	703.5	57.1	3005	966.5	698.2	-1.570	1.480	-0.070	0.350	-1.580	1.580	0.170	0.510
40-60mm	47.01	57.1	3013	848.4	631.3	57.1	3020	844.9	633.3	-1.580	1.580	-0.100	0.360	-1.570	1.580	0.260	0.560
60-80mm	47.16	57.1	2998	690.8	524.7	57.1	3007	685.5	526.2	-1.570	1.580	-0.130	0.330	-1.560	1.580	0.300	0.580
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	115.18	57.1	3013	806.6	614.0	57.1	3020	801.2	613.8	-1.580	1.580	-0.110	0.350	-1.580	1.580	0.260	0.560

Table B. 257: Matched Droplet Info

B.6.2.1 All Droplets for .LA Image

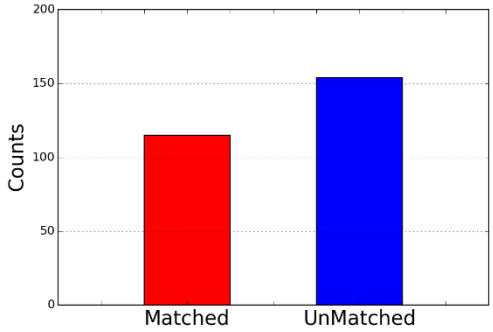


Figure B. 2381: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

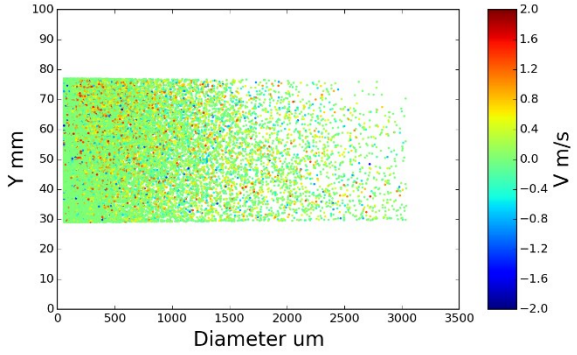


Figure B. 2384: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

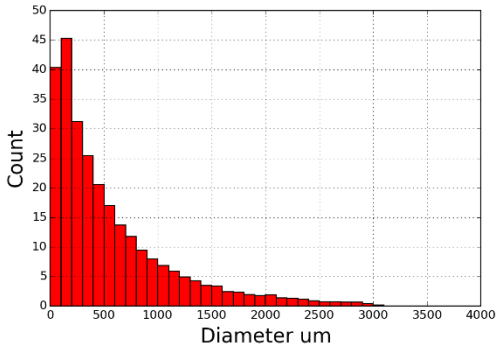


Figure B. 2382: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

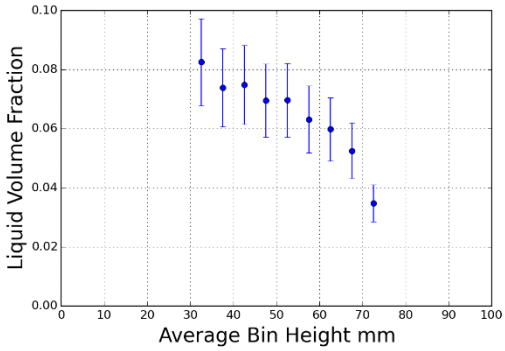


Figure B. 2385: Void Fraction R-123 55F 5000Btu 15000Lb Tri

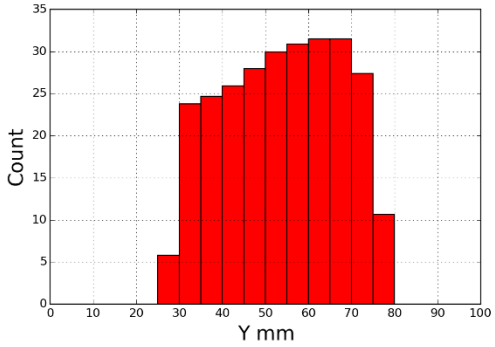


Figure B. 2383: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.2.1 All Droplets for .LB Image

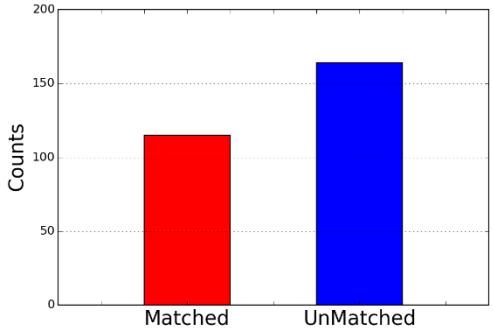


Figure B. 2386: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

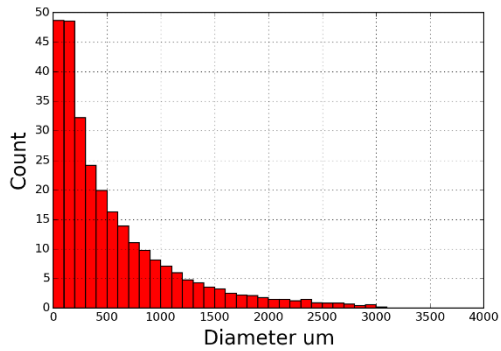


Figure B. 2387: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

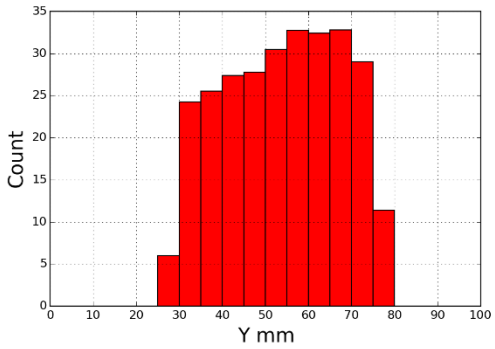


Figure B. 2388: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

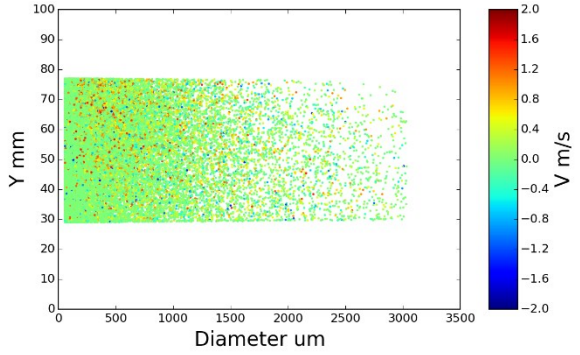


Figure B. 2389: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

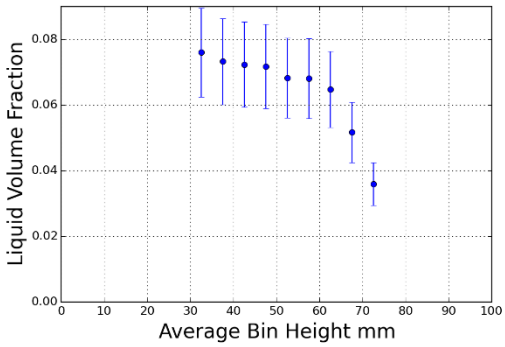


Figure B. 2390: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.2.1 Matched Only Droplets for .LA Image

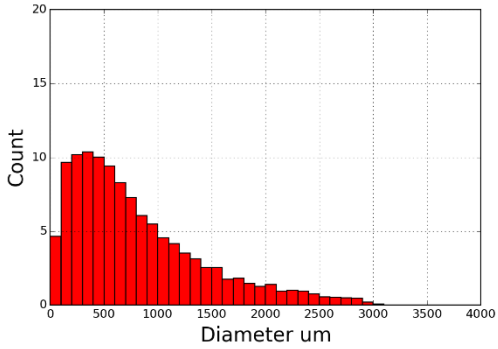


Figure B. 2391: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

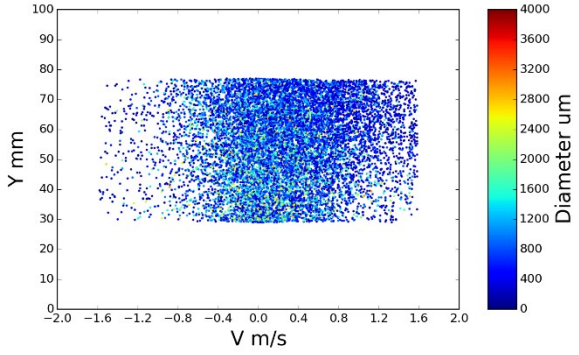


Figure B. 2394: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

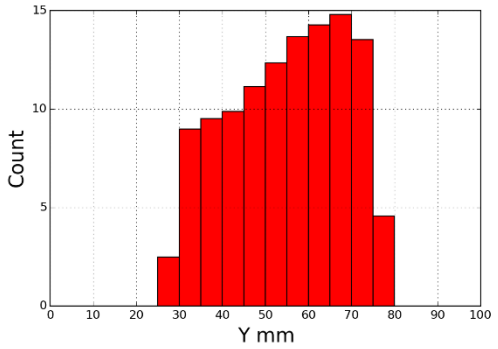


Figure B. 2392: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

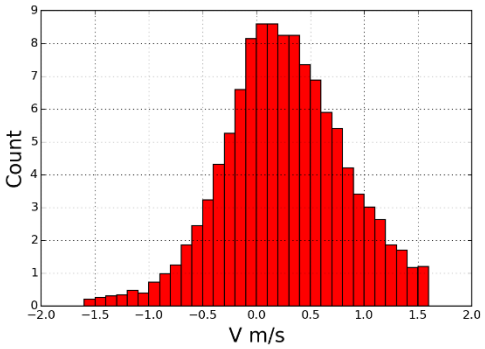


Figure B. 2395: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

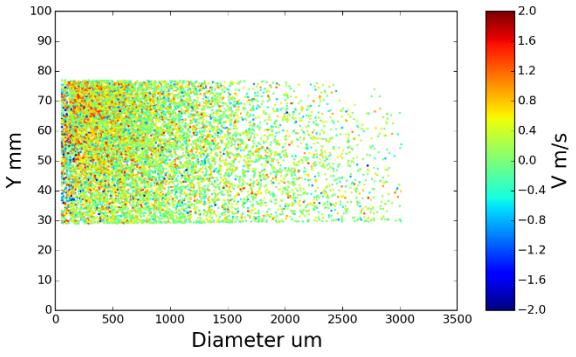


Figure B. 2393: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.2.1 Matched Only Droplets for .LB Image

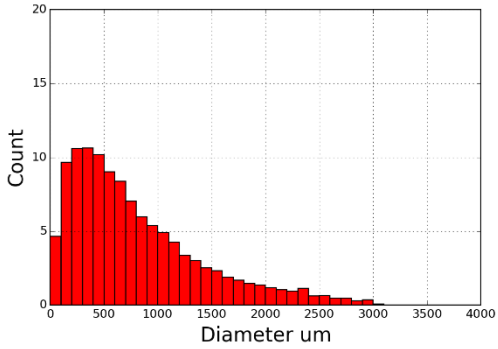


Figure B. 2396: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

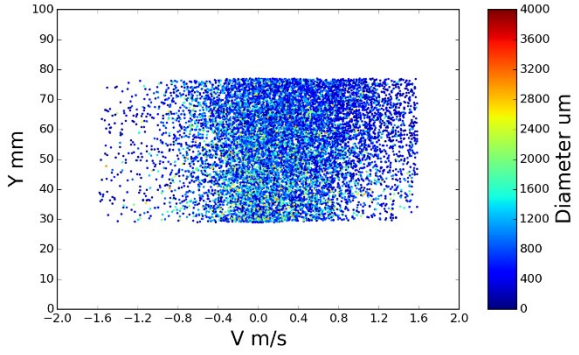


Figure B. 2399: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

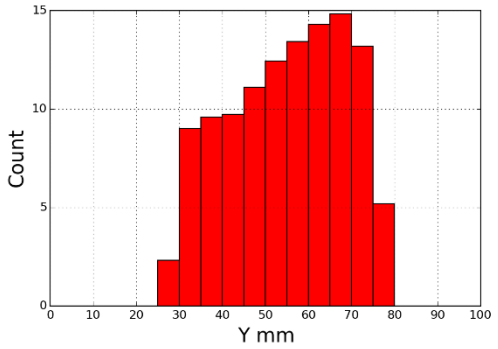


Figure B. 2397: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

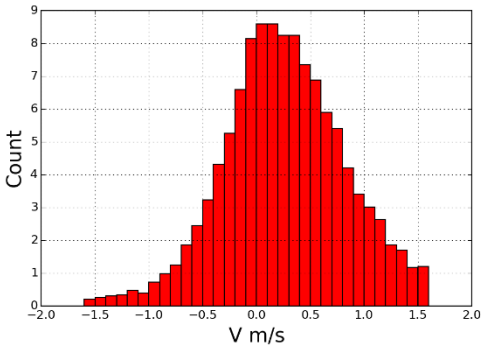


Figure B. 2400: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

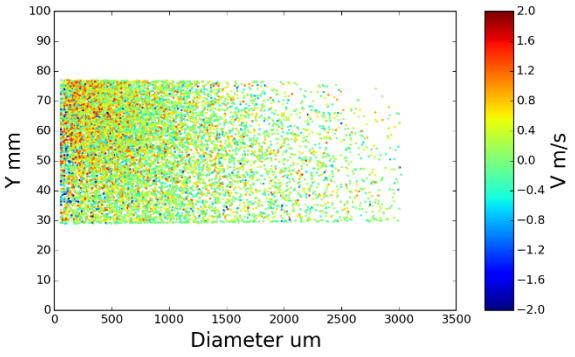


Figure B. 2398: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.2.1 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	38.74	41.57	57.1	3038	638.3	661.5	57.1	3026	605.2	659.4
40-60mm	89.48	97.49	57.1	3032	605.7	646.0	57.1	3030	560.7	624.4
60-80mm	80.69	89.95	57.1	3037	531.2	545.6	57.1	3030	484.4	528.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	209.04	229.08	57.1	3038	583.0	613.8	57.1	3030	538.8	597.4
			Height A (mm)				Height B (mm)			
Highest Particle			76.9981				76.9981			
Lowest Particle			29.0167				29.0167			

Table B. 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	13.25	57.1	3038	1057	750.3	57.1	3023	1047	743.0	-1.560	1.580	-0.090	0.380	-1.480	1.580	0.180	0.520
40-60mm	32.64	57.1	3032	946.9	710.4	57.1	3024	938.4	704.8	-1.580	1.580	-0.100	0.380	-1.580	1.580	0.220	0.580
60-80mm	33.66	57.1	3037	768.3	595.3	57.1	3030	752.8	584.8	-1.580	1.580	-0.120	0.370	-1.580	1.580	0.210	0.590
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	79.55	57.1	3038	889.6	680.5	57.1	3030	877.6	673.1	-1.580	1.580	-0.110	0.380	-1.580	1.580	0.210	0.570

Table B. 259: Matched Droplet Info

B.6.2.1 All Droplets for .LA Image

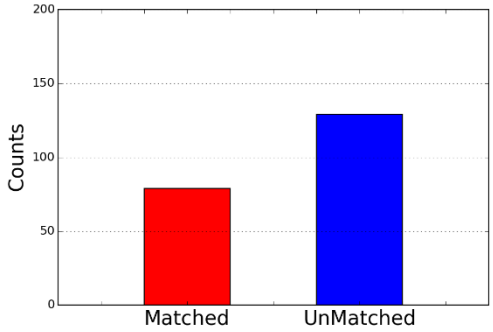


Figure B. 2401: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

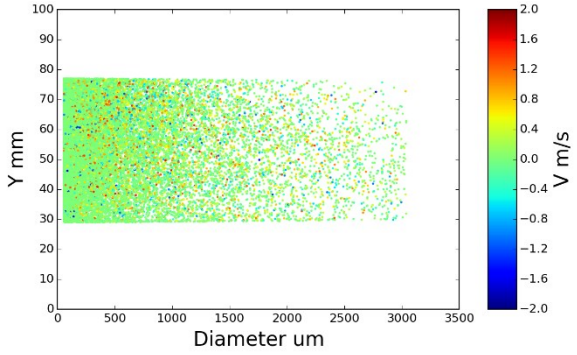


Figure B. 2404: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

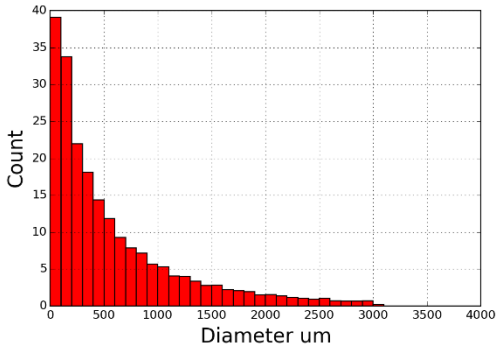


Figure B. 2402: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

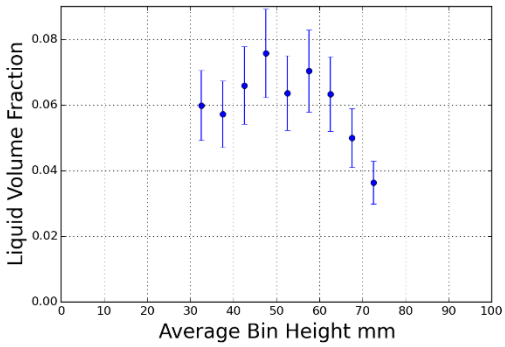


Figure B. 2405: Void Fraction R-123 55F 5000Btu 15000Lb Tri

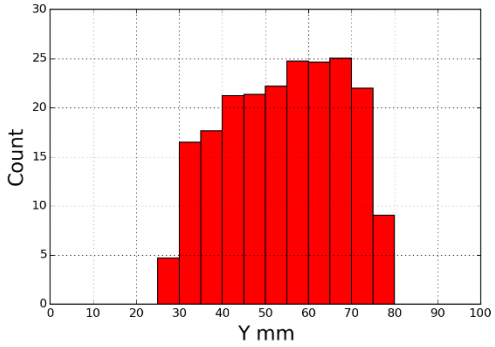


Figure B. 2403: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.2.1 All Droplets for .LB Image

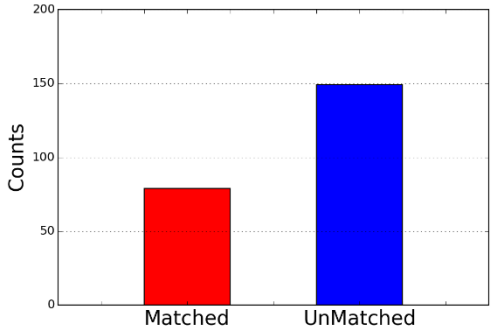


Figure B. 2406: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

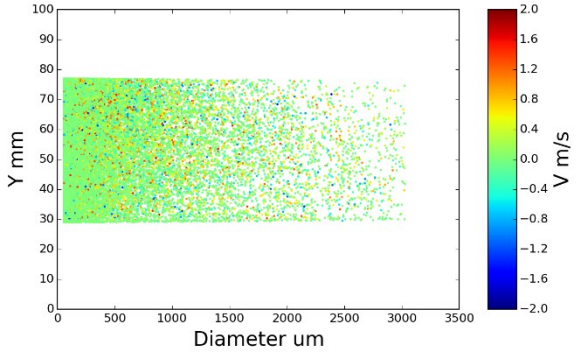


Figure B. 2409: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

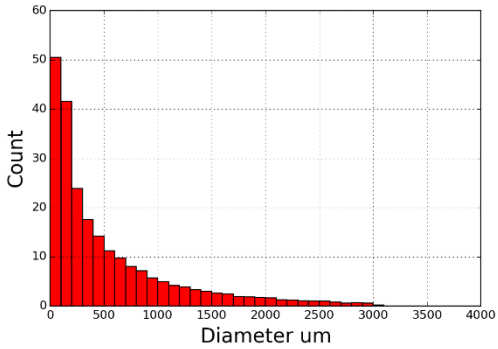


Figure B. 2407: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

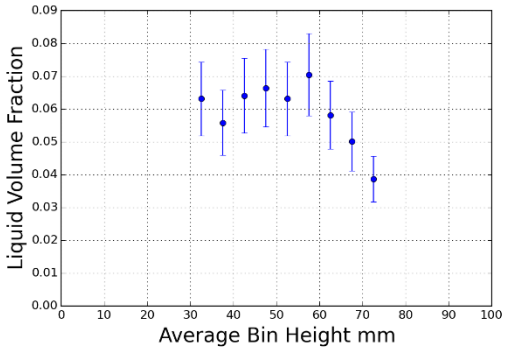


Figure B. 2410: Void Fraction R-123 55F 5000Btu 15000Lb Tri

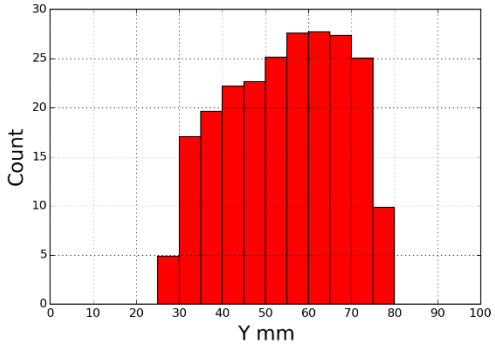


Figure B. 2408: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.2.1 Matched Only Droplets for .LA Image

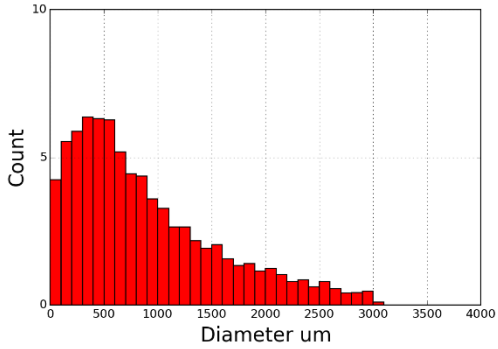


Figure B. 2411: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

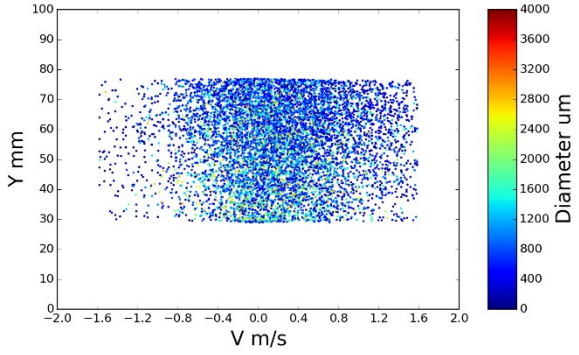


Figure B. 2414: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

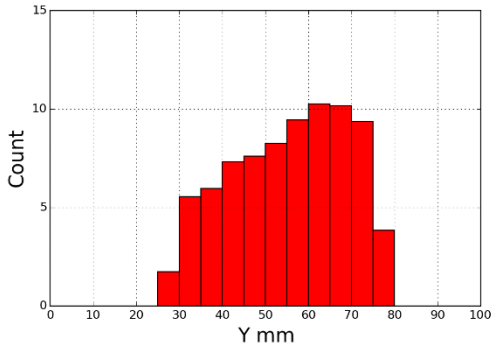


Figure B. 2412: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

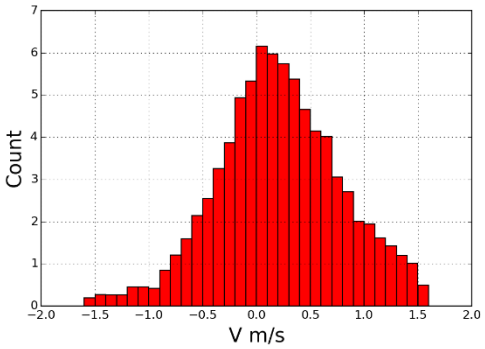


Figure B. 2415: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

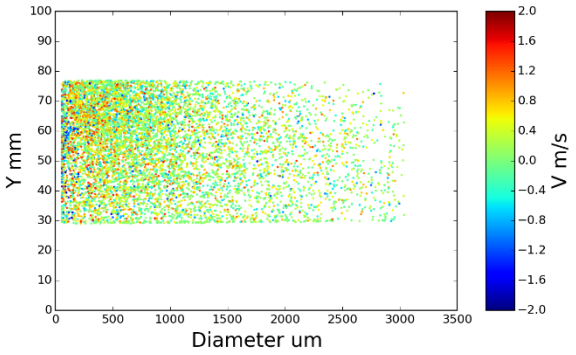


Figure B. 2413: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.2.1 Matched Only Droplets for .LB Image

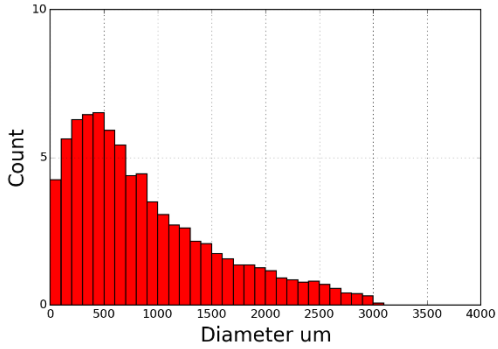


Figure B. 2416: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

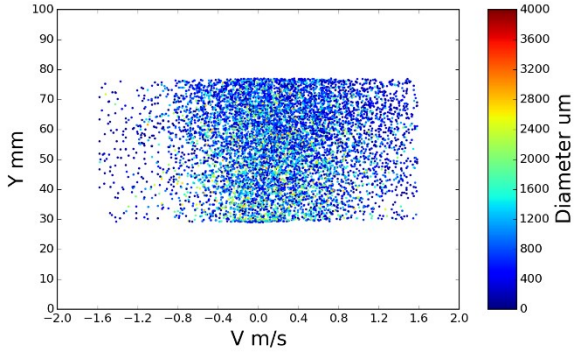


Figure B. 2419: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

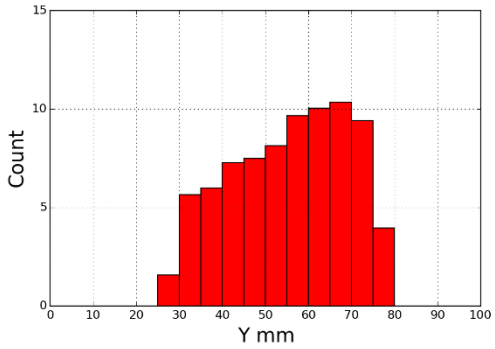


Figure B. 2417: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

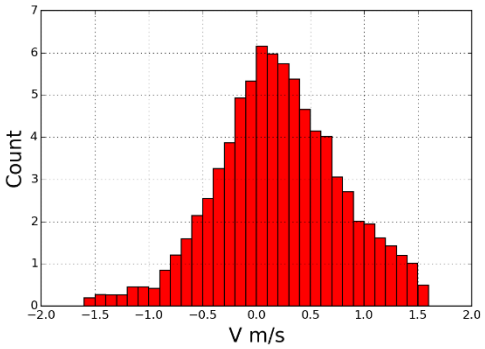


Figure B. 2420: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

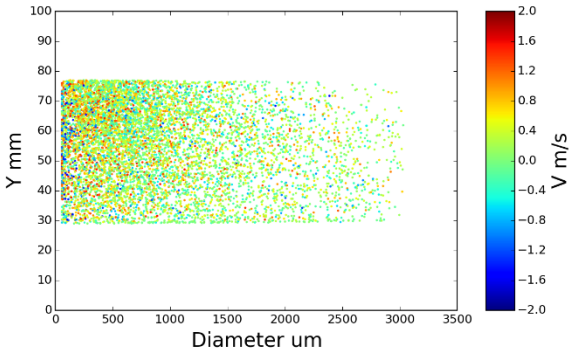


Figure B. 2418: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.2.2 Lens 50mm Mag 0_13x

B.6.2.2 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	88.51	91.16	128.6	3077	743.9	627.0	128.6	3078	729.8	617.1
40-60mm	93.36	95.32	128.6	3077	723.1	575.2	128.6	3070	710.7	578.2
60-80mm	85.36	85.07	128.6	3076	628.0	473.4	128.6	3029	623.9	475.9
80-100mm	50.84	51.36	128.6	3064	484.5	329.4	128.6	2795	484.0	324.0
All	318.07	322.92	128.6	3077	665.3	540.6	128.6	3078	657.2	538.5
			Height A (mm)				Height B (mm)			
Highest Particle			99.9780				99.9780			
Lowest Particle			20.0640				20.0640			

Table B. 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	34.25	128.6	3076	937.8	672.9	128.6	3062	925.5	666.4	-1.550	1.550	-0.070	0.500	-1.550	1.550	0.120	0.600
40-60mm	44.02	128.6	3064	856.7	602.8	128.6	3056	848.8	599.1	-1.550	1.550	-0.110	0.450	-1.550	1.550	0.220	0.610
60-80mm	43.99	128.6	3076	722.4	486.2	128.6	3029	714.0	482.4	-1.550	1.540	-0.120	0.410	-1.550	1.550	0.270	0.610
80-100mm	29.11	128.6	2833	553.0	336.6	128.6	2795	548.6	335.7	-1.540	1.530	-0.150	0.330	-1.550	1.550	0.280	0.540
All	151.37	128.6	3076	777.6	562.9	128.6	3062	767.7	557.3	-1.550	1.550	-0.110	0.430	-1.550	1.550	0.220	0.600

Table B. 261: Matched Droplet Info

B.6.2.2 All Droplets for .LA Image

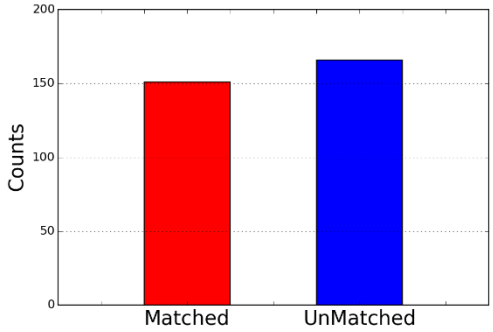


Figure B. 2421: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

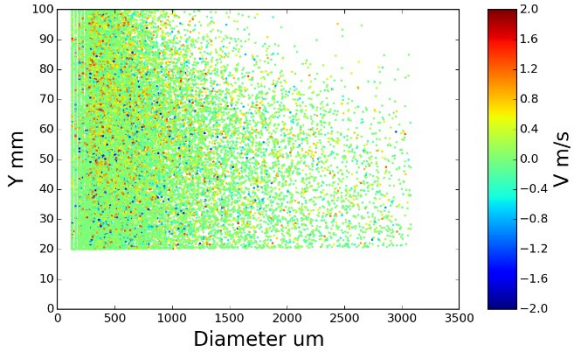


Figure B. 2424: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

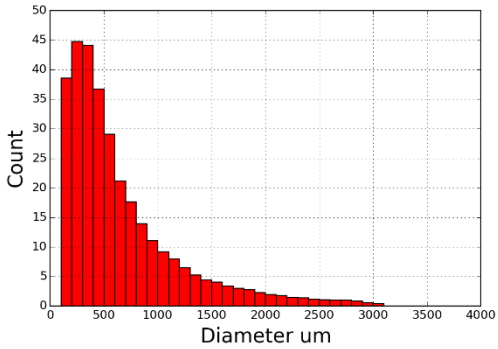


Figure B. 2422: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

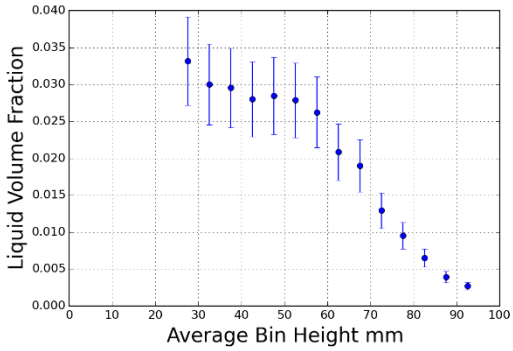


Figure B. 2425: Void Fraction R-123 55F 5000Btu 15000Lb Tri

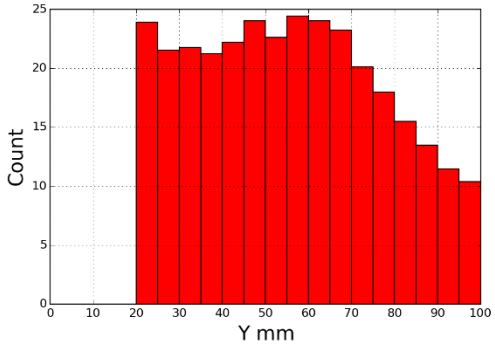


Figure B. 2423: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.2.2 All Droplets for .LB Image

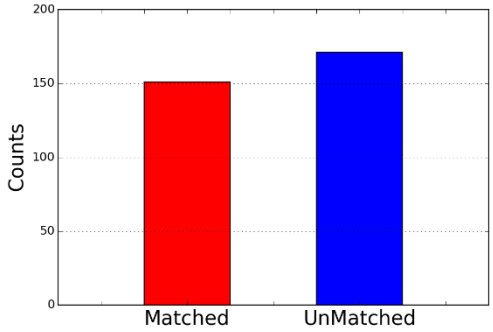


Figure B. 2426: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

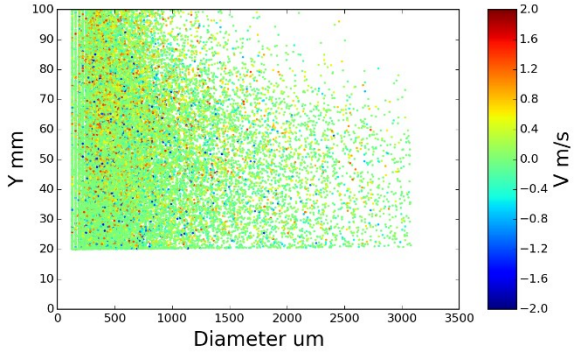


Figure B. 2429: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

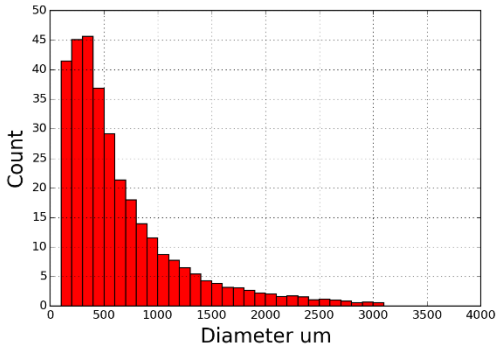


Figure B. 2427: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

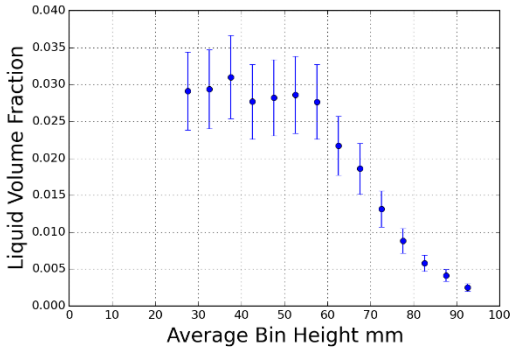


Figure B. 2430: Void Fraction R-123 55F 5000Btu 15000Lb Tri

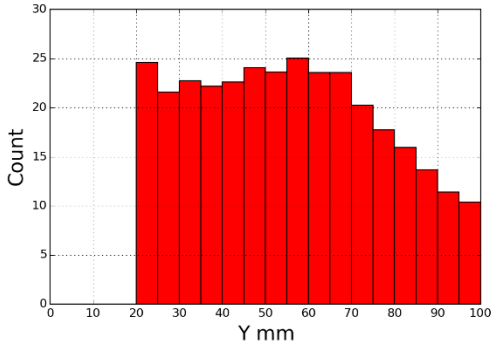


Figure B. 2428: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.2.2 Matched Only Droplets for .LA Image

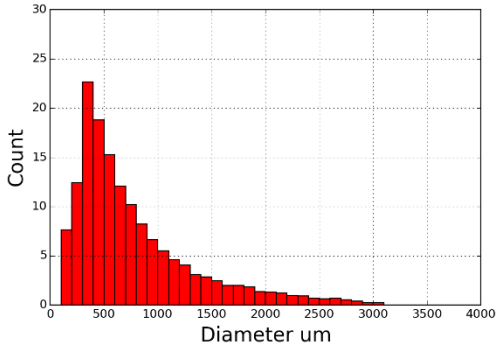


Figure B. 2431: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

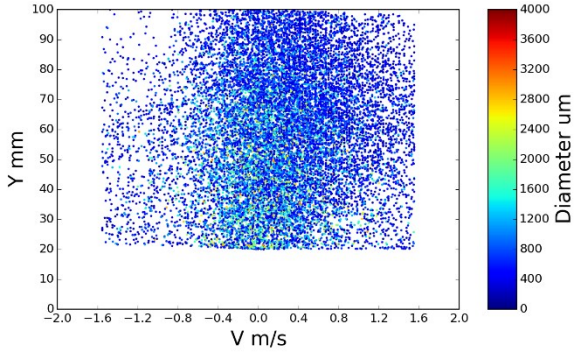


Figure B. 2434: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

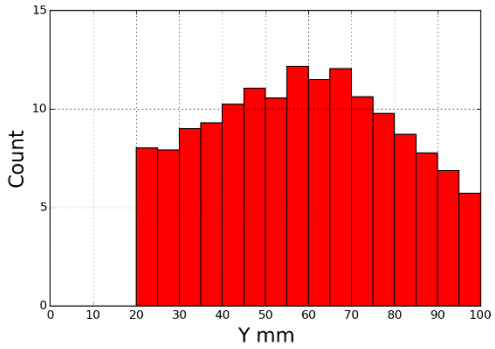


Figure B. 2432: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

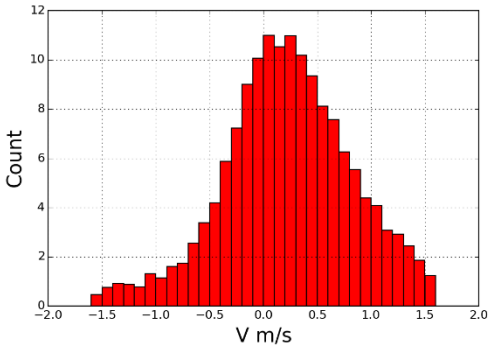


Figure B. 2435: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

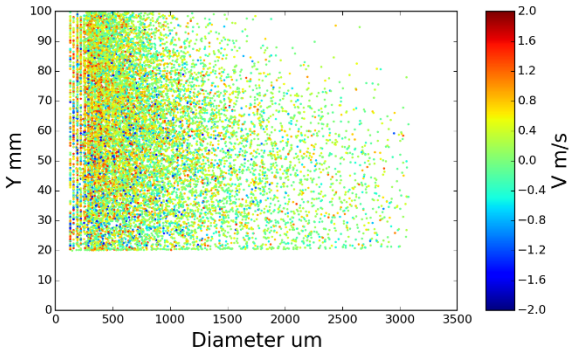


Figure B. 2433: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.2.2 Matched Only Droplets for .LB Image

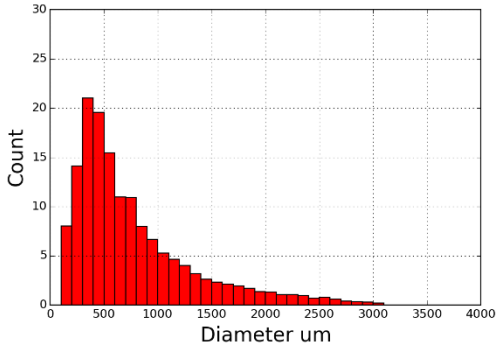


Figure B. 2436: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

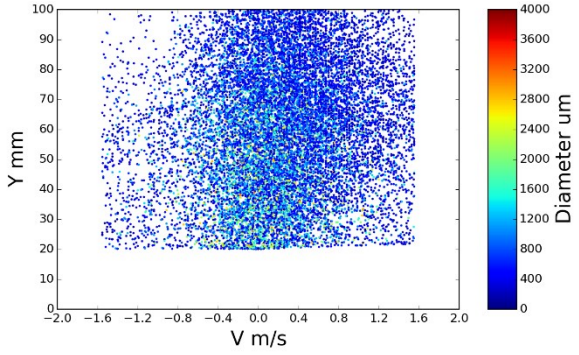


Figure B. 2439: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

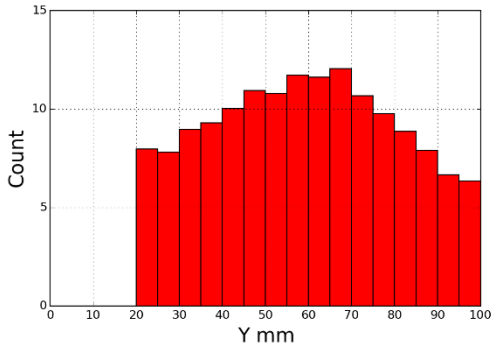


Figure B. 2437: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

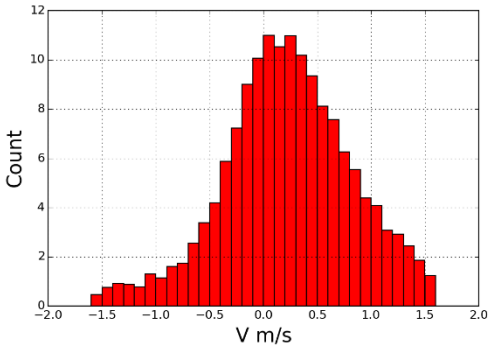


Figure B. 2440: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

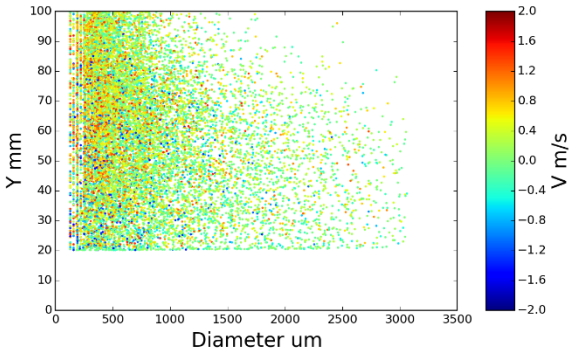


Figure B. 2438: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.2.2 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	80.11	79.32	128.6	3075	783.8	640.5	128.6	3076	787.1	636.1
40-60mm	94.49	96.07	128.6	3074	745.6	574.6	128.6	3077	744.1	575.4
60-80mm	92.14	91.33	128.6	3075	643.1	475.9	128.6	3077	643.6	477.9
80-100mm	55.38	54.54	128.6	2902	510.5	335.0	128.6	2895	513.4	337.2
All	322.12	321.27	128.6	3075	685.4	540.5	128.6	3077	687.0	540.6
			Height A (mm)				Height B (mm)			
Highest Particle			99.9780				99.9780			
Lowest Particle			20.0640				20.0640			

Table B. 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	29.78	128.6	3075	1032	705.0	128.6	3076	1017	695.1	-1.550	1.550	-0.080	0.480	-1.550	1.550	0.120	0.590
40-60mm	43.87	128.6	3045	900.5	601.7	128.6	3077	895.1	600.4	-1.550	1.550	-0.100	0.430	-1.550	1.550	0.190	0.610
60-80mm	46.87	128.6	3030	756.5	490.9	128.6	2980	747.3	486.2	-1.550	1.550	-0.120	0.420	-1.550	1.550	0.250	0.600
80-100mm	31.72	128.6	2902	594.3	348.0	128.6	2895	588.1	350.2	-1.550	1.540	-0.130	0.340	-1.550	1.550	0.240	0.560
All	152.24	128.6	3075	818.1	568.8	128.6	3077	808.0	563.5	-1.550	1.550	-0.110	0.420	-1.550	1.550	0.210	0.590

Table B. 263: Matched Droplet Info

B.6.2.2 All Droplets for .LA Image

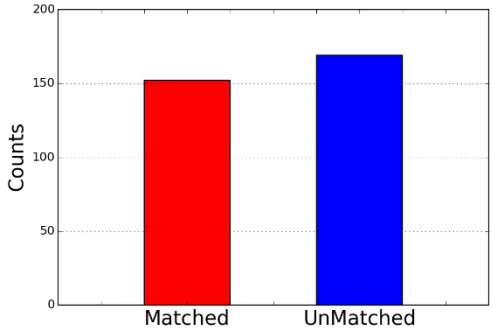


Figure B. 2441: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

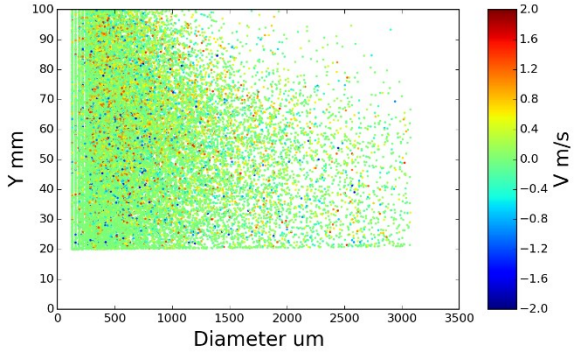


Figure B. 2444: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

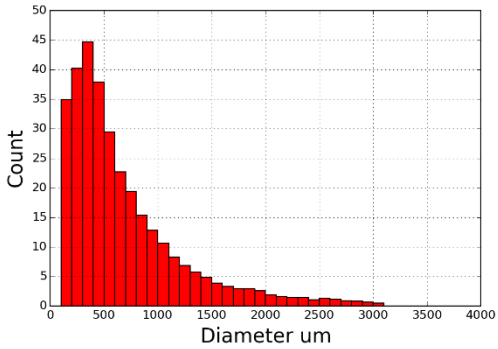


Figure B. 2442: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

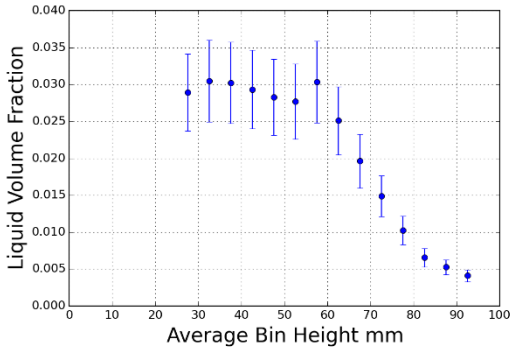


Figure B. 2445: Void Fraction R-123 55F 5000Btu 15000Lb Tri

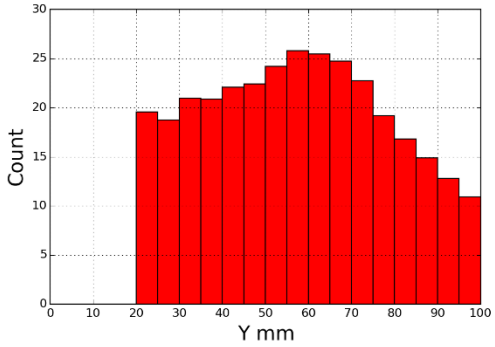


Figure B. 2443: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.2.2 All Droplets for .LB Image

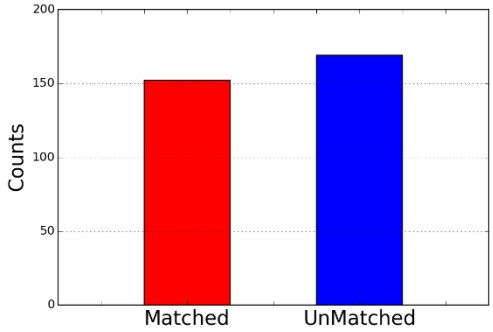


Figure B. 2446: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

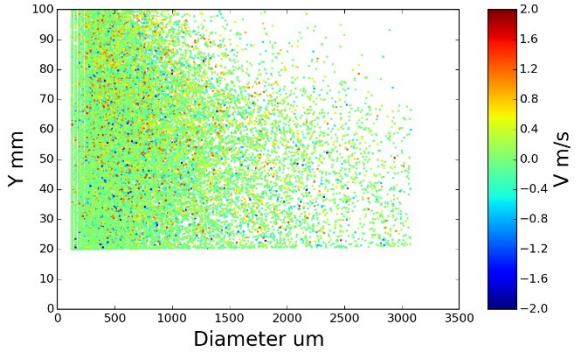


Figure B. 2449: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

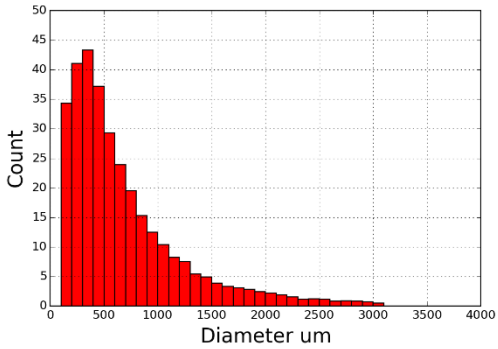


Figure B. 2447: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

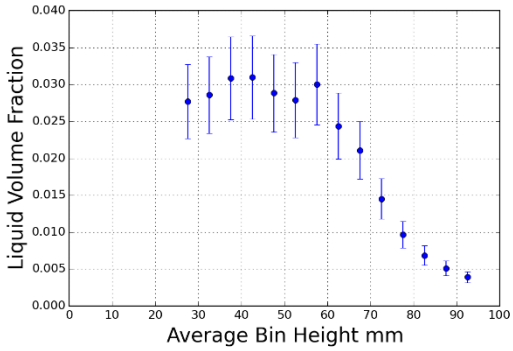


Figure B. 2450: Void Fraction R-123 55F 5000Btu 15000Lb Tri

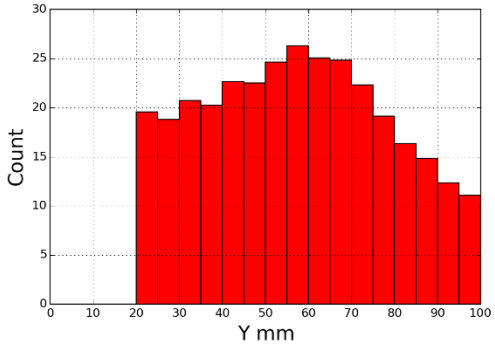


Figure B. 2448: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.2.2 Matched Only Droplets for .LA Image

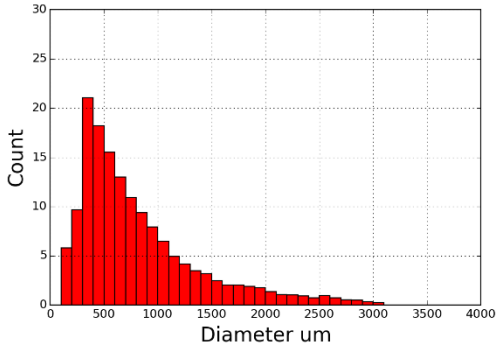


Figure B. 2451: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

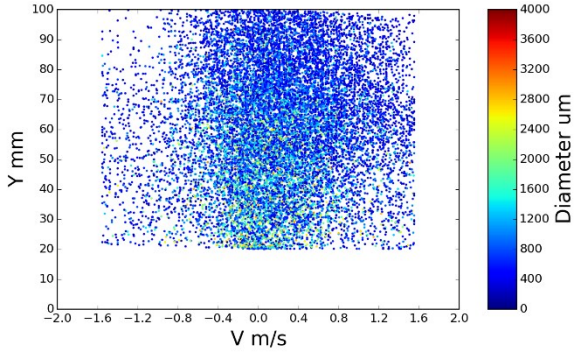


Figure B. 2454: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

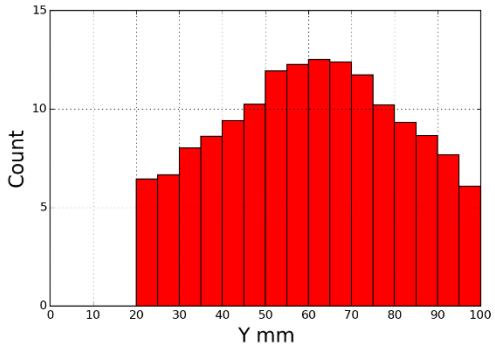


Figure B. 2452: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

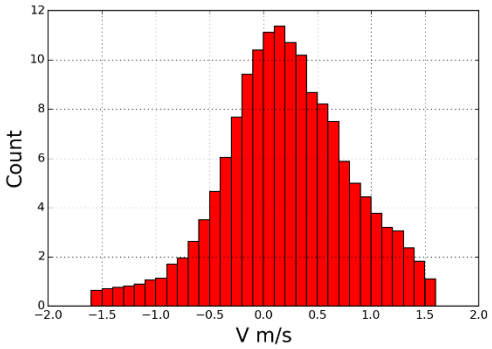


Figure B. 2455: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

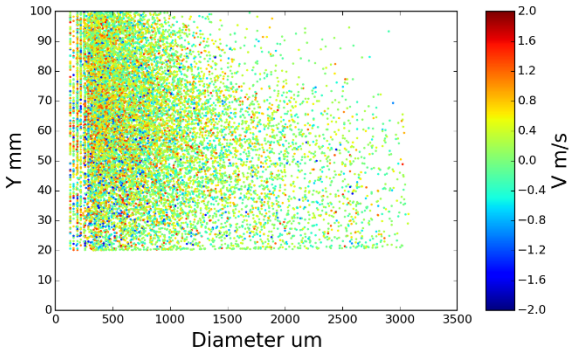


Figure B. 2453: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.2.2 Matched Only Droplets for .LB Image

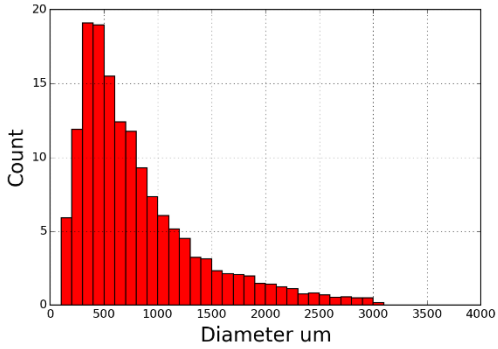


Figure B. 2456: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

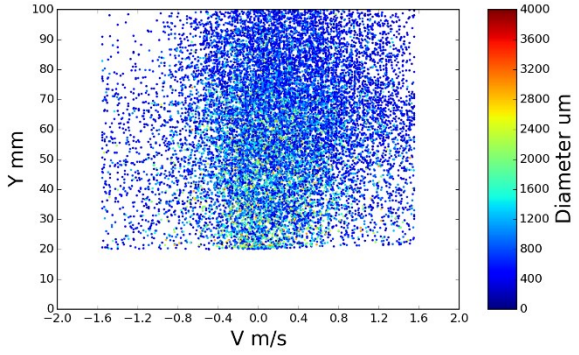


Figure B. 2459: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

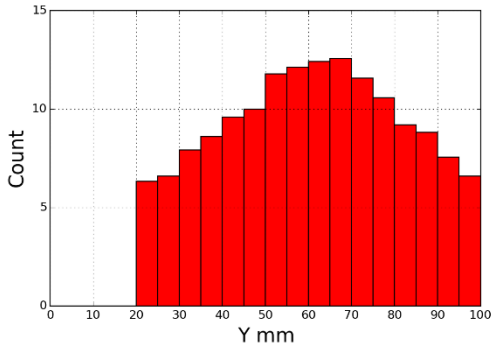


Figure B. 2457: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

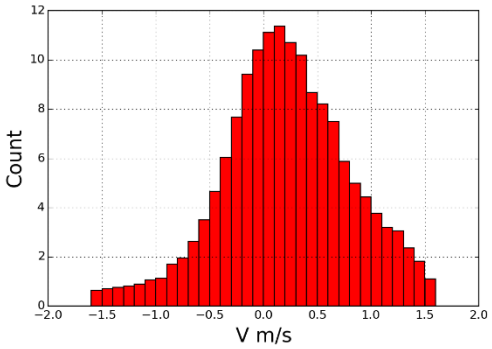


Figure B. 2460: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

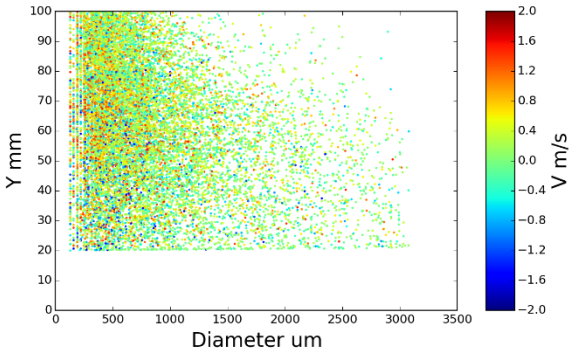


Figure B. 2458: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.2.2 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	59.04	58.51	128.6	3072	878.4	683.4	128.6	3077	887.6	683.8
40-60mm	74.75	75.58	128.6	3070	835.7	621.9	128.6	3068	830.6	623.6
60-80mm	80.42	79.3	128.6	3074	703.6	519.0	128.6	3077	705.6	522.1
80-100mm	49.38	49.0	128.6	3068	551.0	370.0	128.6	2853	551.1	367.5
All	263.61	262.39	128.6	3074	751.6	579.6	128.6	3077	753.3	581.4
			Height A (mm)				Height B (mm)			
Highest Particle			99.9780				99.9780			
Lowest Particle			20.0640				20.0640			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	21.45	128.6	3072	1174	718.8	128.6	3077	1160	718.3	-1.550	1.550	-0.070	0.430	-1.550	1.550	0.140	0.570
40-60mm	33.15	128.6	3054	1032	642.4	128.6	3048	1018	634.9	-1.550	1.550	-0.100	0.430	-1.550	1.550	0.180	0.570
60-80mm	41.09	128.6	3074	843.6	543.1	128.6	3071	839.6	544.5	-1.550	1.540	-0.110	0.410	-1.550	1.550	0.200	0.580
80-100mm	28.06	128.6	2942	653.5	389.2	128.6	2853	644.0	386.5	-1.550	1.550	-0.130	0.360	-1.550	1.550	0.160	0.550
All	123.75	128.6	3074	908.2	604.0	128.6	3077	897.3	600.3	-1.550	1.550	-0.110	0.410	-1.550	1.550	0.170	0.570

Table B. 265: Matched Droplet Info

B.6.2.2 All Droplets for .LA Image

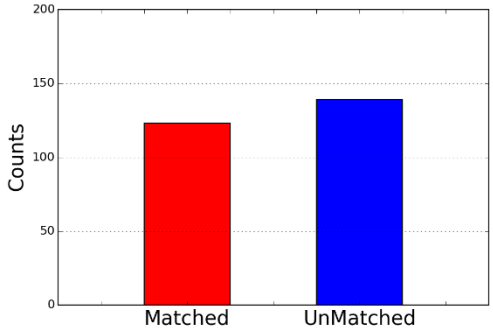


Figure B. 2461: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

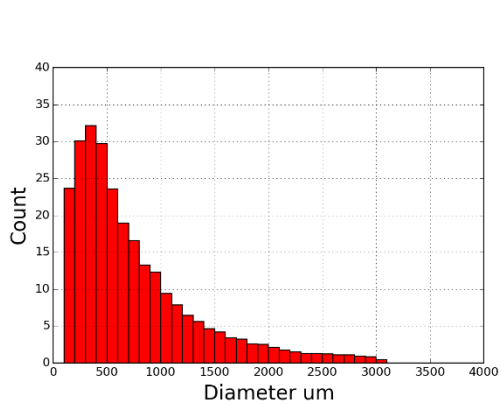


Figure B. 2462: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

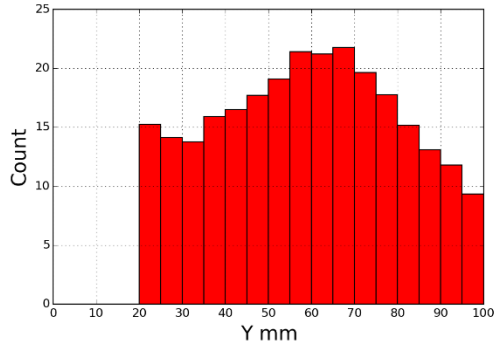


Figure B. 2463: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

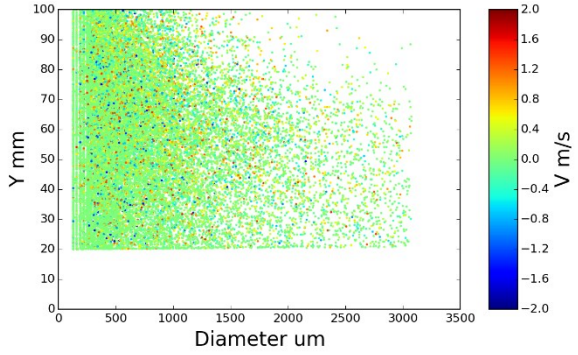


Figure B. 2464: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

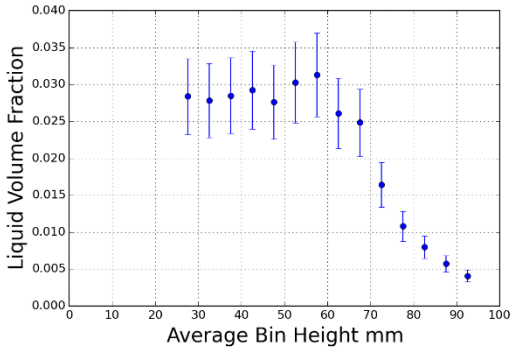


Figure B. 2465: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.2.2 All Droplets for .LB Image

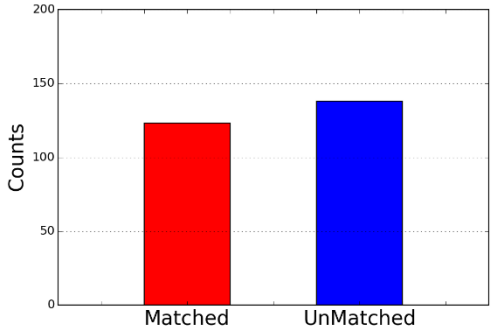


Figure B. 2466: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

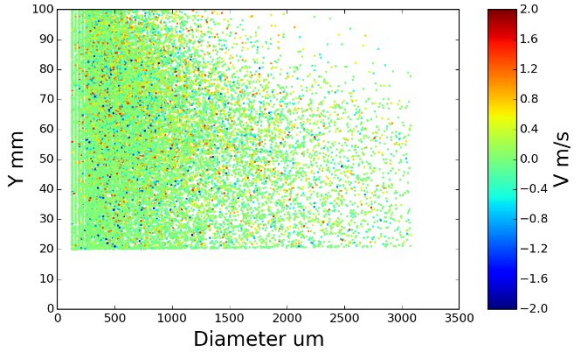


Figure B. 2469: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

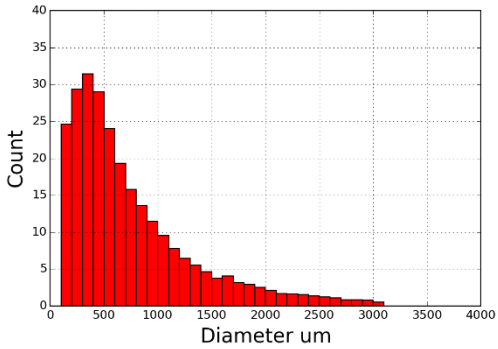


Figure B. 2467: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

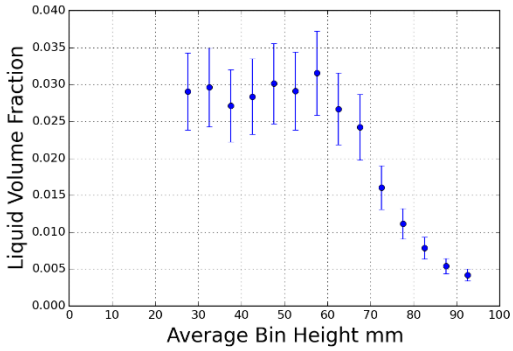


Figure B. 2470: Void Fraction R-123 55F 5000Btu 15000Lb Tri

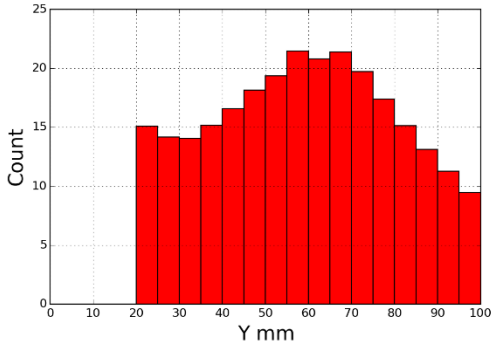


Figure B. 2468: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.2.2 Matched Only Droplets for .LA Image

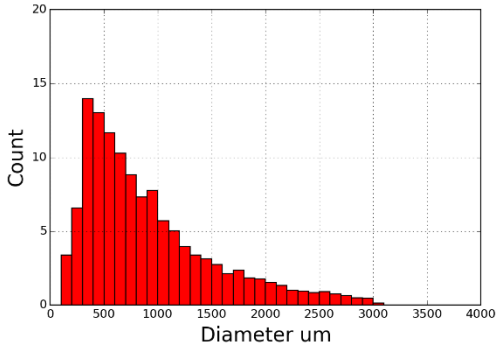


Figure B. 2471: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

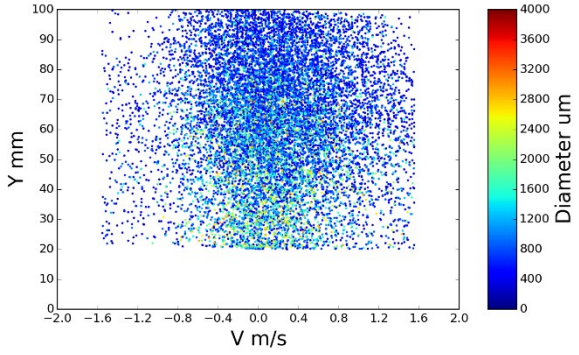


Figure B. 2474: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

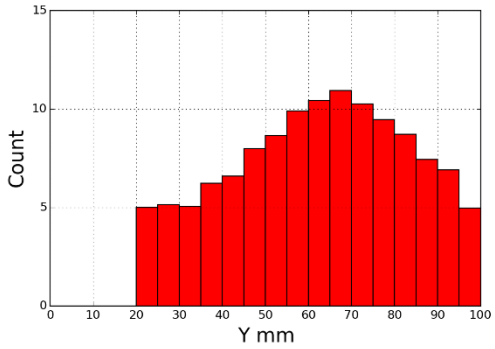


Figure B. 2472: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

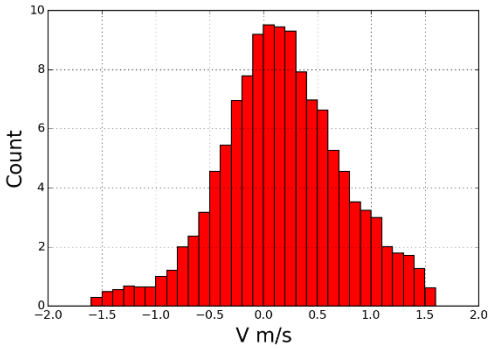


Figure B. 2475: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

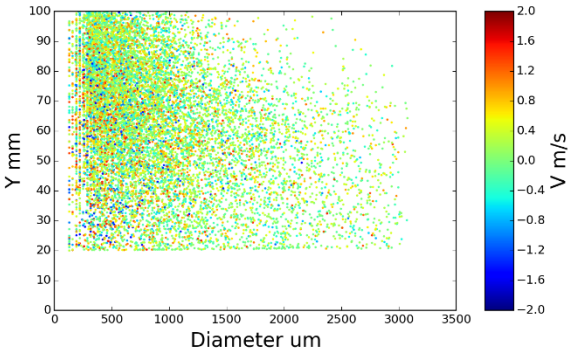


Figure B. 2473: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.2.2 Matched Only Droplets for .LB Image

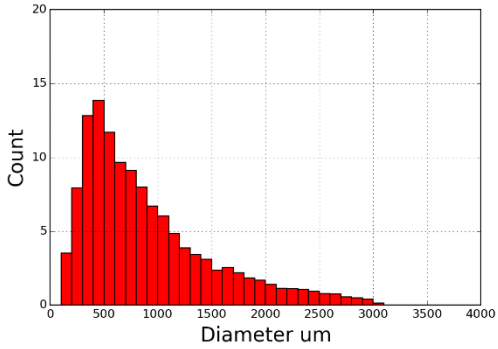


Figure B. 2476: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

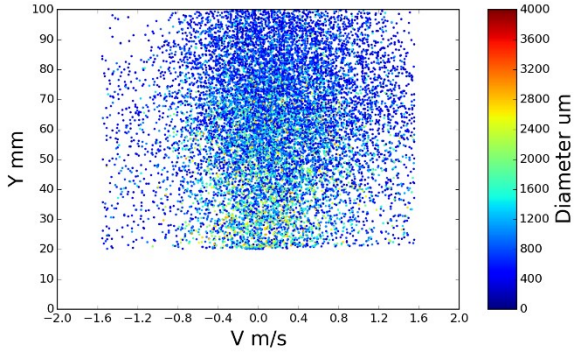


Figure B. 2479: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

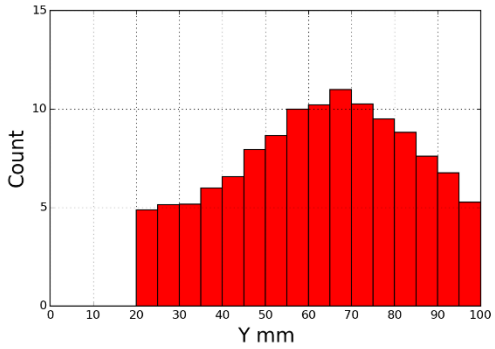


Figure B. 2477: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

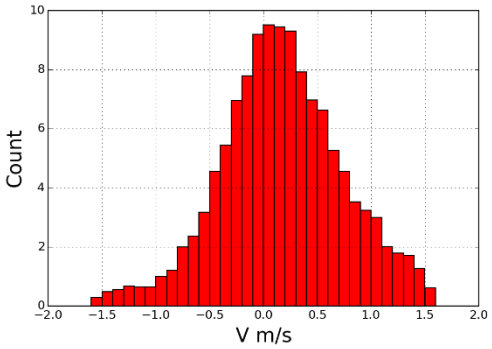


Figure B. 2480: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

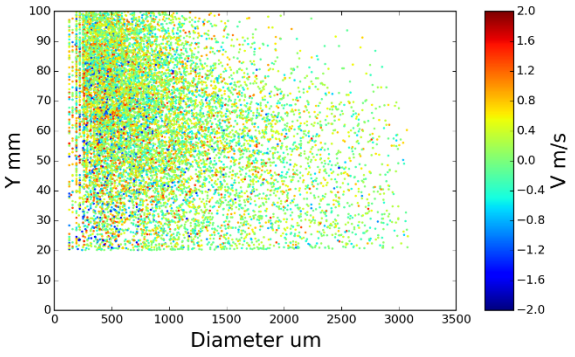


Figure B. 2478: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3 Liquid Level 3

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	11338 / 1.429
Ref Mass Flow (lb/hr) / (kg/s)	1634 / 0.206
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15905 / 21.571
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	2698 / 8.51
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.1 / 12.82
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	56.0 / 13.36
Total Bundle Q (Btu/hr) / (kW)	137706 / 40.36
Total Bundle & Preboiler Q (Btu/hr) / (kW)	137689 / 40.35
Top Two Rows HTC Ratio	0.726
Bundle Inlet Quality	-0.12
Bundle Exit Quality	1.00

Table B. 266: Thermal Conditions

B.6.3.1 Lens 100mm Mag 0_29x

B.6.3.1 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	13.03	14.57	57.1	2879	527.6	577.2	57.1	3029	475.4	556.4
40-60mm	28.85	34.98	57.1	3003	461.6	538.2	57.1	2978	406.4	510.9
60-80mm	21.31	26.54	57.1	2972	425.0	458.4	57.1	2752	373.7	442.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	63.22	76.09	57.1	3003	462.9	522.6	57.1	3029	408.2	498.8
			Height A (mm)				Height B (mm)			
Highest Particle			76.9855				76.9855			
Lowest Particle			29.0167				29.0167			

Table B. 267: 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	5.56	57.1	2879	831.3	642.3	57.1	3029	822.0	644.0	-1.420	1.580	-0.200	0.390	-1.580	1.570	0.150	0.600
40-60mm	11.46	57.1	3003	731.5	617.8	57.1	2961	735.9	617.9	-1.580	1.580	-0.190	0.380	-1.580	1.580	0.250	0.610
60-80mm	9.51	57.1	2727	630.3	526.4	57.1	2752	627.9	528.7	-1.530	1.500	-0.100	0.380	-1.520	1.580	0.250	0.540
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	26.53	57.1	3003	716.1	596.8	57.1	3029	714.7	597.5	-1.580	1.580	-0.160	0.390	-1.580	1.580	0.230	0.590

Table B. 268: Matched Droplet Info

B.6.3.1 All Droplets for .LA Image

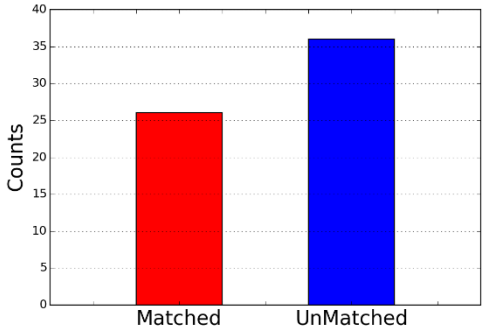


Figure B. 2481: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

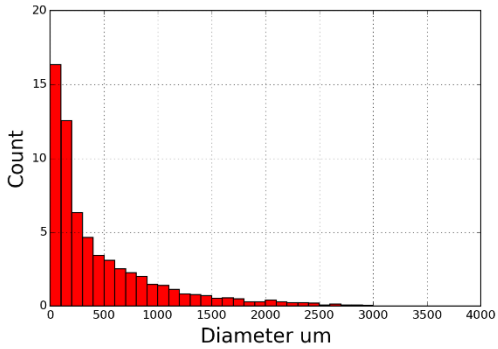


Figure B. 2482: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

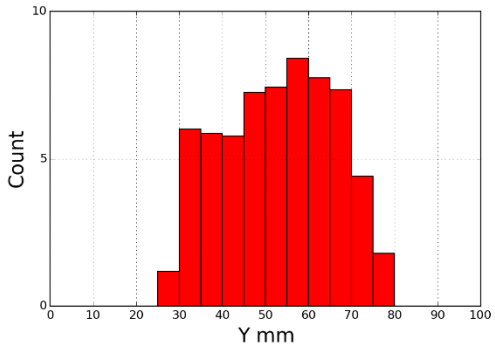


Figure B. 2483: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

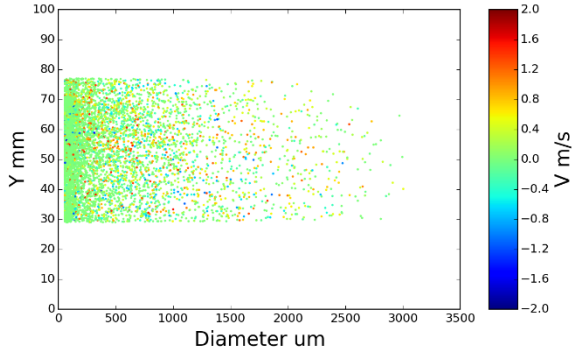


Figure B. 2484: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

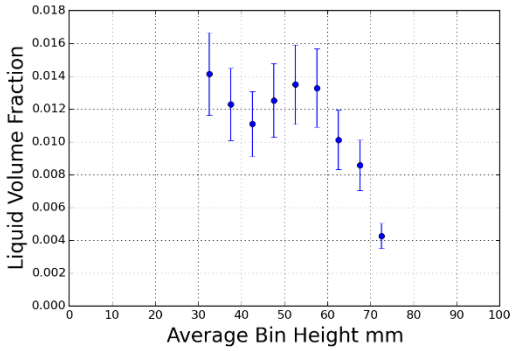


Figure B. 2485: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 All Droplets for .LB Image

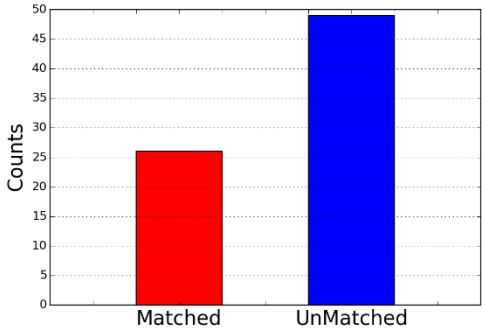


Figure B. 2486: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

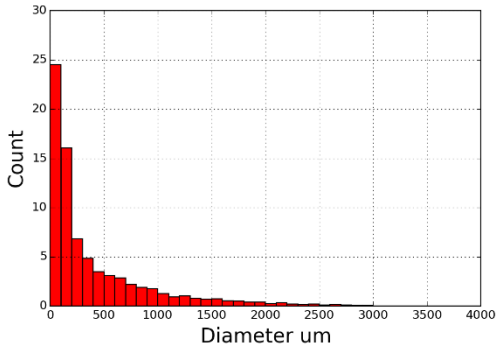


Figure B. 2487: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

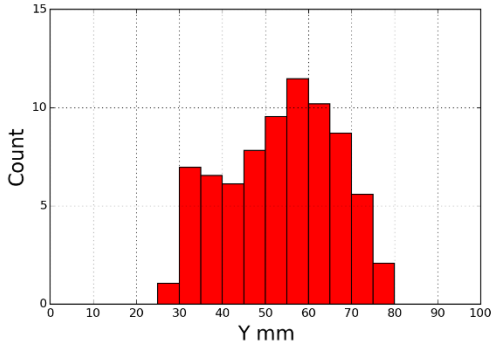


Figure B. 2488: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

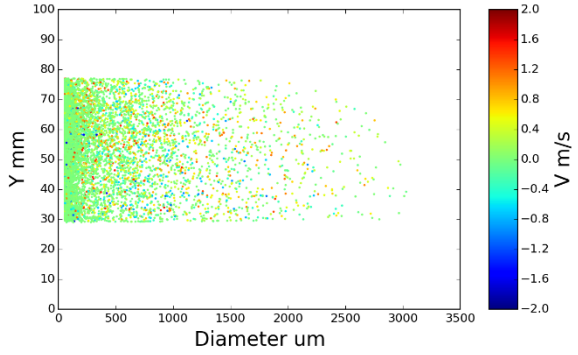


Figure B. 2489: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

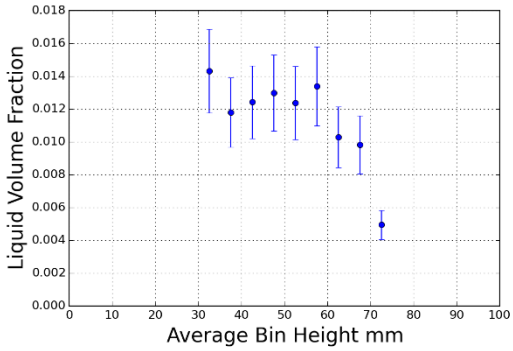


Figure B. 2490: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 Matched Only Droplets for .LA Image

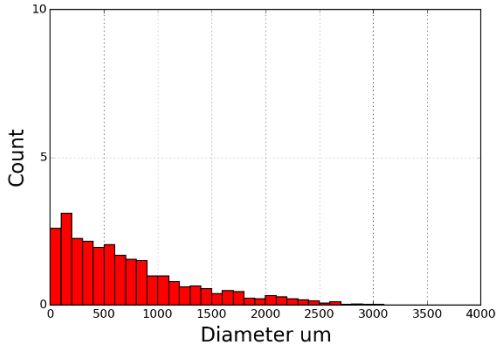


Figure B. 2491: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

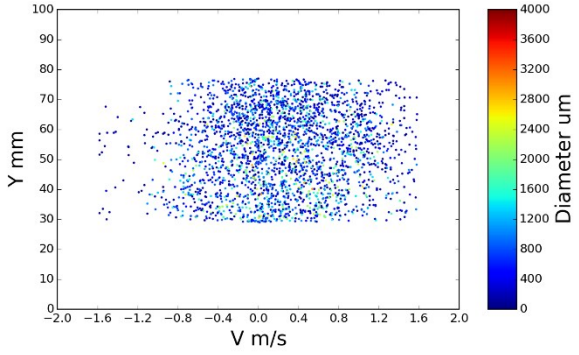


Figure B. 2494: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

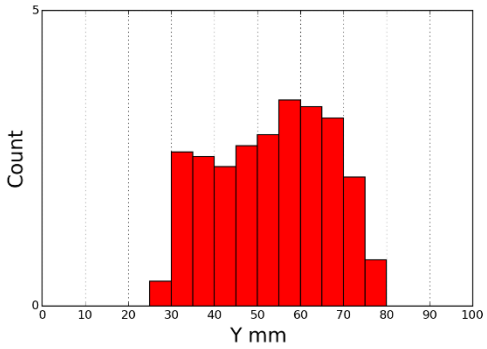


Figure B. 2492: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

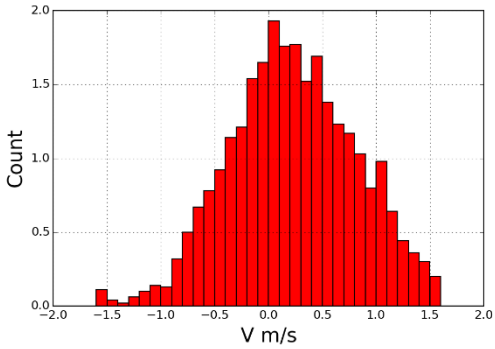


Figure B. 2495: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

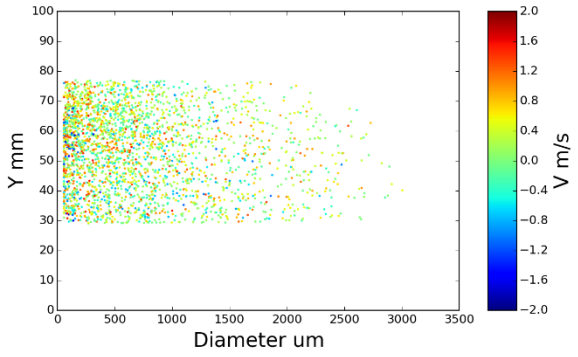


Figure B. 2493: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 Matched Only Droplets for .LB Image

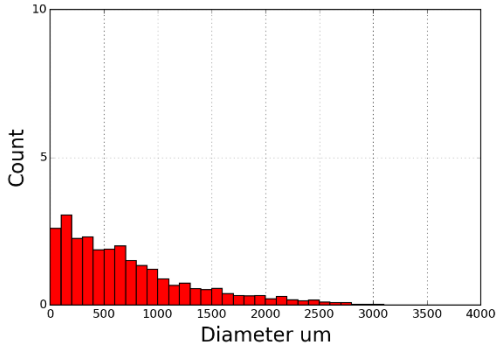


Figure B. 2496: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

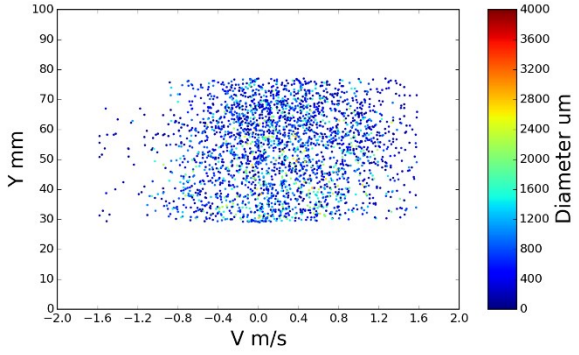


Figure B. 2499: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

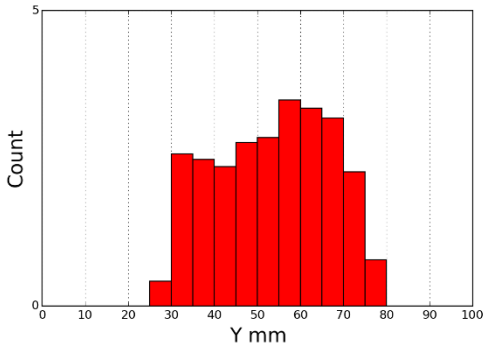


Figure B. 2497: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

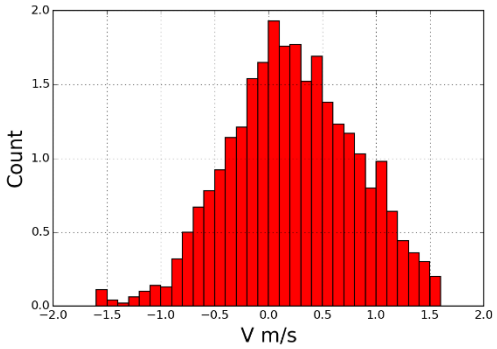


Figure B. 2500: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

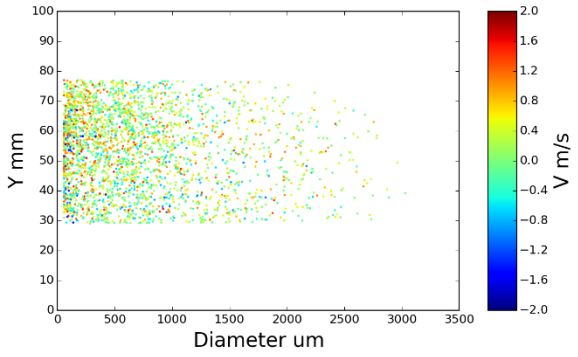


Figure B. 2498: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 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	17.16	19.67	57.1	3010	540.6	536.8	57.1	2966	499.9	530.9
40-60mm	34.57	43.88	57.1	3031	481.2	511.7	57.1	3024	403.2	491.9
60-80mm	24.52	32.5	57.1	2842	462.8	462.4	57.1	3021	382.4	446.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	76.26	96.08	57.1	3031	488.7	503.1	57.1	3024	416.0	487.5
			Height A (mm)				Height B (mm)			
Highest Particle			76.9981				76.9855			
Lowest Particle			29.0294				29.0167			

Table B. 269: 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	7.49	57.1	2910	827.7	586.0	57.1	2857	823.6	585.4	-1.560	1.580	-0.210	0.320	-1.580	1.580	0.440	0.570
40-60mm	13.99	57.1	3031	744.7	586.9	57.1	2995	748.8	590.0	-1.580	1.490	-0.270	0.360	-1.580	1.580	0.500	0.600
60-80mm	10.41	57.1	2842	694.1	523.9	57.1	3021	683.4	524.9	-1.540	1.570	-0.200	0.350	-1.580	1.580	0.430	0.570
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	31.89	57.1	3031	747.7	569.0	57.1	3021	744.4	570.5	-1.580	1.580	-0.230	0.350	-1.580	1.580	0.460	0.590

Table B. 270: Matched Droplet Info

B.6.3.1 All Droplets for .LA Image

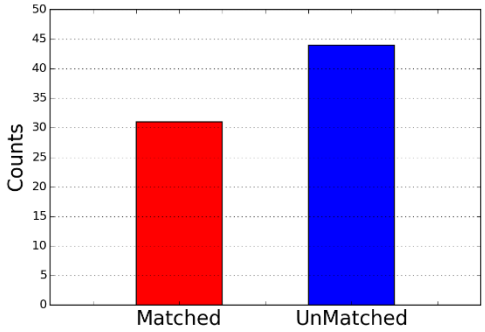


Figure B. 2501: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

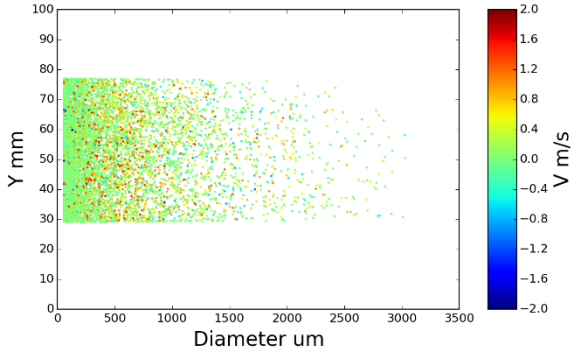


Figure B. 2504: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

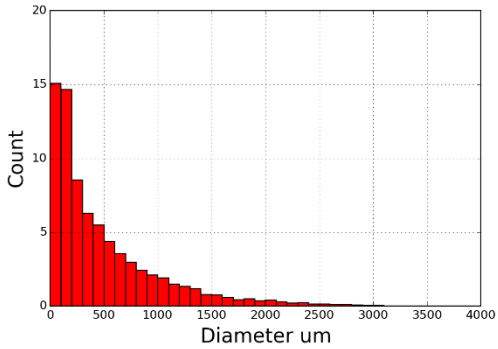


Figure B. 2502: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

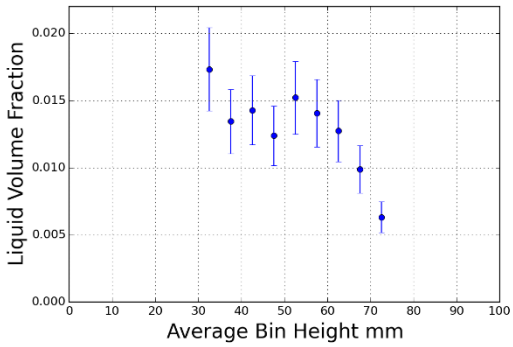


Figure B. 2505: Void Fraction R-123 55F 5000Btu 15000Lb Tri

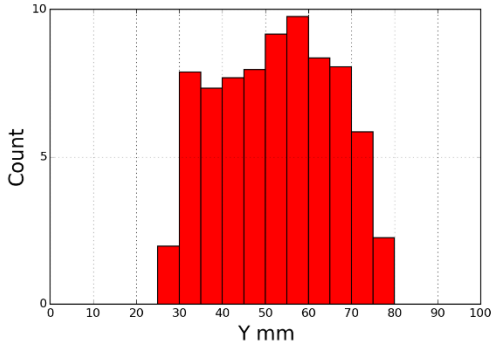


Figure B. 2503: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 All Droplets for .LB Image

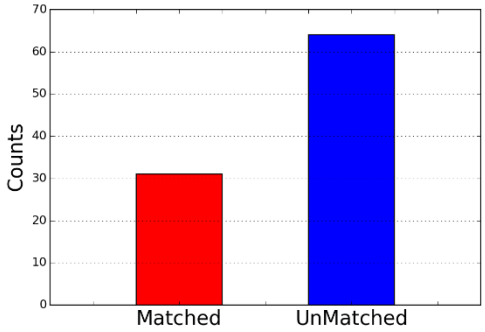


Figure B. 2506: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

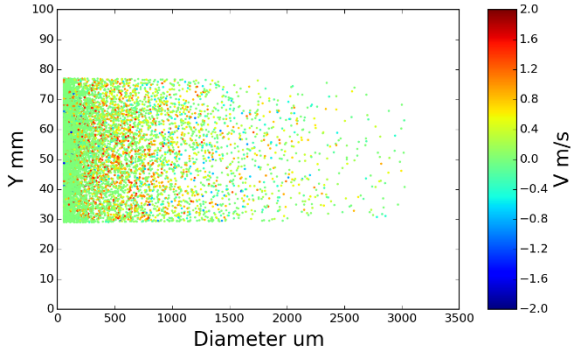


Figure B. 2509: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

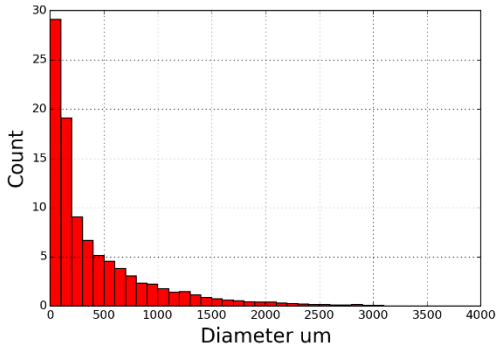


Figure B. 2507: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

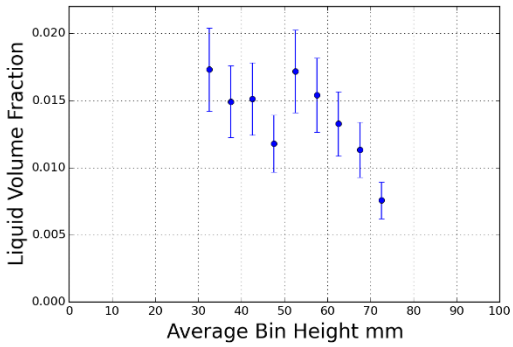


Figure B. 2510: Void Fraction R-123 55F 5000Btu 15000Lb Tri

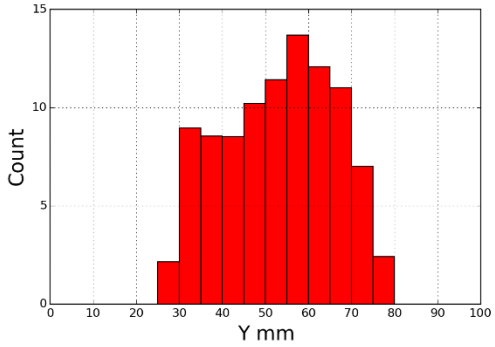


Figure B. 2508: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 Matched Only Droplets for .LA Image

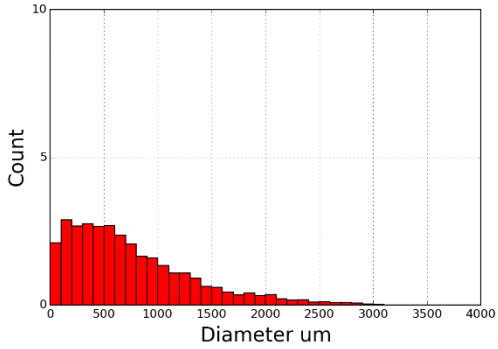


Figure B. 2511: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

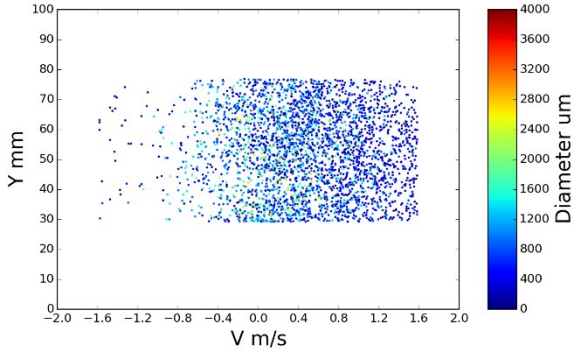


Figure B. 2514: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

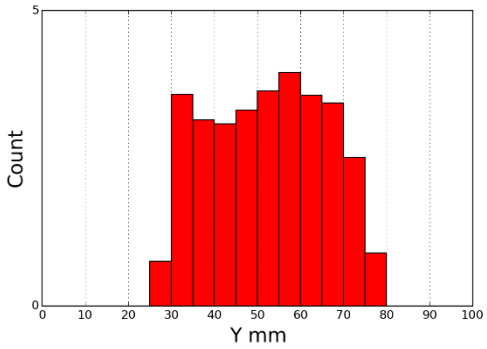


Figure B. 2512: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

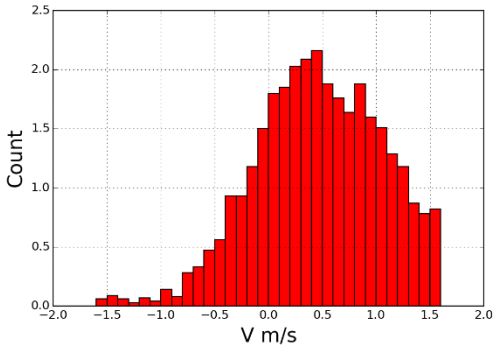


Figure B. 2515: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

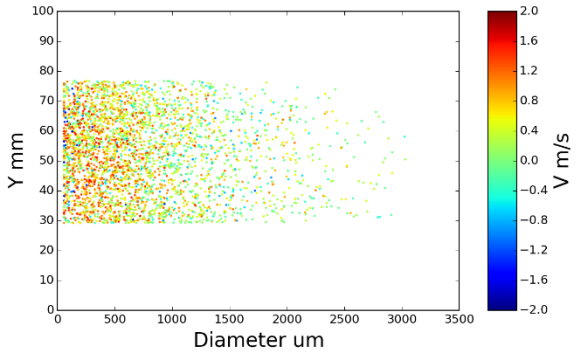


Figure B. 2513: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 Matched Only Droplets for .LB Image

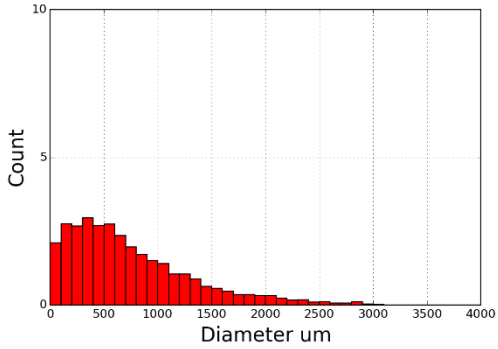


Figure B. 2516: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

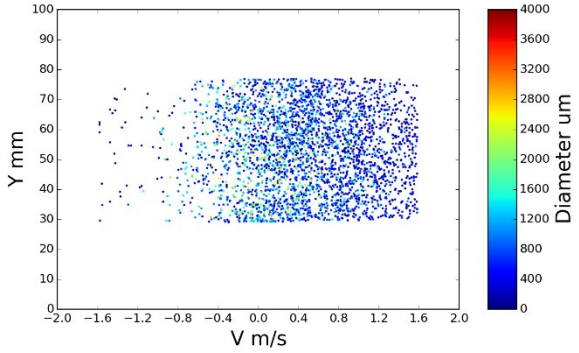


Figure B. 2519: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

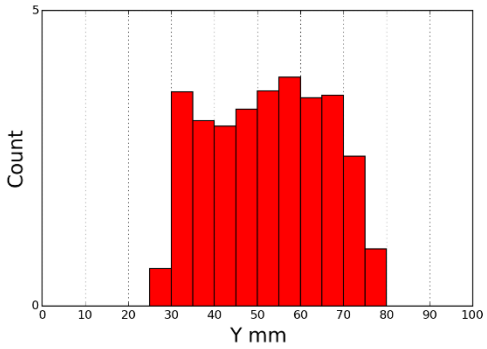


Figure B. 2517: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

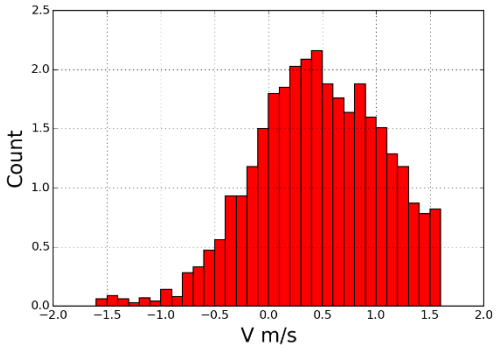


Figure B. 2520: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

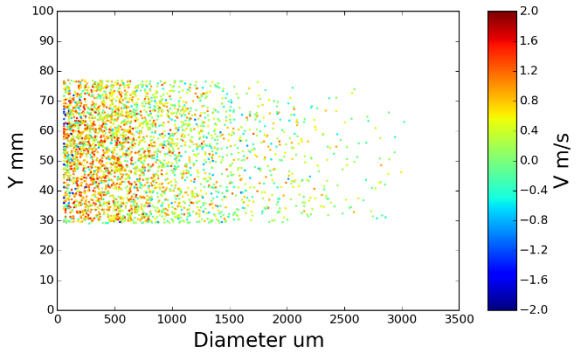


Figure B. 2518: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 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	17.11	17.27	57.1	3016	542.3	531.5	57.1	3031	527.0	535.0
40-60mm	35.5	37.89	57.1	2964	516.2	526.7	57.1	2902	492.2	526.7
60-80mm	23.94	26.97	57.1	2909	497.1	476.6	57.1	2962	449.1	468.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	76.55	82.15	57.1	3016	516.1	512.9	57.1	3031	485.4	511.1
			Height A (mm)				Height B (mm)			
Highest Particle			76.9642				76.9981			
Lowest Particle			29.0284				29.0167			

Table B. 271: 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	8.0	57.1	2956	820.3	596.6	57.1	3031	819.9	606.4	-1.560	1.540	-0.230	0.310	-1.510	1.580	0.570	0.540
40-60mm	15.81	57.1	2942	815.5	582.3	57.1	2902	811.1	581.6	-1.550	1.580	-0.270	0.360	-1.580	1.580	0.550	0.560
60-80mm	11.26	57.1	2822	736.5	520.0	57.1	2962	727.4	525.2	-1.550	1.580	-0.260	0.350	-1.500	1.580	0.570	0.560
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	35.07	57.1	2956	791.2	567.7	57.1	3031	785.7	571.1	-1.560	1.580	-0.260	0.350	-1.580	1.580	0.560	0.550

Table B. 272: Matched Droplet Info

B.6.3.1 All Droplets for .LA Image

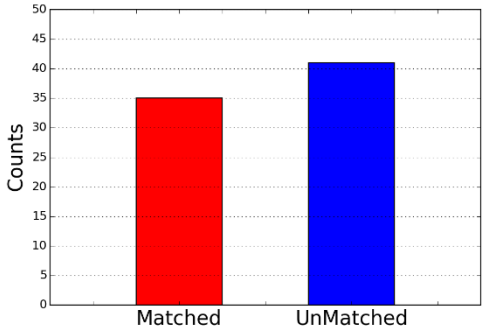


Figure B. 2521: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

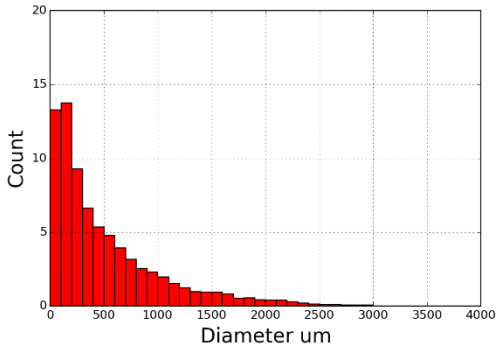


Figure B. 2522: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

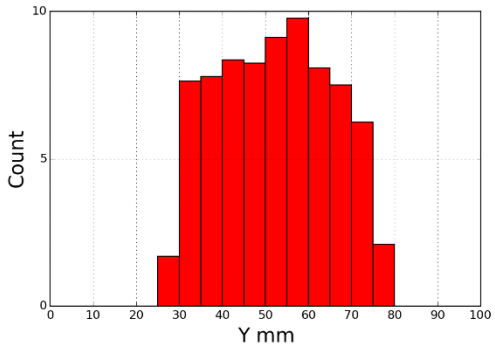


Figure B. 2523: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

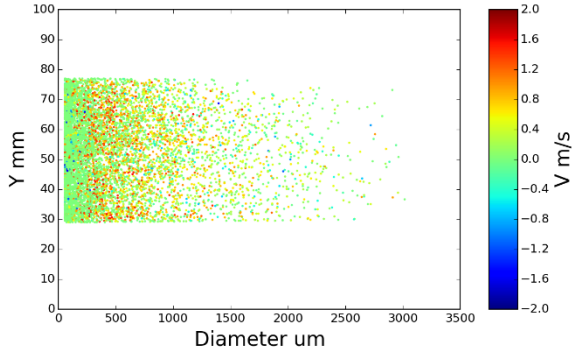


Figure B. 2524: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

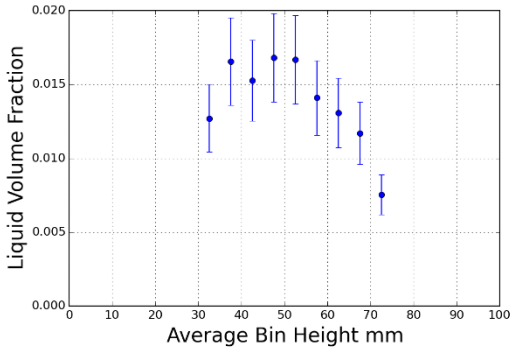


Figure B. 2525: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 All Droplets for .LB Image

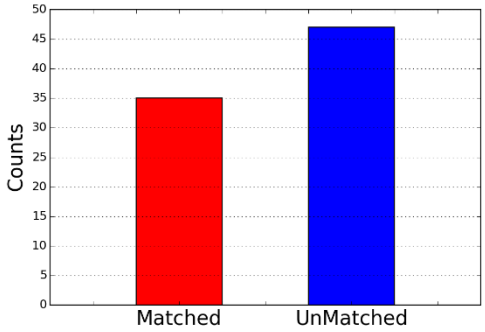


Figure B. 2526: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

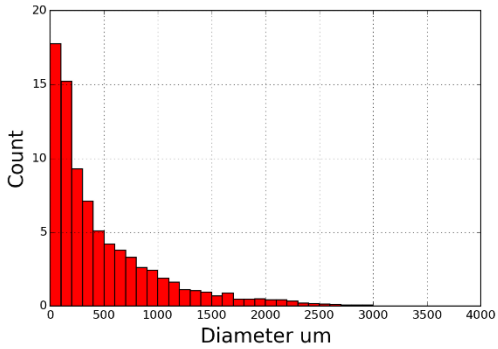


Figure B. 2527: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

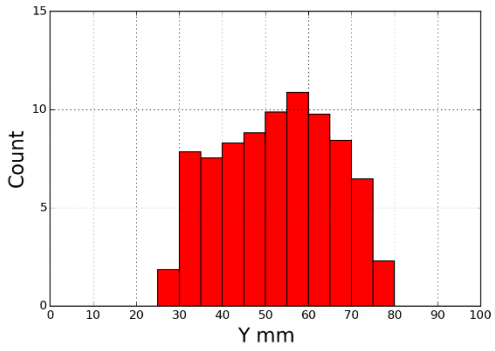


Figure B. 2528: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

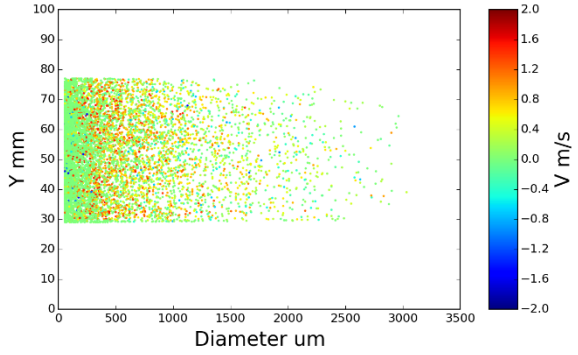


Figure B. 2529: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

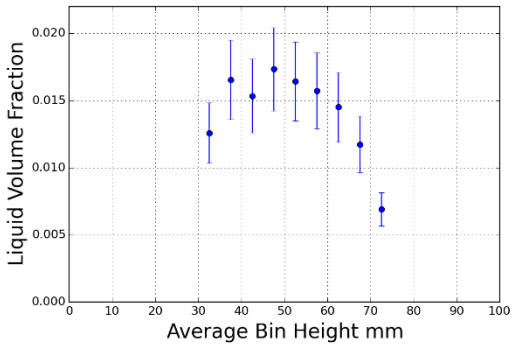


Figure B. 2530: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 Matched Only Droplets for .LA Image

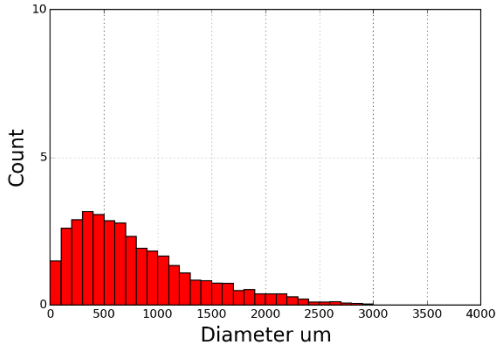


Figure B. 2531: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

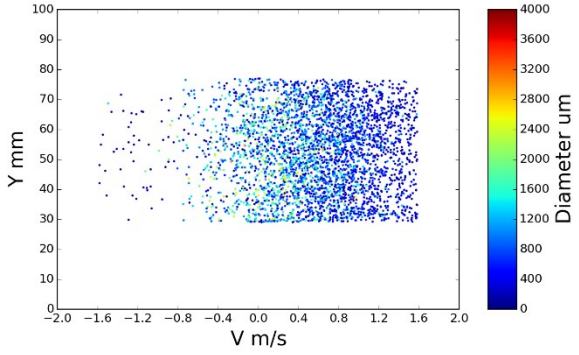


Figure B. 2534: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

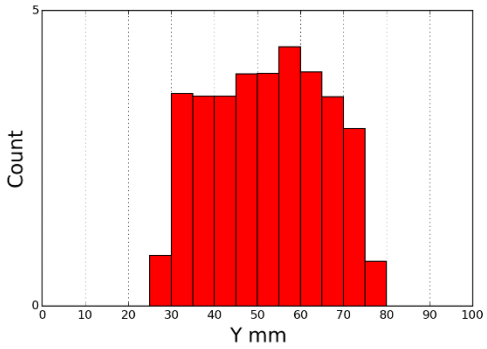


Figure B. 2532: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

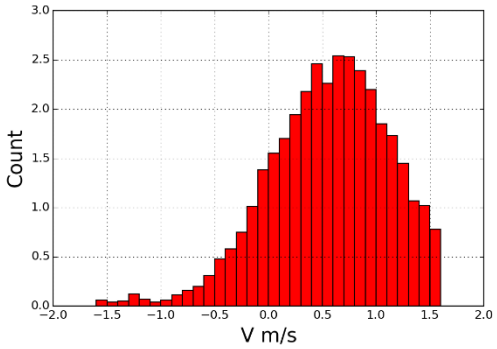


Figure B. 2535: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

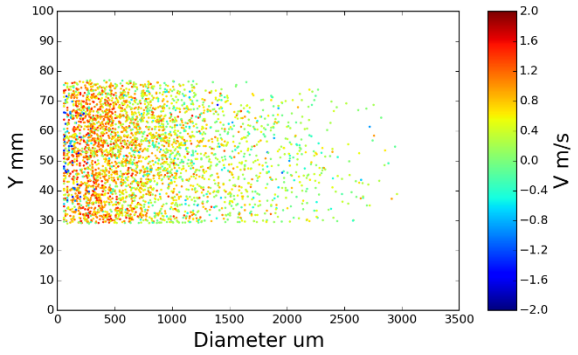


Figure B. 2533: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 Matched Only Droplets for .LB Image

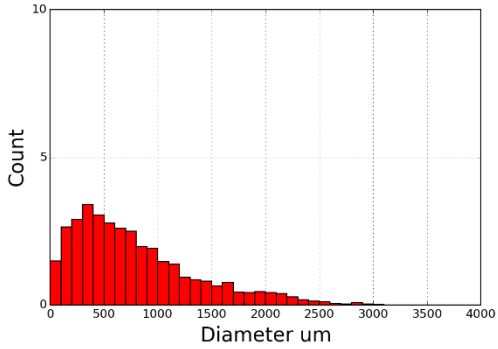


Figure B. 2536: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

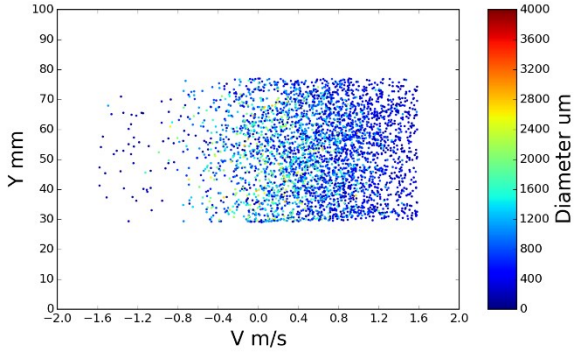


Figure B. 2539: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

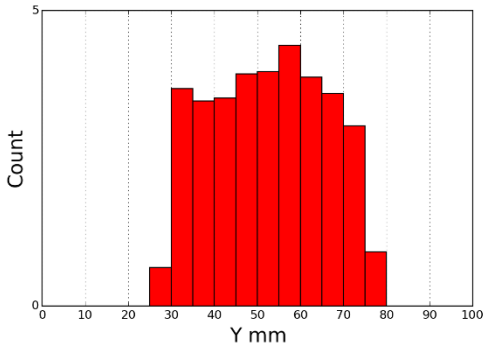


Figure B. 2537: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

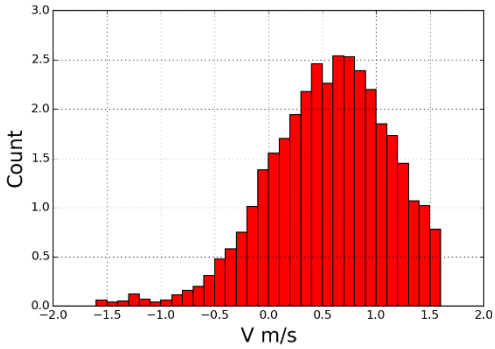


Figure B. 2540: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

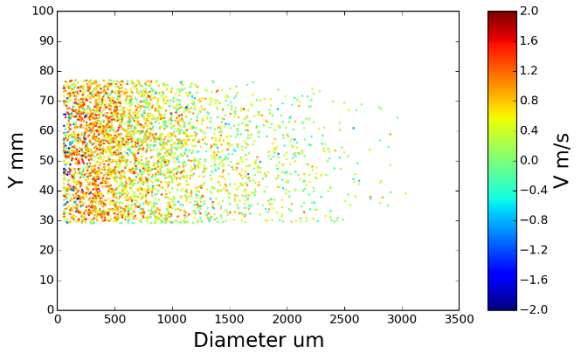


Figure B. 2538: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 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	14.38	15.08	57.1	2953	556.8	559.7	57.1	2972	523.8	563.7
40-60mm	30.46	33.35	57.1	3006	529.3	569.7	57.1	3031	496.4	565.7
60-80mm	22.68	24.81	57.1	2897	473.0	499.6	57.1	2867	438.1	486.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	67.54	73.29	57.1	3006	516.2	545.9	57.1	3031	482.3	540.8
			Height A (mm)				Height B (mm)			
Highest Particle			76.9981				76.9855			
Lowest Particle			29.0282				29.0167			

Table B. 273: 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	6.2	57.1	2953	881.3	619.2	57.1	2864	868.6	617.8	-1.480	1.380	-0.240	0.330	-1.490	1.580	0.480	0.530
40-60mm	12.45	57.1	3006	871.5	640.5	57.1	2996	869.2	643.1	-1.570	1.510	-0.260	0.380	-1.540	1.580	0.550	0.550
60-80mm	9.03	57.1	2874	784.5	576.6	57.1	2837	773.6	571.5	-1.580	1.520	-0.270	0.360	-1.500	1.580	0.560	0.540
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	27.68	57.1	3006	845.3	617.0	57.1	2996	837.5	616.3	-1.580	1.520	-0.260	0.360	-1.540	1.580	0.540	0.540

Table B. 274: Matched Droplet Info

B.6.3.1 All Droplets for .LA Image

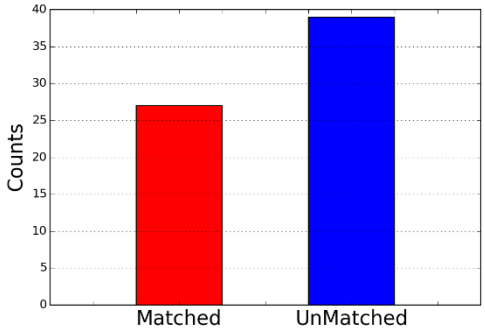


Figure B. 2541: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

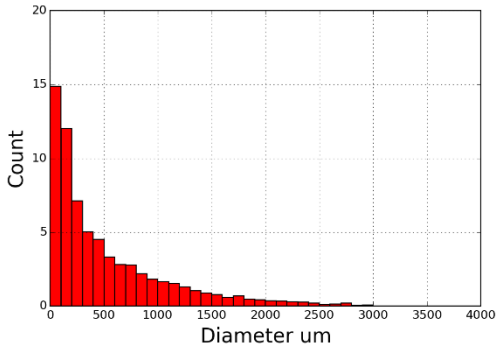


Figure B. 2542: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

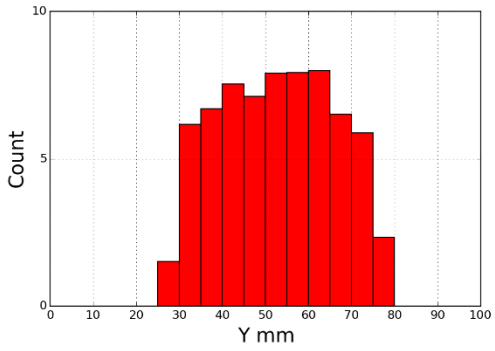


Figure B. 2543: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

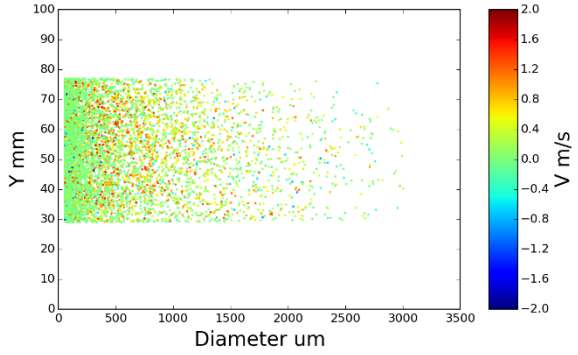


Figure B. 2544: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

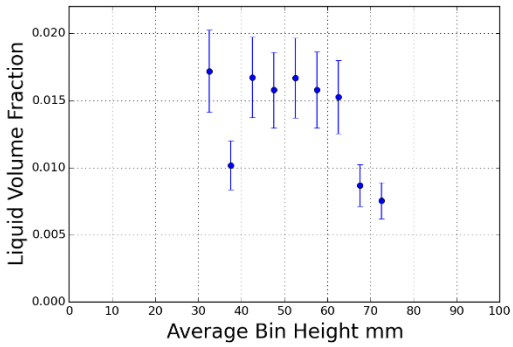


Figure B. 2545: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 All Droplets for .LB Image

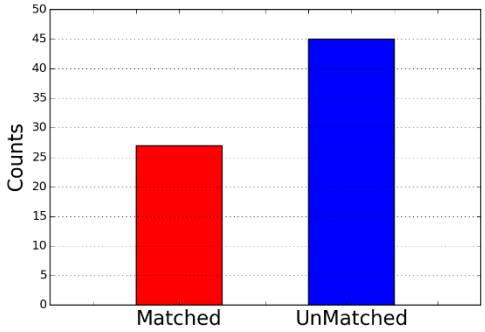


Figure B. 2546: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

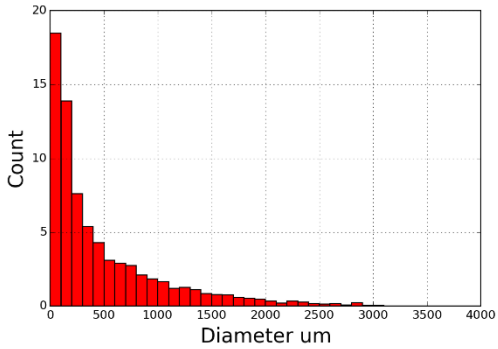


Figure B. 2547: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

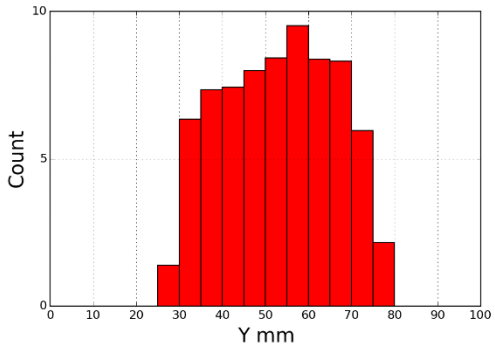


Figure B. 2548: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

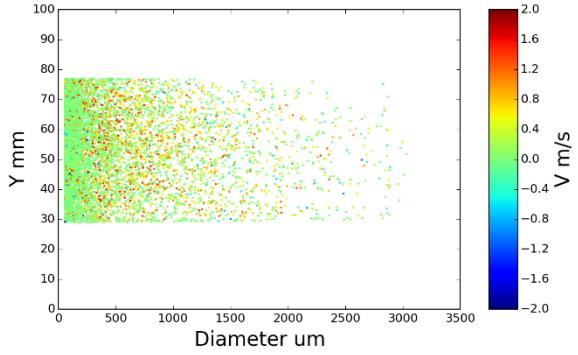


Figure B. 2549: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

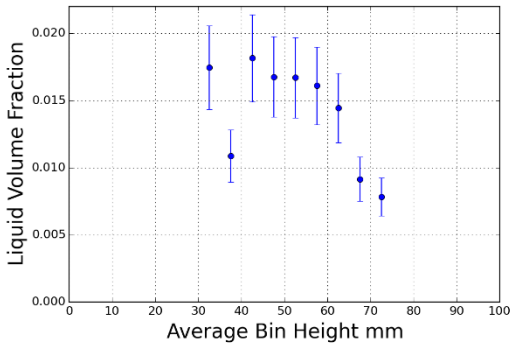


Figure B. 2550: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 Matched Only Droplets for .LA Image

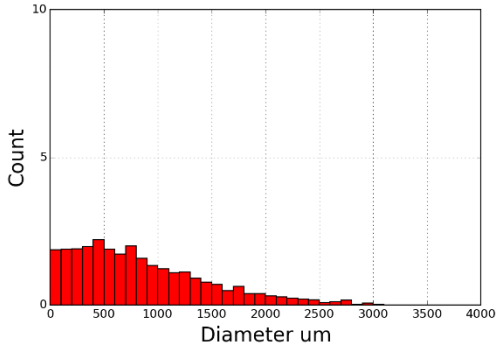


Figure B. 2551: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

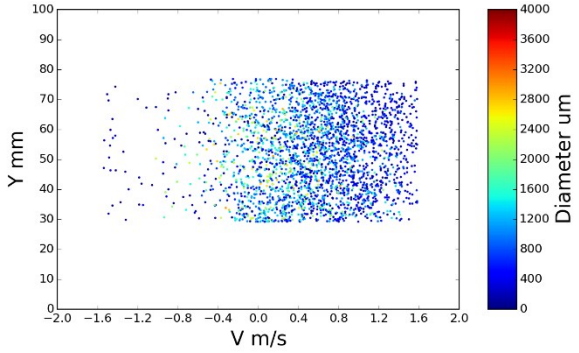


Figure B. 2554: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

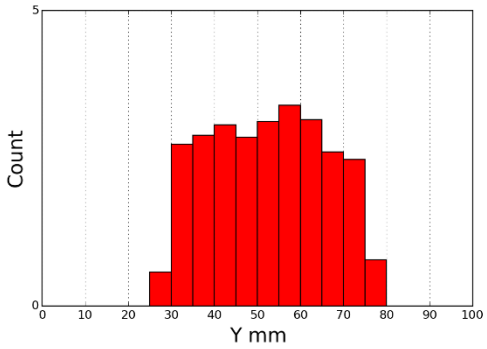


Figure B. 2552: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

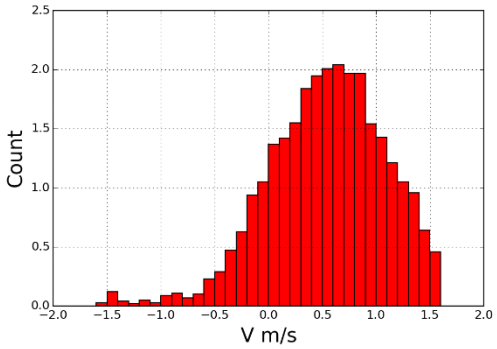


Figure B. 2555: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

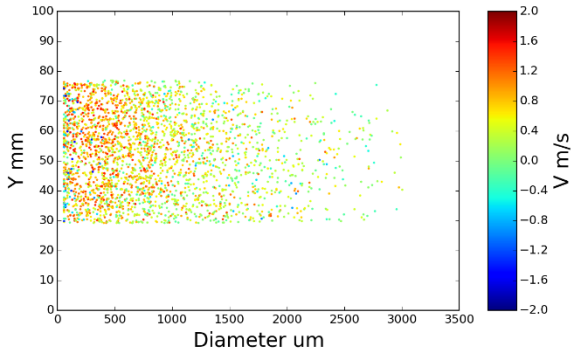


Figure B. 2553: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 Matched Only Droplets for .LB Image

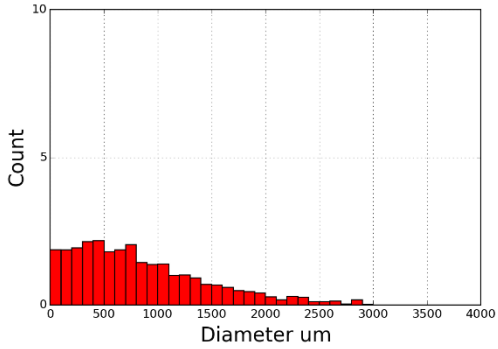


Figure B. 2556: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

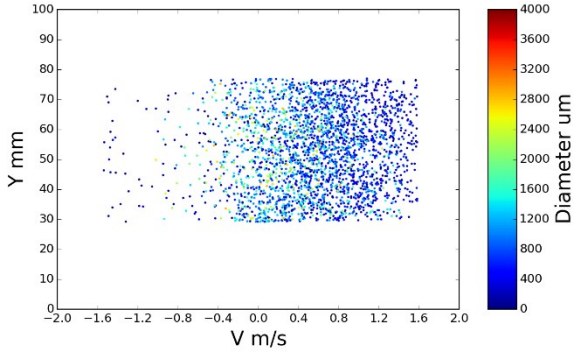


Figure B. 2559: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

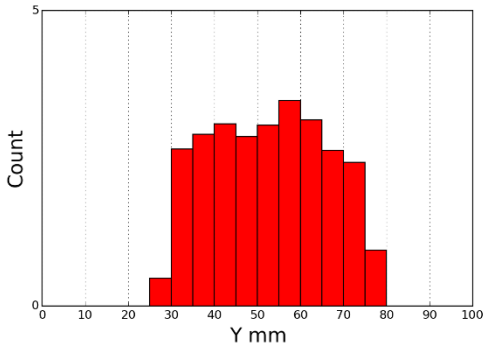


Figure B. 2557: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

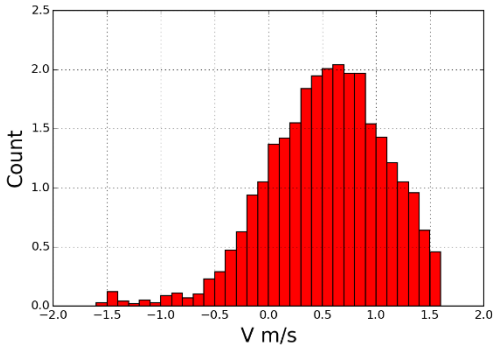


Figure B. 2560: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

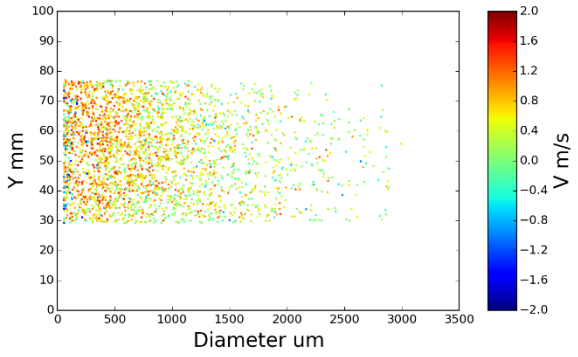


Figure B. 2558: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 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	12.54	13.29	57.1	3026	521.9	659.0	57.1	3038	493.7	632.6
40-60mm	24.67	28.42	57.1	3035	497.3	599.6	57.1	3033	444.4	570.6
60-80mm	17.23	20.05	57.1	2904	468.9	540.9	57.1	3033	421.1	527.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	54.45	61.81	57.1	3035	494.0	596.6	57.1	3038	447.4	571.8
			Height A (mm)				Height B (mm)			
Highest Particle			76.9981				76.9981			
Lowest Particle			29.0167				29.0395			

Table B. 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	4.42	57.1	3024	956.2	764.8	57.1	3038	950.5	769.0	-1.520	1.540	-0.200	0.490	-1.580	1.580	0.250	0.590
40-60mm	8.66	57.1	3018	894.3	712.3	57.1	3033	887.6	707.6	-1.580	1.580	-0.250	0.450	-1.530	1.570	0.450	0.560
60-80mm	6.16	57.1	2904	789.4	653.4	57.1	2994	798.0	655.7	-1.530	1.580	-0.290	0.420	-1.430	1.580	0.520	0.520
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	19.24	57.1	3024	874.9	709.6	57.1	3038	872.7	708.3	-1.580	1.580	-0.250	0.450	-1.580	1.580	0.430	0.570

Table B. 276: Matched Droplet Info

B.6.3.1 All Droplets for .LA Image

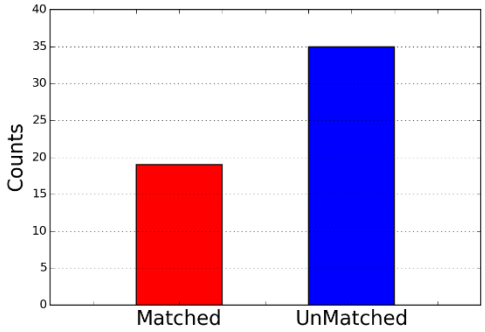


Figure B. 2561: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

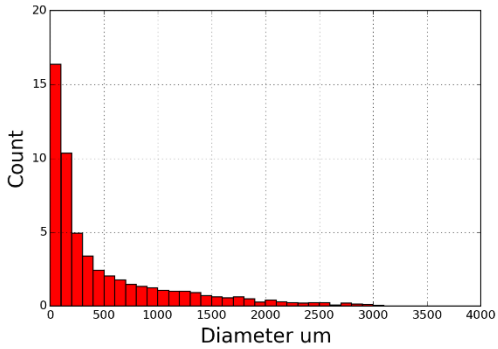


Figure B. 2562: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

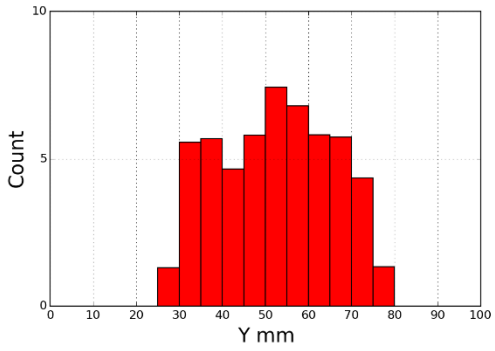


Figure B. 2563: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

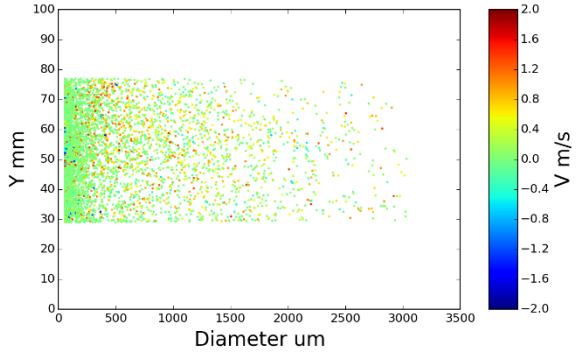


Figure B. 2564: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

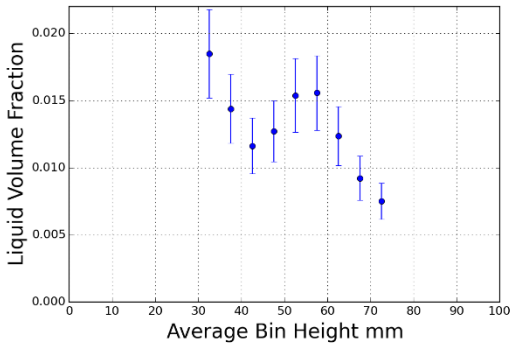


Figure B. 2565: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 All Droplets for .LB Image

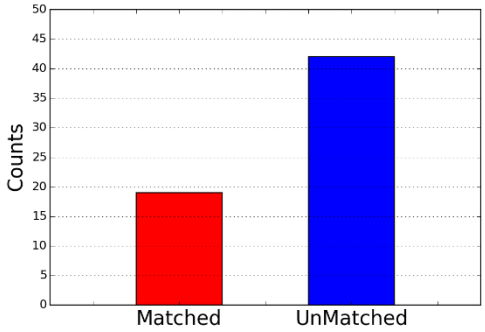


Figure B. 2566: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

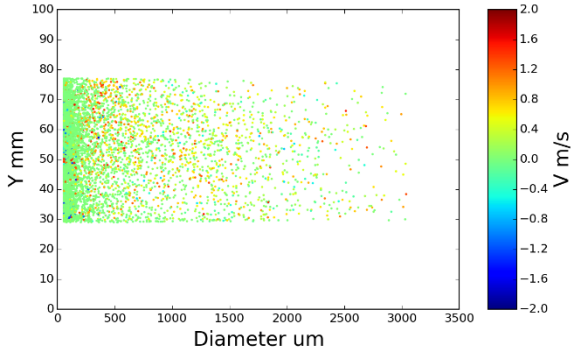


Figure B. 2569: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

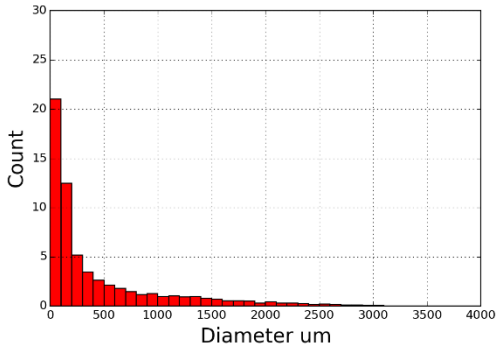


Figure B. 2567: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

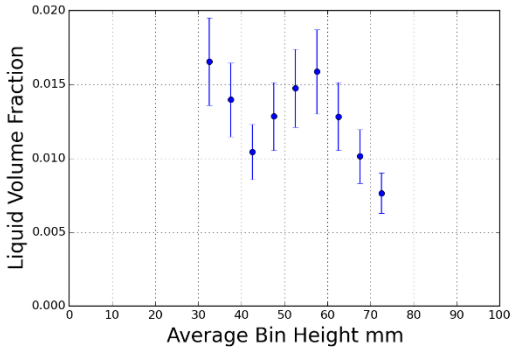


Figure B. 2570: Void Fraction R-123 55F 5000Btu 15000Lb Tri

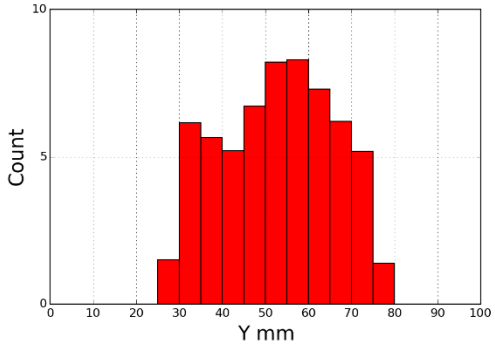


Figure B. 2568: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 Matched Only Droplets for .LA Image

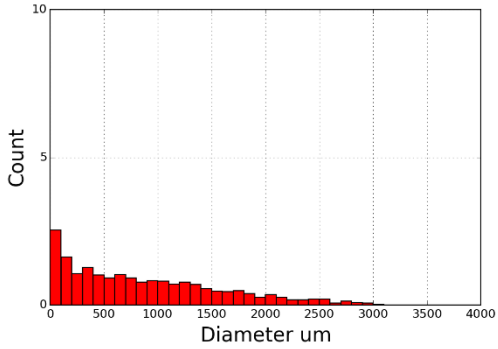


Figure B. 2571: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

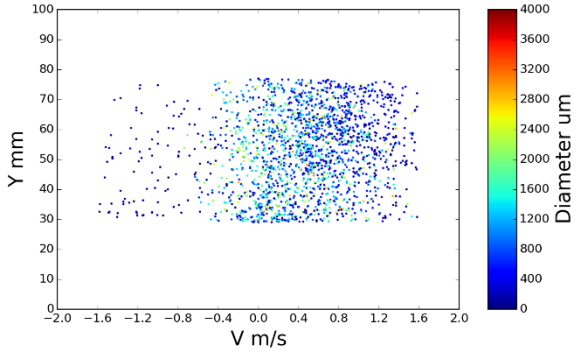


Figure B. 2574: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

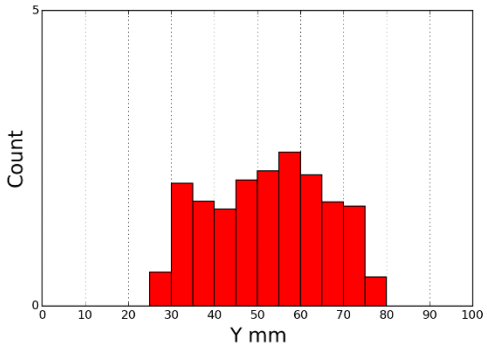


Figure B. 2572: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

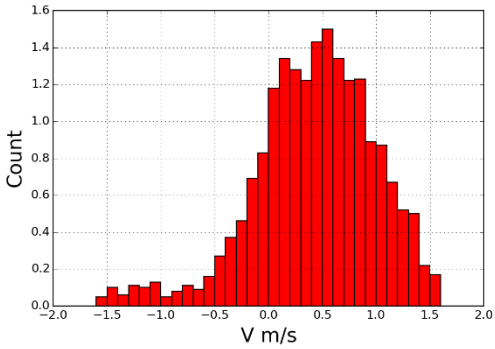


Figure B. 2575: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

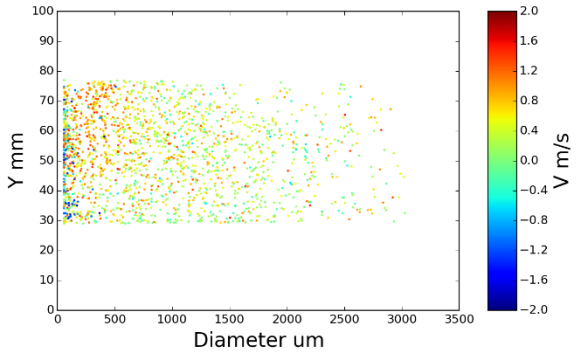


Figure B. 2573: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.1 Matched Only Droplets for .LB Image

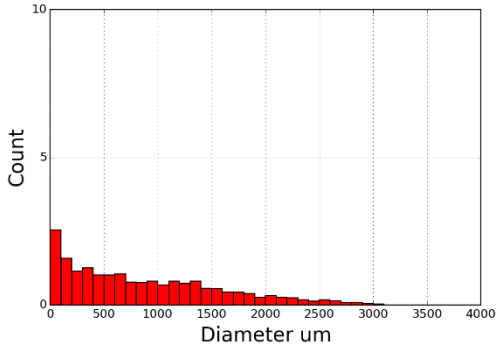


Figure B. 2576: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

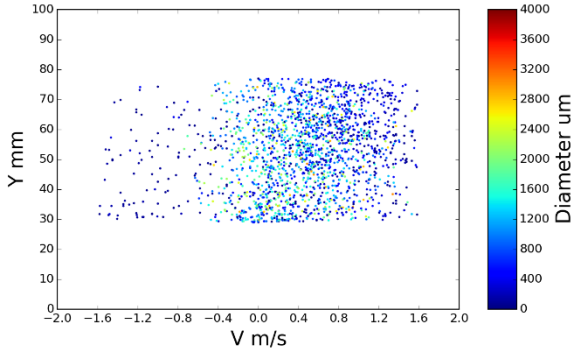


Figure B. 2579: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

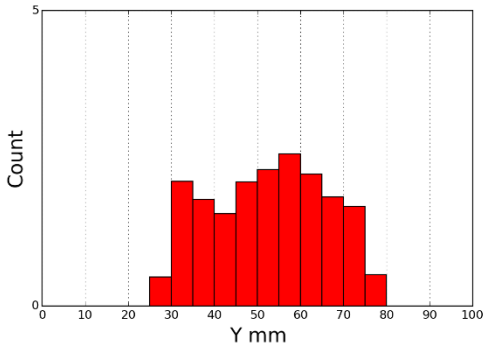


Figure B. 2577: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

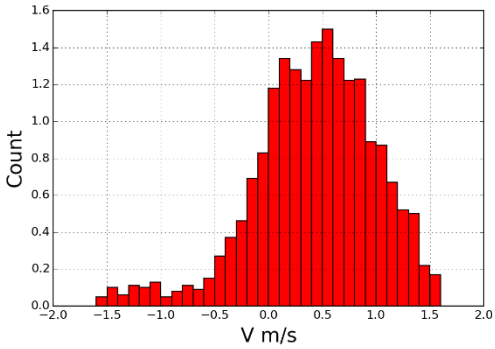


Figure B. 2580: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

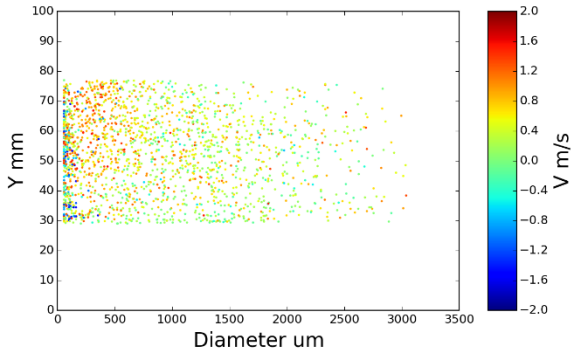


Figure B. 2578: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 Lens 50mm Mag 0_13x

B.6.3.2 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	13.32	13.92	128.6	3068	1130	779.7	128.6	3078	1115	789.5
20-40mm	13.6	13.57	128.6	3060	981.5	682.9	128.6	3036	965.8	676.7
40-60mm	15.38	15.54	128.6	3007	829.9	626.5	128.6	3069	826.8	625.8
60-80mm	13.88	14.38	128.6	2991	675.5	495.1	128.6	2963	655.3	498.4
80-100mm	7.93	7.99	128.6	2858	445.5	297.3	128.6	2713	439.2	294.7
All	64.11	65.4	128.6	3068	843.4	655.9	128.6	3078	832.0	657.6
			Height A (mm)				Height B (mm)			
Highest Particle			99.8975				99.9780			
Lowest Particle			5.0730				5.0730			

Table B. 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	7.22	157.6	3052	1426	760.2	128.6	3078	1405	757.5	-1.260	1.490	-0.120	0.240	-1.530	1.520	0.070	0.430
20-40mm	8.26	157.6	3030	1178	684.0	157.6	3034	1168	684.0	-1.530	1.480	-0.150	0.250	-1.500	1.500	0.090	0.530
40-60mm	9.4	128.6	3007	996.7	655.4	128.6	2991	999.1	649.6	-1.500	1.370	-0.140	0.300	-1.140	1.480	0.140	0.550
60-80mm	8.77	128.6	2991	778.4	528.5	128.6	2963	770.6	526.9	-1.550	1.360	-0.060	0.320	-1.330	1.530	0.140	0.520
80-100mm	4.81	128.6	2858	524.3	315.8	128.6	2713	515.2	308.7	-1.000	1.030	0.000	0.270	-1.440	1.550	0.120	0.480
All	38.46	128.6	3052	1007	685.9	128.6	3078	997.1	681.1	-1.550	1.490	-0.100	0.290	-1.530	1.550	0.110	0.510

Table B. 278: Matched Droplet Info

B.6.3.2 All Droplets for .LA Image

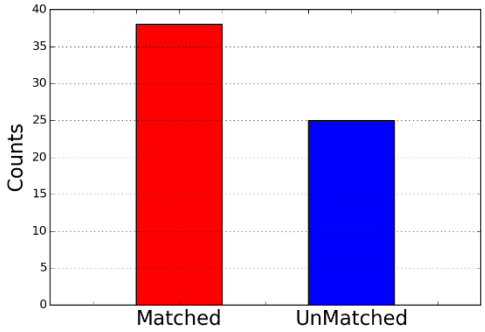


Figure B. 2581: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

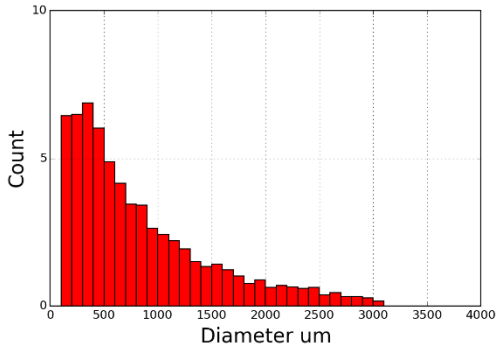


Figure B. 2582: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

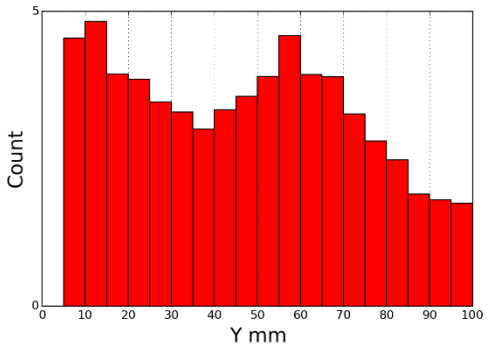


Figure B. 2583: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

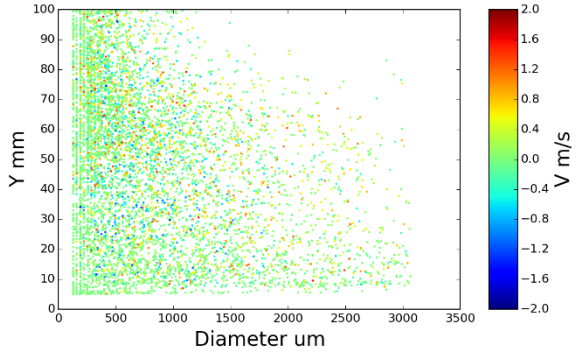


Figure B. 2584: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

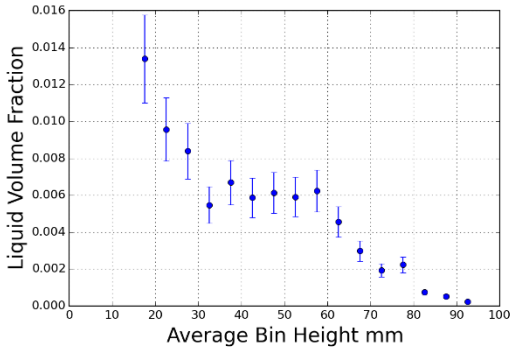


Figure B. 2585: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 All Droplets for .LB Image

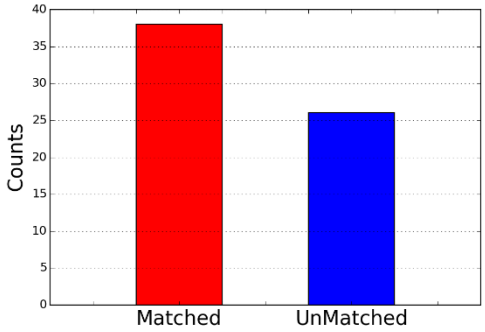


Figure B. 2586: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

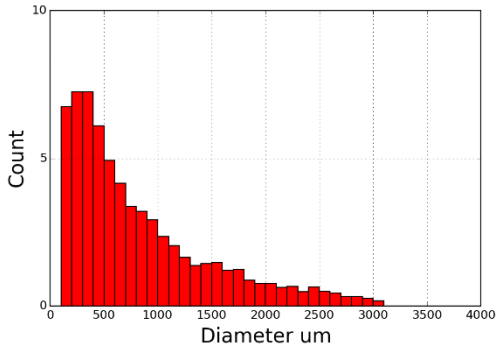


Figure B. 2587: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

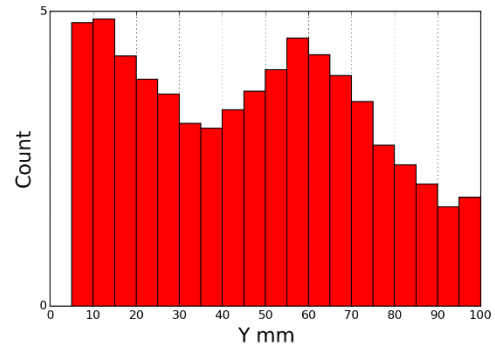


Figure B. 2588: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

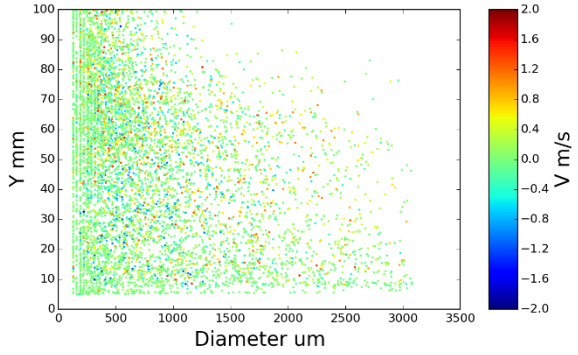


Figure B. 2589: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

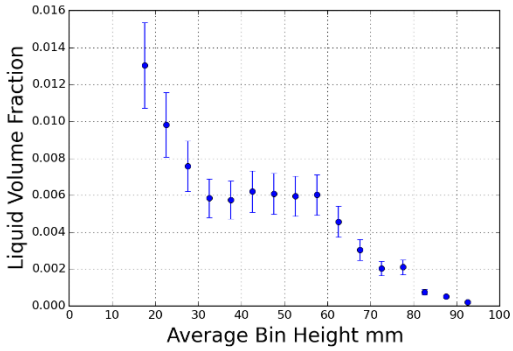


Figure B. 2590: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 Matched Only Droplets for .LA Image

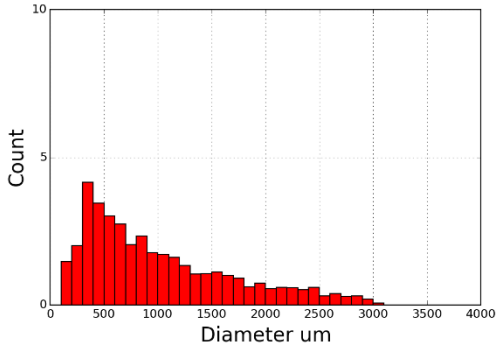


Figure B. 2591: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

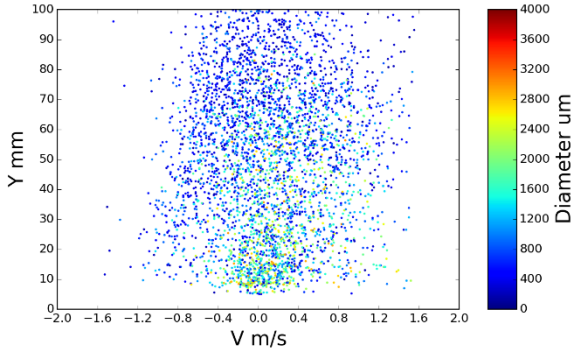


Figure B. 2594: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

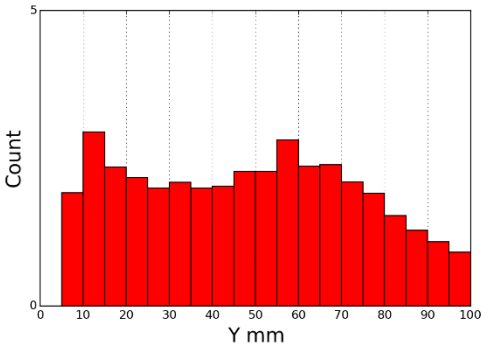


Figure B. 2592: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

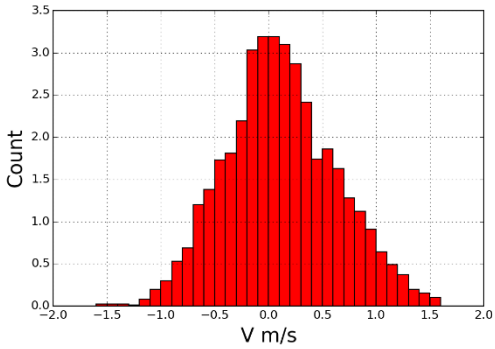


Figure B. 2595: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

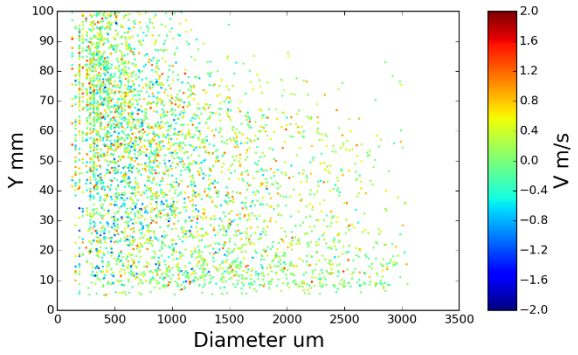


Figure B. 2593: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 Matched Only Droplets for .LB Image

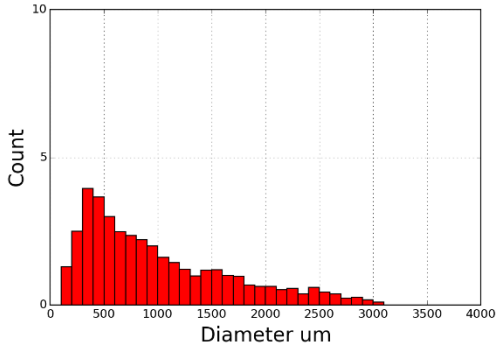


Figure B. 2596: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

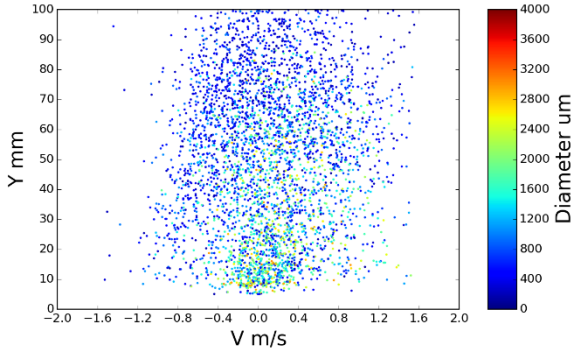


Figure B. 2599: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

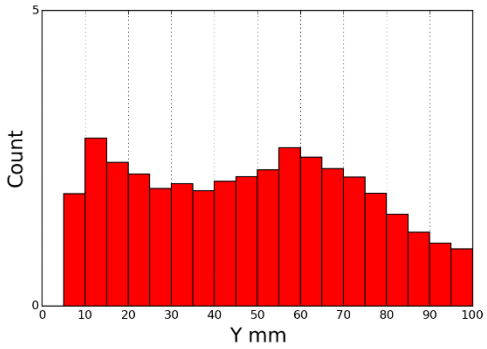


Figure B. 2597: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

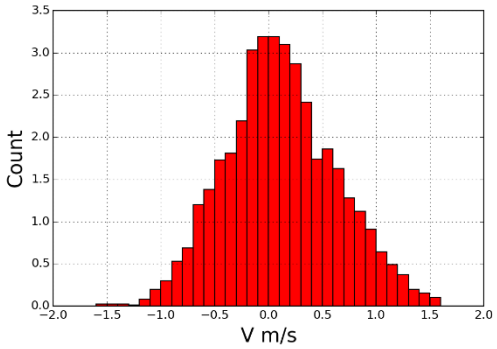


Figure B. 2600: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

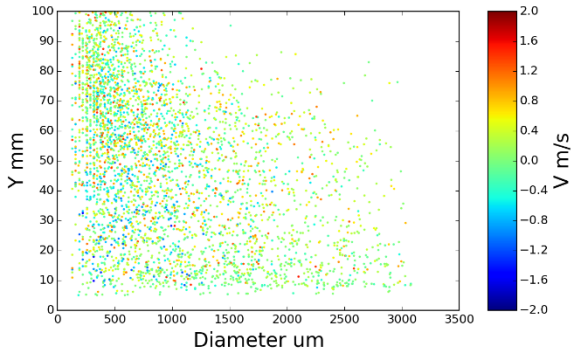


Figure B. 2598: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 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	19.12	19.49	128.6	3074	972.9	717.2	128.6	3074	982.9	721.9
20-40mm	19.75	20.08	128.6	2965	805.3	581.6	128.6	3065	806.4	595.6
40-60mm	22.52	22.01	128.6	3076	737.7	540.6	128.6	3060	752.6	558.1
60-80mm	19.0	19.28	128.6	2966	640.0	450.8	128.6	2797	633.5	443.0
80-100mm	10.39	10.04	128.6	2605	496.6	329.9	128.6	2548	499.9	326.5
All	90.79	90.9	128.6	3076	753.9	574.9	128.6	3074	760.7	583.9
			Height A (mm)				Height B (mm)			
Highest Particle			99.9495				99.9780			
Lowest Particle			5.0730				5.0730			

Table B. 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	10.75	128.6	3059	1229	727.6	128.6	3063	1216	731.4	-1.430	1.170	-0.150	0.270	-1.530	1.520	0.120	0.470
20-40mm	11.99	128.6	2965	978.8	608.8	128.6	3056	973.5	607.5	-1.490	1.380	-0.210	0.280	-1.330	1.530	0.250	0.570
40-60mm	13.75	128.6	3074	888.1	566.3	128.6	3021	890.2	575.5	-1.500	1.460	-0.200	0.300	-1.470	1.550	0.290	0.570
60-80mm	12.28	128.6	2752	739.2	453.5	128.6	2797	734.9	455.1	-1.450	1.460	-0.160	0.320	-1.550	1.530	0.280	0.520
80-100mm	6.52	128.6	2605	587.9	333.0	128.6	2548	575.1	326.3	-1.410	1.190	-0.100	0.290	-1.480	1.400	0.210	0.470
All	55.29	128.6	3074	905.6	601.2	128.6	3063	897.9	602.0	-1.500	1.460	-0.170	0.300	-1.550	1.550	0.240	0.530

Table B. 280: Matched Droplet Info

B.6.3.2 All Droplets for .LA Image

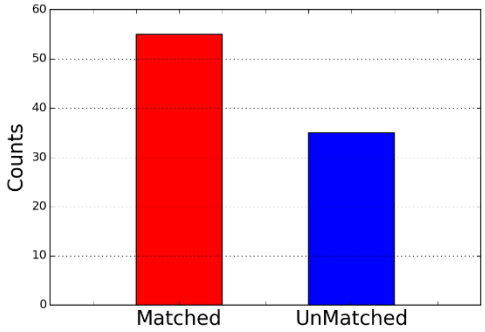


Figure B. 2601: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

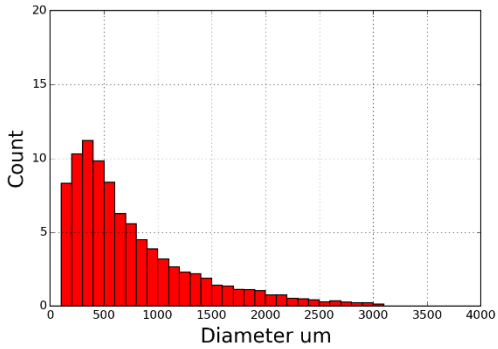


Figure B. 2602: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

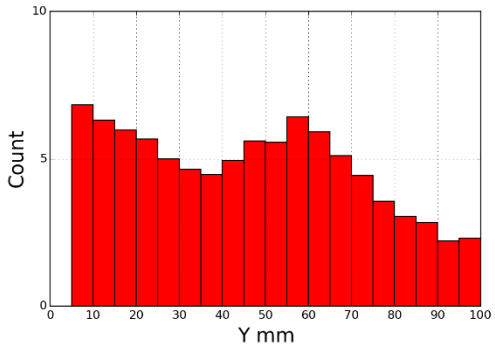


Figure B. 2603: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

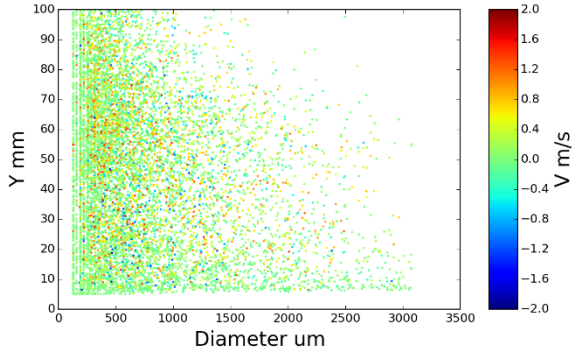


Figure B. 2604: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

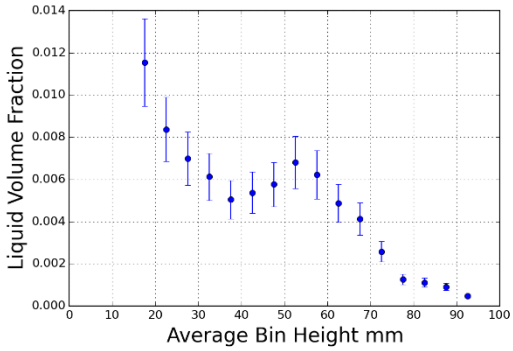


Figure B. 2605: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 All Droplets for .LB Image

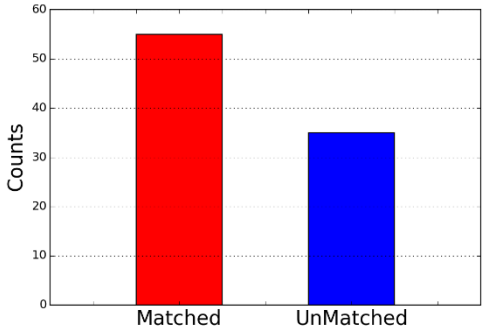


Figure B. 2606: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

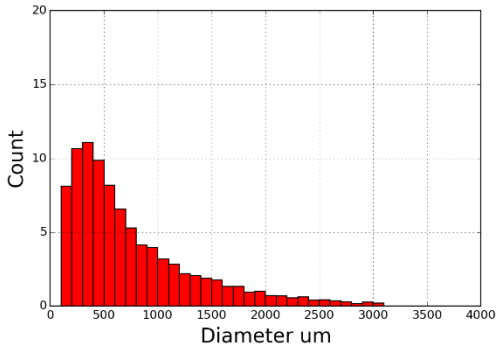


Figure B. 2607: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

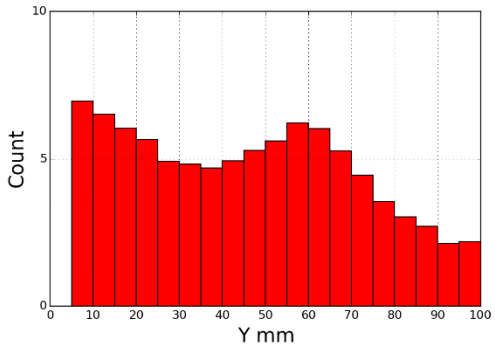


Figure B. 2608: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

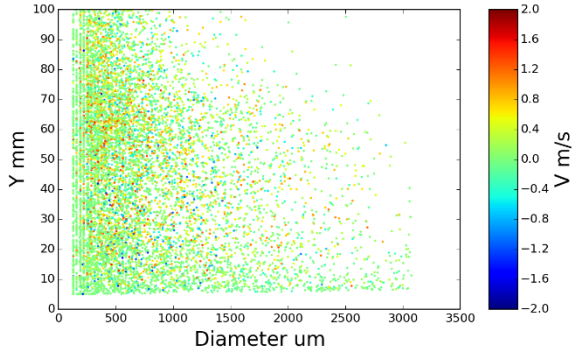


Figure B. 2609: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

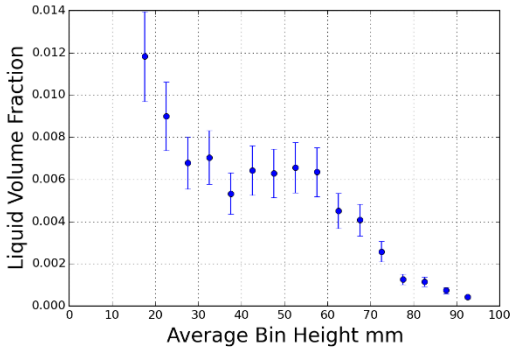


Figure B. 2610: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 Matched Only Droplets for .LA Image

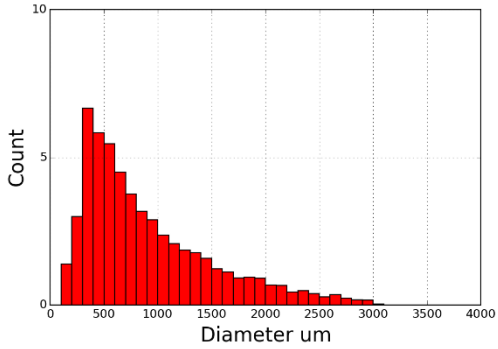


Figure B. 2611: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

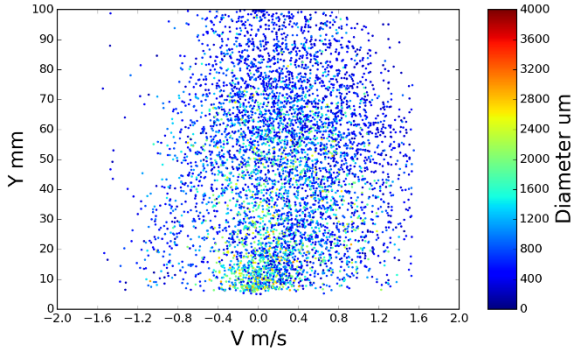


Figure B. 2614: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

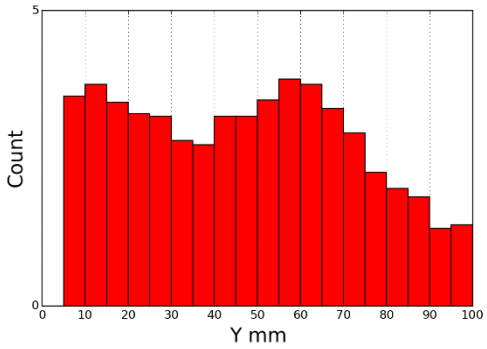


Figure B. 2612: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

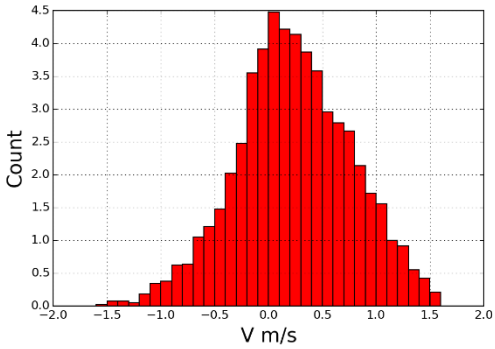


Figure B. 2615: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

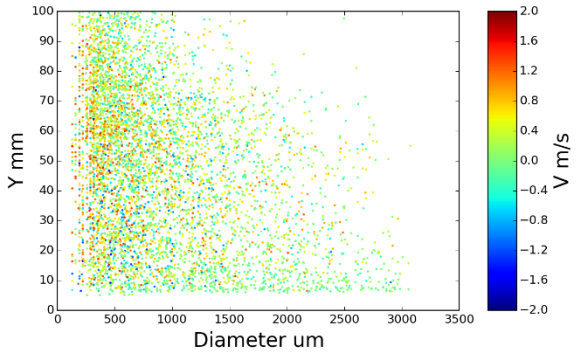


Figure B. 2613: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 Matched Only Droplets for .LB Image

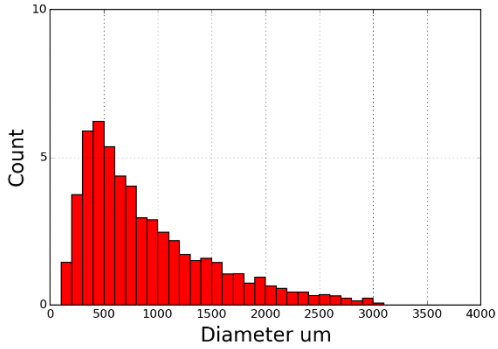


Figure B. 2616: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

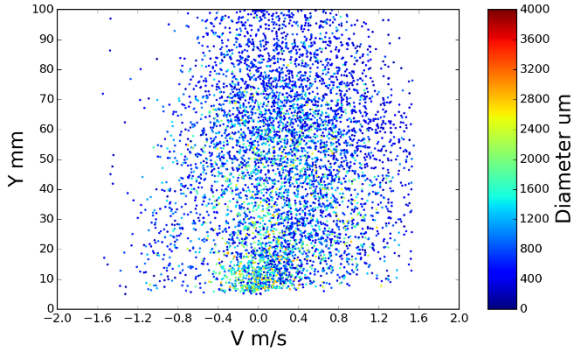


Figure B. 2619: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

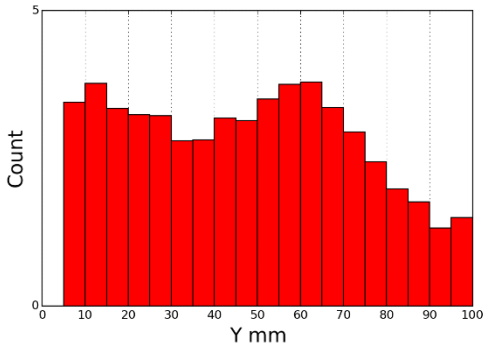


Figure B. 2617: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

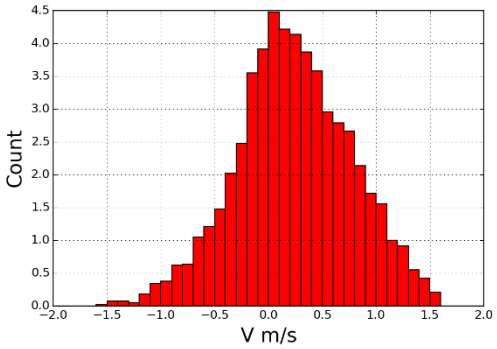


Figure B. 2620: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

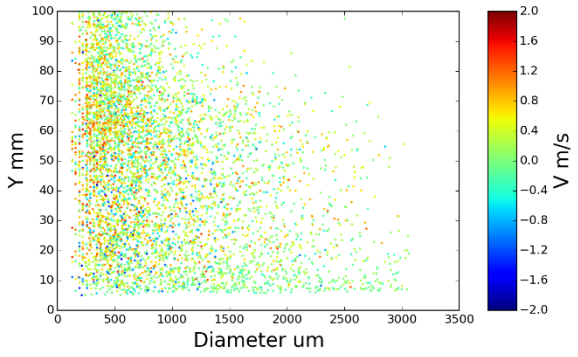


Figure B. 2618: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 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	26.54	26.29	128.6	3048	906.4	688.5	128.6	3070	901.3	692.1
20-40mm	26.46	26.5	128.6	3077	755.9	551.0	128.6	3062	743.7	541.7
40-60mm	27.22	27.39	128.6	3068	718.5	524.9	128.6	3039	709.8	515.3
60-80mm	22.9	22.83	128.6	2752	637.1	444.4	128.6	2779	643.7	441.6
80-100mm	10.53	10.54	128.6	2448	537.0	346.9	128.6	2392	532.6	342.2
All	113.65	113.55	128.6	3077	737.9	557.6	128.6	3070	732.3	552.8
			Height A (mm)				Height B (mm)			
Highest Particle			99.9780				99.9780			
Lowest Particle			5.0730				5.0730			

Table B. 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	15.07	128.6	3045	1129	703.6	128.6	3070	1132	710.0	-1.450	1.510	-0.150	0.280	-1.540	1.550	0.250	0.490
20-40mm	15.79	128.6	3016	931.9	566.5	128.6	2934	925.4	560.7	-1.550	1.550	-0.220	0.290	-1.540	1.550	0.420	0.570
40-60mm	16.36	128.6	3068	858.8	543.4	128.6	3039	853.5	544.0	-1.480	1.550	-0.220	0.320	-1.530	1.550	0.460	0.570
60-80mm	13.83	128.6	2752	778.2	465.1	128.6	2779	771.4	464.0	-1.550	1.500	-0.190	0.320	-1.550	1.550	0.390	0.540
80-100mm	6.3	128.6	2448	654.2	361.2	128.6	2392	636.2	353.6	-1.500	1.310	-0.140	0.290	-1.480	1.540	0.290	0.510
All	67.35	128.6	3068	900.7	579.2	128.6	3070	893.1	578.9	-1.550	1.550	-0.190	0.300	-1.550	1.550	0.370	0.550

Table B. 282: Matched Droplet Info

B.6.3.2 All Droplets for .LA Image

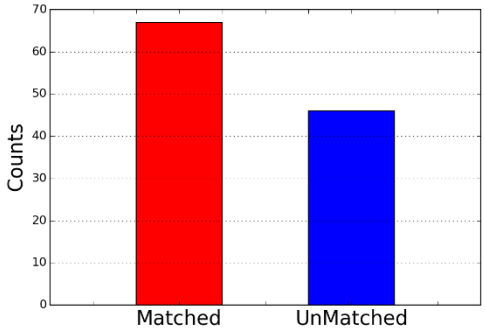


Figure B. 2621: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

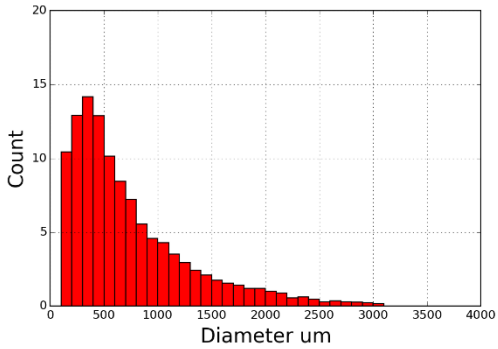


Figure B. 2622: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

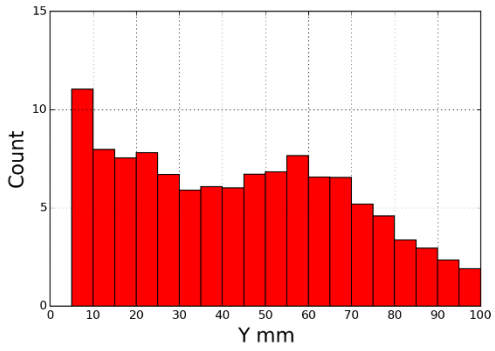


Figure B. 2623: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

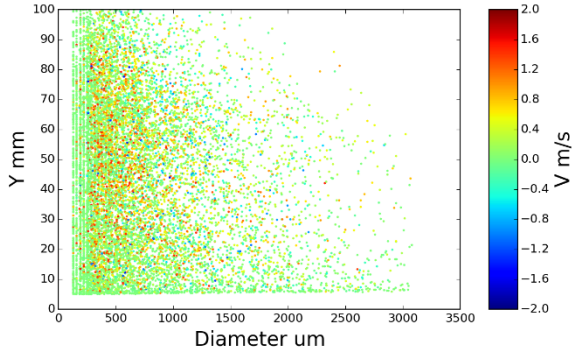


Figure B. 2624: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

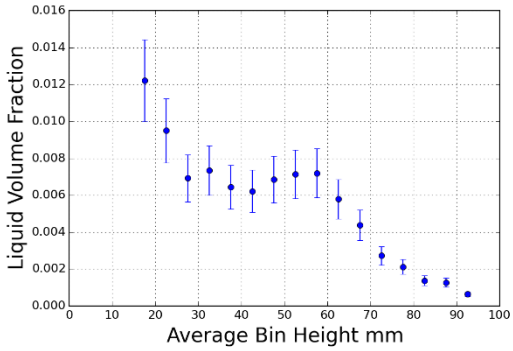


Figure B. 2625: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 All Droplets for .LB Image

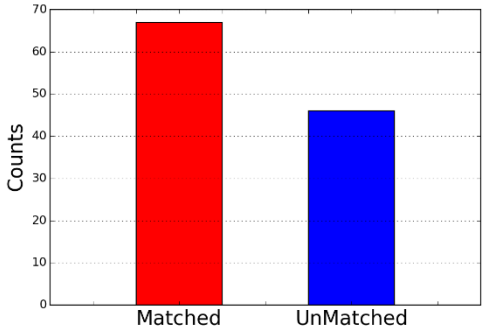


Figure B. 2626: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

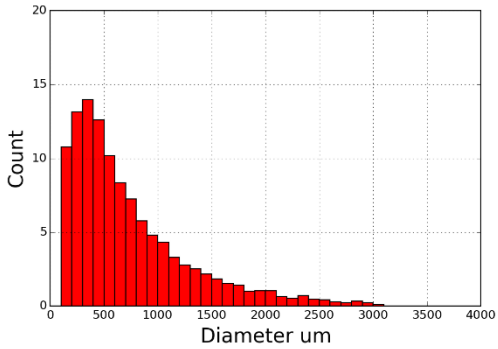


Figure B. 2627: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

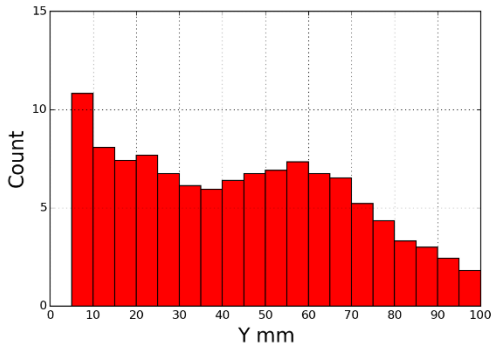


Figure B. 2628: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

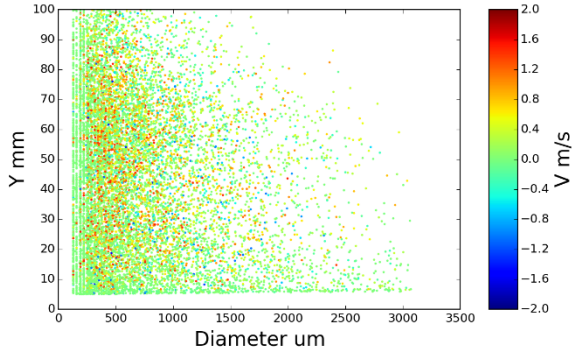


Figure B. 2629: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

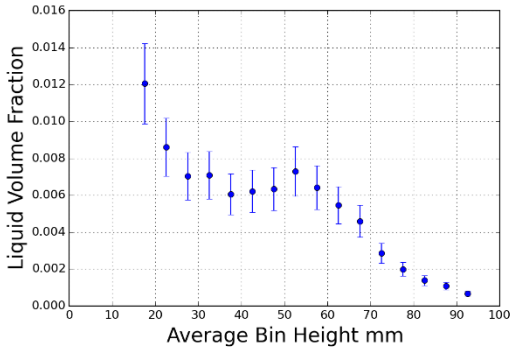


Figure B. 2630: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 Matched Only Droplets for .LA Image

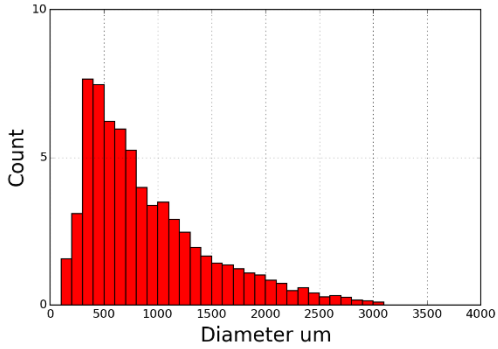


Figure B. 2631: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

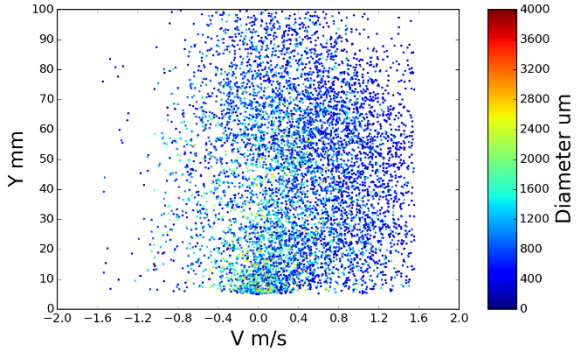


Figure B. 2634: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

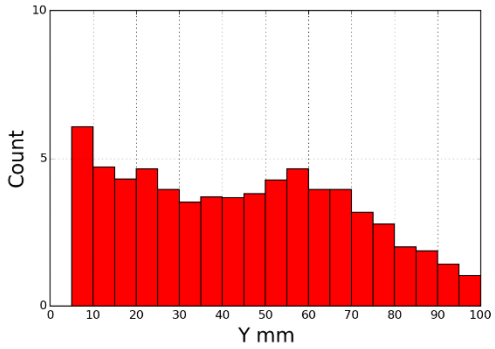


Figure B. 2632: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

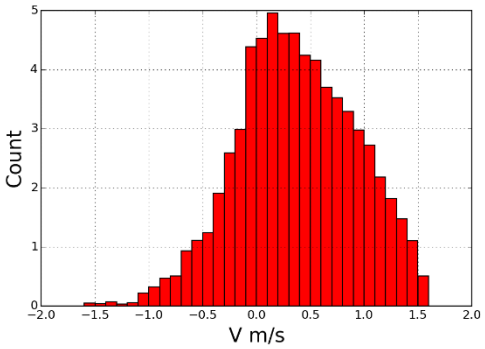


Figure B. 2635: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

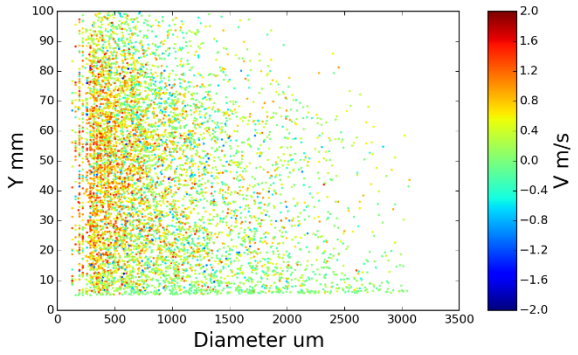


Figure B. 2633: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 Matched Only Droplets for .LB Image

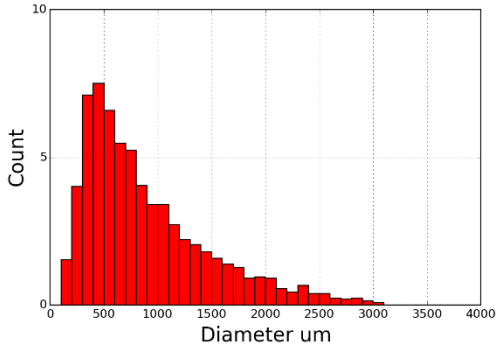


Figure B. 2636: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

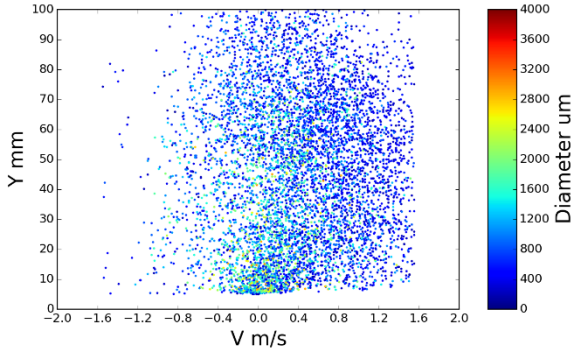


Figure B. 2639: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

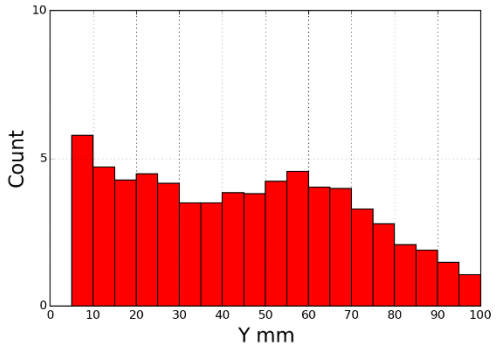


Figure B. 2637: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

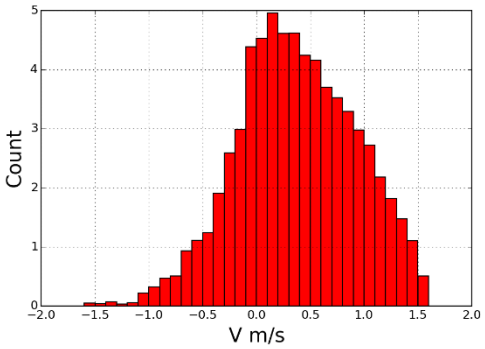


Figure B. 2640: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

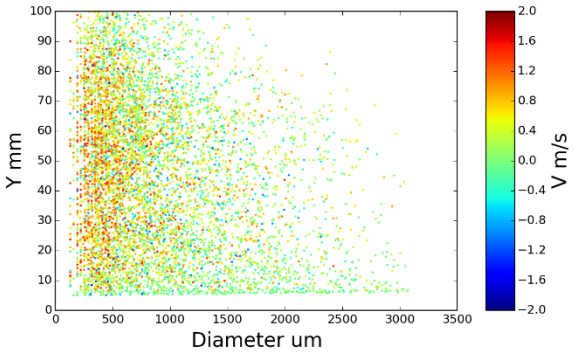


Figure B. 2638: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 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	26.45	26.54	128.6	3069	907.1	679.1	128.6	3066	914.6	686.4
20-40mm	26.01	26.34	128.6	3078	776.8	565.8	128.6	3045	775.2	570.7
40-60mm	25.19	25.33	128.6	3074	750.0	545.9	128.6	3039	744.5	546.3
60-80mm	20.79	20.69	128.6	3072	665.2	470.8	128.6	3064	665.0	463.6
80-100mm	9.47	9.46	128.6	2575	563.0	369.7	128.6	2574	561.1	373.5
All	107.91	108.36	128.6	3078	762.2	570.1	128.6	3066	762.4	573.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.9780				99.9780			
Lowest Particle			5.0730				5.0730			

Table B. 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	14.47	128.6	3069	1190	693.3	128.6	3060	1191	698.1	-1.520	1.480	-0.140	0.300	-1.550	1.550	0.270	0.490
20-40mm	14.59	128.6	3078	1004	587.5	157.6	3045	998.2	587.0	-1.530	1.540	-0.200	0.290	-1.460	1.550	0.440	0.550
40-60mm	15.09	128.6	3074	921.9	564.0	128.6	3039	916.2	560.0	-1.460	1.550	-0.240	0.310	-1.220	1.550	0.510	0.540
60-80mm	12.24	128.6	3002	821.4	483.6	128.6	3064	813.2	480.1	-1.530	1.370	-0.240	0.290	-1.450	1.550	0.450	0.530
80-100mm	5.36	128.6	2575	694.9	389.6	128.6	2574	685.0	392.1	-1.550	1.260	-0.200	0.270	-1.240	1.500	0.310	0.480
All	61.75	128.6	3078	964.4	595.4	128.6	3064	957.4	595.1	-1.550	1.550	-0.200	0.300	-1.550	1.550	0.410	0.530

Table B. 284: Matched Droplet Info

B.6.3.2 All Droplets for .LA Image

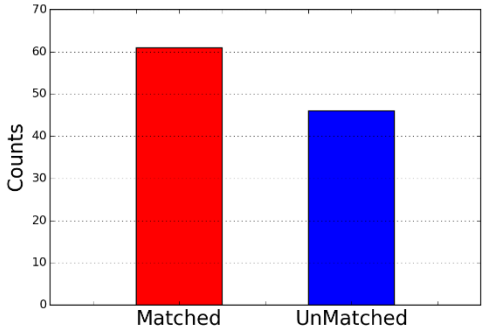


Figure B. 2641: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

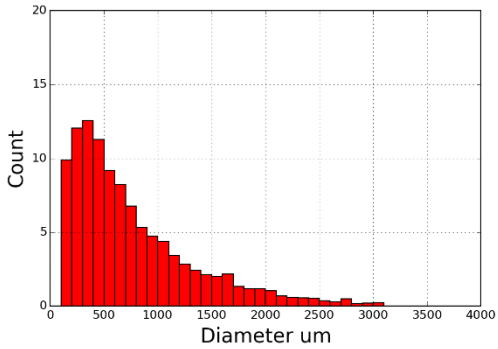


Figure B. 2642: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

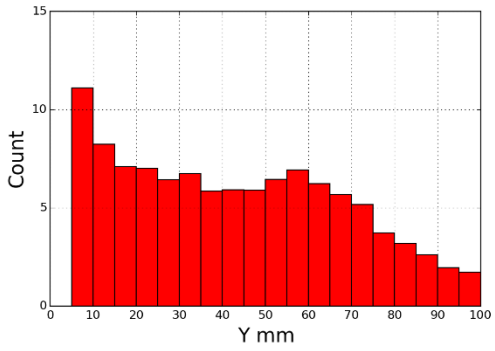


Figure B. 2643: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

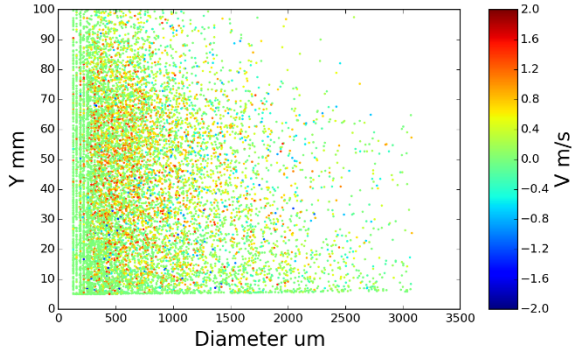


Figure B. 2644: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

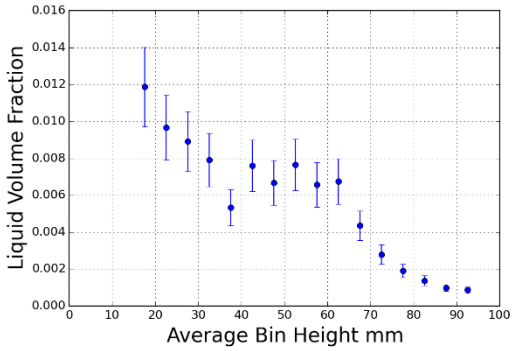


Figure B. 2645: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 All Droplets for .LB Image

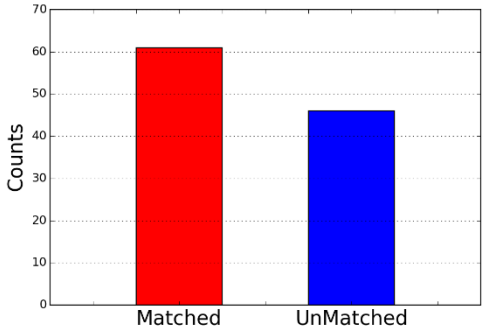


Figure B. 2646: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

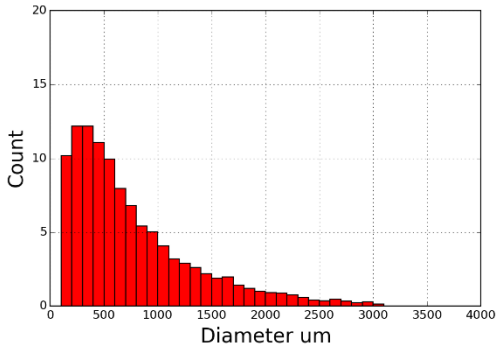


Figure B. 2647: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

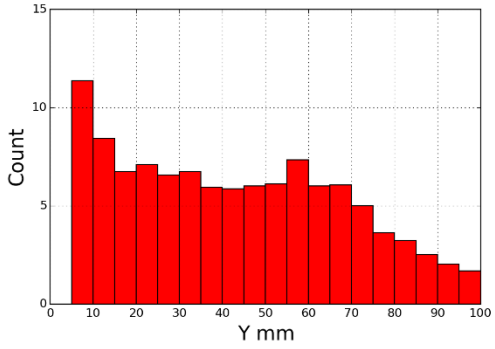


Figure B. 2648: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

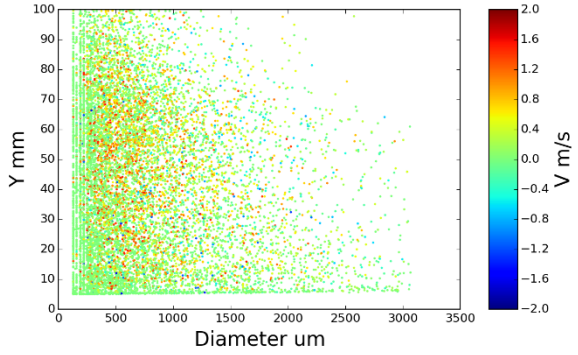


Figure B. 2649: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

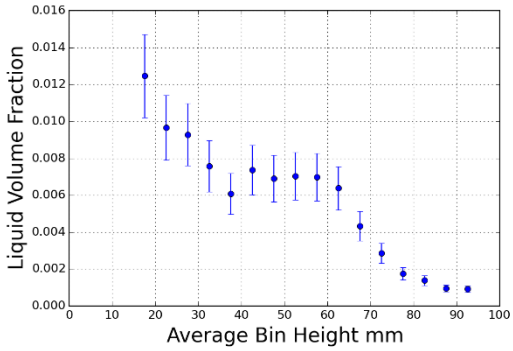


Figure B. 2650: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 Matched Only Droplets for .LA Image

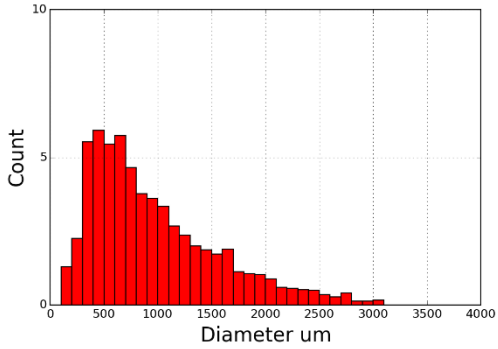


Figure B. 2651: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

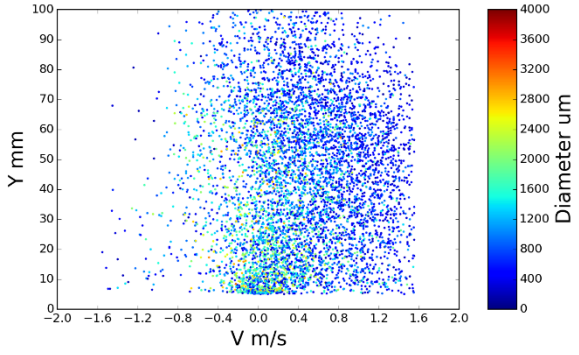


Figure B. 2654: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

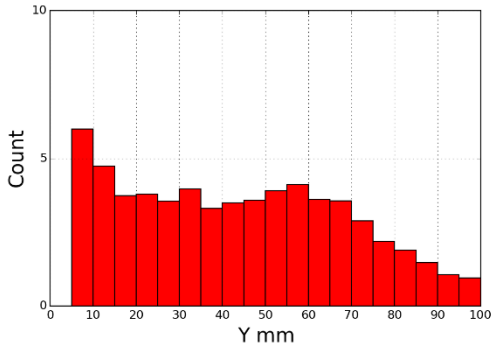


Figure B. 2652: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

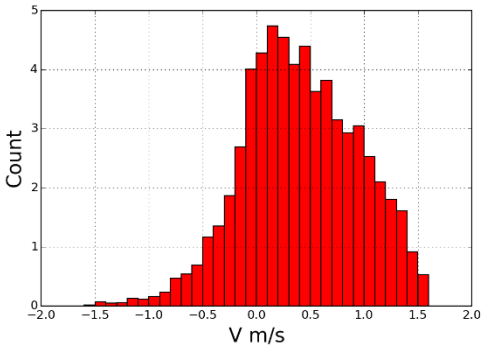


Figure B. 2655: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

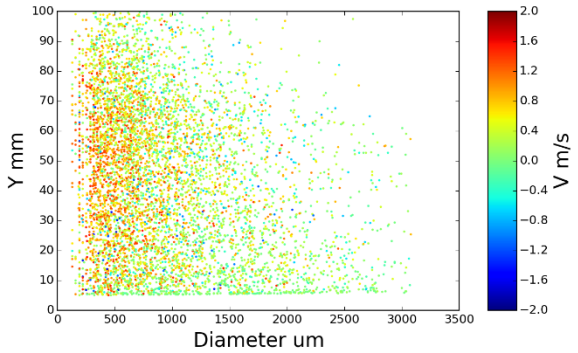


Figure B. 2653: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 Matched Only Droplets for .LB Image

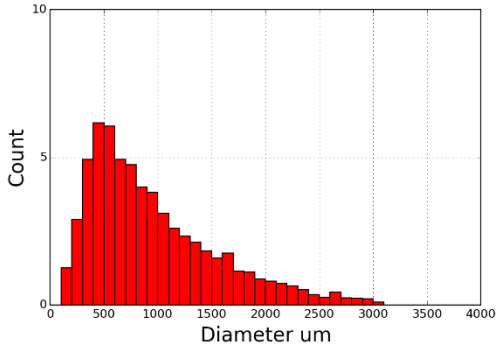


Figure B. 2656: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

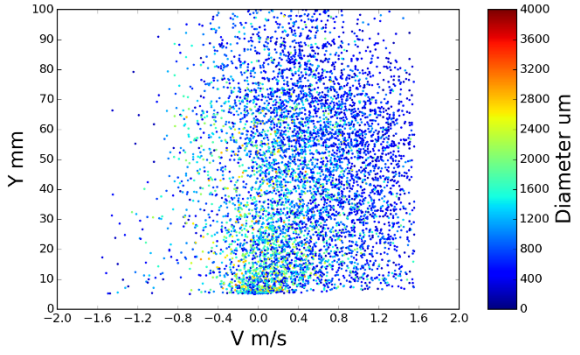


Figure B. 2659: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

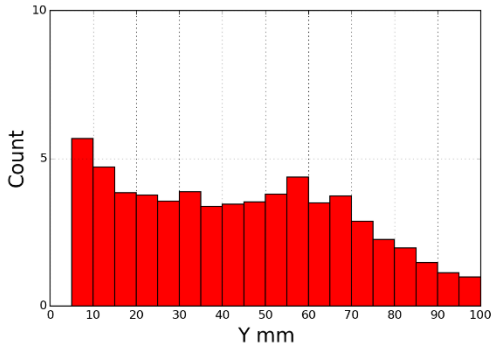


Figure B. 2657: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

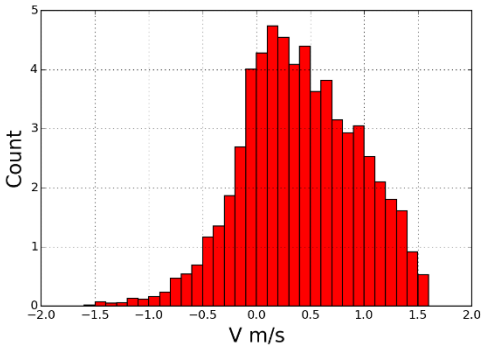


Figure B. 2660: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

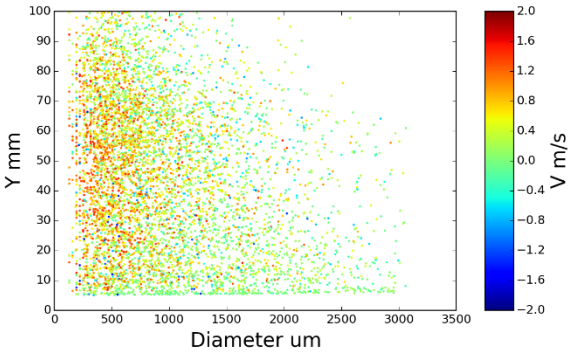


Figure B. 2658: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 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	20.86	21.51	128.6	3060	988.6	686.1	128.6	3078	978.0	679.4
20-40mm	19.62	19.2	128.6	3072	817.2	600.6	128.6	3076	825.8	598.7
40-60mm	20.43	21.02	128.6	3062	815.3	585.4	128.6	3074	806.0	583.7
60-80mm	16.56	16.63	128.6	3007	720.3	492.0	128.6	3060	718.5	494.0
80-100mm	7.12	7.08	128.6	2930	593.5	401.2	128.6	2801	590.0	398.8
All	84.59	85.44	128.6	3072	821.2	597.3	128.6	3078	818.8	595.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.9521				99.9495			
Lowest Particle			5.0730				5.0730			

Table B. 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	10.94	128.6	3058	1294	665.6	128.6	3034	1294	674.5	-1.530	1.490	-0.120	0.300	-1.540	1.550	0.250	0.500
20-40mm	10.01	128.6	3072	1104	624.1	128.6	3076	1094	617.0	-1.480	1.440	-0.200	0.290	-1.540	1.550	0.430	0.500
40-60mm	11.2	128.6	3062	1058	597.6	128.6	3015	1055	595.5	-1.530	1.450	-0.260	0.290	-1.540	1.550	0.490	0.520
60-80mm	8.69	128.6	3007	920.9	500.0	128.6	3060	898.0	497.4	-1.430	1.480	-0.260	0.290	-1.430	1.530	0.440	0.510
80-100mm	3.74	128.6	2930	758.5	427.2	128.6	2801	745.3	425.0	-1.050	1.470	-0.200	0.270	-0.960	1.550	0.370	0.440
All	44.58	128.6	3072	1074	612.4	128.6	3076	1063	612.7	-1.530	1.490	-0.210	0.300	-1.540	1.550	0.400	0.510

Table B. 286: Matched Droplet Info

B.6.3.2 All Droplets for .LA Image

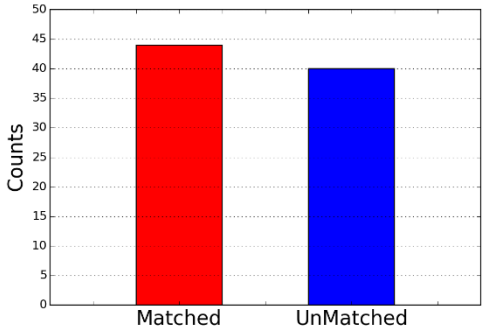


Figure B. 2661: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

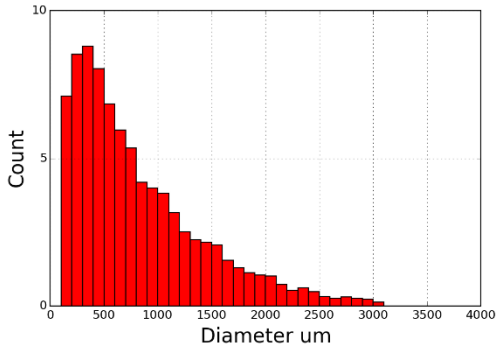


Figure B. 2662: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

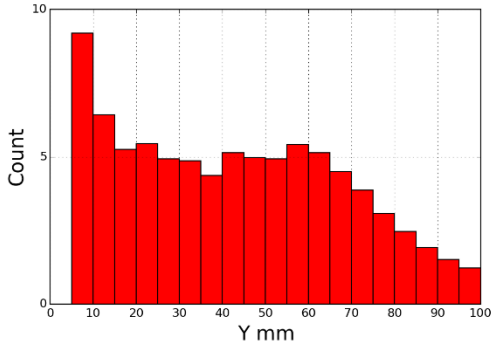


Figure B. 2663: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

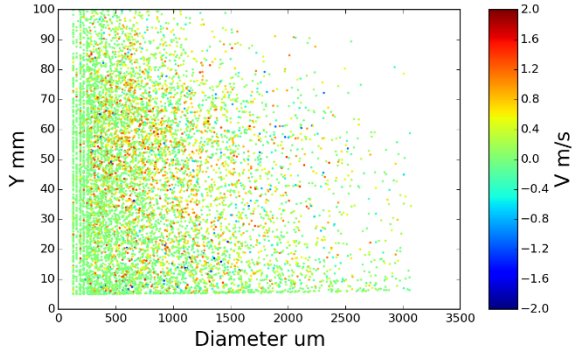


Figure B. 2664: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

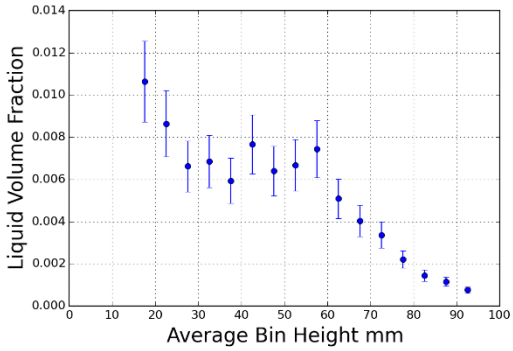


Figure B. 2665: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 All Droplets for .LB Image

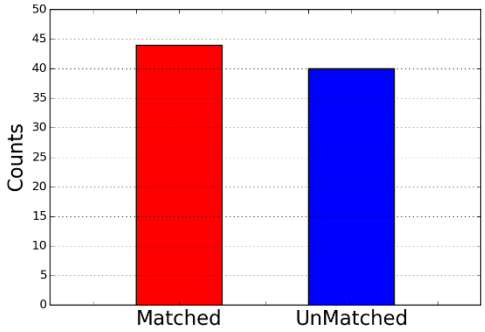


Figure B. 2666: CHC Count Comparison R-123 55F 5000Btu 15000Lb Tri

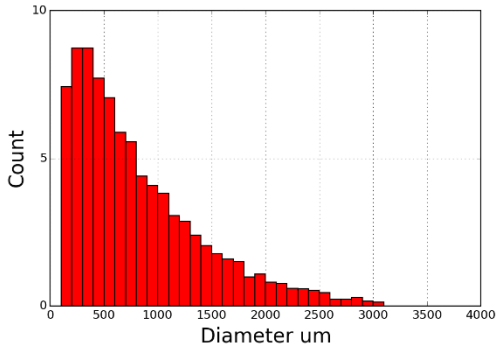


Figure B. 2667: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

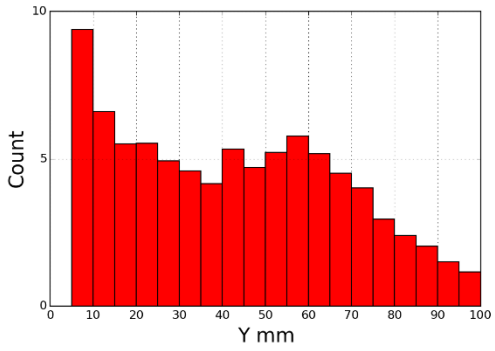


Figure B. 2668: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

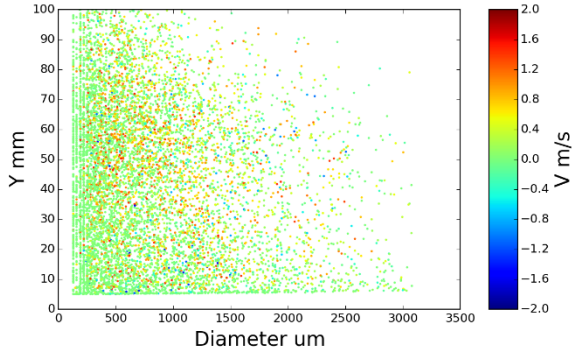


Figure B. 2669: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

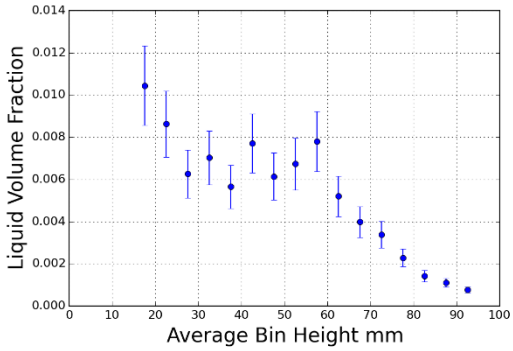


Figure B. 2670: Void Fraction R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 Matched Only Droplets for .LA Image

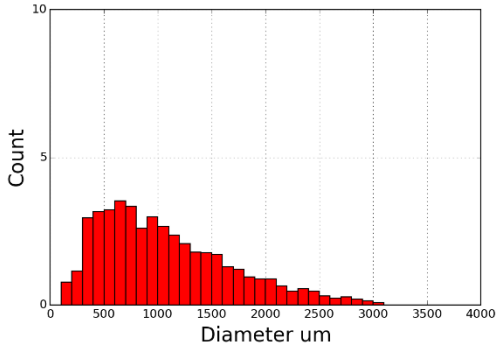


Figure B. 2671: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

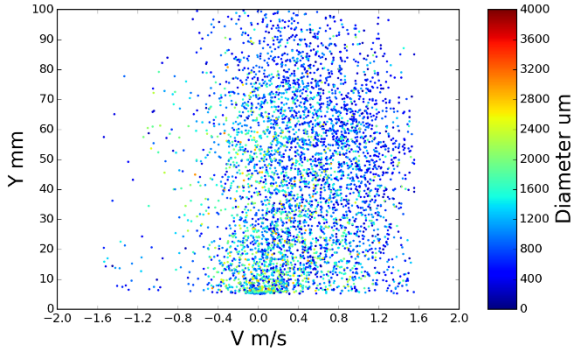


Figure B. 2674: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

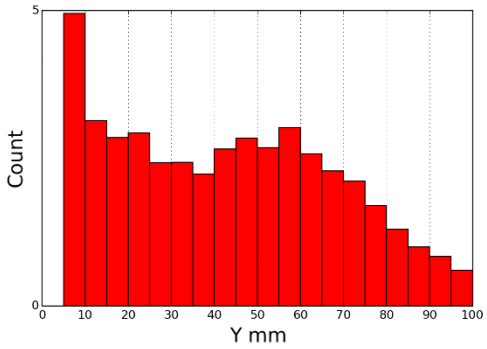


Figure B. 2672: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

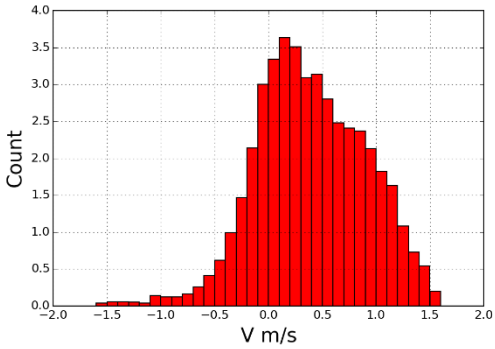


Figure B. 2675: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

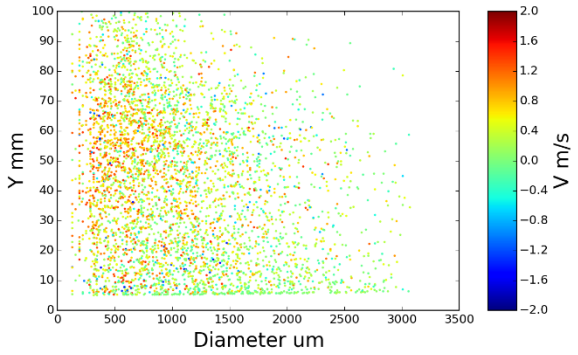


Figure B. 2673: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.6.3.2 Matched Only Droplets for .LB Image

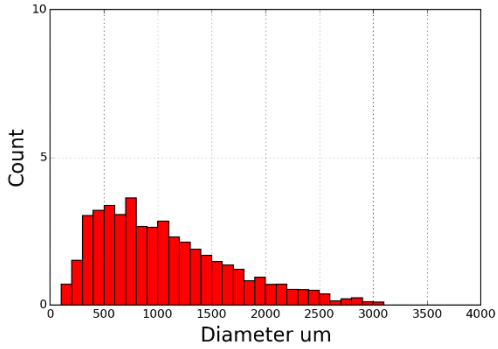


Figure B. 2676: Droplet Diameter Histogram R-123 55F 5000Btu 15000Lb Tri

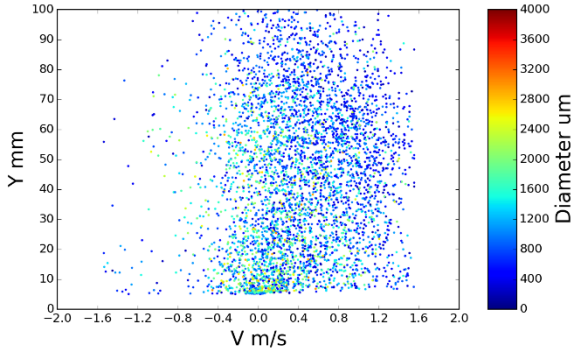


Figure B. 2679: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 15000Lb Tri

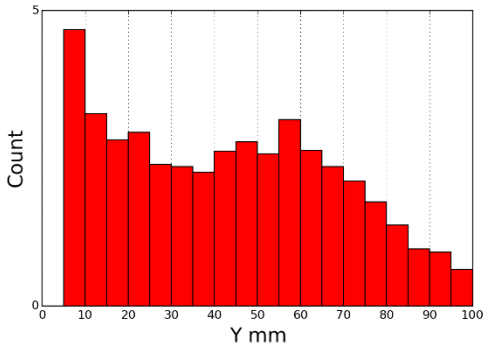


Figure B. 2677: Droplet Height Histogram R-123 55F 5000Btu 15000Lb Tri

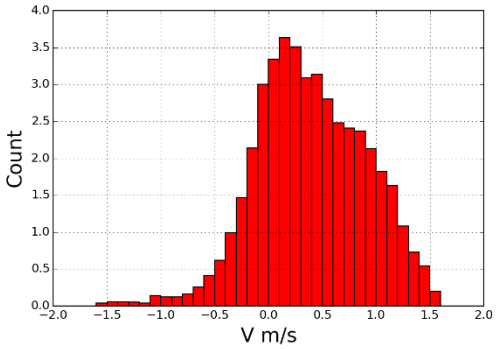


Figure B. 2680: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 15000Lb Tri

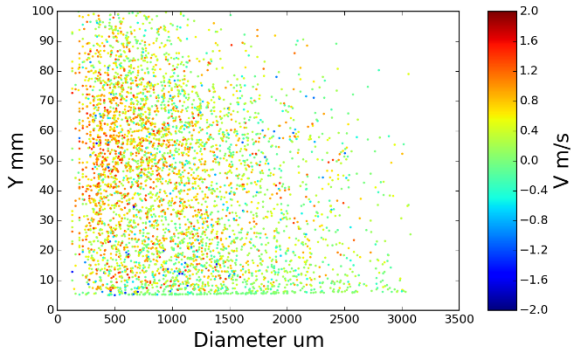


Figure B. 2678: Droplet Height vs Diameter R-123 55F 5000Btu 15000Lb Tri

B.7 - 1556 R-123 55F 5000Btu 30000Lb Tri

B.7.1 Liquid Level 1

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	9313 / 1.173
Ref Mass Flow (lb/hr) / (kg/s)	3224 / 0.406
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	31380 / 42.558
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	5006 / 15.79
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.3 / 12.93
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	56.9 / 13.82
Total Bundle Q (Btu/hr) / (kW)	150924 / 44.23
Total Bundle & Preboiler Q (Btu/hr) / (kW)	211539 / 62.00
Top Two Rows HTC Ratio	1.066
Bundle Inlet Quality	0.14
Bundle Exit Quality	0.76

Table B. 287: Thermal Conditions

B.7.1.1 Lens 100mm Mag 0_29x

B.7.1.1 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	76.54	78.13	57.3	3044	609.5	517.7	57.3	3044	578.1	516.6
40-60mm	152.65	135.76	57.3	3037	578.3	492.2	57.3	3046	587.9	509.3
60-80mm	129.18	131.8	57.3	3046	536.4	537.5	57.3	3044	529.0	537.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	383.87	369.19	57.3	3046	569.9	515.1	57.3	3046	563.2	522.4
			Height A (mm)				Height B (mm)			
Highest Particle			76.1192				76.1192			
Lowest Particle			28.2083				28.2083			

Table B. 288: 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	12.71	57.3	3015	964.0	690.8	57.3	3023	957.3	692.4	-3.170	3.100	-0.030	0.880	-3.170	3.170	0.250	1.000
40-60mm	24.24	57.3	3037	941.3	685.0	57.3	3045	932.1	682.4	-3.170	3.170	-0.040	0.870	-3.170	3.170	0.250	1.220
60-80mm	31.09	57.3	3046	914.5	682.4	57.3	3038	902.8	674.8	-3.170	3.170	-0.020	0.800	-3.170	3.170	0.300	0.930
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	68.04	57.3	3046	933.3	685.2	57.3	3045	923.3	681.1	-3.170	3.170	-0.030	0.840	-3.170	3.170	0.270	1.050

Table B. 289: Matched Droplet Info

B.7.1.1 All Droplets for .LA Image

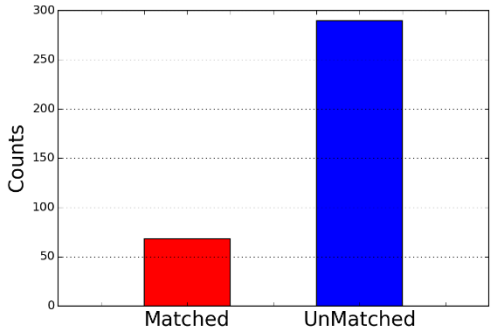


Figure B. 2681: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

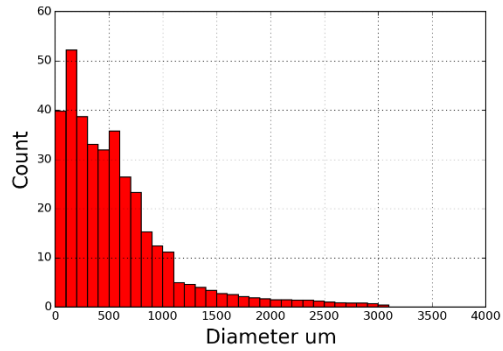


Figure B. 2682: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

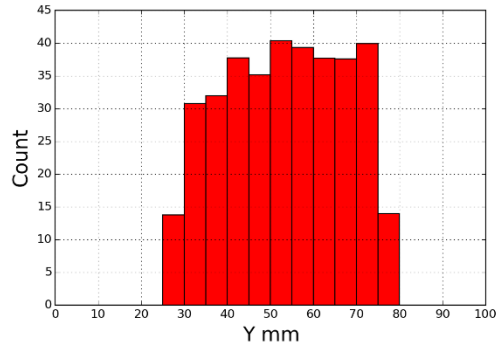


Figure B. 2683: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

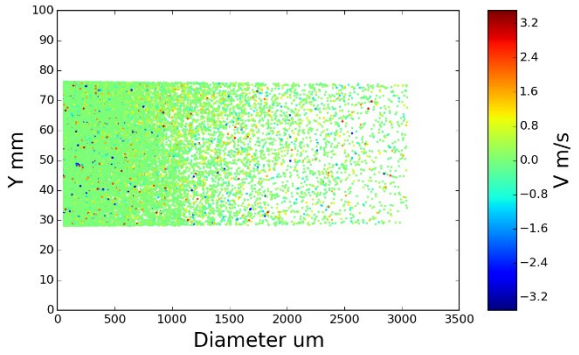


Figure B. 2684: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

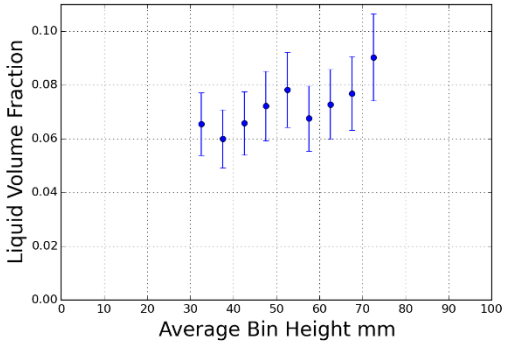


Figure B. 2685: Void Fraction R-123 55F 5000Btu 30000Lb Tri

B.7.1.1 All Droplets for .LB Image

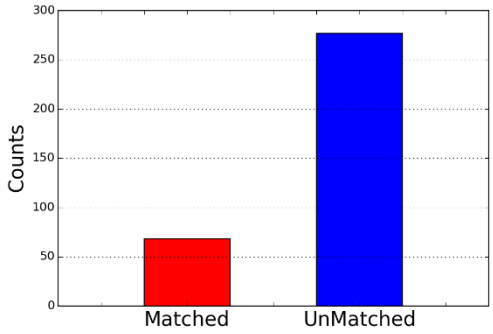


Figure B. 2686: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

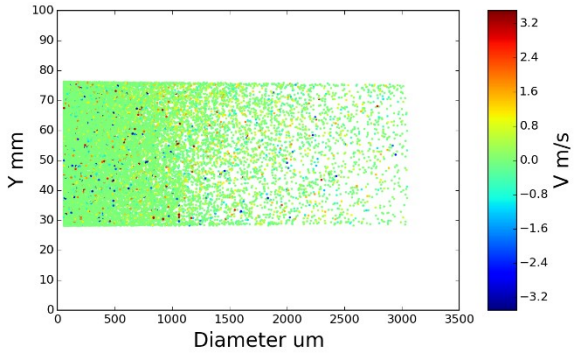


Figure B. 2689: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

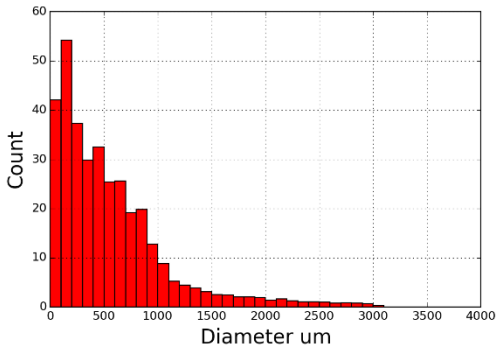


Figure B. 2687: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

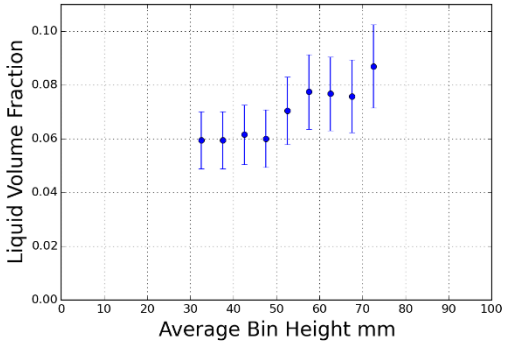


Figure B. 2690: Void Fraction R-123 55F 5000Btu 30000Lb Tri

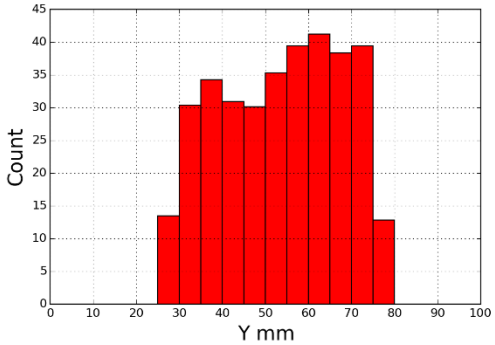


Figure B. 2688: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.1.1 Matched Only Droplets for .LA Image

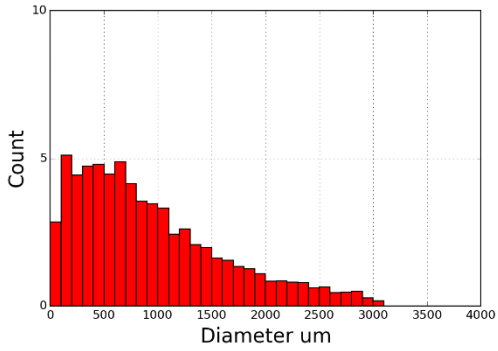


Figure B. 2691: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

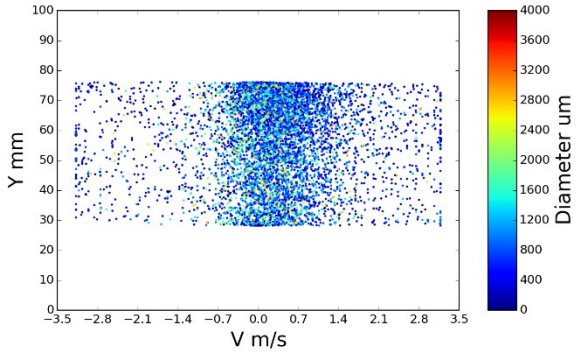


Figure B. 2694: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

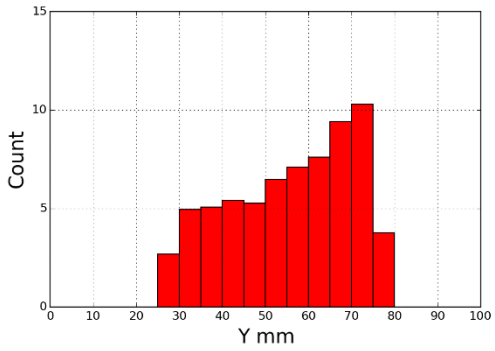


Figure B. 2692: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

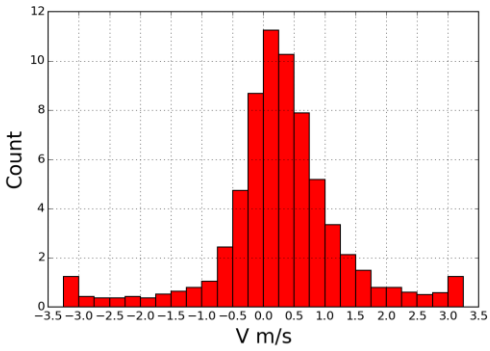


Figure B. 2695: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

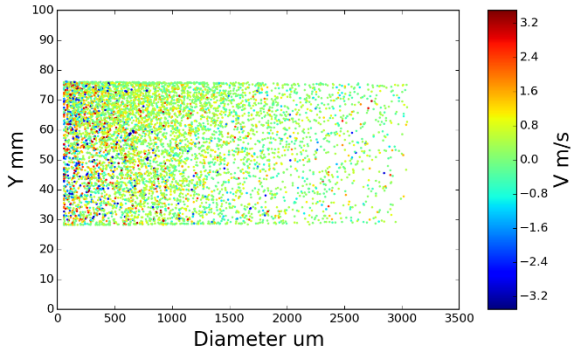


Figure B. 2693: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.1.1 Matched Only Droplets for .LB Image

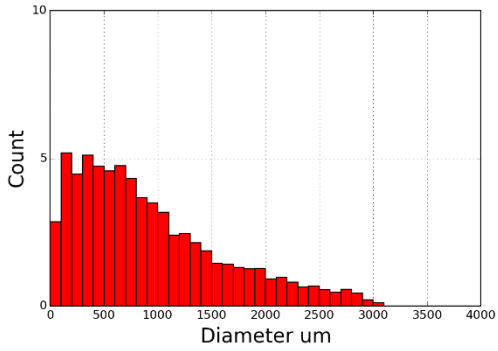


Figure B. 2696: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

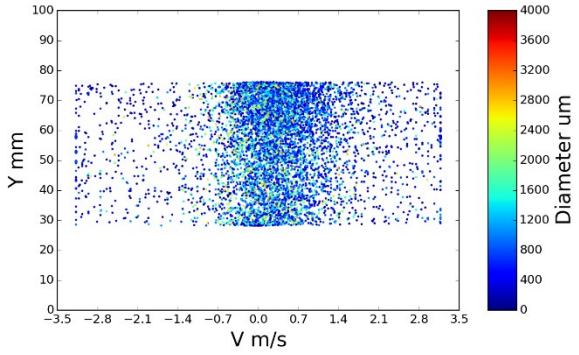


Figure B. 2699: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

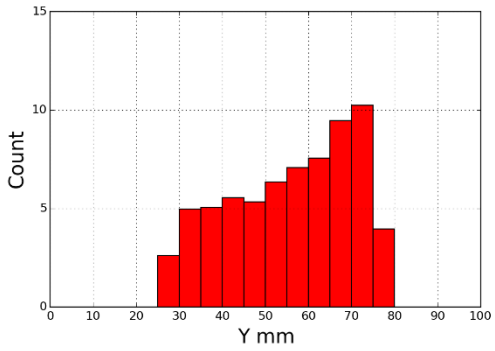


Figure B. 2697: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

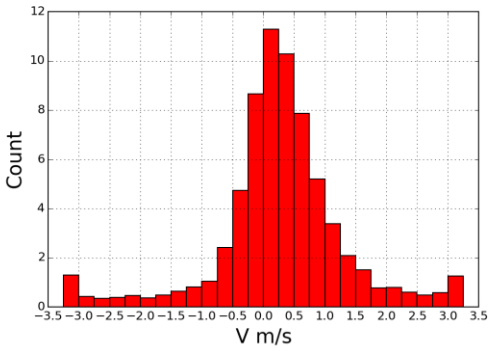


Figure B. 2700: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

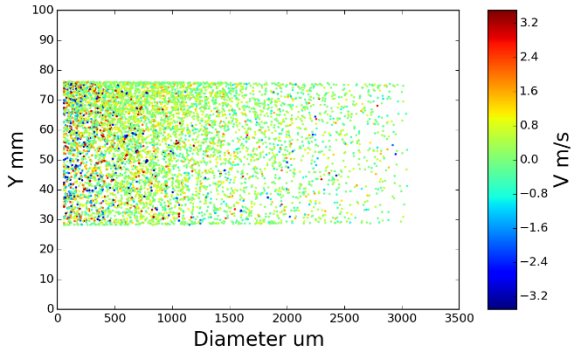


Figure B. 2698: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.1.1 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	62.44	60.62	57.3	3006	652.6	507.1	57.3	3038	612.3	532.7
40-60mm	81.77	94.43	57.3	3044	615.1	556.5	57.3	3042	571.5	530.8
60-80mm	77.76	85.29	57.3	3046	574.9	606.0	57.3	3034	567.0	605.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	239.89	260.62	57.3	3046	611.5	562.1	57.3	3042	580.2	559.2
			Height A (mm)				Height B (mm)			
Highest Particle			76.1192				76.1192			
Lowest Particle			28.2083				28.2083			

Table B. 290: 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	7.09	57.3	3000	1111	771.7	57.3	2993	1090	762.3	-3.170	3.170	-0.080	1.080	-3.170	3.170	0.260	1.100
40-60mm	11.7	57.3	3024	1148	788.7	57.3	3042	1131	776.9	-3.170	3.170	-0.060	0.910	-3.170	3.170	0.260	1.200
60-80mm	14.75	57.3	3046	1158	820.8	57.3	3028	1128	799.4	-3.170	3.170	-0.050	0.920	-3.170	3.170	0.240	1.050
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	33.54	57.3	3046	1145	799.7	57.3	3042	1121	784.0	-3.170	3.170	-0.060	0.950	-3.170	3.170	0.250	1.110

Table B. 291: Matched Droplet Info

B.7.1.1 All Droplets for .LA Image

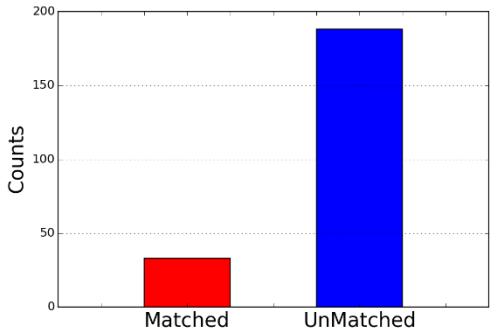


Figure B. 2701: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

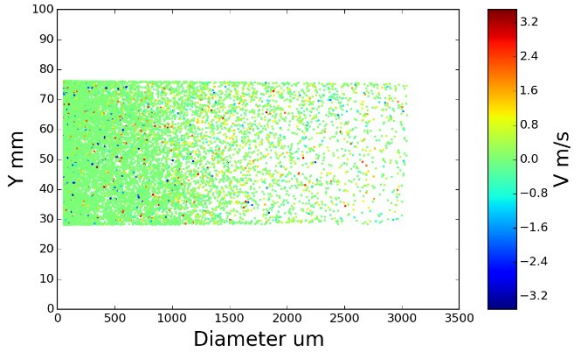


Figure B. 2704: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

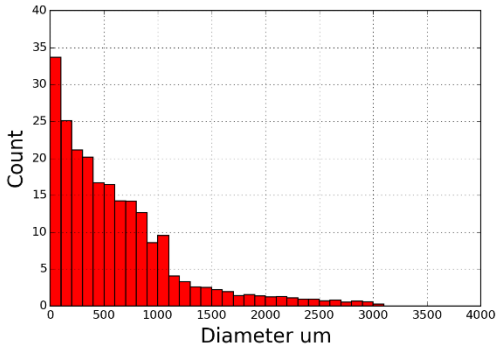


Figure B. 2702: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

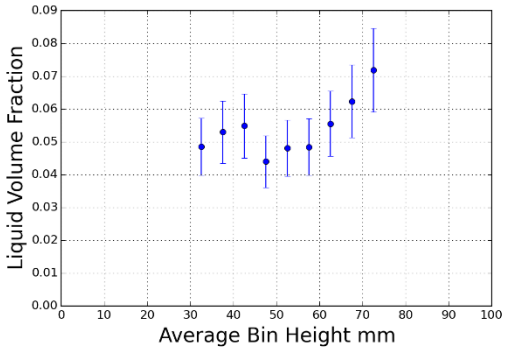


Figure B. 2705: Void Fraction R-123 55F 5000Btu 30000Lb Tri

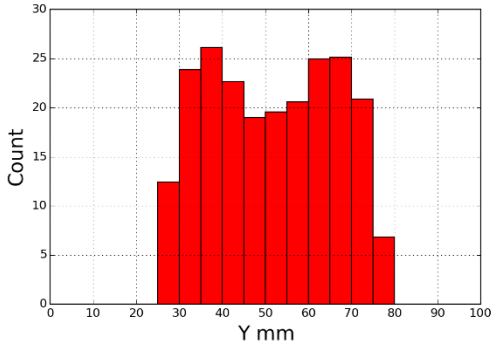


Figure B. 2703: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.1.1 All Droplets for .LB Image

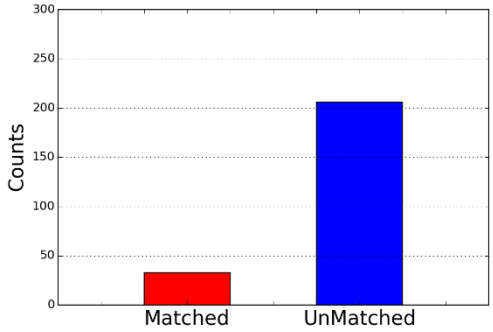


Figure B. 2706: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

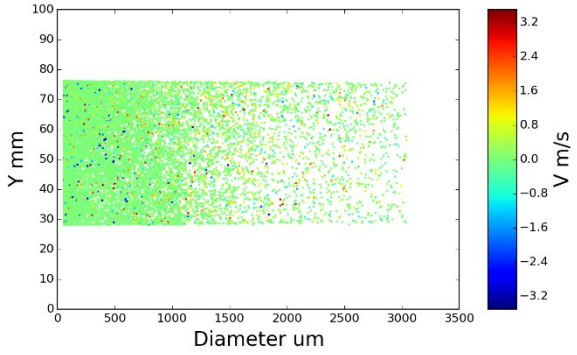


Figure B. 2709: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

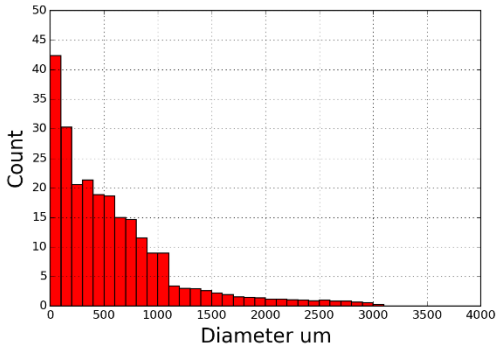


Figure B. 2707: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

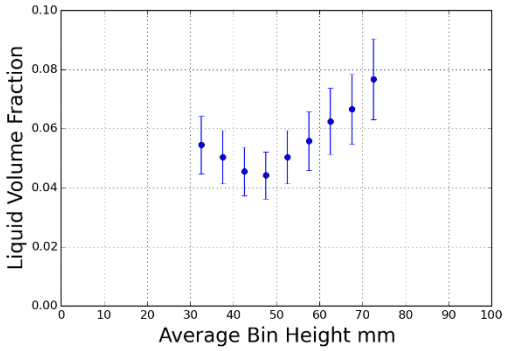


Figure B. 2710: Void Fraction R-123 55F 5000Btu 30000Lb Tri

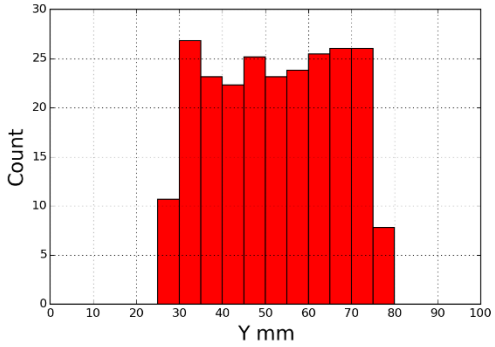


Figure B. 2708: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.1.1 Matched Only Droplets for .LA Image

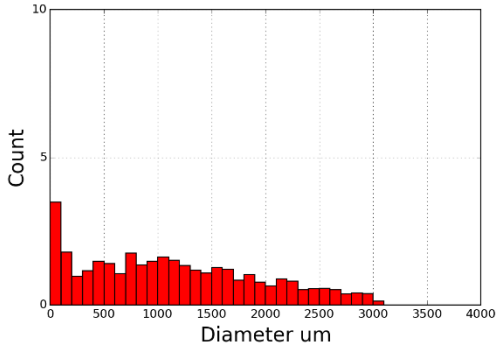


Figure B. 2711: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

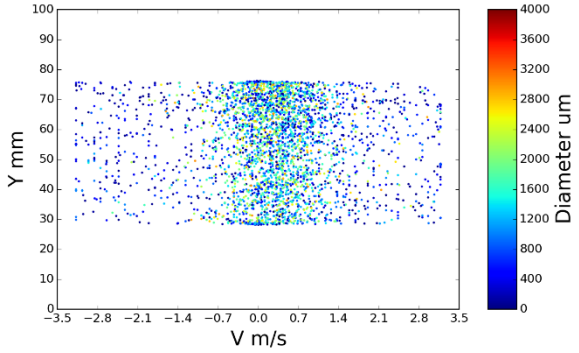


Figure B. 2714: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

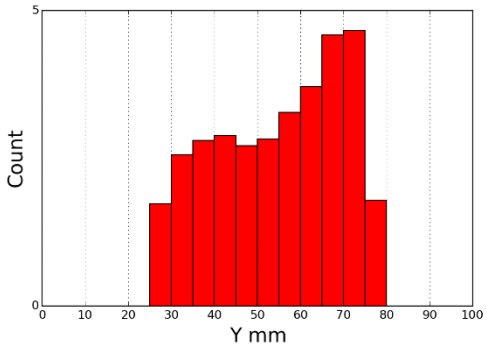


Figure B. 2712: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

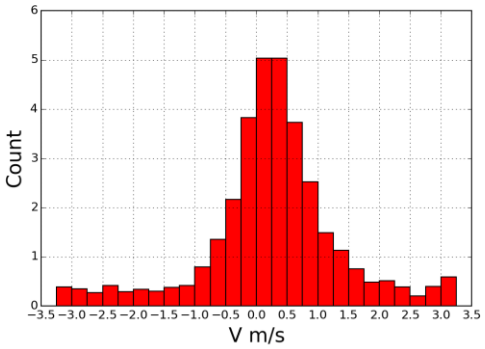


Figure B. 2715: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

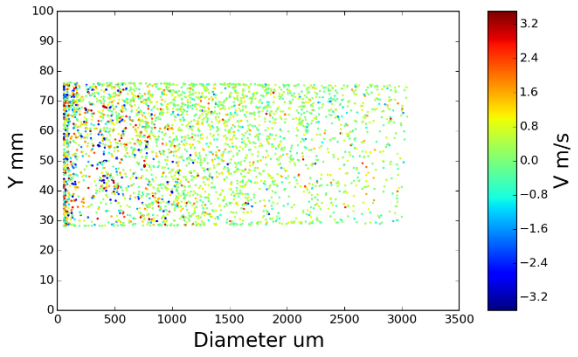


Figure B. 2713: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.1.1 Matched Only Droplets for .LB Image

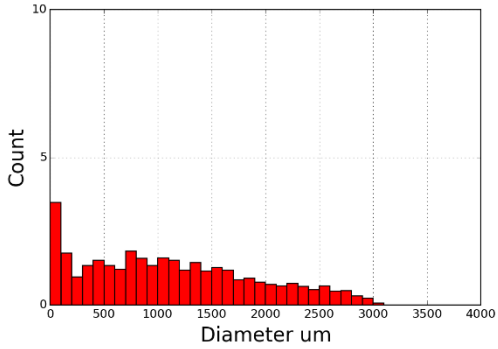


Figure B. 2716: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

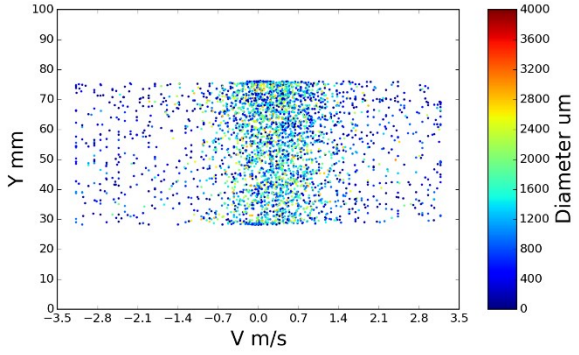


Figure B. 2719: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

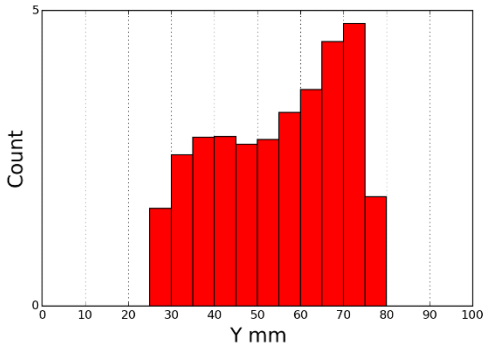


Figure B. 2717: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

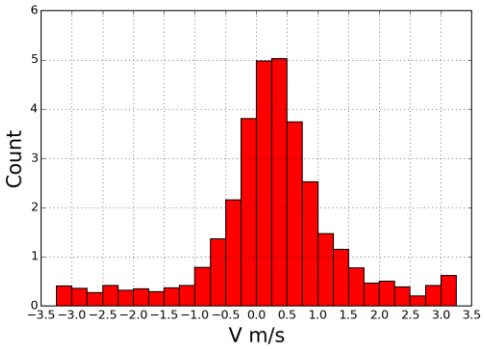


Figure B. 2720: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

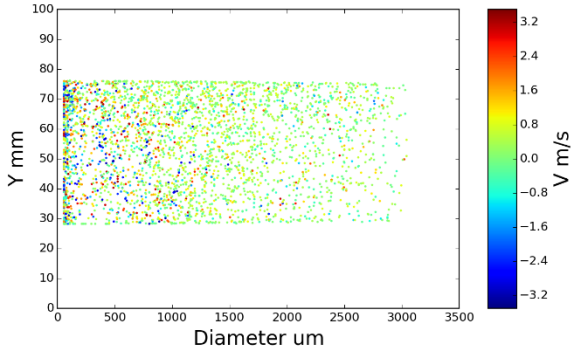


Figure B. 2718: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.1.1 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	46.52	58.07	57.3	3042	559.0	550.9	57.3	3043	530.0	535.4
40-60mm	89.2	93.37	57.3	3043	576.1	521.4	57.3	3046	521.8	510.4
60-80mm	72.36	87.42	57.3	3043	472.7	577.7	57.3	3042	438.4	544.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	225.01	256.11	57.3	3043	536.3	550.1	57.3	3046	493.3	530.8
			Height A (mm)				Height B (mm)			
Highest Particle			76.1192				76.1192			
Lowest Particle			28.2083				28.2083			

Table B. 292: 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	6.61	57.3	2937	806.7	796.0	57.3	3039	803.0	785.9	-3.170	3.170	0.020	1.400	-3.170	3.170	0.140	1.530
40-60mm	11.45	57.3	3043	952.2	833.2	57.3	3036	930.5	808.2	-3.170	3.150	-0.080	1.220	-3.170	3.170	0.310	1.570
60-80mm	11.7	57.3	3033	947.4	892.7	57.3	3034	913.2	859.6	-3.170	3.170	0.010	1.190	-3.170	3.170	0.140	1.370
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	29.76	57.3	3043	918.0	851.3	57.3	3039	895.4	825.8	-3.170	3.170	-0.020	1.250	-3.170	3.170	0.210	1.490

Table B. 293: Matched Droplet Info

B.7.1.1 All Droplets for .LA Image

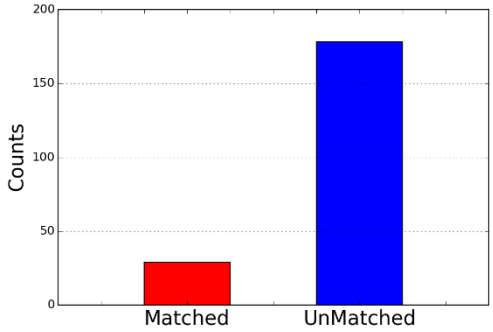


Figure B. 2721: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

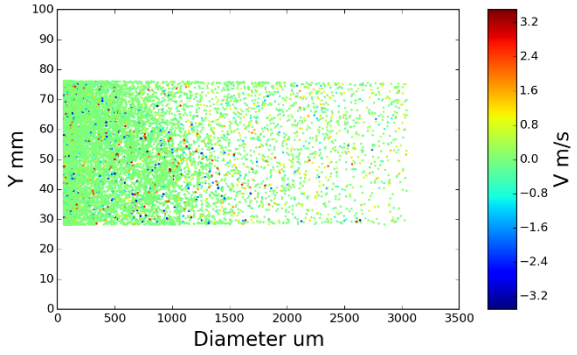


Figure B. 2724: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

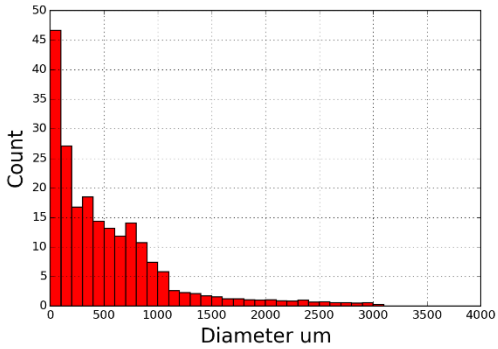


Figure B. 2722: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

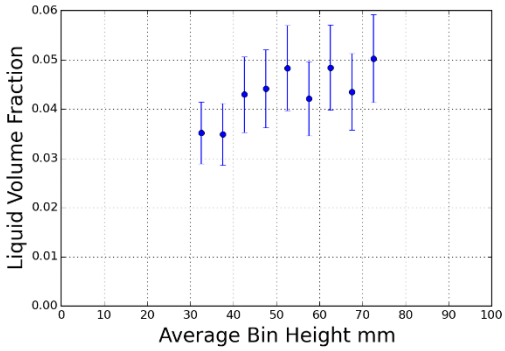


Figure B. 2725: Void Fraction R-123 55F 5000Btu 30000Lb Tri

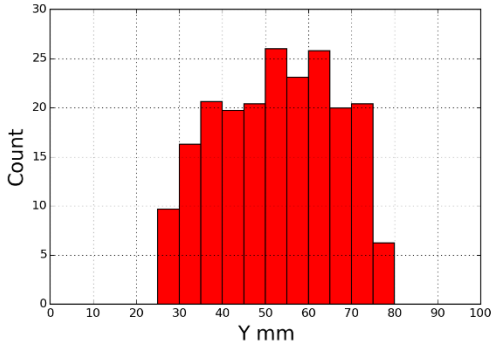


Figure B. 2723: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.1.1 All Droplets for .LB Image

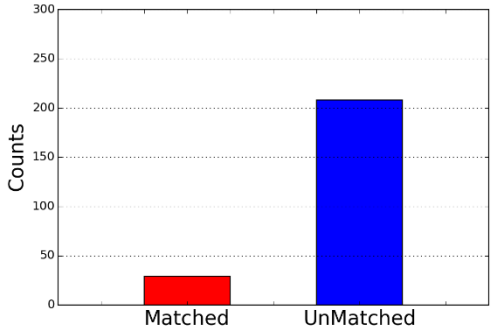


Figure B. 2726: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

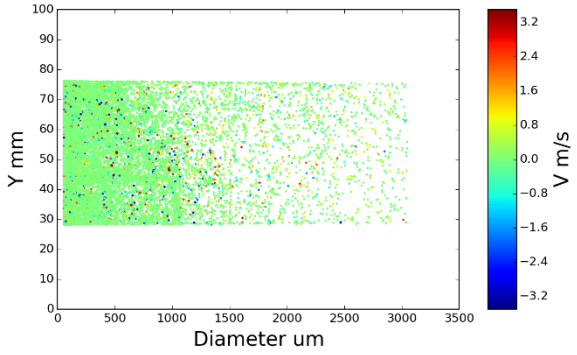


Figure B. 2729: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

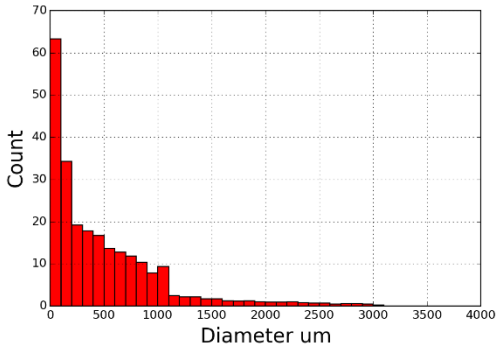


Figure B. 2727: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

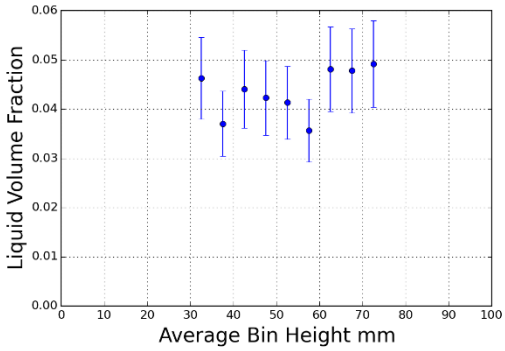


Figure B. 2730: Void Fraction R-123 55F 5000Btu 30000Lb Tri

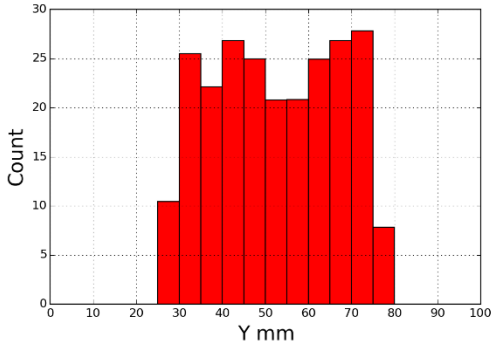


Figure B. 2728: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.1.1 Matched Only Droplets for .LA Image

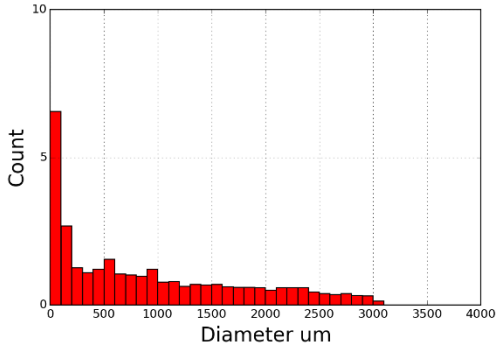


Figure B. 2731: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

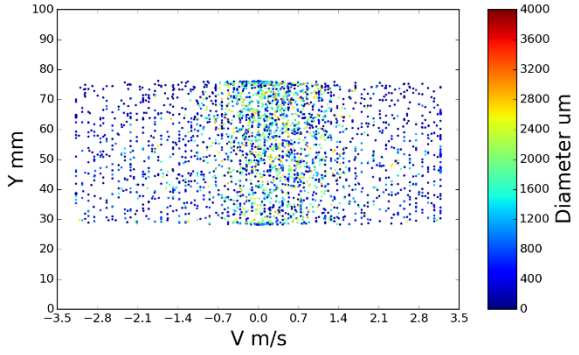


Figure B. 2734: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

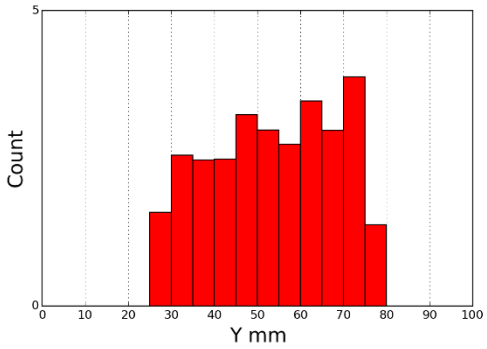


Figure B. 2732: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

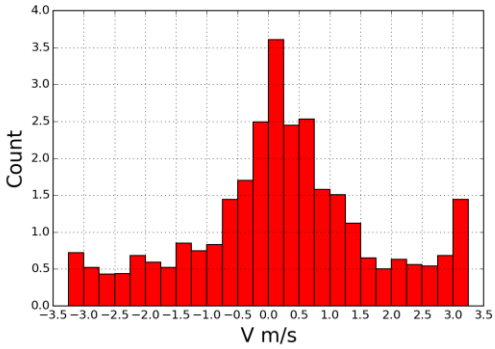


Figure B. 2735: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

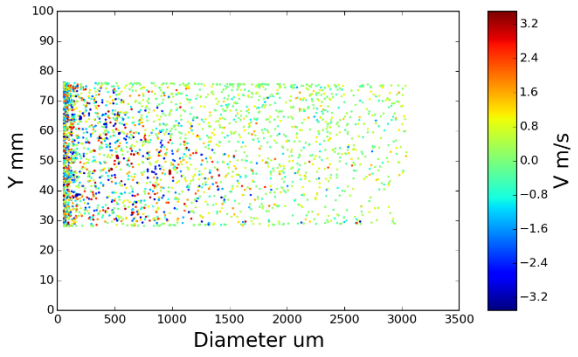


Figure B. 2733: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.1.1 Matched Only Droplets for .LB Image

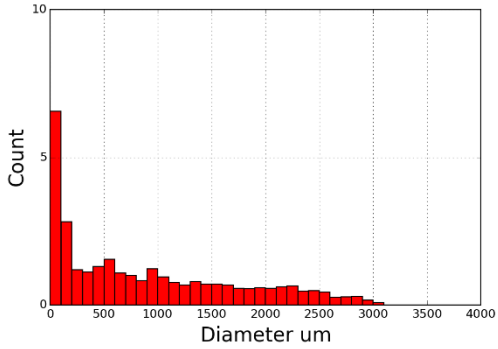


Figure B. 2736: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

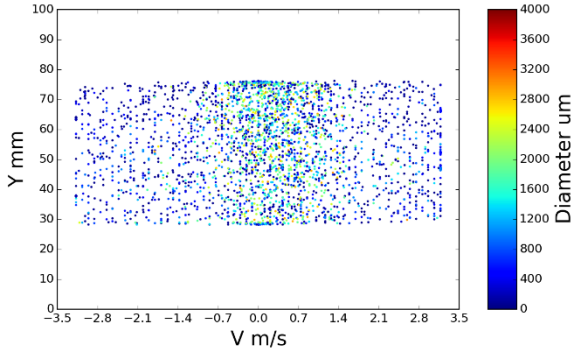


Figure B. 2739: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

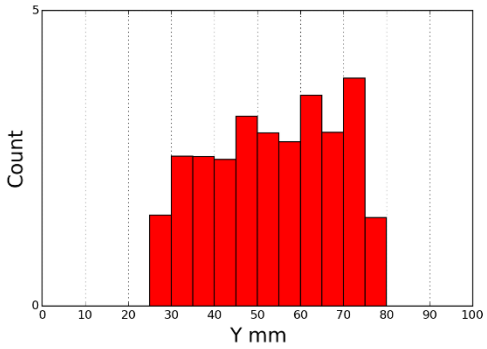


Figure B. 2737: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

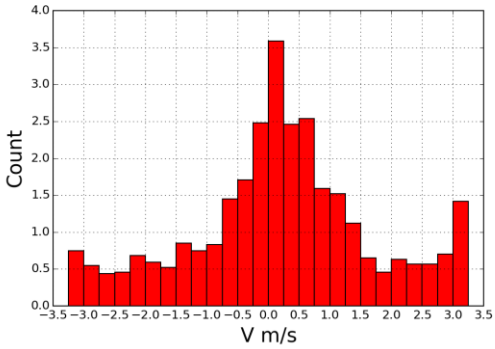


Figure B. 2740: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

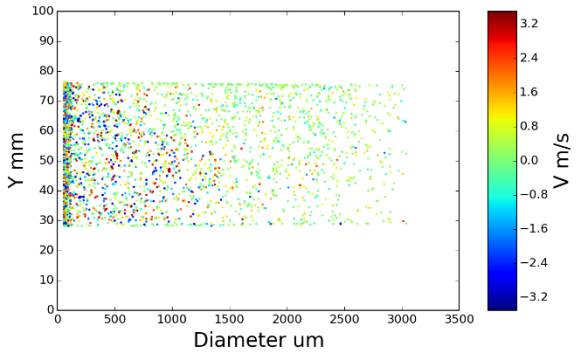


Figure B. 2738: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.1.2 Lens 50mm Mag 0_13x

B.7.1.2 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	44.74	47.48	128.7	3078	619.2	539.8	128.7	3061	641.6	563.0
40-60mm	102.8	109.55	128.7	3069	622.7	535.9	128.7	3074	649.0	551.6
60-80mm	120.23	117.31	128.7	3077	639.5	560.5	128.7	3079	634.5	553.6
80-100mm	143.89	143.41	128.7	3077	623.7	526.6	128.7	3073	631.4	533.2
All	413.71	420.07	128.7	3078	627.6	540.5	128.7	3079	638.0	547.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.9736				99.9736			
Lowest Particle			30.0548				30.0548			

Table B. 294: 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	13.51	128.7	3078	797.6	639.2	128.7	3061	781.6	633.5	-3.110	3.110	-0.050	1.260	-3.110	3.110	0.150	1.310
40-60mm	30.89	128.7	3055	730.6	587.4	128.7	3074	721.7	586.3	-3.110	3.110	-0.100	1.320	-3.110	3.110	0.250	1.390
60-80mm	39.53	128.7	3063	800.1	626.3	128.7	3048	788.0	618.8	-3.110	3.110	-0.070	1.260	-3.110	3.110	0.240	1.300
80-100mm	56.91	128.7	3059	773.6	573.5	128.7	3071	765.1	569.7	-3.110	3.110	-0.100	1.130	-3.110	3.110	0.260	1.230
All	140.84	128.7	3078	773.9	598.8	128.7	3074	763.6	594.1	-3.110	3.110	-0.090	1.230	-3.110	3.110	0.240	1.290

Table B. 295: Matched Droplet Info

B.7.1.2 All Droplets for .LA Image

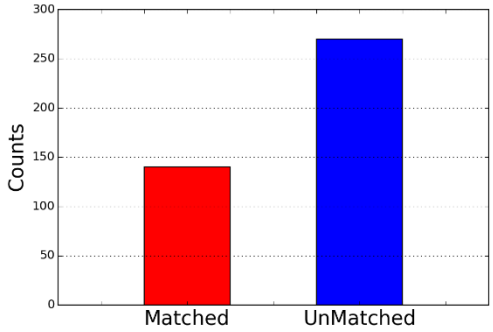


Figure B. 2741: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

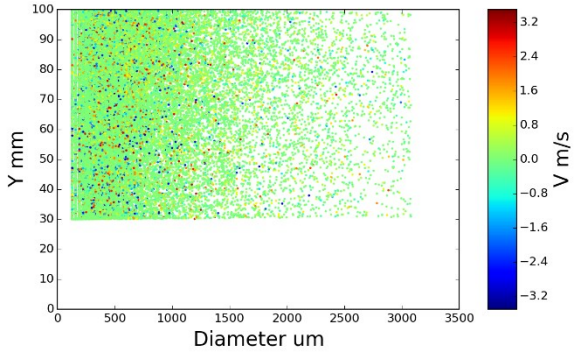


Figure B. 2744: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

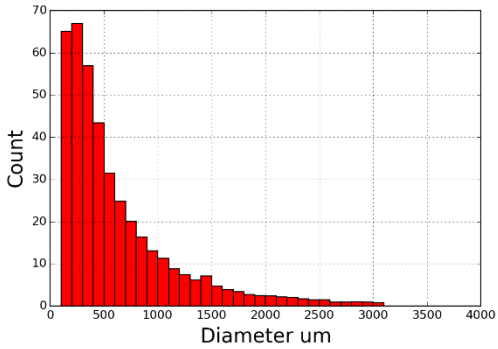


Figure B. 2742: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

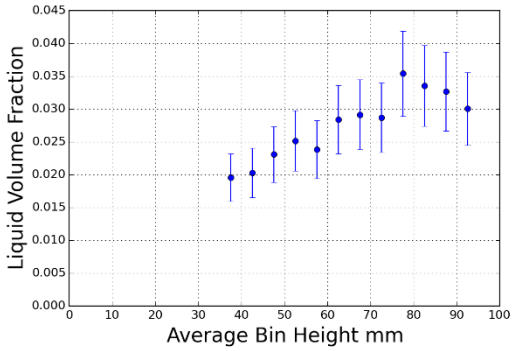


Figure B. 2745: Void Fraction R-123 55F 5000Btu 30000Lb Tri

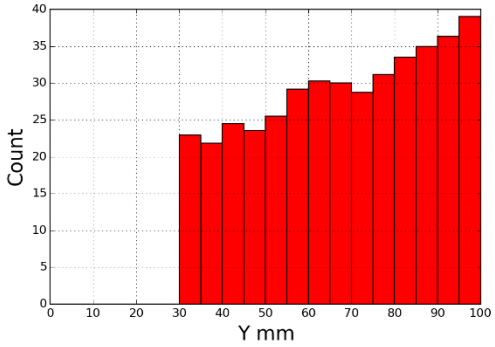


Figure B. 2743: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.1.2 All Droplets for .LB Image

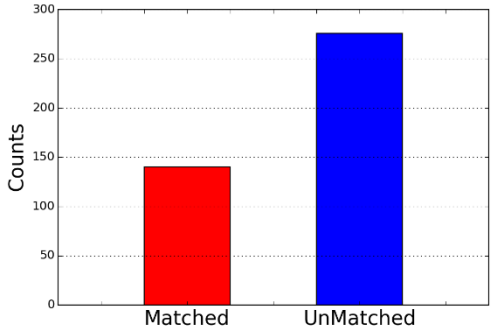


Figure B. 2746: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

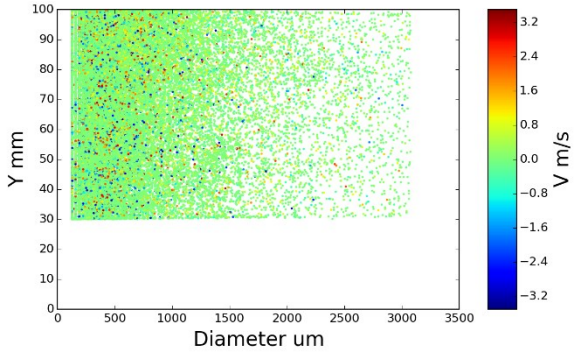


Figure B. 2749: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

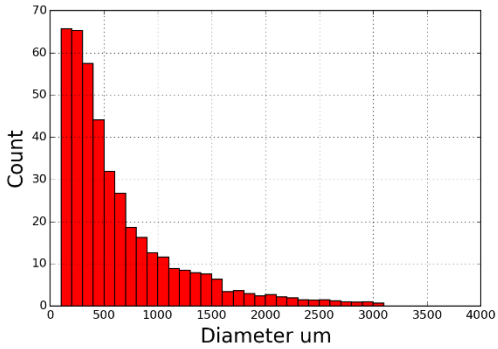


Figure B. 2747: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

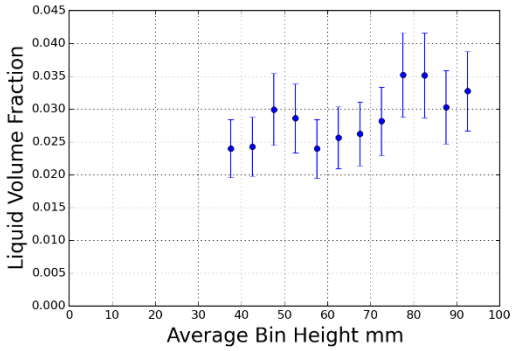


Figure B. 2750: Void Fraction R-123 55F 5000Btu 30000Lb Tri

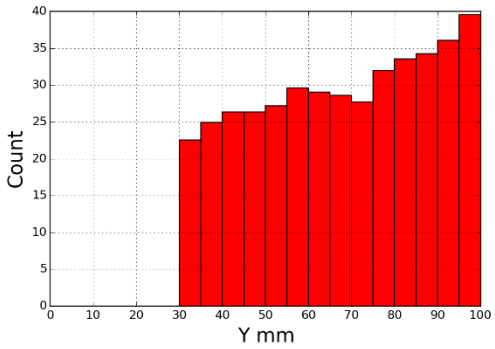


Figure B. 2748: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.1.2 Matched Only Droplets for .LA Image

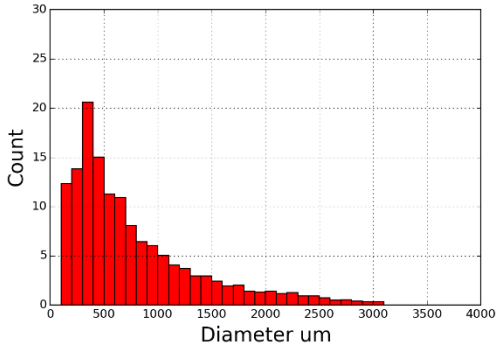


Figure B. 2751: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

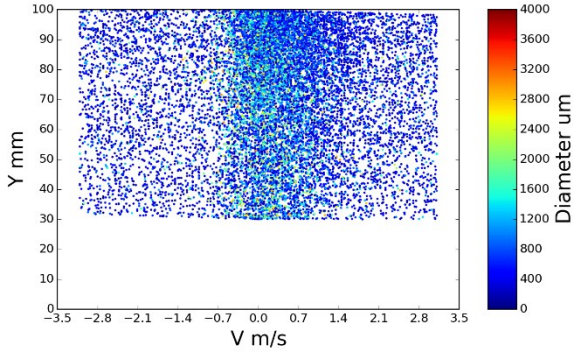


Figure B. 2754: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

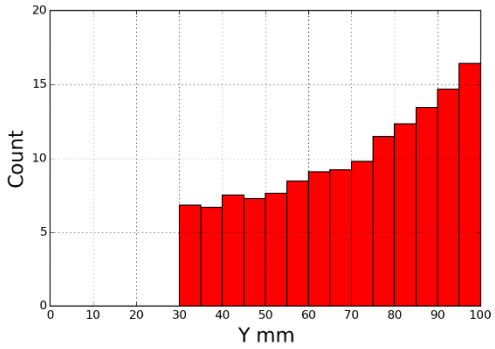


Figure B. 2752: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

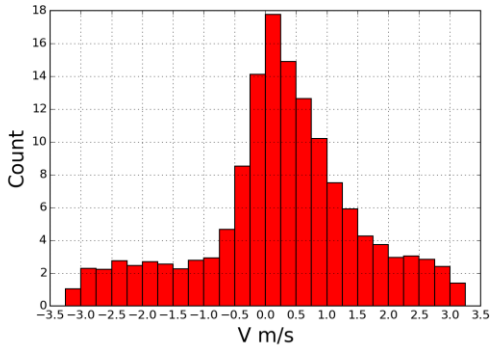


Figure B. 2755: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

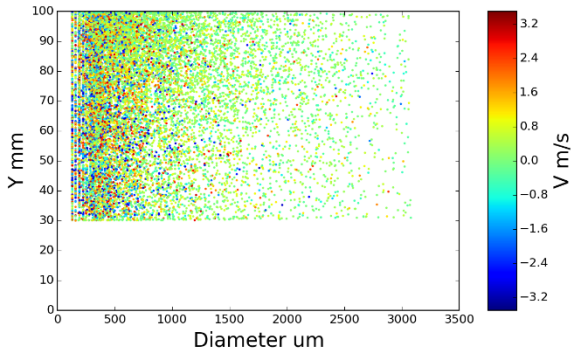


Figure B. 2753: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.1.2 Matched Only Droplets for .LB Image

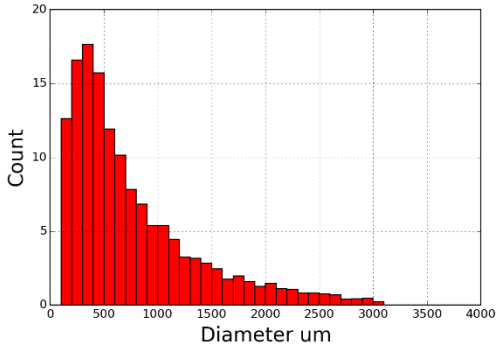


Figure B. 2756: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

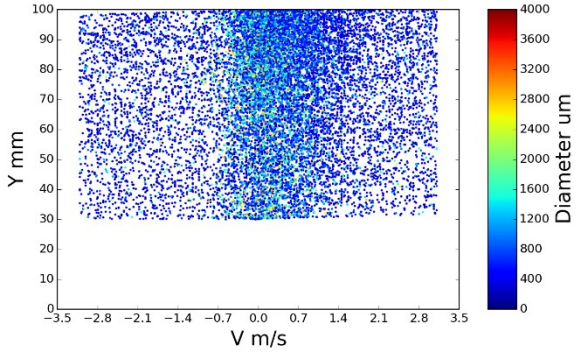


Figure B. 2759: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

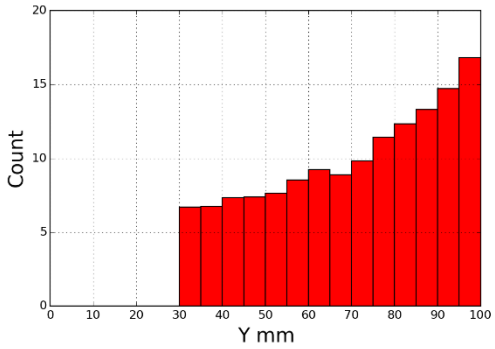


Figure B. 2757: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

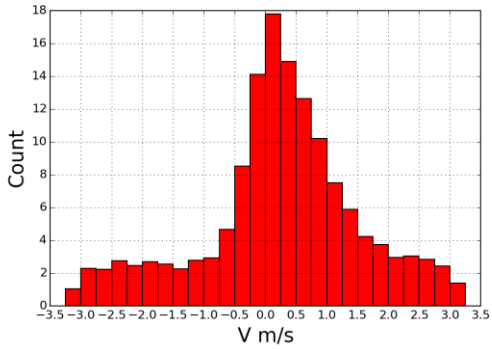


Figure B. 2760: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

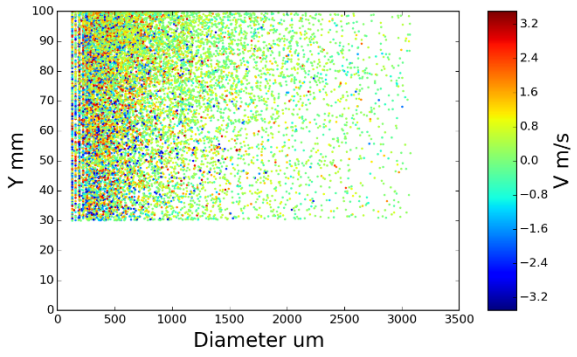


Figure B. 2758: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.1.2 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	22.91	25.96	128.7	3075	805.9	663.4	128.7	3077	853.0	663.2
40-60mm	50.5	49.5	128.7	3072	884.7	670.1	128.7	3075	851.7	665.8
60-80mm	71.94	68.99	128.7	3074	790.5	652.7	128.7	3077	805.3	650.8
80-100mm	100.88	100.32	128.7	3071	723.9	571.7	128.7	3078	726.9	576.5
All	248.03	246.29	128.7	3075	784.0	628.5	128.7	3078	787.6	628.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.9736				99.9736			
Lowest Particle			30.0548				30.0548			

Table B. 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	6.18	128.7	3070	1151	757.5	128.7	3065	1140	748.4	-3.110	3.070	-0.090	1.030	-3.060	3.110	0.180	1.030
40-60mm	13.73	128.7	3047	1182	730.8	128.7	3071	1163	719.3	-3.100	3.110	0.020	1.030	-3.070	3.110	0.200	1.070
60-80mm	21.91	128.7	3067	1080	717.4	128.7	3077	1070	714.9	-3.110	3.110	-0.090	1.000	-3.110	3.110	0.220	1.070
80-100mm	38.42	128.7	3069	948.2	624.9	128.7	3044	930.7	616.3	-3.110	3.110	-0.070	1.000	-3.110	3.110	0.230	1.050
All	80.24	128.7	3070	1040	687.0	128.7	3077	1024	679.6	-3.110	3.110	-0.060	1.010	-3.110	3.110	0.220	1.060

Table B. 297: Matched Droplet Info

B.7.1.2 All Droplets for .LA Image

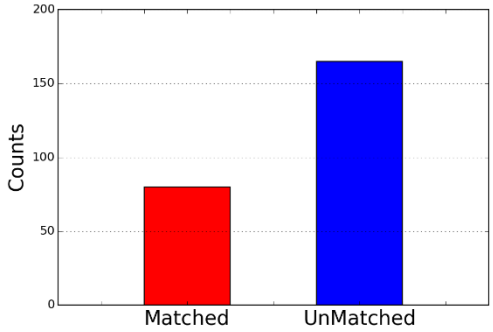


Figure B. 2761: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

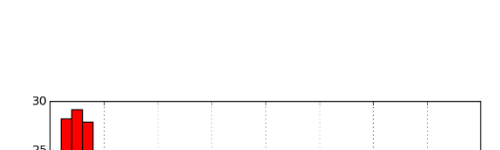


Figure B. 2762: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

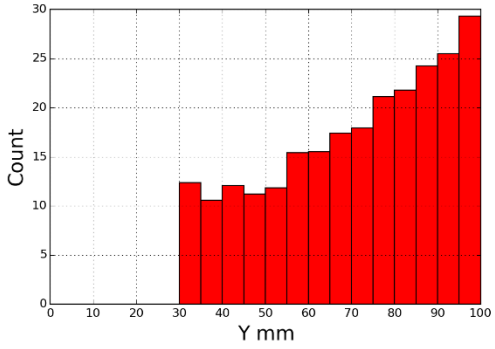


Figure B. 2763: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

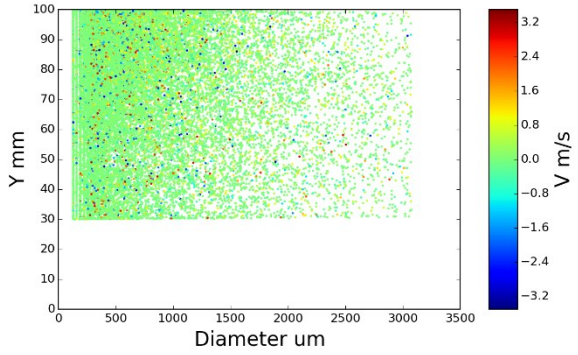


Figure B. 2764: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

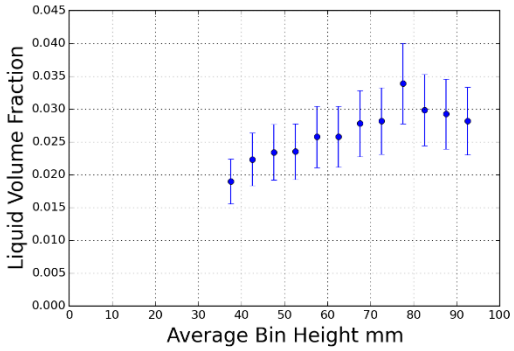


Figure B. 2765: Void Fraction R-123 55F 5000Btu 30000Lb Tri

B.7.1.2 All Droplets for .LB Image

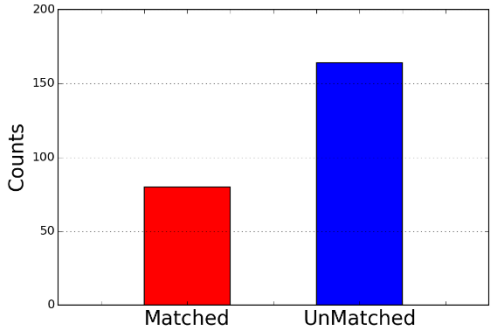


Figure B. 2766: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

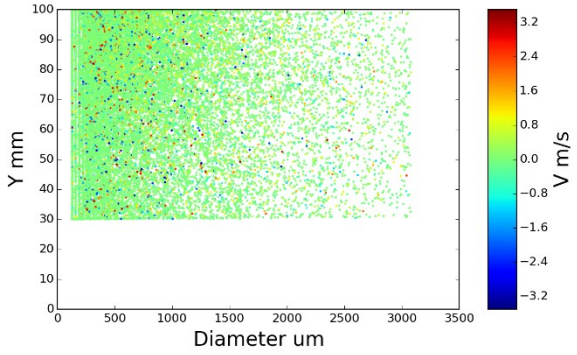


Figure B. 2769: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

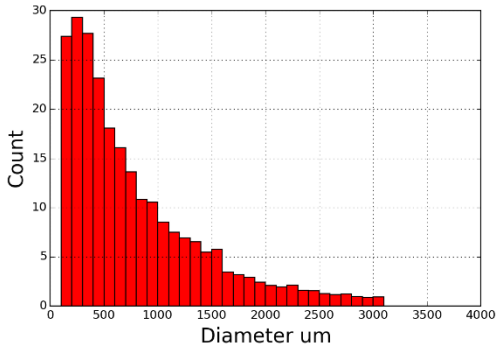


Figure B. 2767: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

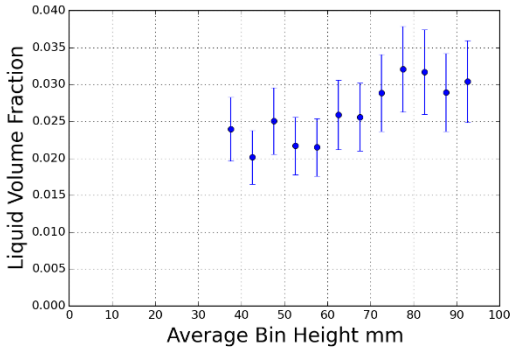


Figure B. 2770: Void Fraction R-123 55F 5000Btu 30000Lb Tri

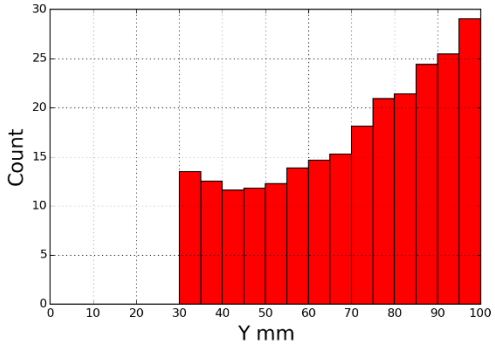


Figure B. 2768: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.1.2 Matched Only Droplets for .LA Image

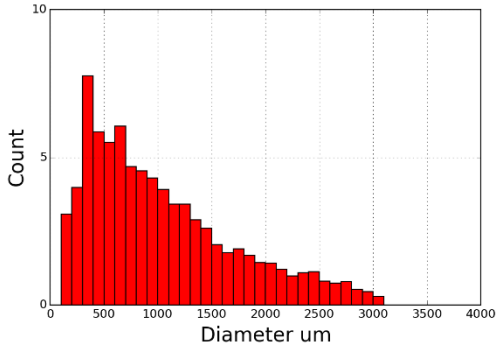


Figure B. 2771: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

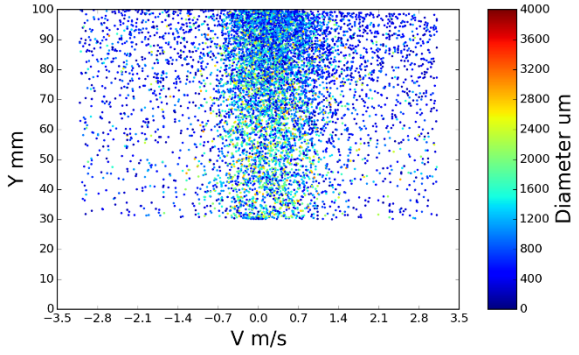


Figure B. 2774: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

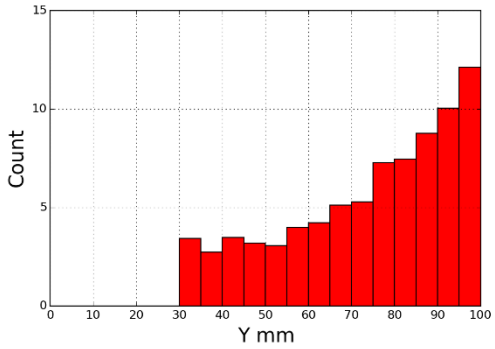


Figure B. 2772: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

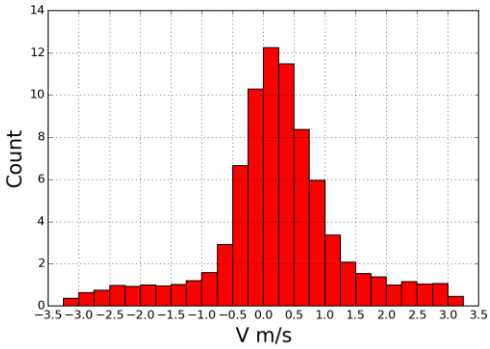


Figure B. 2775: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

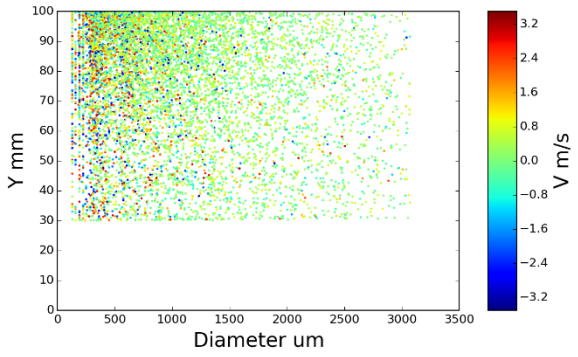


Figure B. 2773: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.1.2 Matched Only Droplets for .LB Image

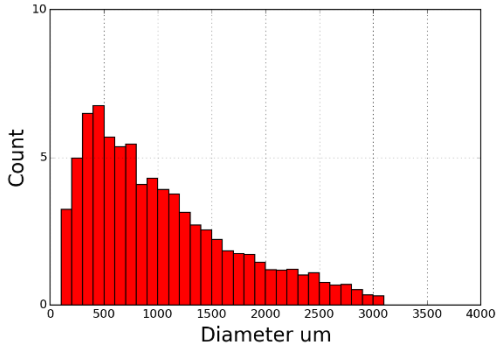


Figure B. 2776: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

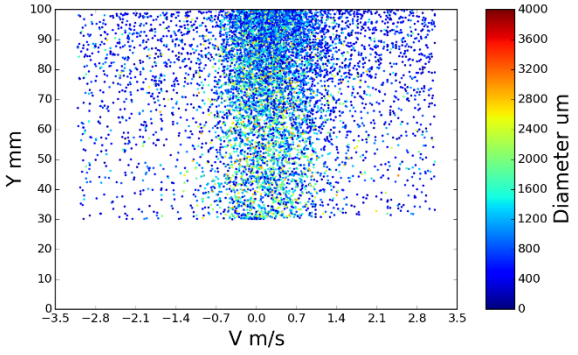


Figure B. 2779: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

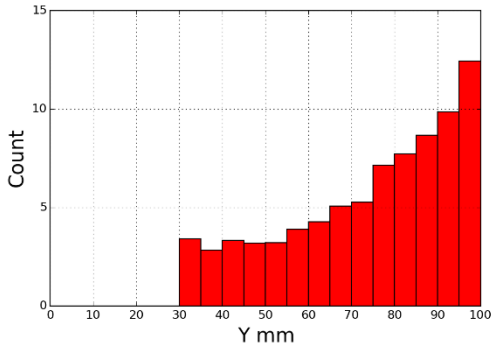


Figure B. 2777: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

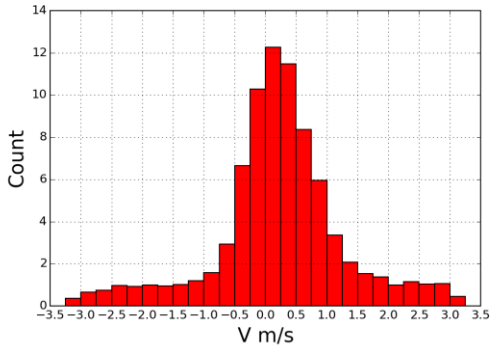


Figure B. 2780: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

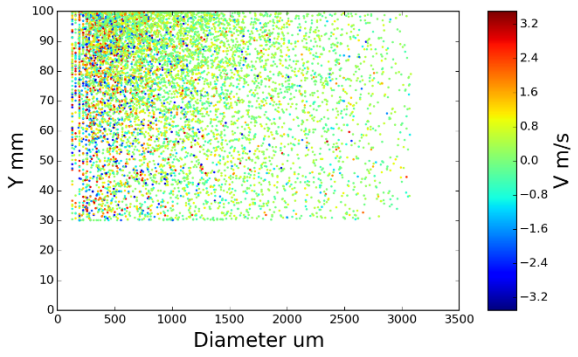


Figure B. 2778: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.1.2 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	13.59	12.97	128.7	3067	943.9	739.5	128.7	3075	958.0	740.9
40-60mm	23.57	26.91	128.7	3078	1055	750.8	128.7	3080	1012	721.9
60-80mm	40.4	38.6	128.7	3076	948.4	731.9	128.7	3078	958.3	729.0
80-100mm	67.71	68.88	128.7	3077	817.5	624.9	128.7	3066	810.7	631.2
All	146.01	147.97	128.7	3078	904.3	693.9	128.7	3080	899.0	690.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.9736				99.9736			
Lowest Particle			30.0548				30.0548			

Table B. 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	3.14	128.7	3038	1412	788.2	128.7	3031	1382	776.5	-3.020	3.060	0.060	0.870	-3.070	2.990	0.220	0.880
40-60mm	5.98	128.7	3078	1526	764.8	128.7	3065	1514	757.3	-3.080	3.110	0.060	0.820	-3.020	3.110	0.250	0.930
60-80mm	11.32	128.7	3063	1384	754.0	128.7	3061	1361	747.5	-3.110	3.070	-0.060	0.850	-3.110	3.090	0.170	0.950
80-100mm	23.48	128.7	3077	1087	665.2	128.7	3040	1069	659.3	-3.110	3.110	-0.070	0.910	-3.110	3.100	0.210	0.990
All	43.92	128.7	3078	1246	733.6	128.7	3065	1227	726.9	-3.110	3.110	-0.040	0.880	-3.110	3.110	0.200	0.960

Table B. 299: Matched Droplet Info

B.7.1.2 All Droplets for .LA Image

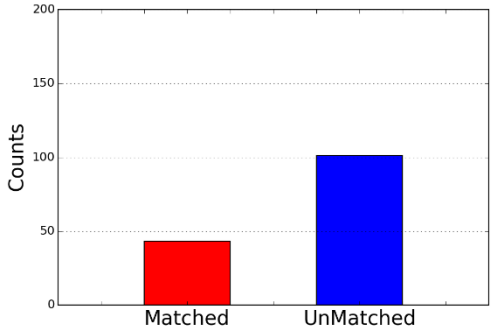


Figure B. 2781: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

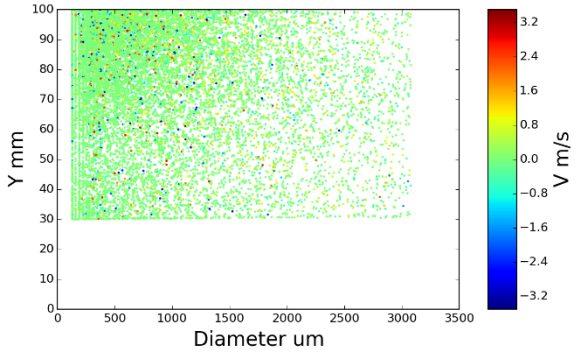


Figure B. 2784: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

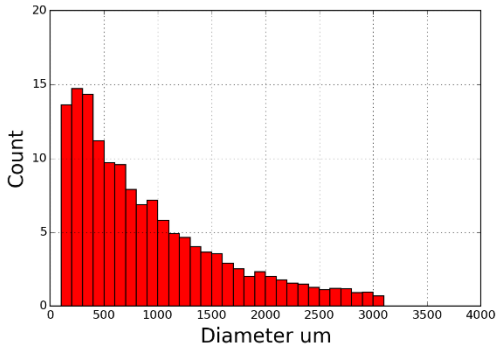


Figure B. 2782: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

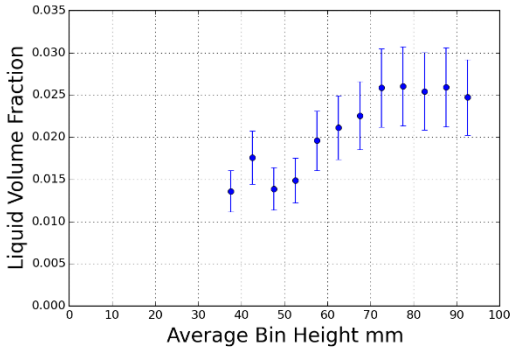


Figure B. 2785: Void Fraction R-123 55F 5000Btu 30000Lb Tri

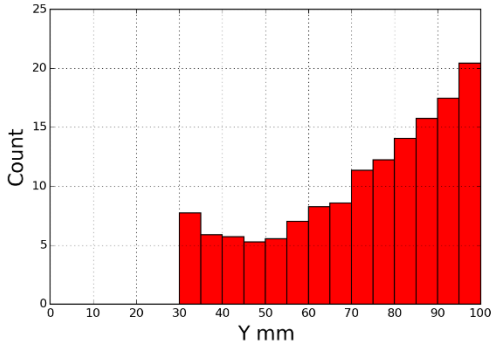


Figure B. 2783: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.1.2 All Droplets for .LB Image

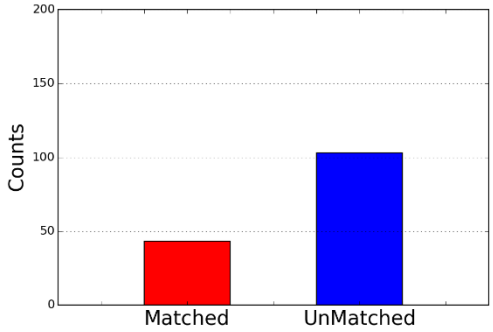


Figure B. 2786: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

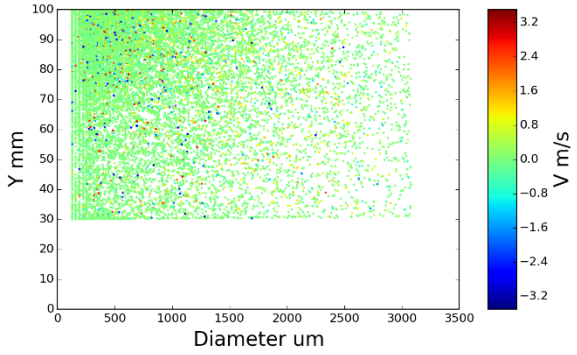


Figure B. 2789: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

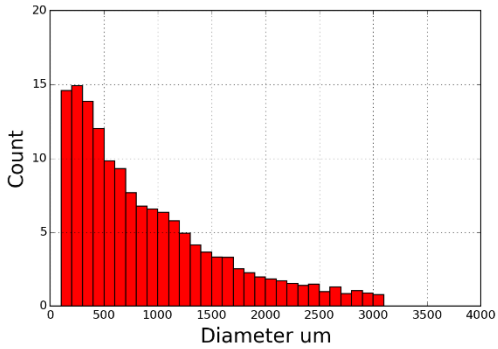


Figure B. 2787: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

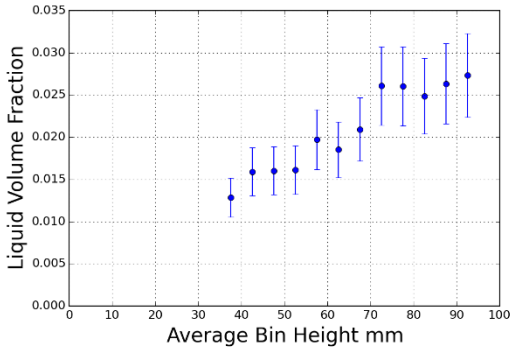


Figure B. 2790: Void Fraction R-123 55F 5000Btu 30000Lb Tri

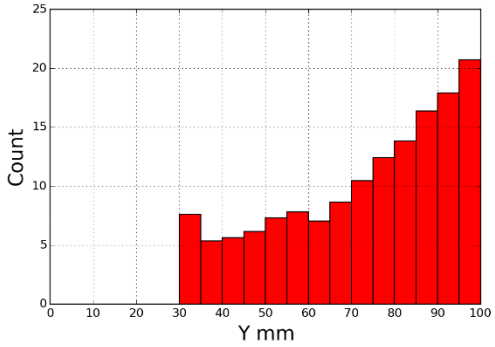


Figure B. 2788: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.1.2 Matched Only Droplets for .LA Image

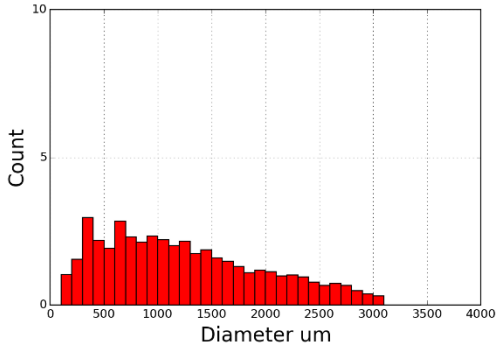


Figure B. 2791: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

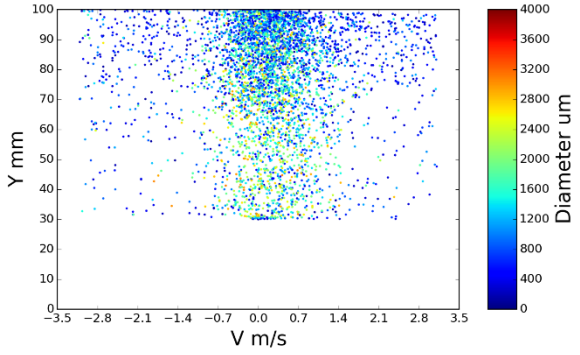


Figure B. 2794: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

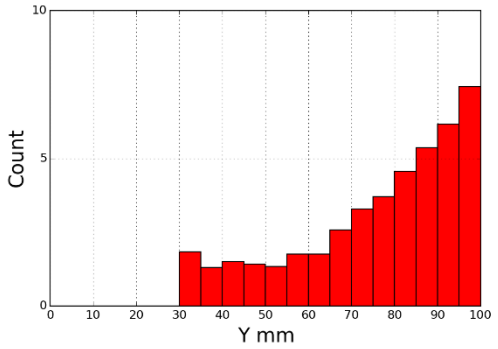


Figure B. 2792: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

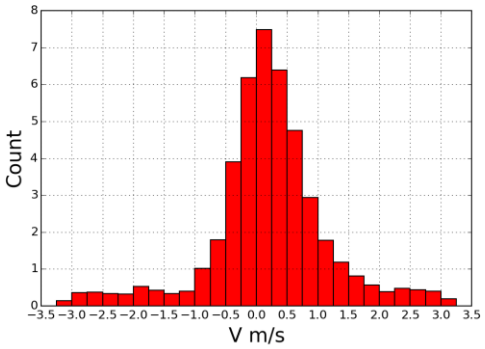


Figure B. 2795: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

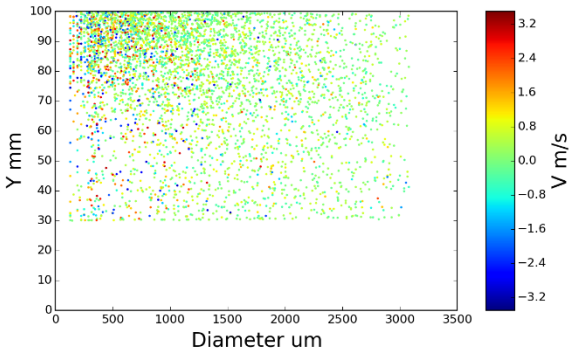


Figure B. 2793: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.1.2 Matched Only Droplets for .LB Image

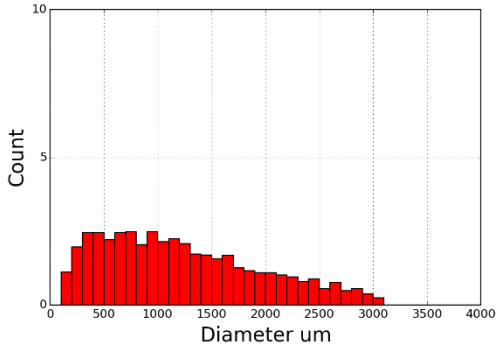


Figure B. 2796: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

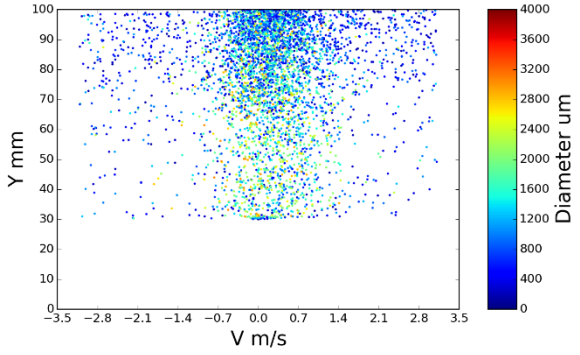


Figure B. 2799: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

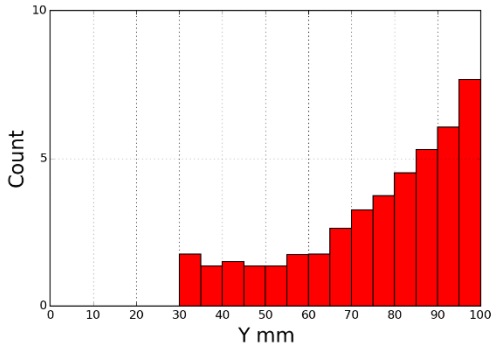


Figure B. 2797: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

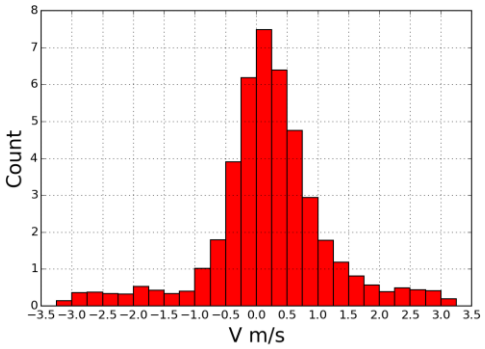


Figure B. 2800: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

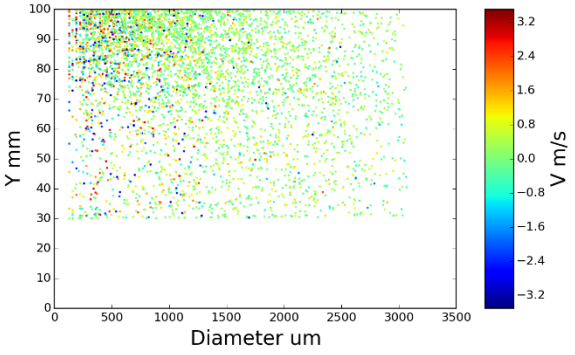


Figure B. 2798: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.2 Liquid Level 2

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	9996 / 1.259
Ref Mass Flow (lb/hr) / (kg/s)	3224 / 0.406
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	31378 / 42.557
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4896 / 15.45
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.1 / 12.84
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	56.7 / 13.72
Total Bundle Q (Btu/hr) / (kW)	152536 / 44.70
Total Bundle & Preboiler Q (Btu/hr) / (kW)	220841 / 64.72
Top Two Rows HTC Ratio	1.038
Bundle Inlet Quality	0.17
Bundle Exit Quality	0.8

Table B. 300: Thermal Conditions

B.7.2.1 Lens 100mm Mag 0_29x

B.7.2.1 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	92.58	97.53	57.3	3043	487.2	512.9	57.3	3040	472.1	513.0
40-60mm	161.48	173.38	57.3	3041	477.9	495.2	57.3	3035	466.5	491.3
60-80mm	146.06	147.74	57.3	3044	459.7	498.8	57.3	3041	447.0	495.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	405.01	423.22	57.3	3044	473.4	500.8	57.3	3041	460.9	498.0
			Height A (mm)				Height B (mm)			
Highest Particle			76.1192				76.1192			
Lowest Particle			28.2083				28.2083			

Table B. 301: 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	25.12	57.3	3023	759.7	627.3	57.3	2994	752.1	622.9	-3.140	3.170	-0.020	0.880	-3.120	3.170	0.670	1.040
40-60mm	40.69	57.3	3024	707.8	590.1	57.3	3009	695.0	581.4	-3.170	3.170	-0.010	0.910	-3.170	3.170	0.790	1.150
60-80mm	38.68	57.3	3037	694.6	592.2	57.3	3025	679.8	577.3	-3.170	3.170	-0.040	0.910	-3.160	3.170	0.860	1.140
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	104.49	57.3	3037	715.4	600.6	57.3	3025	702.8	590.6	-3.170	3.170	-0.020	0.900	-3.170	3.170	0.790	1.120

Table B. 302: Matched Droplet Info

B.7.2.1 All Droplets for .LA Image

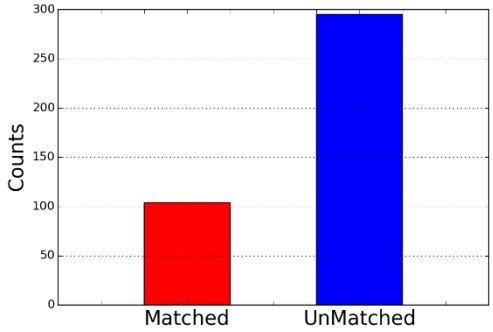


Figure B. 2801: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

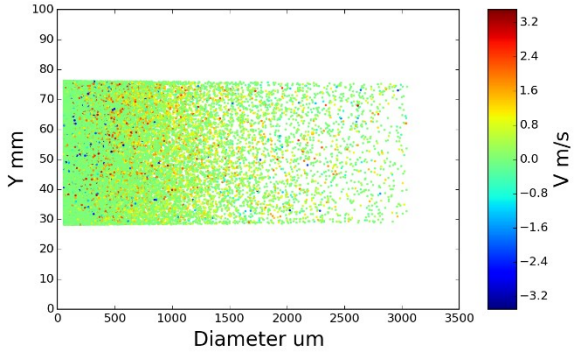


Figure B. 2804: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

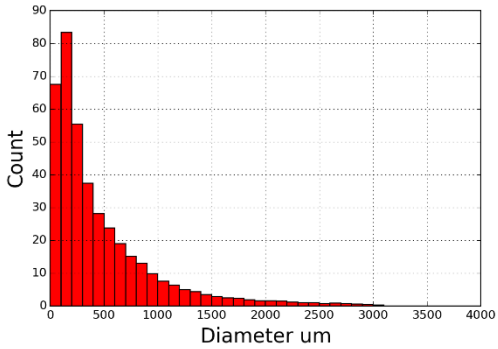


Figure B. 2802: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

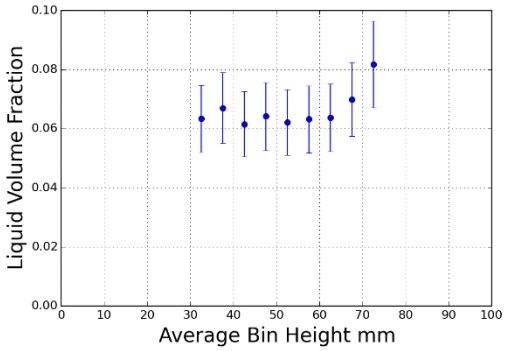


Figure B. 2805: Void Fraction R-123 55F 5000Btu 30000Lb Tri

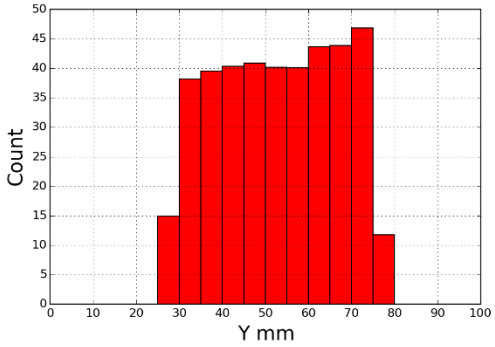


Figure B. 2803: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.2.1 All Droplets for .LB Image

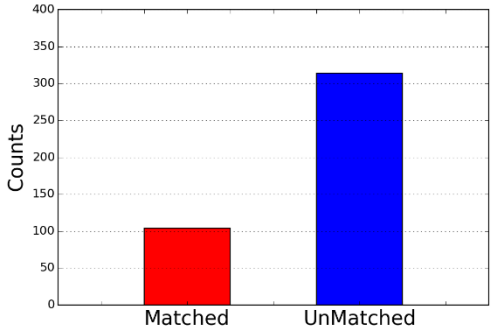


Figure B. 2806: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

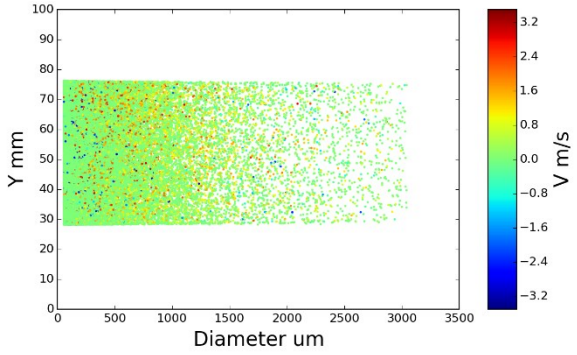


Figure B. 2809: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

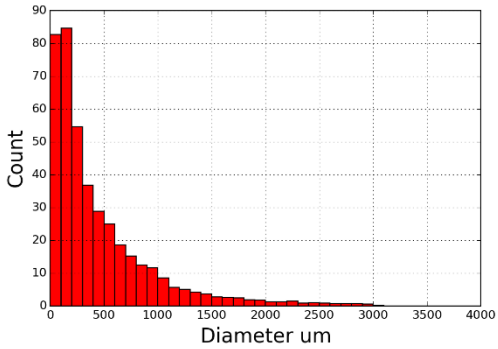


Figure B. 2807: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

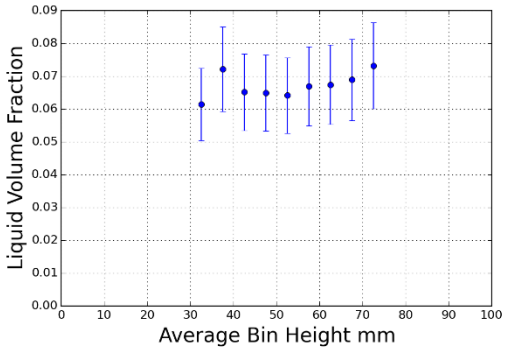


Figure B. 2810: Void Fraction R-123 55F 5000Btu 30000Lb Tri

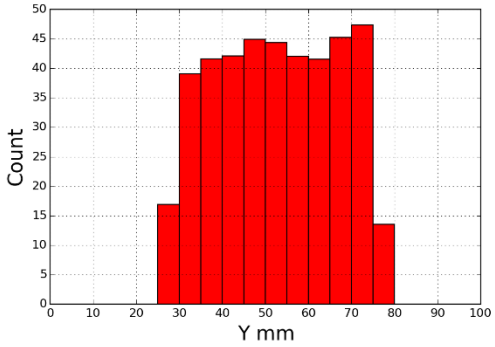


Figure B. 2808: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.2.1 Matched Only Droplets for .LA Image

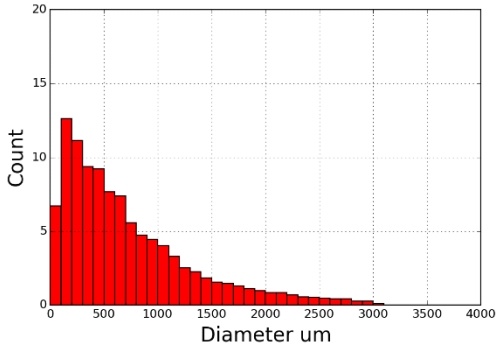


Figure B. 2811: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

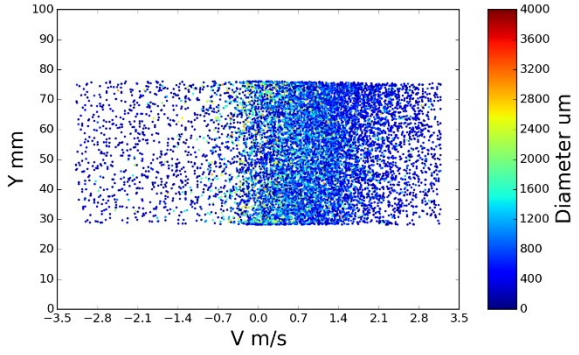


Figure B. 2814: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

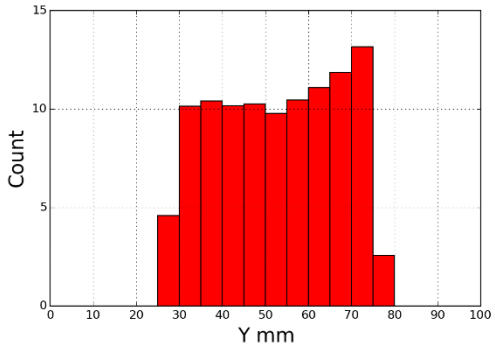


Figure B. 2812: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

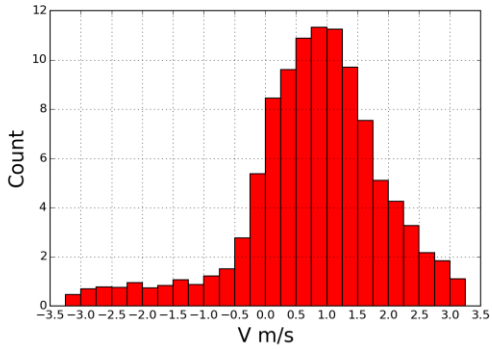


Figure B. 2815: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

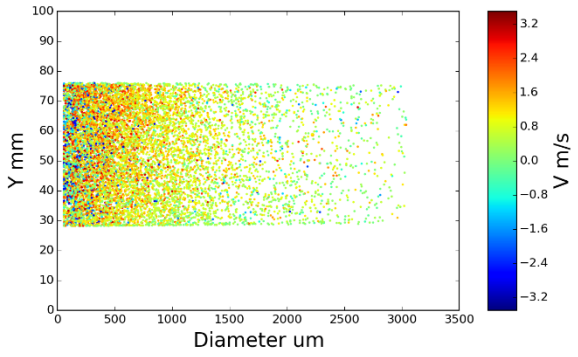


Figure B. 2813: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.2.1 Matched Only Droplets for .LB Image

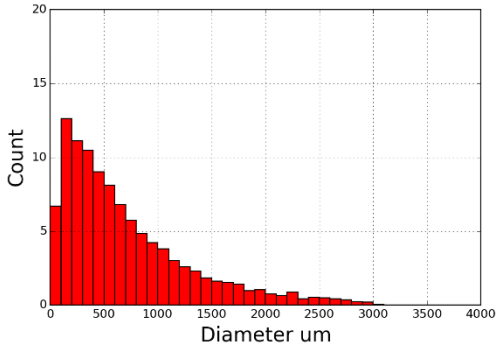


Figure B. 2816: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

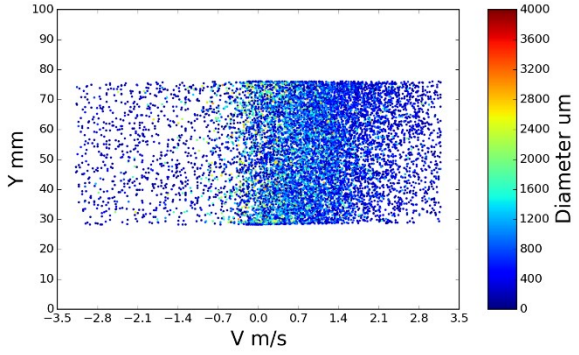


Figure B. 2819: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

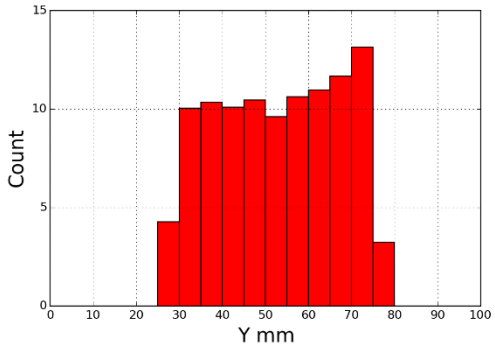


Figure B. 2817: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

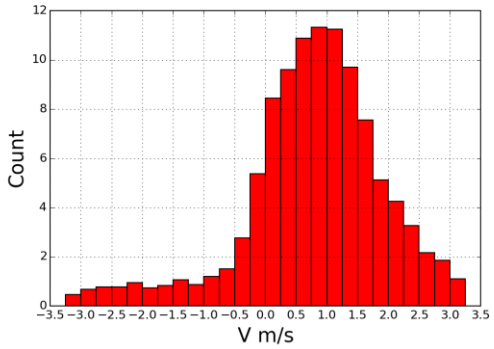


Figure B. 2820: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

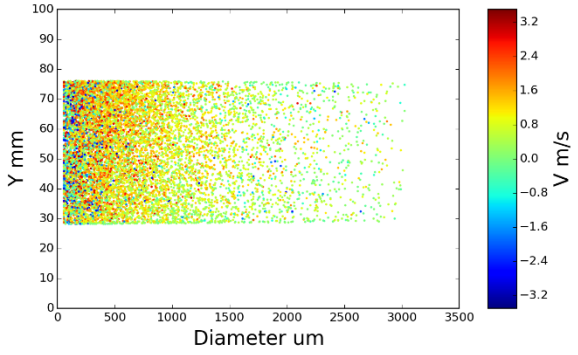


Figure B. 2818: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.2.1 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	50.46	54.63	57.3	3040	567.2	587.5	57.3	3042	497.6	579.2
40-60mm	98.7	109.25	57.3	3032	549.4	582.0	57.3	3044	488.6	570.3
60-80mm	83.87	97.8	57.3	3044	519.5	584.5	57.3	3037	463.9	559.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	236.73	265.58	57.3	3044	542.5	584.4	57.3	3044	481.3	568.5
			Height A (mm)				Height B (mm)			
Highest Particle			76.1192				76.1192			
Lowest Particle			28.2083				28.2083			

Table B. 303: 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	11.63	57.3	2987	946.3	682.4	57.3	2998	937.5	681.0	-3.170	3.070	0.000	0.810	-3.120	3.170	0.620	1.040
40-60mm	21.32	57.3	3027	945.6	705.3	57.3	3044	926.2	691.8	-3.170	3.170	-0.050	0.920	-3.170	3.170	0.750	1.050
60-80mm	19.74	57.3	3044	869.3	696.0	57.3	3037	848.4	675.9	-3.170	3.170	-0.050	0.920	-3.170	3.170	0.740	1.100
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	52.69	57.3	3044	917.1	697.8	57.3	3044	899.1	684.6	-3.170	3.170	-0.040	0.900	-3.170	3.170	0.720	1.070

Table B. 304: Matched Droplet Info

B.7.2.1 All Droplets for .LA Image

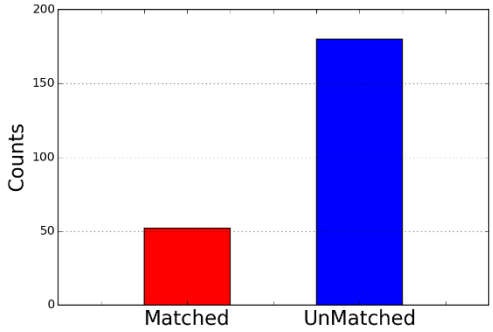


Figure B. 2821: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

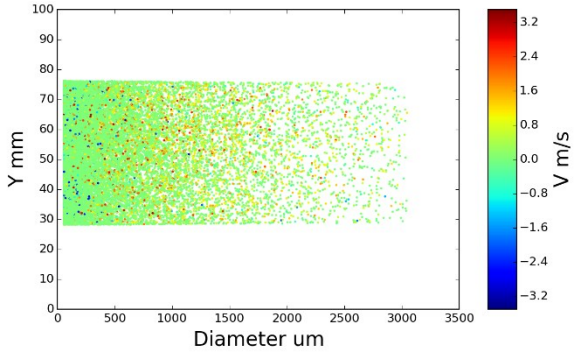


Figure B. 2824: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

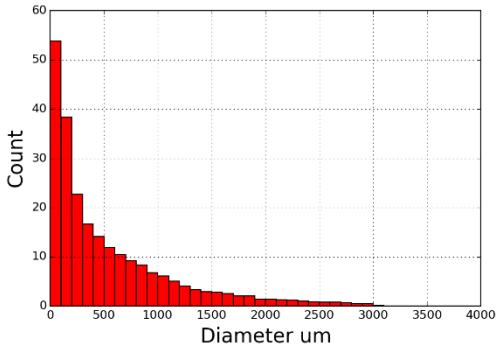


Figure B. 2822: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

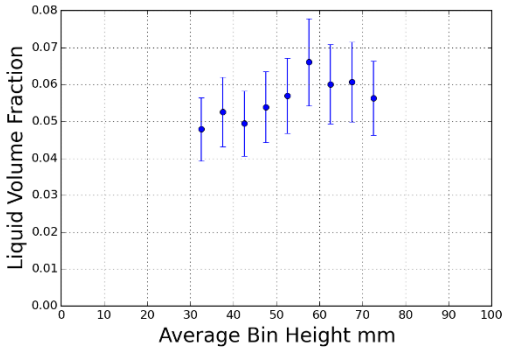


Figure B. 2825: Void Fraction R-123 55F 5000Btu 30000Lb Tri

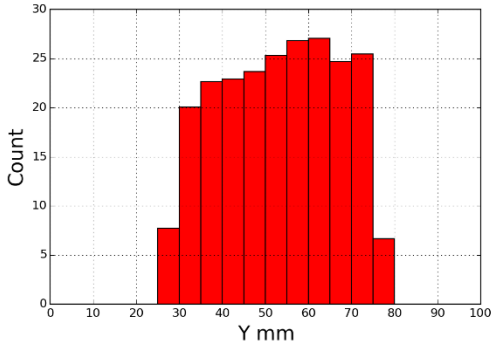


Figure B. 2823: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.2.1 All Droplets for .LB Image

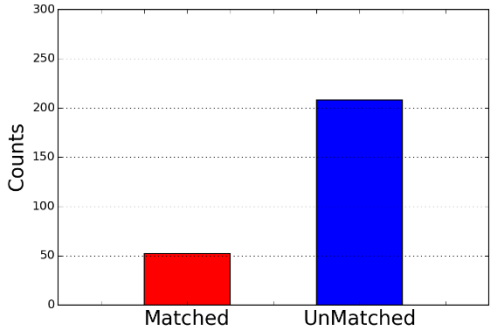


Figure B. 2826: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

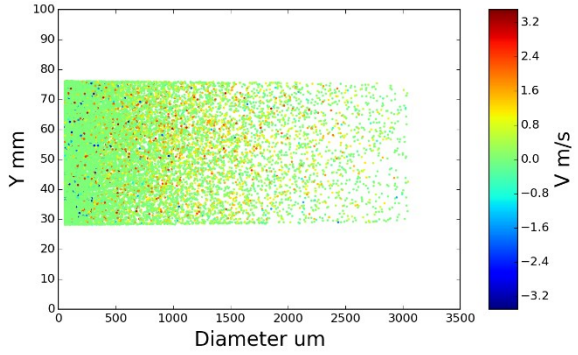


Figure B. 2829: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

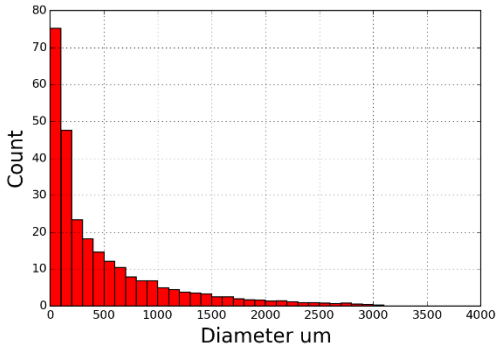


Figure B. 2827: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

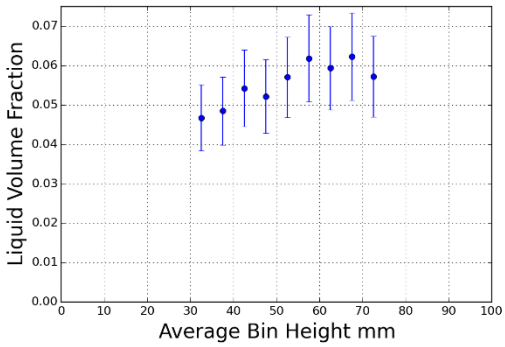


Figure B. 2830: Void Fraction R-123 55F 5000Btu 30000Lb Tri

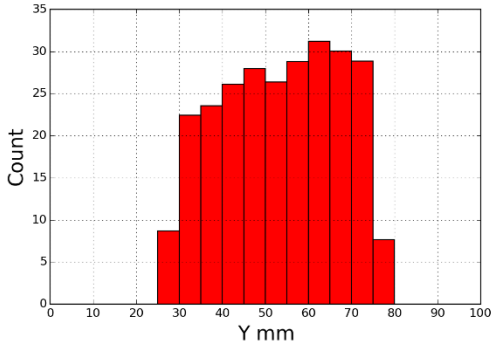


Figure B. 2828: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.2.1 Matched Only Droplets for .LA Image

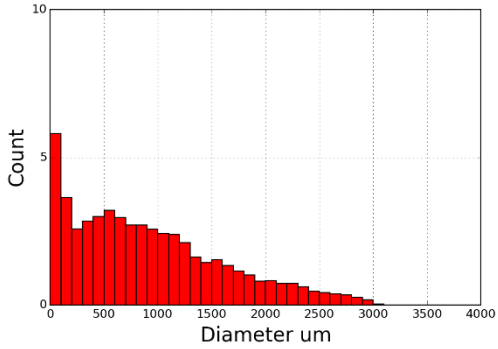


Figure B. 2831: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

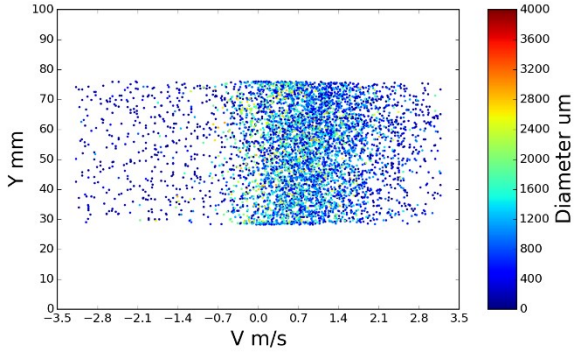


Figure B. 2834: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

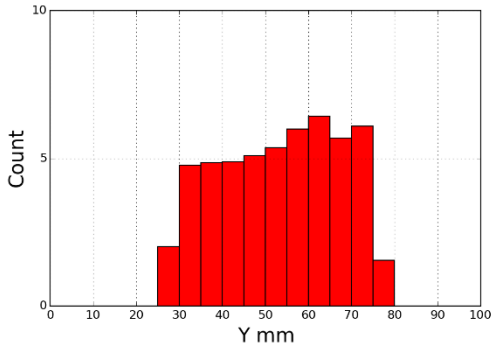


Figure B. 2832: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

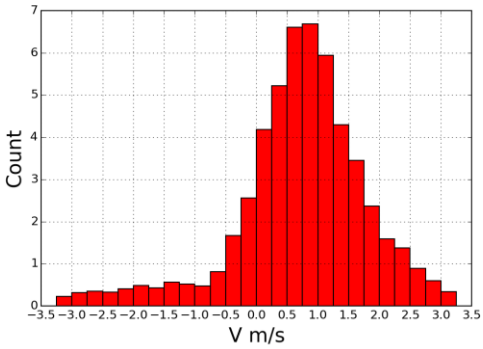


Figure B. 2835: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

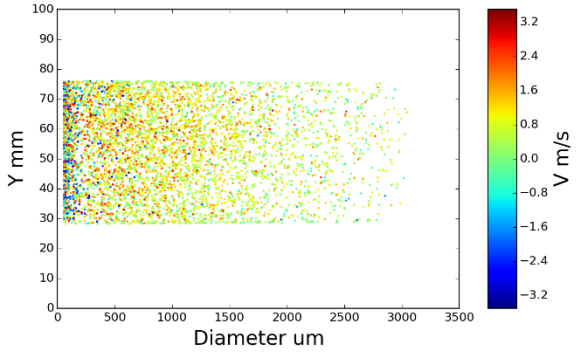


Figure B. 2833: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.2.1 Matched Only Droplets for .LB Image

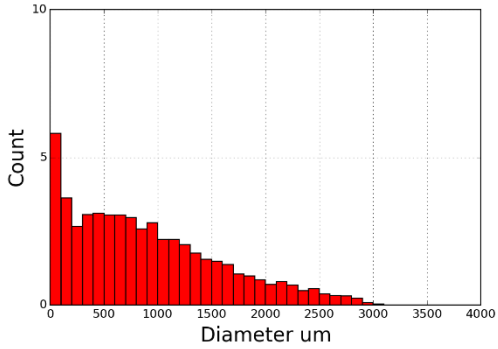


Figure B. 2836: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

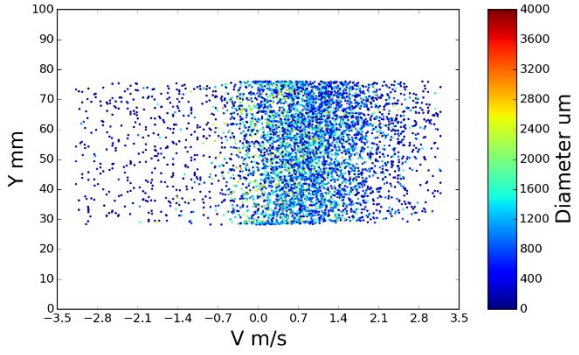


Figure B. 2839: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

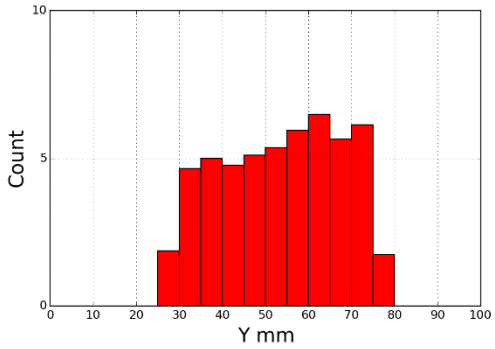


Figure B. 2837: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

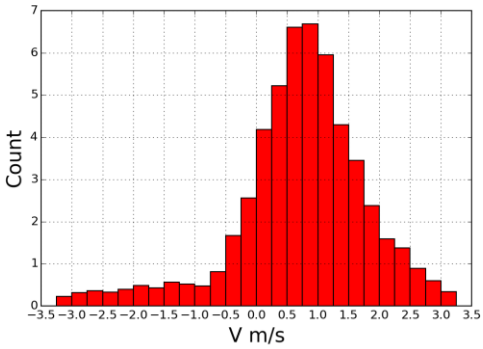


Figure B. 2840: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

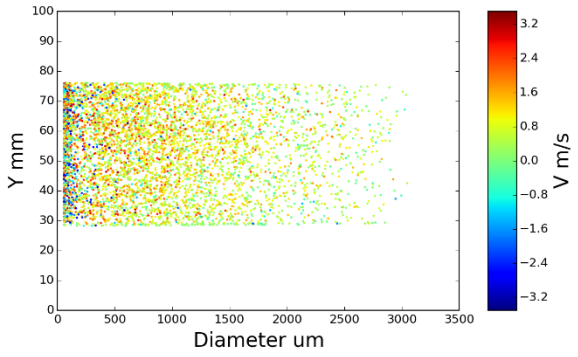


Figure B. 2838: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.2.1 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	41.09	49.08	57.3	3033	449.7	600.3	57.3	3041	408.8	568.8
40-60mm	86.47	115.4	57.3	3038	405.7	564.5	57.3	3040	373.1	506.0
60-80mm	72.78	84.64	57.3	3045	416.7	575.1	57.3	3041	373.8	542.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	202.26	252.36	57.3	3045	418.7	576.1	57.3	3041	380.4	531.4
			Height A (mm)				Height B (mm)			
Highest Particle			76.1192				76.1192			
Lowest Particle			28.2083				28.2083			

Table B. 305: 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	7.94	57.3	3006	827.0	828.4	57.3	3011	815.5	814.1	-3.170	3.170	-0.010	1.250	-3.170	3.170	0.470	1.300
40-60mm	14.79	57.3	3019	726.5	783.5	57.3	3033	712.0	767.0	-3.170	3.170	-0.040	1.310	-3.170	3.170	0.430	1.460
60-80mm	13.04	57.3	3045	765.0	785.4	57.3	3041	752.1	771.8	-3.170	3.170	-0.030	1.240	-3.170	3.170	0.550	1.360
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	35.77	57.3	3045	762.8	795.3	57.3	3041	749.5	780.4	-3.170	3.170	-0.030	1.270	-3.170	3.170	0.480	1.390

Table B. 306: Matched Droplet Info

B.7.2.1 All Droplets for .LA Image

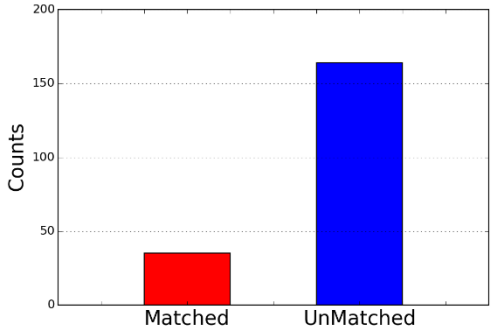


Figure B. 2841: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

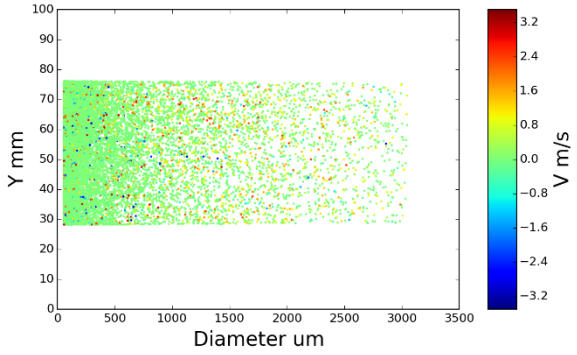


Figure B. 2844: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

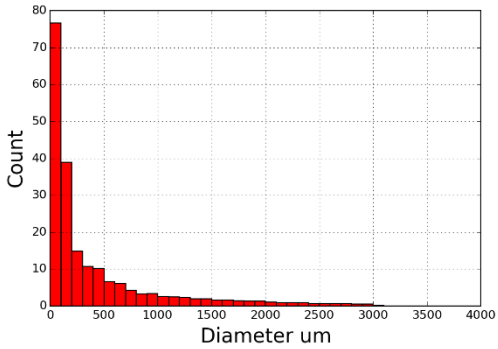


Figure B. 2842: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

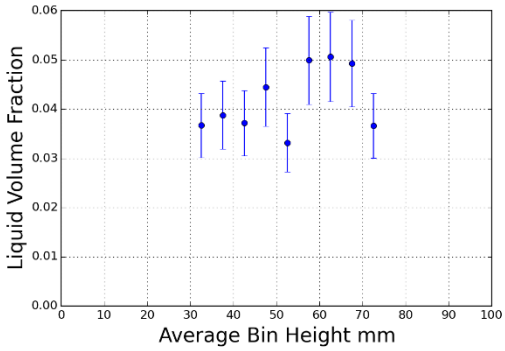


Figure B. 2845: Void Fraction R-123 55F 5000Btu 30000Lb Tri

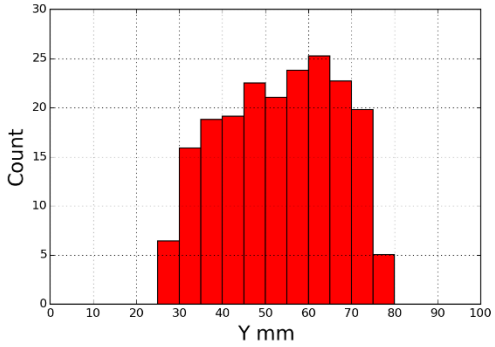


Figure B. 2843: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.2.1 All Droplets for .LB Image

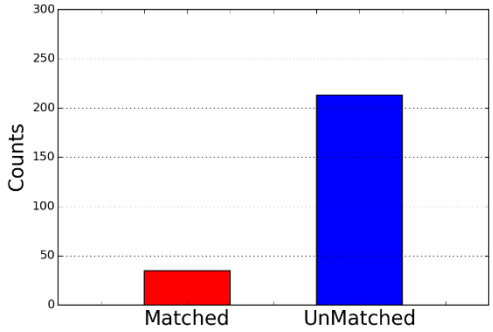


Figure B. 2846: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

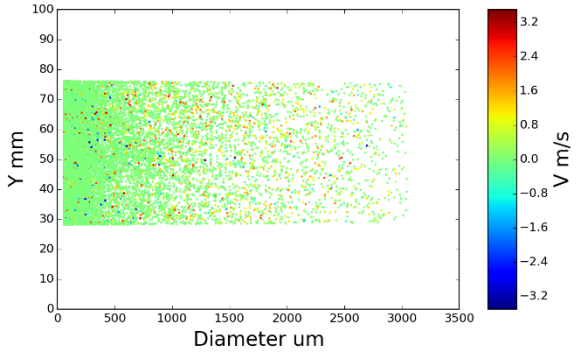


Figure B. 2849: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

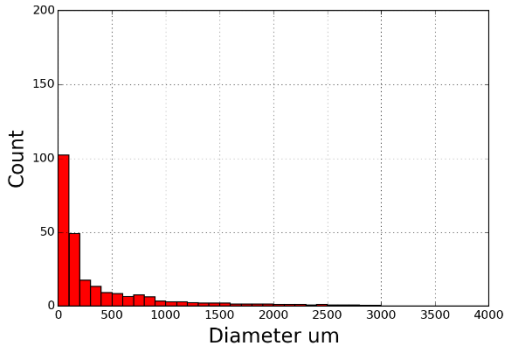


Figure B. 2847: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

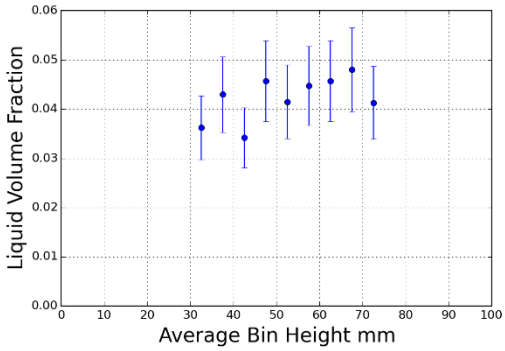


Figure B. 2850: Void Fraction R-123 55F 5000Btu 30000Lb Tri

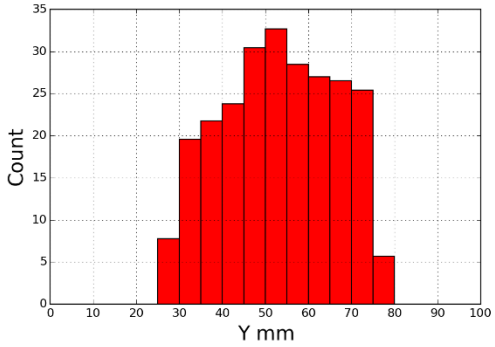


Figure B. 2848: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.2.1 Matched Only Droplets for .LA Image

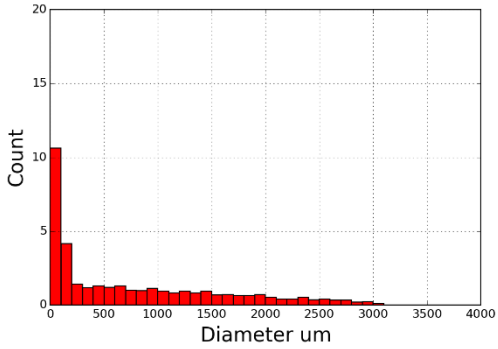


Figure B. 2851: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

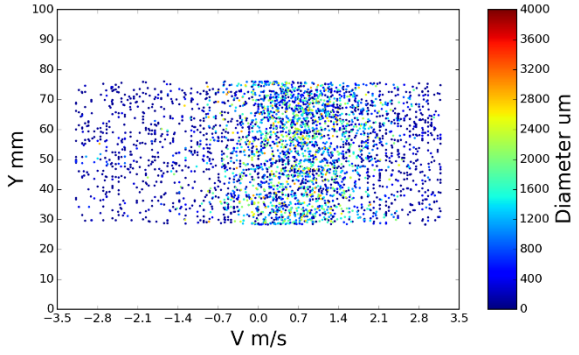


Figure B. 2854: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

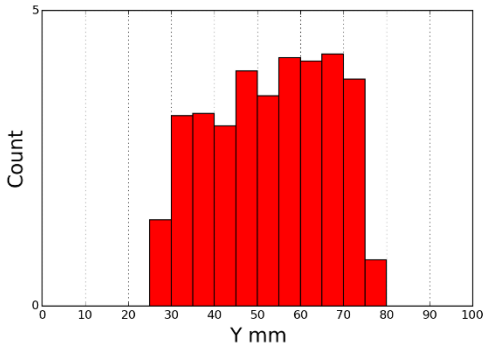


Figure B. 2852: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

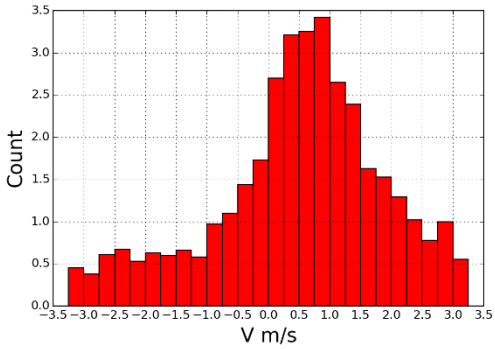


Figure B. 2855: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

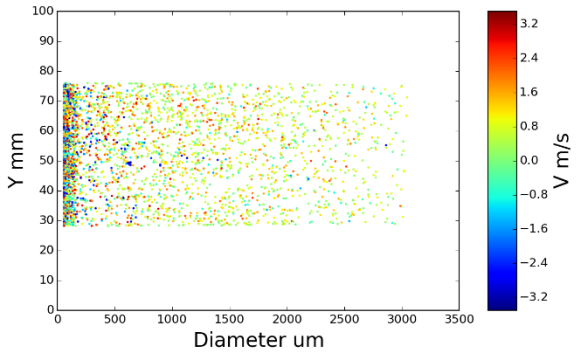


Figure B. 2853: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.2.1 Matched Only Droplets for .LB Image

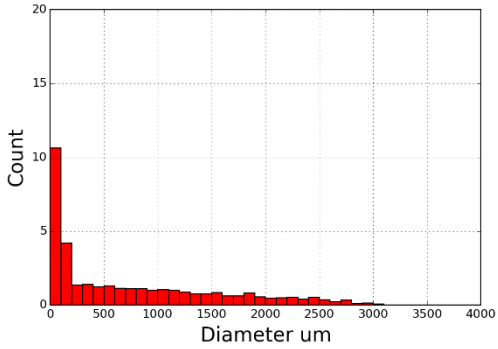


Figure B. 2856: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

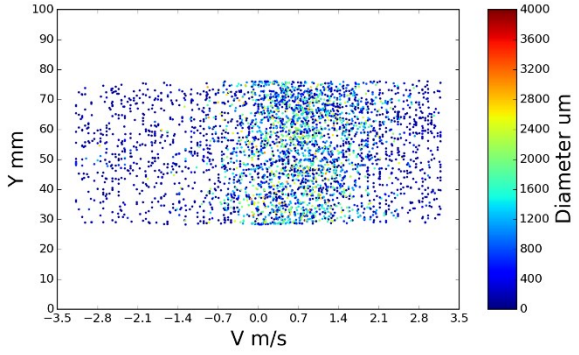


Figure B. 2859: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

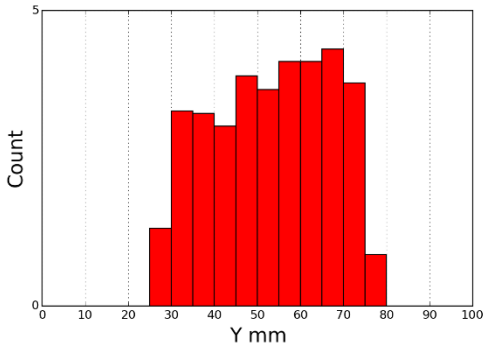


Figure B. 2857: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

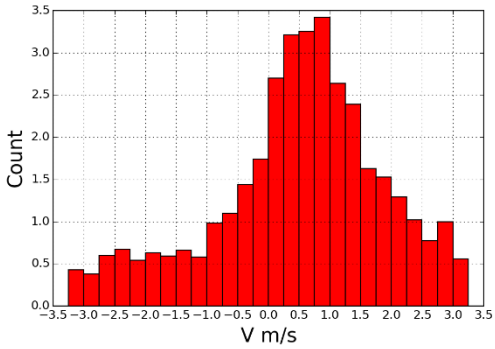


Figure B. 2860: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

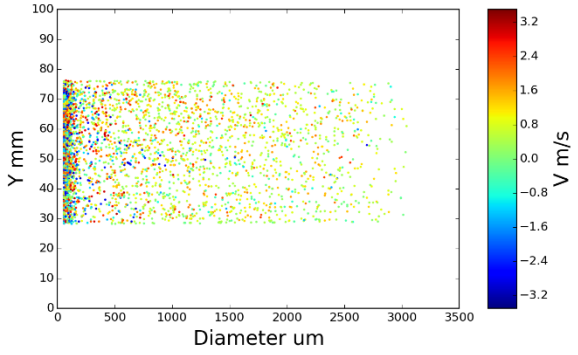


Figure B. 2858: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.2.2 Lens 50mm Mag 0_13x

B.7.2.2 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	135.87	136.46	128.7	3075	598.3	521.6	128.7	3079	598.4	520.3
40-60mm	150.87	150.13	128.7	3075	585.3	509.9	128.7	3078	587.0	514.0
60-80mm	134.03	133.7	128.7	3078	605.7	524.1	128.7	3073	607.7	529.2
80-100mm	111.7	111.52	128.7	3079	568.9	462.6	128.7	3077	566.8	454.9
All	532.55	531.86	128.7	3079	590.3	507.2	128.7	3079	590.9	508.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.9736				99.9736			
Lowest Particle			20.0746				20.0746			

Table B. 307: 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	48.09	128.7	3062	730.3	583.5	128.7	3075	720.5	580.6	-3.110	3.110	-0.070	1.270	-3.110	3.110	0.440	1.330
40-60mm	53.69	128.7	3070	692.5	551.9	128.7	3018	682.3	545.4	-3.110	3.110	-0.100	1.310	-3.110	3.110	0.500	1.430
60-80mm	50.46	128.7	3078	735.4	579.2	128.7	3071	726.7	572.5	-3.110	3.110	-0.080	1.200	-3.110	3.110	0.610	1.360
80-100mm	44.68	128.7	3079	691.2	503.3	128.7	3050	681.8	499.6	-3.110	3.110	-0.030	1.040	-3.110	3.110	0.670	1.270
All	196.92	128.7	3079	712.4	556.8	128.7	3075	702.7	551.5	-3.110	3.110	-0.070	1.220	-3.110	3.110	0.550	1.360

Table B. 308: Matched Droplet Info

B.7.2.2 All Droplets for .LA Image

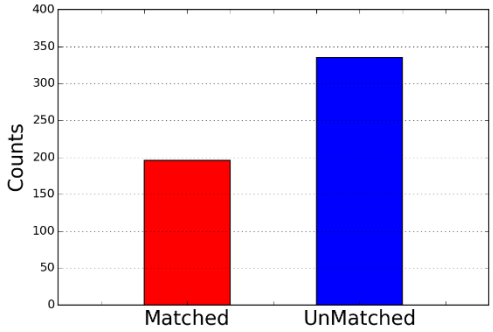


Figure B. 2861: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

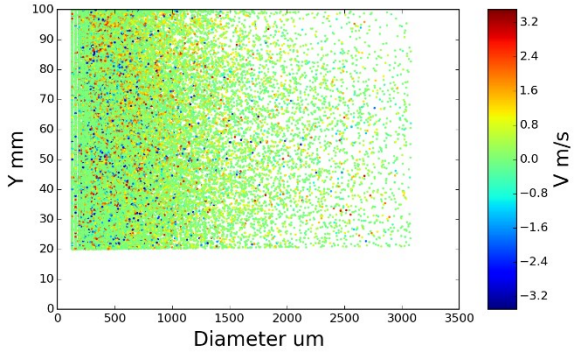


Figure B. 2864: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

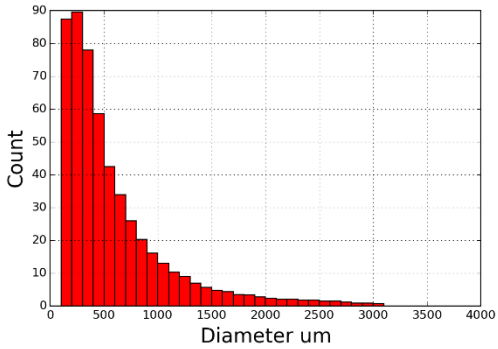


Figure B. 2862: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

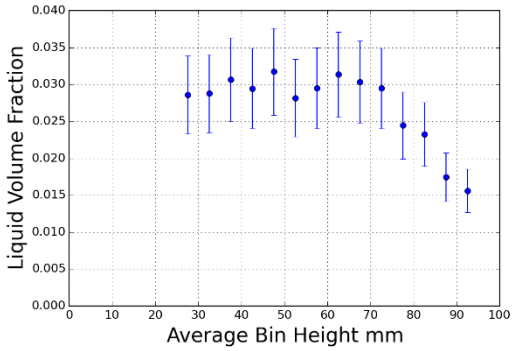


Figure B. 2865: Void Fraction R-123 55F 5000Btu 30000Lb Tri

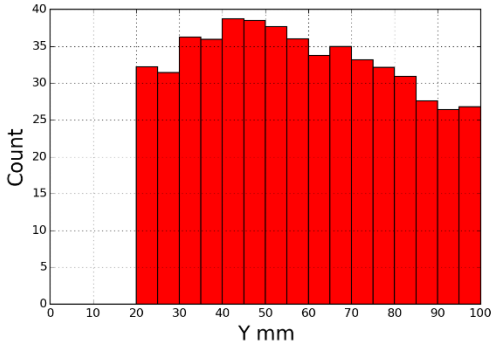


Figure B. 2863: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.2.2 All Droplets for .LB Image

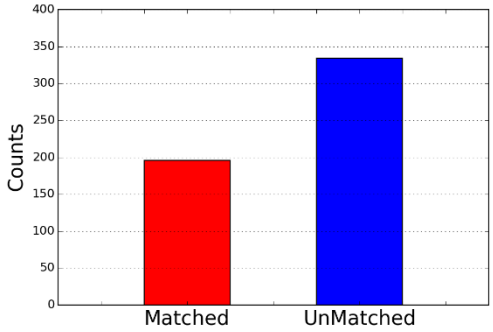


Figure B. 2866: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

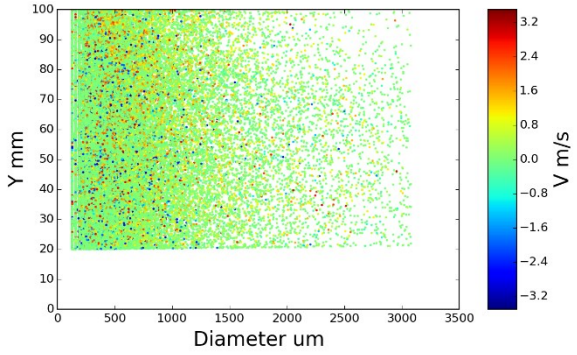


Figure B. 2869: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

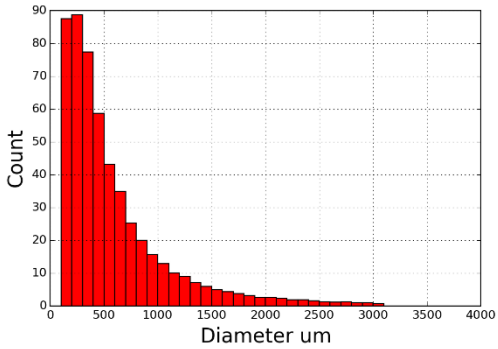


Figure B. 2867: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

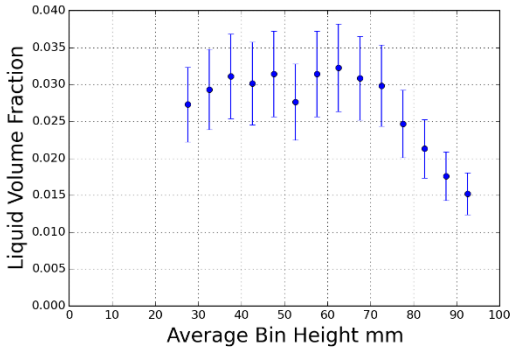


Figure B. 2870: Void Fraction R-123 55F 5000Btu 30000Lb Tri

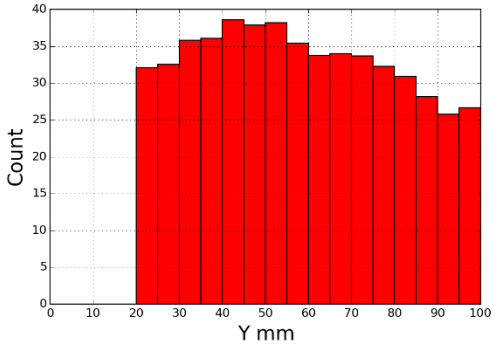


Figure B. 2868: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.2.2 Matched Only Droplets for .LA Image

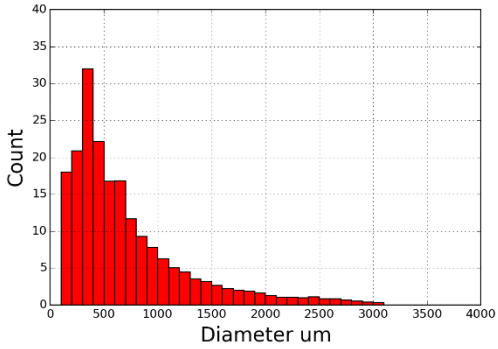


Figure B. 2871: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

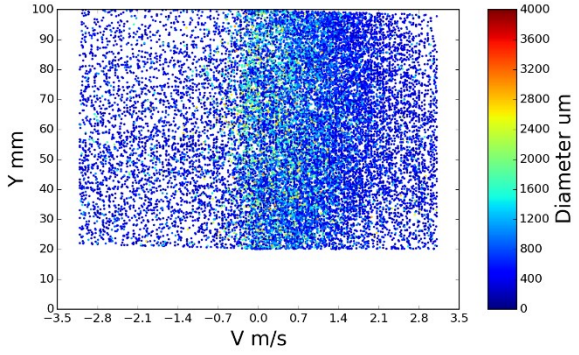


Figure B. 2874: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

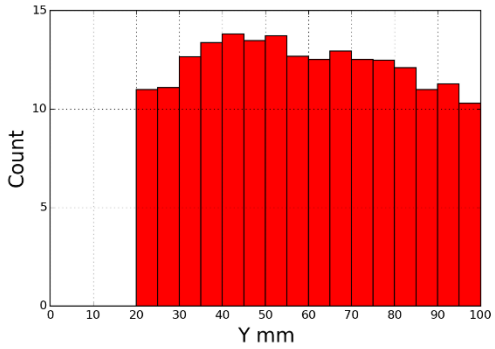


Figure B. 2872: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

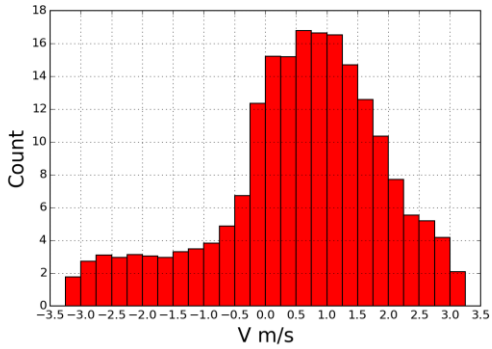


Figure B. 2875: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

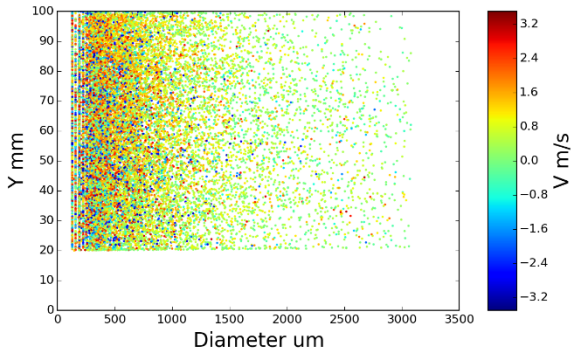


Figure B. 2873: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.2.2 Matched Only Droplets for .LB Image

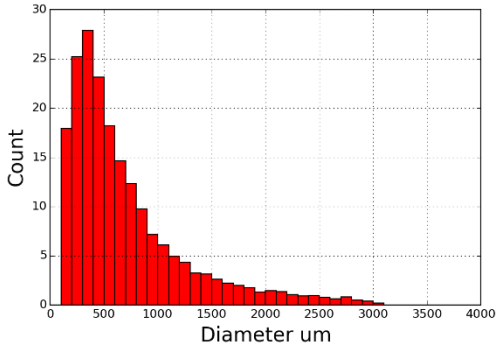


Figure B. 2876: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

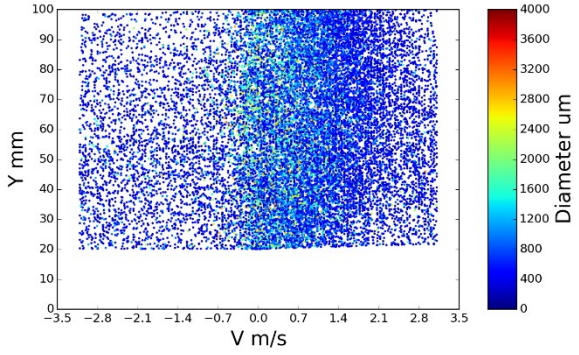


Figure B. 2879: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

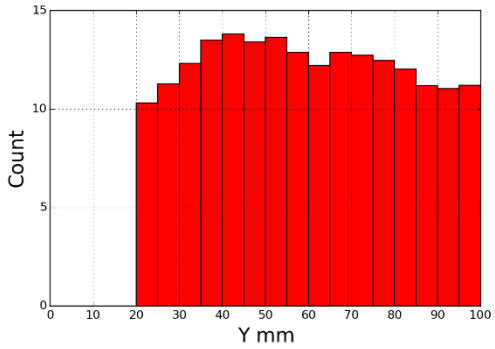


Figure B. 2877: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

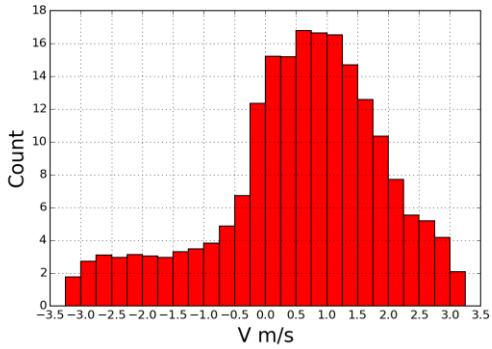


Figure B. 2880: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

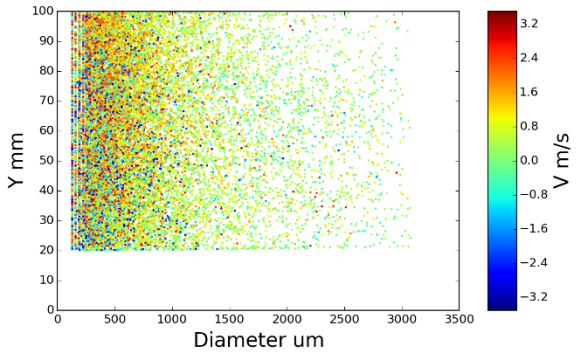


Figure B. 2878: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.2.2 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	78.56	77.42	128.7	3071	724.4	588.2	128.7	3078	723.4	590.1
40-60mm	74.67	73.49	128.7	3078	756.5	594.2	128.7	3077	744.1	587.4
60-80mm	84.19	82.08	128.7	3080	728.5	588.9	128.7	3059	735.8	594.1
80-100mm	78.26	79.97	128.7	3022	661.4	498.9	128.7	3075	657.0	503.1
All	316.18	313.25	128.7	3080	717.5	570.1	128.7	3078	714.5	570.6
			Height A (mm)				Height B (mm)			
Highest Particle			99.9736				99.9736			
Lowest Particle			20.0746				20.0746			

Table B. 309: 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	24.38	128.7	3071	931.1	638.6	128.7	3078	918.1	635.1	-3.110	3.110	-0.040	1.100	-3.110	3.110	0.460	1.210
40-60mm	23.95	128.7	3067	968.4	645.3	128.7	3065	954.0	637.1	-3.110	3.110	-0.070	1.020	-3.110	3.110	0.600	1.200
60-80mm	29.62	128.7	3080	935.0	638.6	128.7	3054	926.6	637.4	-3.110	3.110	-0.050	1.050	-3.110	3.110	0.590	1.230
80-100mm	30.93	128.7	3022	828.5	544.0	128.7	3067	815.8	537.4	-3.110	3.110	-0.040	0.960	-3.110	3.110	0.620	1.120
All	108.88	128.7	3080	911.2	617.1	128.7	3078	898.6	611.9	-3.110	3.110	-0.050	1.030	-3.110	3.110	0.570	1.190

Table B. 310: Matched Droplet Info

B.7.2.2 All Droplets for .LA Image

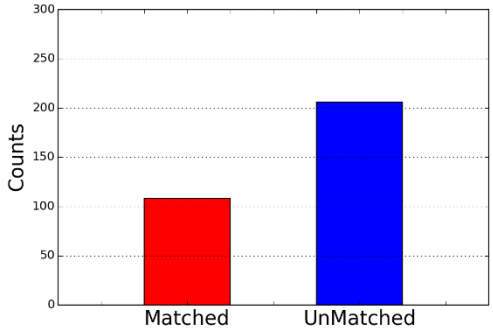


Figure B. 2881: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

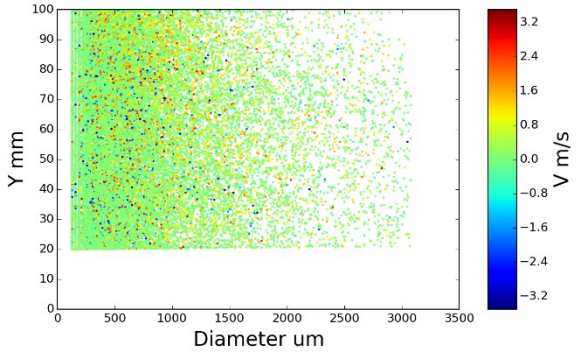


Figure B. 2884: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

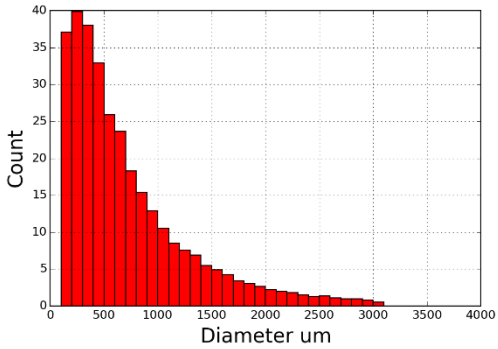


Figure B. 2882: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

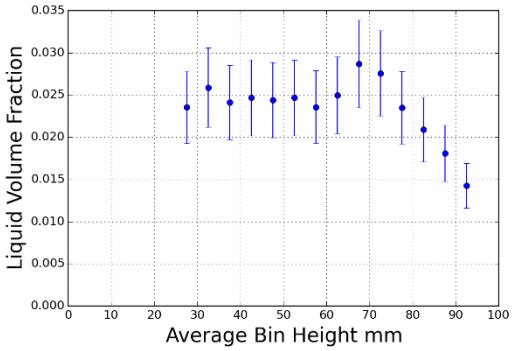


Figure B. 2885: Void Fraction R-123 55F 5000Btu 30000Lb Tri

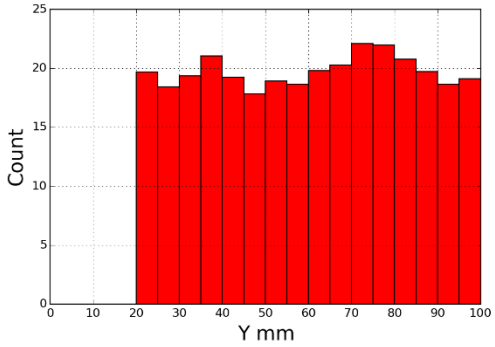


Figure B. 2883: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.2.2 All Droplets for .LB Image

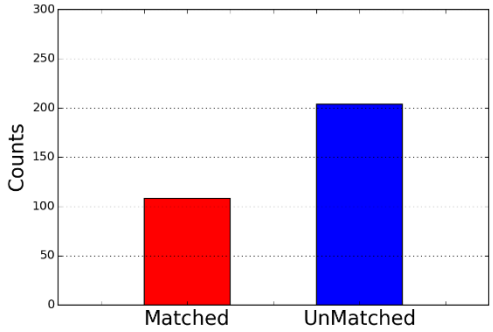


Figure B. 2886: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

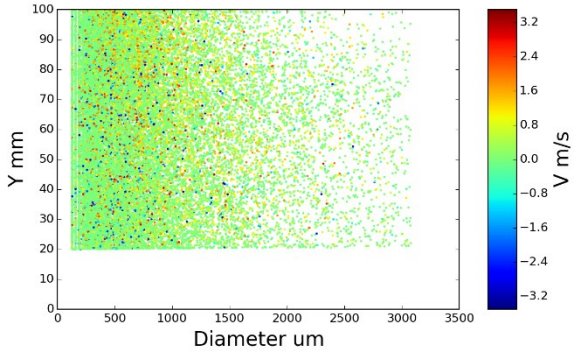


Figure B. 2889: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

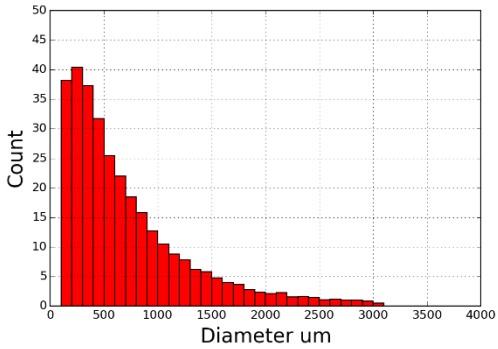


Figure B. 2887: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

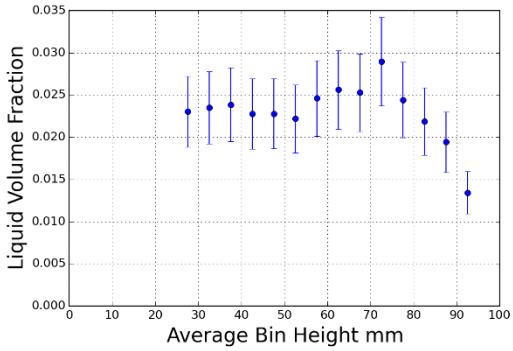


Figure B. 2890: Void Fraction R-123 55F 5000Btu 30000Lb Tri

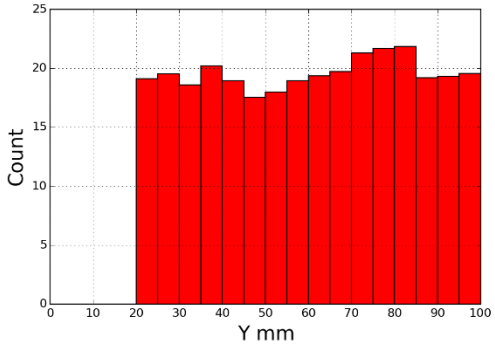


Figure B. 2888: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.2.2 Matched Only Droplets for .LA Image

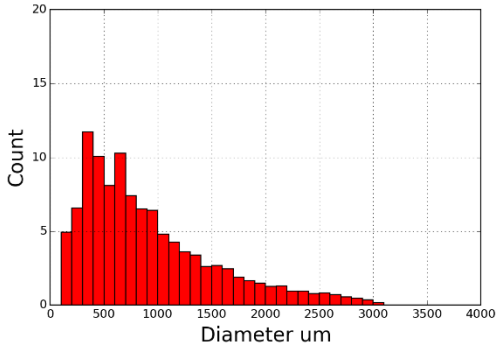


Figure B. 2891: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

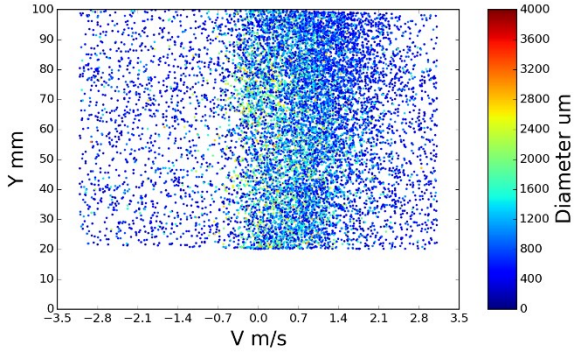


Figure B. 2894: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

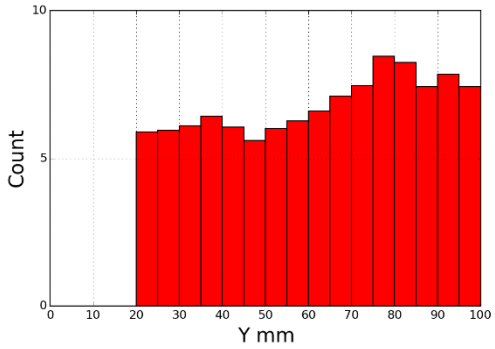


Figure B. 2892: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

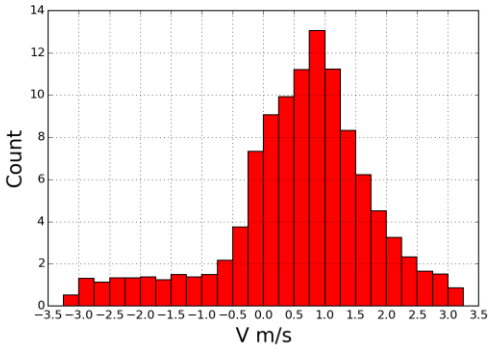


Figure B. 2895: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

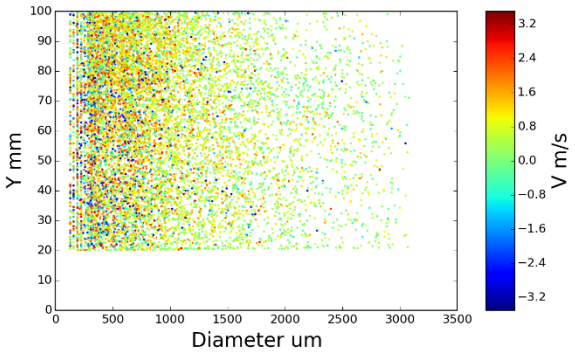


Figure B. 2893: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.2.2 Matched Only Droplets for .LB Image

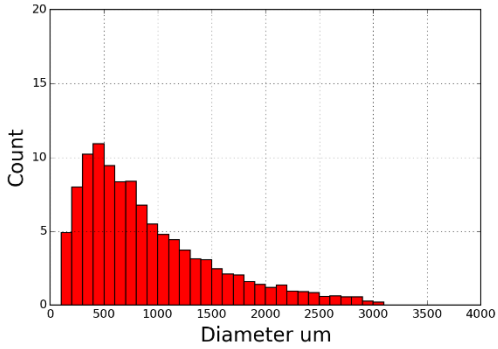


Figure B. 2896: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

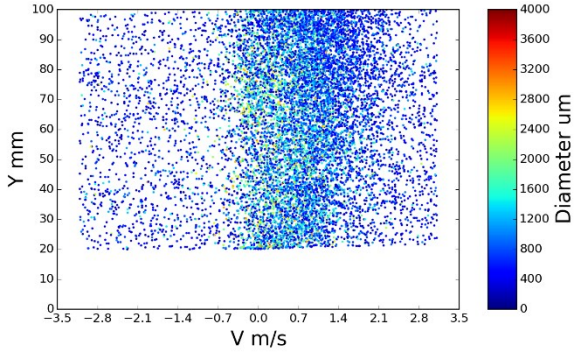


Figure B. 2899: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

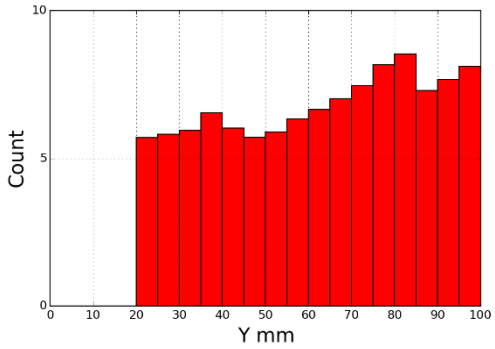


Figure B. 2897: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

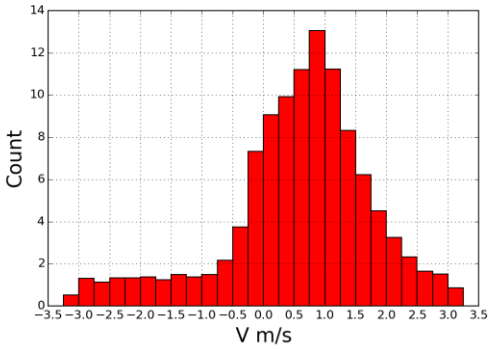


Figure B. 2900: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

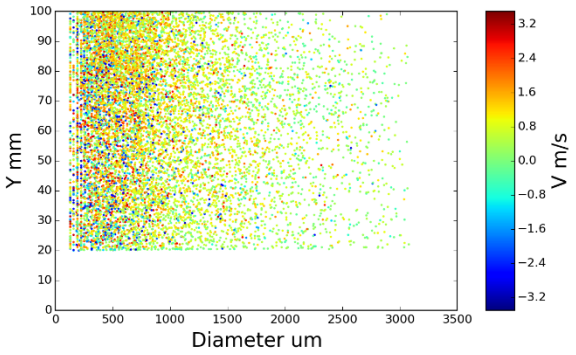


Figure B. 2898: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.2.2 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	45.95	46.68	128.7	3078	846.8	666.4	128.7	3077	844.0	668.9
40-60mm	44.14	45.49	128.7	3069	909.8	685.0	128.7	3080	900.6	683.5
60-80mm	51.93	51.2	128.7	3075	836.2	650.5	128.7	3074	841.0	662.7
80-100mm	48.52	49.11	128.7	3065	712.3	526.5	128.7	3073	710.5	534.9
All	190.59	192.48	128.7	3078	824.3	637.8	128.7	3080	822.5	643.1
			Height A (mm)				Height B (mm)			
Highest Particle			99.9736				99.9736			
Lowest Particle			20.0746				20.0746			

Table B. 311: 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	13.79	128.7	3054	1182	708.5	128.7	3073	1173	708.0	-3.090	3.080	-0.020	0.860	-3.080	3.010	0.490	1.030
40-60mm	14.38	128.7	3065	1251	708.9	128.7	3060	1231	711.9	-3.110	3.090	0.010	0.870	-3.100	3.110	0.670	1.010
60-80mm	16.59	128.7	3075	1129	697.3	128.7	3059	1121	691.2	-3.110	3.110	-0.060	0.850	-3.110	3.110	0.580	1.040
80-100mm	16.56	128.7	3060	947.3	580.0	128.7	3048	935.9	571.3	-3.080	3.110	-0.020	0.810	-3.110	3.080	0.580	1.040
All	61.32	128.7	3075	1120	682.7	128.7	3073	1107	678.6	-3.110	3.110	-0.030	0.850	-3.110	3.110	0.580	1.040

Table B. 312: Matched Droplet Info

B.7.2.2 All Droplets for .LA Image

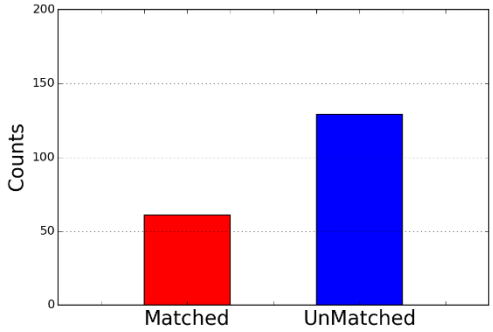


Figure B. 2901: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

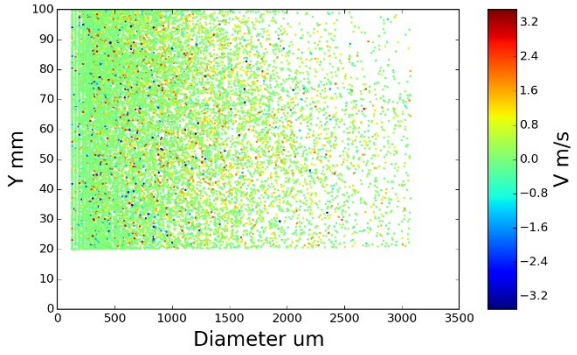


Figure B. 2904: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

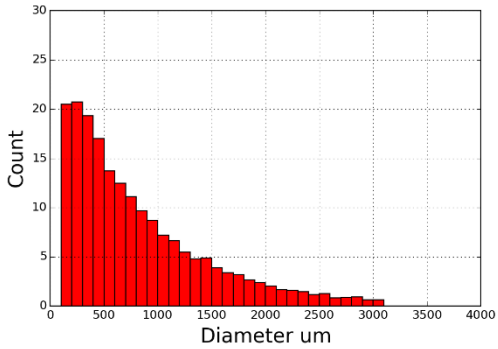


Figure B. 2902: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

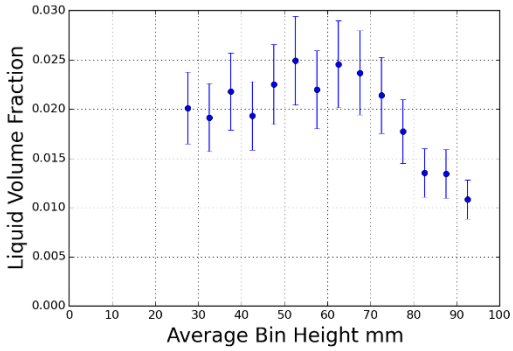


Figure B. 2905: Void Fraction R-123 55F 5000Btu 30000Lb Tri

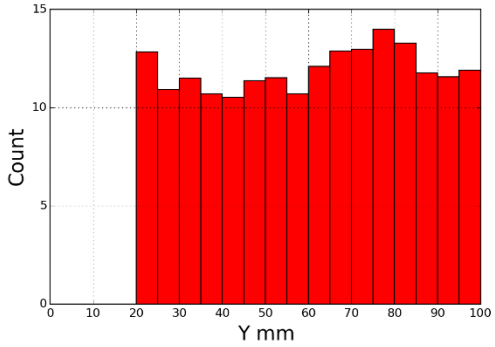


Figure B. 2903: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.2.2 All Droplets for .LB Image

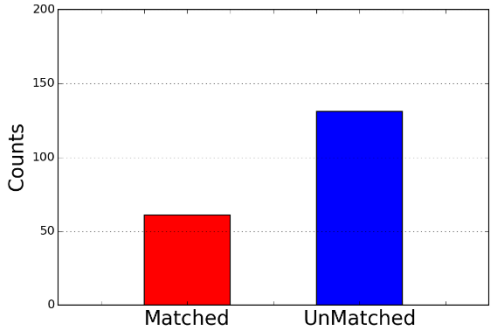


Figure B. 2906: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

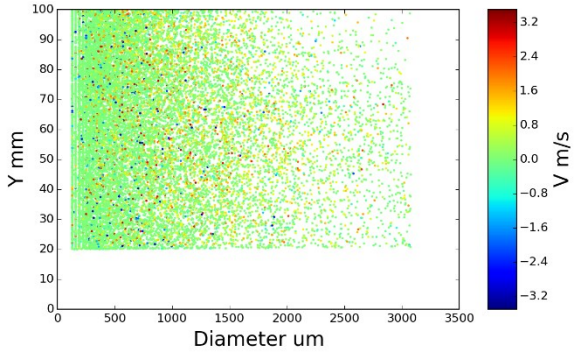


Figure B. 2909: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

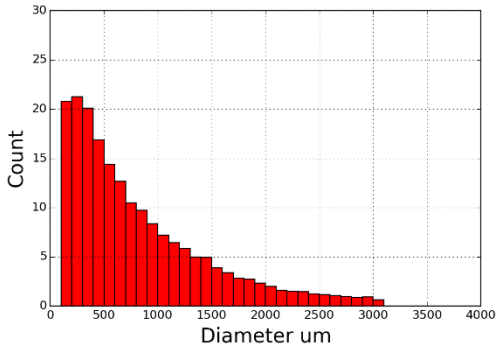


Figure B. 2907: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

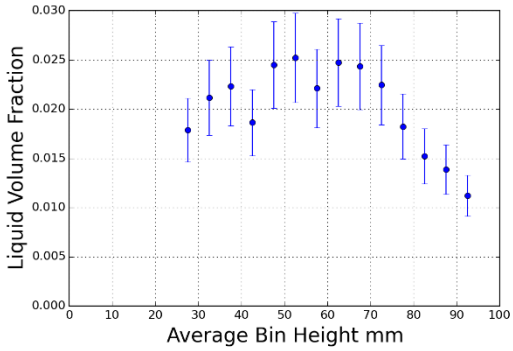


Figure B. 2910: Void Fraction R-123 55F 5000Btu 30000Lb Tri

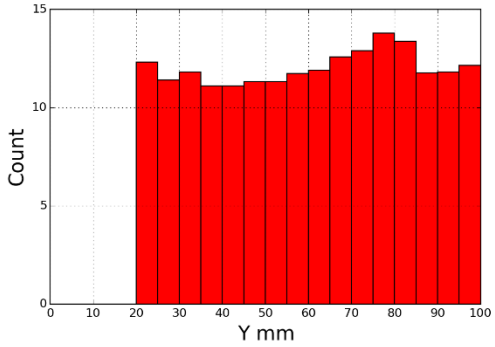


Figure B. 2908: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.2.2 Matched Only Droplets for .LA Image

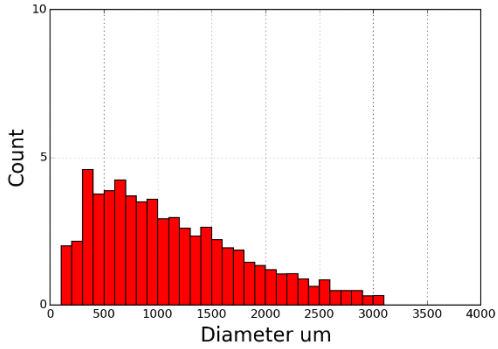


Figure B. 2911: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

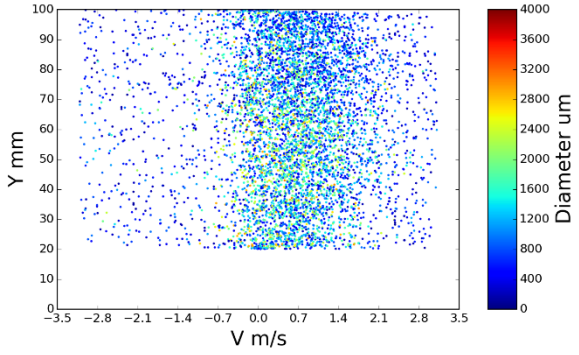


Figure B. 2914: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

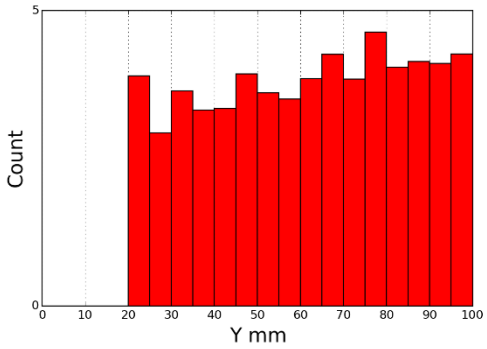


Figure B. 2912: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

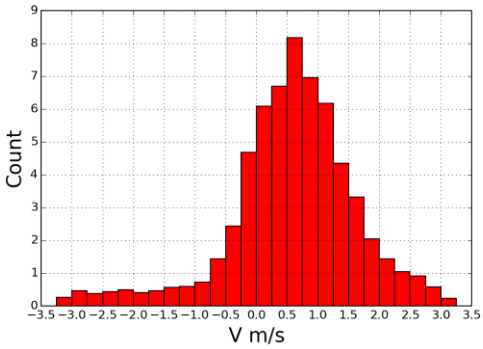


Figure B. 2915: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

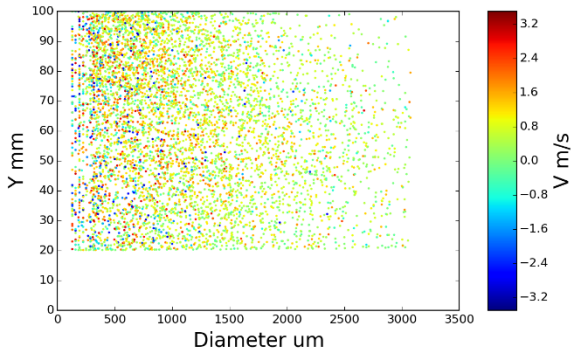


Figure B. 2913: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.2.2 Matched Only Droplets for .LB Image

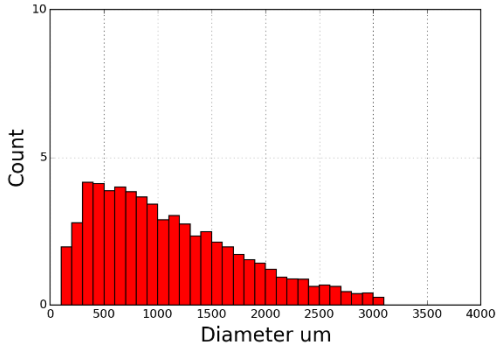


Figure B. 2916: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

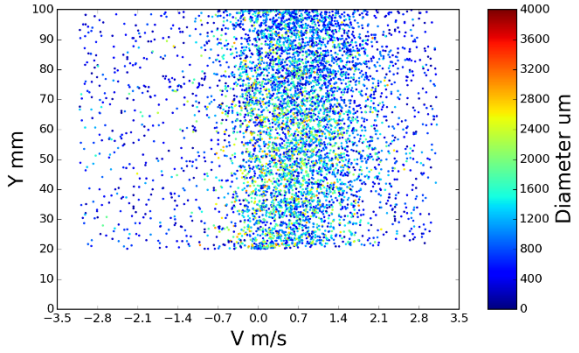


Figure B. 2919: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

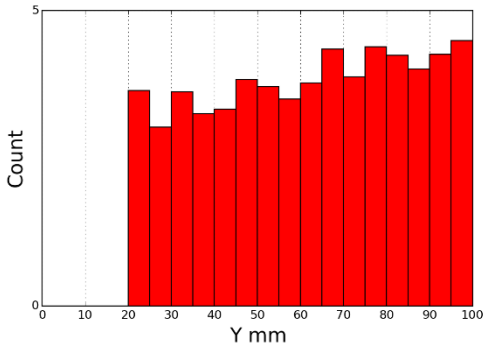


Figure B. 2917: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

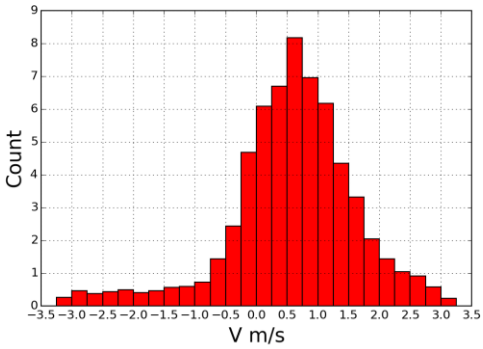


Figure B. 2920: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

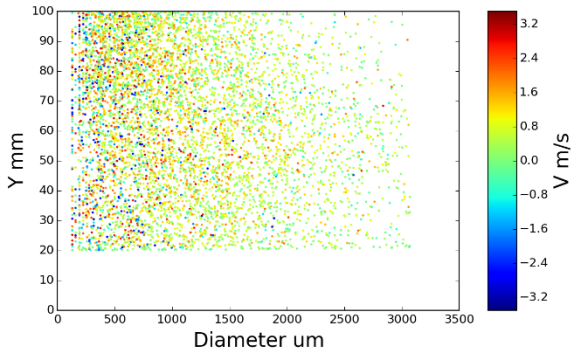


Figure B. 2918: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.3 Liquid Level 3

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	10008 / 1.261
Ref Mass Flow (lb/hr) / (kg/s)	3262 / 0.411
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	31750 / 43.060
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	3380 / 10.67
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	54.7 / 12.61
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	56.3 / 13.50
Total Bundle Q (Btu/hr) / (kW)	157407 / 46.13
Total Bundle & Preboiler Q (Btu/hr) / (kW)	229917 / 67.38
Top Two Rows HTC Ratio	0.671
Bundle Inlet Quality	0.18
Bundle Exit Quality	0.82

Table B. 313: Thermal Conditions

B.7.3.1 Lens 100mm Mag 0_29x

B.7.3.1 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	42.44	46.55	57.3	2911	378.5	430.3	57.3	3018	375.6	443.3
40-60mm	100.24	112.54	57.3	3033	352.8	390.4	57.3	3047	347.3	401.6
60-80mm	67.31	81.56	57.3	2992	356.5	379.5	57.3	2987	343.5	379.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	210.06	241.37	57.3	3033	359.1	395.5	57.3	3047	351.5	403.0
			Height A (mm)				Height B (mm)			
Highest Particle			76.1192				76.1192			
Lowest Particle			28.2083				28.2083			

Table B. 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	16.29	57.3	2911	572.6	530.8	57.3	3018	570.3	533.3	-3.160	3.170	0.130	0.790	-3.170	3.170	1.010	1.070
40-60mm	38.32	57.3	3020	509.9	465.5	57.3	3047	500.3	459.6	-3.170	3.170	0.070	0.840	-3.170	3.170	1.270	1.150
60-80mm	27.14	57.3	2906	484.4	419.0	57.3	2722	477.4	409.5	-3.170	3.170	0.090	0.760	-3.170	3.170	1.330	1.130
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	81.75	57.3	3020	514.0	465.8	57.3	3047	506.1	460.1	-3.170	3.170	0.090	0.810	-3.170	3.170	1.240	1.140

Table B. 315: Matched Droplet Info

B.7.3.1 All Droplets for .LA Image

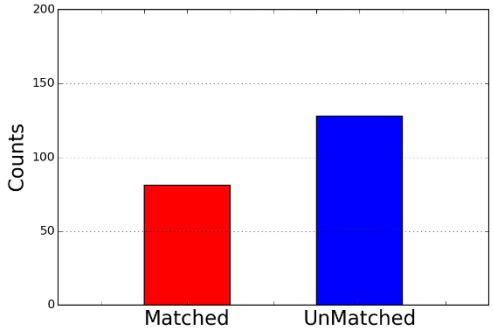


Figure B. 2921: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

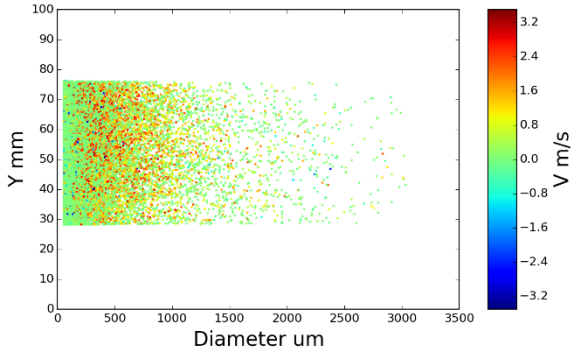


Figure B. 2924: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

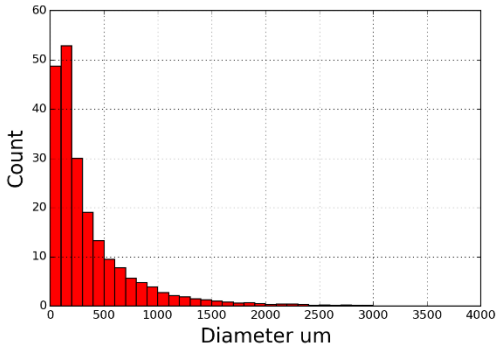


Figure B. 2922: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

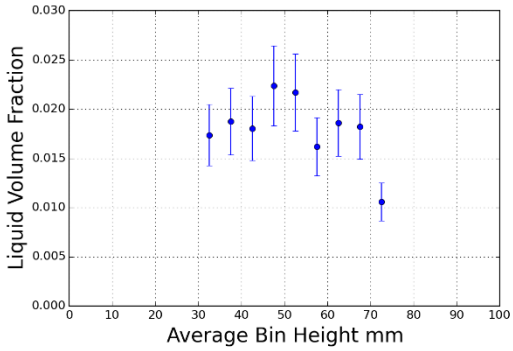


Figure B. 2925: Void Fraction R-123 55F 5000Btu 30000Lb Tri

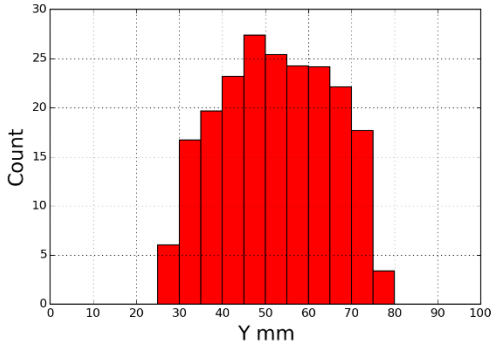


Figure B. 2923: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.3.1 All Droplets for .LB Image

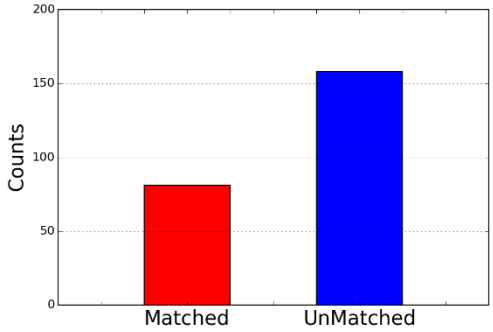


Figure B. 2926: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

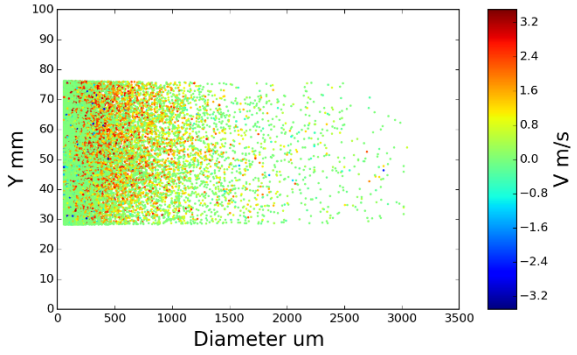


Figure B. 2929: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

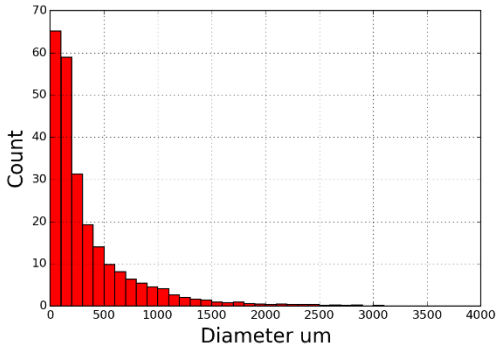


Figure B. 2927: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

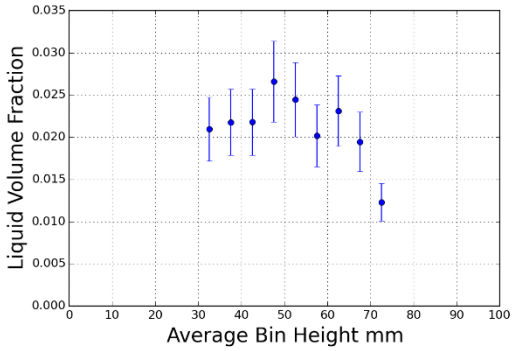


Figure B. 2930: Void Fraction R-123 55F 5000Btu 30000Lb Tri

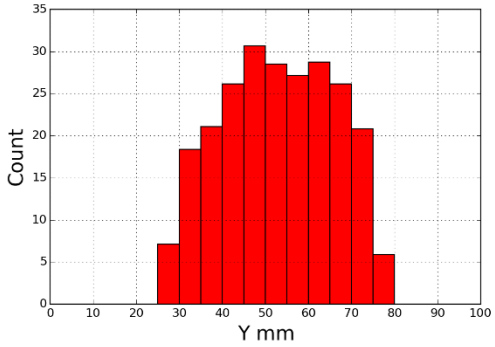


Figure B. 2928: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.3.1 Matched Only Droplets for .LA Image

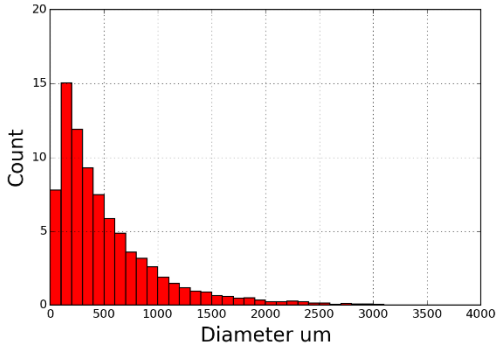


Figure B. 2931: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

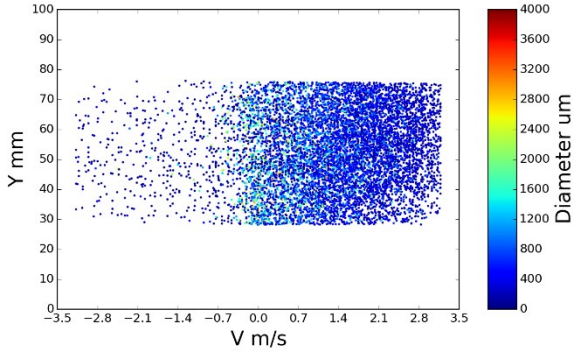


Figure B. 2934: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

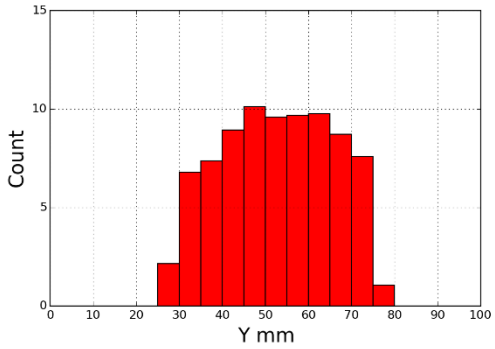


Figure B. 2932: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

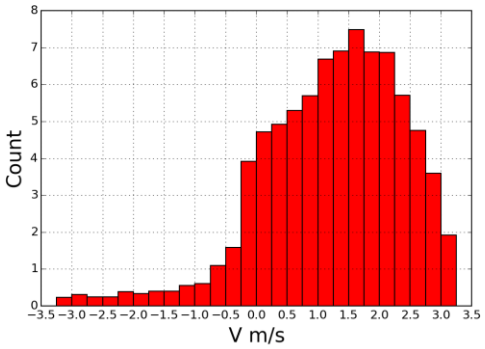


Figure B. 2935: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

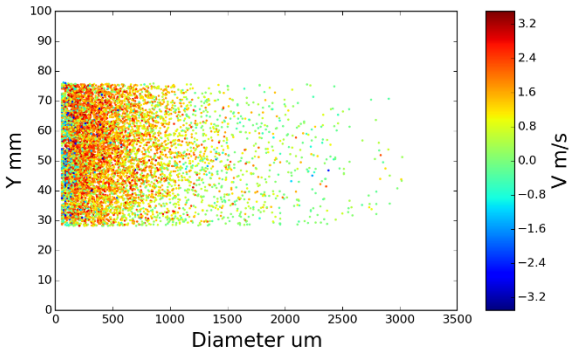


Figure B. 2933: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.3.1 Matched Only Droplets for .LB Image

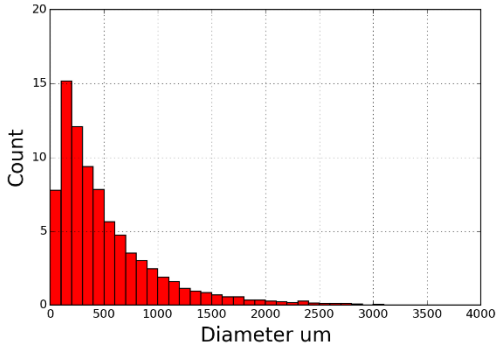


Figure B. 2936: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

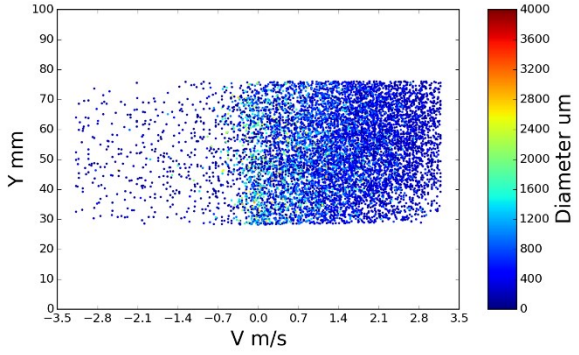


Figure B. 2939: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

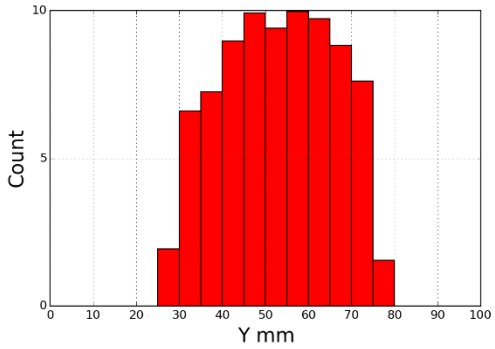


Figure B. 2937: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

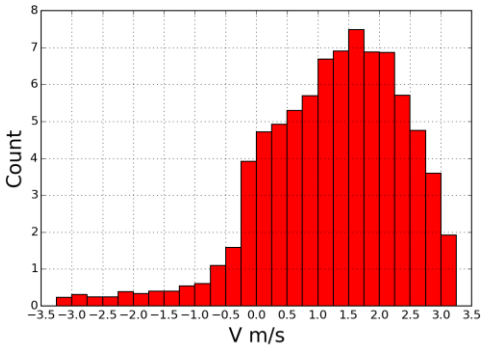


Figure B. 2940: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

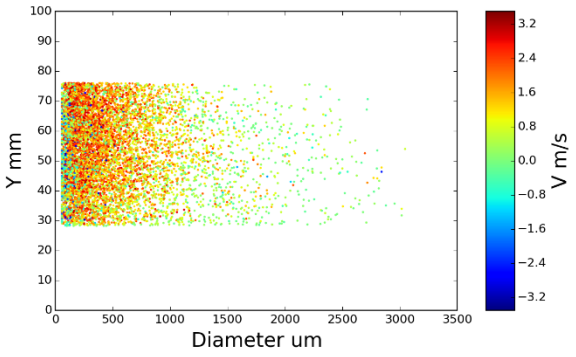


Figure B. 2938: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.3.1 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	34.19	37.93	57.3	2858	384.1	391.6	57.3	3010	362.2	385.8
40-60mm	73.78	85.51	57.3	2985	395.6	406.4	57.3	3036	359.1	395.0
60-80mm	53.75	59.85	57.3	2983	383.5	389.0	57.3	2990	356.7	377.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	161.74	183.31	57.3	2985	389.1	397.6	57.3	3036	358.9	387.5
			Height A (mm)				Height B (mm)			
Highest Particle			76.1192				76.1192			
Lowest Particle			28.2083				28.2083			

Table B. 316: 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	14.22	57.3	2858	560.2	456.5	57.3	3010	562.0	458.5	-3.130	3.160	0.060	0.730	-3.020	3.170	1.080	1.070
40-60mm	30.98	57.3	2981	585.3	465.2	57.3	3008	580.0	462.4	-3.160	3.170	0.060	0.740	-3.130	3.170	1.170	1.030
60-80mm	24.23	57.3	2983	537.5	424.5	57.3	2896	532.6	418.4	-3.120	3.170	0.050	0.670	-3.140	3.170	1.150	1.030
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	69.43	57.3	2983	563.5	450.1	57.3	3010	559.5	446.9	-3.160	3.170	0.050	0.720	-3.140	3.170	1.150	1.040

Table B. 317: Matched Droplet Info

B.7.3.1 All Droplets for .LA Image

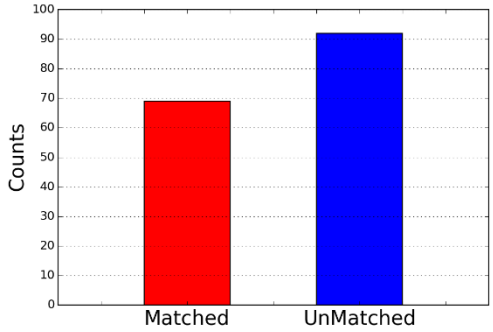


Figure B. 2941: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

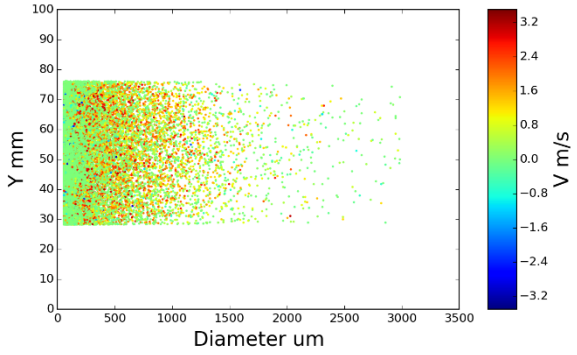


Figure B. 2944: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

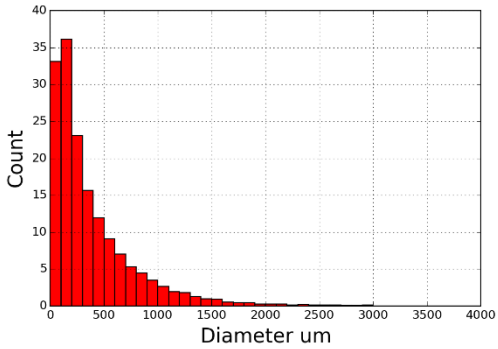


Figure B. 2942: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

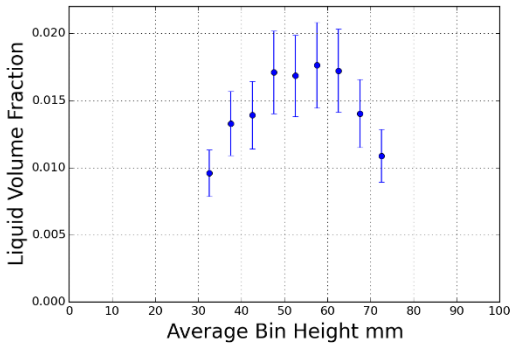


Figure B. 2945: Void Fraction R-123 55F 5000Btu 30000Lb Tri

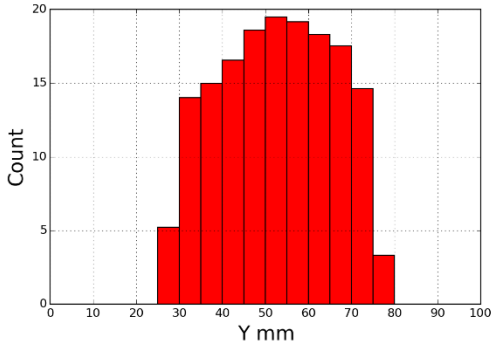


Figure B. 2943: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.3.1 All Droplets for .LB Image

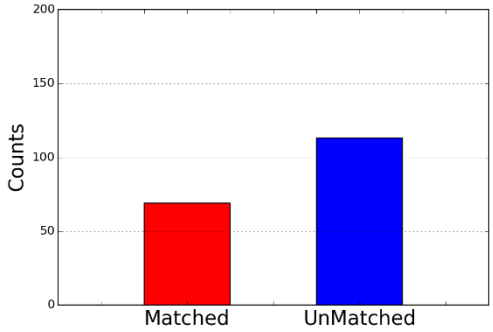


Figure B. 2946: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

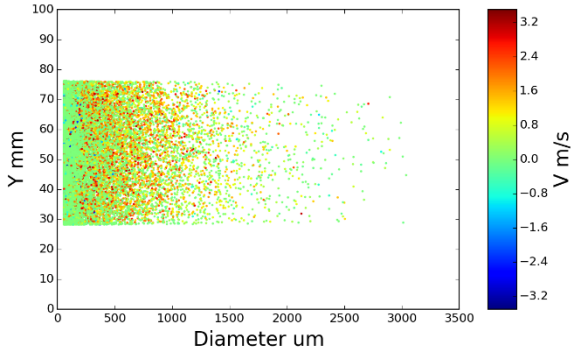


Figure B. 2949: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

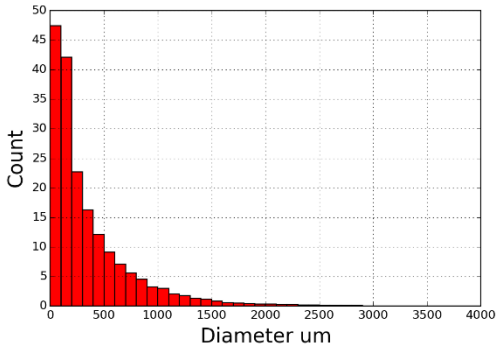


Figure B. 2947: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

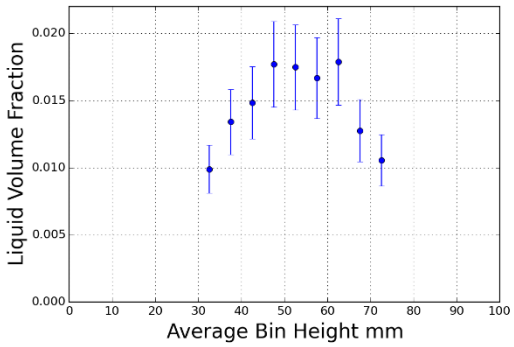


Figure B. 2950: Void Fraction R-123 55F 5000Btu 30000Lb Tri

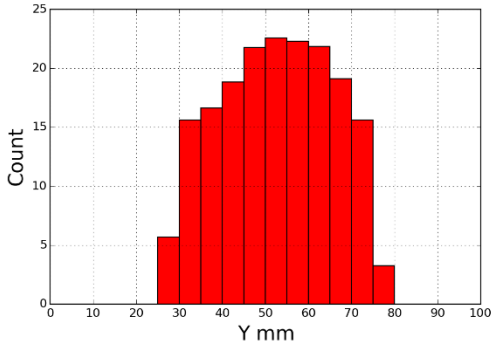


Figure B. 2948: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.3.1 Matched Only Droplets for .LA Image

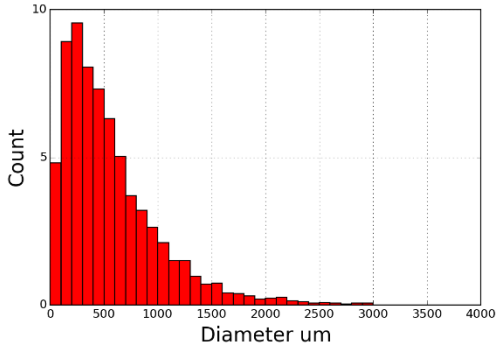


Figure B. 2951: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

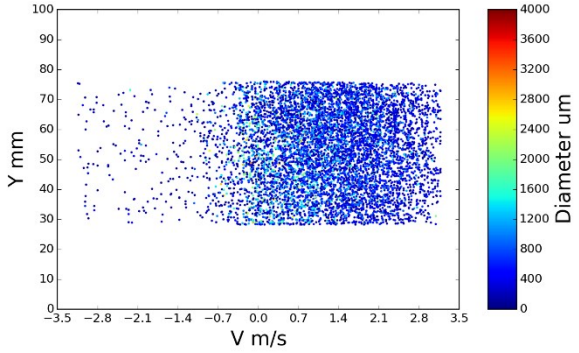


Figure B. 2954: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

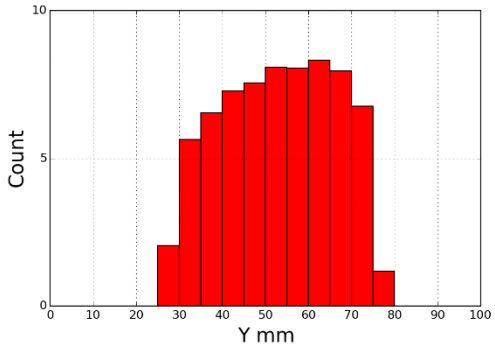


Figure B. 2952: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

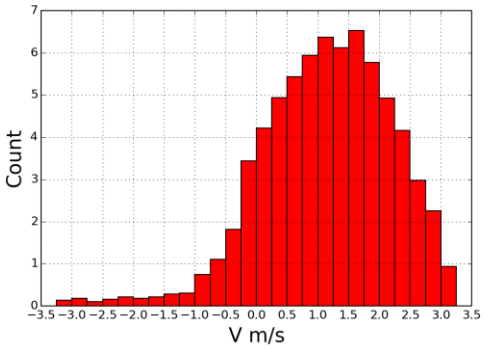


Figure B. 2955: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

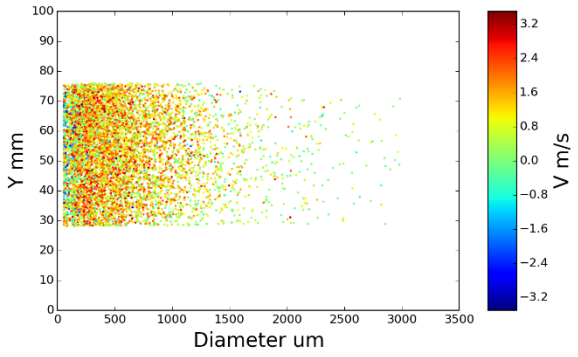


Figure B. 2953: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.3.1 Matched Only Droplets for .LB Image

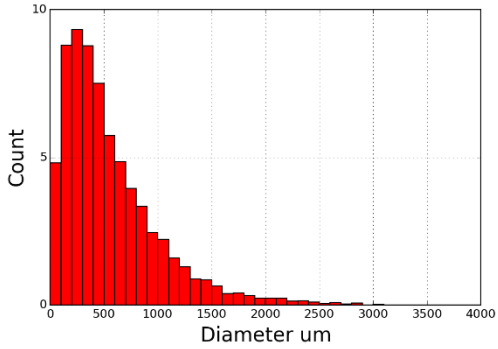


Figure B. 2956: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

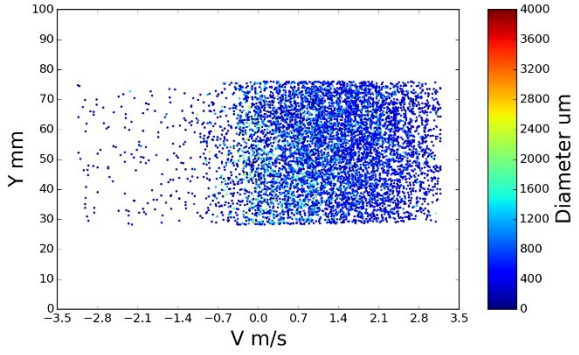


Figure B. 2959: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

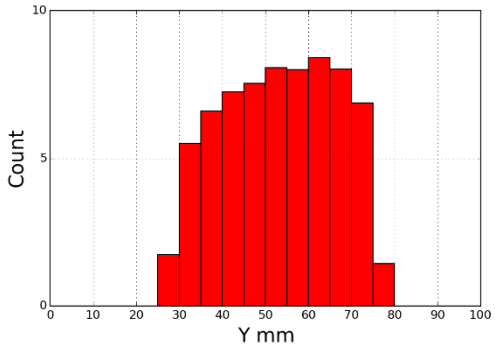


Figure B. 2957: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

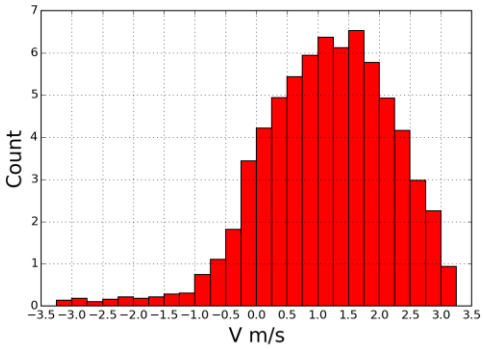


Figure B. 2960: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

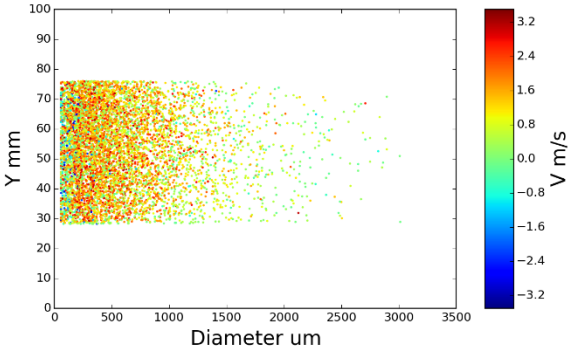


Figure B. 2958: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.3.1 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	18.11	21.55	57.3	2836	402.9	396.7	57.3	2713	362.9	381.2
40-60mm	42.75	48.52	57.3	2979	424.2	449.1	57.3	3033	395.7	443.4
60-80mm	27.32	30.34	57.3	2955	427.6	413.2	57.3	2982	397.6	413.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	88.21	100.45	57.3	2979	420.9	427.9	57.3	3033	389.3	422.0
			Height A (mm)				Height B (mm)			
Highest Particle			76.1065				76.1192			
Lowest Particle			28.2210				28.2210			

Table B. 318: 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	7.14	57.3	2451	606.2	454.4	57.3	2713	596.5	456.3	-3.170	3.090	0.030	0.790	-3.070	3.170	0.920	1.100
40-60mm	17.28	57.3	2979	640.5	503.2	57.3	2968	633.6	501.0	-3.170	3.140	-0.000	0.780	-3.140	3.170	0.970	1.100
60-80mm	12.34	57.3	2872	610.7	458.2	57.3	2759	603.8	459.3	-3.170	3.070	0.000	0.660	-3.170	3.170	0.950	0.940
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	36.76	57.3	2979	623.8	479.4	57.3	2968	616.5	479.1	-3.170	3.140	0.010	0.740	-3.170	3.170	0.950	1.050

Table B. 319: Matched Droplet Info

B.7.3.1 All Droplets for .LA Image

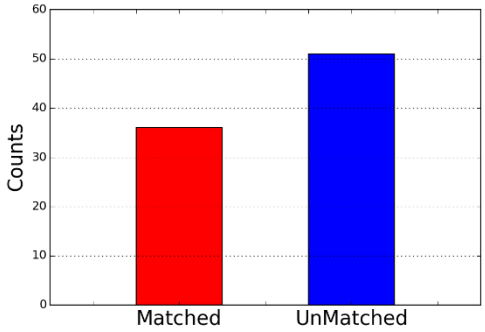


Figure B. 2961: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

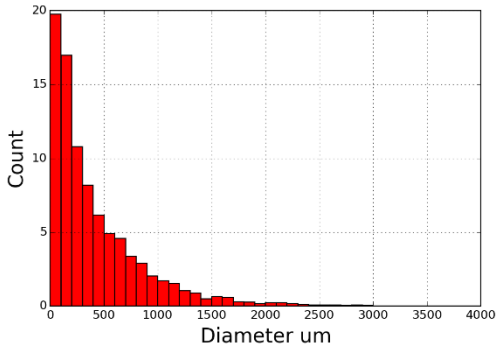


Figure B. 2962: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

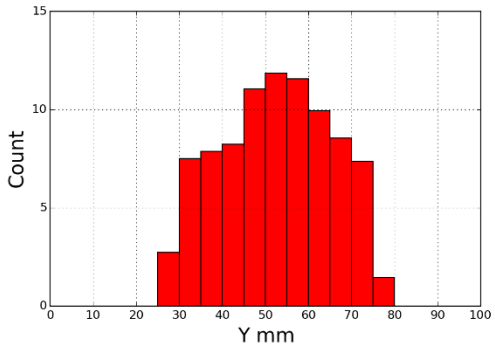


Figure B. 2963: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

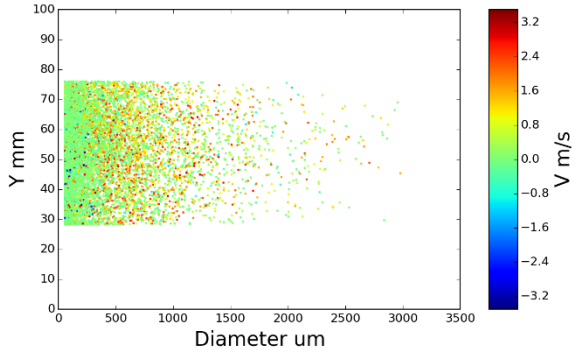


Figure B. 2964: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

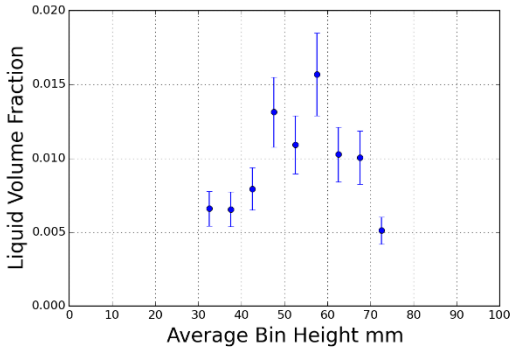


Figure B. 2965: Void Fraction R-123 55F 5000Btu 30000Lb Tri

B.7.3.1 All Droplets for .LB Image

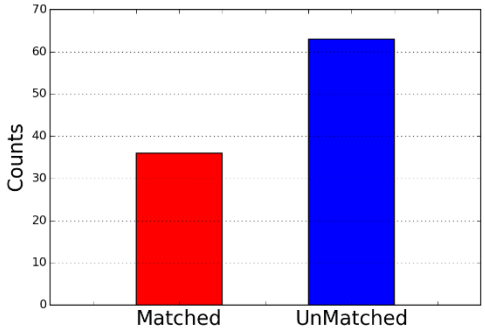


Figure B. 2966: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

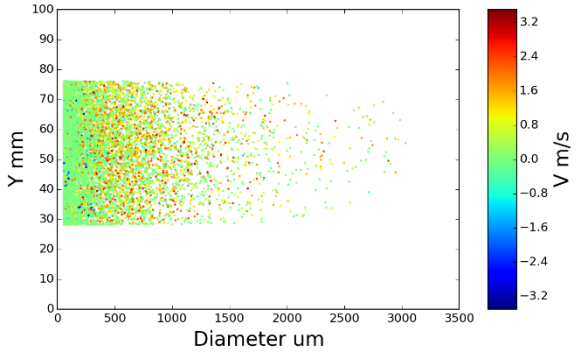


Figure B. 2969: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

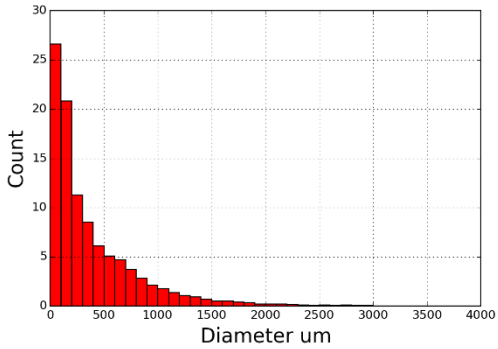


Figure B. 2967: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

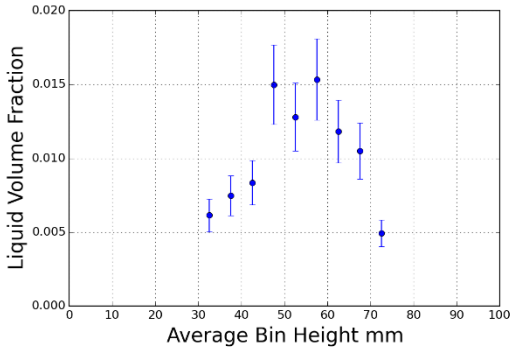


Figure B. 2970: Void Fraction R-123 55F 5000Btu 30000Lb Tri

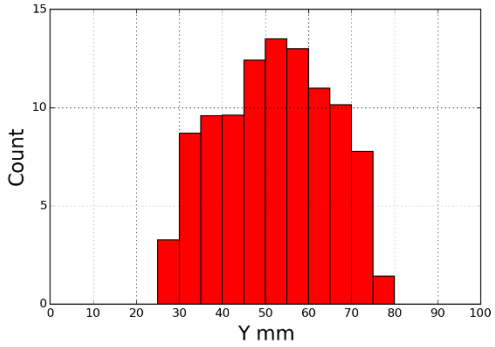


Figure B. 2968: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.3.1 Matched Only Droplets for .LA Image

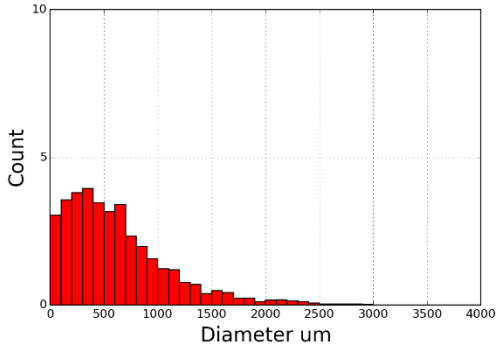


Figure B. 2971: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

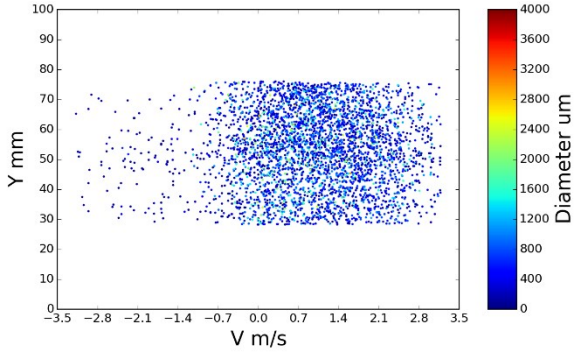


Figure B. 2974: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

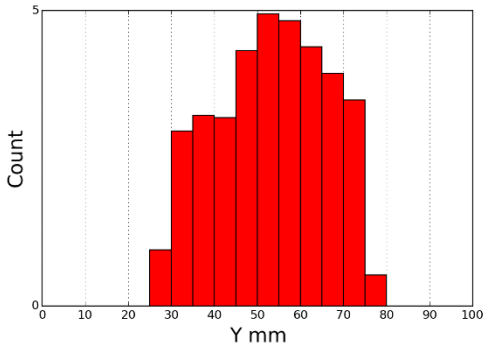


Figure B. 2972: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

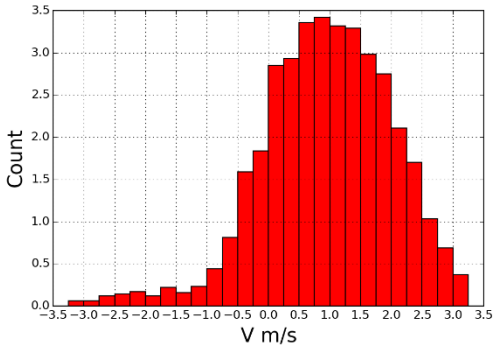


Figure B. 2975: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

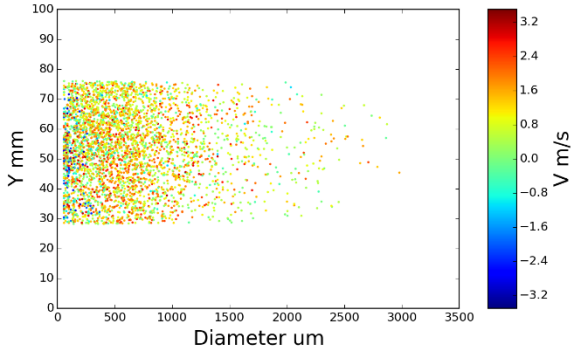


Figure B. 2973: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.3.1 Matched Only Droplets for .LB Image

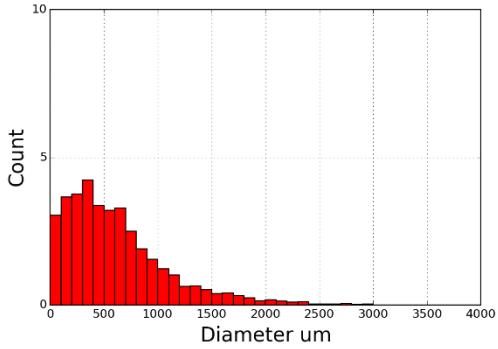


Figure B. 2976: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

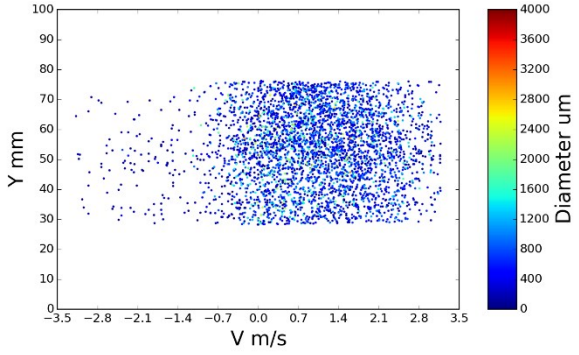


Figure B. 2979: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

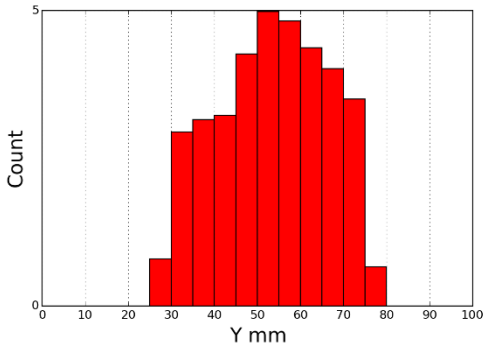


Figure B. 2977: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

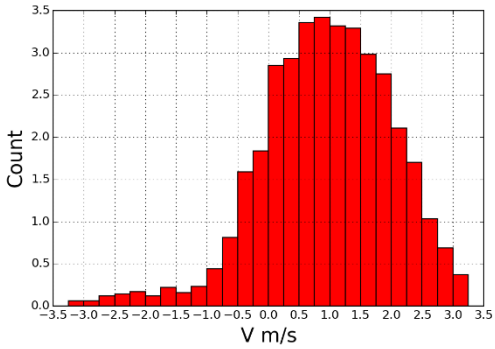


Figure B. 2980: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

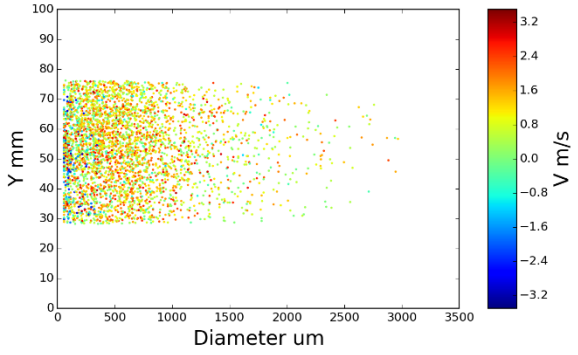


Figure B. 2978: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 Lens 50mm Mag 0_13x

B.7.3.2 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	21.11	21.96	128.7	2924	646.6	504.4	128.7	3004	642.4	494.7
20-40mm	28.04	27.88	128.7	3054	625.5	527.4	128.7	3065	626.3	528.5
40-60mm	39.6	40.31	128.7	3054	600.9	505.9	128.7	3064	592.2	492.5
60-80mm	32.87	32.4	128.7	2973	596.5	472.1	128.7	2955	587.8	460.5
80-100mm	17.69	17.51	128.7	2659	466.4	319.9	128.7	2963	464.3	322.8
All	139.31	140.06	128.7	3054	594.6	485.3	128.7	3065	589.9	478.1
			Height A (mm)				Height B (mm)			
Highest Particle			99.9508				99.9736			
Lowest Particle			5.0757				5.1016			

Table B. 320: 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	9.95	128.7	2924	824.9	546.3	128.7	3004	823.0	549.4	-3.070	3.070	-0.020	0.690	-3.020	3.080	0.340	0.880
20-40mm	12.77	128.7	2958	804.8	593.9	128.7	3046	805.9	592.8	-3.070	3.110	-0.030	0.720	-3.000	3.110	0.590	0.980
40-60mm	18.28	128.7	2960	745.0	560.2	128.7	3064	733.7	550.1	-3.110	3.100	0.010	0.830	-3.110	3.110	0.770	1.170
60-80mm	16.01	128.7	2895	732.2	516.6	128.7	2772	717.5	503.8	-3.110	2.940	0.040	0.690	-3.100	3.110	0.840	1.110
80-100mm	9.47	128.7	2659	547.4	333.0	128.7	2617	540.1	330.8	-2.470	2.900	0.090	0.470	-3.110	3.110	1.050	0.970
All	66.48	128.7	2960	737.2	534.8	128.7	3064	728.0	528.2	-3.110	3.110	0.010	0.710	-3.110	3.110	0.730	1.070

Table B. 321: Matched Droplet Info

B.7.3.2 All Droplets for .LA Image

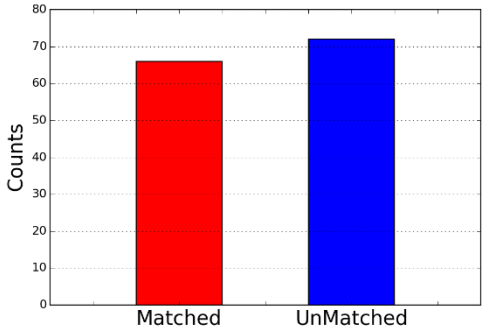


Figure B. 2981: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

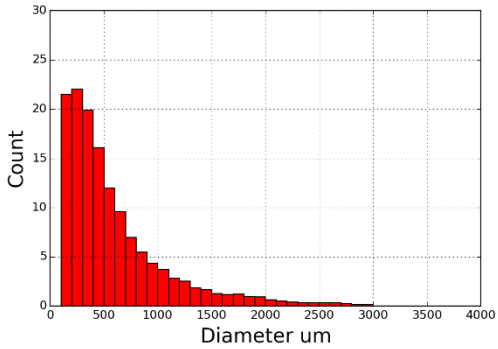


Figure B. 2982: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

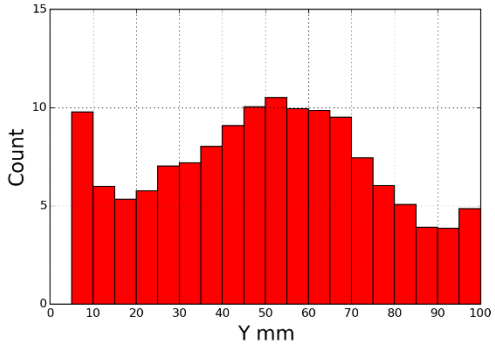


Figure B. 2983: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

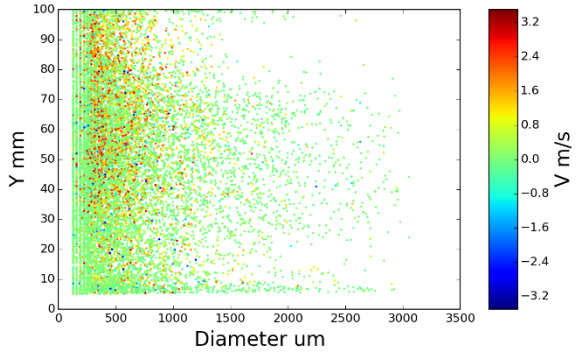


Figure B. 2984: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

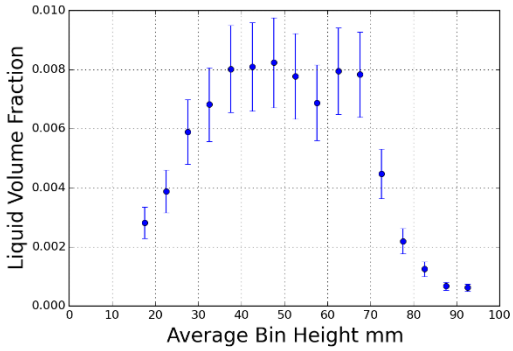


Figure B. 2985: Void Fraction R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 All Droplets for .LB Image

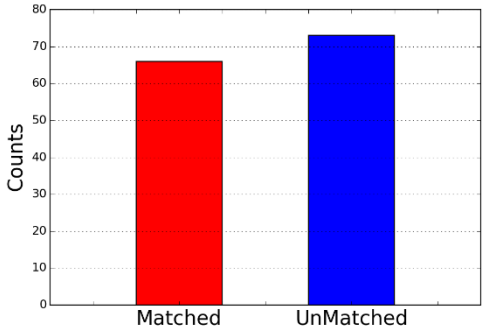


Figure B. 2986: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

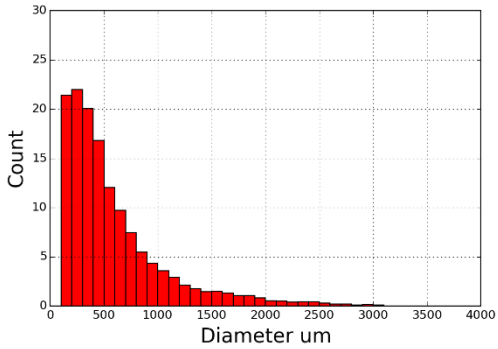


Figure B. 2987: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

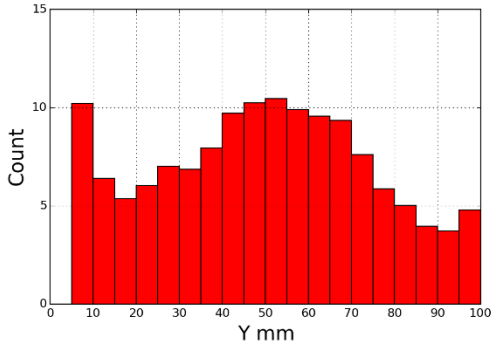


Figure B. 2988: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

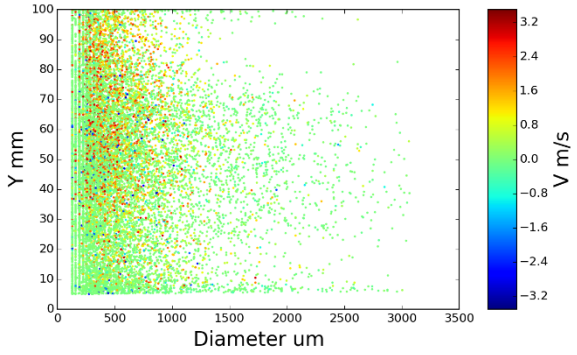


Figure B. 2989: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

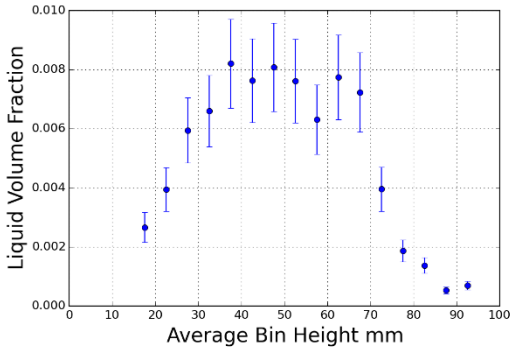


Figure B. 2990: Void Fraction R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 Matched Only Droplets for .LA Image

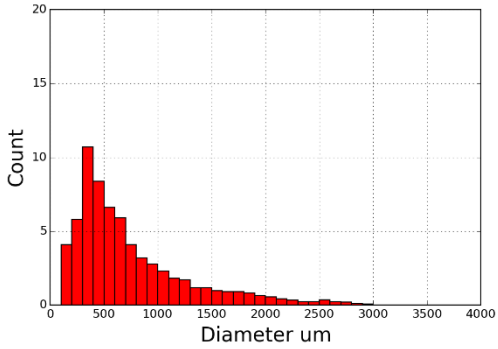


Figure B. 2991: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

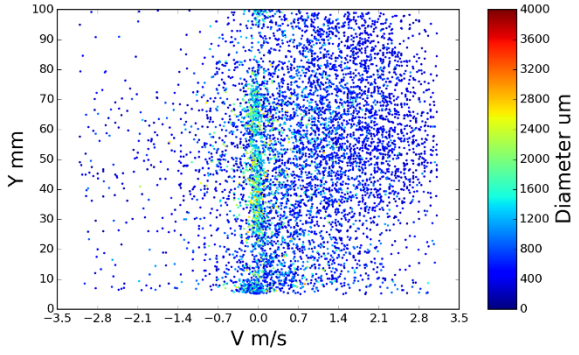


Figure B. 2994: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

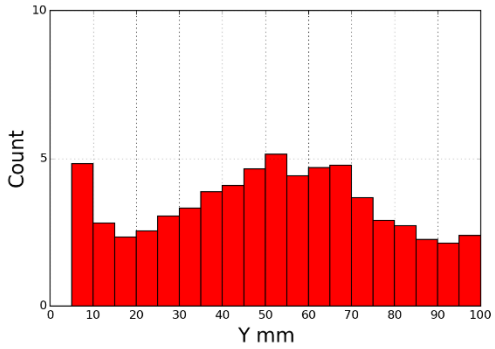


Figure B. 2992: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

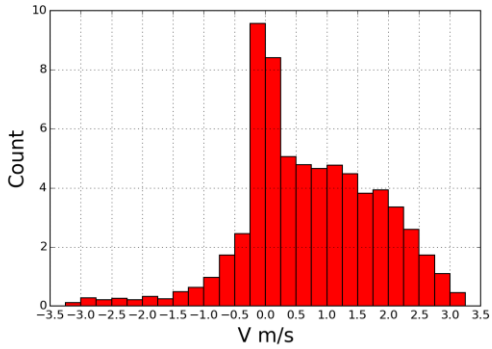


Figure B. 2995: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

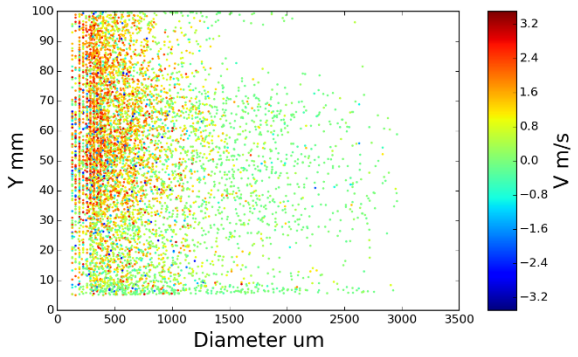


Figure B. 2993: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 Matched Only Droplets for .LB Image

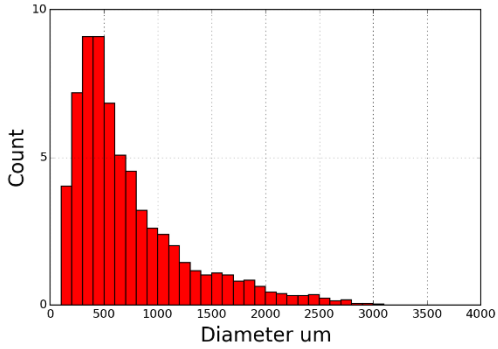


Figure B. 2996: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

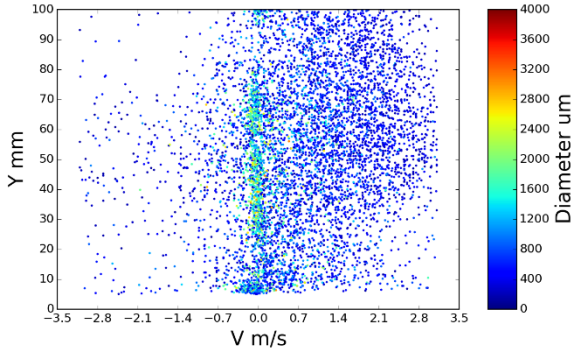


Figure B. 2999: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

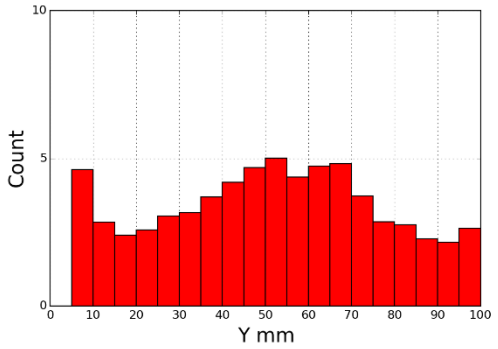


Figure B. 2997: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

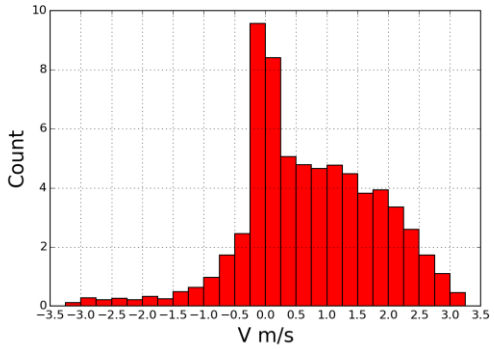


Figure B. 3000: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

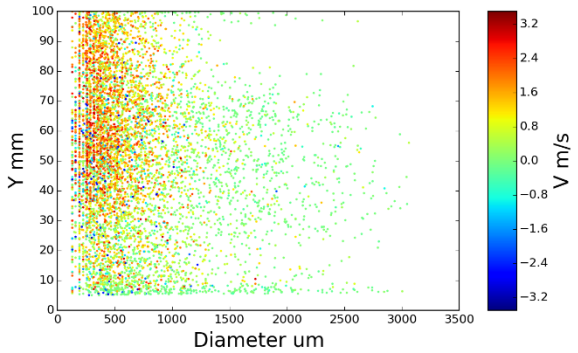


Figure B. 2998: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 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	22.54	23.17	128.7	3050	656.7	521.8	128.7	3067	658.4	518.9
20-40mm	33.59	34.17	128.7	2957	591.8	473.1	128.7	3065	586.0	474.9
40-60mm	46.43	46.34	128.7	3071	570.8	441.3	128.7	3065	572.8	451.6
60-80mm	38.84	37.99	128.7	2925	524.7	384.3	128.7	2943	531.4	390.2
80-100mm	19.52	19.21	128.7	2867	461.2	295.4	128.7	2759	461.6	290.5
All	160.93	160.88	128.7	3071	562.8	436.2	128.7	3067	564.9	440.9
			Height A (mm)				Height B (mm)			
Highest Particle			99.9736				99.9736			
Lowest Particle			5.0757				5.0757			

Table B. 322: 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	9.59	128.7	3033	863.6	584.5	128.7	3067	869.3	590.6	-3.080	3.110	0.010	0.760	-3.090	3.040	0.530	1.030
20-40mm	13.19	128.7	2957	779.2	552.7	128.7	3065	776.8	559.6	-3.110	3.100	0.040	0.880	-3.100	3.090	0.700	1.120
40-60mm	20.06	128.7	3071	712.1	495.2	128.7	3065	709.1	499.8	-3.060	3.050	0.090	0.830	-3.110	3.110	0.940	1.170
60-80mm	17.53	128.7	2684	637.6	422.3	128.7	2943	632.4	421.6	-3.110	3.090	0.080	0.750	-3.110	3.110	1.080	1.090
80-100mm	10.08	128.7	2867	542.8	312.6	128.7	2759	532.9	302.3	-2.850	2.850	0.100	0.570	-3.010	3.090	1.100	0.930
All	70.45	128.7	3071	702.5	491.2	128.7	3067	697.5	493.2	-3.110	3.110	0.070	0.780	-3.110	3.110	0.900	1.110

Table B. 323: Matched Droplet Info

B.7.3.2 All Droplets for .LA Image

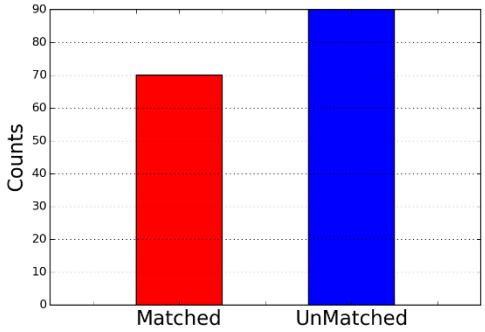


Figure B. 3001: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

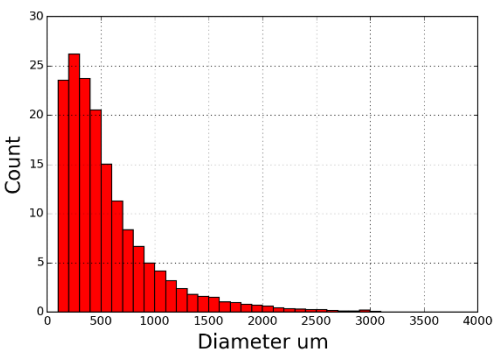


Figure B. 3002: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

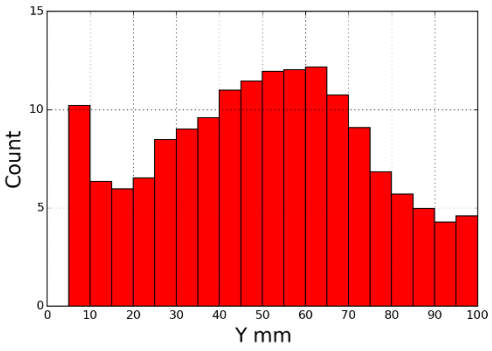


Figure B. 3003: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

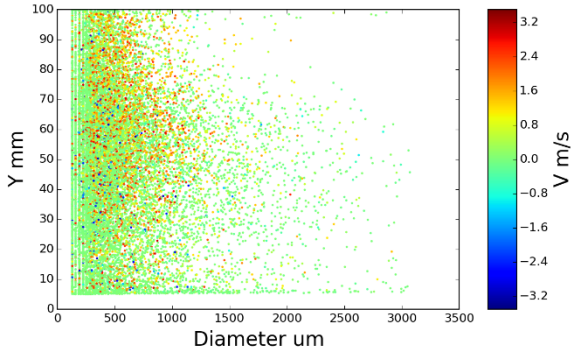


Figure B. 3004: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

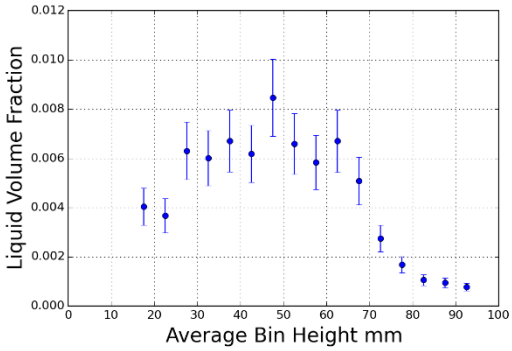


Figure B. 3005: Void Fraction R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 All Droplets for .LB Image

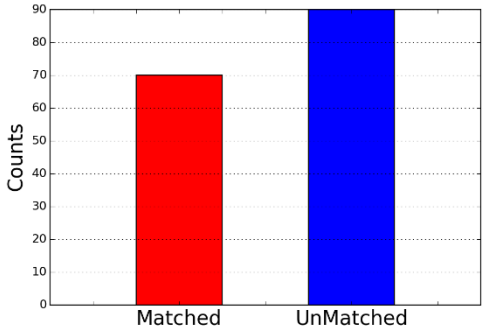


Figure B. 3006: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

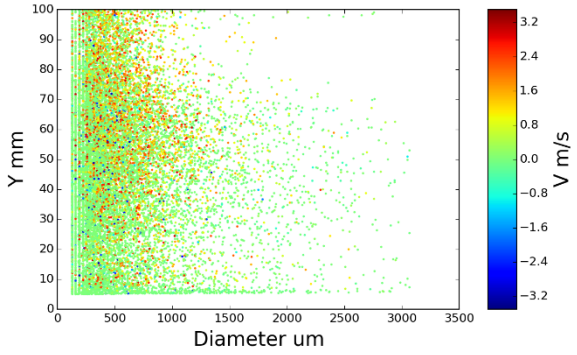


Figure B. 3009: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

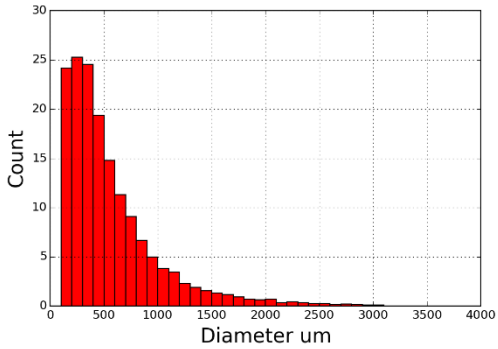


Figure B. 3007: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

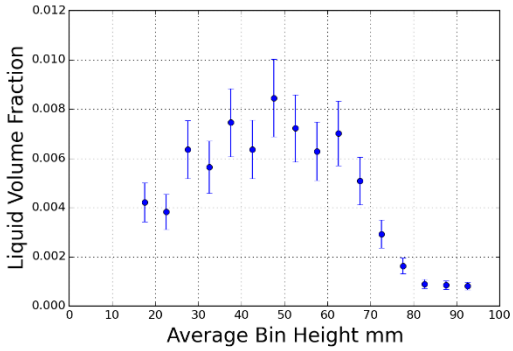


Figure B. 3010: Void Fraction R-123 55F 5000Btu 30000Lb Tri

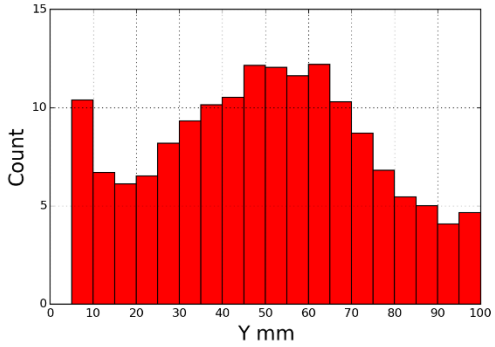


Figure B. 3008: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 Matched Only Droplets for .LA Image

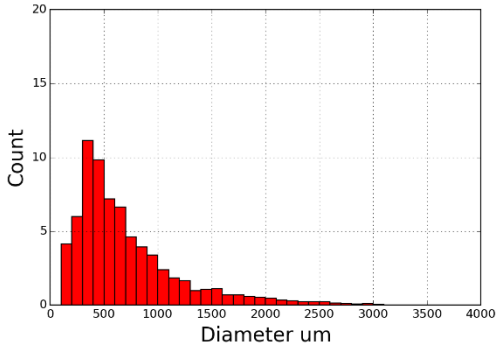


Figure B. 3011: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

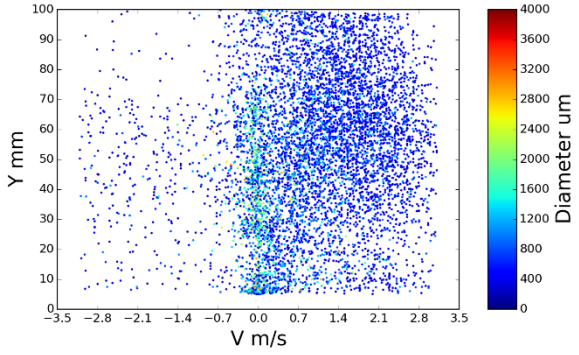


Figure B. 3014: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

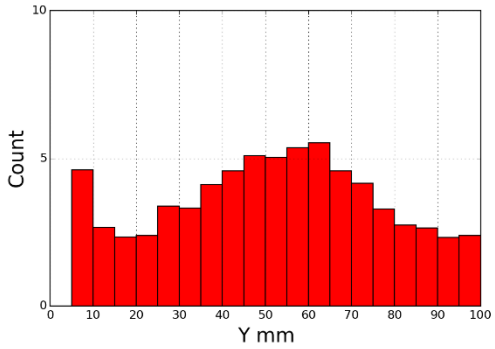


Figure B. 3012: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

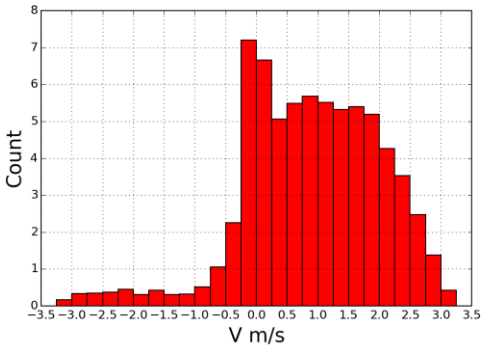


Figure B. 3015: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

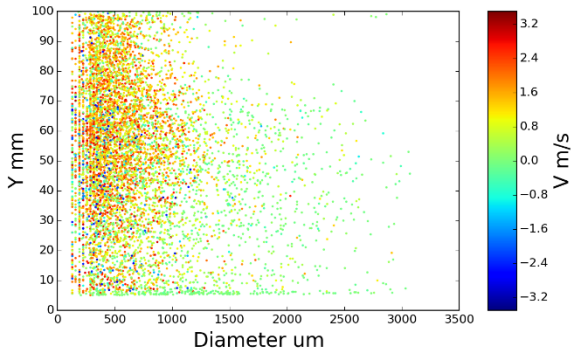


Figure B. 3013: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 Matched Only Droplets for .LB Image

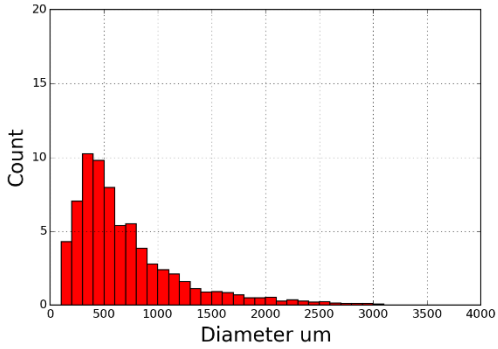


Figure B. 3016: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

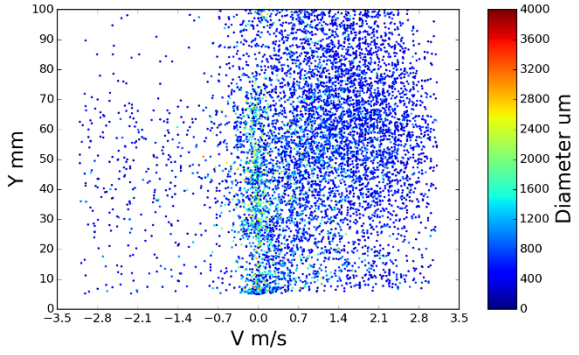


Figure B. 3019: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

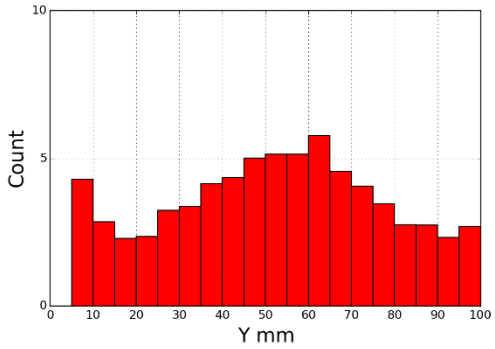


Figure B. 3017: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

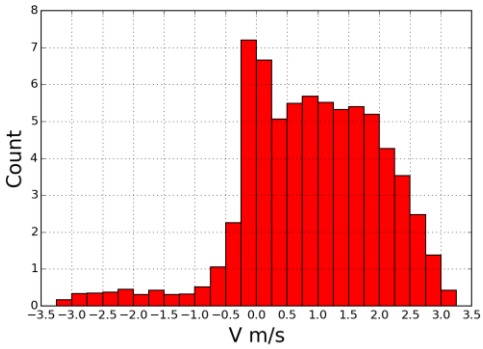


Figure B. 3020: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

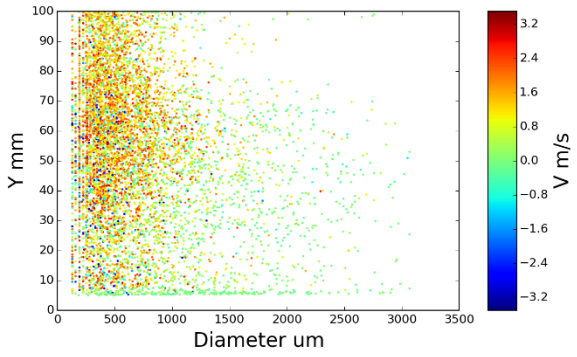


Figure B. 3018: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 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	21.29	21.03	128.7	3080	710.1	547.1	128.7	3062	720.2	546.9
20-40mm	29.31	29.39	128.7	3070	645.0	493.0	128.7	3059	637.7	475.3
40-60mm	37.79	37.74	128.7	3080	673.0	525.0	128.7	3074	669.6	508.0
60-80mm	31.95	31.49	128.7	3071	635.5	463.1	128.7	2929	635.6	459.4
80-100mm	16.35	16.51	128.7	3019	530.8	341.2	128.7	2848	523.5	336.9
All	136.69	136.16	128.7	3080	647.0	491.4	128.7	3074	644.9	481.6
			Height A (mm)				Height B (mm)			
Highest Particle			99.9736				99.9736			
Lowest Particle			5.0757				5.0757			

Table B. 324: 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	8.21	128.7	3063	975.9	597.9	128.7	3062	971.8	598.3	-3.100	3.110	-0.020	0.780	-3.080	3.110	0.500	0.950
20-40mm	11.19	128.7	3059	842.4	538.5	128.7	3059	834.7	530.2	-3.060	3.110	0.020	0.770	-3.110	3.000	0.800	1.080
40-60mm	15.12	128.7	3060	879.1	567.3	128.7	3072	870.8	557.9	-3.110	3.100	0.010	0.760	-3.080	3.110	0.940	1.120
60-80mm	13.76	128.7	2987	794.3	474.2	128.7	2834	787.1	477.4	-3.100	3.080	-0.000	0.730	-3.070	3.080	0.920	1.030
80-100mm	7.23	128.7	3019	669.3	382.2	128.7	2848	658.0	366.2	-3.090	3.060	0.010	0.600	-3.080	3.090	0.940	0.960
All	55.51	128.7	3063	837.6	530.3	128.7	3072	828.5	524.5	-3.110	3.110	0.000	0.740	-3.110	3.110	0.840	1.050

Table B. 325: Matched Droplet Info

B.7.3.2 All Droplets for .LA Image

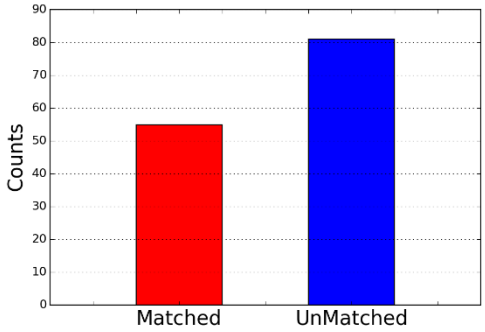


Figure B. 3021: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

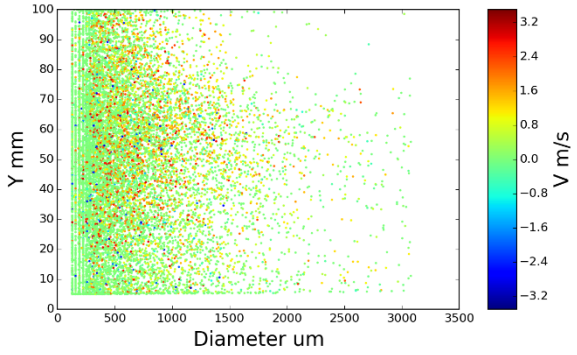


Figure B. 3024: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

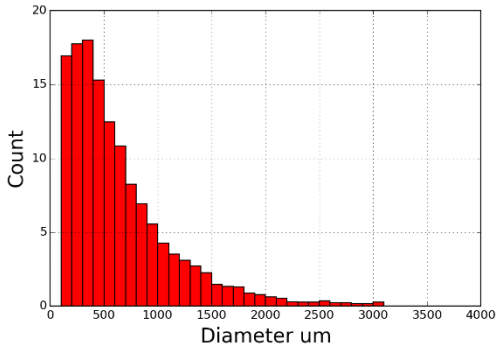


Figure B. 3022: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

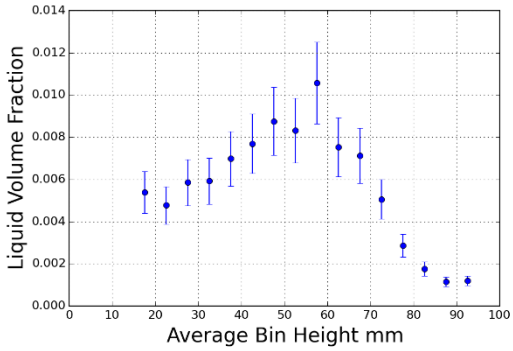


Figure B. 3025: Void Fraction R-123 55F 5000Btu 30000Lb Tri

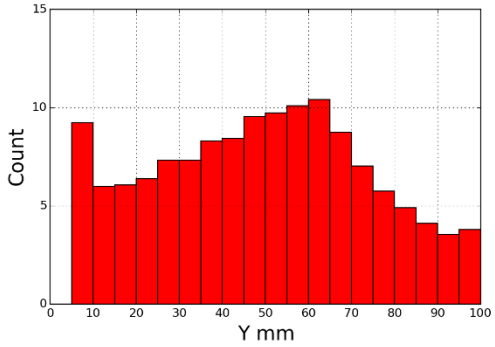


Figure B. 3023: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 All Droplets for .LB Image

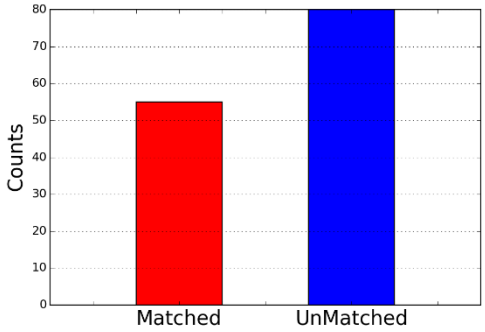


Figure B. 3026: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

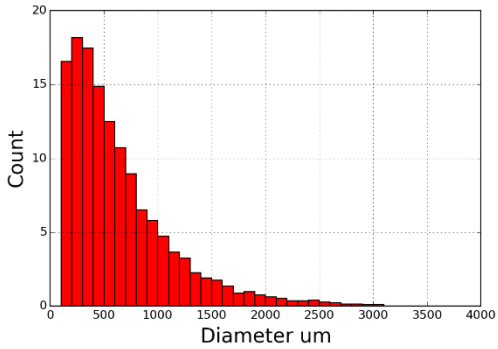


Figure B. 3027: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

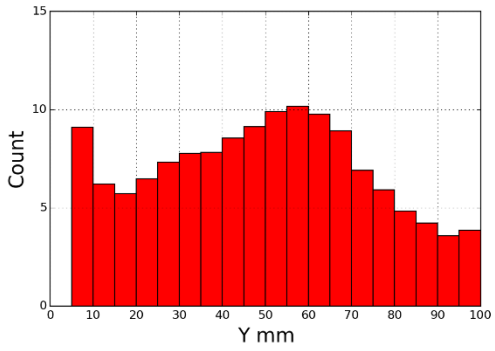


Figure B. 3028: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

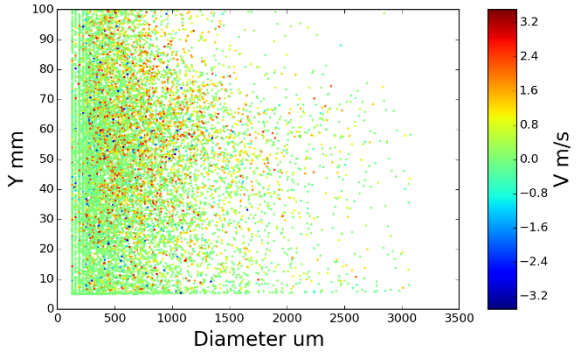


Figure B. 3029: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

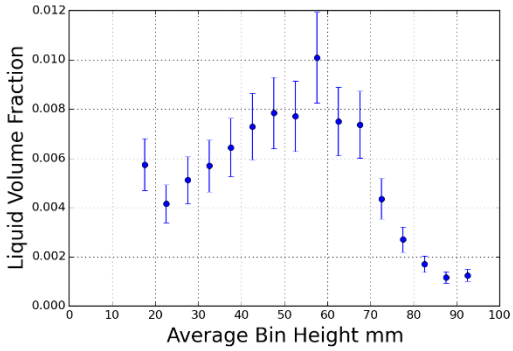


Figure B. 3030: Void Fraction R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 Matched Only Droplets for .LA Image

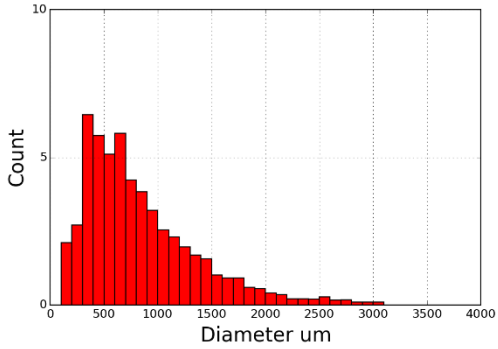


Figure B. 3031: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

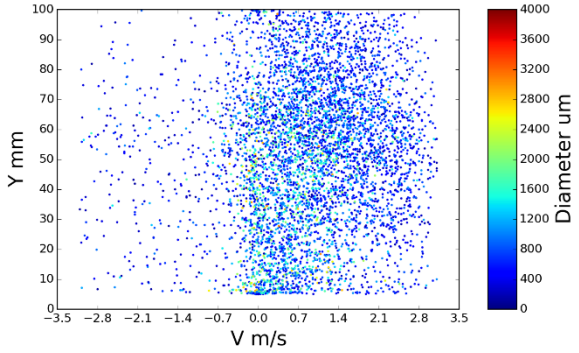


Figure B. 3034: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

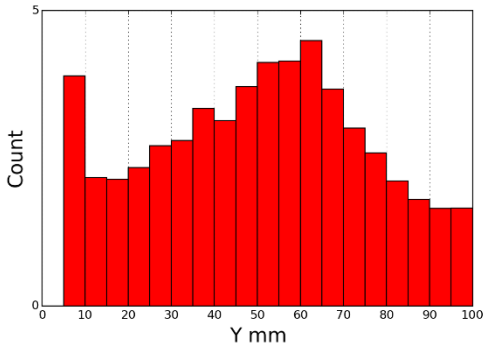


Figure B. 3032: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

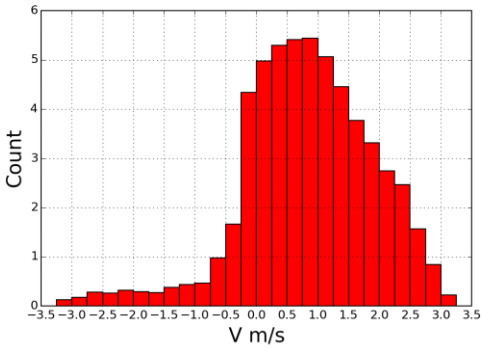


Figure B. 3035: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

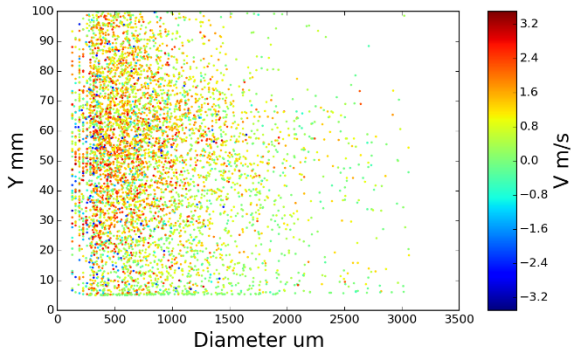


Figure B. 3033: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 Matched Only Droplets for .LB Image

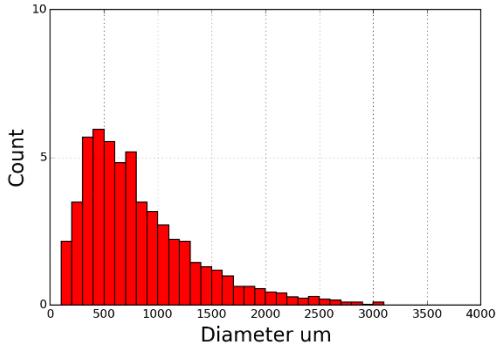


Figure B. 3036: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

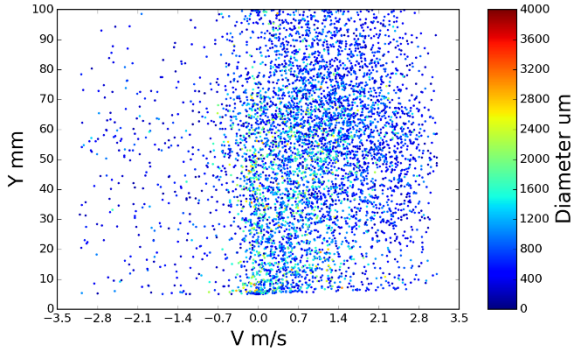


Figure B. 3039: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

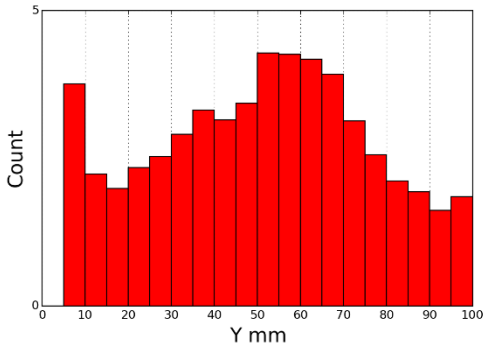


Figure B. 3037: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

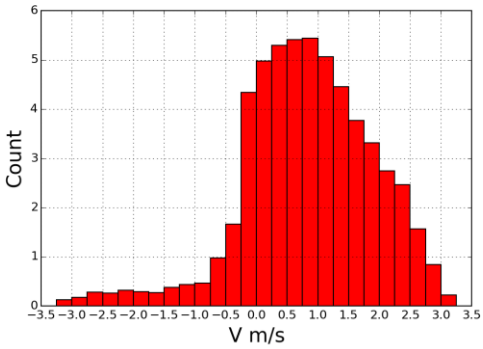


Figure B. 3040: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

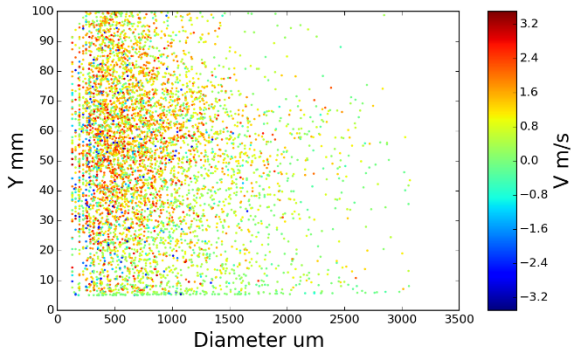


Figure B. 3038: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 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	11.84	12.62	128.7	3042	736.0	565.4	128.7	3072	726.9	564.2
20-40mm	14.57	14.72	128.7	2990	663.9	499.6	128.7	2991	674.2	505.7
40-60mm	20.77	20.74	128.7	3061	727.2	525.6	128.7	3057	731.3	553.4
60-80mm	18.21	17.92	128.7	3059	655.1	471.8	128.7	2967	651.7	474.2
80-100mm	9.2	9.17	128.7	2253	515.8	318.3	128.7	2547	521.5	324.7
All	74.59	75.17	128.7	3061	672.5	497.9	128.7	3072	674.8	508.7
			Height A (mm)				Height B (mm)			
Highest Particle			99.9736				99.9736			
Lowest Particle			5.0757				5.0757			

Table B. 326: 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	4.21	128.7	3042	1050	630.7	128.7	3045	1034	622.4	-3.090	2.890	-0.040	0.740	-3.030	3.030	0.540	1.030
20-40mm	4.53	128.7	2940	904.5	543.7	128.7	2991	897.8	546.6	-2.950	2.930	0.020	0.760	-2.840	3.070	0.790	1.070
40-60mm	8.2	128.7	3061	935.3	564.6	128.7	3057	924.5	571.0	-3.010	2.980	0.020	0.640	-3.110	3.100	0.840	1.060
60-80mm	7.18	128.7	3059	831.2	495.4	128.7	2962	821.1	493.0	-2.930	2.910	0.020	0.660	-2.850	3.080	0.840	1.000
80-100mm	3.72	128.7	2253	653.4	341.9	128.7	2547	649.3	347.4	-3.060	2.750	0.010	0.560	-3.030	3.060	0.740	0.920
All	27.84	128.7	3061	883.0	542.1	128.7	3057	871.5	541.4	-3.090	2.980	0.010	0.670	-3.110	3.100	0.770	1.030

Table B. 327: Matched Droplet Info

B.7.3.2 All Droplets for .LA Image

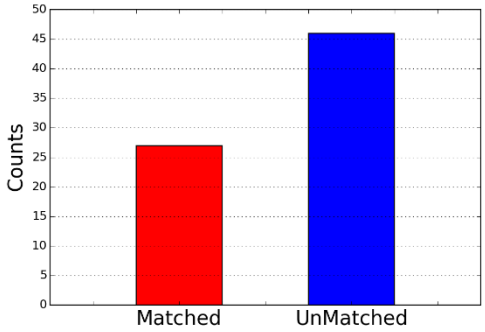


Figure B. 3041: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

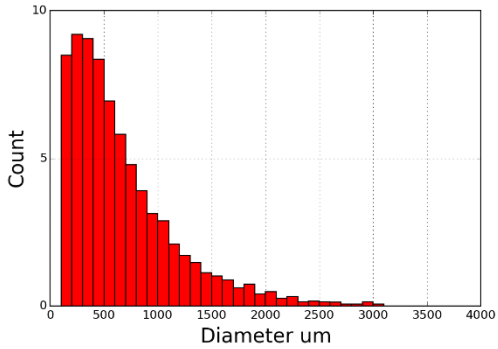


Figure B. 3042: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

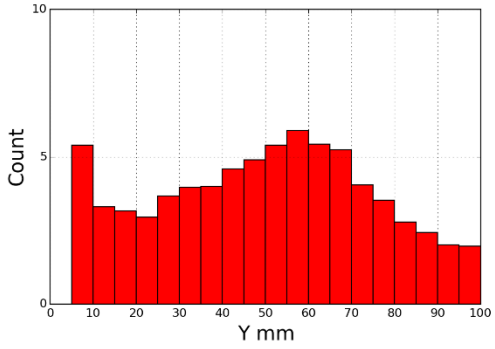


Figure B. 3043: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

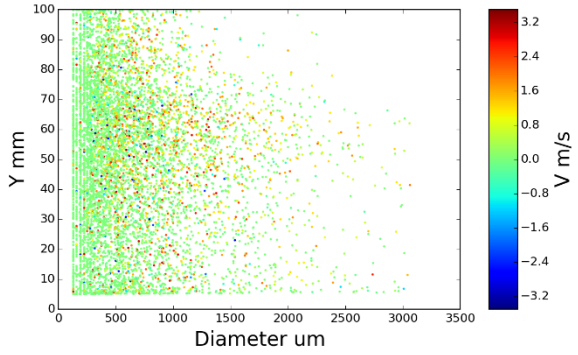


Figure B. 3044: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

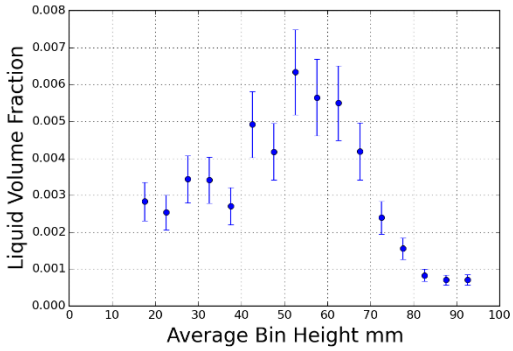


Figure B. 3045: Void Fraction R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 All Droplets for .LB Image

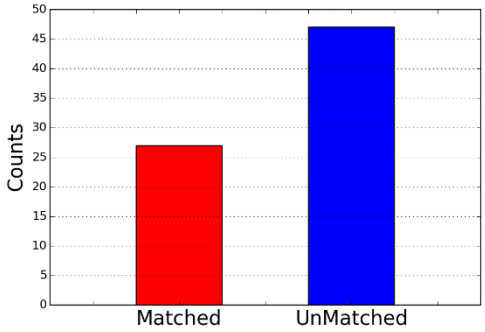


Figure B. 3046: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

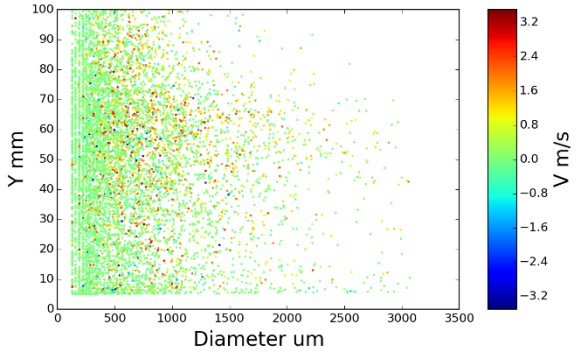


Figure B. 3049: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

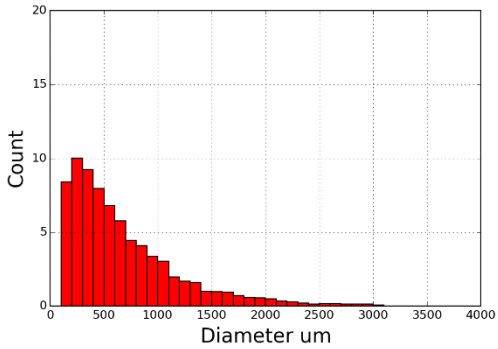


Figure B. 3047: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

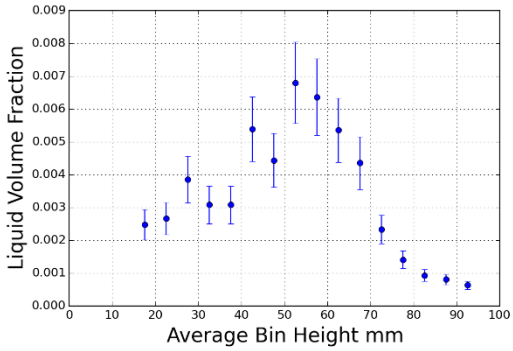


Figure B. 3050: Void Fraction R-123 55F 5000Btu 30000Lb Tri

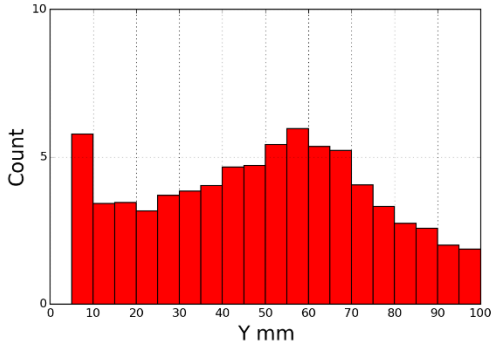


Figure B. 3048: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 Matched Only Droplets for .LA Image

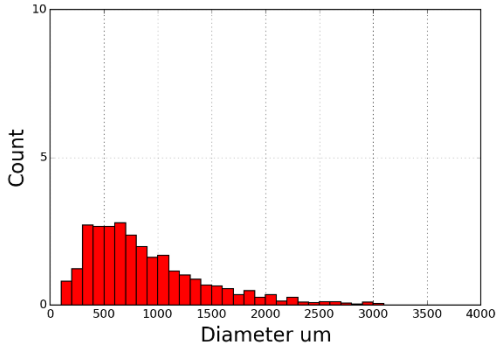


Figure B. 3051: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

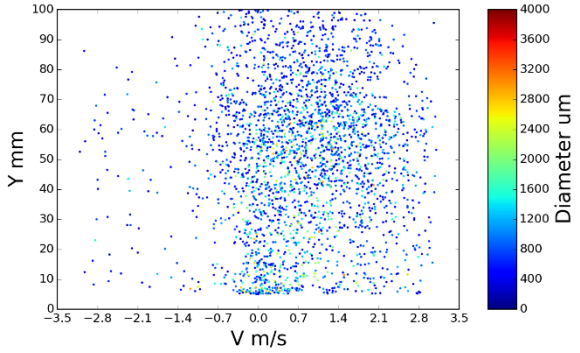


Figure B. 3054: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

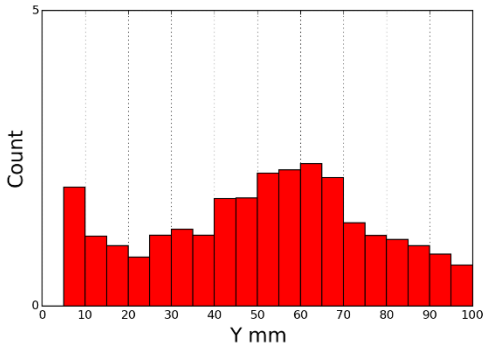


Figure B. 3052: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

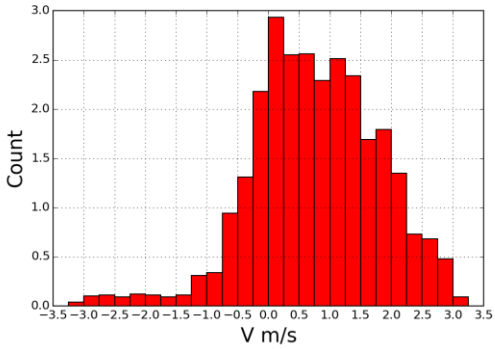


Figure B. 3055: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

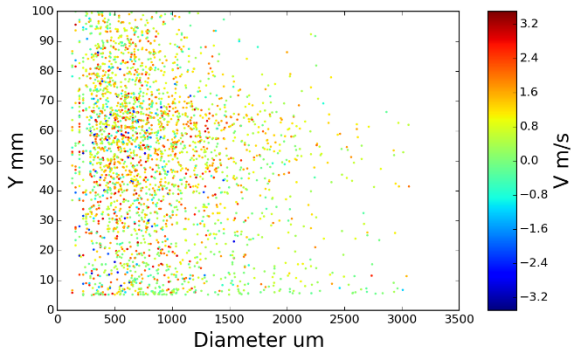


Figure B. 3053: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 Matched Only Droplets for .LB Image

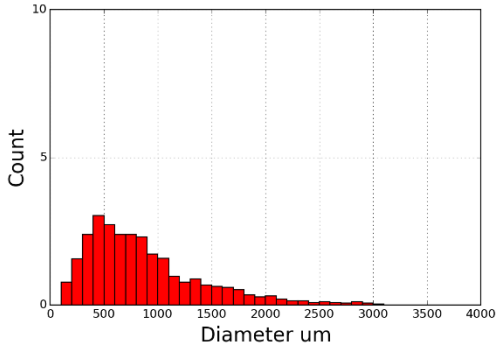


Figure B. 3056: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

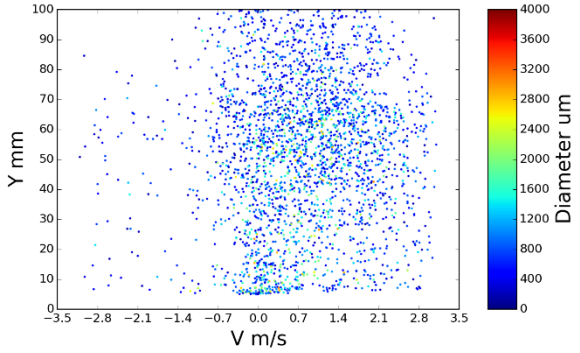


Figure B. 3059: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

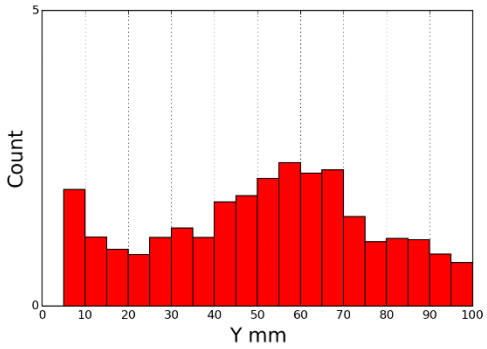


Figure B. 3057: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

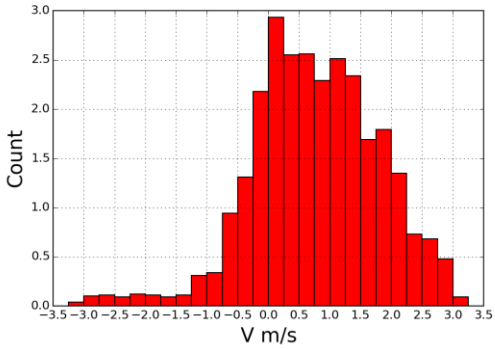


Figure B. 3060: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

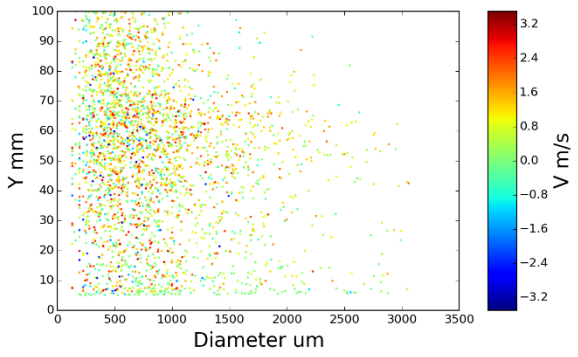


Figure B. 3058: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 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	7.26	7.5	128.7	2973	770.6	587.5	128.7	3026	753.6	580.0
20-40mm	9.25	8.97	128.7	2964	690.9	555.4	128.7	3080	712.6	589.2
40-60mm	12.93	13.09	128.7	2950	762.4	591.5	128.7	3035	765.2	603.6
60-80mm	12.17	11.31	128.7	3050	692.3	547.7	128.7	3069	698.8	550.7
80-100mm	5.96	6.22	128.7	2670	546.9	387.1	128.7	2828	533.6	375.9
All	47.58	47.1	128.7	3050	704.8	555.0	128.7	3080	706.8	563.7
			Height A (mm)				Height B (mm)			
Highest Particle			99.9451				99.9217			
Lowest Particle			5.0757				5.0757			

Table B. 328: 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	2.05	128.7	2860	1122	606.1	128.7	2742	1132	624.9	-2.800	2.710	0.020	0.680	-3.060	3.050	0.420	1.070
20-40mm	2.53	128.7	2955	1022	654.6	128.7	3080	1028	670.0	-2.800	2.760	0.030	0.760	-2.300	2.930	0.610	1.000
40-60mm	4.8	128.7	2950	1041	603.2	128.7	3033	1023	598.4	-3.060	3.110	0.090	0.650	-3.010	2.990	0.630	0.980
60-80mm	4.19	128.7	3032	932.8	579.0	128.7	3069	924.3	578.5	-2.620	2.570	0.050	0.560	-2.750	3.100	0.490	0.990
80-100mm	2.42	128.7	2670	697.2	402.5	128.7	2504	689.7	400.4	-2.810	2.800	0.070	0.560	-3.020	3.030	0.410	0.920
All	15.99	128.7	3032	968.2	594.2	128.7	3080	959.8	597.5	-3.060	3.110	0.060	0.640	-3.060	3.100	0.530	0.990

Table B. 329: Matched Droplet Info

B.7.3.2 All Droplets for .LA Image

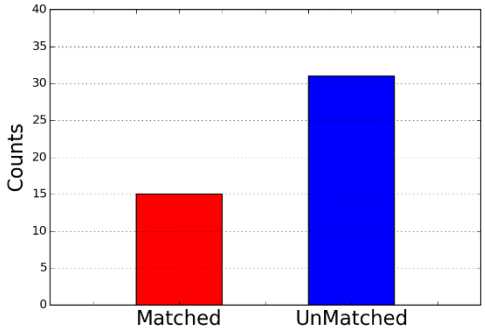


Figure B. 3061: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

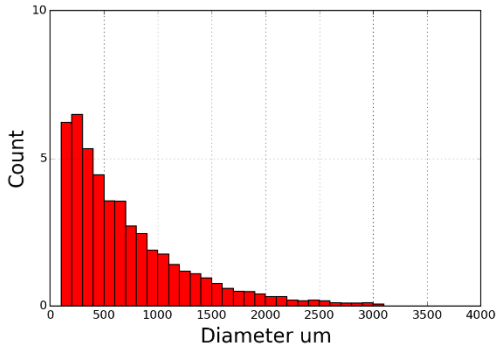


Figure B. 3062: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

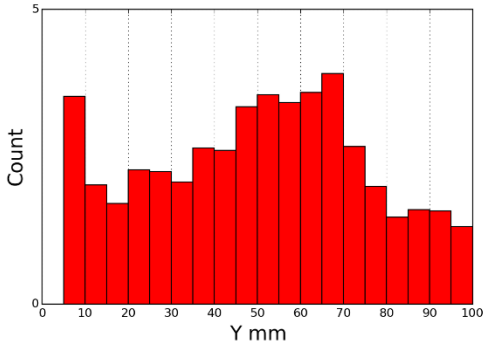


Figure B. 3063: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

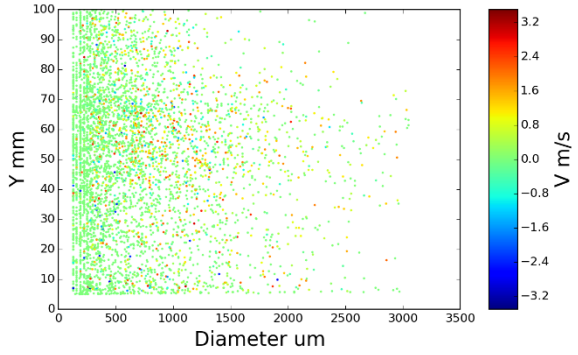


Figure B. 3064: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

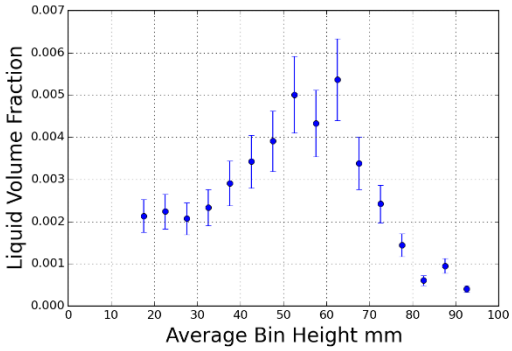


Figure B. 3065: Void Fraction R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 All Droplets for .LB Image

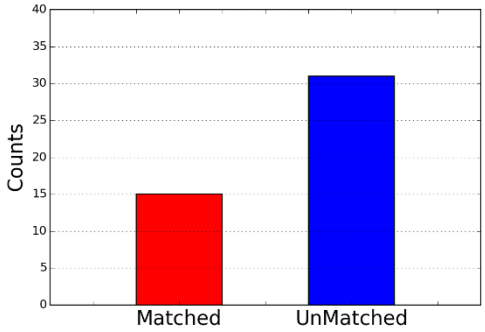


Figure B. 3066: CHC Count Comparison R-123 55F 5000Btu 30000Lb Tri

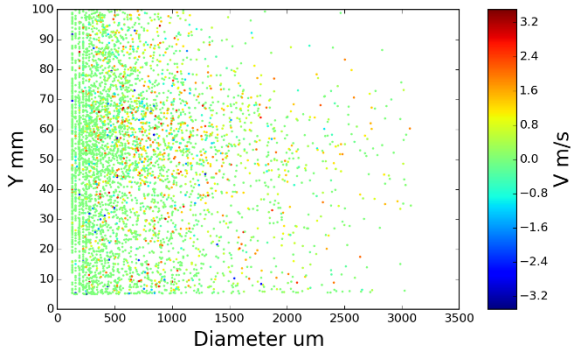


Figure B. 3069: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

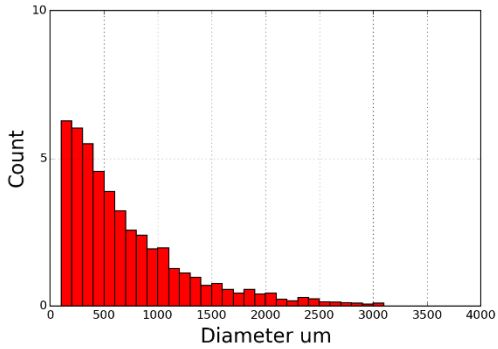


Figure B. 3067: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

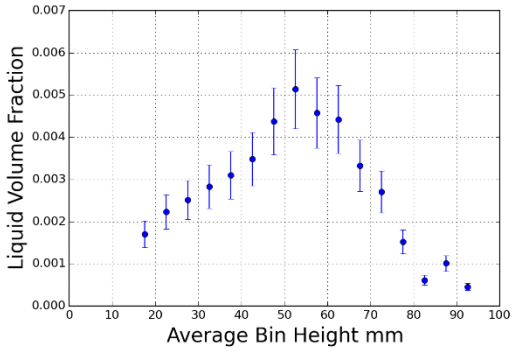


Figure B. 3070: Void Fraction R-123 55F 5000Btu 30000Lb Tri

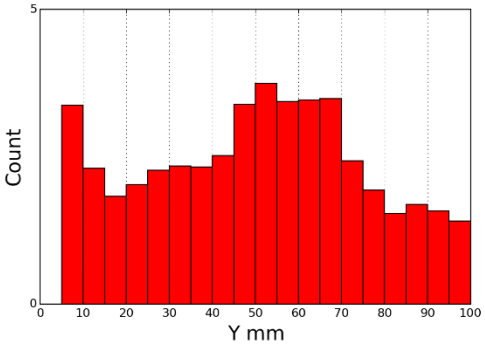


Figure B. 3068: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 Matched Only Droplets for .LA Image

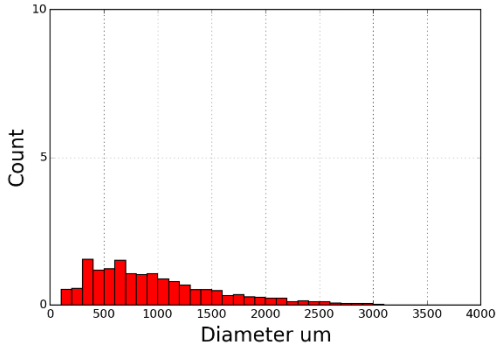


Figure B. 3071: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

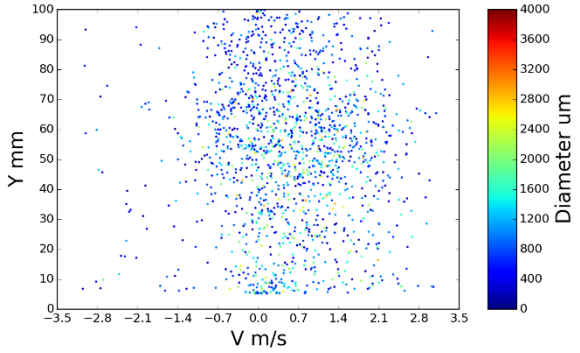


Figure B. 3074: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

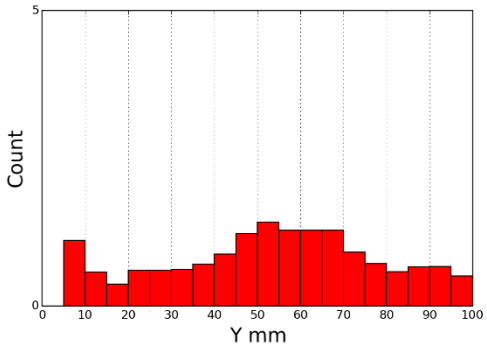


Figure B. 3072: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

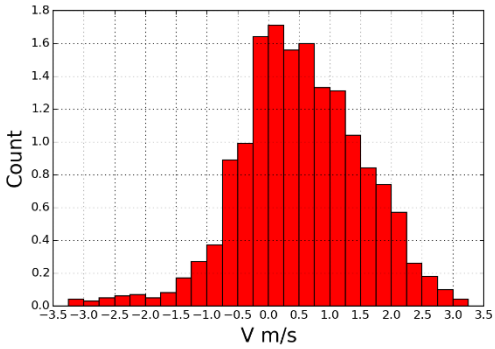


Figure B. 3075: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

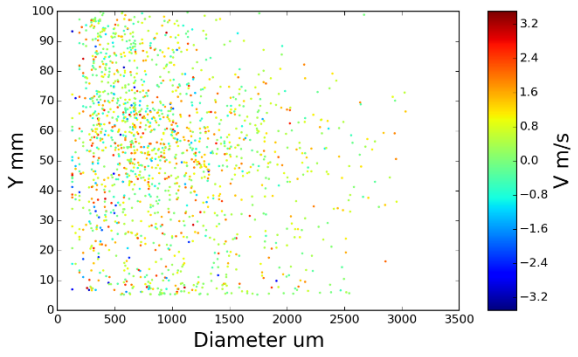


Figure B. 3073: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.7.3.2 Matched Only Droplets for .LB Image

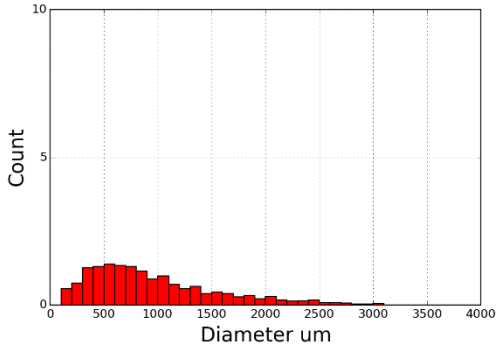


Figure B. 3076: Droplet Diameter Histogram R-123 55F 5000Btu 30000Lb Tri

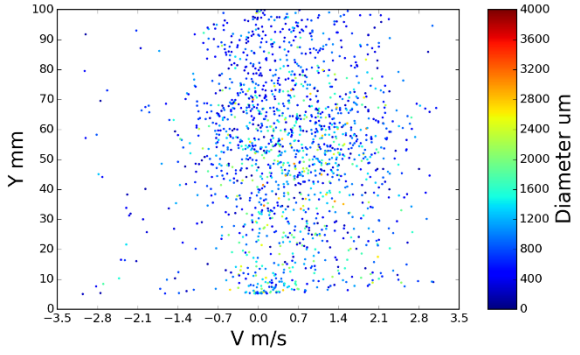


Figure B. 3079: Droplet Height vs Vertical Velocity R-123 55F 5000Btu 30000Lb Tri

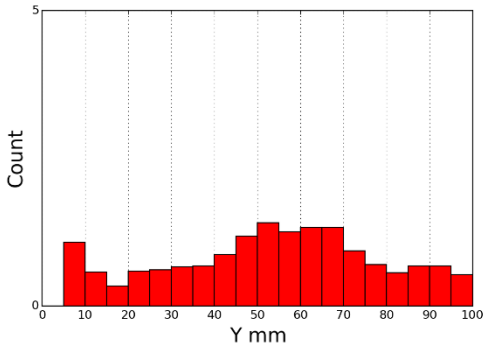


Figure B. 3077: Droplet Height Histogram R-123 55F 5000Btu 30000Lb Tri

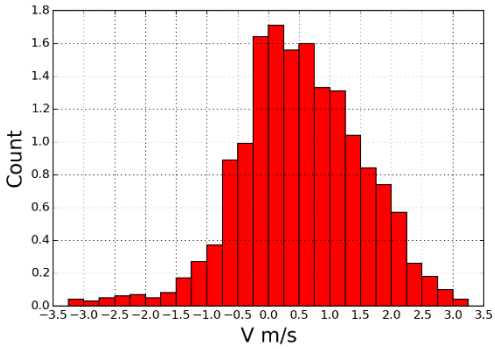


Figure B. 3080: Droplet Vertical Velocity Histogram R-123 55F 5000Btu 30000Lb Tri

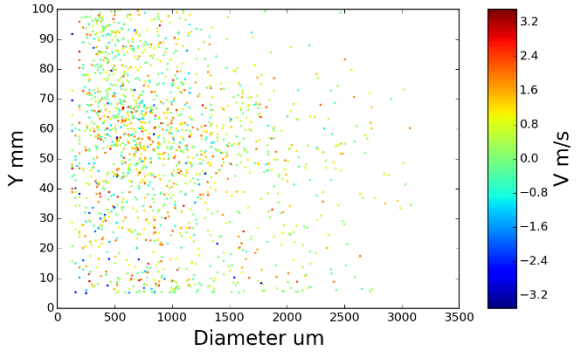


Figure B. 3078: Droplet Height vs Diameter R-123 55F 5000Btu 30000Lb Tri

B.8 - 1556 R-123 55F 10000Btu 30000Lb Tri

B.8.1 Liquid Level 2

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	17519 / 2.207
Ref Mass Flow (lb/hr) / (kg/s)	3225 / 0.406
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	31396 / 42.580
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	10062 / 31.74
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.0 / 12.75
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	56.9 / 13.83
Total Bundle Q (Btu/hr) / (kW)	223049 / 65.37
Total Bundle & Preboiler Q (Btu/hr) / (kW)	222994 / 65.35
Top Two Rows HTC Ratio	1.078
Bundle Inlet Quality	-0.12
Bundle Exit Quality	0.80

Table B. 330: Thermal Conditions

B.8.1.1 Lens 100mm Mag 0_29x

B.8.1.1 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	78.27	76.51	75.7	3879	514.9	562.7	75.7	3949	511.5	561.8
40-60mm	96.93	97.2	75.7	3936	588.4	626.9	75.7	3953	576.6	605.7
60-80mm	92.84	94.08	75.7	3945	567.8	609.1	75.7	3956	569.7	619.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	270.43	270.37	75.7	3945	559.8	603.3	75.7	3956	555.6	599.1
			Height A (mm)				Height B (mm)			
Highest Particle			74.5371				74.5371			
Lowest Particle			26.5624				26.5624			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	30.06	81.0	3748	727.5	621.7	81.0	3911	713.9	632.0	-3.170	3.170	-0.040	0.990	-3.170	3.170	0.400	1.060
40-60mm	37.57	81.0	3923	826.1	669.7	75.7	3953	804.2	669.1	-3.170	3.170	-0.030	0.910	-3.170	3.170	0.510	1.050
60-80mm	37.71	81.0	3851	798.7	659.5	81.0	3922	780.6	663.2	-3.170	3.170	-0.010	0.930	-3.150	3.170	0.480	1.060
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	105.34	81.0	3923	788.2	653.9	75.7	3953	770.2	657.7	-3.170	3.170	-0.020	0.940	-3.170	3.170	0.470	1.060

B.8.1.1 Table B. 332: Matched Droplet Info

All Droplets for .LA Image

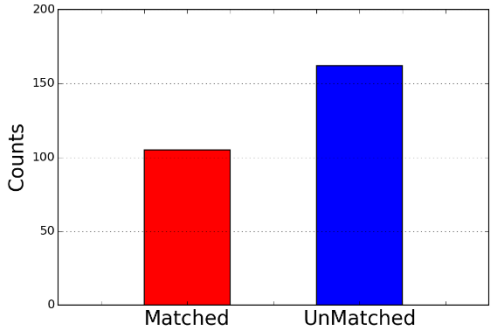


Figure B. 3081: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

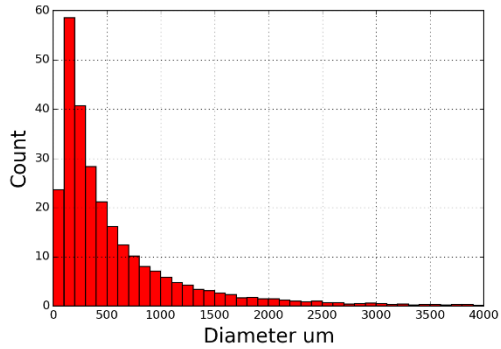


Figure B. 3082: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

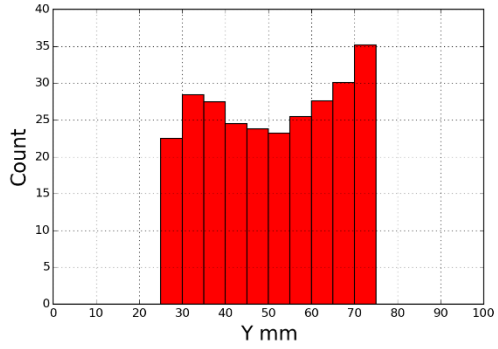


Figure B. 3083: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

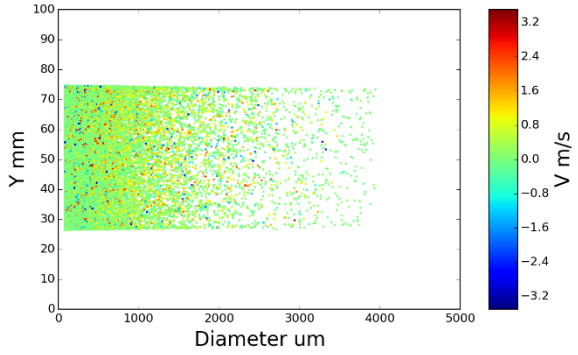


Figure B. 3084: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

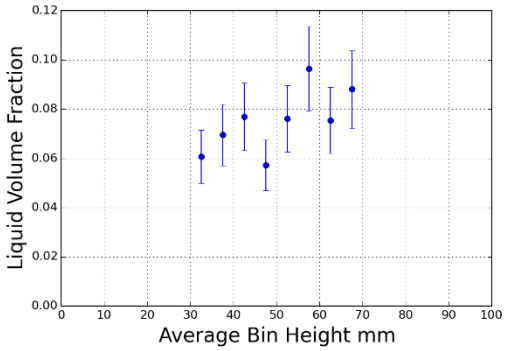


Figure B. 3085: Void Fraction R-123 55F 10000Btu 30000Lb Tri

B.8.1.1 All Droplets for .LB Image

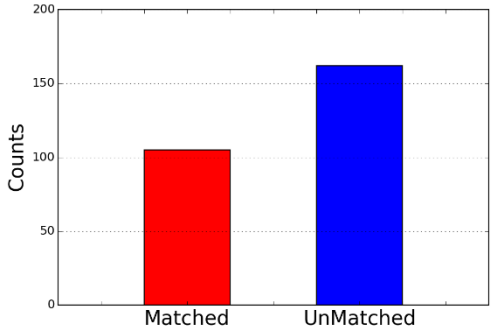


Figure B. 3086: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

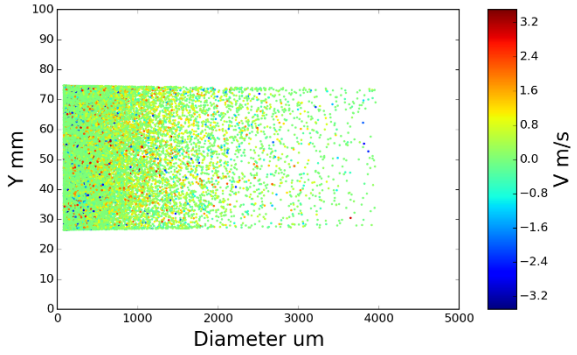


Figure B. 3089: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

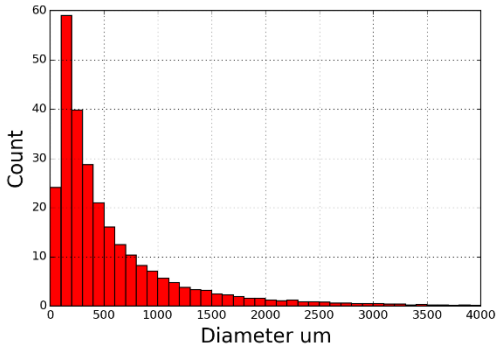


Figure B. 3087: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

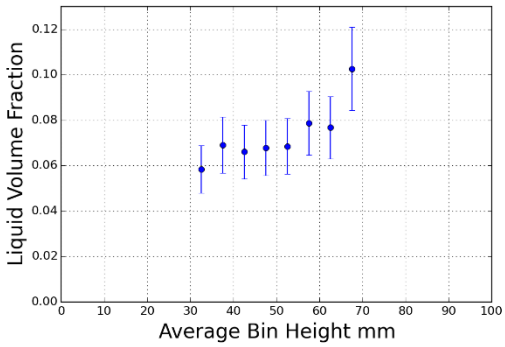


Figure B. 3090: Void Fraction R-123 55F 10000Btu 30000Lb Tri

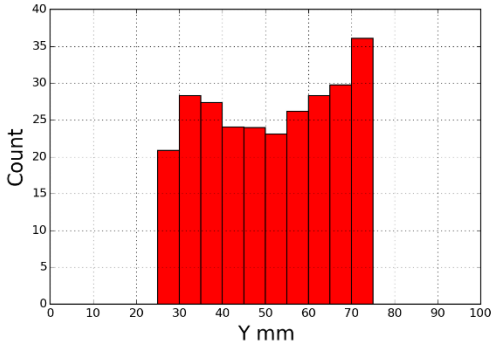


Figure B. 3088: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

B.8.1.1 Matched Only Droplets for .LA Image

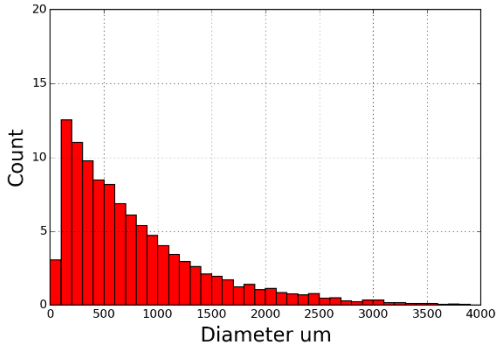


Figure B. 3091: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

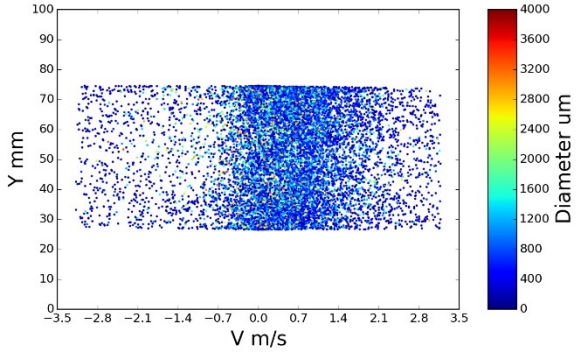


Figure B. 3094: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

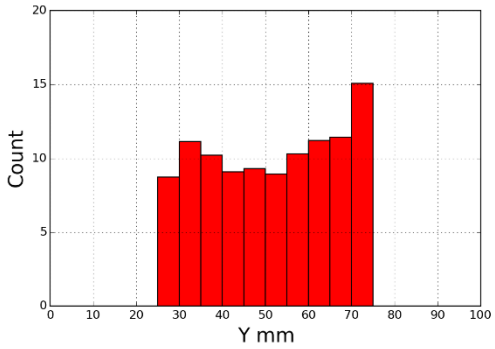


Figure B. 3092: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

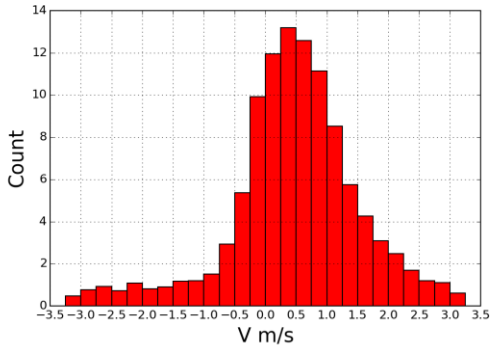


Figure B. 3095: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

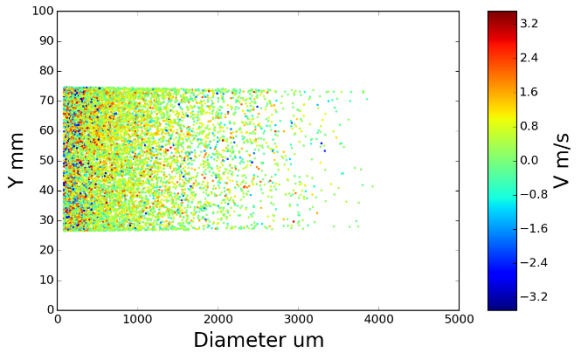


Figure B. 3093: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.1.1 Matched Only Droplets for .LB Image

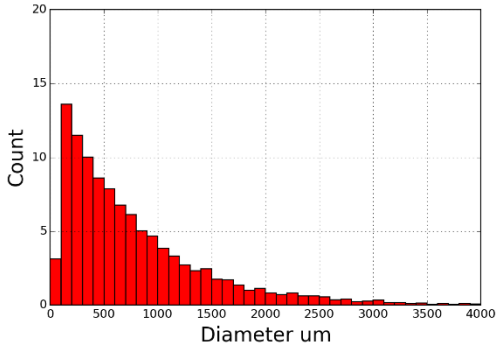


Figure B. 3096: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

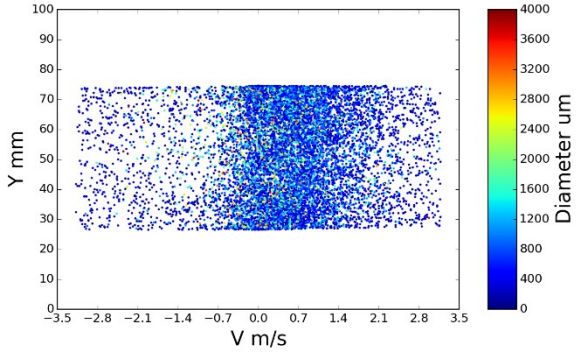


Figure B. 3099: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

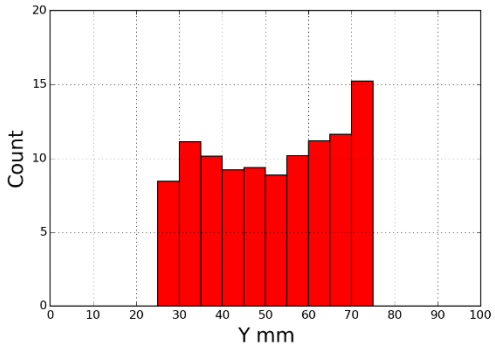


Figure B. 3097: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

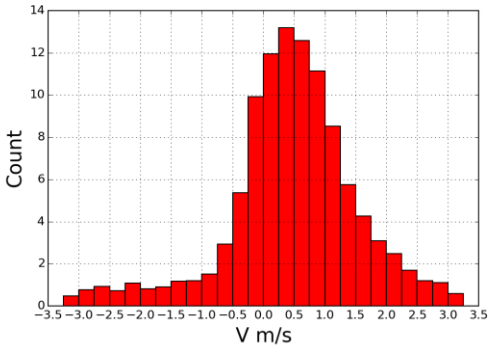


Figure B. 3100: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

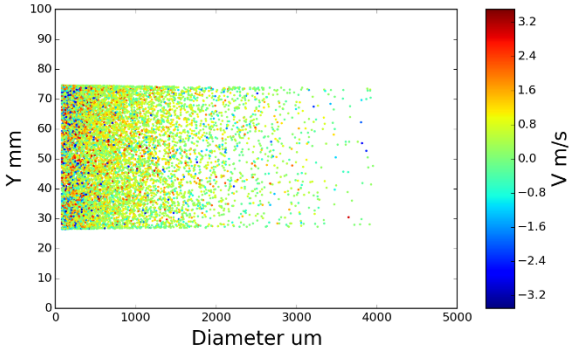


Figure B. 3098: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.1.1 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	25.53	27.36	75.7	3954	813.4	803.0	75.7	3919	769.0	797.5
40-60mm	36.59	37.96	75.7	3951	875.4	869.4	75.7	3944	838.6	849.3
60-80mm	34.87	36.55	75.7	3945	924.1	884.8	75.7	3957	890.0	880.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	98.98	103.5	75.7	3954	876.6	859.2	75.7	3957	838.4	848.5
			Height A (mm)				Height B (mm)			
Highest Particle			74.5371				74.5371			
Lowest Particle			26.5624				26.5624			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	10.3	85.9	3818	1176	791.1	81.0	3919	1165	803.6	-3.070	2.970	0.000	0.750	-2.910	3.160	0.460	0.880
40-60mm	14.71	81.0	3722	1300	827.9	75.7	3943	1275	844.7	-3.170	3.070	-0.020	0.750	-3.120	3.130	0.520	0.870
60-80mm	14.69	81.0	3799	1361	830.2	81.0	3950	1337	841.2	-3.170	3.140	-0.040	0.740	-3.050	3.130	0.480	0.830
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	39.7	81.0	3818	1290	822.6	75.7	3950	1270	835.7	-3.170	3.140	-0.020	0.750	-3.120	3.160	0.490	0.860

Table B. 334: Matched Droplet Info

B.8.1.1 All Droplets for .LA Image

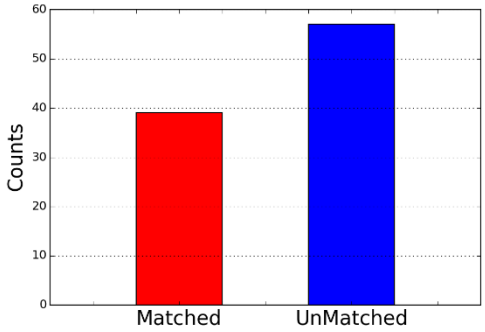


Figure B. 3101: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

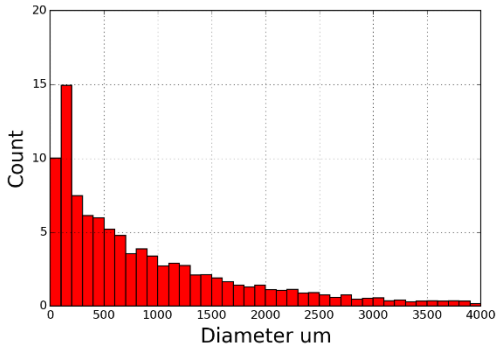


Figure B. 3102: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

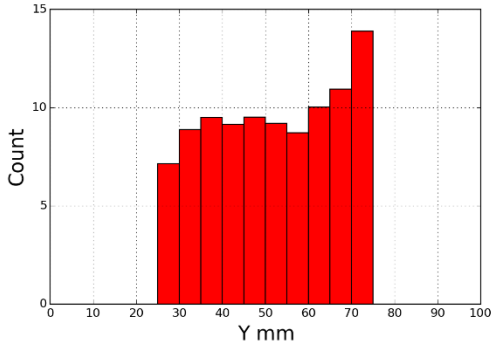


Figure B. 3103: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

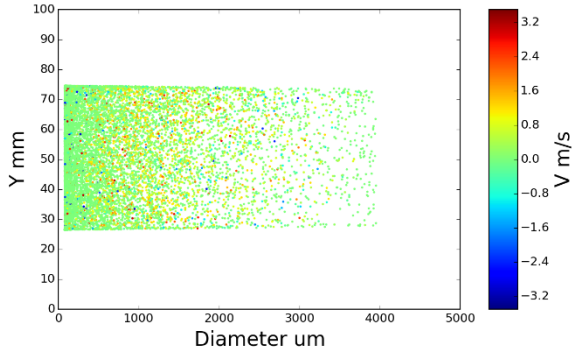


Figure B. 3104: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

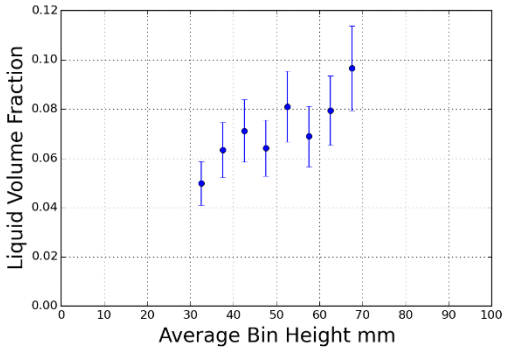


Figure B. 3105: Void Fraction R-123 55F 10000Btu 30000Lb Tri

B.8.1.1 All Droplets for .LB Image

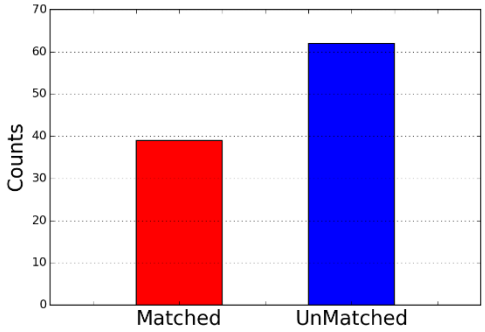


Figure B. 3106: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

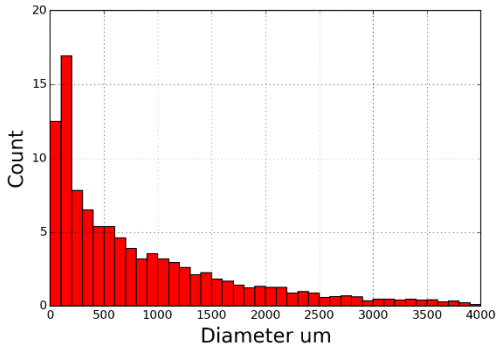


Figure B. 3107: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

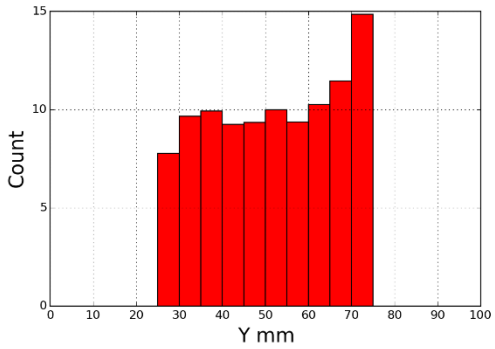


Figure B. 3108: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

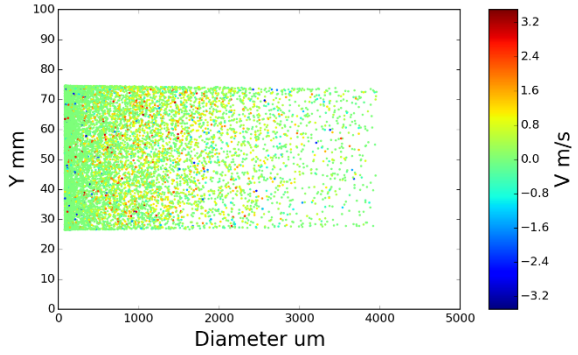


Figure B. 3109: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

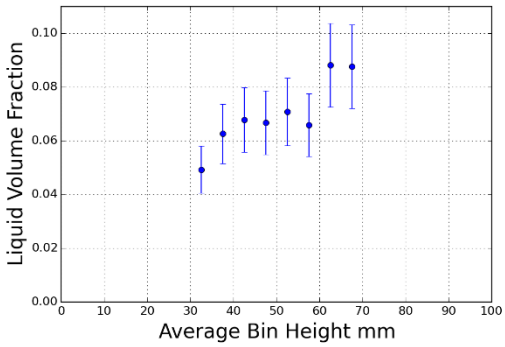


Figure B. 3110: Void Fraction R-123 55F 10000Btu 30000Lb Tri

B.8.1.1 Matched Only Droplets for .LA Image

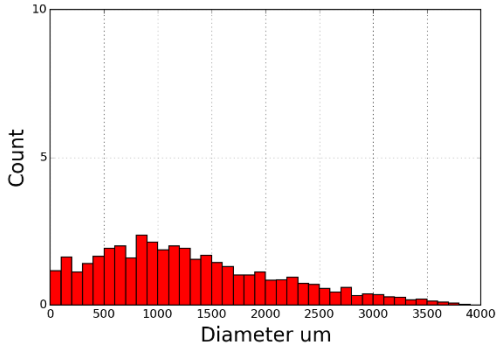


Figure B. 3111: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

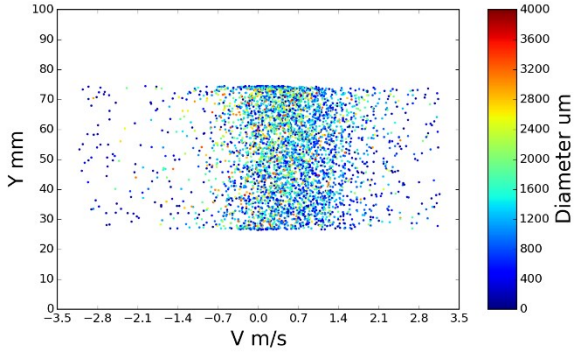


Figure B. 3114: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

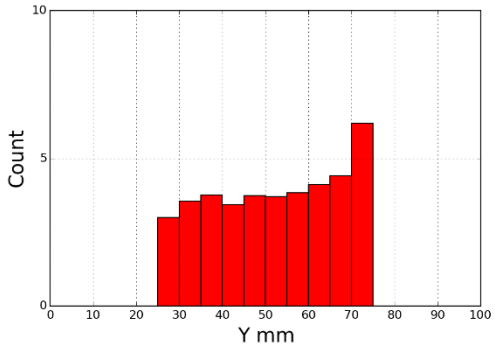


Figure B. 3112: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

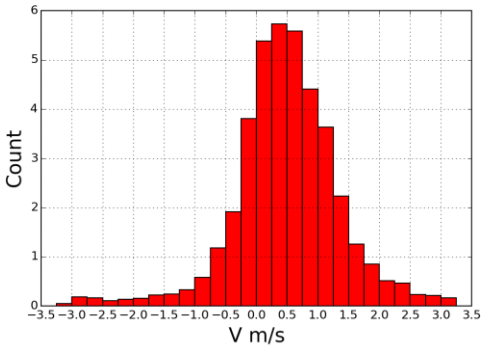


Figure B. 3115: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

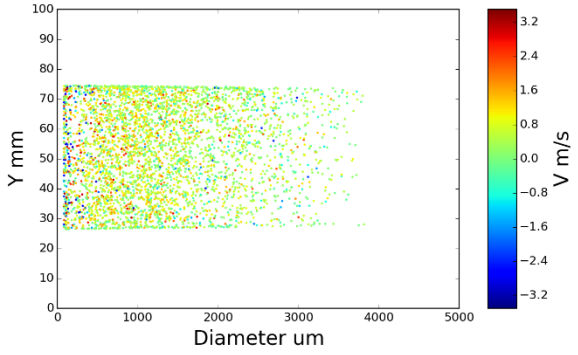


Figure B. 3113: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.1.1 Matched Only Droplets for .LB Image

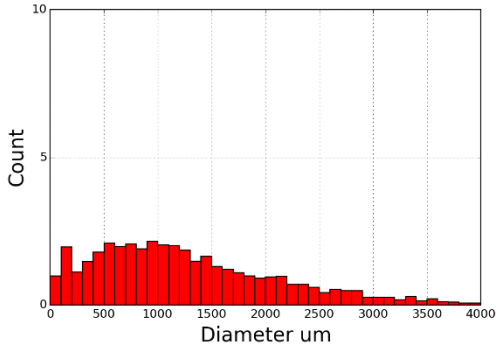


Figure B. 3116: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

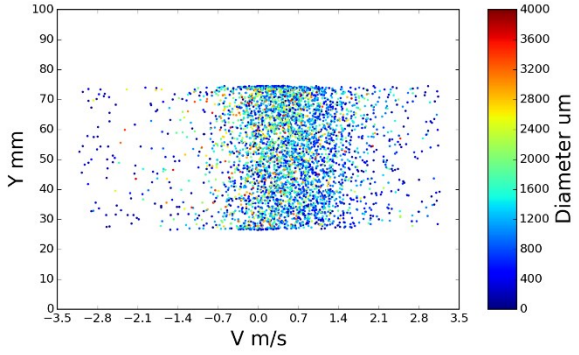


Figure B. 3119: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

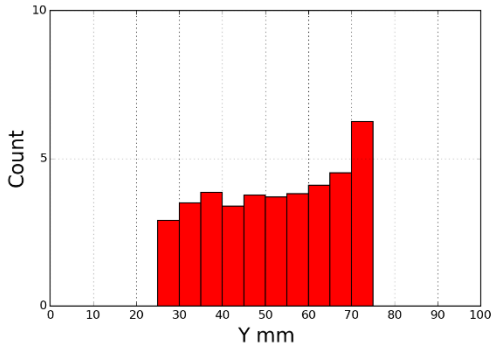


Figure B. 3117: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

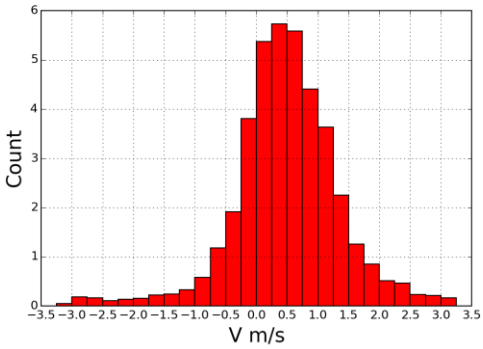


Figure B. 3120: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

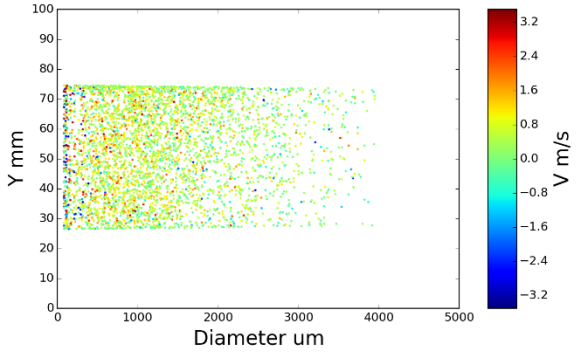


Figure B. 3118: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.1.1 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	16.97	19.38	75.7	3891	795.3	919.2	75.7	3899	705.5	892.0
40-60mm	23.29	28.08	75.7	3950	853.6	972.7	75.7	3956	738.1	931.6
60-80mm	23.49	24.85	75.7	3951	835.1	968.9	75.7	3954	797.2	970.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	66.2	74.64	75.7	3951	831.3	957.6	75.7	3956	749.7	935.5
			Height A (mm)				Height B (mm)			
Highest Particle			74.5371				74.5294			
Lowest Particle			26.5624				26.5624			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	5.6	75.7	3891	1341	940.6	75.7	3890	1333	972.1	-3.010	3.170	-0.070	0.860	-3.170	3.160	0.400	1.010
40-60mm	8.2	75.7	3743	1397	969.0	75.7	3956	1376	992.1	-3.170	3.140	-0.080	0.920	-3.170	3.170	0.450	1.010
60-80mm	8.03	81.0	3874	1413	968.6	75.7	3954	1397	988.6	-3.150	3.060	-0.000	0.880	-3.010	3.170	0.380	0.970
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	21.83	75.7	3891	1389	962.1	75.7	3956	1373	986.0	-3.170	3.170	-0.050	0.890	-3.170	3.170	0.410	1.000

Table B. 336: Matched Droplet Info

B.8.1.1 All Droplets for .LA Image

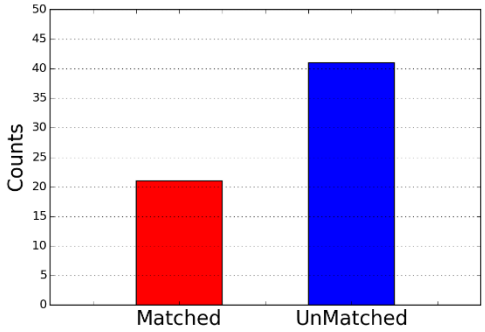


Figure B. 3121: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

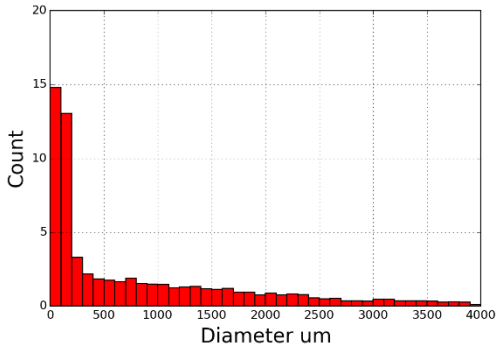


Figure B. 3122: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

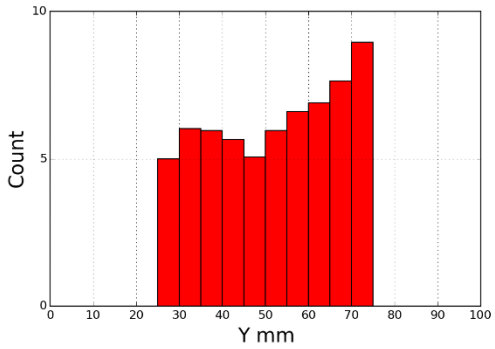


Figure B. 3123: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

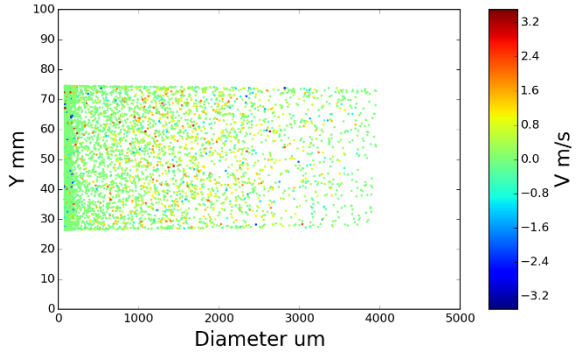


Figure B. 3124: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

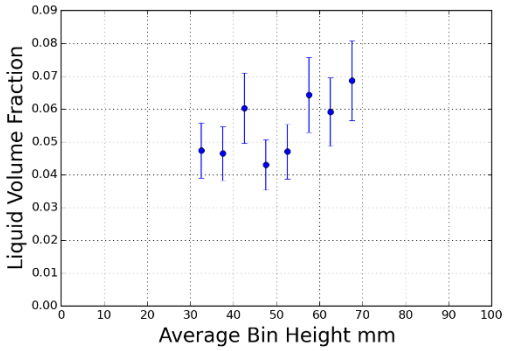


Figure B. 3125: Void Fraction R-123 55F 10000Btu 30000Lb Tri

B.8.1.1 All Droplets for .LB Image

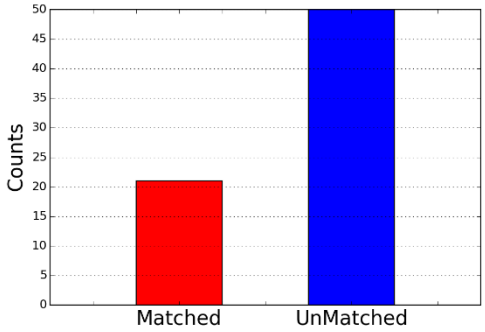


Figure B. 3126: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

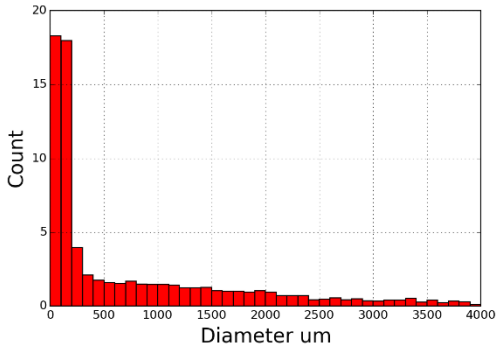


Figure B. 3127: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

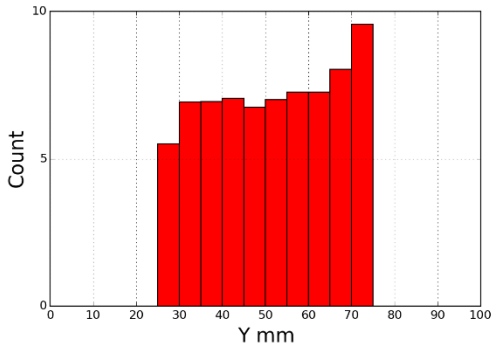


Figure B. 3128: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

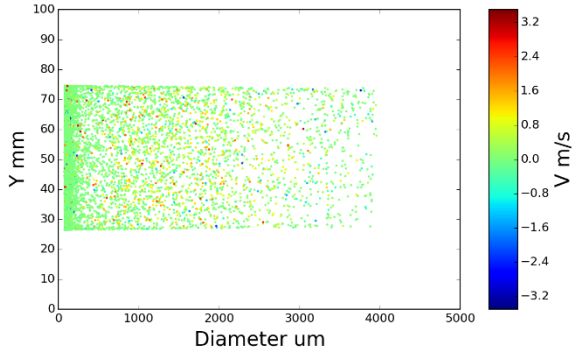


Figure B. 3129: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

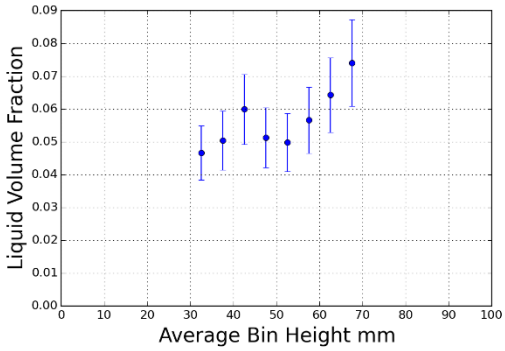


Figure B. 3130: Void Fraction R-123 55F 10000Btu 30000Lb Tri

B.8.1.1 Matched Only Droplets for .LA Image

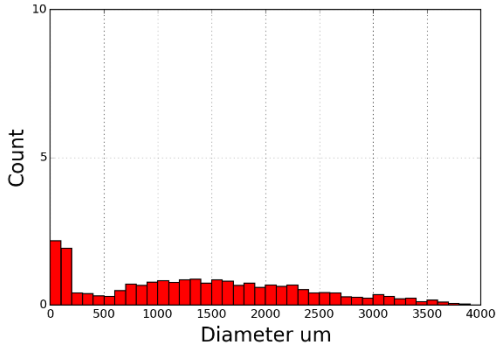


Figure B. 3131: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

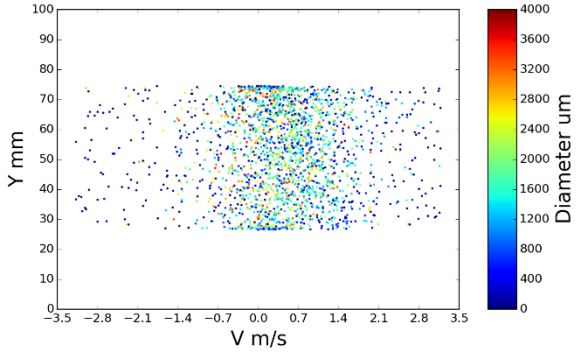


Figure B. 3134: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

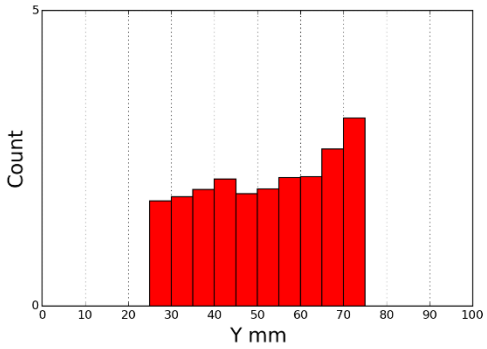


Figure B. 3132: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

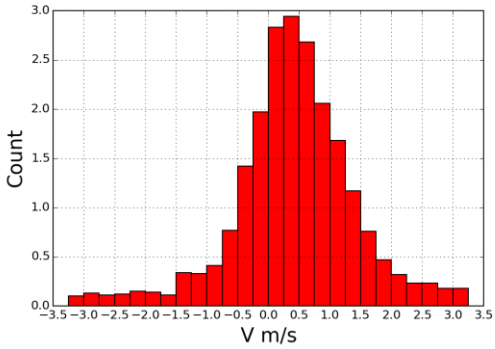


Figure B. 3135: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

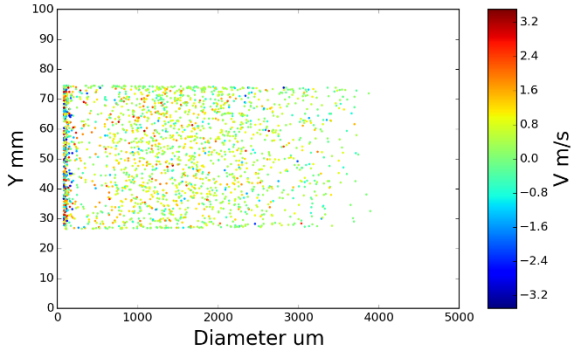


Figure B. 3133: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.1.1 Matched Only Droplets for .LB Image

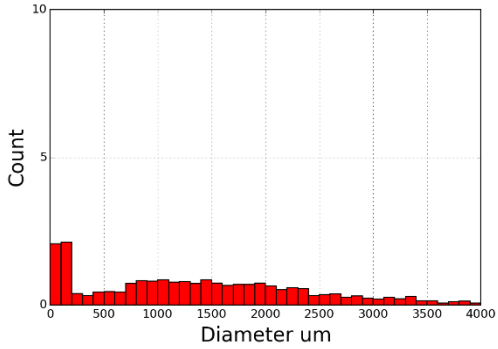


Figure B. 3136: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

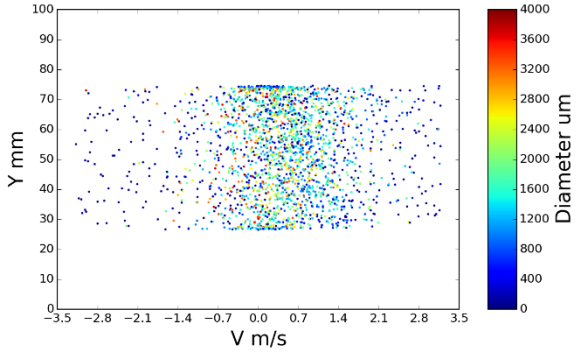


Figure B. 3139: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

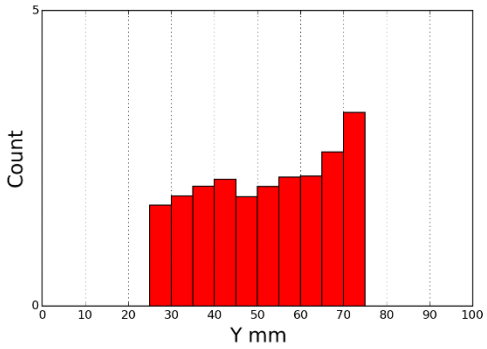


Figure B. 3137: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

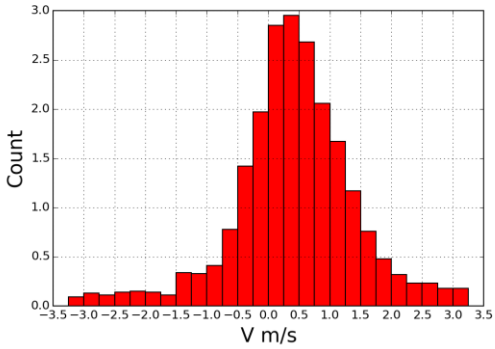


Figure B. 3140: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

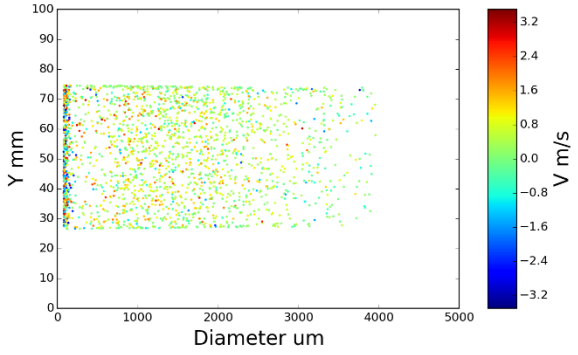


Figure B. 3138: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.1.2 Lens 50mm Mag 0_13x

B.8.1.2 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	93.19	92.63	170.2	3967	665.6	594.8	170.2	3989	666.3	593.9
40-60mm	86.52	86.41	170.2	3979	686.3	620.0	170.2	3991	680.5	599.6
60-80mm	107.84	107.49	170.2	3978	706.9	639.2	182.0	3988	709.7	635.8
80-100mm	123.19	123.2	182.0	3967	733.9	633.5	170.2	3990	732.1	627.3
All	412.0	410.97	170.2	3979	700.3	623.8	170.2	3991	699.5	616.7
			Height A (mm)				Height B (mm)			
Highest Particle			100.0701				100.0511			
Lowest Particle			20.1281				20.1281			

Table B. 337: 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	38.99	182.0	3860	768.0	629.7	182.0	3989	741.4	620.5	-3.110	3.110	-0.180	1.370	-3.100	3.110	0.270	1.390
40-60mm	36.43	182.0	3858	775.0	628.1	182.0	3940	756.4	629.8	-3.110	3.110	-0.100	1.360	-3.110	3.110	0.310	1.410
60-80mm	48.56	182.0	3937	812.4	653.6	182.0	3988	792.7	656.9	-3.110	3.110	-0.090	1.310	-3.110	3.110	0.320	1.380
80-100mm	60.49	182.0	3871	867.3	663.1	170.2	3977	847.8	666.3	-3.110	3.110	-0.120	1.190	-3.110	3.110	0.280	1.260
All	184.67	182.0	3937	813.0	648.0	170.2	3989	792.3	648.6	-3.110	3.110	-0.120	1.290	-3.110	3.110	0.290	1.350

Table B. 338: Matched Droplet Info

B.8.1.2 All Droplets for .LA Image

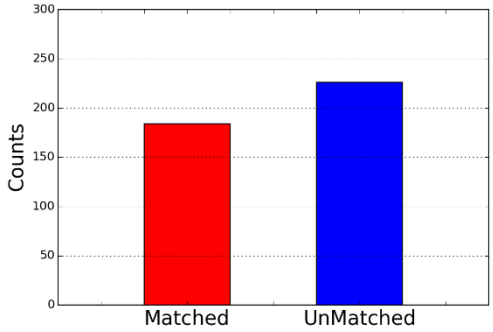


Figure B. 3141: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

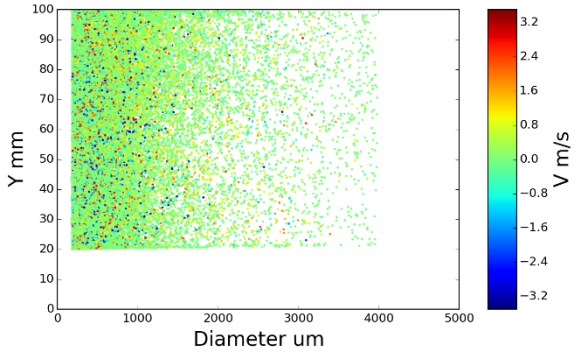


Figure B. 3144: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

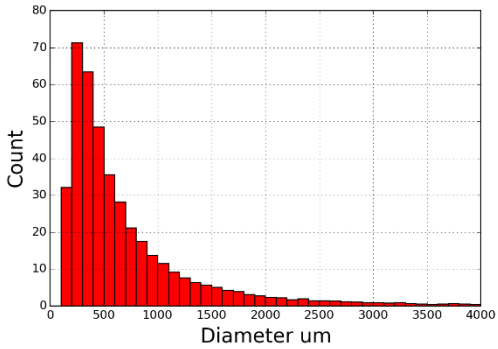


Figure B. 3142: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

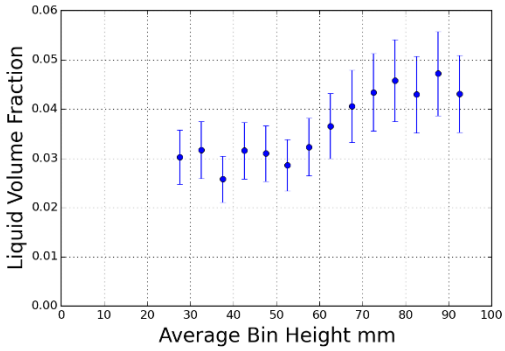


Figure B. 3145: Void Fraction R-123 55F 10000Btu 30000Lb Tri

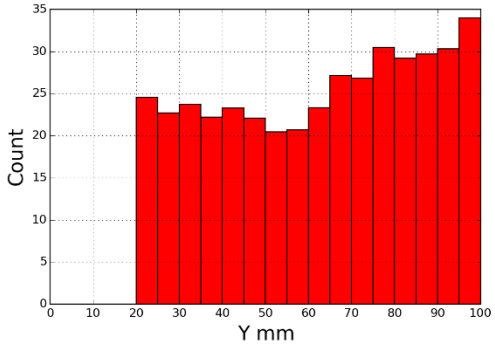


Figure B. 3143: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

B.8.1.2 All Droplets for .LB Image

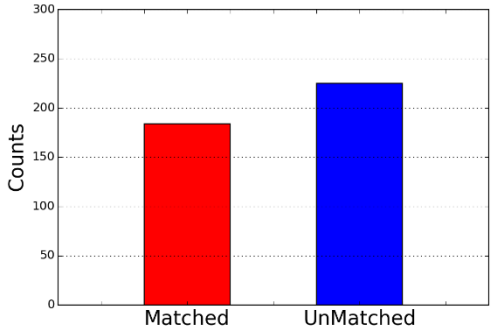


Figure B. 3146: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

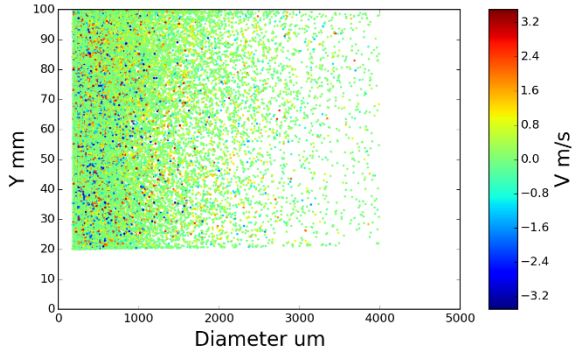


Figure B. 3149: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

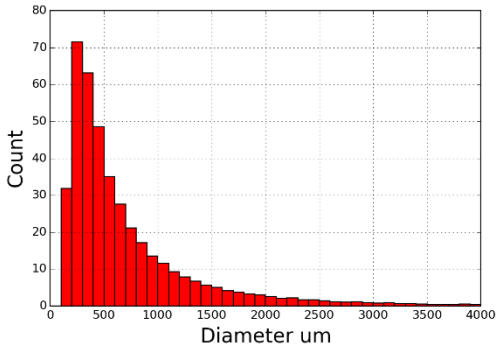


Figure B. 3147: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

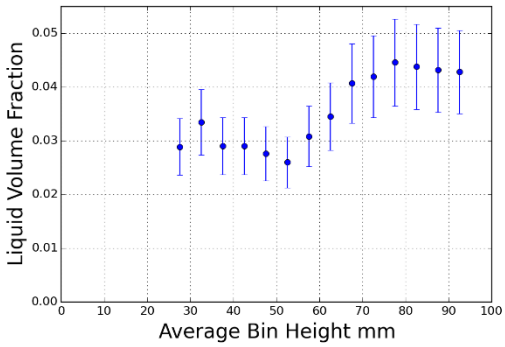


Figure B. 3150: Void Fraction R-123 55F 10000Btu 30000Lb Tri

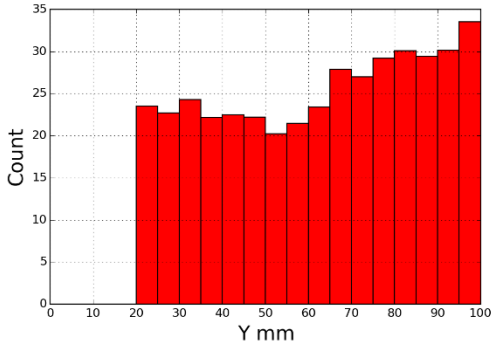


Figure B. 3148: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

B.8.1.2 Matched Only Droplets for .LA Image

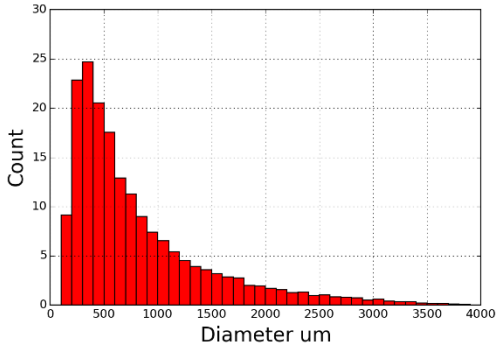


Figure B. 3151: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

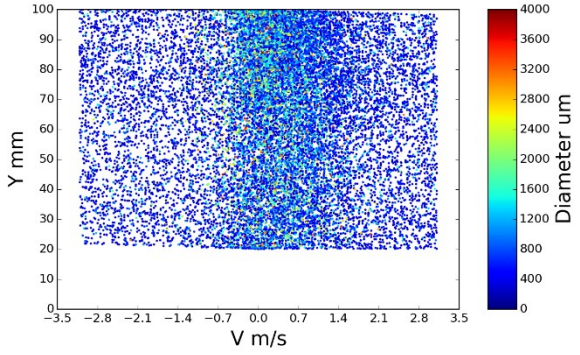


Figure B. 3154: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

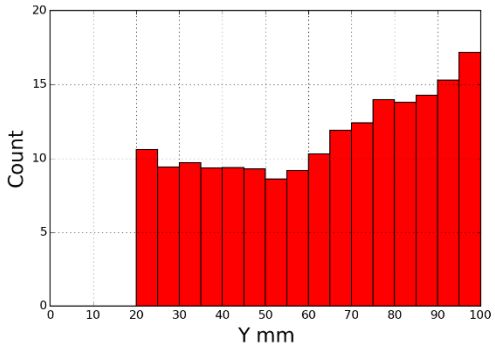


Figure B. 3152: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

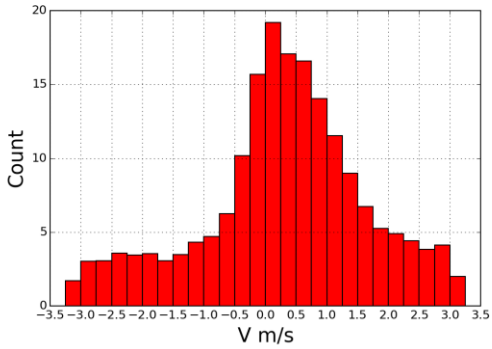


Figure B. 3155: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

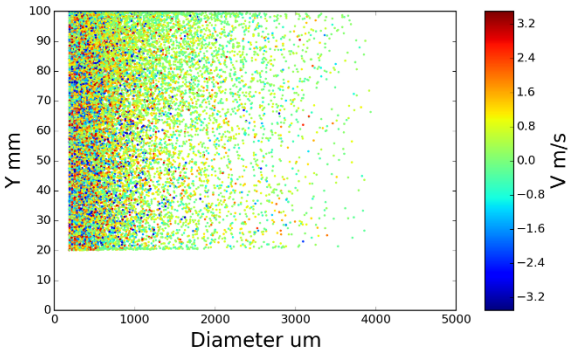


Figure B. 3153: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.1.2 Matched Only Droplets for .LB Image

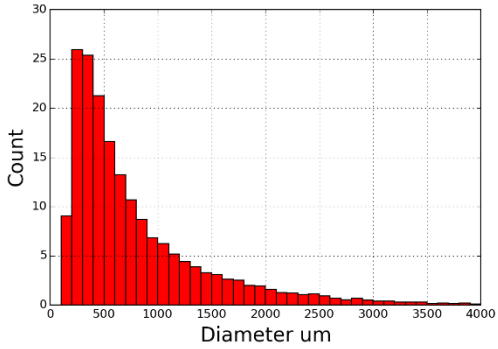


Figure B. 3156: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

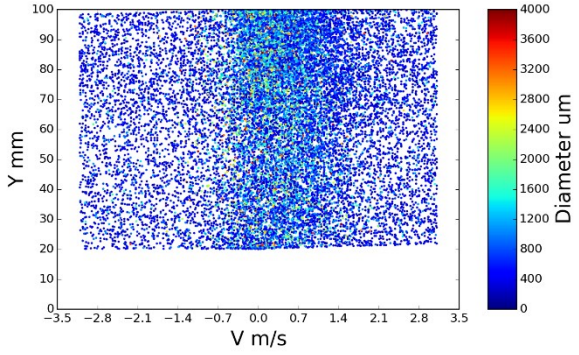


Figure B. 3159: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

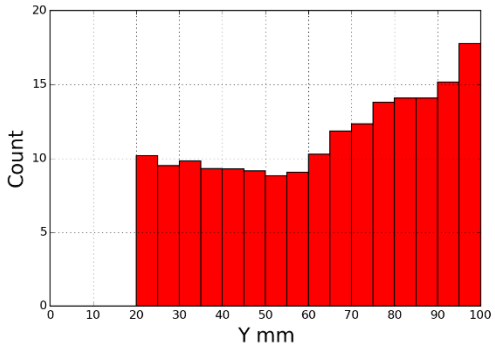


Figure B. 3157: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

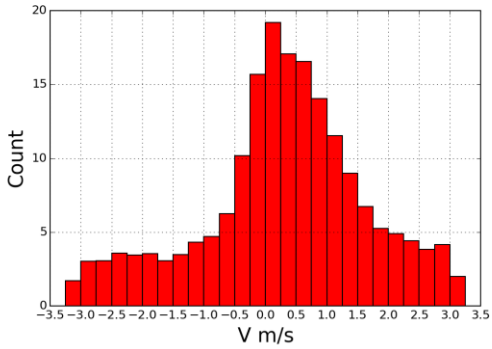


Figure B. 3160: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

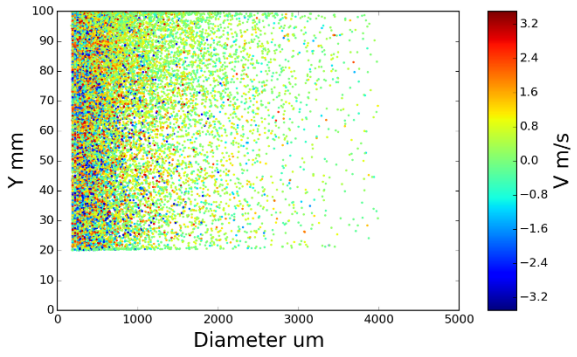


Figure B. 3158: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.1.2 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	44.24	46.33	170.2	3989	859.4	731.0	170.2	3991	827.4	714.0
40-60mm	38.83	39.82	170.2	3976	924.9	773.8	182.0	3986	931.5	786.5
60-80mm	56.6	55.53	170.2	3986	924.3	797.6	170.2	3980	926.6	803.4
80-100mm	79.0	79.38	170.2	3983	880.8	711.8	182.0	3988	885.0	713.3
All	219.56	222.04	170.2	3989	893.8	749.9	170.2	3991	889.7	751.0
			Height A (mm)				Height B (mm)			
Highest Particle			100.0482				100.0701			
Lowest Particle			20.1281				20.1281			

Table B. 339: 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	182.0	3758	1090	764.5	170.2	3982	1053	771.2	-3.110	3.110	-0.080	1.130	-3.100	3.110	0.280	1.180
40-60mm	14.95	182.0	3903	1204	815.9	182.0	3925	1180	825.2	-3.110	3.110	-0.050	1.050	-3.100	3.110	0.330	1.160
60-80mm	22.84	182.0	3932	1168	817.2	182.0	3980	1145	830.7	-3.110	3.100	-0.090	1.070	-3.110	3.100	0.370	1.130
80-100mm	38.02	182.0	3926	1080	724.3	182.0	3970	1061	734.0	-3.110	3.110	-0.110	1.010	-3.110	3.110	0.300	1.110
All	92.5	182.0	3932	1122	772.2	170.2	3982	1097	782.0	-3.110	3.110	-0.090	1.050	-3.110	3.110	0.320	1.140

Table B. 340: Matched Droplet Info

B.8.1.2 All Droplets for .LA Image

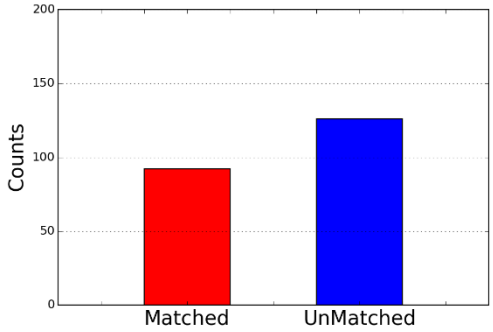


Figure B. 3161: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

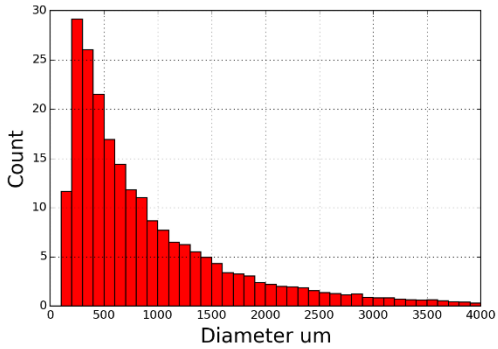


Figure B. 3162: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

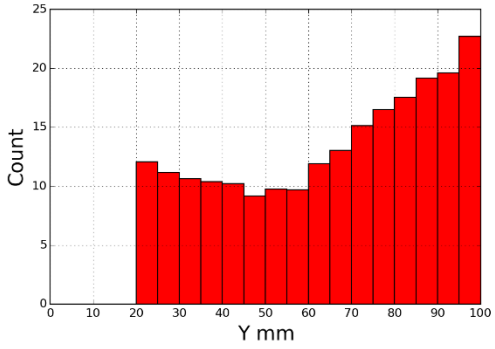


Figure B. 3163: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

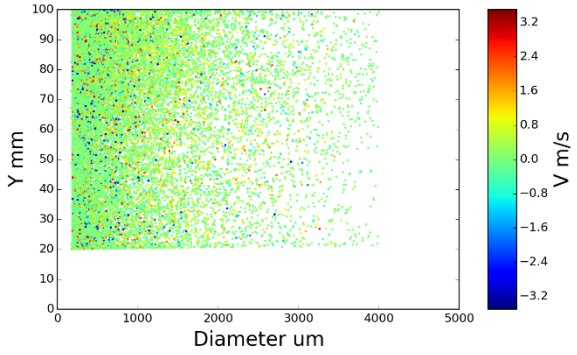


Figure B. 3164: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

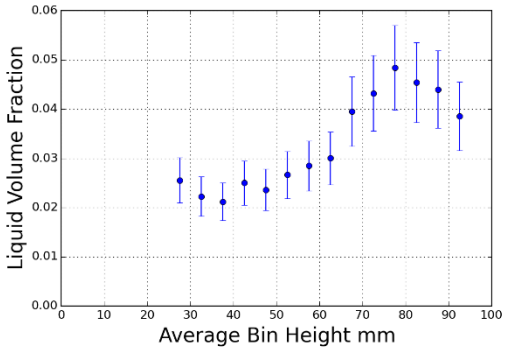


Figure B. 3165: Void Fraction R-123 55F 10000Btu 30000Lb Tri

B.8.1.2 All Droplets for .LB Image

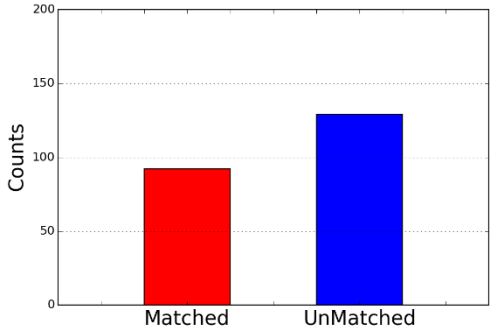


Figure B. 3166: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

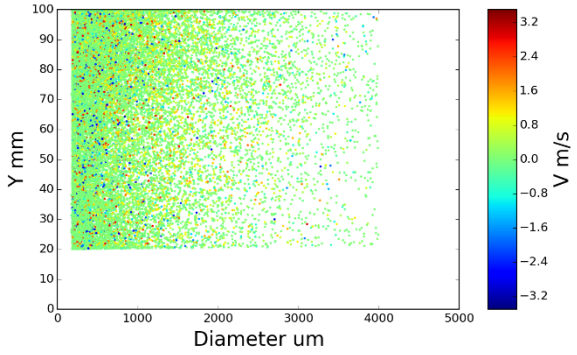


Figure B. 3169: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

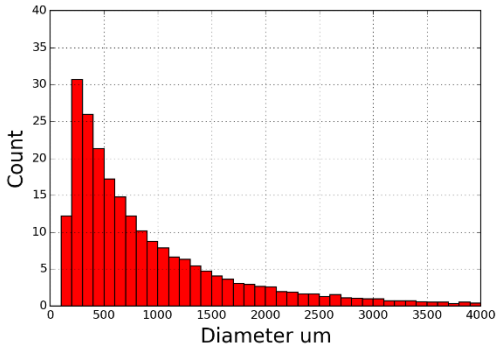


Figure B. 3167: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

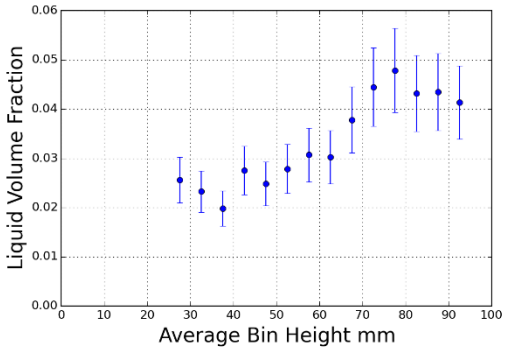


Figure B. 3170: Void Fraction R-123 55F 10000Btu 30000Lb Tri

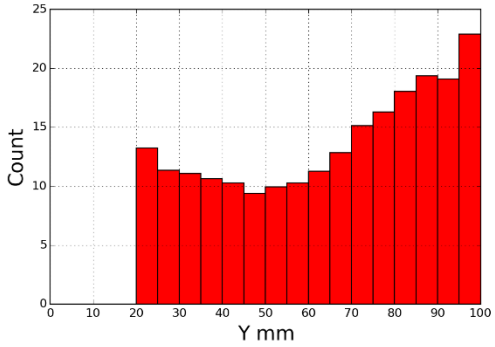


Figure B. 3168: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

B.8.1.2 Matched Only Droplets for .LA Image

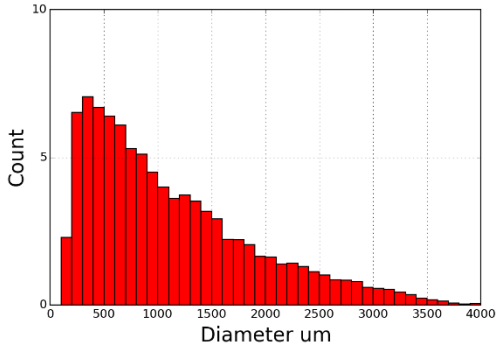


Figure B. 3171: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

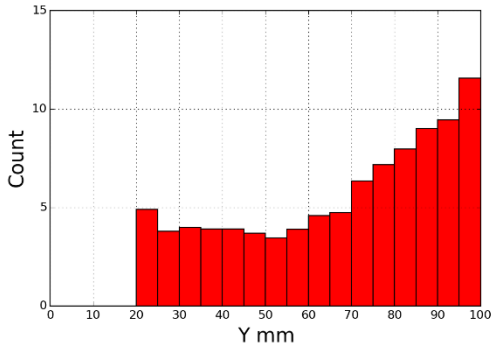


Figure B. 3172: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

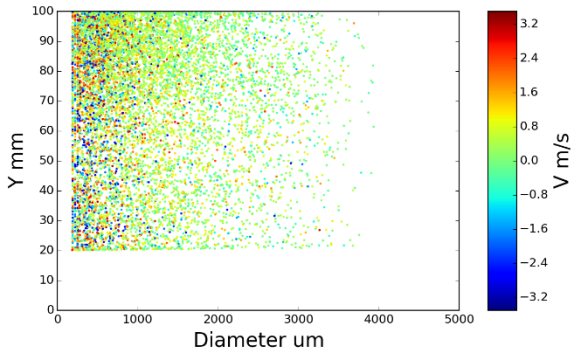


Figure B. 3173: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

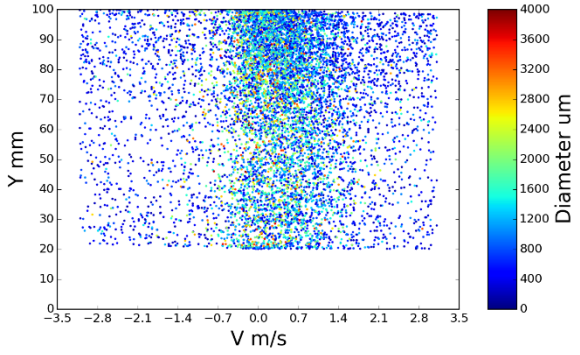


Figure B. 3174: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

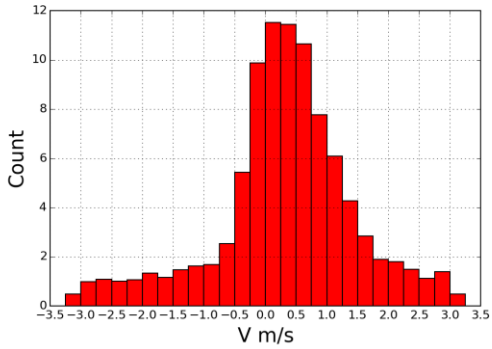


Figure B. 3175: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

B.8.1.2 Matched Only Droplets for .LB Image

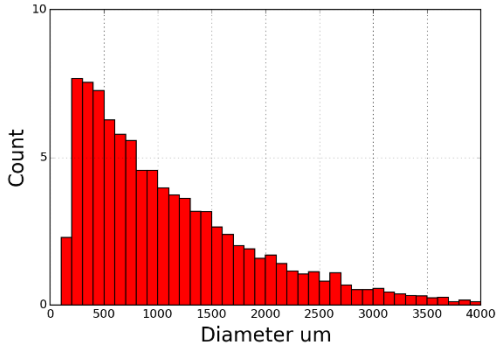


Figure B. 3176: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

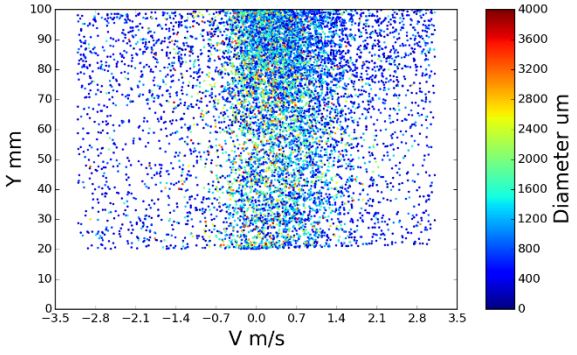


Figure B. 3179: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

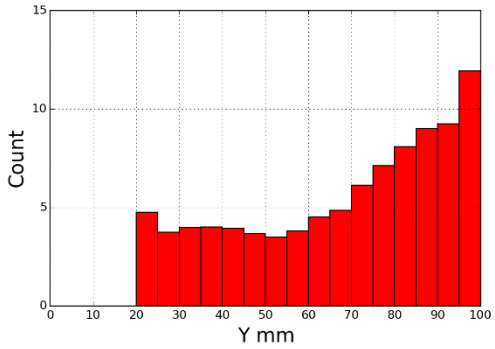


Figure B. 3177: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

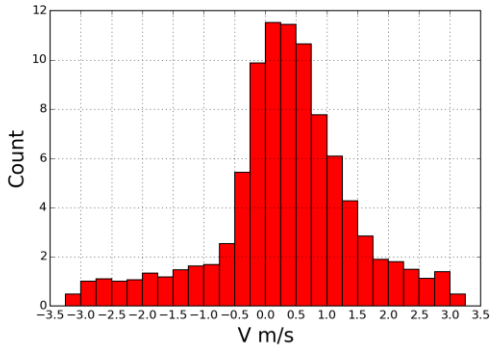


Figure B. 3180: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

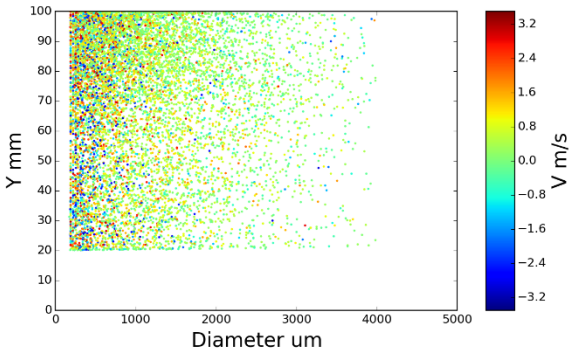


Figure B. 3178: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.1.2 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	28.95	27.93	170.2	3988	1078	913.9	170.2	3973	1051	879.2
40-60mm	22.6	22.91	170.2	3981	1175	919.5	170.2	3991	1191	936.5
60-80mm	35.63	34.69	170.2	3986	1089	913.0	182.0	3983	1091	894.6
80-100mm	50.08	50.51	182.0	3989	997.8	793.0	170.2	3991	1009	808.5
All	137.99	136.53	170.2	3989	1064	874.4	170.2	3991	1066	870.0
			Height A (mm)				Height B (mm)			
Highest Particle			100.0701				100.0701			
Lowest Particle			20.1529				20.1518			

Table B. 341: 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	9.72	182.0	3976	1449	916.4	193.0	3973	1420	942.4	-3.110	3.110	-0.070	0.960	-3.050	3.040	0.250	1.050
40-60mm	8.12	193.0	3873	1612	885.2	182.0	3978	1579	910.6	-3.100	3.110	-0.010	0.870	-3.080	3.080	0.330	1.010
60-80mm	13.29	182.0	3986	1463	900.7	182.0	3983	1452	927.1	-3.090	3.090	-0.030	0.870	-3.110	3.050	0.360	1.010
80-100mm	21.92	182.0	3956	1296	802.9	182.0	3974	1278	828.0	-3.110	3.090	-0.080	0.920	-3.090	3.100	0.320	0.970
All	53.15	182.0	3986	1412	870.0	182.0	3983	1390	894.7	-3.110	3.110	-0.060	0.910	-3.110	3.100	0.320	1.000

Table B. 342: Matched Droplet Info

B.8.1.2 All Droplets for .LA Image

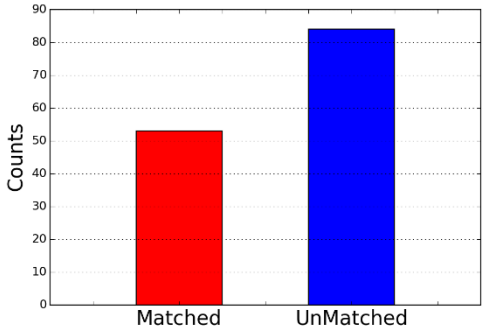


Figure B. 3181: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

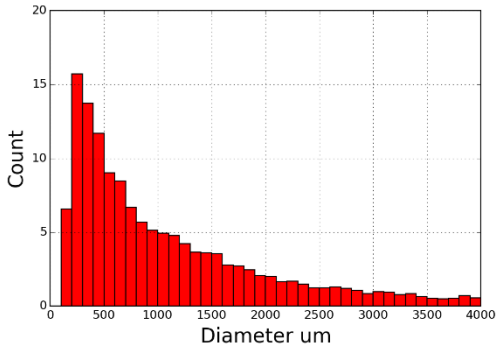


Figure B. 3182: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

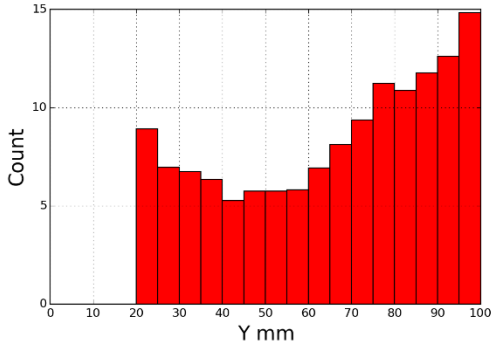


Figure B. 3183: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

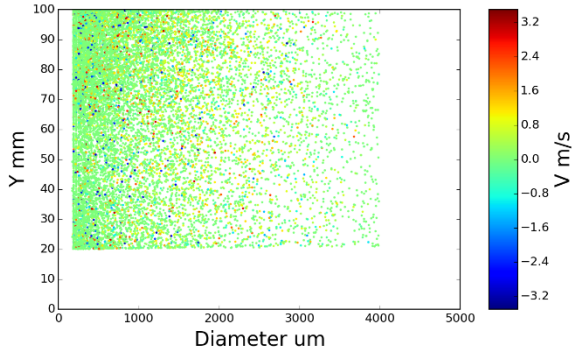


Figure B. 3184: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

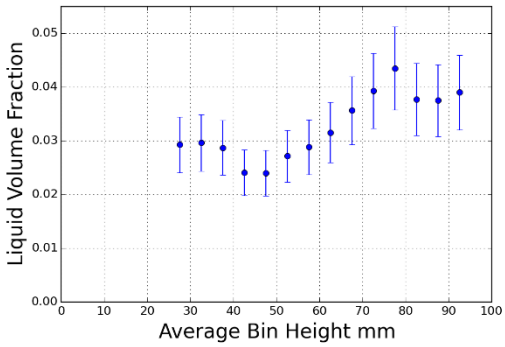


Figure B. 3185: Void Fraction R-123 55F 10000Btu 30000Lb Tri

B.8.1.2 All Droplets for .LB Image

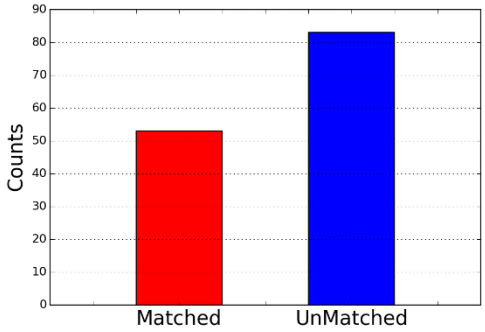


Figure B. 3186: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

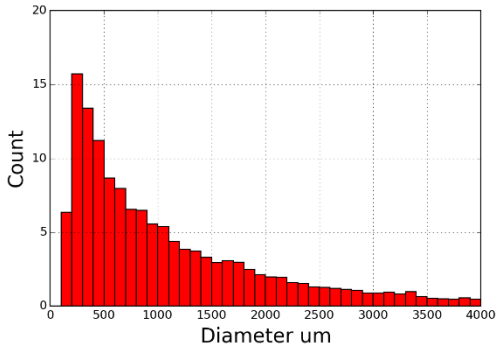


Figure B. 3187: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

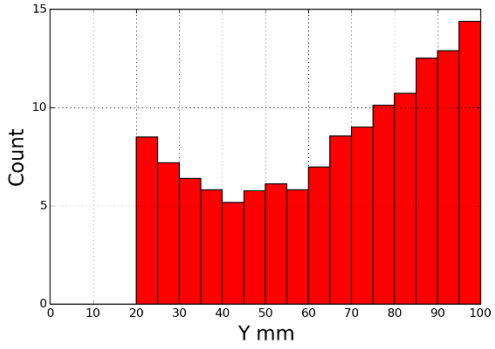


Figure B. 3188: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

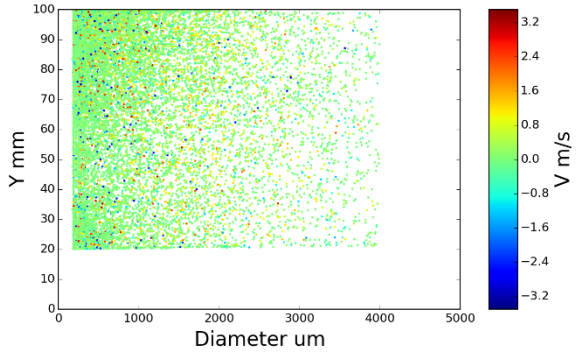


Figure B. 3189: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

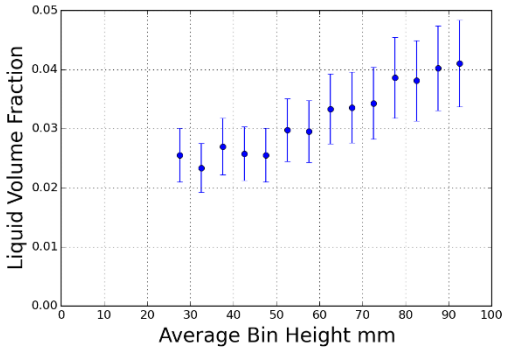


Figure B. 3190: Void Fraction R-123 55F 10000Btu 30000Lb Tri

B.8.1.2 Matched Only Droplets for .LA Image

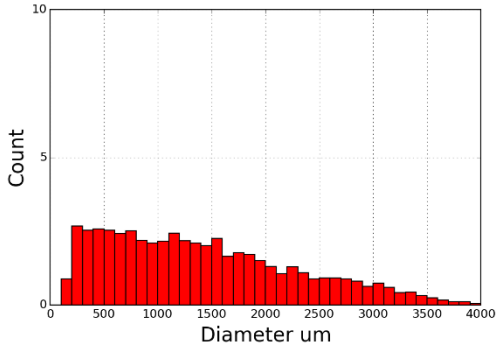


Figure B. 3191: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

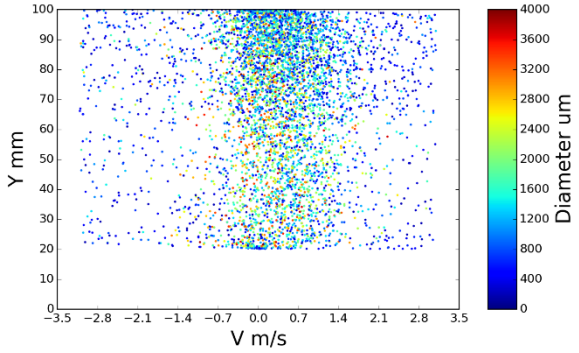


Figure B. 3194: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

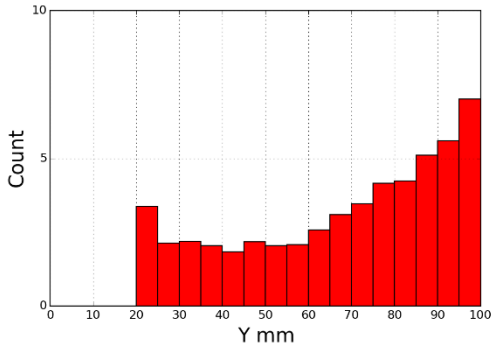


Figure B. 3192: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

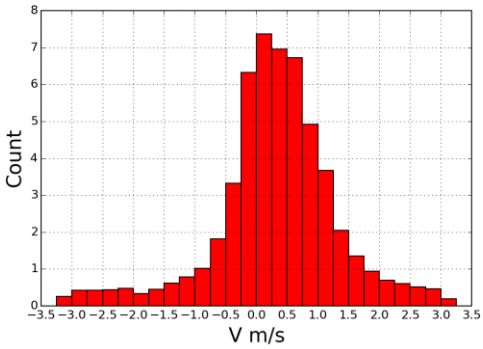


Figure B. 3195: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

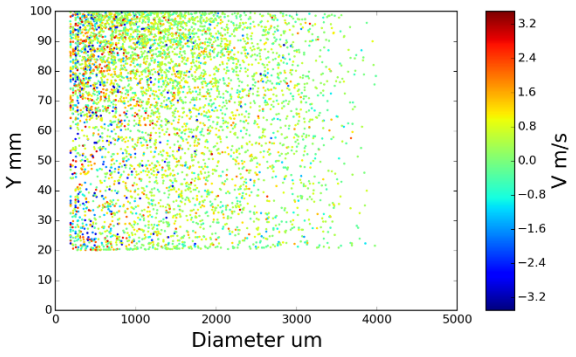


Figure B. 3193: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.1.2 Matched Only Droplets for .LB Image

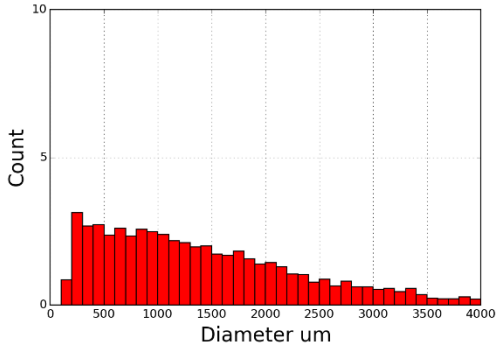


Figure B. 3196: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

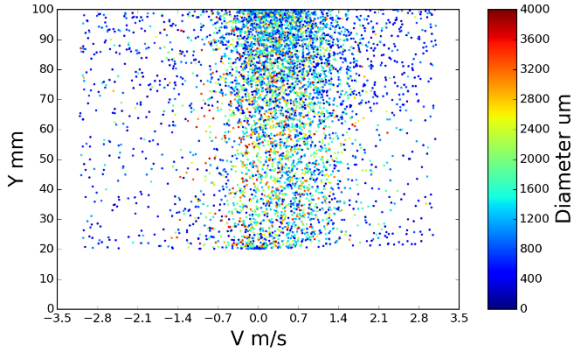


Figure B. 3199: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

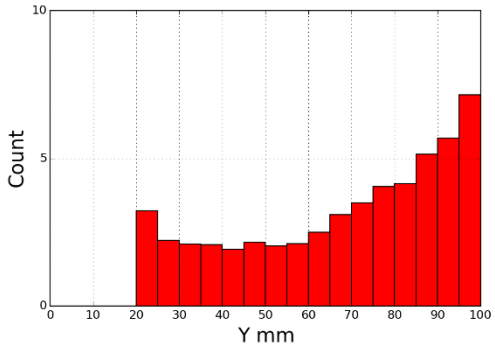


Figure B. 3197: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

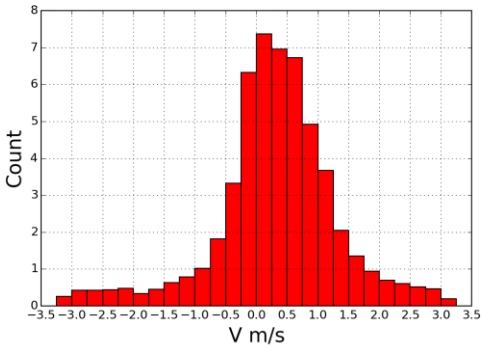


Figure B. 3200: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

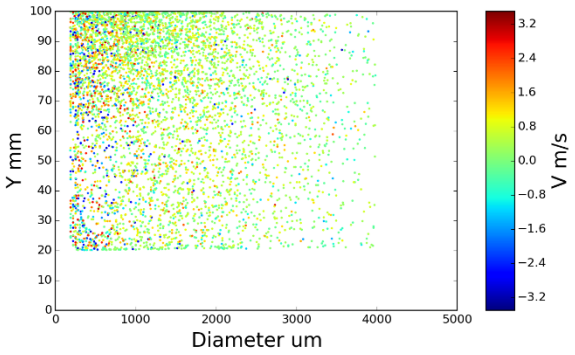


Figure B. 3198: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.2 Liquid Level 3

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	17554 / 2.212
Ref Mass Flow (lb/hr) / (kg/s)	3222 / 0.406
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	31367 / 42.541
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	7067 / 22.30
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.3 / 12.94
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	57.2 / 14.02
Total Bundle Q (Btu/hr) / (kW)	239898 / 70.31
Total Bundle & Preboiler Q (Btu/hr) / (kW)	239792 / 70.28
Top Two Rows HTC Ratio	0.685
Bundle Inlet Quality	-0.12
Bundle Exit Quality	0.87

Table B. 343: Thermal Conditions

B.8.2.1 Lens 100mm Mag 0_29x

B.8.2.1 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	53.21	54.8	75.7	3936	540.9	726.8	75.7	3950	517.0	702.8
40-60mm	101.45	107.14	75.7	3956	460.1	607.1	75.7	3957	429.1	580.4
60-80mm	75.48	79.16	75.7	3950	446.2	552.3	75.7	3840	426.7	547.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	230.14	241.16	75.7	3956	474.2	621.3	75.7	3957	448.3	601.6
			Height A (mm)				Height B (mm)			
Highest Particle			74.5260				74.5244			
Lowest Particle			26.5721				26.5751			

Table B. 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	19.59	81.0	3792	795.0	816.7	75.7	3866	779.0	828.1	-3.170	3.160	-0.070	0.990	-3.170	3.170	0.430	1.030
40-60mm	39.54	81.0	3886	612.0	669.6	75.7	3907	595.8	669.3	-3.170	3.170	-0.130	0.950	-3.170	3.170	1.000	1.270
60-80mm	31.41	81.0	3518	641.3	652.7	75.7	3840	618.1	640.7	-3.170	3.170	-0.160	0.860	-3.170	3.170	1.180	1.270
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	90.54	81.0	3886	661.8	702.1	75.7	3907	643.0	700.6	-3.170	3.170	-0.130	0.930	-3.170	3.170	0.940	1.250

Table B. 345: Matched Droplet Info

B.8.2.1 All Droplets for .LA Image

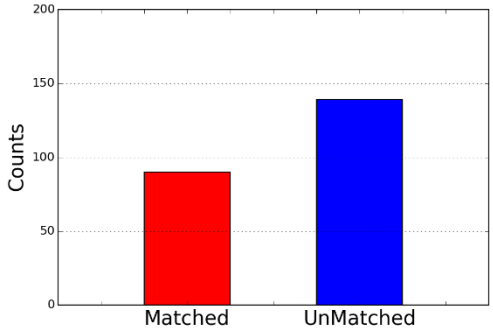


Figure B. 3201: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

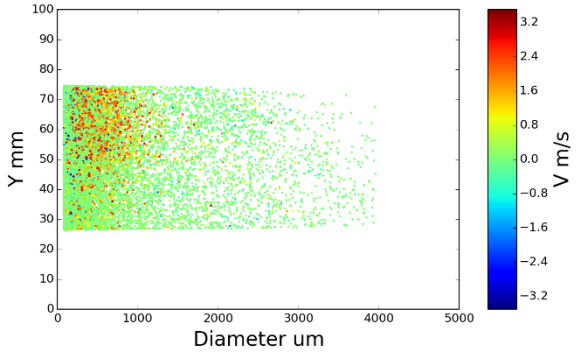


Figure B. 3204: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

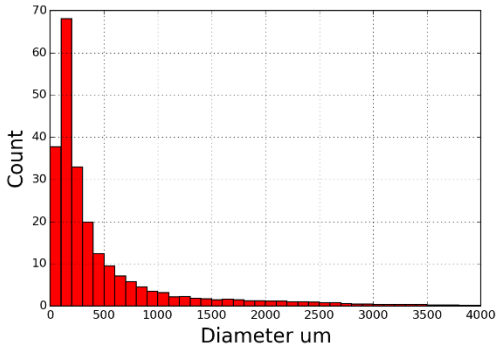


Figure B. 3202: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

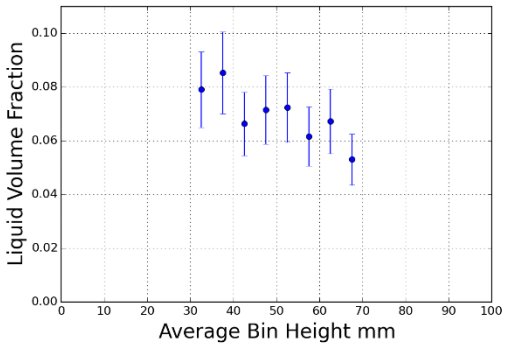


Figure B. 3205: Void Fraction R-123 55F 10000Btu 30000Lb Tri

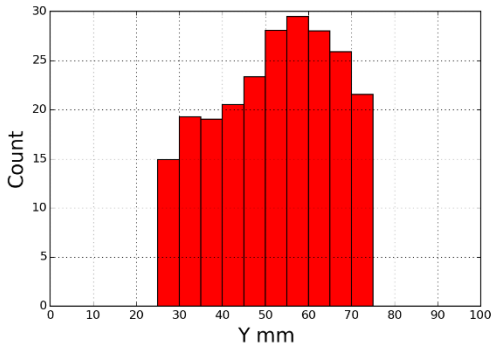


Figure B. 3203: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

B.8.2.1 All Droplets for .LB Image

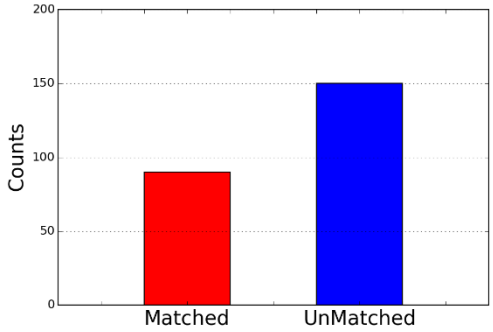


Figure B. 3206: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

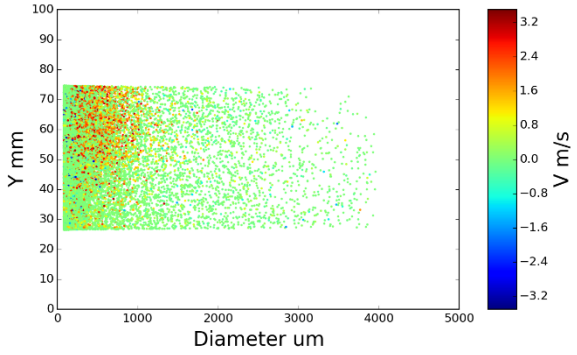


Figure B. 3209: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

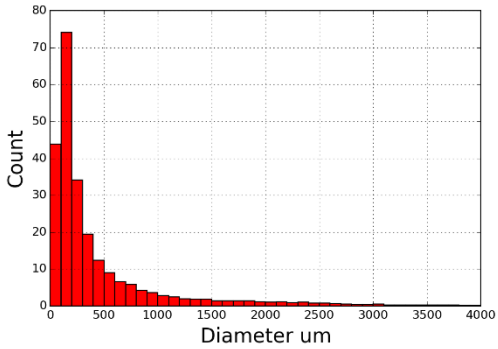


Figure B. 3207: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

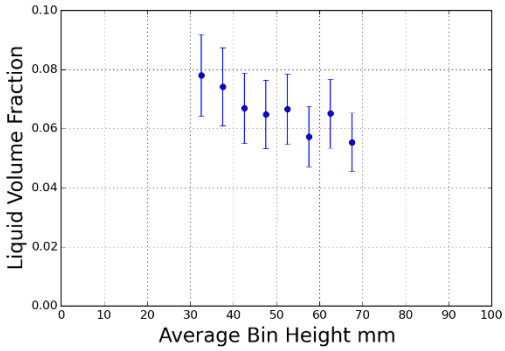


Figure B. 3210: Void Fraction R-123 55F 10000Btu 30000Lb Tri

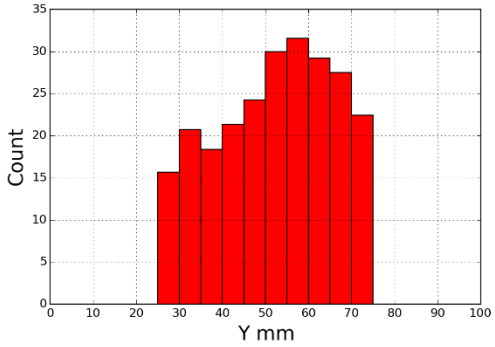


Figure B. 3208: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

B.8.2.1 Matched Only Droplets for .LA Image

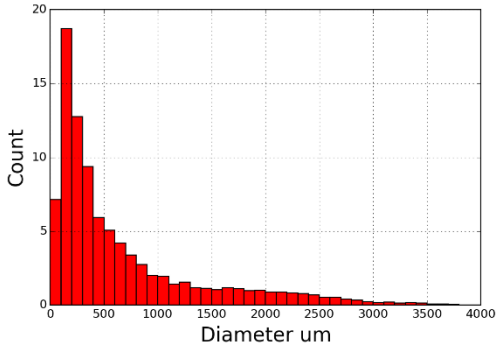


Figure B. 3211: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

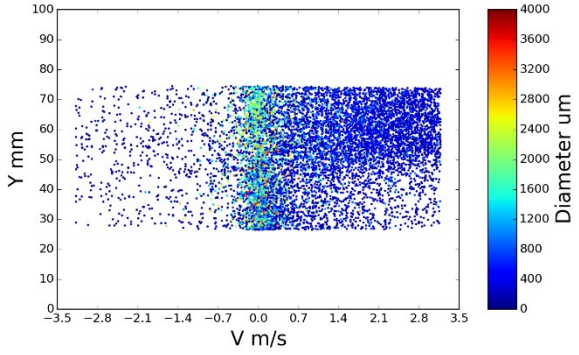


Figure B. 3214: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

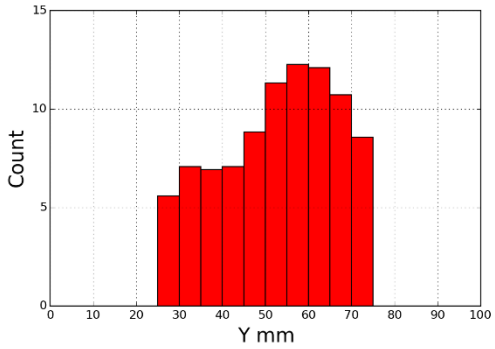


Figure B. 3212: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

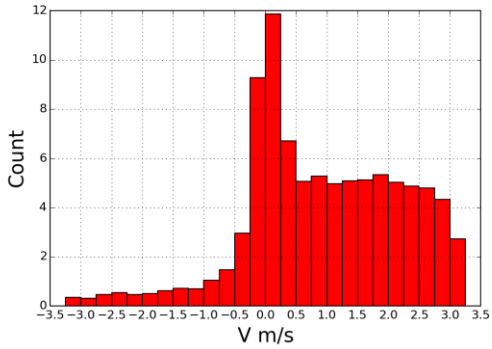


Figure B. 3215: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

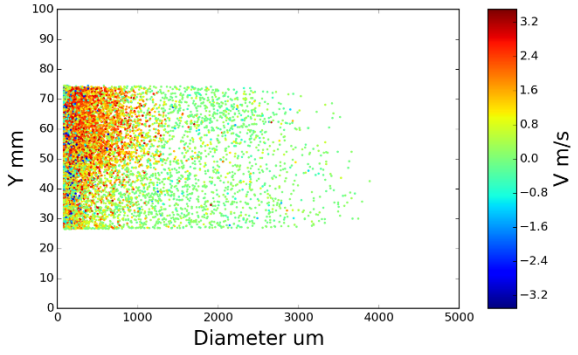


Figure B. 3213: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.2.1 Matched Only Droplets for .LB Image

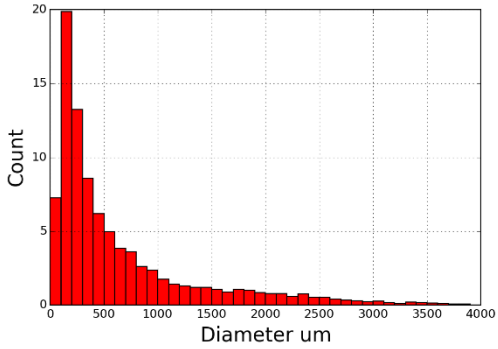


Figure B. 3216: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

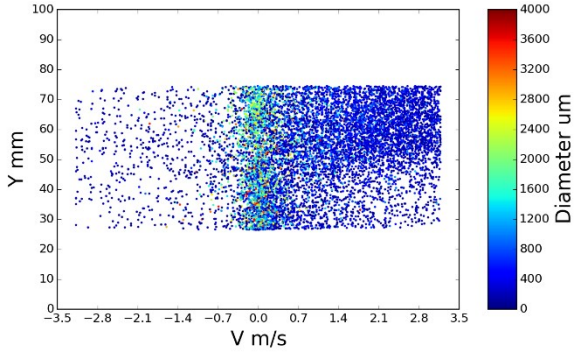


Figure B. 3219: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

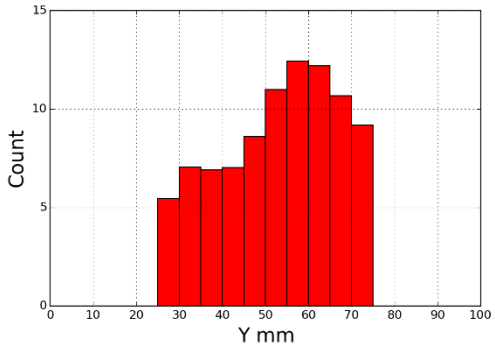


Figure B. 3217: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

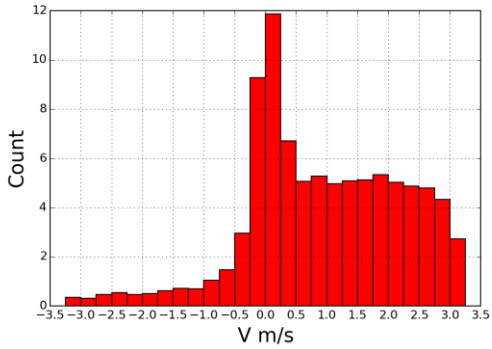


Figure B. 3220: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

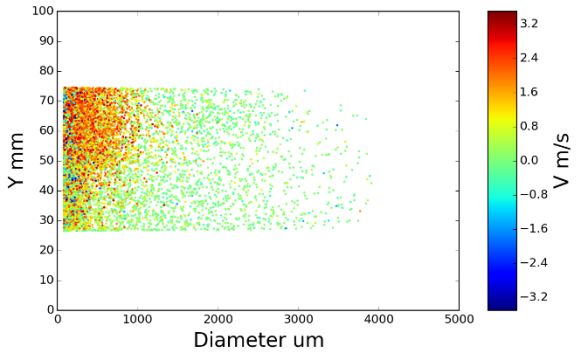


Figure B. 3218: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.2.1 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	35.36	38.66	75.7	3955	572.9	776.7	75.7	3934	524.2	760.5
40-60mm	66.6	75.02	75.7	3942	517.5	683.5	75.7	3954	463.7	646.2
60-80mm	54.26	62.37	75.7	3952	467.8	538.9	75.7	3954	425.6	529.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	156.22	176.22	75.7	3955	512.8	661.9	75.7	3954	463.5	636.9
			Height A (mm)				Height B (mm)			
Highest Particle			74.5244				74.5244			
Lowest Particle			26.5624				26.5751			

Table B. 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	11.5	81.0	3723	960.8	929.7	75.7	3858	942.4	940.2	-3.160	3.170	-0.070	1.060	-3.120	3.170	0.290	0.930
40-60mm	25.83	81.0	3728	734.0	762.0	81.0	3948	712.3	753.0	-3.170	3.170	-0.130	0.970	-3.160	3.170	0.800	1.210
60-80mm	23.2	81.0	3572	650.5	627.5	75.7	3954	632.0	609.0	-3.160	3.160	-0.160	0.910	-3.120	3.170	0.950	1.150
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	60.53	81.0	3728	745.1	758.5	75.7	3954	724.5	750.3	-3.170	3.170	-0.130	0.960	-3.160	3.170	0.760	1.160

Table B. 347: Matched Droplet Info

B.8.2.1 All Droplets for .LA Image

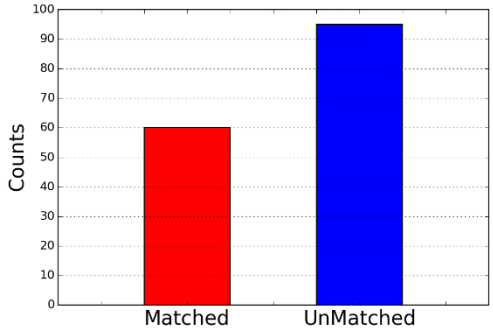


Figure B. 3221: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

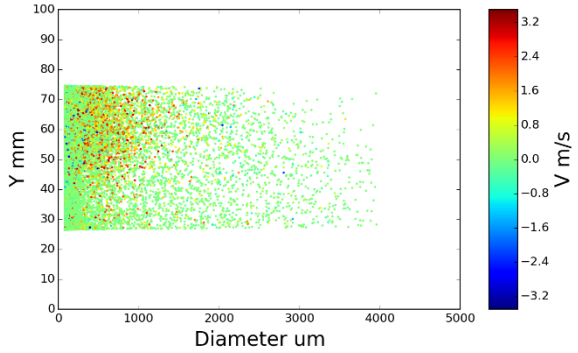


Figure B. 3224: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

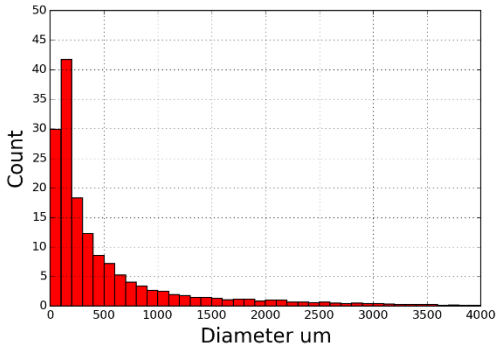


Figure B. 3222: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

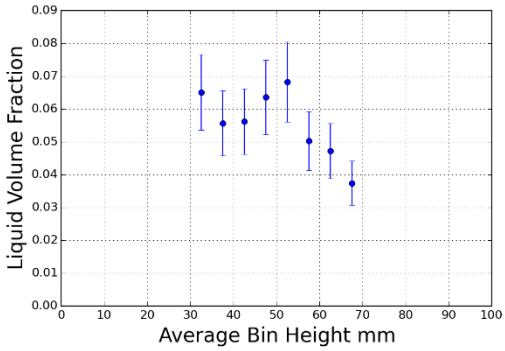


Figure B. 3225: Void Fraction R-123 55F 10000Btu 30000Lb Tri

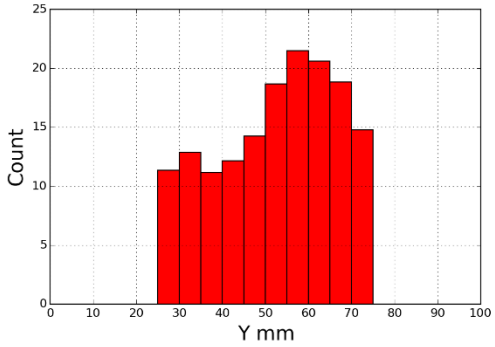


Figure B. 3223: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

B.8.2.1 All Droplets for .LB Image

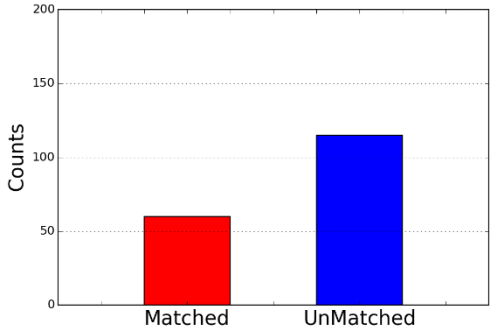


Figure B. 3226: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

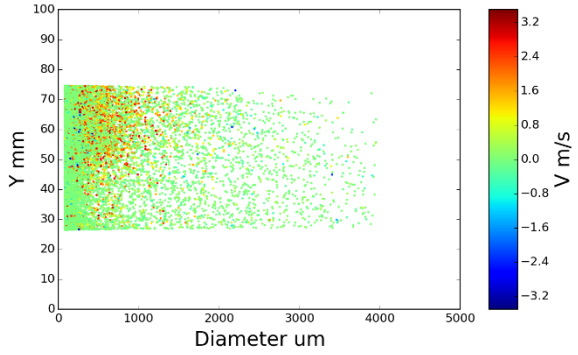


Figure B. 3229: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

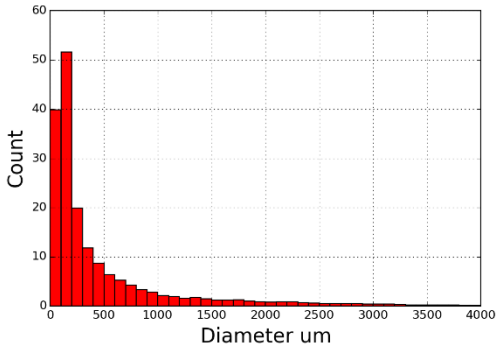


Figure B. 3227: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

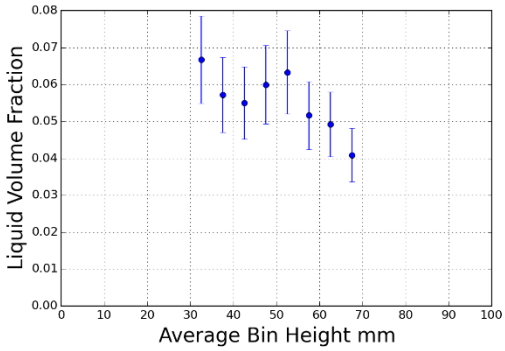


Figure B. 3230: Void Fraction R-123 55F 10000Btu 30000Lb Tri

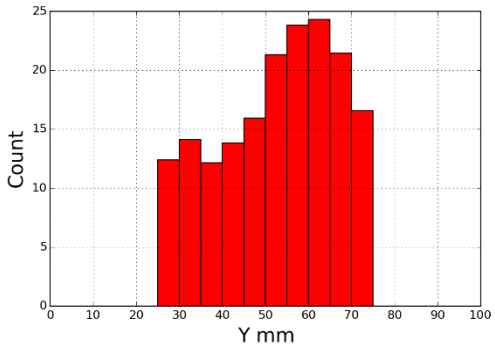


Figure B. 3228: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

B.8.2.1 Matched Only Droplets for .LA Image

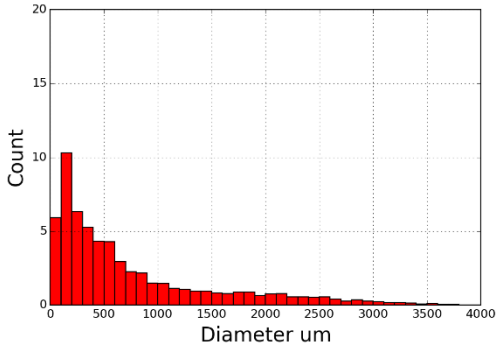


Figure B. 3231: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

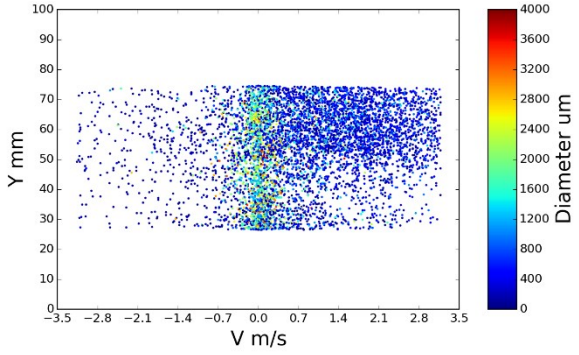


Figure B. 3234: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

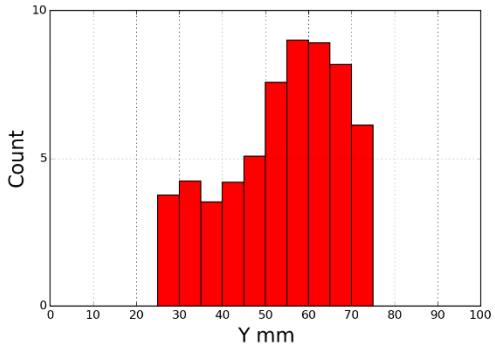


Figure B. 3232: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

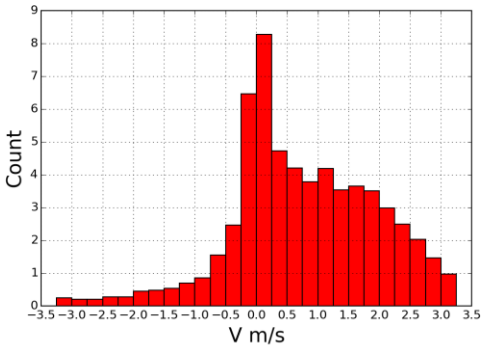


Figure B. 3235: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

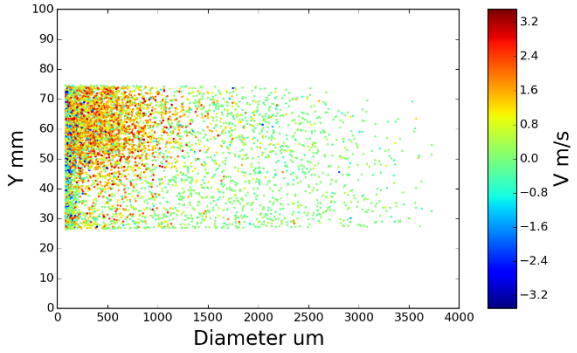


Figure B. 3233: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.2.1 Matched Only Droplets for .LB Image

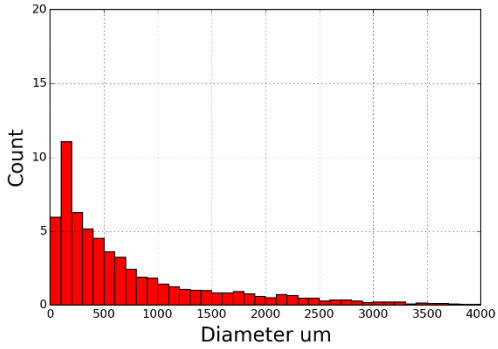


Figure B. 3236: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

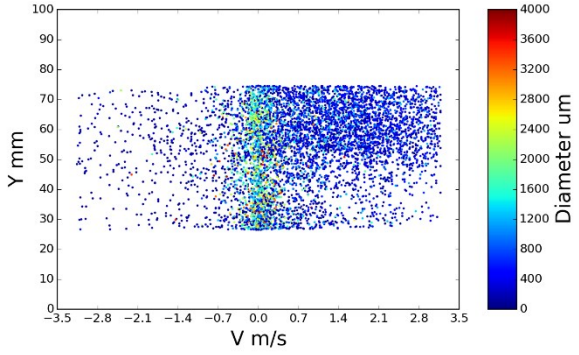


Figure B. 3239: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

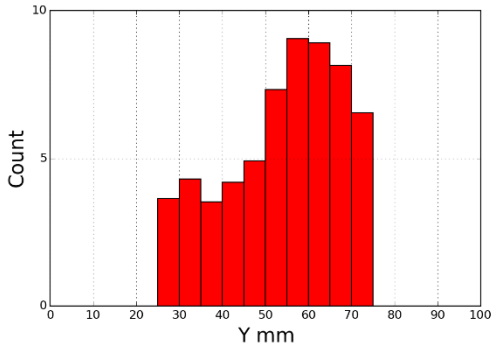


Figure B. 3237: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

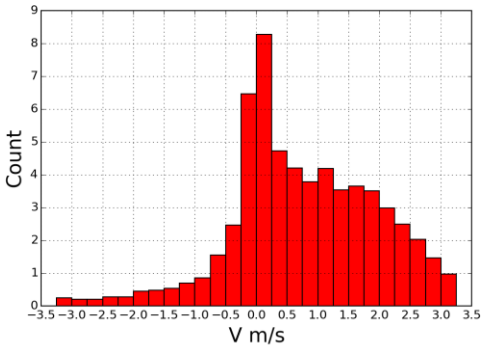


Figure B. 3240: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

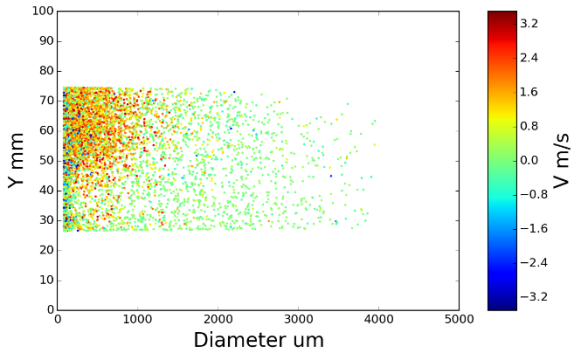


Figure B. 3238: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.2.1 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	26.03	34.57	75.7	3949	461.5	712.9	75.7	3869	381.0	641.0
40-60mm	55.69	68.1	75.7	3941	456.3	671.1	75.7	3936	382.1	599.9
60-80mm	33.09	43.45	75.7	3723	414.3	466.2	75.7	3635	359.8	455.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	114.81	146.15	75.7	3949	445.4	629.8	75.7	3936	375.2	571.7
			Height A (mm)				Height B (mm)			
Highest Particle			74.5244				74.5244			
Lowest Particle			26.5737				26.5624			

Table B. 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	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	6.89	81.0	3406	733.9	862.4	81.0	3781	724.1	886.0	-3.170	3.170	-0.230	1.350	-3.010	3.170	0.350	1.240
40-60mm	17.61	81.0	3796	637.9	714.7	75.7	3936	629.5	734.7	-3.170	3.170	-0.200	1.230	-3.160	3.170	0.560	1.330
60-80mm	11.75	81.0	3371	588.5	509.4	81.0	3635	584.0	526.3	-3.170	3.170	-0.290	1.000	-3.170	3.170	0.800	1.190
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	36.25	81.0	3796	640.1	690.0	75.7	3936	632.3	708.2	-3.170	3.170	-0.230	1.190	-3.170	3.170	0.600	1.280

Table B. 349: Matched Droplet Info

B.8.2.1 All Droplets for .LA Image

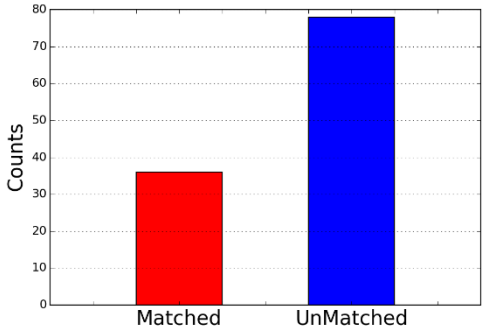


Figure B. 3241: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

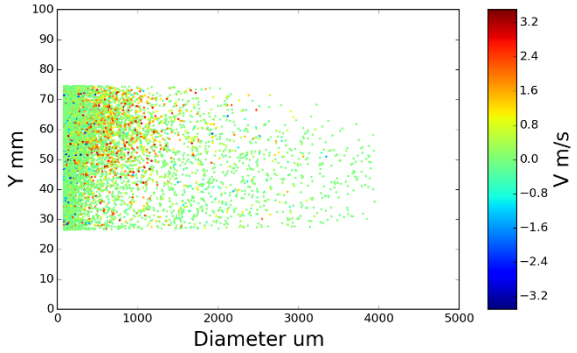


Figure B. 3244: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

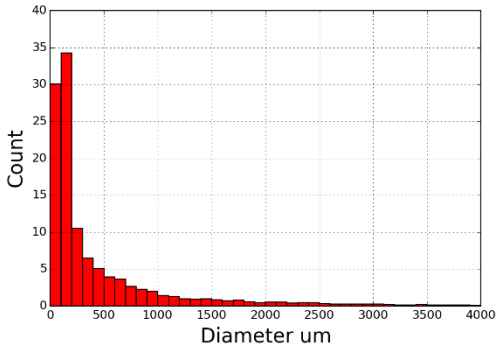


Figure B. 3242: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

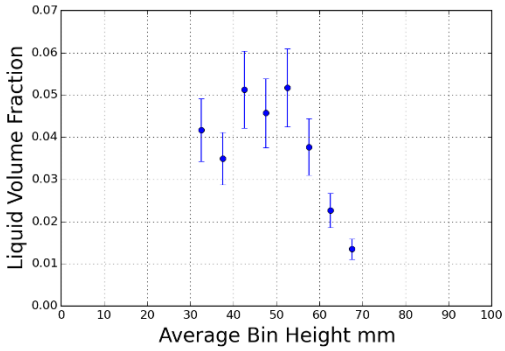


Figure B. 3245: Void Fraction R-123 55F 10000Btu 30000Lb Tri

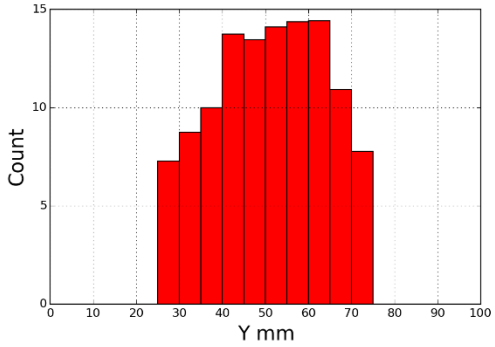


Figure B. 3243: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

B.8.2.1 All Droplets for .LB Image

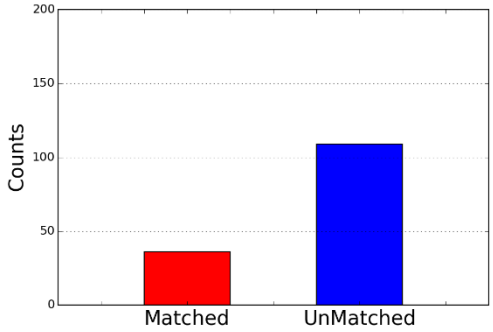


Figure B. 3246: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

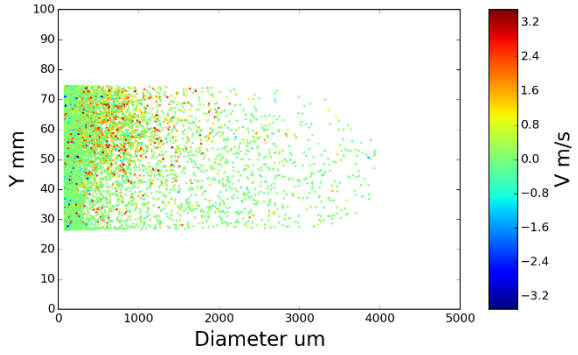


Figure B. 3249: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

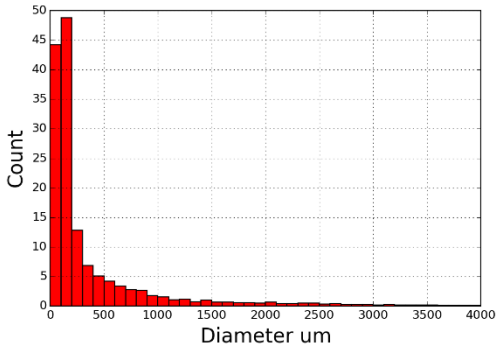


Figure B. 3247: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

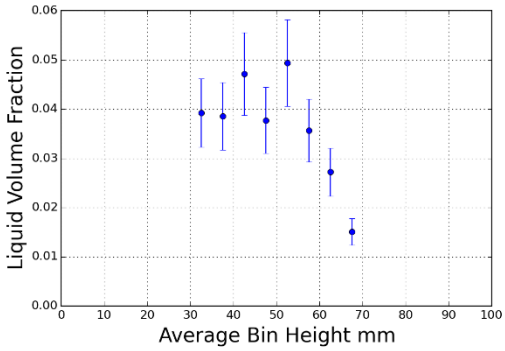


Figure B. 3250: Void Fraction R-123 55F 10000Btu 30000Lb Tri

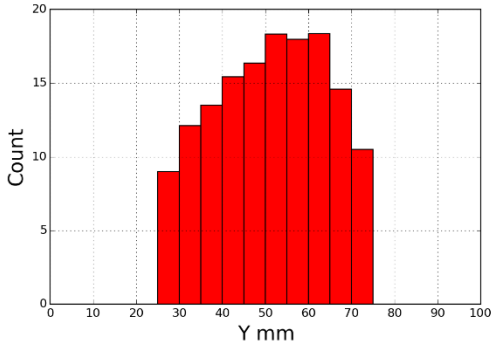


Figure B. 3248: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

B.8.2.1 Matched Only Droplets for .LA Image

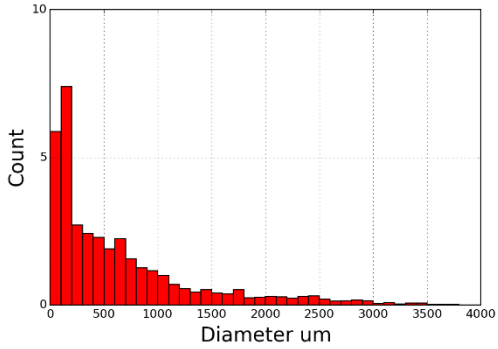


Figure B. 3251: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

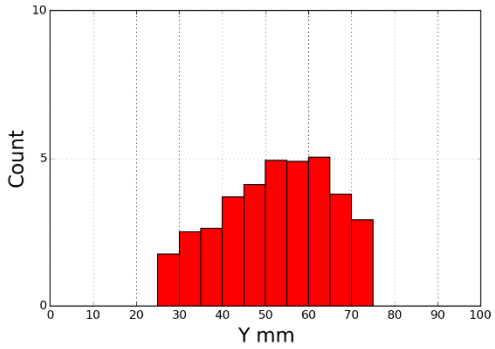


Figure B. 3252: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

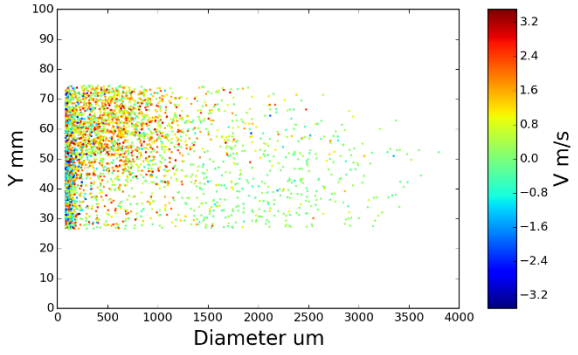


Figure B. 3253: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

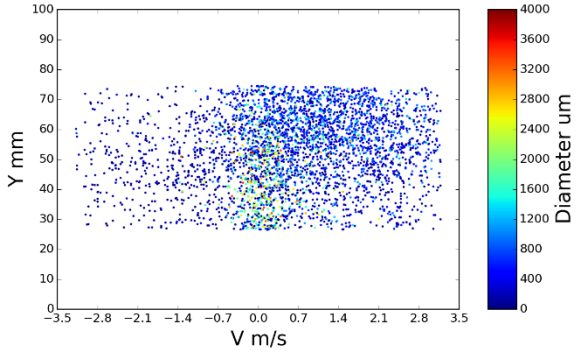


Figure B. 3254: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

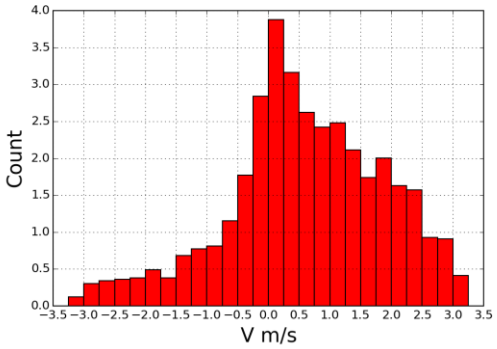


Figure B. 3255: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

B.8.2.1 Matched Only Droplets for .LB Image

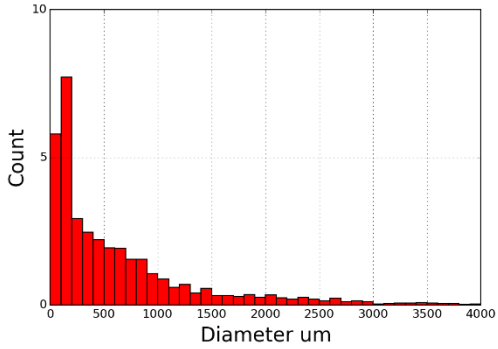


Figure B. 3256: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

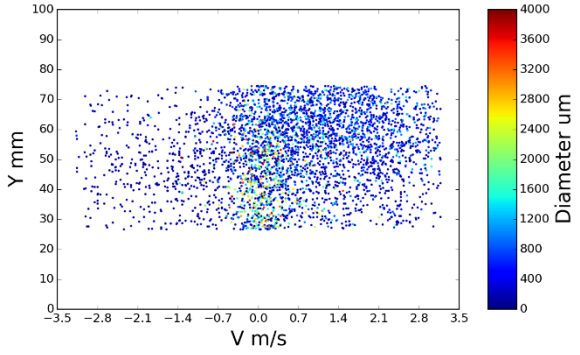


Figure B. 3259: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

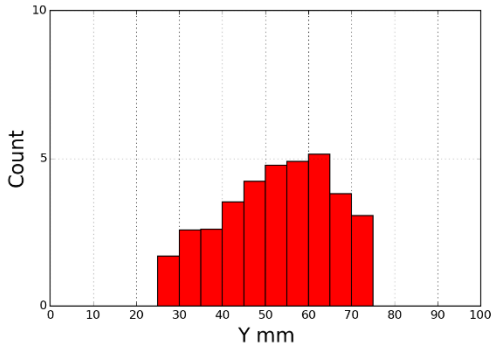


Figure B. 3257: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

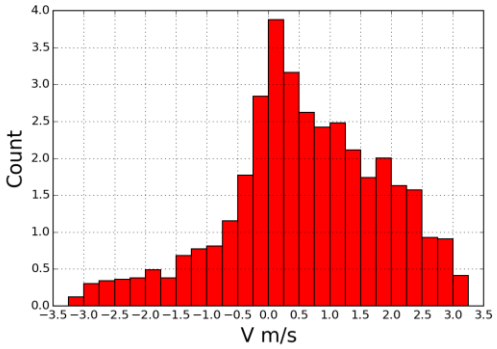


Figure B. 3260: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

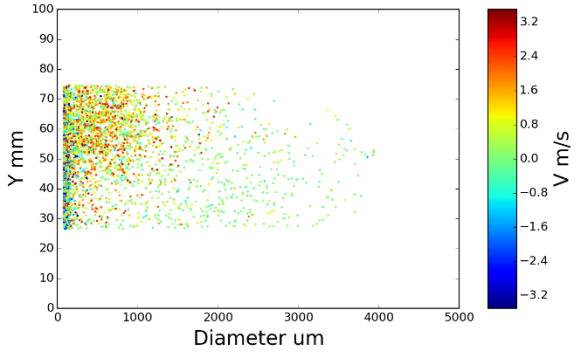


Figure B. 3258: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.2.2 Lens 50mm Mag 0_13x

B.8.2.2 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	28.84	28.06	170.2	3907	630.0	470.6	182.0	3781	639.8	473.0
20-40mm	45.91	45.38	182.0	3984	857.5	763.6	170.2	3988	843.1	770.2
40-60mm	58.42	58.51	182.0	3984	742.7	705.0	182.0	3991	724.8	681.5
60-80mm	58.06	57.41	170.2	3949	692.4	618.2	182.0	3974	695.6	638.7
80-100mm	31.22	31.62	170.2	3880	599.9	516.4	182.0	3931	615.4	534.9
All	222.8	221.4	170.2	3984	717.9	651.0	170.2	3991	714.2	652.2
			Height A (mm)				Height B (mm)			
Highest Particle			100.0701100.0701							
Lowest Particle			5.13185.1567							

Table B. 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	15.89	182.0	3862	755.0	501.7	182.0	3781	745.9	507.1	-3.100	3.060	-0.100	0.790	-3.110	3.110	0.510	1.020
20-40mm	21.64	182.0	3870	1074	792.8	182.0	3923	1032	789.2	-3.110	3.090	-0.100	0.870	-3.110	3.110	0.330	0.990
40-60mm	28.59	182.0	3896	879.5	740.8	182.0	3983	852.8	729.5	-3.110	3.080	-0.120	0.990	-3.110	3.110	0.650	1.290
60-80mm	30.88	182.0	3860	835.8	688.6	182.0	3968	806.2	676.2	-3.110	3.110	-0.160	0.860	-3.110	3.110	0.850	1.260
80-100mm	17.74	182.0	3880	706.5	566.1	182.0	3931	691.7	564.8	-3.040	3.060	-0.140	0.670	-3.110	3.110	0.990	1.110
All	114.86	182.0	3896	859.7	693.7	182.0	3983	833.0	685.1	-3.110	3.110	-0.130	0.860	-3.110	3.110	0.680	1.190

Table B. 351: Matched Droplet Info

B.8.2.2 All Droplets for .LA Image

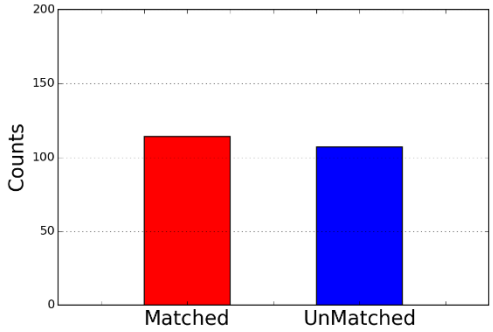


Figure B. 3261: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

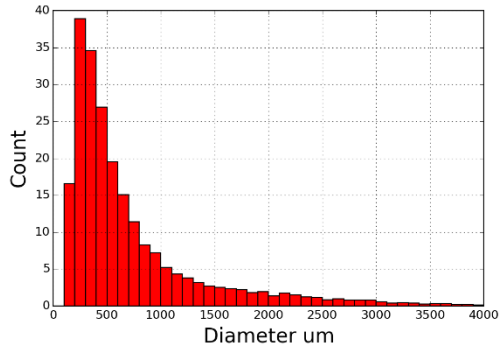


Figure B. 3262: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

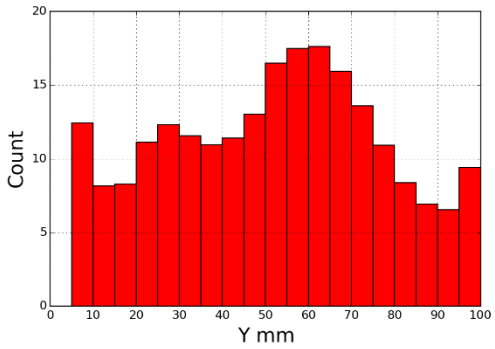


Figure B. 3263: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

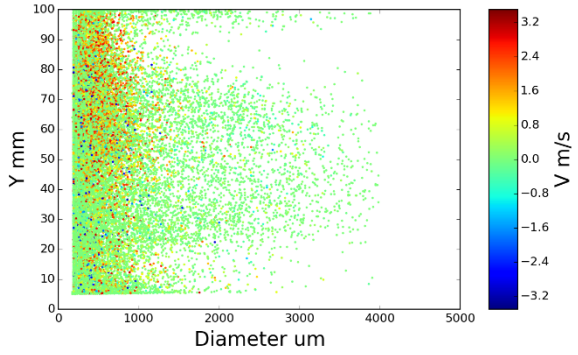


Figure B. 3264: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

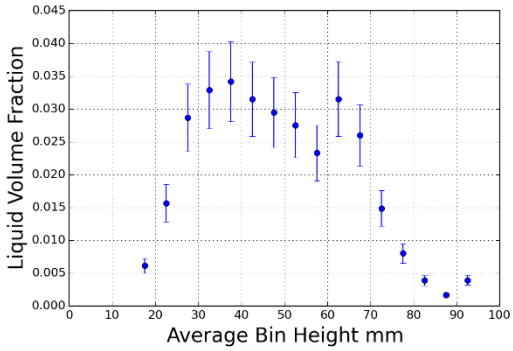


Figure B. 3265: Void Fraction R-123 55F 10000Btu 30000Lb Tri

B.8.2.2 All Droplets for .LB Image

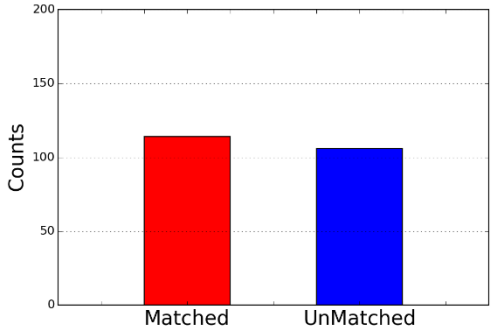


Figure B. 3266: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

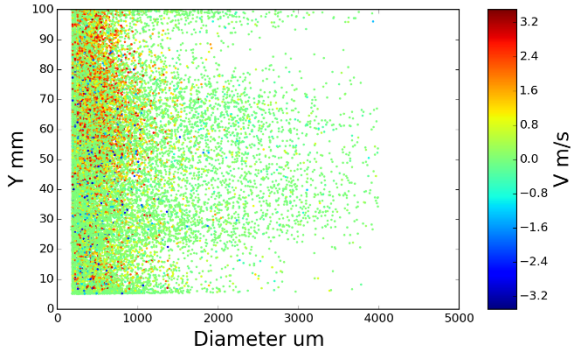


Figure B. 3269: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

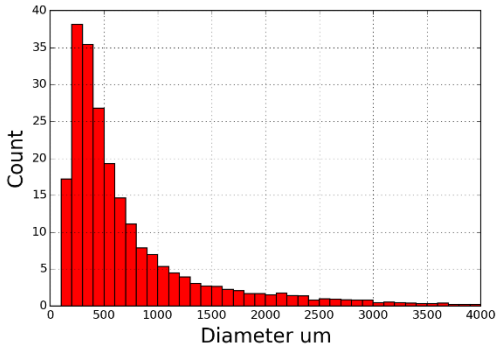


Figure B. 3267: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

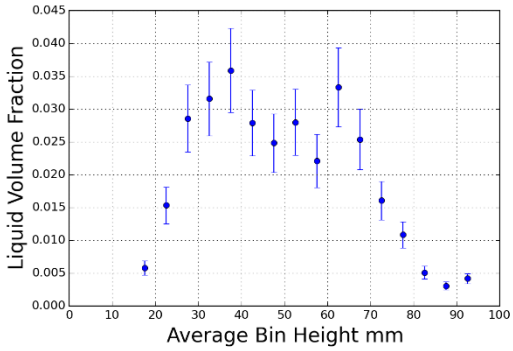


Figure B. 3270: Void Fraction R-123 55F 10000Btu 30000Lb Tri

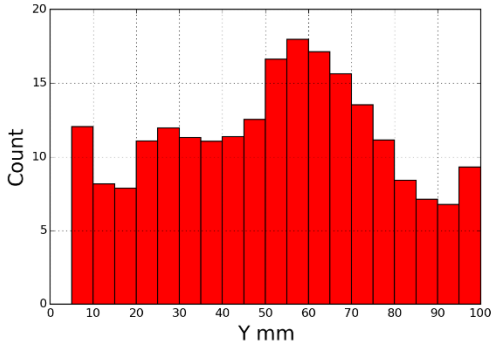


Figure B. 3268: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

B.8.2.2 Matched Only Droplets for .LA Image

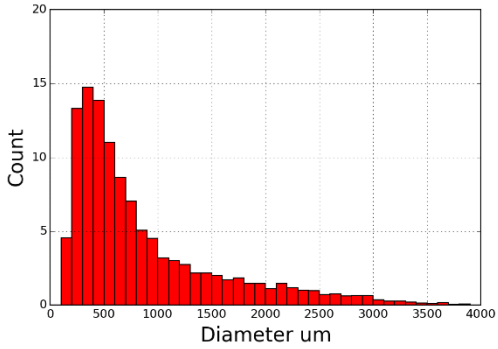


Figure B. 3271: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

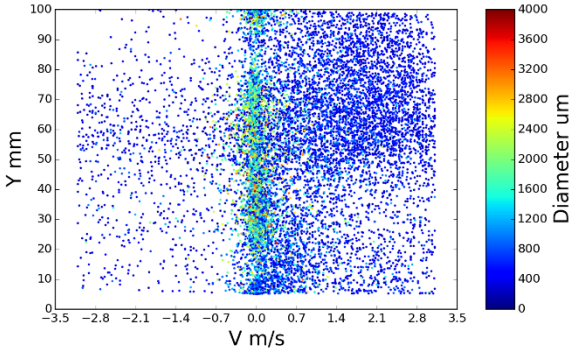


Figure B. 3274: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

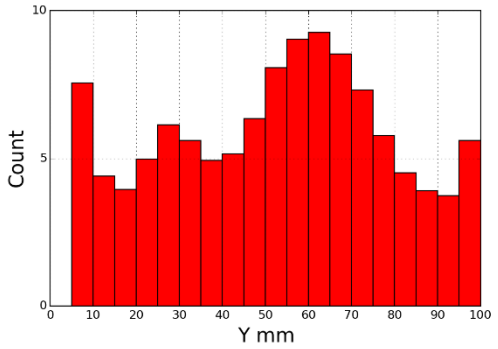


Figure B. 3272: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

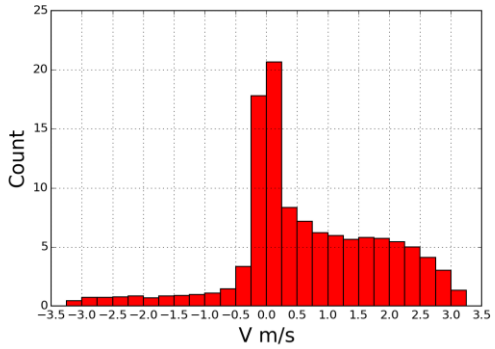


Figure B. 3275: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

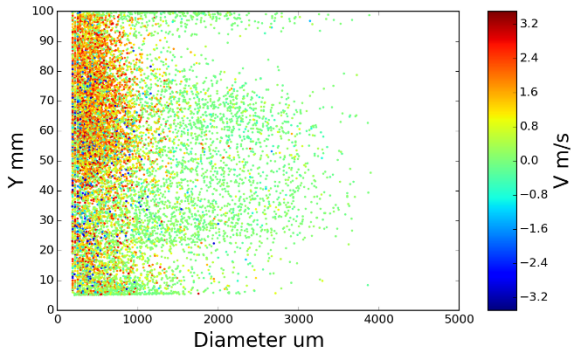


Figure B. 3273: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.2.2 Matched Only Droplets for .LB Image

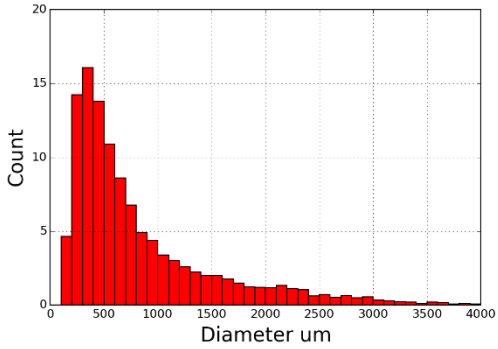


Figure B. 3276: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

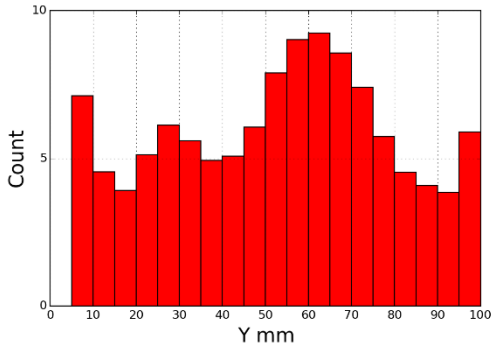


Figure B. 3277: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

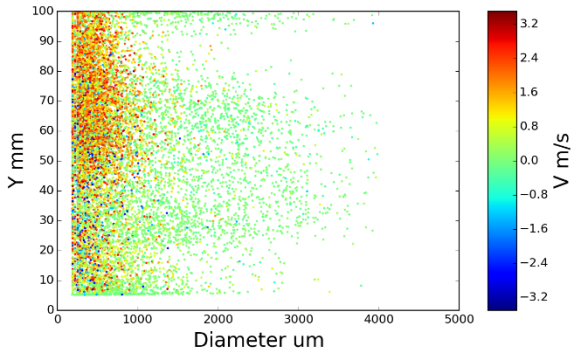


Figure B. 3278: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

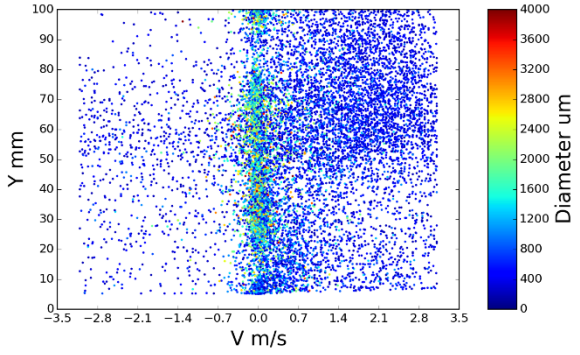


Figure B. 3279: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

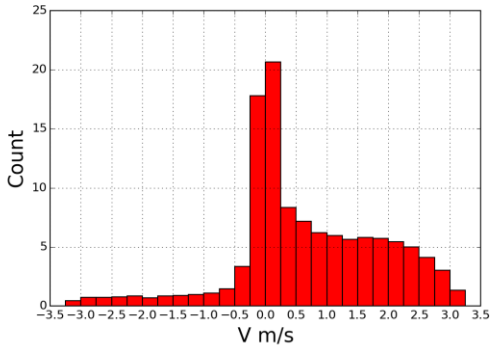


Figure B. 3280: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

B.8.2.2 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	27.82	28.26	170.2	3714	582.8	425.1	182.0	3906	598.9	438.3
20-40mm	30.99	31.91	170.2	3971	990.4	855.4	182.0	3989	980.0	864.7
40-60mm	43.27	42.96	170.2	3953	834.8	761.3	182.0	3979	817.3	734.5
60-80mm	41.62	42.88	170.2	3990	742.5	613.5	182.0	3989	745.8	631.8
80-100mm	21.96	23.46	182.0	3843	610.0	491.1	182.0	3866	617.0	487.0
All	165.78	169.77	170.2	3990	768.2	681.6	182.0	3989	764.8	678.3
			Height A (mm)				Height B (mm)			
Highest Particle			100.0448100.0487							
Lowest Particle			5.13185.1588							

Table B. 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	14.75	182.0	3714	696.8	472.7	182.0	3906	686.6	475.2	-3.110	3.110	-0.170	0.830	-3.110	3.110	0.700	1.150
20-40mm	14.59	182.0	3971	1313	865.8	182.0	3970	1276	876.6	-3.110	3.080	-0.100	0.770	-3.070	3.110	0.220	0.820
40-60mm	20.75	182.0	3766	1028	801.6	182.0	3978	991.8	789.9	-3.110	3.110	-0.170	0.840	-3.080	3.110	0.610	1.130
60-80mm	21.37	182.0	3871	912.7	662.4	182.0	3915	886.1	658.1	-3.110	3.110	-0.130	0.850	-3.090	3.110	0.710	1.150
80-100mm	11.95	182.0	3834	726.6	529.9	182.0	3866	713.0	525.7	-3.060	3.100	-0.110	0.670	-3.060	3.080	0.890	1.070
All	83.44	182.0	3971	946.2	725.5	182.0	3978	919.4	720.4	-3.110	3.110	-0.140	0.810	-3.110	3.110	0.620	1.100

Table B. 353: Matched Droplet Info

B.8.2.2 All Droplets for .LA Image

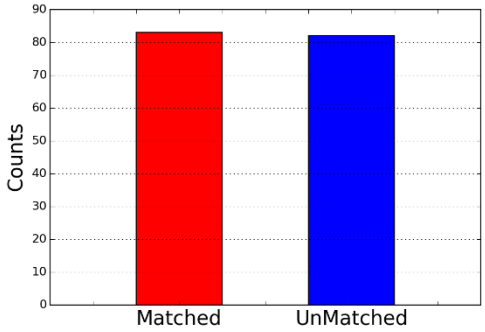


Figure B. 3281: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

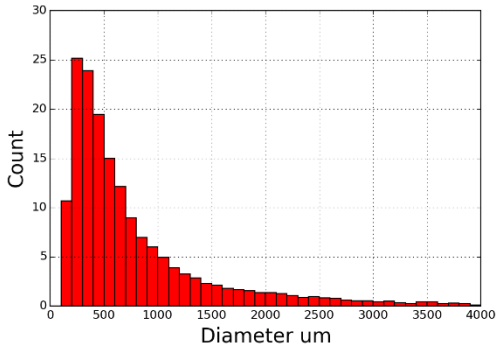


Figure B. 3282: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

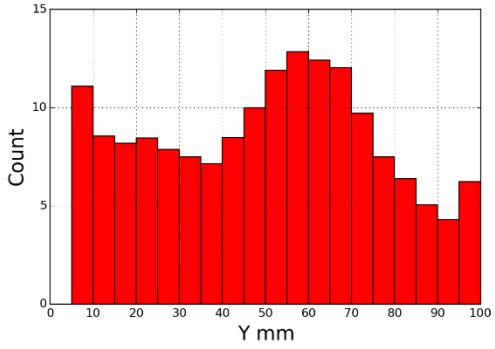


Figure B. 3283: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

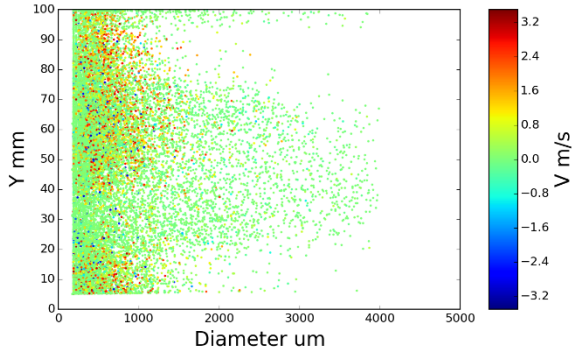


Figure B. 3284: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

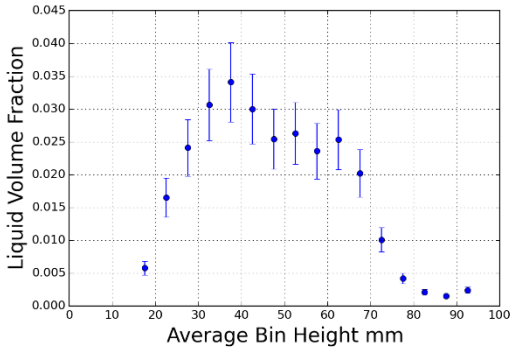


Figure B. 3285: Void Fraction R-123 55F 10000Btu 30000Lb Tri

B.8.2.2 All Droplets for .LB Image

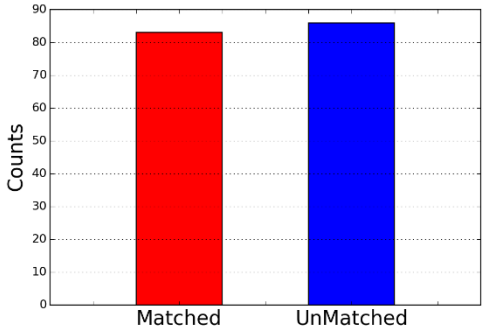


Figure B. 3286: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

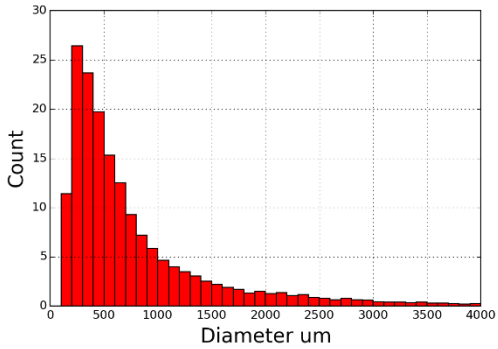


Figure B. 3287: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

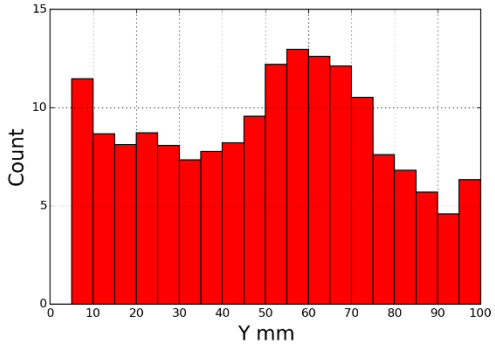


Figure B. 3288: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

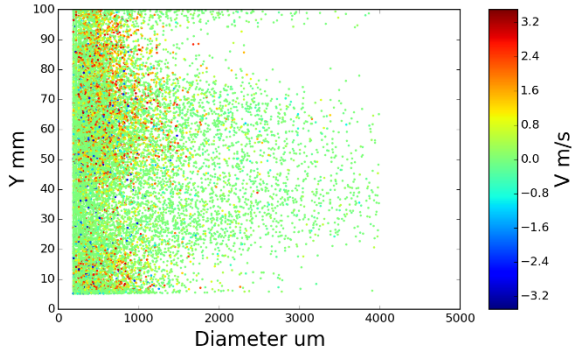


Figure B. 3289: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

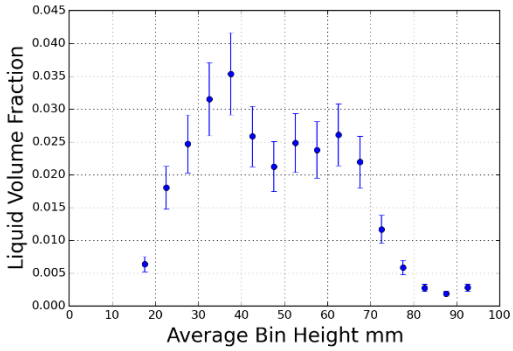


Figure B. 3290: Void Fraction R-123 55F 10000Btu 30000Lb Tri

B.8.2.2 Matched Only Droplets for .LA Image

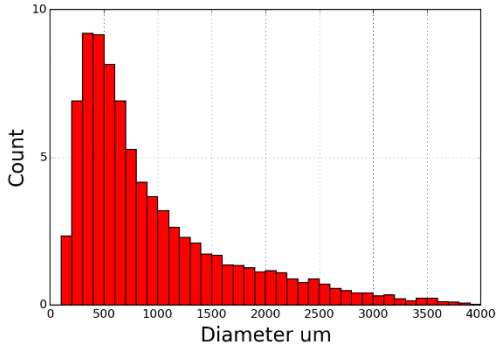


Figure B. 3291: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

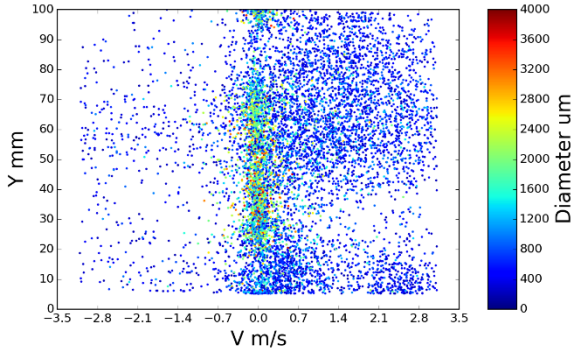


Figure B. 3294: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

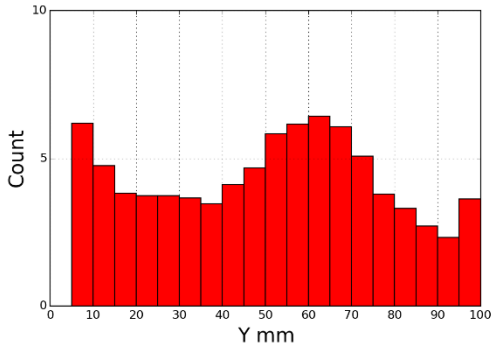


Figure B. 3292: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

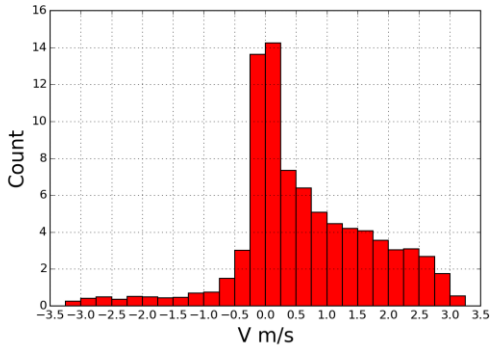


Figure B. 3295: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

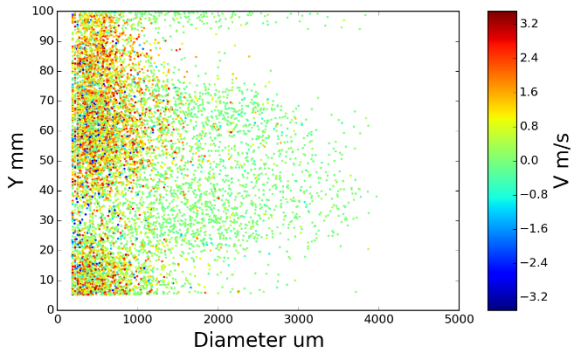


Figure B. 3293: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.2.2 Matched Only Droplets for .LB Image

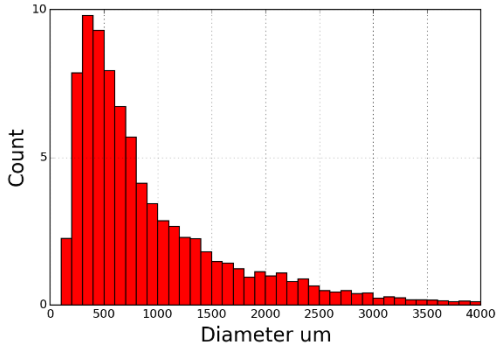


Figure B. 3296: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

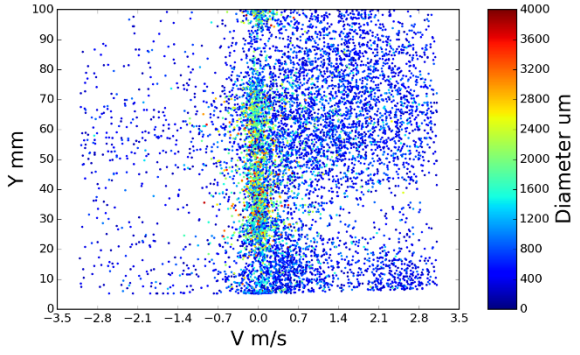


Figure B. 3299: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

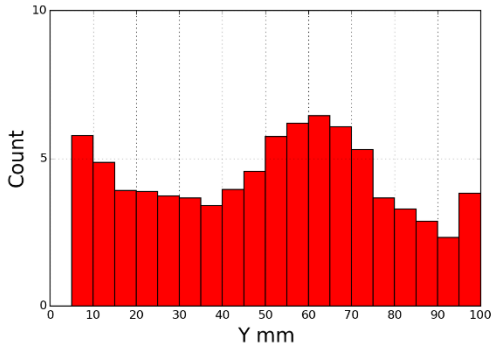


Figure B. 3297: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

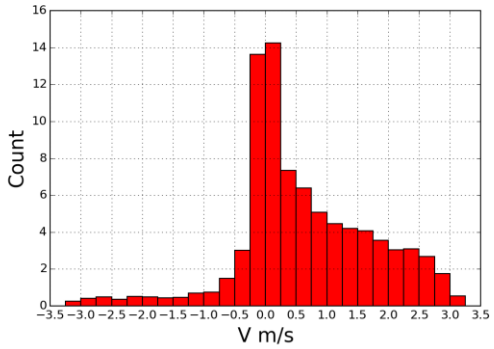


Figure B. 3300: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

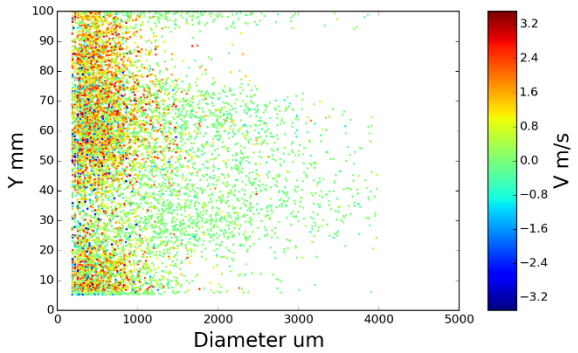


Figure B. 3298: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.2.2 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	18.68	18.56	182.0	3979	641.7	491.5	182.0	3947	660.5	495.3
20-40mm	20.86	21.63	170.2	3965	1046	886.9	182.0	3990	1008	883.1
40-60mm	28.03	28.68	182.0	3962	916.4	797.6	182.0	3977	877.6	779.7
60-80mm	24.63	25.12	170.2	3827	765.5	616.9	170.2	3968	765.5	635.2
80-100mm	10.72	10.94	182.0	3827	672.9	572.4	182.0	3934	673.3	559.2
All	102.99	105.02	170.2	3979	830.9	723.2	170.2	3990	817.5	717.6
			Height A (mm)				Height B (mm)			
Highest Particle			100.0701100.0431							
Lowest Particle			5.16035.1571							

Table B. 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	9.6	182.0	3590	791.7	534.8	182.0	3947	776.4	532.0	-3.110	2.900	-0.200	0.740	-3.080	3.080	0.560	1.090
20-40mm	9.2	182.0	3883	1413	882.5	182.0	3990	1370	896.3	-3.040	3.090	-0.070	0.740	-3.060	3.110	0.260	0.770
40-60mm	12.33	193.0	3798	1126	821.1	182.0	3862	1088	819.4	-3.090	3.080	-0.190	0.840	-3.090	3.100	0.510	1.010
60-80mm	11.44	182.0	3811	924.9	636.8	182.0	3750	898.9	628.8	-3.110	3.080	-0.160	0.760	-3.110	3.110	0.610	1.050
80-100mm	5.44	182.0	3827	853.7	644.2	182.0	3934	834.4	645.0	-3.050	2.950	-0.210	0.570	-2.980	3.110	0.650	0.930
All	48.03	182.0	3883	1035	755.8	182.0	3990	1006	754.2	-3.110	3.090	-0.160	0.760	-3.110	3.110	0.510	1.000

Table B. 355: Matched Droplet Info

B.8.2.2 All Droplets for .LA Image

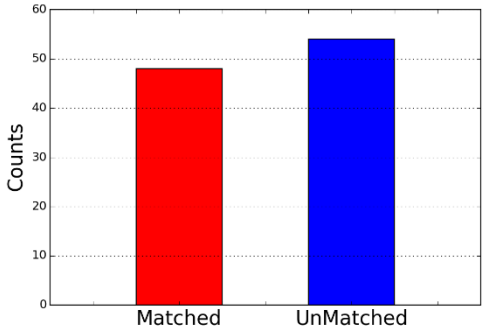


Figure B. 3301: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

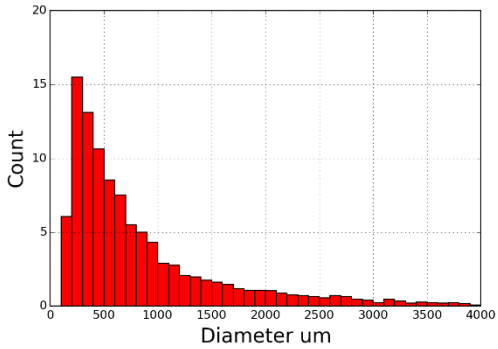


Figure B. 3302: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

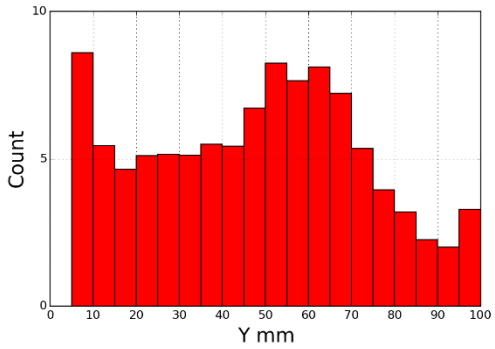


Figure B. 3303: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

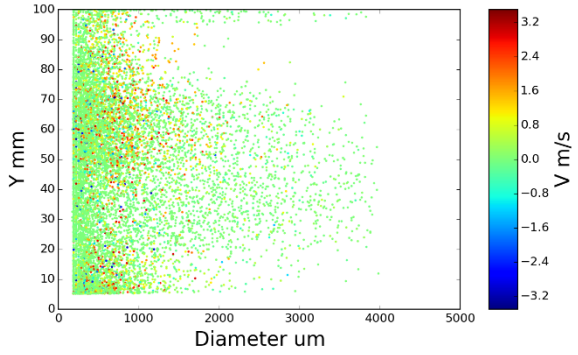


Figure B. 3304: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

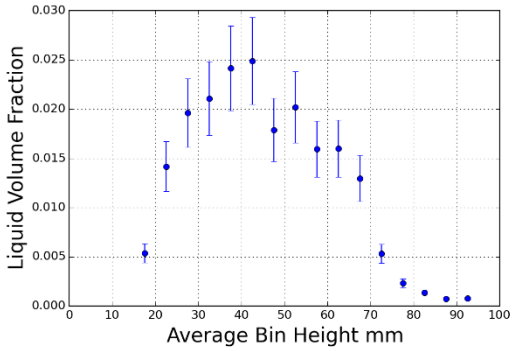


Figure B. 3305: Void Fraction R-123 55F 10000Btu 30000Lb Tri

B.8.2.2 All Droplets for .LB Image

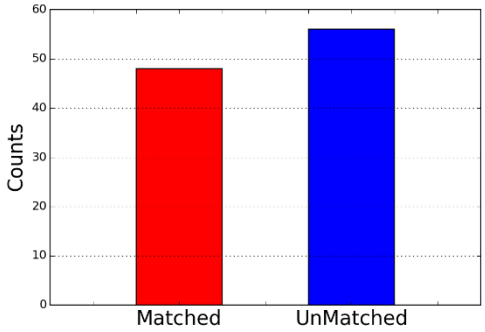


Figure B. 3306: CHC Count Comparison R-123 55F 10000Btu 30000Lb Tri

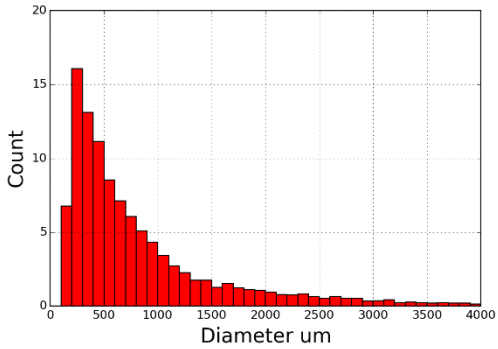


Figure B. 3307: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

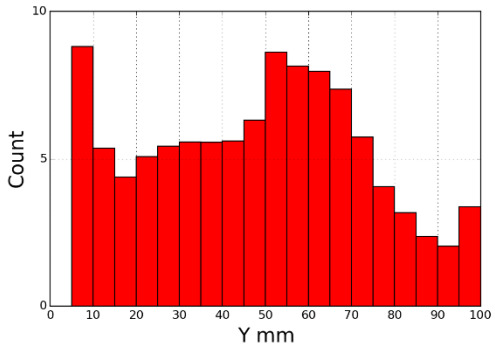


Figure B. 3308: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

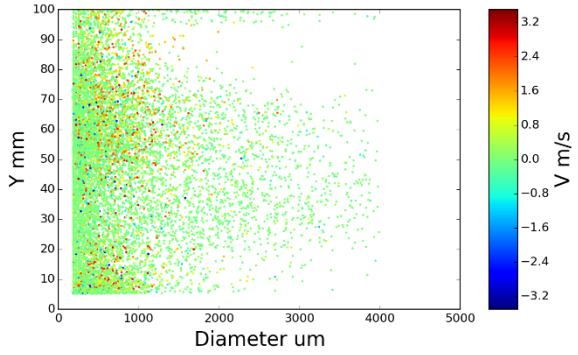


Figure B. 3309: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

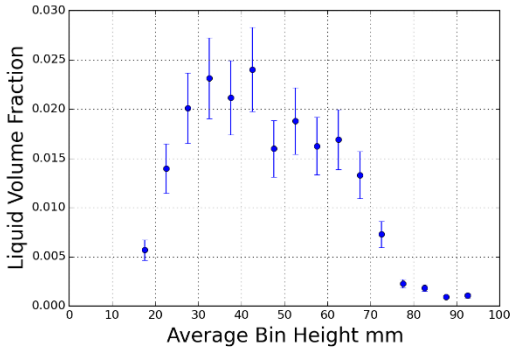


Figure B. 3310: Void Fraction R-123 55F 10000Btu 30000Lb Tri

B.8.2.2 Matched Only Droplets for .LA Image

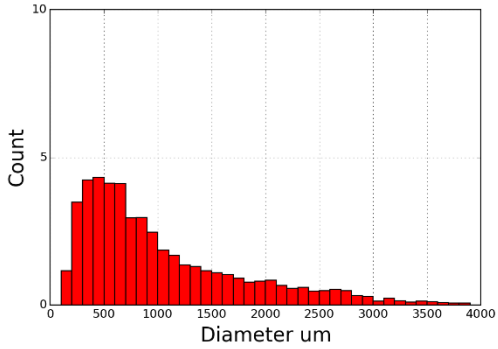


Figure B. 3311: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

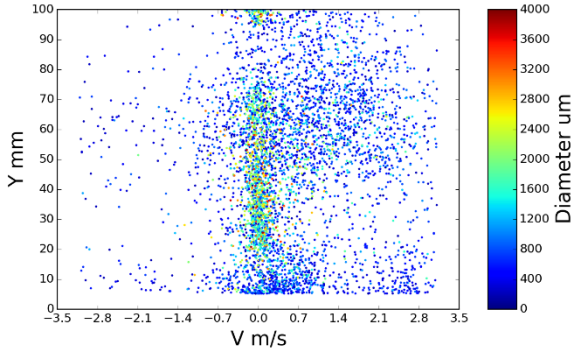


Figure B. 3314: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

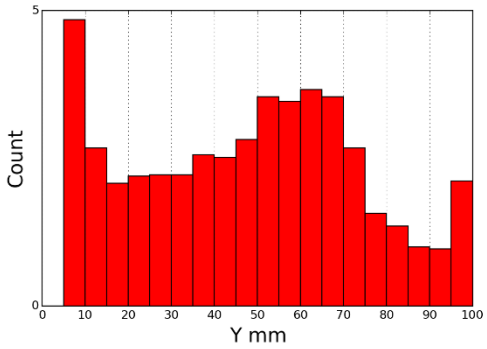


Figure B. 3312: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

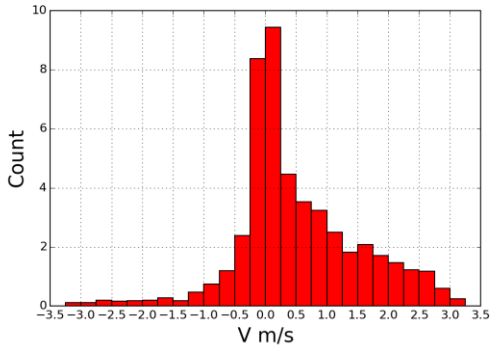


Figure B. 3315: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

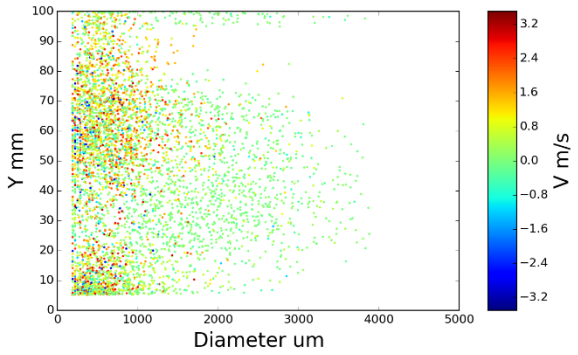


Figure B. 3313: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri

B.8.2.2 Matched Only Droplets for .LB Image

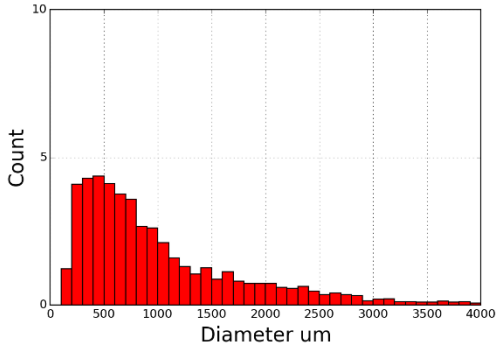


Figure B. 3316: Droplet Diameter Histogram R-123 55F 10000Btu 30000Lb Tri

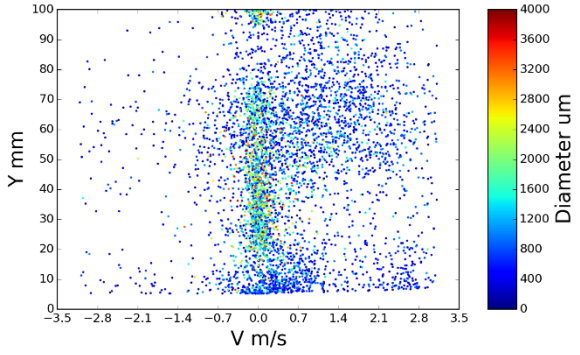


Figure B. 3319: Droplet Height vs Vertical Velocity R-123 55F 10000Btu 30000Lb Tri

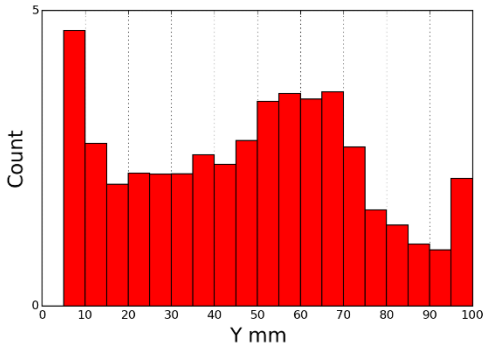


Figure B. 3317: Droplet Height Histogram R-123 55F 10000Btu 30000Lb Tri

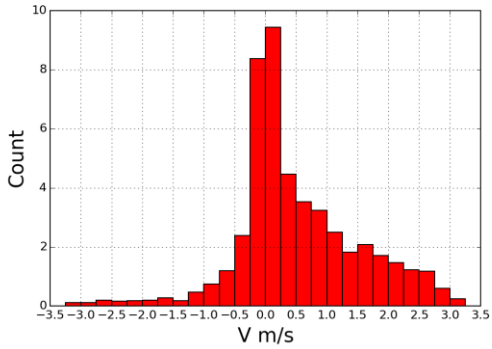


Figure B. 3320: Droplet Vertical Velocity Histogram R-123 55F 10000Btu 30000Lb Tri

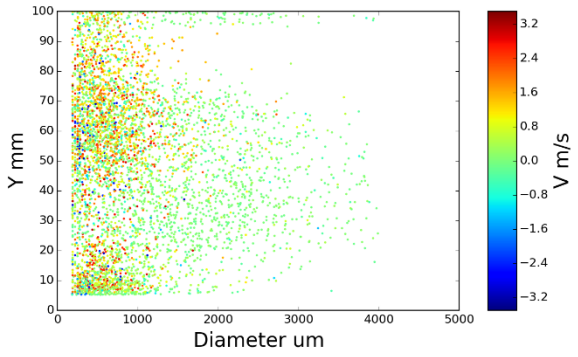


Figure B. 3318: Droplet Height vs Diameter R-123 55F 10000Btu 30000Lb Tri