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

by

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

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DOCTOR OF PHILOSOPHY

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A.7.1.2 Matched Only Droplets for .LA Image 447
A.7.1.2 Matched Only Droplets for .LB Image 448
A.7.1.2 Depth N 449
A.7.1.2 All Droplets for .LA Image 450
A.7.1.2 All Droplets for .LB Image 451
A.7.1.2 Matched Only Droplets for .LA Image 452
A.7.1.2 Matched Only Droplets for .LB Image 453
A.7.2 Liquid Level 2 454
A.7.2.1 Lens 100mm Mag 0_29x 454
A.7.2.1 Depth J 454
A.7.2.1 All Droplets for .LA Image 455
A.7.2.1 All Droplets for .LB Image 456
A.7.2.1 Matched Only Droplets for .LA Image 457
A.7.2.1 Matched Only Droplets for .LB Image 458
A.7.2.1 Depth K 459
A.7.2.1 All Droplets for .LA Image 460
A.7.2.1 All Droplets for .LB Image 461

A.7.2.1 Matched Only Droplets for .LA Image 462
A.7.2.1 Matched Only Droplets for .LB Image 463
A.7.2.1 Depth L 464
A.7.2.1 All Droplets for .LA Image 465
A.7.2.1 All Droplets for .LB Image 466
A.7.2.1 Matched Only Droplets for .LA Image 467
A.7.2.1 Matched Only Droplets for .LB Image 468
A.7.2.1 Depth M 469
A.7.2.1 All Droplets for .LA Image 470
A.7.2.1 All Droplets for .LB Image 471
A.7.2.1 Matched Only Droplets for .LA Image 472
A.7.2.1 Matched Only Droplets for .LB Image 473
A.7.2.1 Depth N 474
A.7.2.1 All Droplets for .LA Image 475
A.7.2.1 All Droplets for .LB Image 476
A.7.2.1 Matched Only Droplets for .LA Image 477
A.7.2.1 Matched Only Droplets for .LB Image 478
A.7.2.2 Lens 50mm Mag 0_13x 479
A.7.2.2 Depth J 479
A.7.2.2 All Droplets for .LA Image 480
A.7.2.2 All Droplets for .LB Image 481
A.7.2.2 Matched Only Droplets for .LA Image 482
A.7.2.2 Matched Only Droplets for .LB Image 483
A.7.2.2 Depth K 484
A.7.2.2 All Droplets for .LA Image 485
A.7.2.2 All Droplets for .LB Image 486
A.7.2.2 Matched Only Droplets for .LA Image 487
A.7.2.2 Matched Only Droplets for .LB Image 488
A.7.2.2 Depth L 489

A.7.2.2 All Droplets for .LA Image 490
A.7.2.2 All Droplets for .LB Image 491
A.7.2.2 Matched Only Droplets for .LA Image 492
A.7.2.2 Matched Only Droplets for .LB Image 493
A.7.2.2 Depth M 494
A.7.2.2 All Droplets for .LA Image 495
A.7.2.2 All Droplets for .LB Image 496
A.7.2.2 Matched Only Droplets for .LA Image 497
A.7.2.2 Matched Only Droplets for .LB Image 498
A.7.2.2 Depth N 499
A.7.2.2 All Droplets for .LA Image 500
A.7.2.2 All Droplets for .LB Image 501
A.7.2.2 Matched Only Droplets for .LA Image 502
A.7.2.2 Matched Only Droplets for .LB Image 503
A.7.3 Liquid Level 3 504
A.7.3.1 Lens 100mm Mag 0_29x 504
A.7.3.1 Depth J 504
A.7.3.1 All Droplets for .LA Image 505
A.7.3.1 All Droplets for .LB Image 506
A.7.3.1 Matched Only Droplets for .LA Image 507
A.7.3.1 Matched Only Droplets for .LB Image 508
A.7.3.1 Depth K 509
A.7.3.1 All Droplets for .LA Image 510
A.7.3.1 All Droplets for .LB Image 511
A.7.3.1 Matched Only Droplets for .LA Image 512
A.7.3.1 Matched Only Droplets for .LB Image 513
A.7.3.1 Depth L 514
A.7.3.1 All Droplets for .LA Image 515
A.7.3.1 All Droplets for .LB Image 516

A.7.3.1 Matched Only Droplets for .LA Image 517
A.7.3.1 Matched Only Droplets for .LB Image 518
A.7.3.1 Depth M 519
A.7.3.1 All Droplets for .LA Image 520
A.7.3.1 All Droplets for .LB Image 521
A.7.3.1 Matched Only Droplets for .LA Image 522
A.7.3.1 Matched Only Droplets for .LB Image 523
A.7.3.1 Depth N 524
A.7.3.1 All Droplets for .LA Image 525
A.7.3.1 All Droplets for .LB Image 526
A.7.3.1 Matched Only Droplets for .LA Image 527
A.7.3.1 Matched Only Droplets for .LB Image 528
A.7.3.2 Lens 50mm Mag 0_13x 529
A.7.3.2 Depth J 529
A.7.3.2 All Droplets for .LA Image 530
A.7.3.2 All Droplets for .LB Image 531
A.7.3.2 Matched Only Droplets for .LA Image 532
A.7.3.2 Matched Only Droplets for .LB Image 533
A.7.3.2 Depth K 534
A.7.3.2 All Droplets for .LA Image 535
A.7.3.2 All Droplets for .LB Image 536
A.7.3.2 Matched Only Droplets for .LA Image 537
A.7.3.2 Matched Only Droplets for .LB Image 538
A.7.3.2 Depth L 539
A.7.3.2 All Droplets for .LA Image 540
A.7.3.2 All Droplets for .LB Image 541
A.7.3.2 Matched Only Droplets for .LA Image 542
A.7.3.2 Matched Only Droplets for .LB Image 543
A.7.3.2 Depth M 544

A.7.3.2 All Droplets for .LA Image 545
A.7.3.2 All Droplets for .LB Image 546
A.7.3.2 Matched Only Droplets for .LA Image 547
A.7.3.2 Matched Only Droplets for .LB Image 548
A.7.3.2 Depth N 549
A.7.3.2 All Droplets for .LA Image 550
A.7.3.2 All Droplets for .LB Image 551
A.7.3.2 Matched Only Droplets for .LA Image 552
A.7.3.2 Matched Only Droplets for .LB Image 553
A.8 - 1556 R-134a 55F 10000Btu 30000Lb Tri 554
A.8.1 Liquid Level 1 554
A.8.1.1 Lens 100mm Mag 0_29x 554
A.8.1.1 Depth J 554
A.8.1.1 All Droplets for .LA Image 555
A.8.1.1 All Droplets for .LB Image 556
A.8.1.1 Matched Only Droplets for .LA Image 557
A.8.1.1 Matched Only Droplets for .LB Image 558
A.8.1.1 Depth K 559
A.8.1.1 All Droplets for .LA Image 560
A.8.1.1 All Droplets for .LB Image 561
A.8.1.1 Matched Only Droplets for .LA Image 562
A.8.1.1 Matched Only Droplets for .LB Image 563
A.8.1.1 Depth L 564
A.8.1.1 All Droplets for .LA Image 565
A.8.1.1 All Droplets for .LB Image 566
A.8.1.1 Matched Only Droplets for .LA Image 567
A.8.1.1 Matched Only Droplets for .LB Image 568
A.8.1.1 Depth M 569
A.8.1.1 All Droplets for .LA Image 570

A.8.1.1 All Droplets for .LB Image 571
A.8.1.1 Matched Only Droplets for .LA Image 572
A.8.1.1 Matched Only Droplets for .LB Image 573
A.8.1.1 Depth N 574
A.8.1.1 All Droplets for .LA Image 575
A.8.1.1 All Droplets for .LB Image 576
A.8.1.1 Matched Only Droplets for .LA Image 577
A.8.1.1 Matched Only Droplets for .LB Image 578
A.8.1.2 Lens 50mm Mag 0_13x 579
A.8.1.2 Depth J 579
A.8.1.2 All Droplets for .LA Image 580
A.8.1.2 All Droplets for .LB Image 581
A.8.1.2 Matched Only Droplets for .LA Image 582
A.8.1.2 Matched Only Droplets for .LB Image 583
A.8.1.2 Depth K 584
A.8.1.2 All Droplets for .LA Image 585
A.8.1.2 All Droplets for .LB Image 586
A.8.1.2 Matched Only Droplets for .LA Image 587
A.8.1.2 Matched Only Droplets for .LB Image 588
A.8.1.2 Depth L 589
A.8.1.2 All Droplets for .LA Image 590
A.8.1.2 All Droplets for .LB Image 591
A.8.1.2 Matched Only Droplets for .LA Image 592
A.8.1.2 Matched Only Droplets for .LB Image 593
A.8.1.2 Depth M 594
A.8.1.2 All Droplets for .LA Image 595
A.8.1.2 All Droplets for .LB Image 596
A.8.1.2 Matched Only Droplets for .LA Image 597
A.8.1.2 Matched Only Droplets for .LB Image 598

A.8.1.2 Depth N 599
A.8.1.2 All Droplets for .LA Image 600
A.8.1.2 All Droplets for .LB Image 601
A.8.1.2 Matched Only Droplets for .LA Image 602
A.8.1.2 Matched Only Droplets for .LB Image 603
A.8.2 Liquid Level 2 604
A.8.2.1 Lens 100mm Mag 0_29x 604
A.8.2.1 Depth J 604
A.8.2.1 All Droplets for .LA Image 605
A.8.2.1 All Droplets for .LB Image 606
A.8.2.1 Matched Only Droplets for .LA Image 607
A.8.2.1 Matched Only Droplets for .LB Image 608
A.8.2.1 Depth K 609
A.8.2.1 All Droplets for .LA Image 610
A.8.2.1 All Droplets for .LB Image 611
A.8.2.1 Matched Only Droplets for .LA Image 612
A.8.2.1 Matched Only Droplets for .LB Image 613
A.8.2.1 Depth L 614
A.8.2.1 All Droplets for .LA Image 615
A.8.2.1 All Droplets for .LB Image 616
A.8.2.1 Matched Only Droplets for .LA Image 617
A.8.2.1 Matched Only Droplets for .LB Image 618
A.8.2.1 Depth M 619
A.8.2.1 All Droplets for .LA Image 620
A.8.2.1 All Droplets for .LB Image 621
A.8.2.1 Matched Only Droplets for .LA Image 622
A.8.2.1 Matched Only Droplets for .LB Image 623
A.8.2.1 Depth N 624
A.8.2.1 All Droplets for .LA Image 625

A.8.2.1 All Droplets for .LB Image 626
A.8.2.1 Matched Only Droplets for .LA Image 627
A.8.2.1 Matched Only Droplets for .LB Image 628
A.8.2.2 Lens 50mm Mag 0_13x 629
A.8.2.2 Depth J 629
A.8.2.2 All Droplets for .LA Image 630
A.8.2.2 All Droplets for .LB Image 631
A.8.2.2 Matched Only Droplets for .LA Image 632
A.8.2.2 Matched Only Droplets for .LB Image 633
A.8.2.2 Depth K 634
A.8.2.2 All Droplets for .LA Image 635
A.8.2.2 All Droplets for .LB Image 636
A.8.2.2 Matched Only Droplets for .LA Image 637
A.8.2.2 Matched Only Droplets for .LB Image 638
A.8.2.2 Depth L 639
A.8.2.2 All Droplets for .LA Image 640
A.8.2.2 All Droplets for .LB Image 641
A.8.2.2 Matched Only Droplets for .LA Image 642
A.8.2.2 Matched Only Droplets for .LB Image 643
A.8.2.2 Depth M 644
A.8.2.2 All Droplets for .LA Image 645
A.8.2.2 All Droplets for .LB Image 646
A.8.2.2 Matched Only Droplets for .LA Image 647
A.8.2.2 Matched Only Droplets for .LB Image 648
A.8.2.2 Depth N 649
A.8.2.2 All Droplets for .LA Image 650
A.8.2.2 All Droplets for .LB Image 651
A.8.2.2 Matched Only Droplets for .LA Image 652
A.8.2.2 Matched Only Droplets for .LB Image 653

A.8.3 Liquid Level 3 654
A.8.3.1 Lens 100mm Mag 0_29x 654
A.8.3.1 Depth J 654
A.8.3.1 All Droplets for .LA Image 655
A.8.3.1 All Droplets for .LB Image 656
A.8.3.1 Matched Only Droplets for .LA Image 657
A.8.3.1 Matched Only Droplets for .LB Image 658
A.8.3.1 Depth K 659
A.8.3.1 All Droplets for .LA Image 660
A.8.3.1 All Droplets for .LB Image 661
A.8.3.1 Matched Only Droplets for .LA Image 662
A.8.3.1 Matched Only Droplets for .LB Image 663
A.8.3.1 Depth L 664
A.8.3.1 All Droplets for .LA Image 665
A.8.3.1 All Droplets for .LB Image 666
A.8.3.1 Matched Only Droplets for .LA Image 667
A.8.3.1 Matched Only Droplets for .LB Image 668
A.8.3.1 Depth M 669
A.8.3.1 All Droplets for .LA Image 670
A.8.3.1 All Droplets for .LB Image 671
A.8.3.1 Matched Only Droplets for .LA Image 672
A.8.3.1 Matched Only Droplets for .LB Image 673
A.8.3.1 Depth N 674
A.8.3.1 All Droplets for .LA Image 675
A.8.3.1 All Droplets for .LB Image 676
A.8.3.1 Matched Only Droplets for .LA Image 677
A.8.3.1 Matched Only Droplets for .LB Image 678
A.8.3.2 Lens 50mm Mag 0_13x 679
A.8.3.2 Depth J 679

A.8.3.2 All Droplets for .LA Image 680
A.8.3.2 All Droplets for .LB Image 681
A.8.3.2 Matched Only Droplets for .LA Image 682
A.8.3.2 Matched Only Droplets for .LB Image 683
A.8.3.2 Depth K 684
A.8.3.2 All Droplets for .LA Image 685
A.8.3.2 All Droplets for .LB Image 686
A.8.3.2 Matched Only Droplets for .LA Image 687
A.8.3.2 Matched Only Droplets for .LB Image 688
A.8.3.2 Depth L 689
A.8.3.2 All Droplets for .LA Image 690
A.8.3.2 All Droplets for .LB Image 691
A.8.3.2 Matched Only Droplets for .LA Image 692
A.8.3.2 Matched Only Droplets for .LB Image 693
A.8.3.2 Depth M 694
A.8.3.2 All Droplets for .LA Image 695
A.8.3.2 All Droplets for .LB Image 696
A.8.3.2 Matched Only Droplets for .LA Image 697
A.8.3.2 Matched Only Droplets for .LB Image 698
A.8.3.2 Depth N 699
A.8.3.2 All Droplets for .LA Image 700
A.8.3.2 All Droplets for .LB Image 701
A.8.3.2 Matched Only Droplets for .LA Image 702
A.8.3.2 Matched Only Droplets for .LB Image 703
A.8.4 Liquid Level 4 704
A.8.4.1 Lens 100mm Mag 0_29x 704
A.8.4.1 Depth J 704
A.8.4.1 All Droplets for .LA Image 705
A.8.4.1 All Droplets for .LB Image 706

A.8.4.1 Matched Only Droplets for .LA Image 707
A.8.4.1 Matched Only Droplets for .LB Image 708
A.8.4.1 Depth K 709
A.8.4.1 All Droplets for .LA Image 710
A.8.4.1 All Droplets for .LB Image 711
A.8.4.1 Matched Only Droplets for .LA Image 712
A.8.4.1 Matched Only Droplets for .LB Image 713
A.8.4.1 Depth L 714
A.8.4.1 All Droplets for .LA Image 715
A.8.4.1 All Droplets for .LB Image 716
A.8.4.1 Matched Only Droplets for .LA Image 717
A.8.4.1 Matched Only Droplets for .LB Image 718
A.8.4.1 Depth M 719
A.8.4.1 All Droplets for .LA Image 720
A.8.4.1 All Droplets for .LB Image 721
A.8.4.1 Matched Only Droplets for .LA Image 722
A.8.4.1 Matched Only Droplets for .LB Image 723
A.8.4.1 Depth N 724
A.8.4.1 All Droplets for .LA Image 725
A.8.4.1 All Droplets for .LB Image 726
A.8.4.1 Matched Only Droplets for .LA Image 727
A.8.4.1 Matched Only Droplets for .LB Image 728
A.8.4.2 Lens 50mm Mag 0_13x 729
A.8.4.2 Depth J 729
A.8.4.2 All Droplets for .LA Image 730
A.8.4.2 All Droplets for .LB Image 731
A.8.4.2 Matched Only Droplets for .LA Image 732
A.8.4.2 Matched Only Droplets for .LB Image 733
A.8.4.2 Depth K 734

A.8.4.2 All Droplets for .LA Image 735
A.8.4.2 All Droplets for .LB Image 736
A.8.4.2 Matched Only Droplets for .LA Image 737
A.8.4.2 Matched Only Droplets for .LB Image 738
A.8.4.2 Depth L 739
A.8.4.2 All Droplets for .LA Image 740
A.8.4.2 All Droplets for .LB Image 741
A.8.4.2 Matched Only Droplets for .LA Image 742
A.8.4.2 Matched Only Droplets for .LB Image 743
A.8.4.2 Depth M 744
A.8.4.2 All Droplets for .LA Image 745
A.8.4.2 All Droplets for .LB Image 746
A.8.4.2 Matched Only Droplets for .LA Image 747
A.8.4.2 Matched Only Droplets for .LB Image 748
A.8.4.2 Depth N 749
A.8.4.2 All Droplets for .LA Image 750
A.8.4.2 All Droplets for .LB Image 751
A.8.4.2 Matched Only Droplets for .LA Image 752
A.8.4.2 Matched Only Droplets for .LB Image 753

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A.5.1 Liquid Level 1

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	18315 / 2.308
Ref Mass Flow (lb/hr) / (kg/s)	1678 / 0.211
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15583 / 21.134
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4971 / 15.68
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.0 / 12.76
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	55.2 / 12.87
Total Bundle Q (Btu/hr) / (kW)	112107 / 32.86
Total Bundle & Preboiler Q (Btu/hr) / (kW)	150400 / 44.08
Top Two Rows HTC Ratio	1.073
Bundle Inlet Quality	0.15
Bundle Exit Quality	0.98

Table A. 1: Thermal Conditions

A.5.1.1 Lens 100mm Mag 0_29x

A.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	52.08	53.85	57.1	3028	470.6	494.9	57.1	3030	460.6	482.9
40-60mm	82.9	90.56	57.1	3027	376.4	443.5	57.1	3017	366.6	442.2
60-80mm	23.11	23.76	57.1	2945	342.3	380.9	57.1	2675	334.6	376.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	159.22	169.46	57.1	3028	402.5	455.5	57.1	3030	392.2	449.8
			Height A (mm)				Height B (mm)			
Highest Particle			75.8874				75.8883			
Lowest Particle			27.9312				27.9312			

Table A. 2: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	21.37	57.1	3028	585.0	578.9	57.1	3030	577.5	572.2	-0.950	0.940	-0.030	0.240	-0.950	0.950	-0.030	0.330
40-60mm	50.28	57.1	3027	470.1	493.1	57.1	3014	464.6	487.6	-0.950	0.950	-0.040	0.190	-0.950	0.950	0.020	0.290
60-80mm	14.95	57.1	2945	445.7	408.8	57.1	2675	442.0	408.9	-0.860	0.900	-0.040	0.140	-0.950	0.920	0.040	0.280
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	86.6	57.1	3028	494.2	505.4	57.1	3030	488.7	500.4	-0.950	0.950	-0.040	0.200	-0.950	0.950	0.010	0.300

Table A. 3: Matched Droplet Info

A.5.1.1 All Droplets for .LA Image

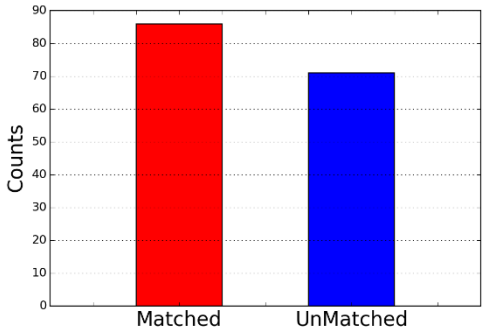

Figure A. 1: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

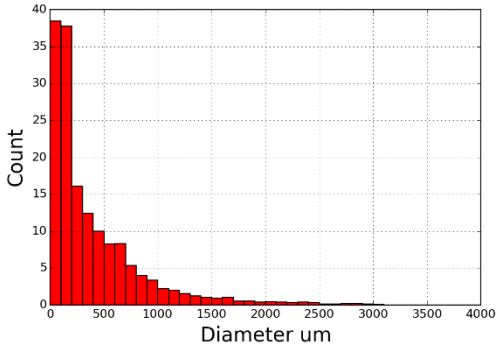

Figure A. 2: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

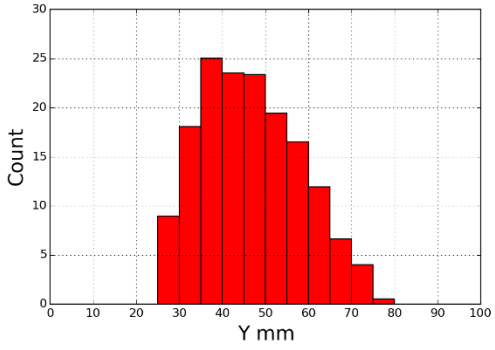

Figure A. 3: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

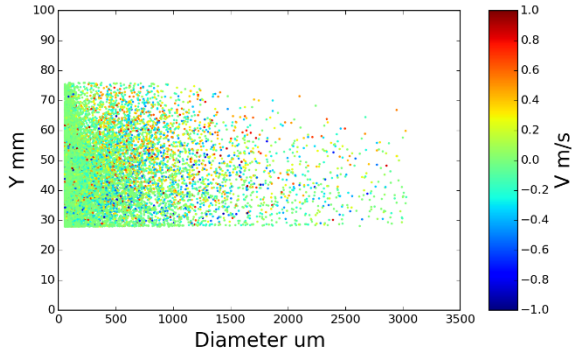

Figure A. 4: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

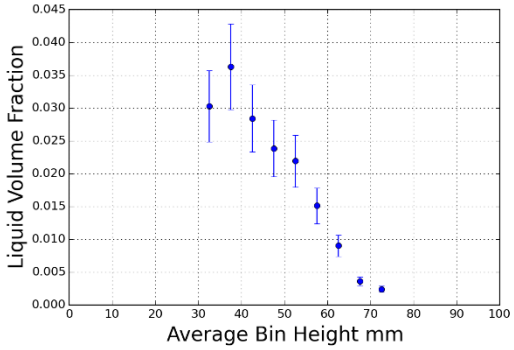

Figure A. 5: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 All Droplets for .LB Image

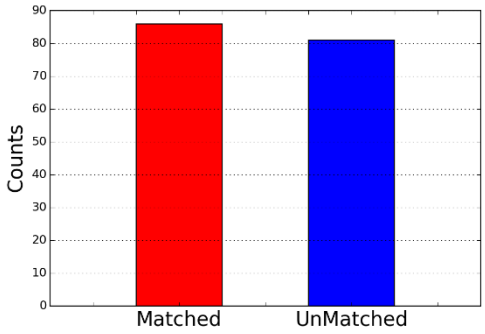

Figure A. 6: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

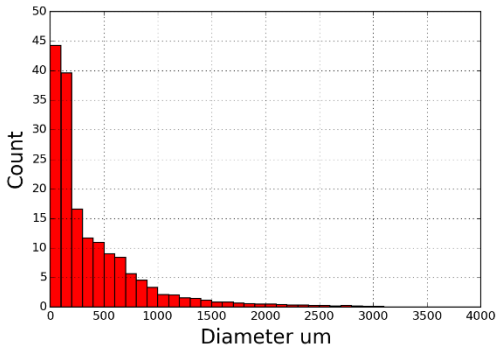

Figure A. 7: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

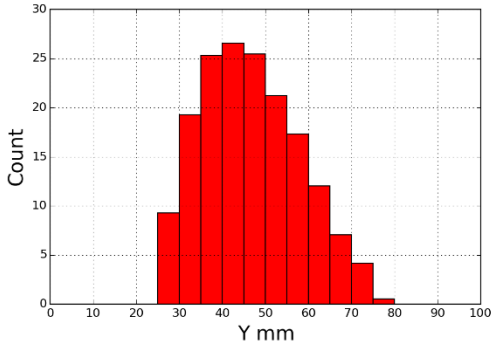

Figure A. 8: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

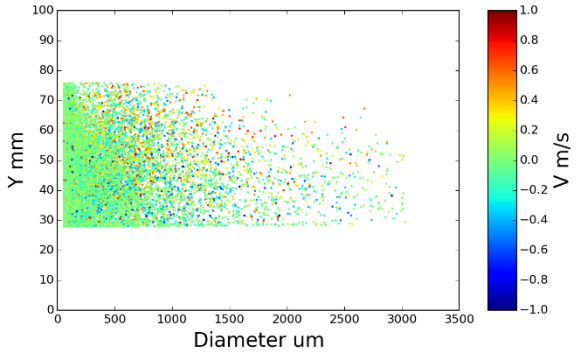

Figure A. 9: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

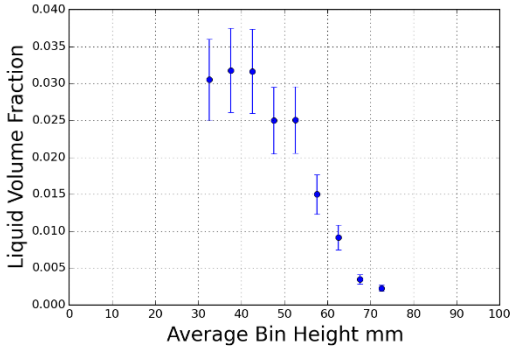

Figure A. 10: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 Matched Only Droplets for .LA Image

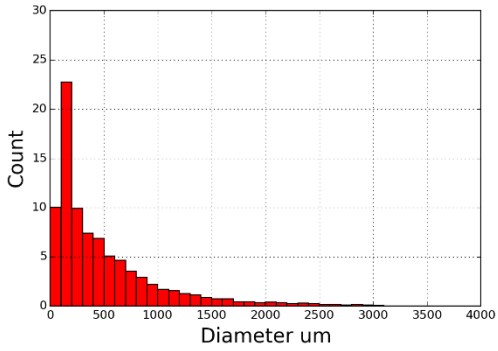

Figure A. 11: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

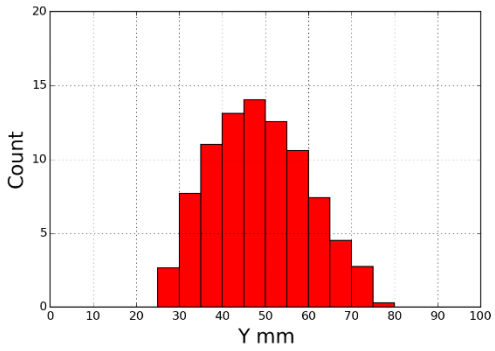

Figure A. 12: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

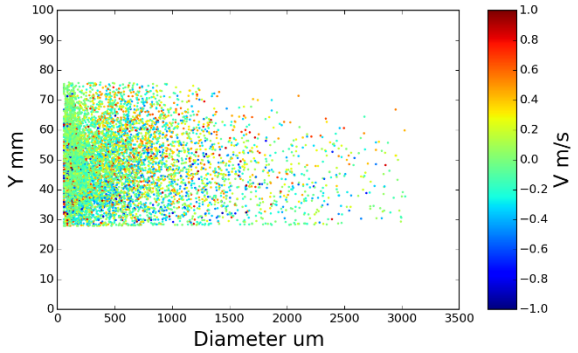

Figure A. 13: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

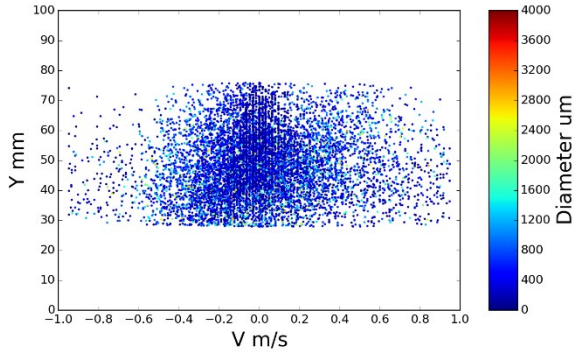

Figure A. 14: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

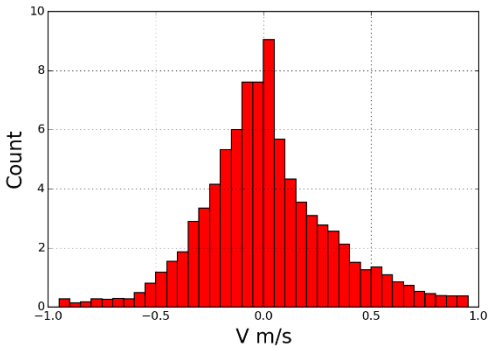

Figure A. 15: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 Matched Only Droplets for .LB Image

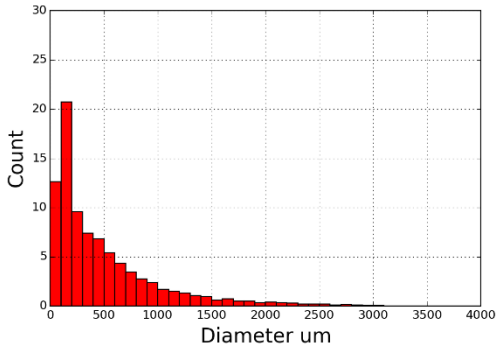

Figure A. 16: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

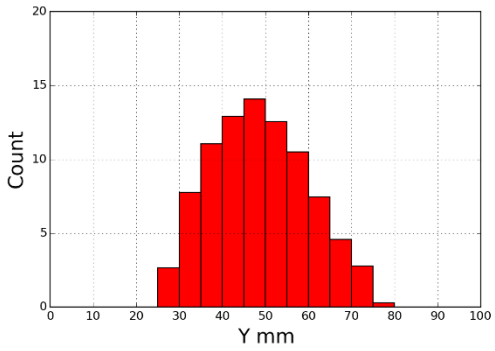

Figure A. 17: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

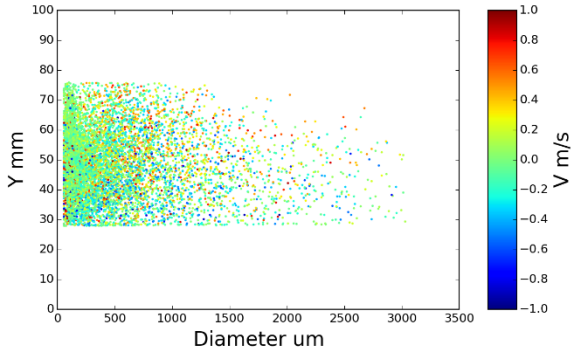

Figure A. 18: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

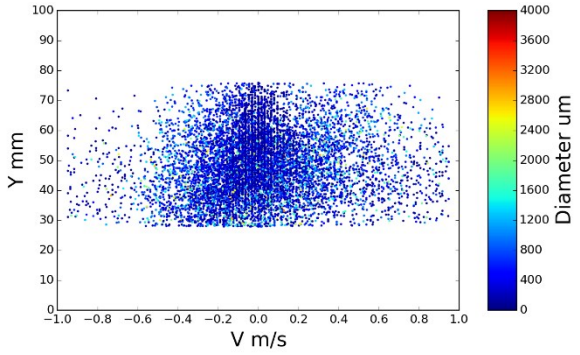

Figure A. 19: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

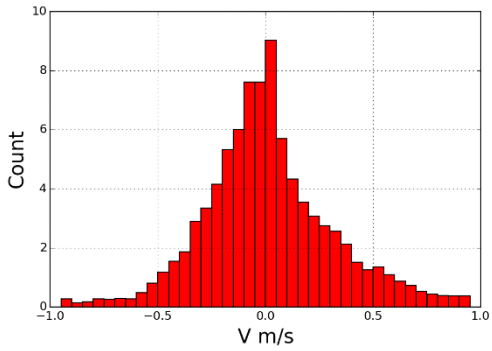

Figure A. 20: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

A.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	46.35	48.04	57.1	3032	487.6	529.1	57.1	3018	473.2	515.8
40-60mm	70.95	76.58	57.1	2986	437.7	484.2	57.1	3029	415.2	473.8
60-80mm	16.8	18.42	57.1	2702	391.4	410.1	57.1	2974	367.4	406.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	134.55	143.71	57.1	3032	449.2	492.8	57.1	3029	428.5	481.7
			Height A (mm)				Height B (mm)			
Highest Particle			75.8387				75.8540			
Lowest Particle			27.9312				27.9312			

Table A. 4: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	22.81	57.1	2965	639.4	586.8	57.1	3018	628.4	578.1	-0.920	0.950	-0.030	0.220	-0.950	0.950	-0.060	0.310
40-60mm	45.46	57.1	2986	561.6	518.7	57.1	3029	558.8	518.5	-0.950	0.950	-0.040	0.170	-0.940	0.950	-0.000	0.290
60-80mm	10.63	57.1	2702	520.0	439.4	57.1	2974	515.6	440.6	-0.890	0.930	-0.040	0.150	-0.910	0.950	-0.020	0.270
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	78.9	57.1	2986	578.5	531.3	57.1	3029	573.1	528.3	-0.950	0.950	-0.040	0.190	-0.950	0.950	-0.020	0.300

Table A. 5: Matched Droplet Info

A.5.1.1 All Droplets for .LA Image

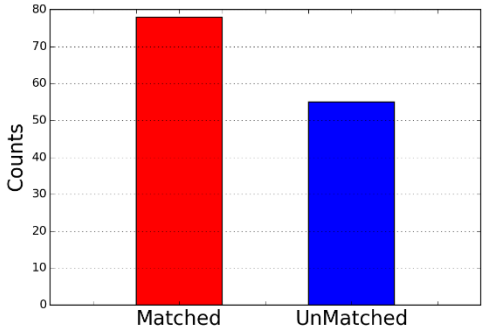

Figure A. 21: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

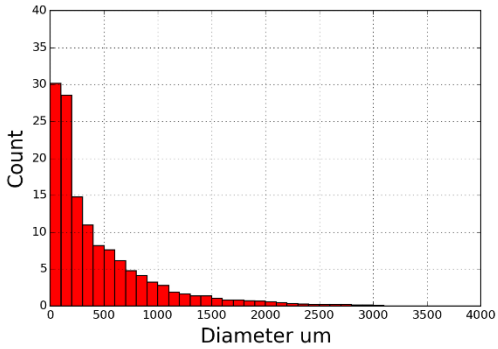

Figure A. 22: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

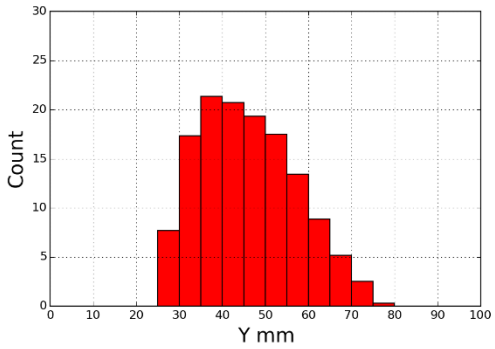

Figure A. 23: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

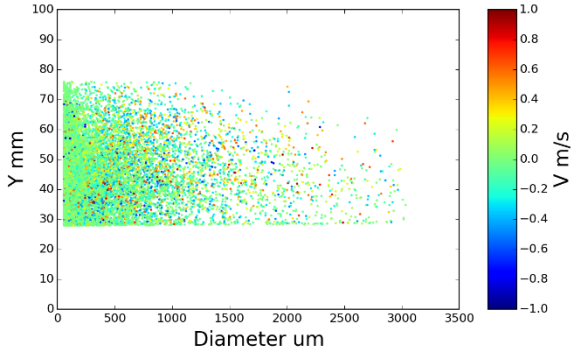

Figure A. 24: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

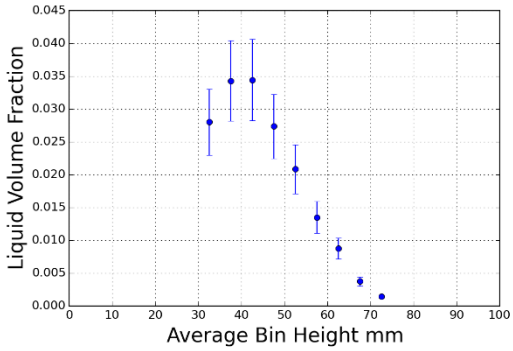

Figure A. 25: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 All Droplets for .LB Image

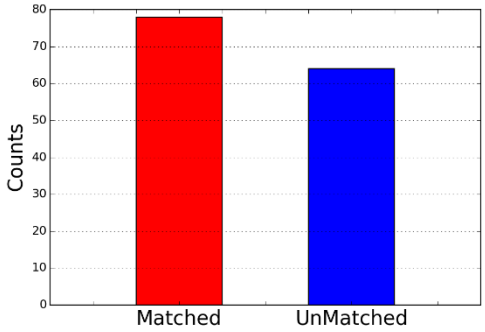

Figure A. 26: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

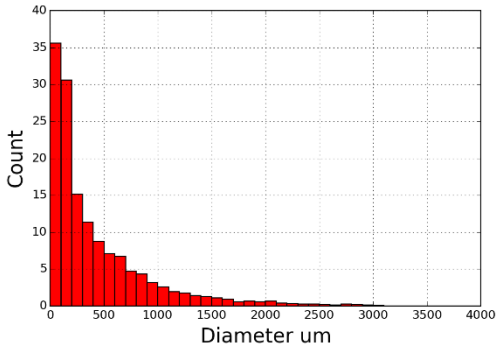

Figure A. 27: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

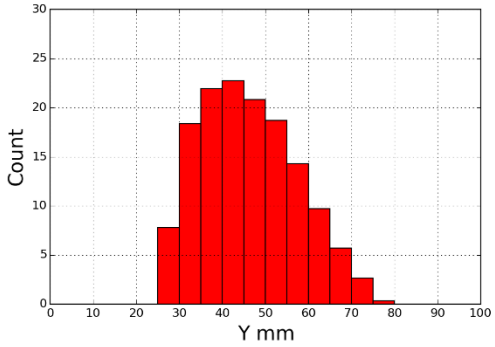

Figure A. 28: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

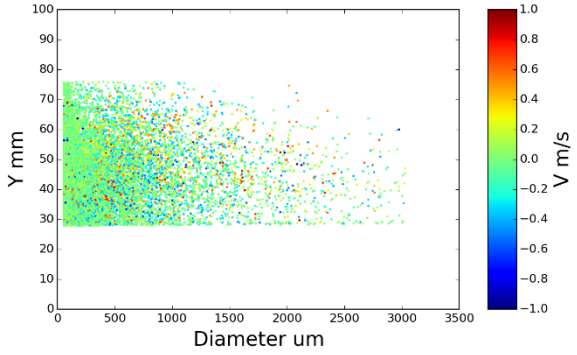

Figure A. 29: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

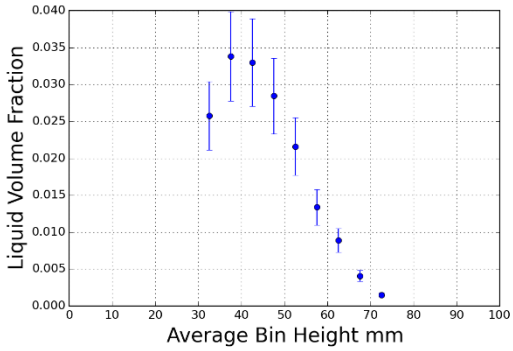

Figure A. 30: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 Matched Only Droplets for .LA Image

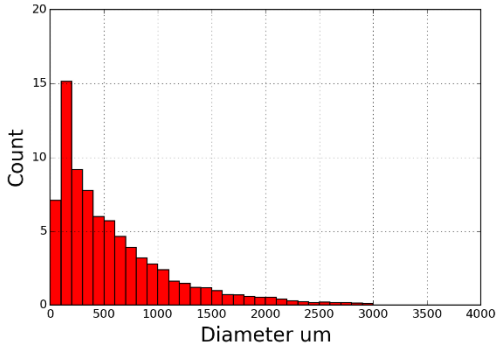

Figure A. 31: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

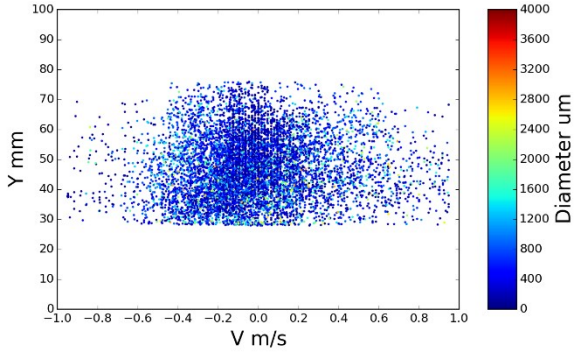

Figure A. 34: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

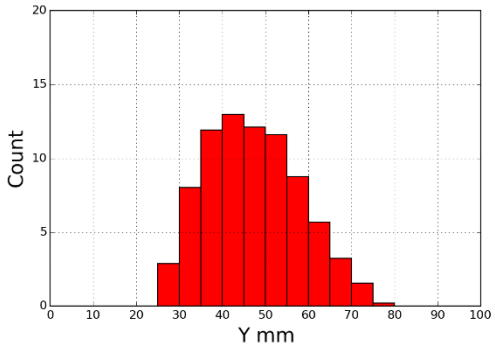

Figure A. 32: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

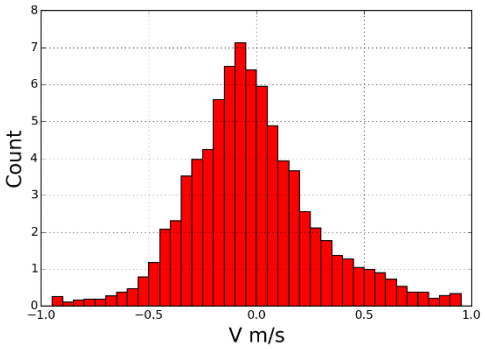

Figure A. 35: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

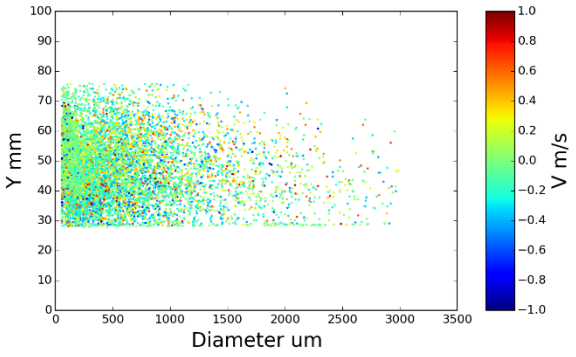

Figure A. 33: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 Matched Only Droplets for .LB Image

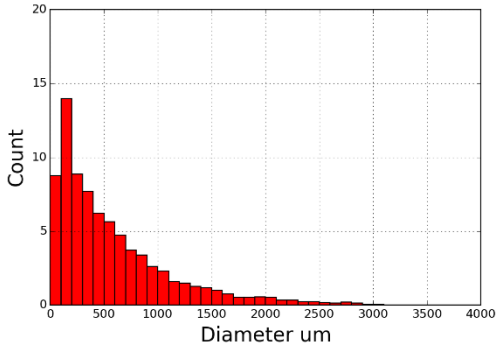

Figure A. 36: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

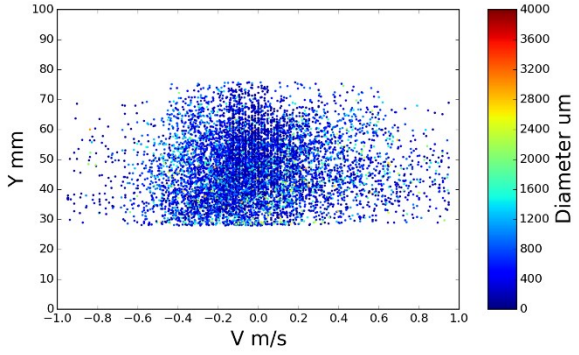

Figure A. 39: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

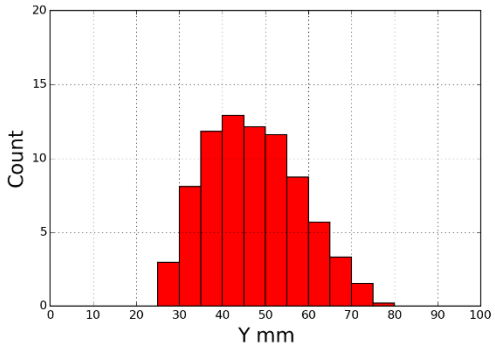

Figure A. 37: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

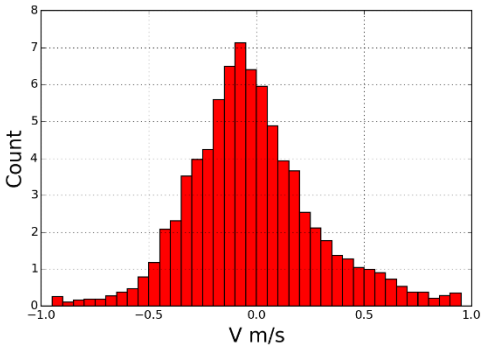

Figure A. 40: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

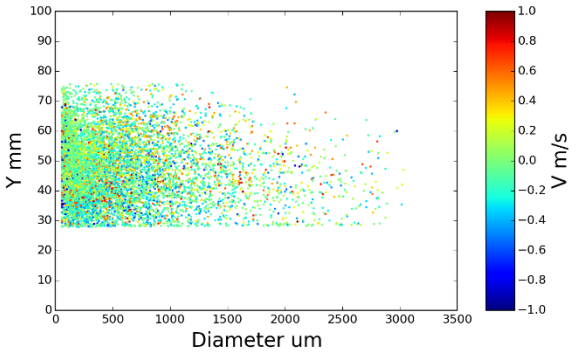

Figure A. 38: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	39.6	43.4	57.1	2998	540.8	515.3	57.1	3035	540.8	530.2
40-60mm	56.28	59.68	57.1	2992	444.4	485.0	57.1	2986	421.4	478.5
60-80mm	12.56	13.81	57.1	2724	393.0	443.0	57.1	2798	365.7	433.7
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	109.64	118.07	57.1	2998	473.6	494.6	57.1	3035	459.2	497.7
			Height A (mm)				Height B (mm)			
Highest Particle			75.8878				75.8148			
Lowest Particle			27.9312				27.9312			

Table A. 6: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	15.53	57.1	2998	682.8	607.4	57.1	3035	677.7	616.0	-0.950	0.930	-0.040	0.240	-0.950	0.950	-0.050	0.320
40-60mm	32.24	57.1	2992	579.7	541.2	57.1	2986	574.1	537.9	-0.950	0.950	-0.040	0.170	-0.950	0.950	-0.000	0.300
60-80mm	7.64	57.1	2713	540.8	475.7	57.1	2798	540.4	486.3	-0.930	0.870	-0.040	0.160	-0.900	0.950	-0.030	0.290
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	55.41	57.1	2998	603.2	554.7	57.1	3035	598.6	556.7	-0.950	0.950	-0.040	0.190	-0.950	0.950	-0.020	0.310

Table A. 7: Matched Droplet Info

A.5.1.1 All Droplets for .LA Image

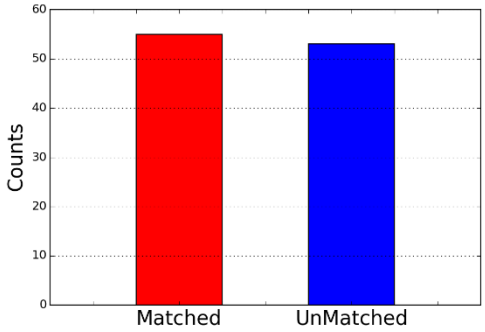

Figure A. 41: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

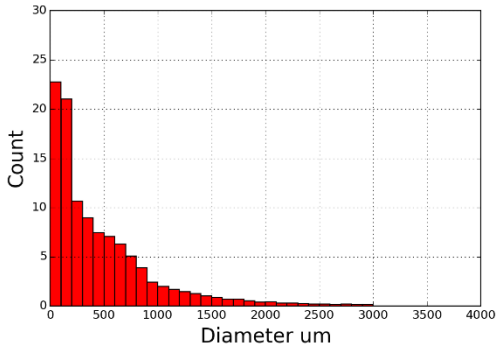

Figure A. 42: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

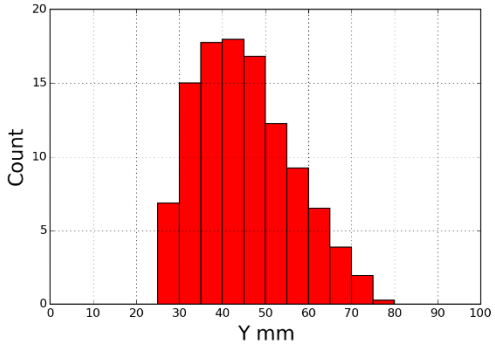

Figure A. 43: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

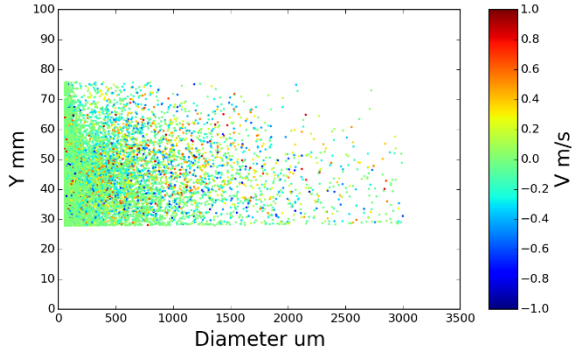

Figure A. 44: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

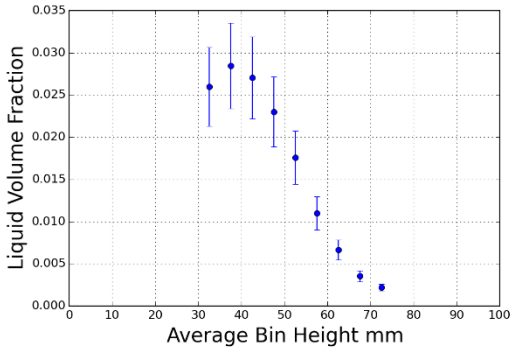

Figure A. 45: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 All Droplets for .LB Image

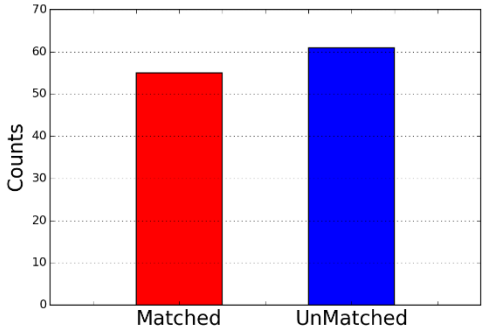

Figure A. 46: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

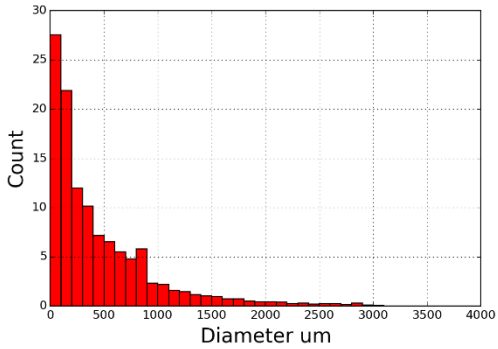

Figure A. 47: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

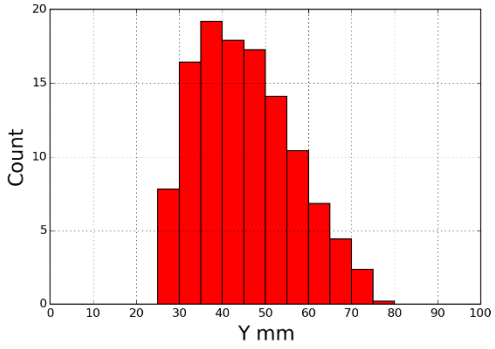

Figure A. 48: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

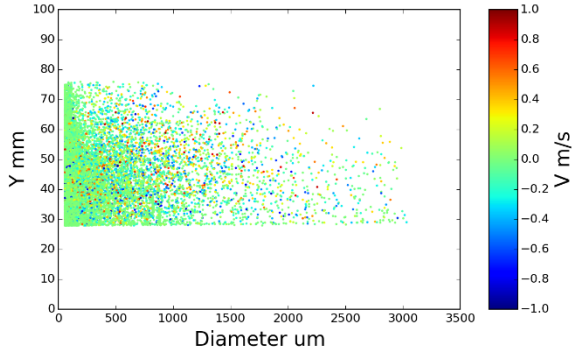

Figure A. 49: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

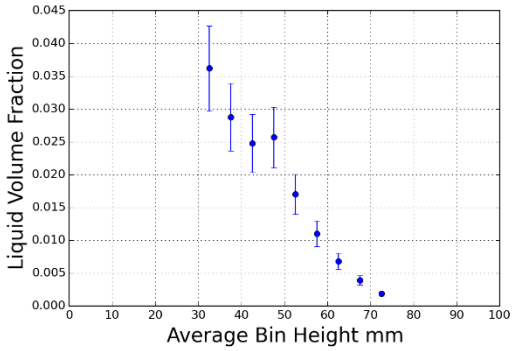

Figure A. 50: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 Matched Only Droplets for .LA Image

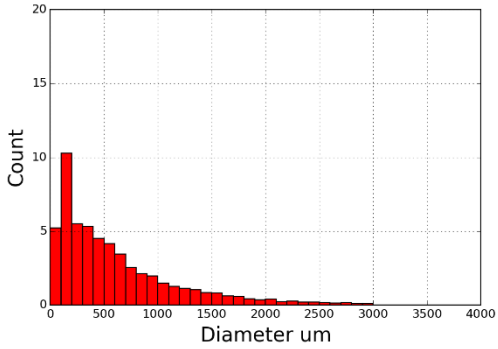

Figure A. 51: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

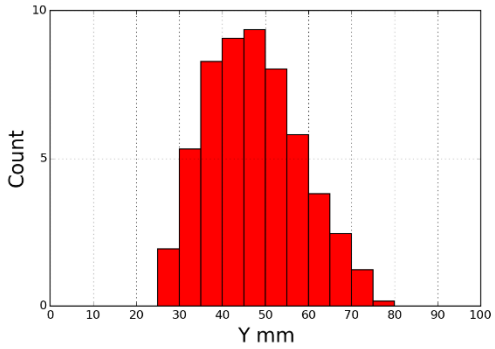

Figure A. 52: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

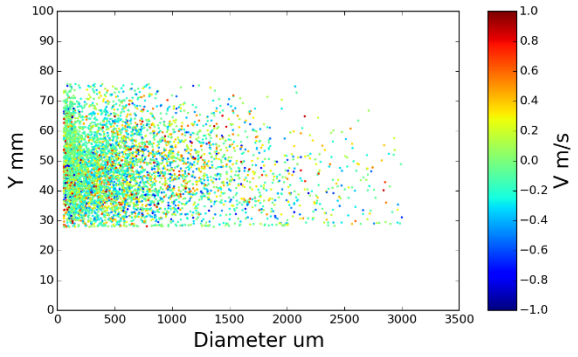

Figure A. 53: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

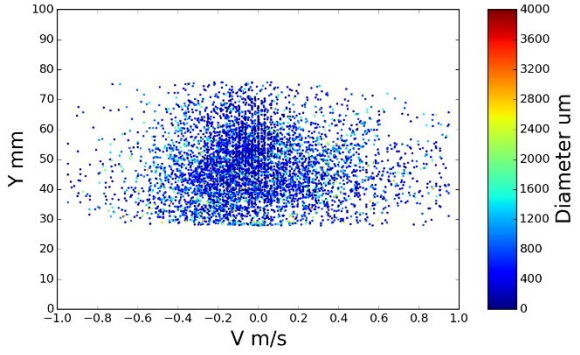

Figure A. 54: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

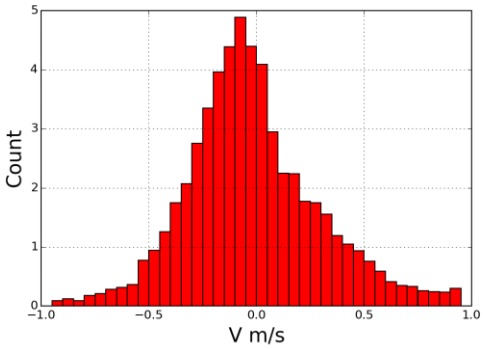

Figure A. 55: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 Matched Only Droplets for .LB Image

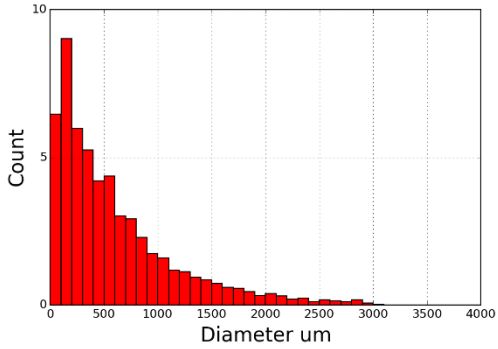

Figure A. 56: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

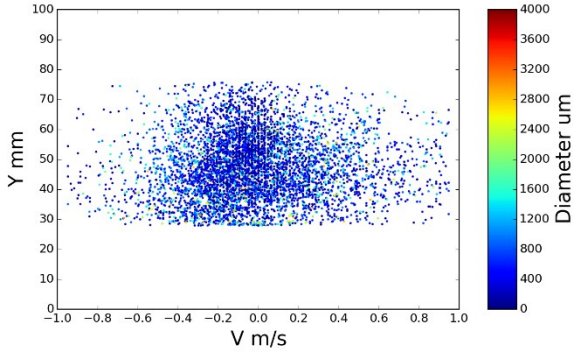

Figure A. 59: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

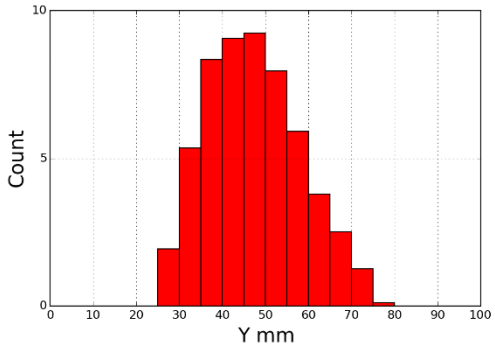

Figure A. 57: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

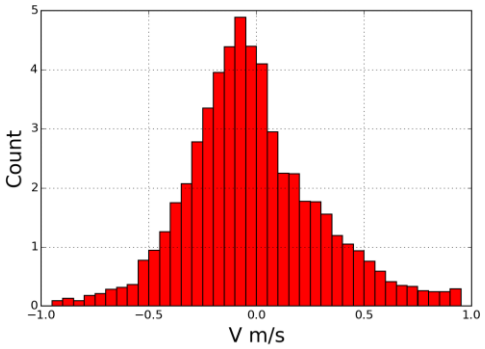

Figure A. 60: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

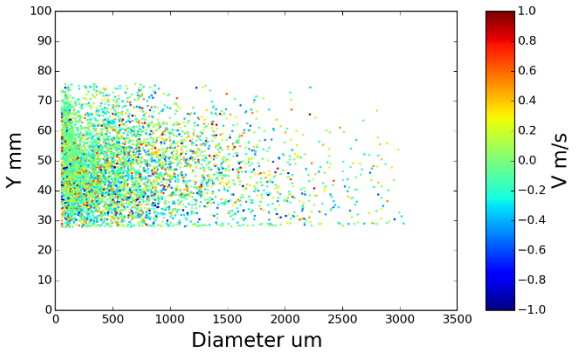

Figure A. 58: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 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	42.95	47.93	57.1	3034	562.4	527.0	57.1	3035	557.1	526.5
40-60mm	59.55	70.69	57.1	3031	432.0	498.9	57.1	3036	403.6	482.4
60-80mm	14.07	15.53	57.1	2996	397.6	444.5	57.1	2910	370.7	431.7
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	117.59	135.71	57.1	3034	475.9	507.8	57.1	3036	454.6	499.1
			Height A (mm)				Height B (mm)			
Highest Particle			75.8896				75.8874			
Lowest Particle			27.9312				27.9312			

Table A. 8: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	15.74	57.1	3025	724.5	615.8	57.1	3023	712.8	616.6	-0.950	0.950	-0.030	0.260	-0.950	0.950	-0.070	0.360
40-60mm	33.85	57.1	3031	572.2	544.6	57.1	2983	573.8	548.6	-0.950	0.950	-0.030	0.210	-0.950	0.940	0.010	0.320
60-80mm	8.45	57.1	2996	542.9	480.0	57.1	2910	540.0	487.2	-0.810	0.950	-0.030	0.170	-0.930	0.880	-0.030	0.280
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	58.04	57.1	3031	609.3	560.7	57.1	3023	606.6	563.5	-0.950	0.950	-0.030	0.220	-0.950	0.950	-0.020	0.330

Table A. 9: Matched Droplet Info

A.5.1.1 All Droplets for .LA Image

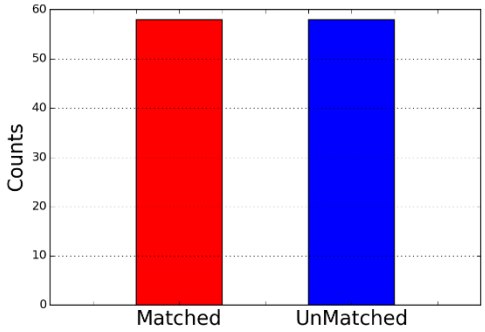

Figure A. 61: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

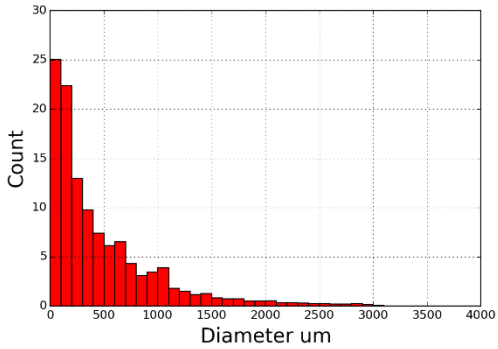

Figure A. 62: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

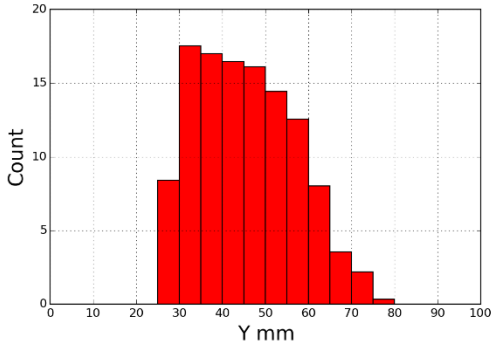

Figure A. 63: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

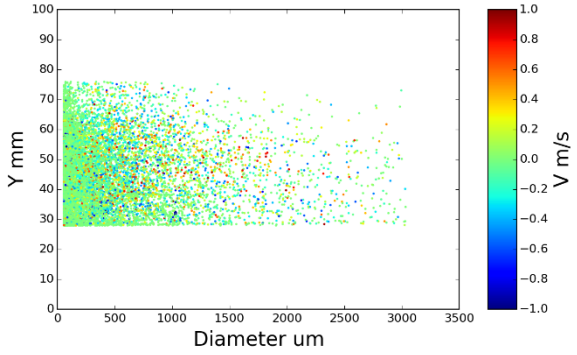

Figure A. 64: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

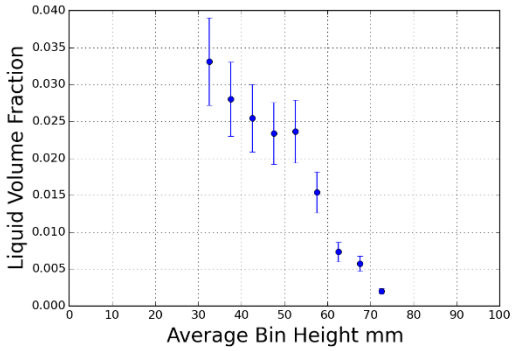

Figure A. 65: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 All Droplets for .LB Image

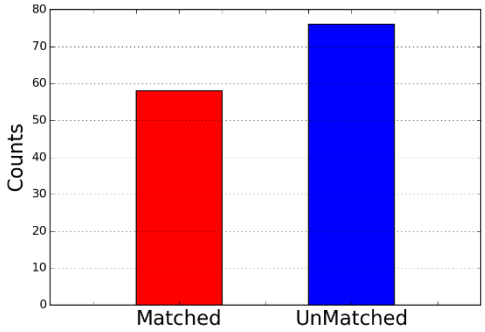

Figure A. 66: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

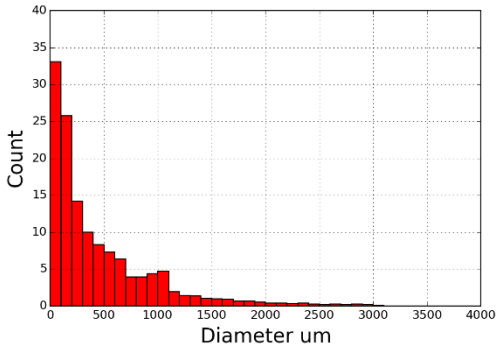

Figure A. 67: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

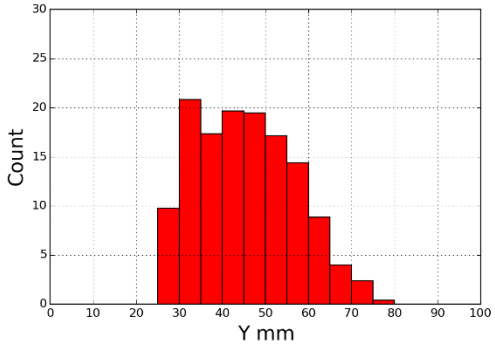

Figure A. 68: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

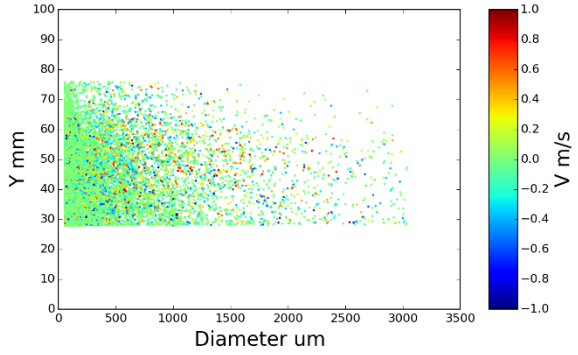

Figure A. 69: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

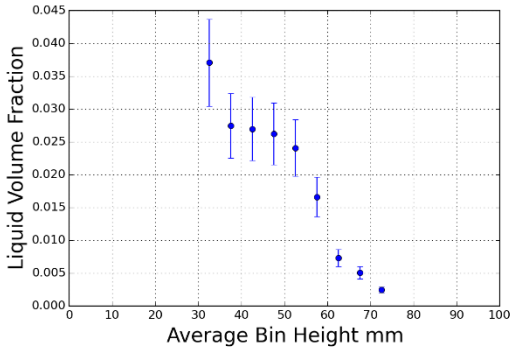

Figure A. 70: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 Matched Only Droplets for .LA Image

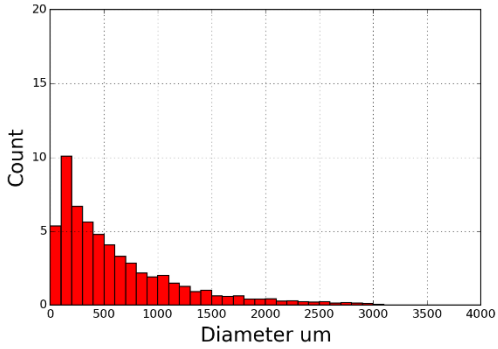

Figure A. 71: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

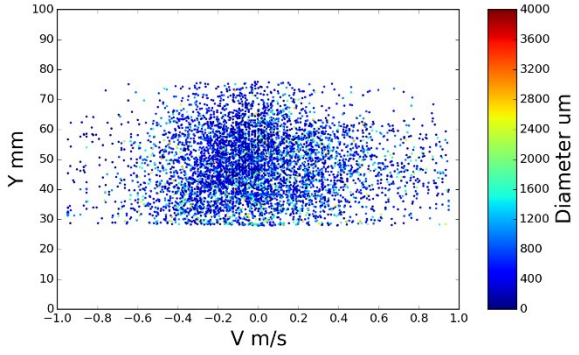

Figure A. 74: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

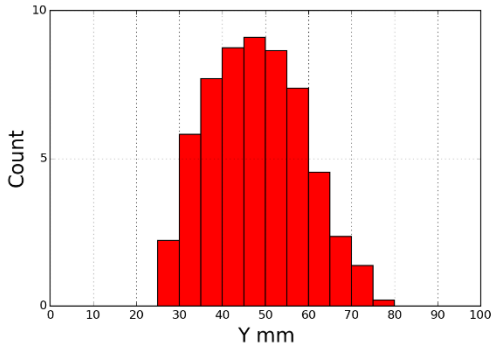

Figure A. 72: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

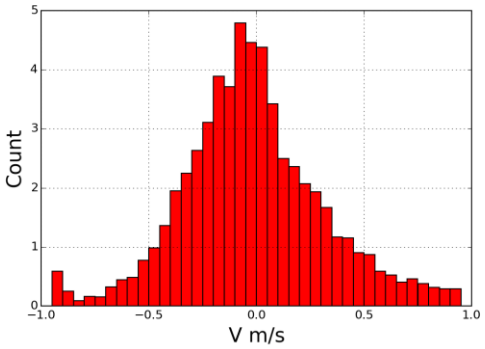

Figure A. 75: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

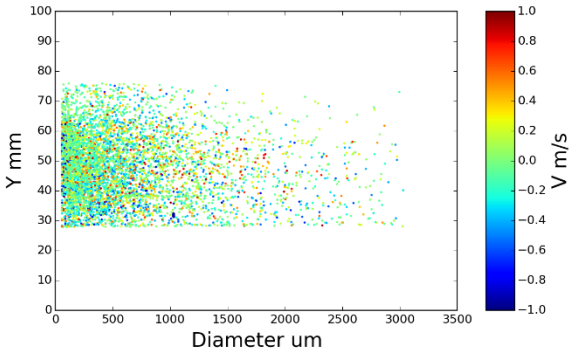

Figure A. 73: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 Matched Only Droplets for .LB Image

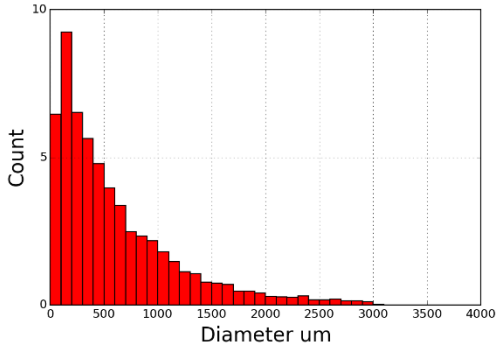

Figure A. 76: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

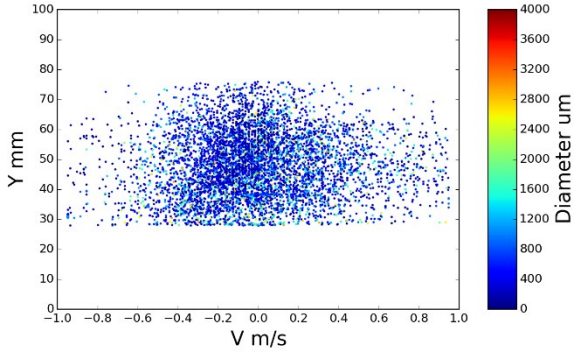

Figure A. 79: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

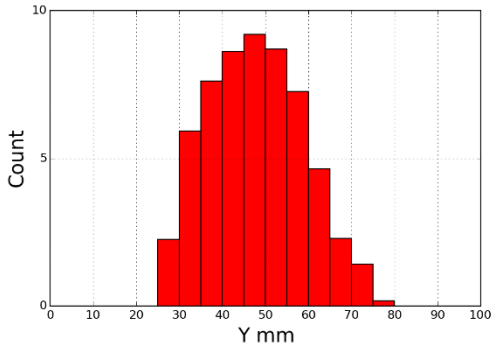

Figure A. 77: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

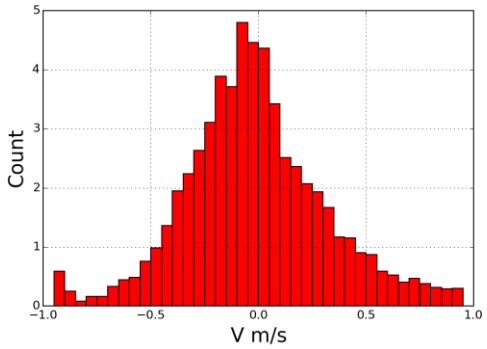

Figure A. 80: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

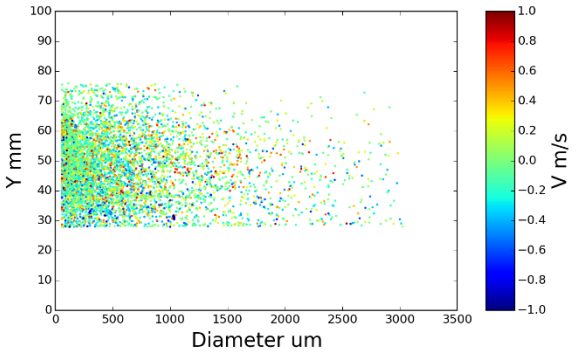

Figure A. 78: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 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	42.22	41.41	57.1	3030	531.8	529.8	57.1	3032	492.5	532.1
40-60mm	56.72	68.77	57.1	3029	405.8	494.5	57.1	3034	371.3	474.6
60-80mm	17.04	18.89	57.1	2928	343.7	406.4	57.1	2929	323.1	402.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	116.76	129.96	57.1	3030	442.6	501.0	57.1	3034	403.1	488.5
			Height A (mm)				Height B (mm)			
Highest Particle			75.8621				75.9000			
Lowest Particle			27.9312				27.9312			

Table A. 10: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	13.08	57.1	3030	744.9	653.1	57.1	3032	735.9	654.8	-0.950	0.950	-0.020	0.300	-0.950	0.950	-0.020	0.390
40-60mm	29.93	57.1	3020	557.8	562.8	57.1	3013	554.5	564.2	-0.950	0.950	-0.030	0.220	-0.950	0.950	-0.010	0.320
60-80mm	9.86	57.1	2928	474.1	460.0	57.1	2929	468.1	460.6	-0.950	0.930	-0.040	0.200	-0.950	0.920	-0.040	0.280
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	52.87	57.1	3030	588.5	577.3	57.1	3032	583.4	578.5	-0.950	0.950	-0.030	0.240	-0.950	0.950	-0.020	0.330

Table A. 11: Matched Droplet Info

A.5.1.1 All Droplets for .LA Image

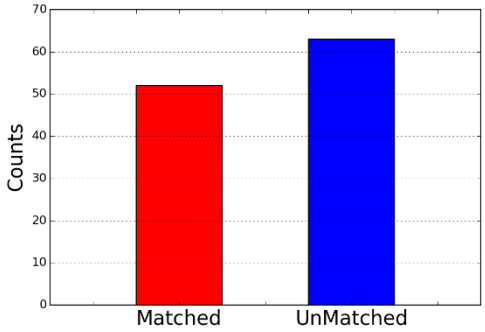

Figure A. 81: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

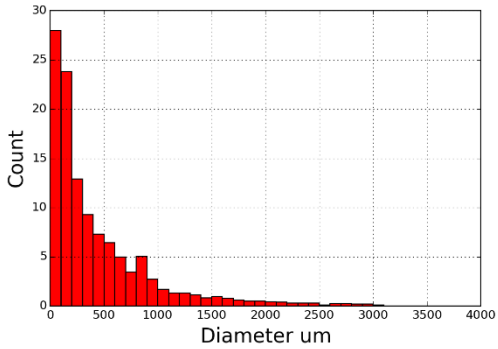

Figure A. 82: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

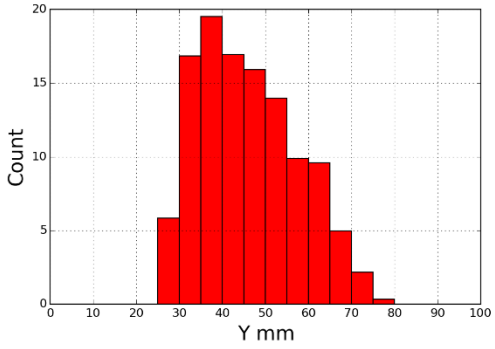

Figure A. 83: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

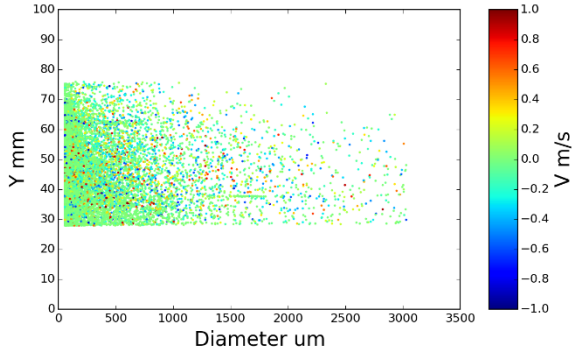

Figure A. 84: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

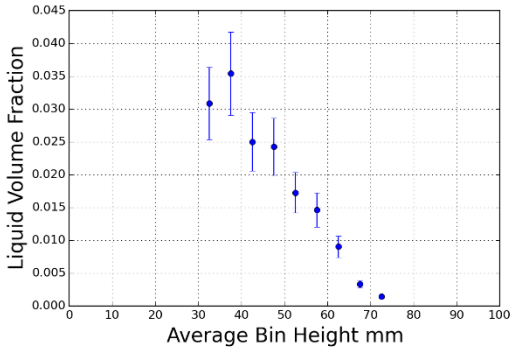

Figure A. 85: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 All Droplets for .LB Image

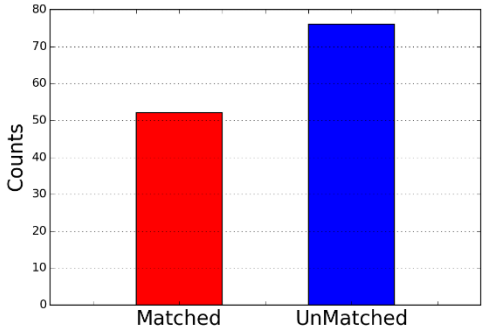

Figure A. 86: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

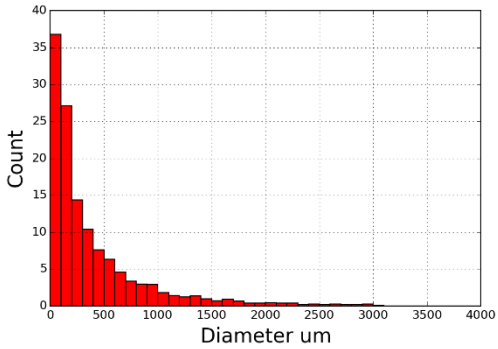

Figure A. 87: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

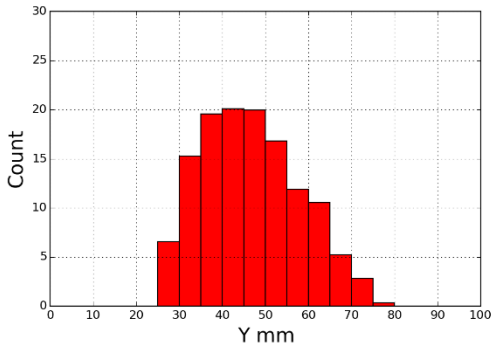

Figure A. 88: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

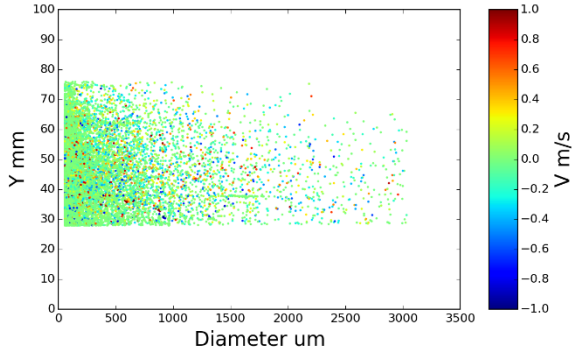

Figure A. 89: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

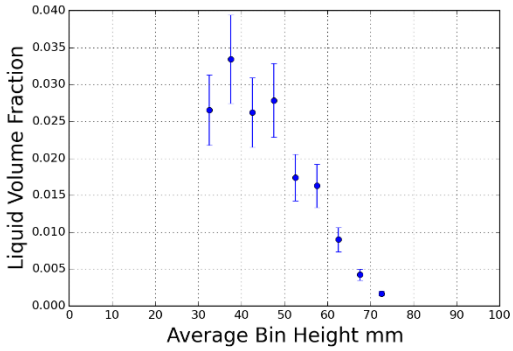

Figure A. 90: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 Matched Only Droplets for .LA Image

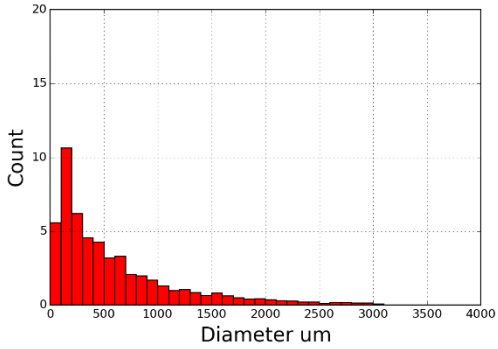

Figure A. 91: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

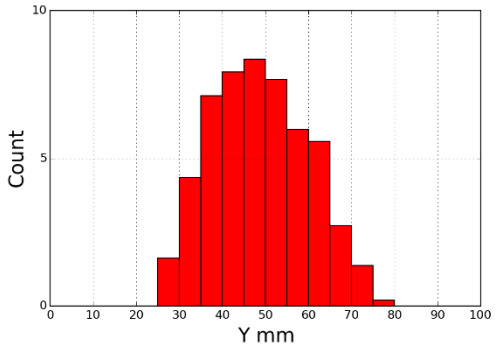

Figure A. 92: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

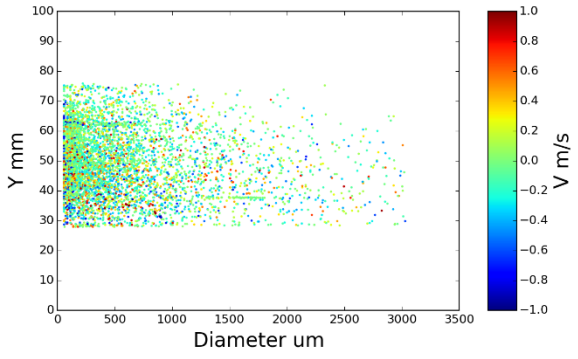

Figure A. 93: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

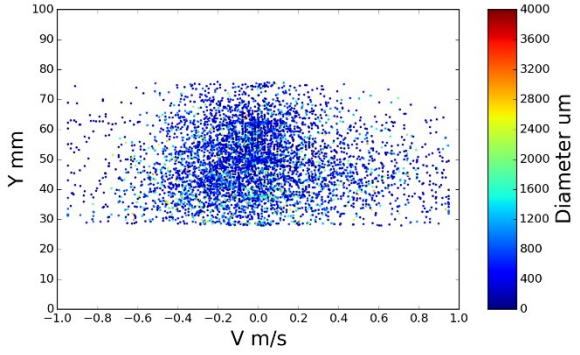

Figure A. 94: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

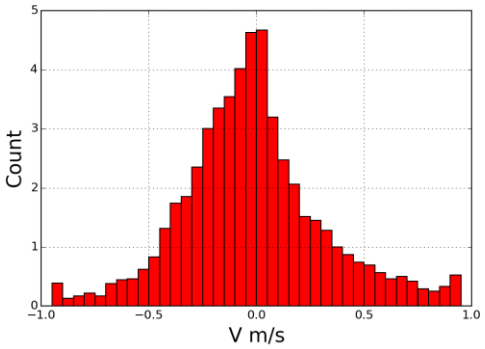

Figure A. 95: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

A.5.1.1 Matched Only Droplets for .LB Image

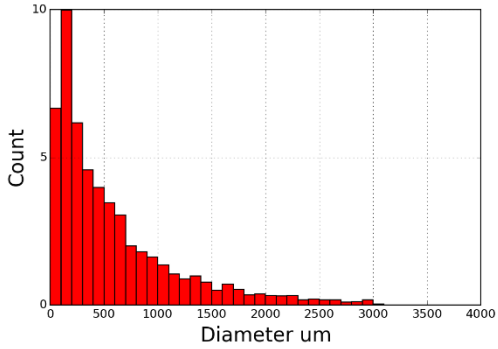

Figure A. 96: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

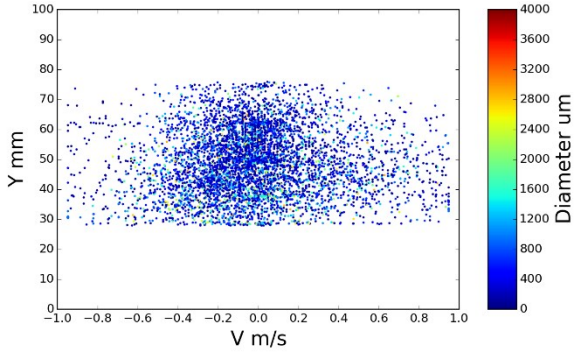

Figure A. 99: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

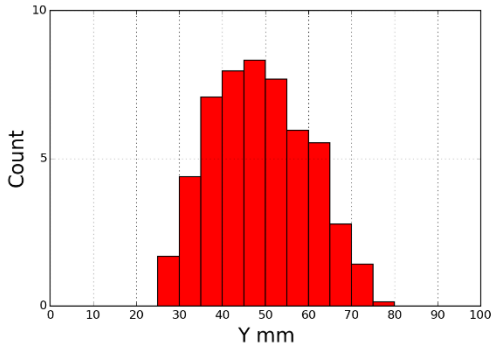

Figure A. 97: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

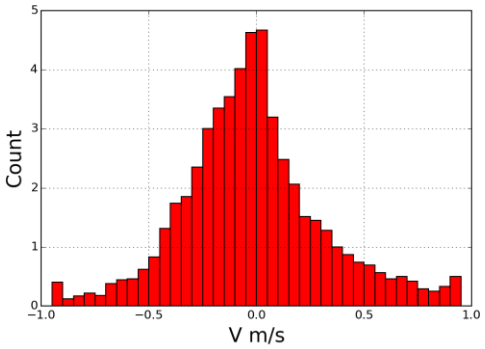

Figure A. 100: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

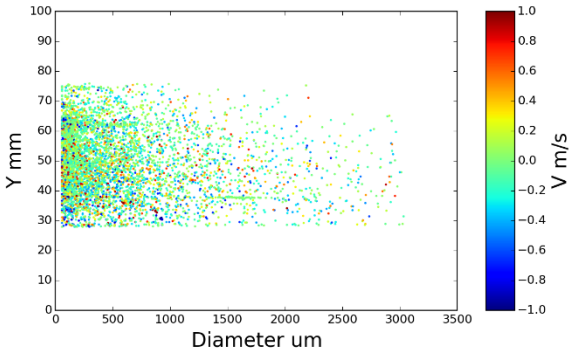

Figure A. 98: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 Lens 50mm Mag 0_13x

A.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	25.8	25.59	128.5	3358	707.8	621.0	128.5	3369	695.3	605.4
40-60mm	46.63	46.8	128.5	3403	623.4	485.1	128.5	3403	625.6	483.4
60-80mm	13.56	13.55	128.5	3058	598.3	396.1	128.5	3394	596.1	398.4
80-100mm	1.86	1.9	157.4	1653	557.7	269.7	128.5	1826	555.9	268.7
All	87.85	87.84	128.5	3403	642.9	515.6	128.5	3403	639.8	508.7
			Height A (mm)				Height B (mm)			
Highest Particle			99.2923				99.3208			
Lowest Particle			29.3862				29.3862			

Table A. 12: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	13.77	128.5	3358	827.1	643.1	128.5	3369	809.6	631.7	-0.950	0.940	-0.050	0.240	-0.950	0.950	-0.030	0.340
40-60mm	31.78	128.5	3403	706.4	498.4	128.5	3343	693.2	483.8	-0.950	0.940	-0.050	0.210	-0.930	0.950	-0.010	0.340
60-80mm	10.43	128.5	3058	664.0	399.9	128.5	3394	663.4	409.3	-0.920	0.950	-0.040	0.150	-0.940	0.950	-0.020	0.290
80-100mm	1.59	192.8	1653	595.4	266.1	192.8	1826	594.8	263.5	-0.360	0.240	-0.040	0.090	-0.800	0.770	-0.040	0.210
All	57.57	128.5	3403	724.5	520.4	128.5	3394	713.1	510.4	-0.950	0.950	-0.050	0.210	-0.950	0.950	-0.020	0.330

Table A. 13: Matched Droplet Info

A.5.1.2 All Droplets for .LA Image

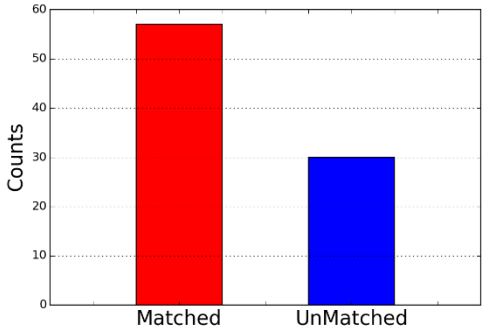

Figure A. 101: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

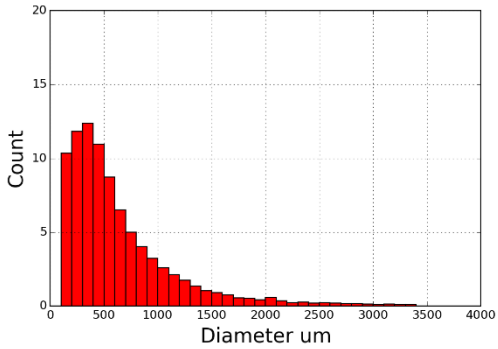

Figure A. 102: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

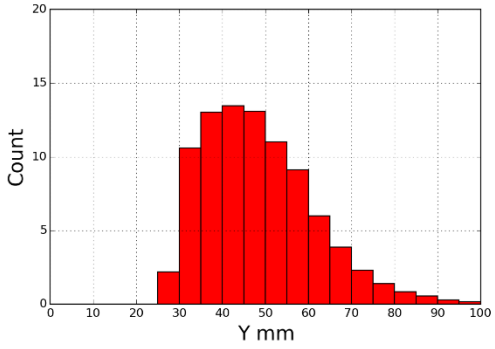

Figure A. 103: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

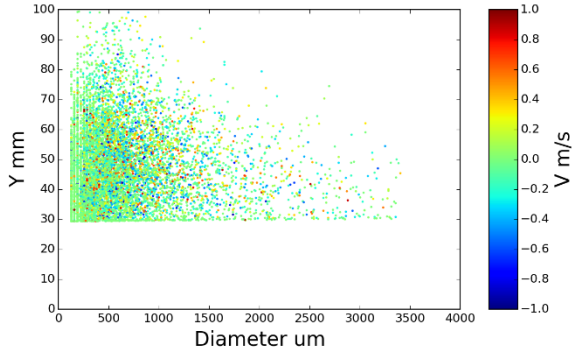

Figure A. 104: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

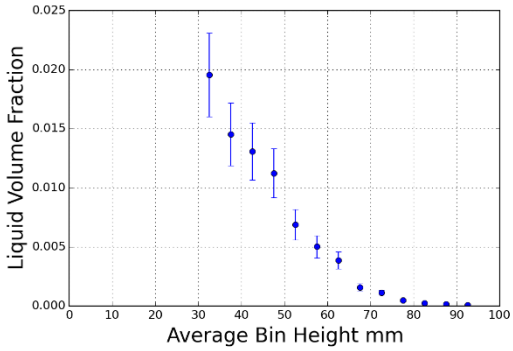

Figure A. 105: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 All Droplets for .LB Image

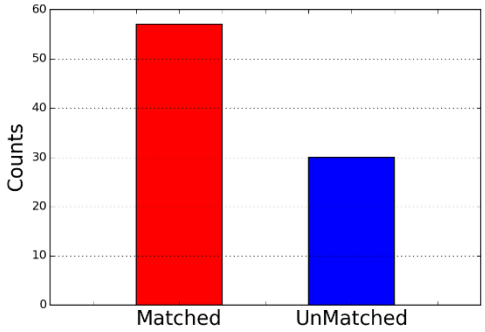

Figure A. 106: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

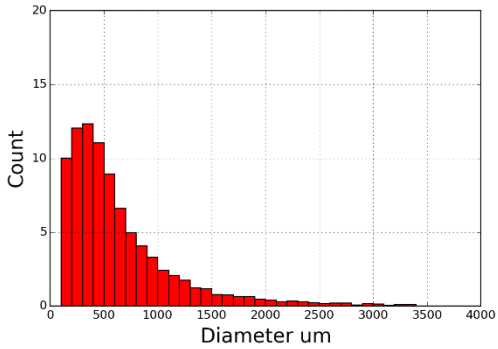

Figure A. 107: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

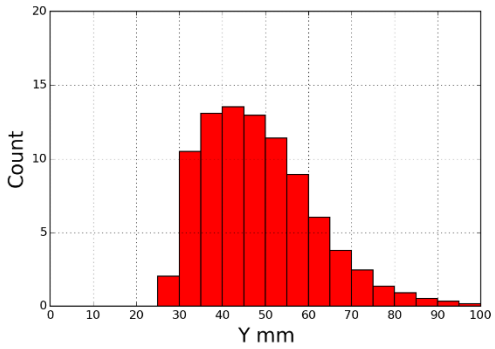

Figure A. 108: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

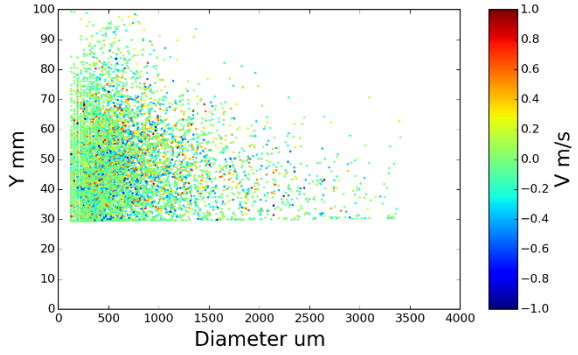

Figure A. 109: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

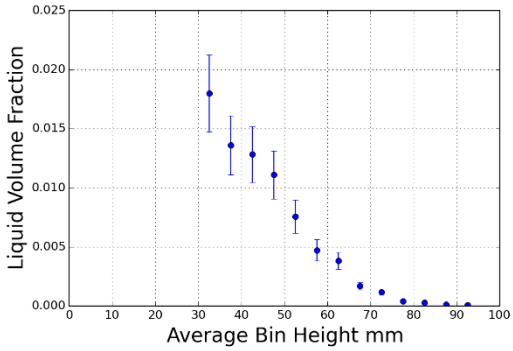

Figure A. 110: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 Matched Only Droplets for .LA Image

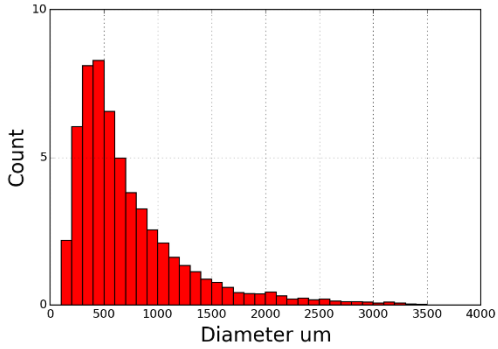

Figure A. 111: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

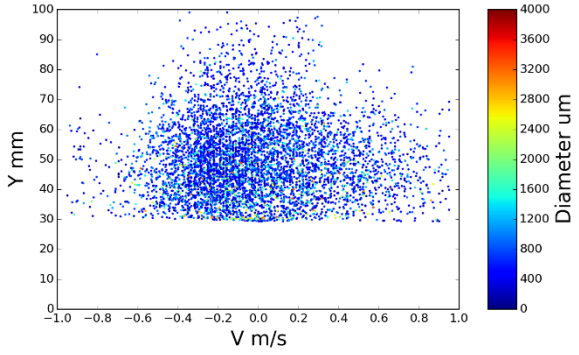

Figure A. 114: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

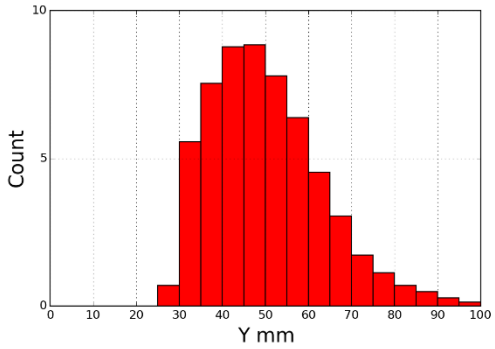

Figure A. 112: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

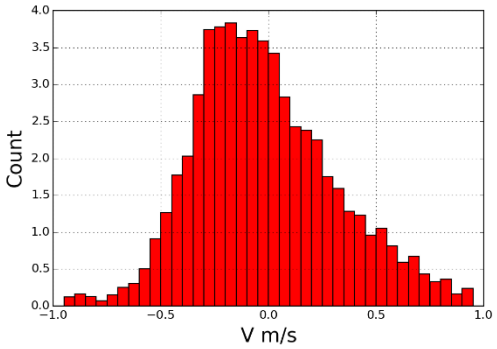

Figure A. 115: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

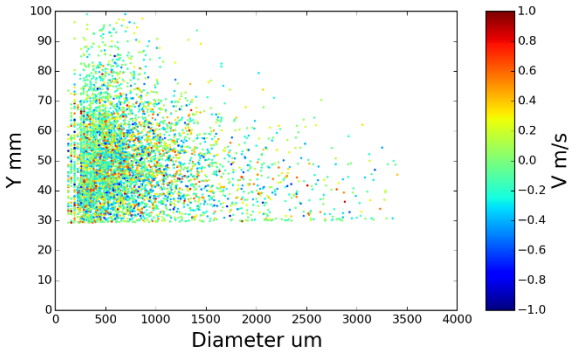

Figure A. 113: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 Matched Only Droplets for .LB Image

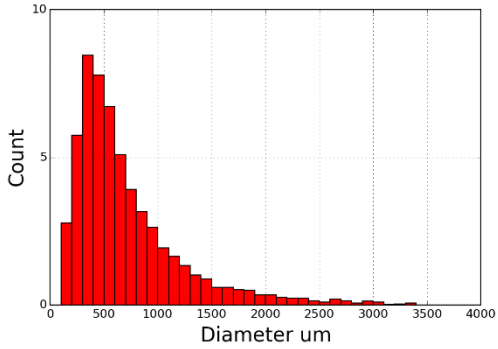

Figure A. 116: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

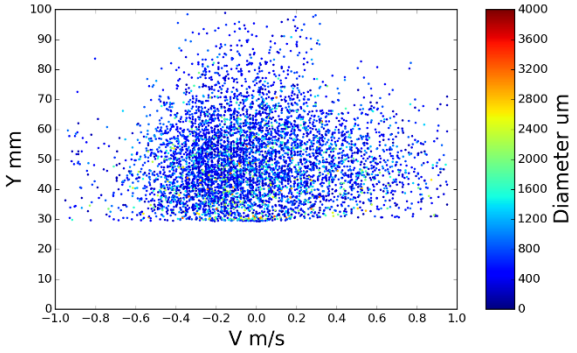

Figure A. 119: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

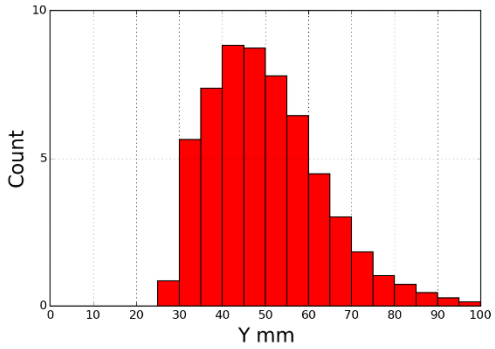

Figure A. 117: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

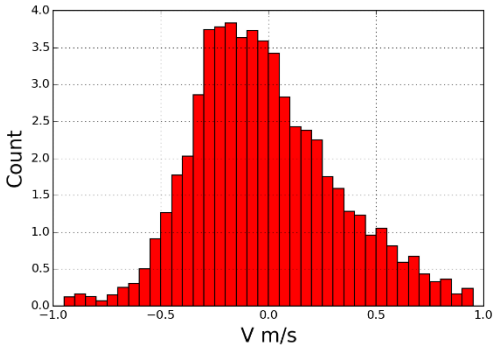

Figure A. 120: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

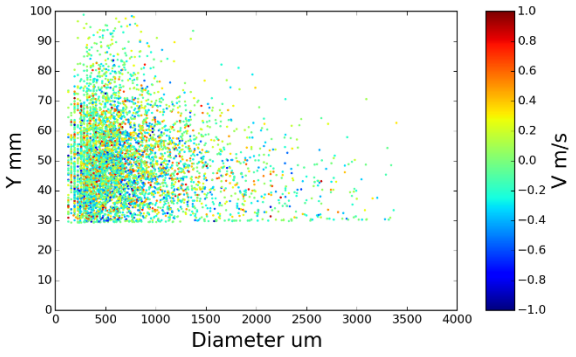

Figure A. 118: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	28.81	28.1	128.5	3338	721.1	598.4	128.5	3413	721.9	606.1
40-60mm	54.14	53.35	128.5	3413	660.8	495.0	128.5	3385	661.6	502.4
60-80mm	15.47	15.37	128.5	3410	614.9	388.2	128.5	2947	619.8	387.7
80-100mm	2.13	2.11	128.5	2386	605.6	319.3	128.5	2510	606.7	320.3
All	100.55	98.93	128.5	3413	669.8	511.1	128.5	3413	671.0	517.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.1329				99.0394			
Lowest Particle			29.3862				29.3862			

Table A. 14: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	15.55	128.5	3294	850.8	632.1	128.5	3413	841.1	638.6	-0.950	0.950	-0.040	0.250	-0.920	0.950	-0.040	0.360
40-60mm	36.57	128.5	3413	748.3	504.2	128.5	3385	738.9	497.4	-0.950	0.930	-0.040	0.200	-0.940	0.950	-0.010	0.350
60-80mm	12.04	128.5	2663	670.5	380.8	128.5	2947	662.4	387.6	-0.950	0.940	-0.040	0.150	-0.950	0.920	0.010	0.300
80-100mm	1.8	128.5	2386	646.9	310.1	157.4	2510	644.2	313.4	-0.780	0.250	-0.050	0.110	-0.650	0.590	0.070	0.240
All	65.96	128.5	3413	755.5	517.8	128.5	3413	746.2	516.6	-0.950	0.950	-0.040	0.210	-0.950	0.950	-0.010	0.340

Table A. 15: Matched Droplet Info

A.5.1.2 All Droplets for .LA Image

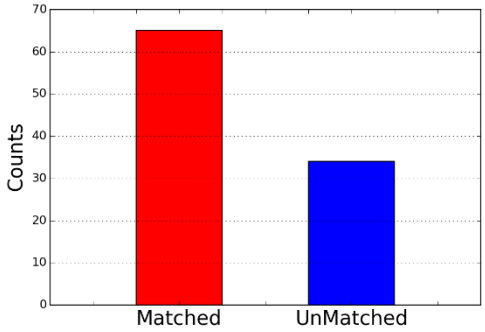

Figure A. 121: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

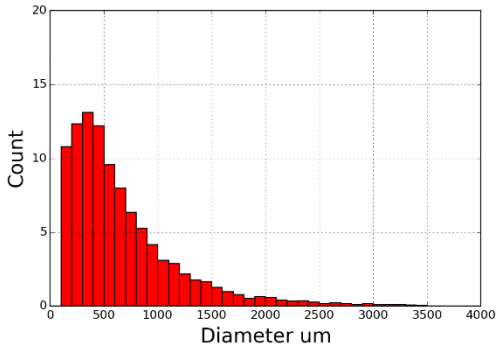

Figure A. 122: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

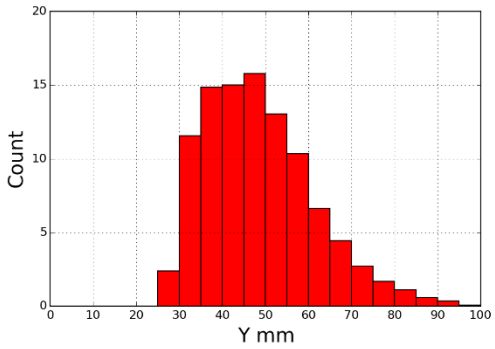

Figure A. 123: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

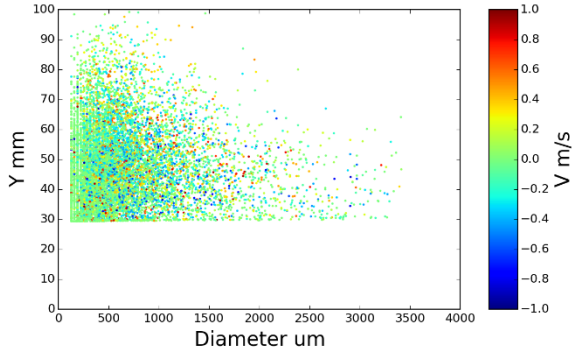

Figure A. 124: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

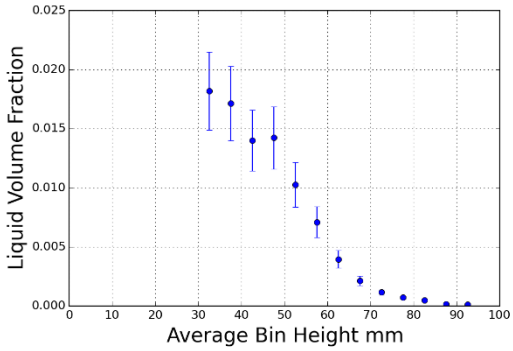

Figure A. 125: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 All Droplets for .LB Image

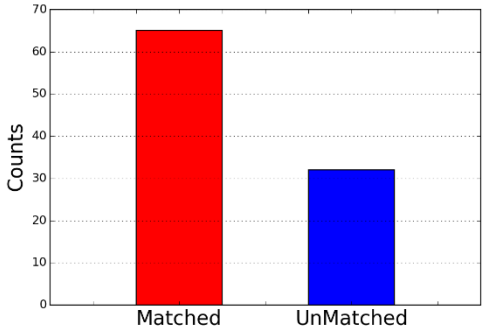

Figure A. 126: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

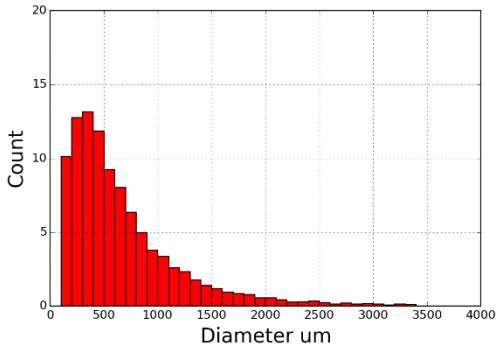

Figure A. 127: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

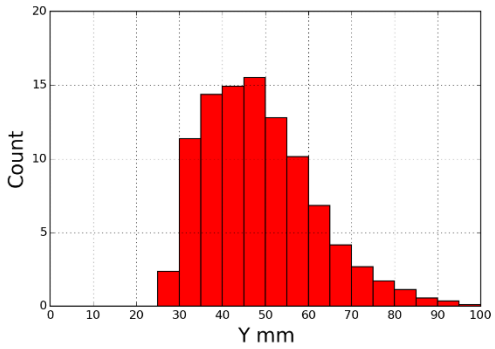

Figure A. 128: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

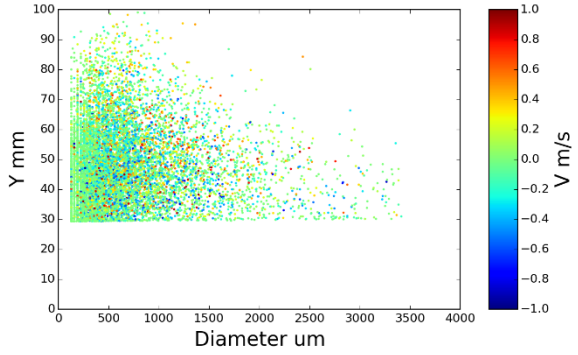

Figure A. 129: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

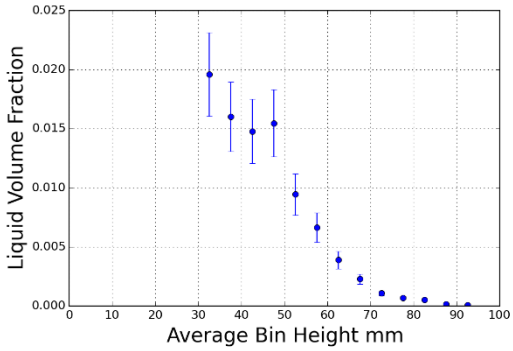

Figure A. 130: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 Matched Only Droplets for .LA Image

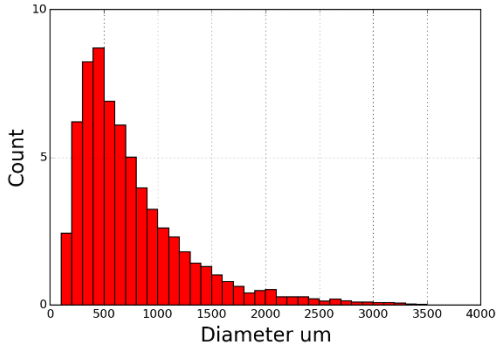

Figure A. 131: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

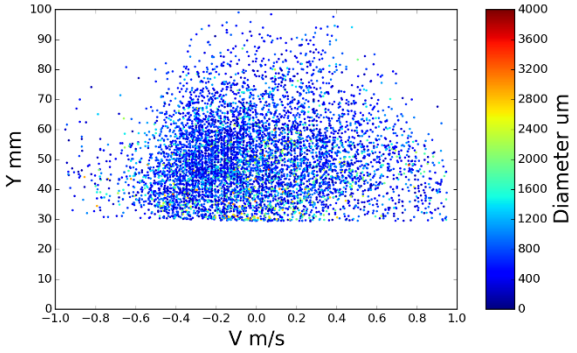

Figure A. 134: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

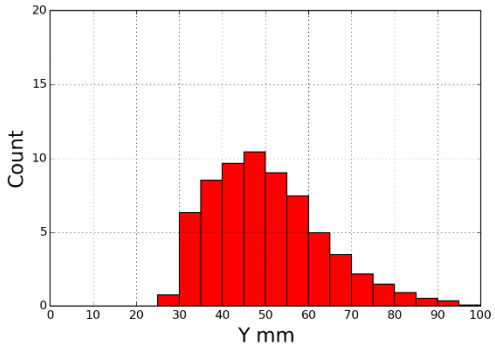

Figure A. 132: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

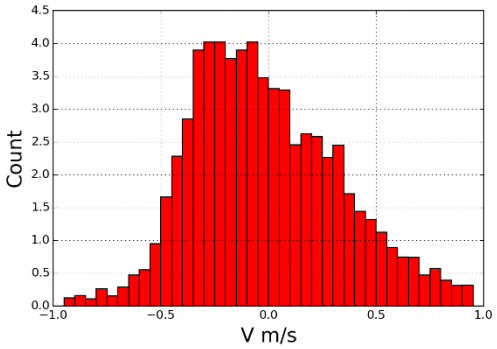

Figure A. 135: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

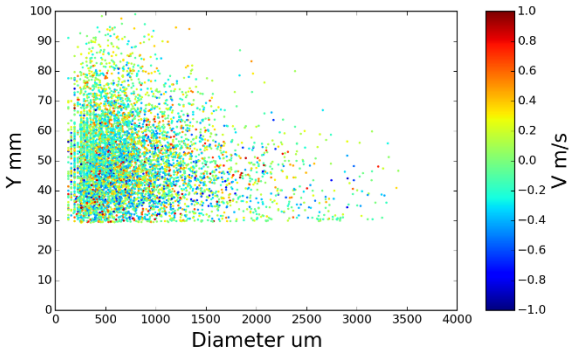

Figure A. 133: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 Matched Only Droplets for .LB Image

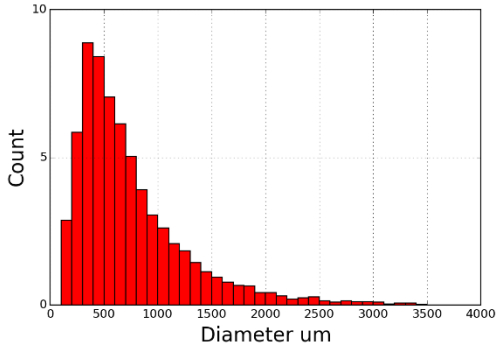

Figure A. 136: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

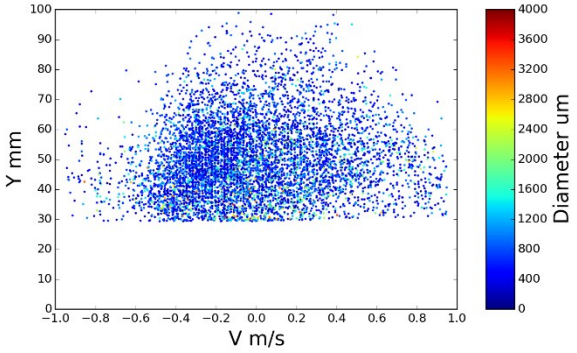

Figure A. 139: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

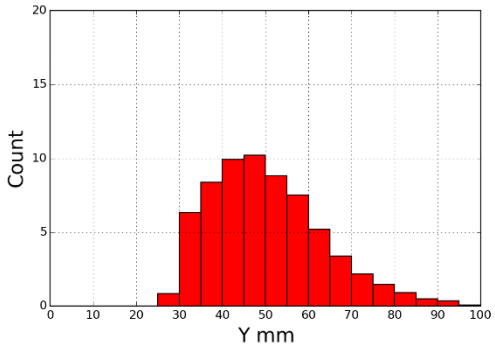

Figure A. 137: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

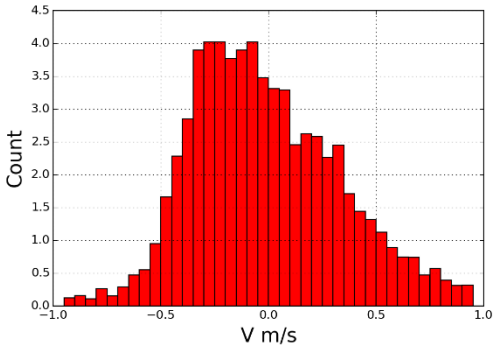

Figure A. 140: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

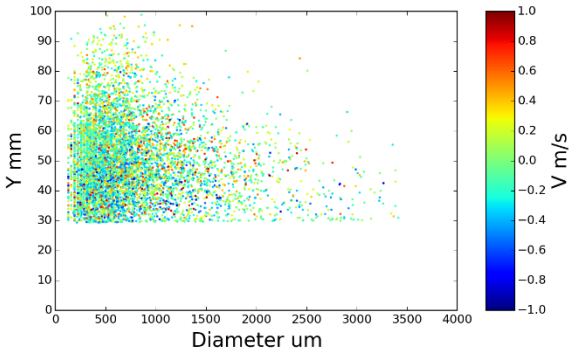

Figure A. 138: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	26.22	26.63	128.5	3385	750.7	615.0	128.5	3403	763.2	627.8
40-60mm	49.66	49.17	128.5	3378	710.2	559.7	128.5	3396	713.9	564.2
60-80mm	17.71	17.68	128.5	3218	621.3	418.9	128.5	3394	627.5	426.9
80-100mm	2.05	1.94	128.5	2167	623.3	333.2	128.5	2101	631.8	330.6
All	95.64	95.43	128.5	3385	703.0	550.6	128.5	3403	710.0	558.7
			Height A (mm)				Height B (mm)			
Highest Particle			99.0554				98.1597			
Lowest Particle			29.3862				29.3862			

Table A. 16: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	13.97	128.5	3385	891.3	651.2	128.5	3403	866.0	637.5	-0.940	0.930	-0.050	0.260	-0.950	0.950	-0.080	0.340
40-60mm	33.06	128.5	3357	809.8	573.9	128.5	3381	799.9	571.8	-0.950	0.940	-0.040	0.200	-0.950	0.950	-0.020	0.330
60-80mm	12.89	128.5	3218	697.0	427.2	128.5	3394	693.7	428.7	-0.950	0.890	-0.040	0.170	-0.950	0.950	0.060	0.320
80-100mm	1.66	128.5	2167	681.1	320.2	128.5	2101	668.1	321.1	-0.350	0.270	-0.040	0.110	-0.550	0.890	0.070	0.260
All	61.58	128.5	3385	801.2	564.4	128.5	3403	789.4	559.5	-0.950	0.940	-0.040	0.210	-0.950	0.950	-0.020	0.330

Table A. 17: Matched Droplet Info

A.5.1.2 All Droplets for .LA Image

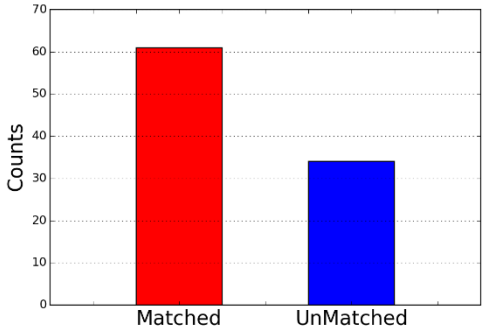

Figure A. 141: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

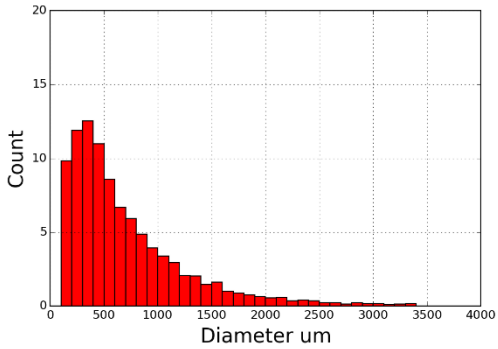

Figure A. 142: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

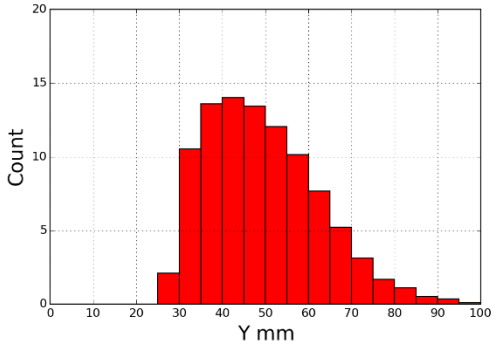

Figure A. 143: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

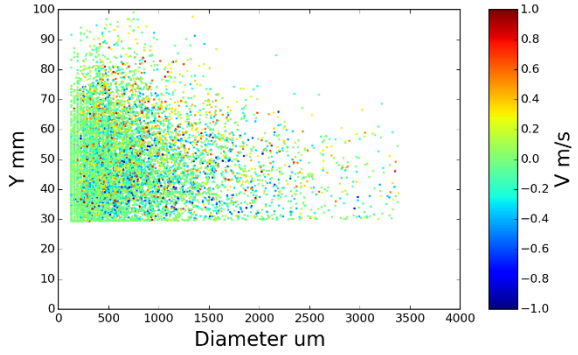

Figure A. 144: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

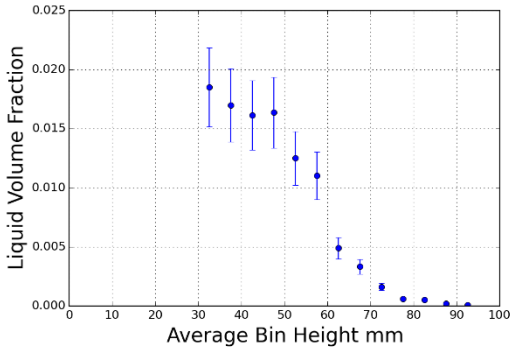

Figure A. 145: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 All Droplets for .LB Image

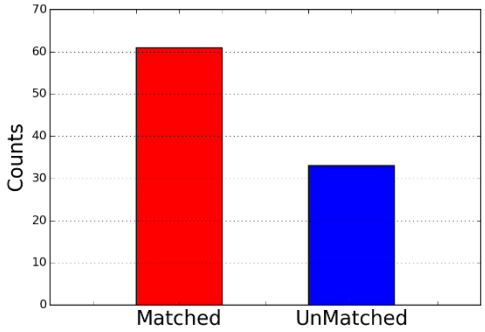

Figure A. 146: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

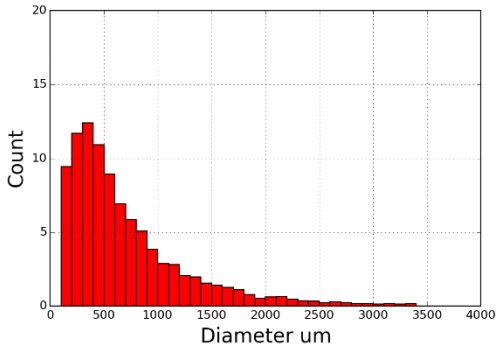

Figure A. 147: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

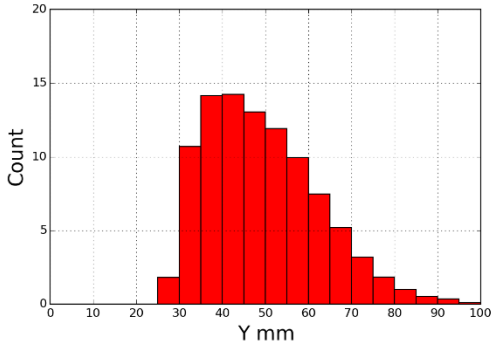

Figure A. 148: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

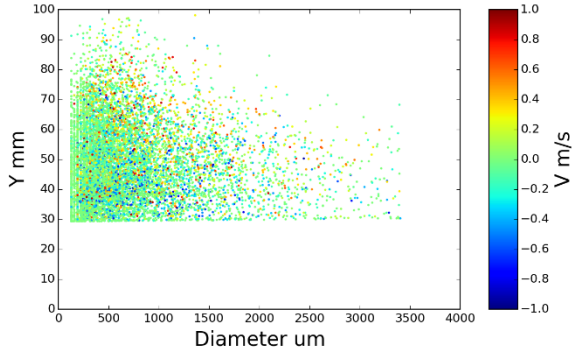

Figure A. 149: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

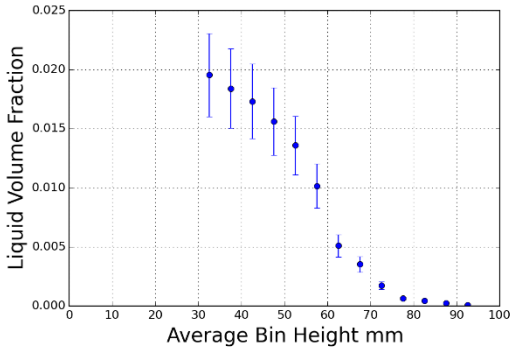

Figure A. 150: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 Matched Only Droplets for .LA Image

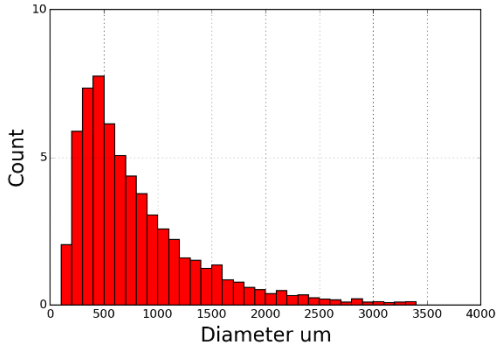

Figure A. 151: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

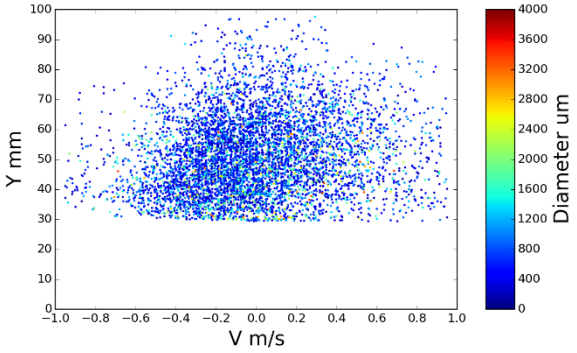

Figure A. 154: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

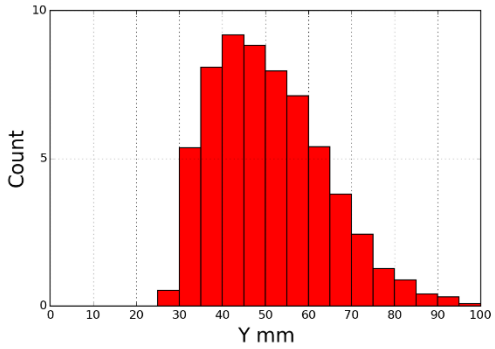

Figure A. 152: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

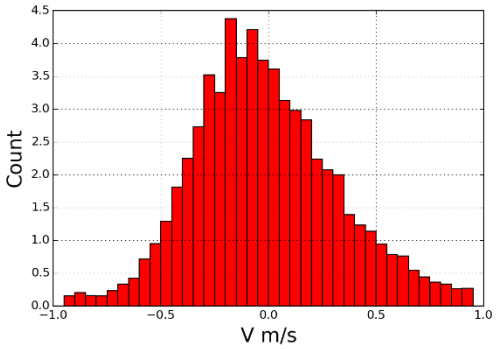

Figure A. 155: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

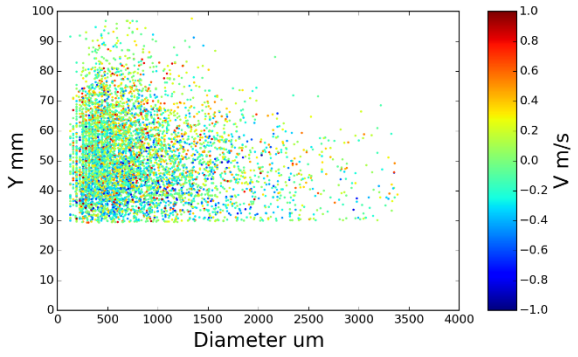

Figure A. 153: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 Matched Only Droplets for .LB Image

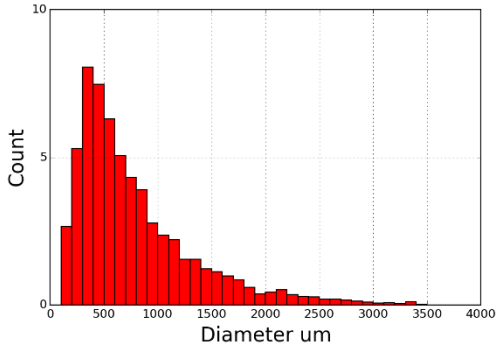

Figure A. 156: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

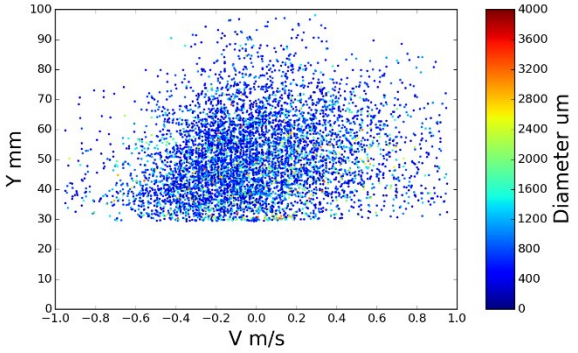

Figure A. 159: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

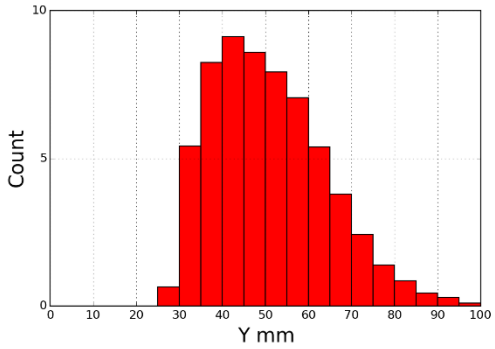

Figure A. 157: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

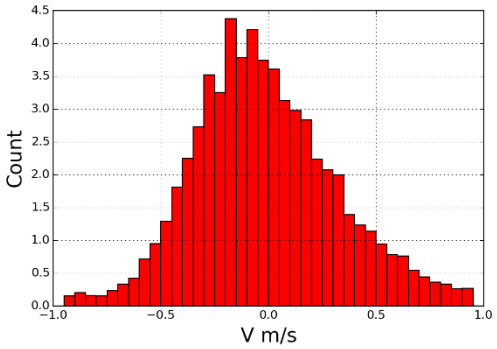

Figure A. 160: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

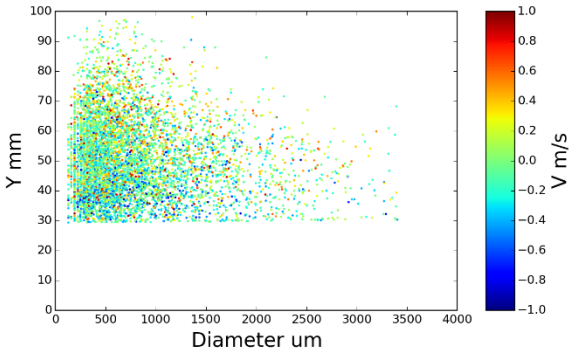

Figure A. 158: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 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	21.37	22.18	128.5	3395	833.7	685.5	128.5	3411	821.8	674.0
40-60mm	40.28	40.79	128.5	3406	735.2	601.3	128.5	3412	733.8	596.9
60-80mm	14.37	15.15	128.5	3344	668.1	494.4	128.5	3101	655.2	492.7
80-100mm	2.62	2.46	128.5	2662	589.6	398.5	128.5	2507	575.5	376.0
All	78.64	80.59	128.5	3406	744.9	605.7	128.5	3412	738.4	599.5
			Height A (mm)				Height B (mm)			
Highest Particle			99.2704				99.2297			
Lowest Particle			29.3862				29.3862			

Table A. 18: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	10.15	128.5	3252	1022	705.7	128.5	3397	989.0	673.4	-0.950	0.950	-0.040	0.270	-0.930	0.950	-0.060	0.320
40-60mm	26.06	128.5	3397	834.8	610.4	128.5	3343	824.0	606.5	-0.950	0.930	-0.030	0.200	-0.950	0.950	-0.040	0.330
60-80mm	10.3	128.5	3344	771.9	509.7	128.5	3101	761.0	495.0	-0.950	0.910	-0.020	0.180	-0.910	0.860	-0.000	0.280
80-100mm	1.93	181.8	2662	664.2	416.6	192.8	2507	638.8	390.1	-0.420	0.330	-0.030	0.120	-0.690	0.520	-0.000	0.250
All	48.44	128.5	3397	853.9	613.1	128.5	3397	838.4	599.2	-0.950	0.950	-0.030	0.210	-0.950	0.950	-0.030	0.310

Table A. 19: Matched Droplet Info

A.5.1.2 All Droplets for .LA Image

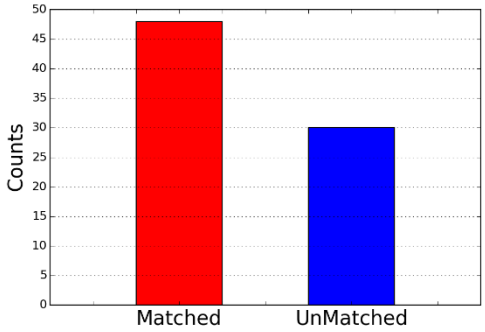

Figure A. 161: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

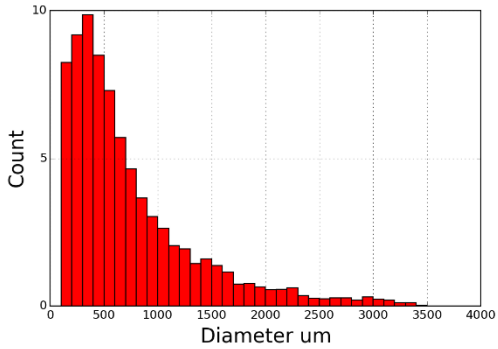

Figure A. 162: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

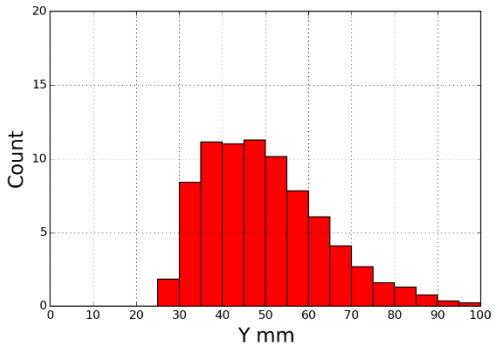

Figure A. 163: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

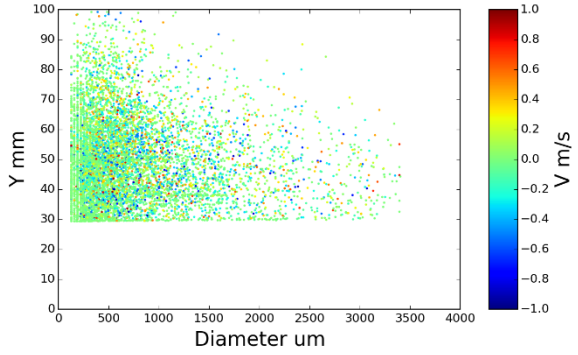

Figure A. 164: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

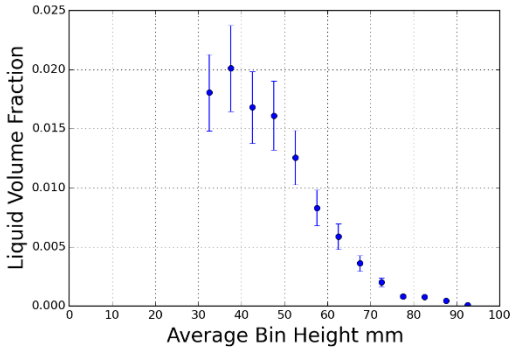

Figure A. 165: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 All Droplets for .LB Image

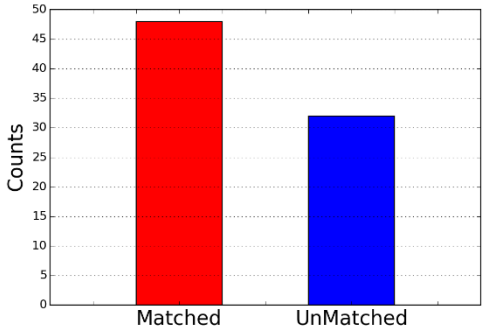

Figure A. 166: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

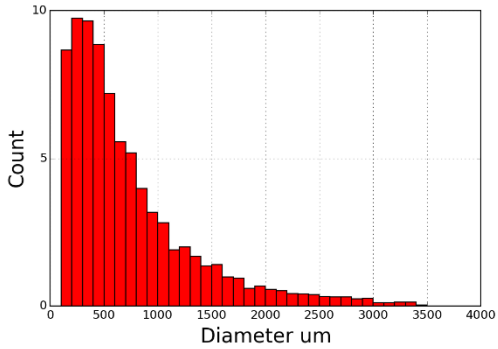

Figure A. 167: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

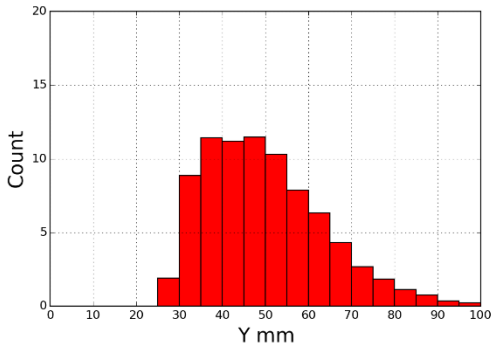

Figure A. 168: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

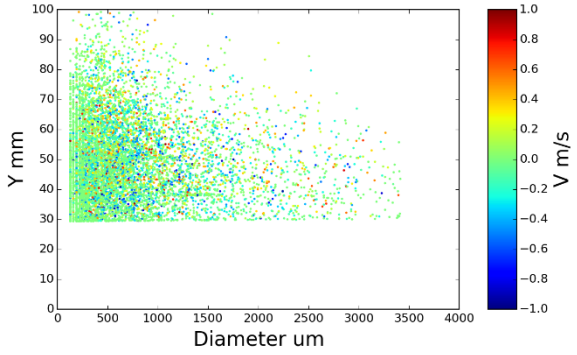

Figure A. 169: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

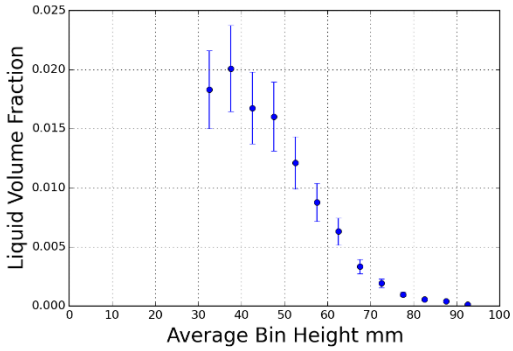

Figure A. 170: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 Matched Only Droplets for .LA Image

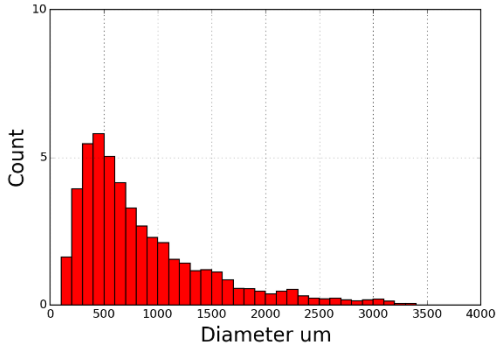

Figure A. 171: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

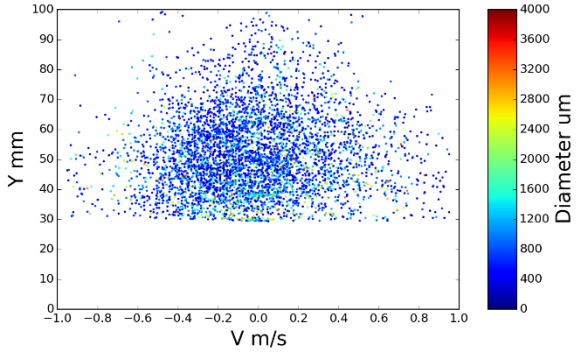

Figure A. 174: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

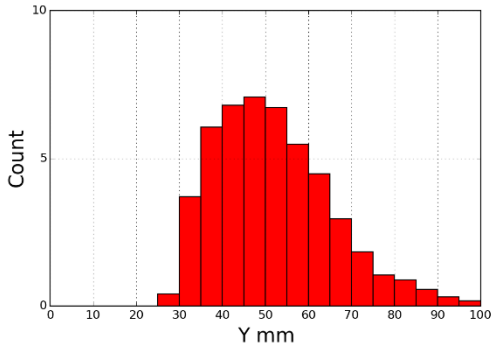

Figure A. 172: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

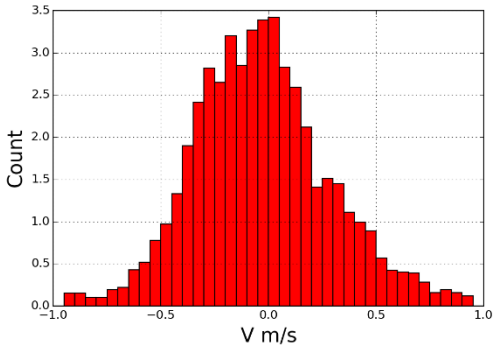

Figure A. 175: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

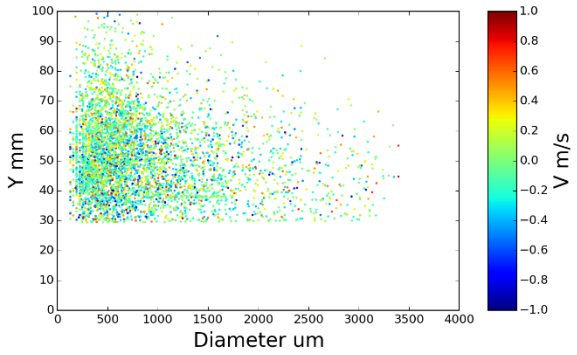

Figure A. 173: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 Matched Only Droplets for .LB Image

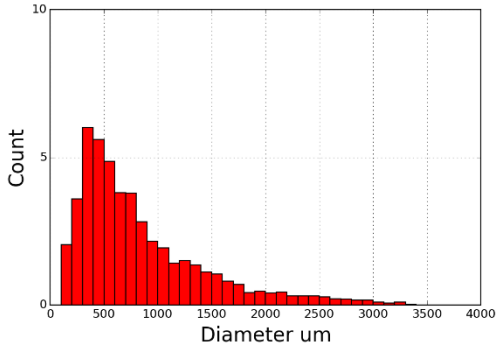

Figure A. 176: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

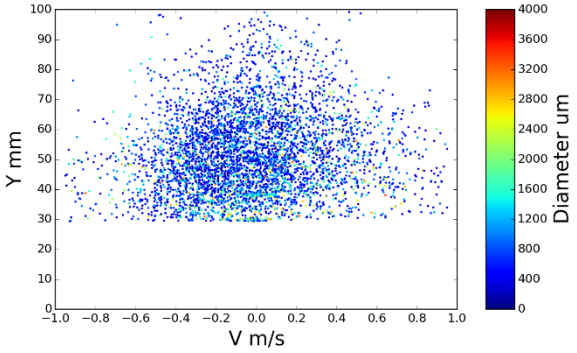

Figure A. 179: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

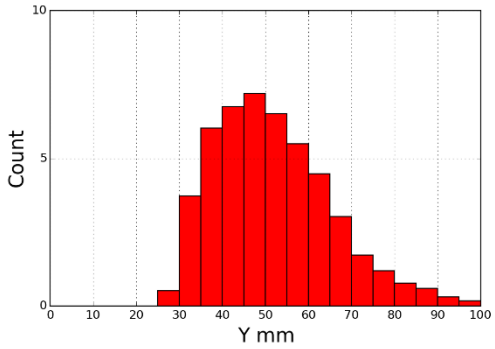

Figure A. 177: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

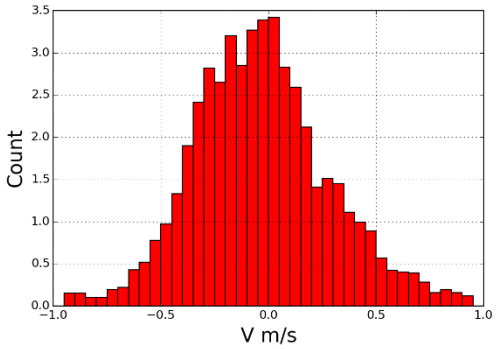

Figure A. 180: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

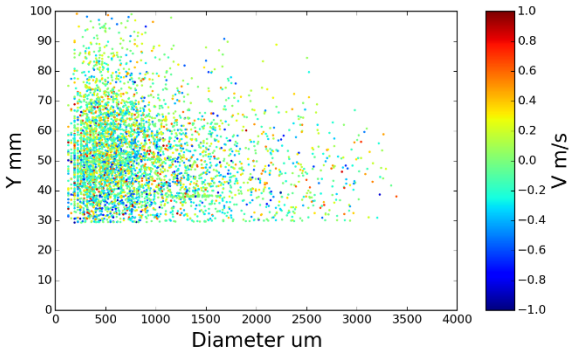

Figure A. 178: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 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	19.94	20.52	128.5	3413	843.7	714.8	128.5	3411	837.9	707.6
40-60mm	38.18	38.85	128.5	3411	722.0	609.5	128.5	3386	717.0	612.2
60-80mm	13.17	13.06	128.5	3280	609.0	477.9	128.5	3290	612.7	475.1
80-100mm	1.54	1.7	128.5	2664	594.9	432.8	128.5	2888	589.0	410.0
All	72.83	74.14	128.5	3413	732.2	621.7	128.5	3411	729.2	620.4
			Height A (mm)				Height B (mm)			
Highest Particle			99.0076				99.1123			
Lowest Particle			29.3862				29.3862			

Table A. 20: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	9.04	128.5	3413	1088	770.9	128.5	3411	1071	762.2	-0.950	0.940	-0.040	0.280	-0.940	0.950	-0.040	0.330
40-60mm	23.97	128.5	3411	857.9	636.3	128.5	3386	848.4	639.6	-0.940	0.950	-0.030	0.220	-0.940	0.940	0.000	0.330
60-80mm	8.52	128.5	3280	723.9	503.4	128.5	3286	707.4	488.8	-0.890	0.950	-0.050	0.190	-0.940	0.890	-0.010	0.290
80-100mm	1.05	128.5	2664	684.6	448.8	128.5	2888	674.5	431.5	-0.400	0.790	-0.020	0.140	-0.470	0.780	0.000	0.290
All	42.58	128.5	3413	875.6	651.9	128.5	3411	863.5	649.1	-0.950	0.950	-0.040	0.230	-0.940	0.950	-0.010	0.320

Table A. 21: Matched Droplet Info

A.5.1.2 All Droplets for .LA Image

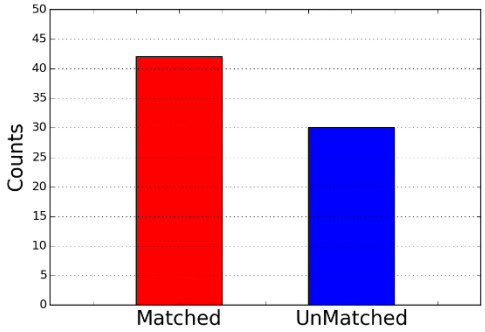

Figure A. 181: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

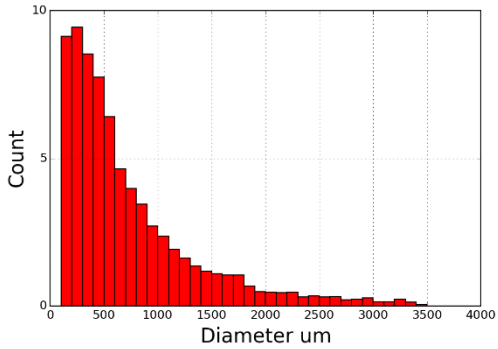

Figure A. 182: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

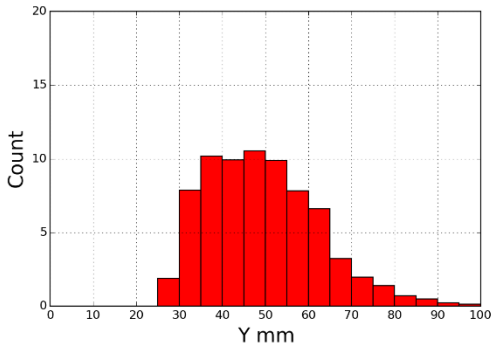

Figure A. 183: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

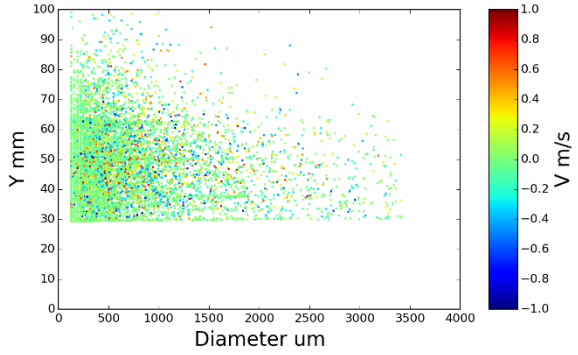

Figure A. 184: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

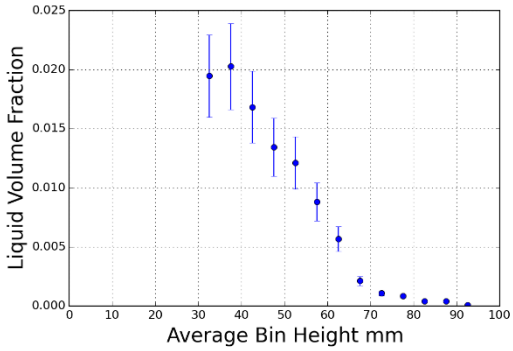

Figure A. 185: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 All Droplets for .LB Image

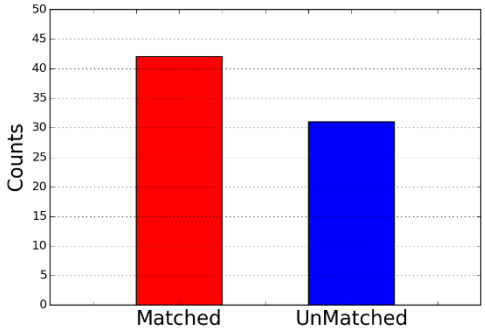

Figure A. 186: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

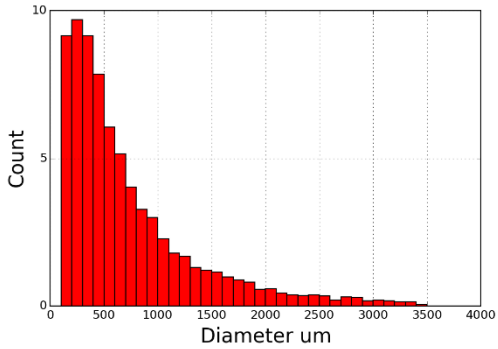

Figure A. 187: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

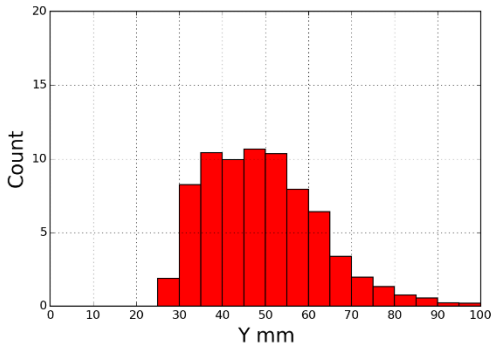

Figure A. 188: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

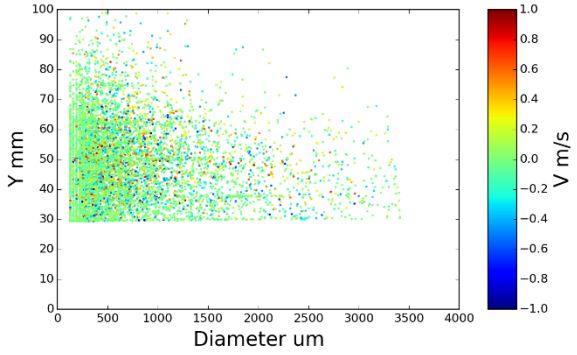

Figure A. 189: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

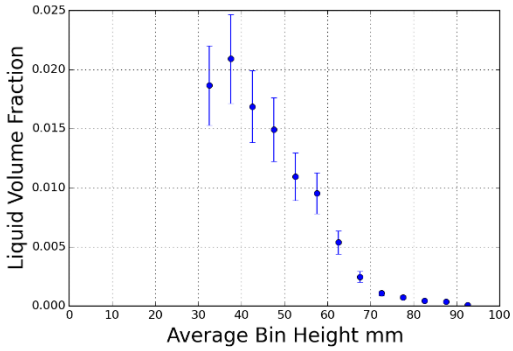

Figure A. 190: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 Matched Only Droplets for .LA Image

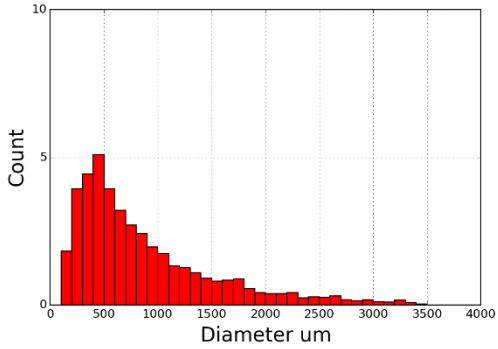

Figure A. 191: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

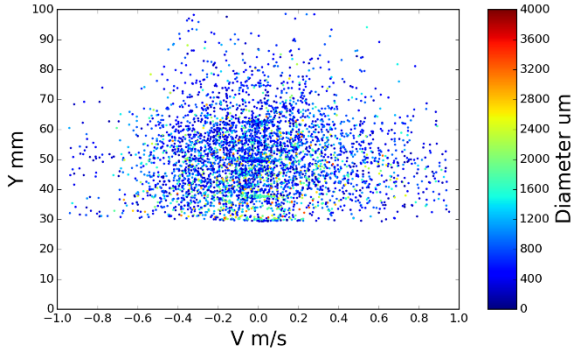

Figure A. 194: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

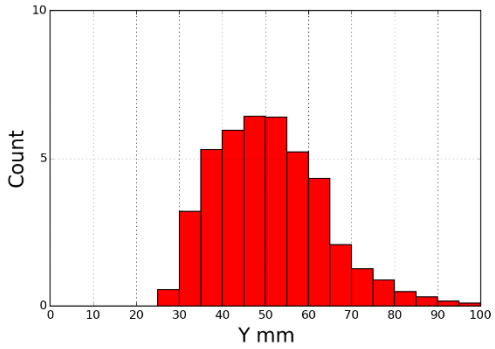

Figure A. 192: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

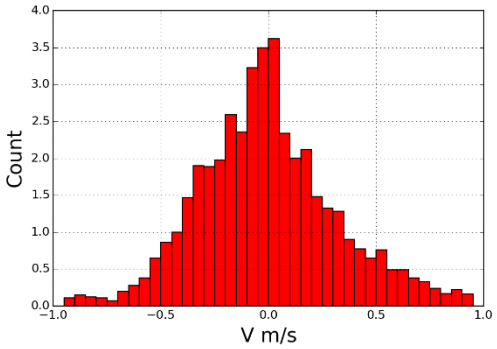

Figure A. 195: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

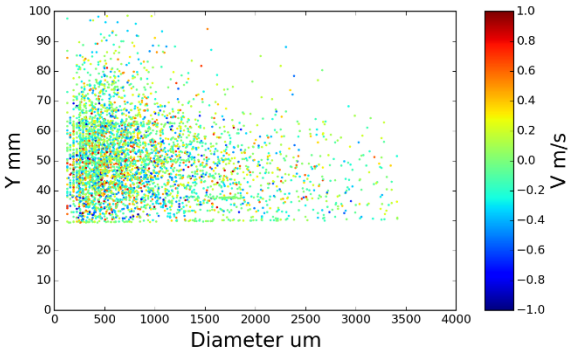

Figure A. 193: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.1.2 Matched Only Droplets for .LB Image

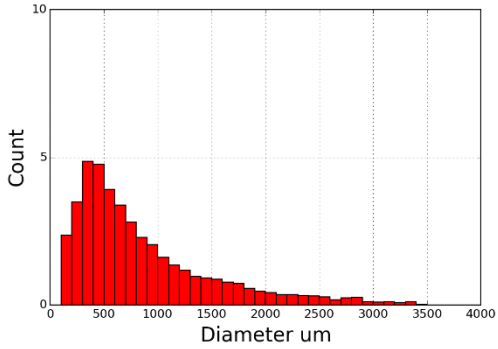

Figure A. 196: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

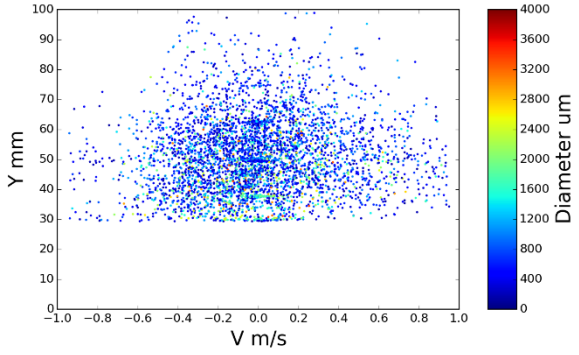

Figure A. 199: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

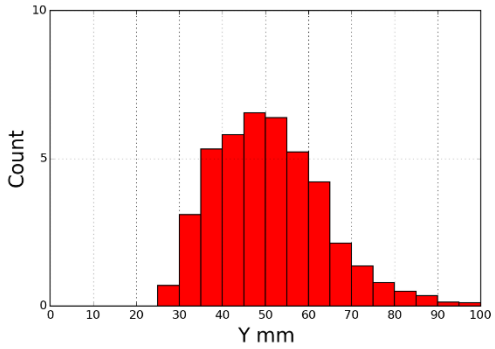

Figure A. 197: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

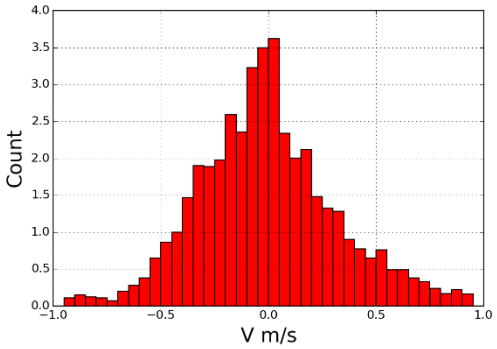

Figure A. 200: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

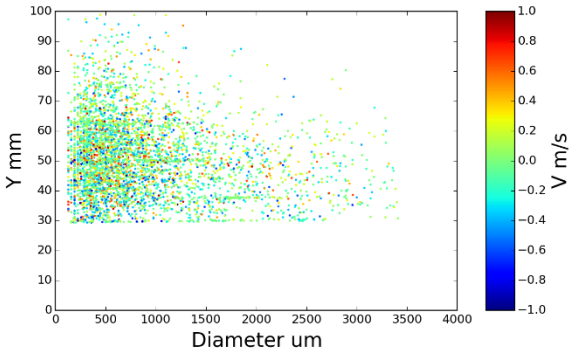

Figure A. 198: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.2 Liquid Level 2

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	18484 / 2.329
Ref Mass Flow (lb/hr) / (kg/s)	1657 / 0.209
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15391 / 20.874
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4913 / 15.50
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.1 / 12.82
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	55.2 / 12.92
Total Bundle Q (Btu/hr) / (kW)	110998 / 32.53
Total Bundle & Preboiler Q (Btu/hr) / (kW)	149048 / 43.68
Top Two Rows HTC Ratio	1.032
Bundle Inlet Quality	0.15
Bundle Exit Quality	0.98

Table A. 22: Thermal Conditions

A.5.2.1 Lens 100mm Mag 0_29x

A.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	85.5	89.39	57.1	3003	410.7	417.3	57.1	3009	396.6	412.2
40-60mm	88.19	92.82	57.1	2835	350.1	356.9	57.1	3022	335.5	351.1
60-80mm	23.89	24.64	57.1	2102	256.6	285.1	57.1	1977	248.7	276.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	197.59	206.86	57.1	3003	365.0	380.1	57.1	3022	351.6	374.3
			Height A (mm)				Height B (mm)			
Highest Particle			77.2030				77.2030			
Lowest Particle			29.2468				29.2468			

Table A. 23: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	54.87	57.1	2987	499.5	438.6	57.1	2959	492.0	433.3	-0.940	0.950	-0.020	0.190	-0.950	0.950	0.020	0.300
40-60mm	60.66	57.1	2573	427.0	375.3	57.1	2493	422.6	374.1	-0.950	0.940	-0.010	0.160	-0.950	0.950	0.010	0.260
60-80mm	16.23	57.1	2102	323.5	312.2	57.1	1977	321.1	311.0	-0.950	0.820	-0.010	0.130	-0.930	0.920	0.010	0.210
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	131.76	57.1	2987	444.4	400.2	57.1	2959	438.9	396.9	-0.950	0.950	-0.010	0.170	-0.950	0.950	0.010	0.270

Table A. 24: Matched Droplet Info

A.5.2.1 All Droplets for .LA Image

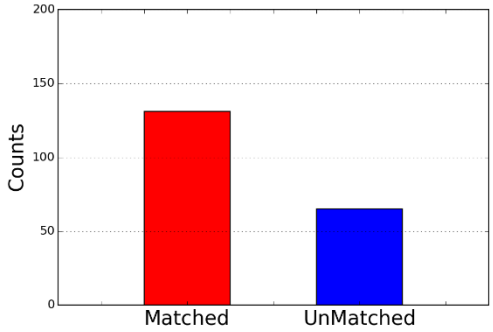

Figure A. 201: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

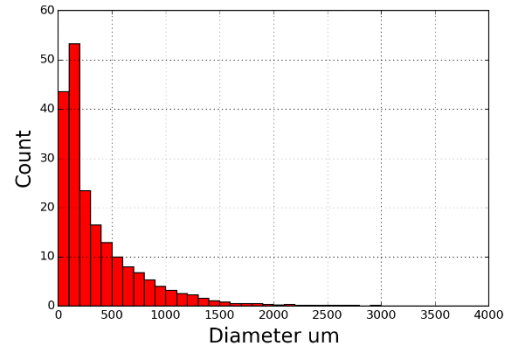

Figure A. 202: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

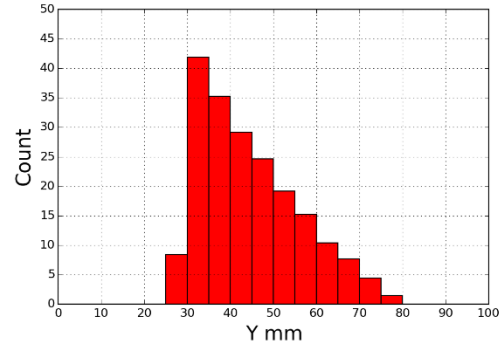

Figure A. 203: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

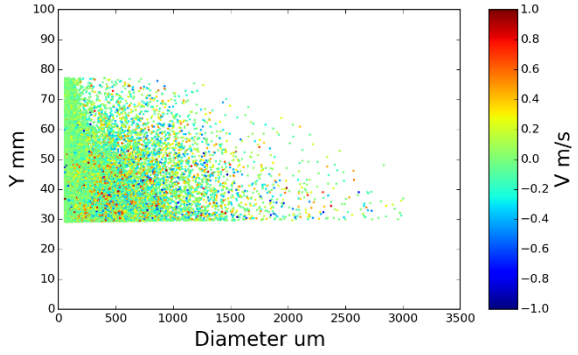

Figure A. 204: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

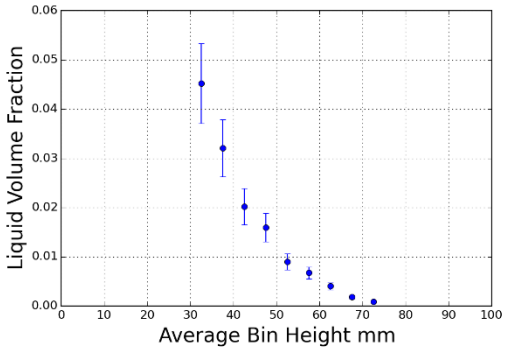

Figure A. 205: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.2.1 All Droplets for .LB Image

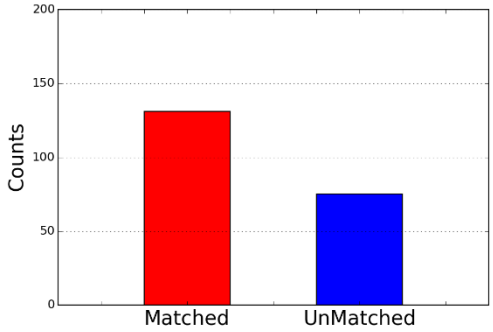

Figure A. 206: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

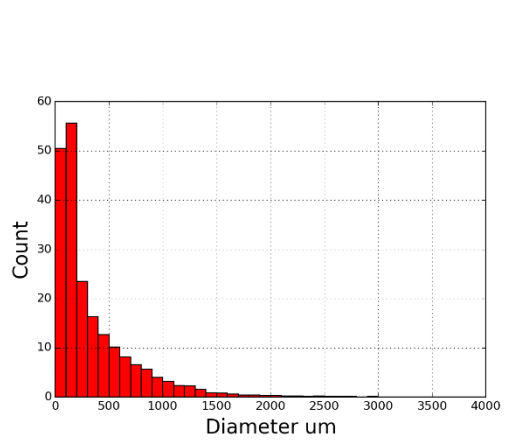

Figure A. 207: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

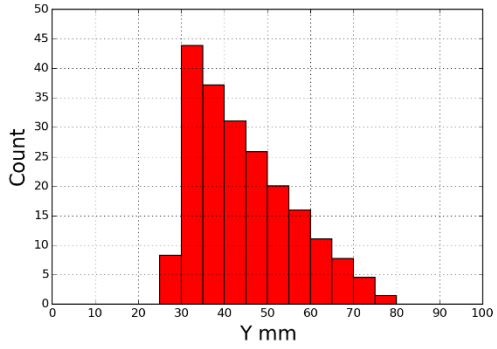

Figure A. 208: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

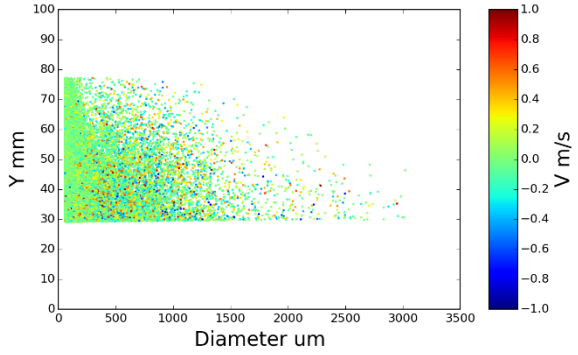

Figure A. 209: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

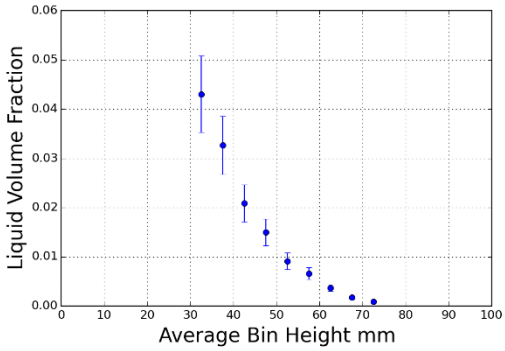

Figure A. 210: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.2.1 Matched Only Droplets for .LA Image

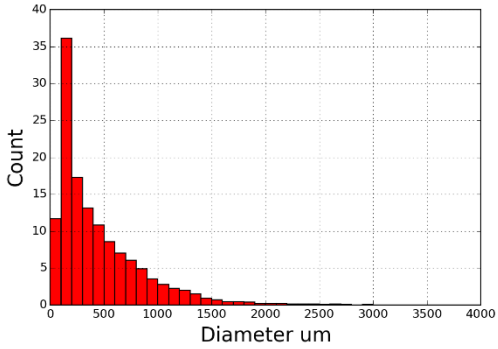

Figure A. 211: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

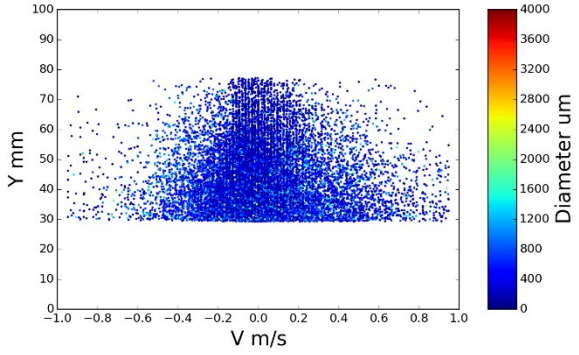

Figure A. 214: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

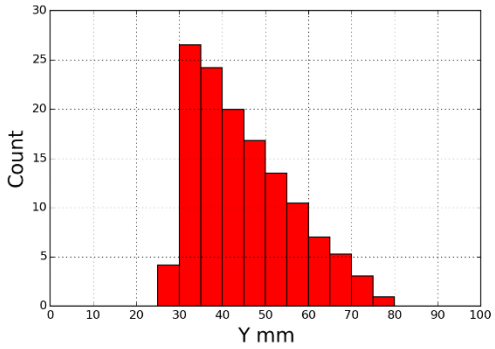

Figure A. 212: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

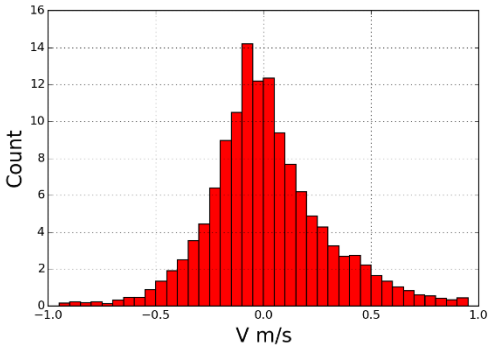

Figure A. 215: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

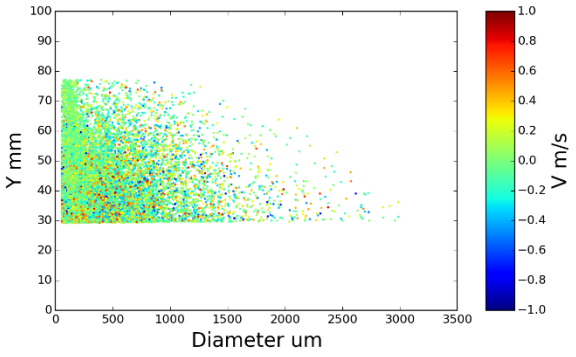

Figure A. 213: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.2.1 Matched Only Droplets for .LB Image

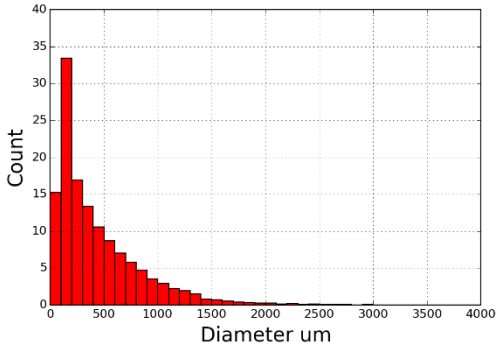

Figure A. 216: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

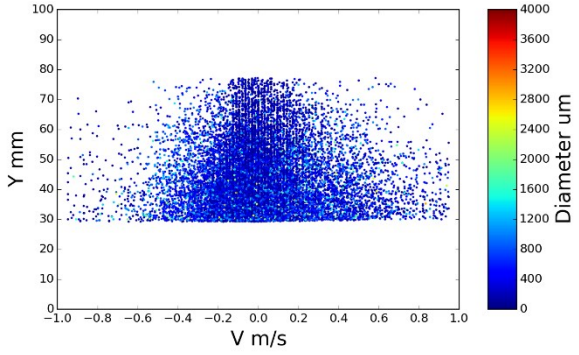

Figure A. 219: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

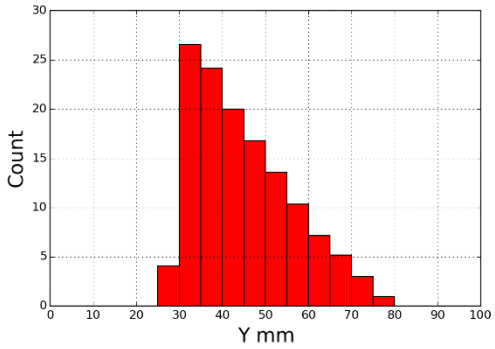

Figure A. 217: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

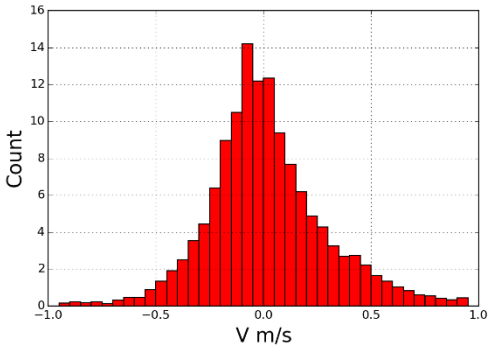

Figure A. 220: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

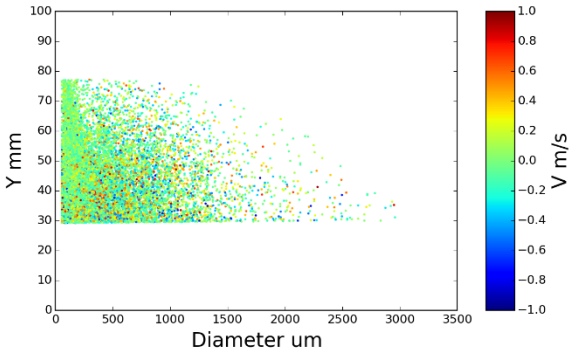

Figure A. 218: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	81.72	86.36	57.1	2994	472.6	471.7	57.1	3020	454.3	467.8
40-60mm	81.07	88.42	57.1	2886	416.6	413.6	57.1	2910	394.9	415.3
60-80mm	16.84	19.39	57.1	2578	317.1	354.7	57.1	2414	284.2	334.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	179.64	194.2	57.1	2994	432.8	438.5	57.1	3020	410.3	435.5
			Height A (mm)				Height B (mm)			
Highest Particle			77.1776				77.1914			
Lowest Particle			29.2468				29.2468			

Table A. 25: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	49.96	57.1	2980	578.1	495.5	57.1	3020	570.9	489.9	-0.950	0.950	-0.020	0.190	-0.950	0.950	-0.010	0.310
40-60mm	53.83	57.1	2886	523.1	433.2	57.1	2791	519.5	434.1	-0.950	0.950	-0.030	0.170	-0.940	0.950	-0.010	0.270
60-80mm	10.4	57.1	2578	429.4	394.9	57.1	2414	425.3	392.2	-0.920	0.930	-0.030	0.140	-0.870	0.820	-0.060	0.200
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	114.19	57.1	2980	538.6	460.4	57.1	3020	533.5	457.8	-0.950	0.950	-0.020	0.180	-0.950	0.950	-0.020	0.280

Table A. 26: Matched Droplet Info

A.5.2.1 All Droplets for .LA Image

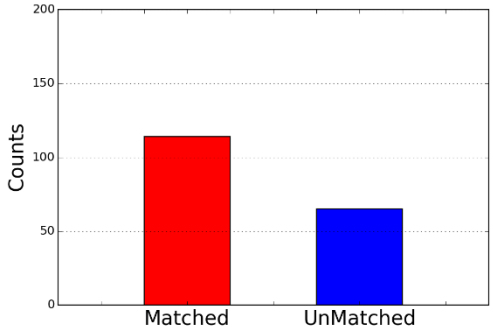

Figure A. 221: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

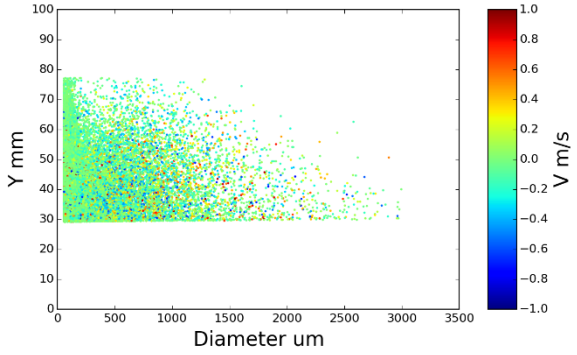

Figure A. 224: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

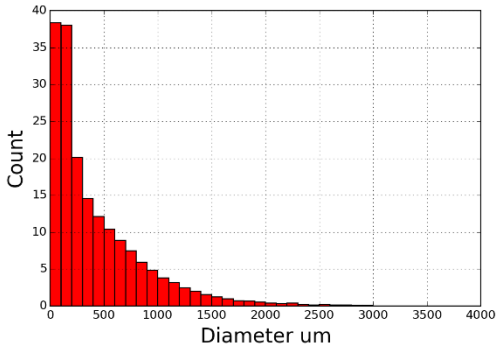

Figure A. 222: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

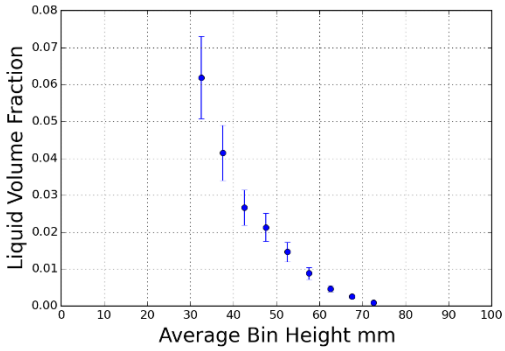

Figure A. 225: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

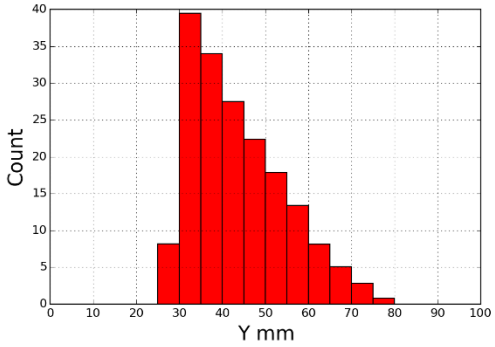

Figure A. 223: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

A.5.2.1 All Droplets for .LB Image

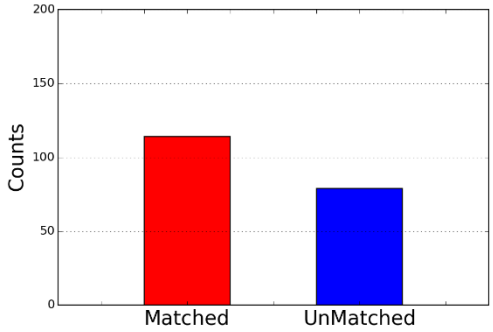

Figure A. 226: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

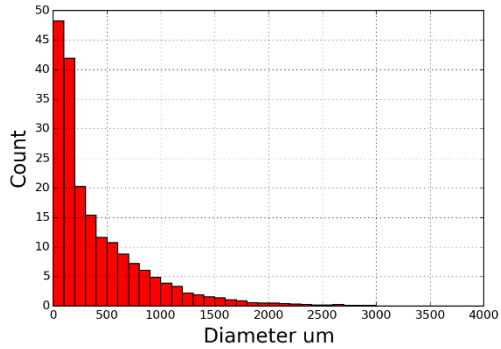

Figure A. 227: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

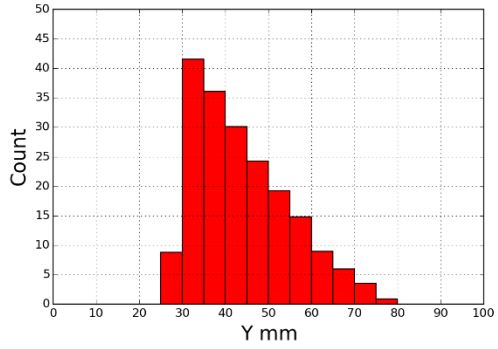

Figure A. 228: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

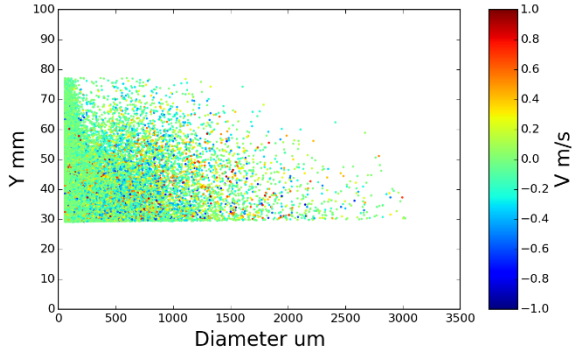

Figure A. 229: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

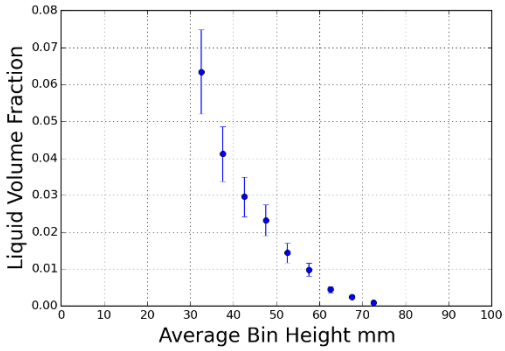

Figure A. 230: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.2.1 Matched Only Droplets for .LA Image

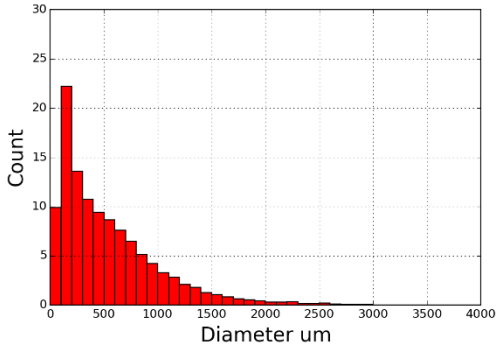

Figure A. 231: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

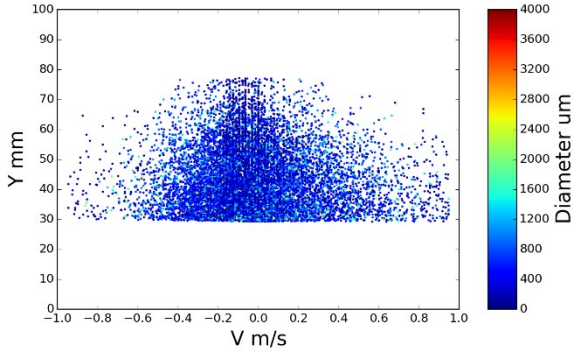

Figure A. 234: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

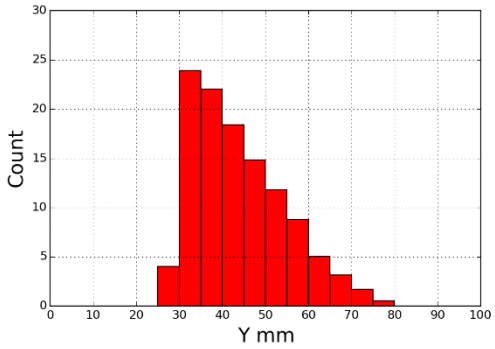

Figure A. 232: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

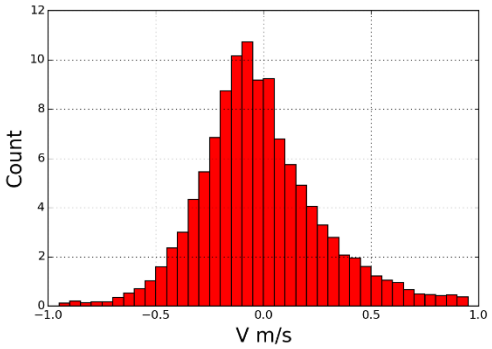

Figure A. 235: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

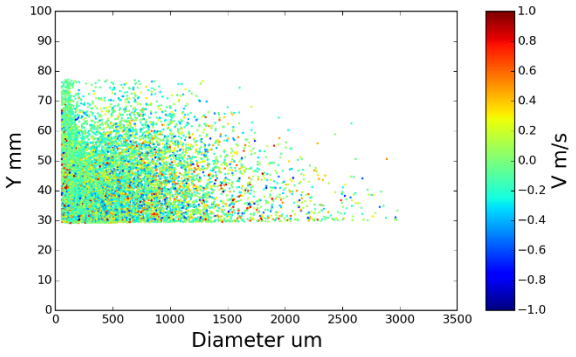

Figure A. 233: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.2.1 Matched Only Droplets for .LB Image

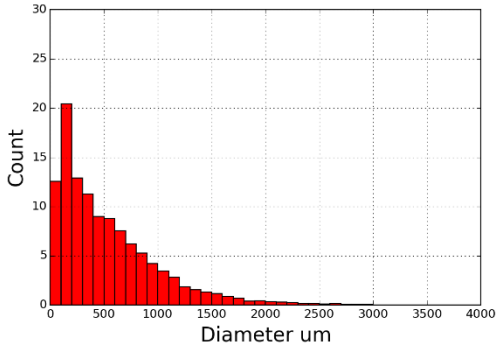

Figure A. 236: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

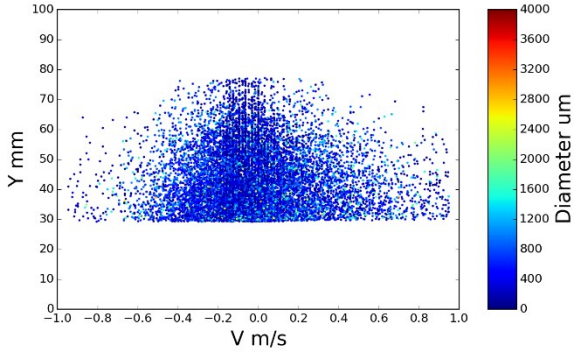

Figure A. 239: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

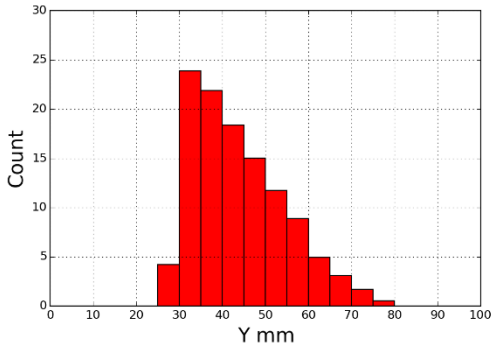

Figure A. 237: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

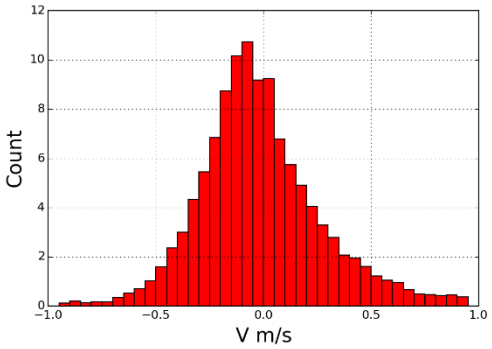

Figure A. 240: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

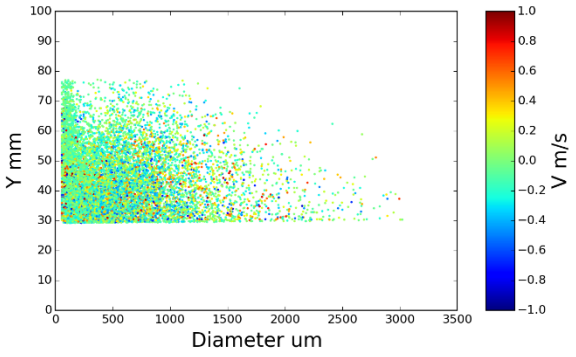

Figure A. 238: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	70.24	74.65	57.1	2990	473.1	477.8	57.1	3023	443.8	469.6
40-60mm	68.77	75.54	57.1	2873	398.5	414.3	57.1	3024	372.2	406.0
60-80mm	14.68	16.57	57.1	2081	280.7	320.3	57.1	2267	263.8	315.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	153.75	166.81	57.1	2990	421.4	440.8	57.1	3024	393.5	431.6
			Height A (mm)				Height B (mm)			
Highest Particle			77.1690				77.2030			
Lowest Particle			29.2468				29.2468			

Table A. 27: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	40.91	57.1	2990	599.7	505.5	57.1	2960	590.9	500.6	-0.950	0.940	-0.030	0.200	-0.950	0.930	-0.050	0.300
40-60mm	43.63	57.1	2873	514.4	441.1	57.1	2913	510.8	441.1	-0.930	0.950	-0.030	0.190	-0.950	0.950	-0.040	0.280
60-80mm	8.68	57.1	2081	390.2	363.6	57.1	2267	389.4	364.5	-0.820	0.890	-0.030	0.130	-0.870	0.890	-0.060	0.190
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	93.22	57.1	2990	540.3	468.5	57.1	2960	534.8	466.0	-0.950	0.950	-0.030	0.190	-0.950	0.950	-0.050	0.280

Table A. 28: Matched Droplet Info

A.5.2.1 All Droplets for .LA Image

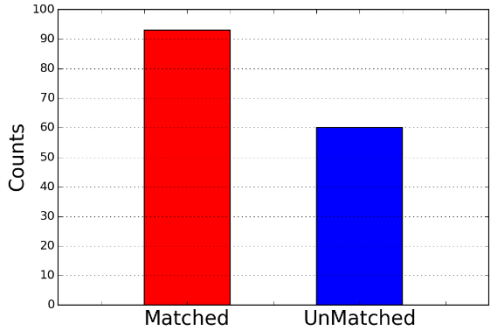

Figure A. 241: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

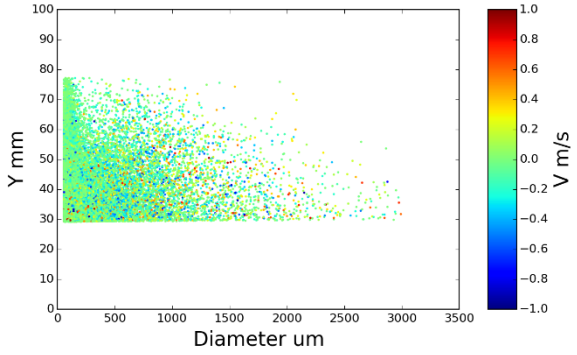

Figure A. 244: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

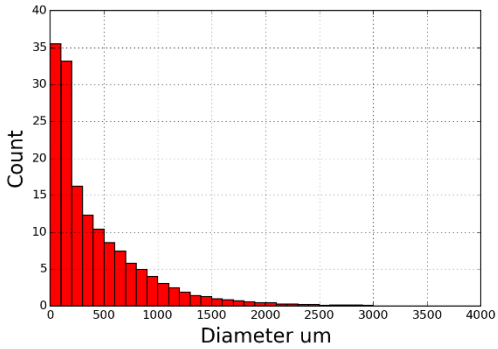

Figure A. 242: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

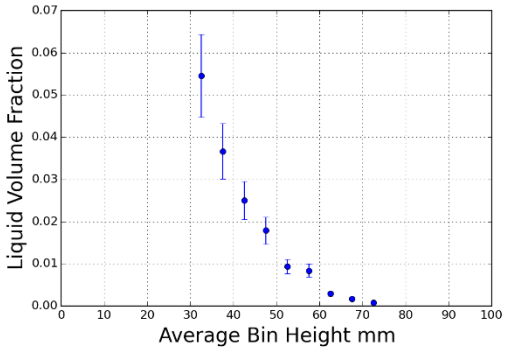

Figure A. 245: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

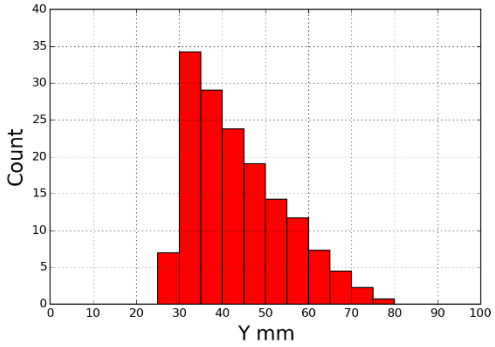

Figure A. 243: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

A.5.2.1 All Droplets for .LB Image

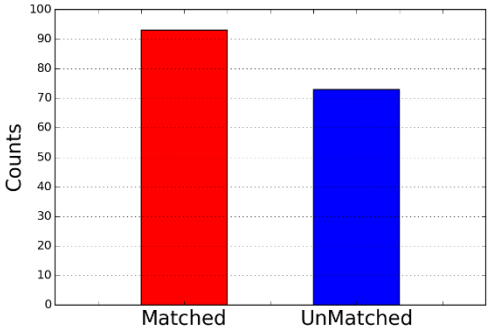

Figure A. 246: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

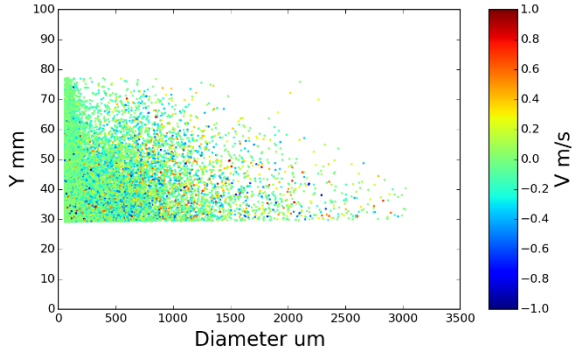

Figure A. 249: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

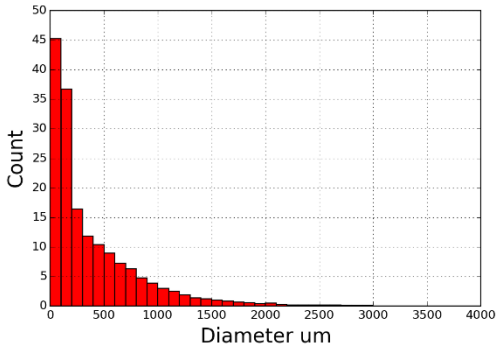

Figure A. 247: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

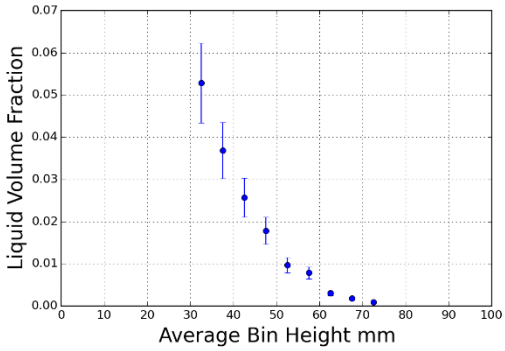

Figure A. 250: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

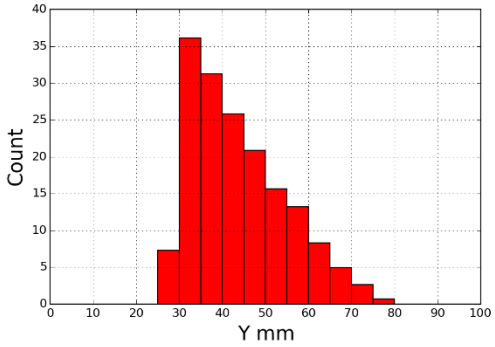

Figure A. 248: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

A.5.2.1 Matched Only Droplets for .LA Image

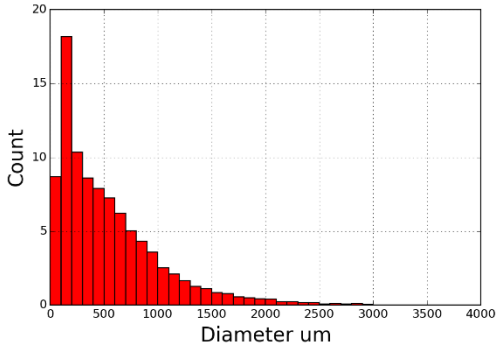

Figure A. 251: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

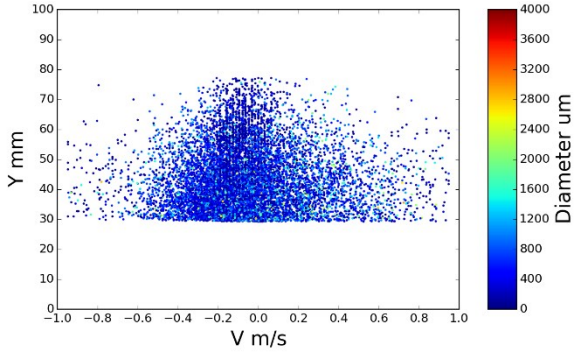

Figure A. 254: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

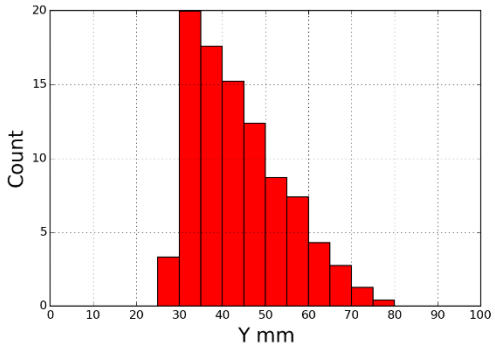

Figure A. 252: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

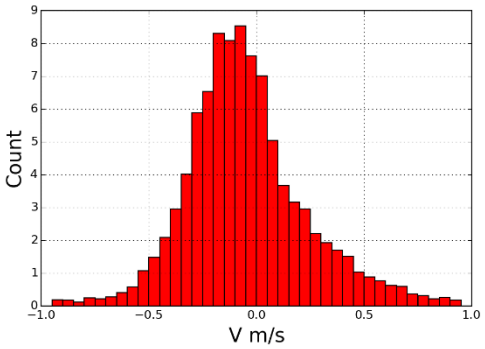

Figure A. 255: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

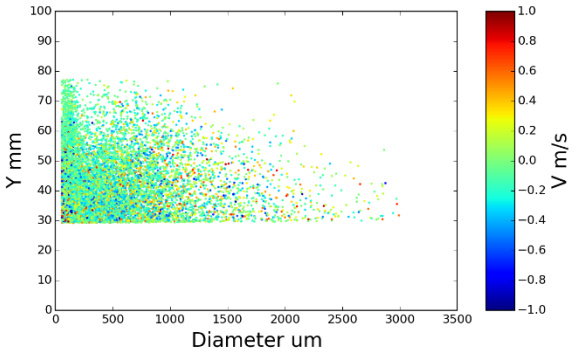

Figure A. 253: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.2.1 Matched Only Droplets for .LB Image

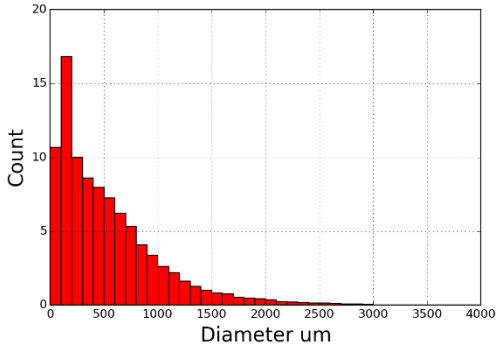

Figure A. 256: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

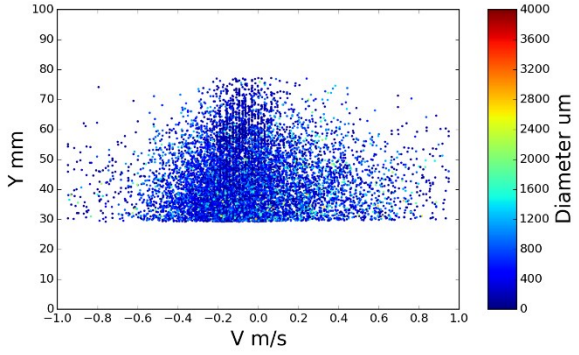

Figure A. 259: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

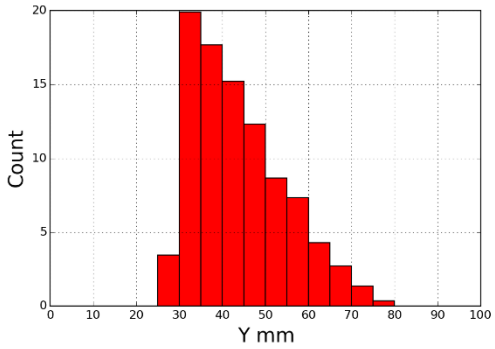

Figure A. 257: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

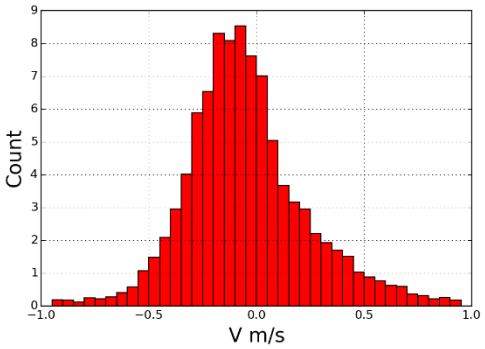

Figure A. 260: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

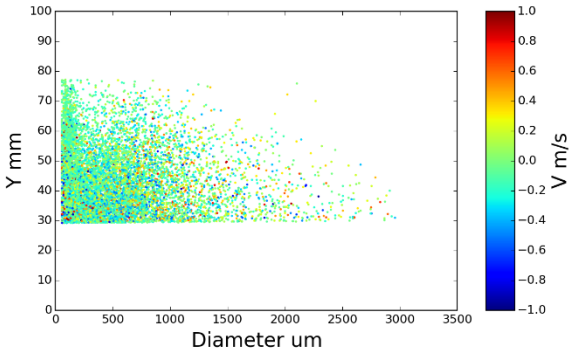

Figure A. 258: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	76.92	81.06	57.1	3024	457.1	475.6	57.1	3005	438.3	469.0
40-60mm	80.67	89.66	57.1	2921	398.6	410.1	57.1	2932	370.8	397.5
60-80mm	17.19	18.86	57.1	2394	302.9	312.3	57.1	2543	281.8	305.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	174.84	189.67	57.1	3024	414.9	434.7	57.1	3005	390.8	424.7
			Height A (mm)				Height B (mm)			
Highest Particle			77.0863				77.1698			
Lowest Particle			29.2468				29.2468			

Table A. 29: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	43.3	57.1	2997	583.8	506.4	57.1	3005	574.0	500.8	-0.930	0.950	-0.020	0.210	-0.930	0.950	-0.020	0.300
40-60mm	51.75	57.1	2896	502.4	421.8	57.1	2897	498.8	424.0	-0.950	0.950	-0.040	0.180	-0.950	0.950	-0.000	0.280
60-80mm	10.5	57.1	2394	403.6	340.3	57.1	2543	402.8	345.0	-0.930	0.950	-0.040	0.140	-0.790	0.940	-0.020	0.230
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	105.55	57.1	2997	526.0	455.1	57.1	3005	520.1	453.5	-0.950	0.950	-0.030	0.190	-0.950	0.950	-0.010	0.290

Table A. 30: Matched Droplet Info

A.5.2.1 All Droplets for .LA Image

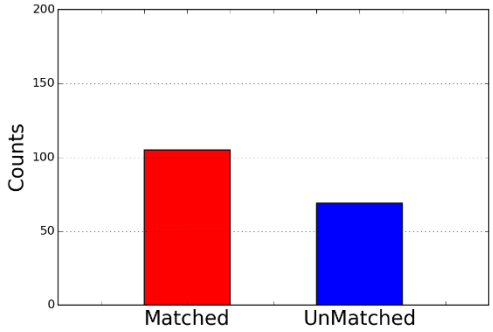

Figure A. 261: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

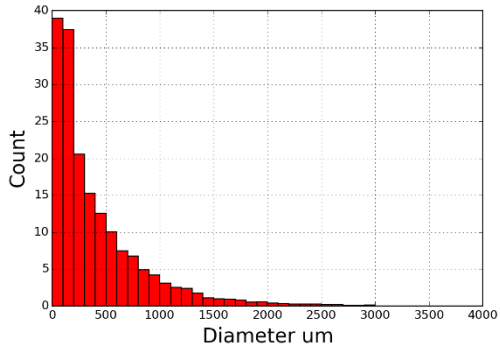

Figure A. 262: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

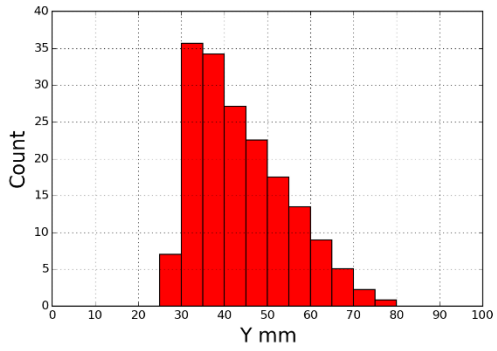

Figure A. 263: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

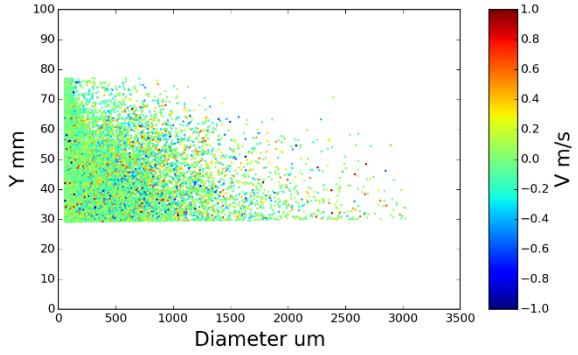

Figure A. 264: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

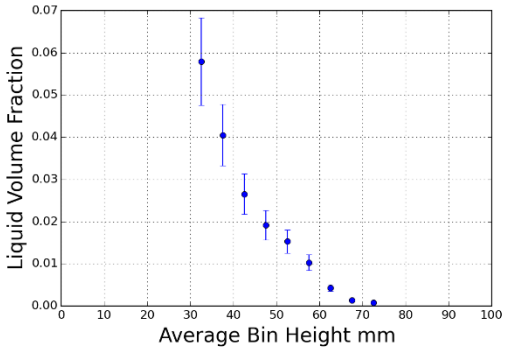

Figure A. 265: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.2.1 All Droplets for .LB Image

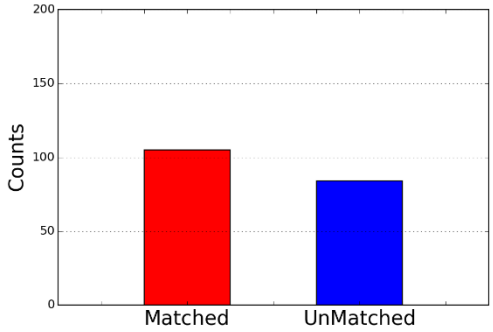

Figure A. 266: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

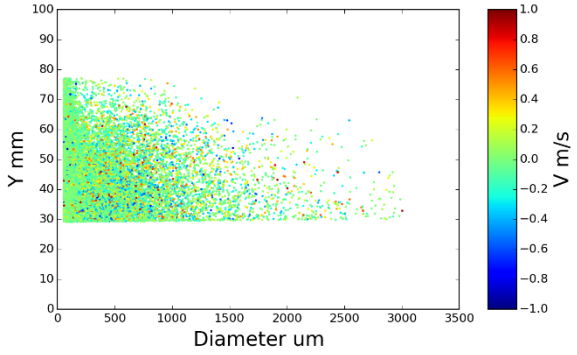

Figure A. 269: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

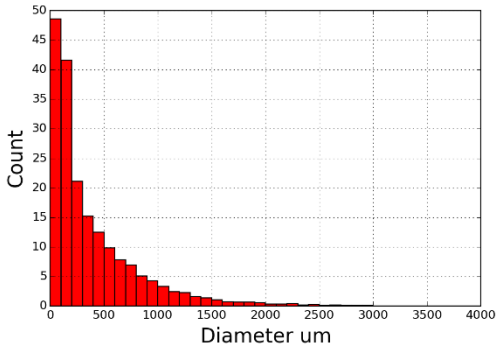

Figure A. 267: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

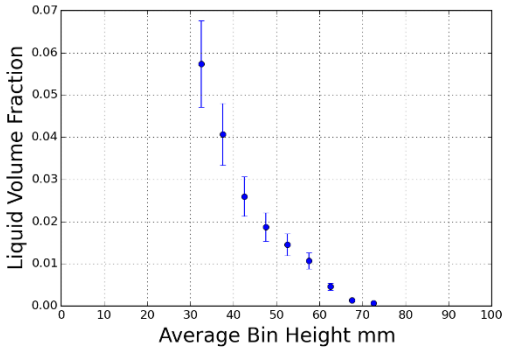

Figure A. 270: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

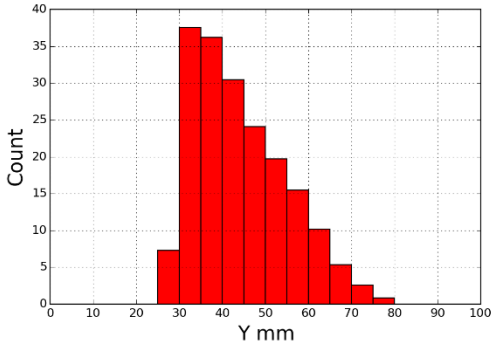

Figure A. 268: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

A.5.2.1 Matched Only Droplets for .LA Image

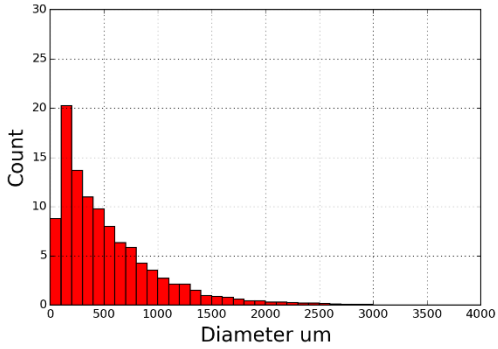

Figure A. 271: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

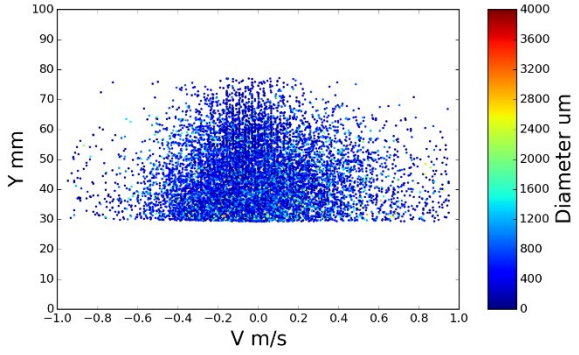

Figure A. 274: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

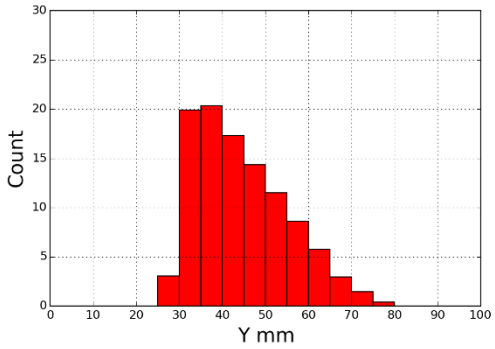

Figure A. 272: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

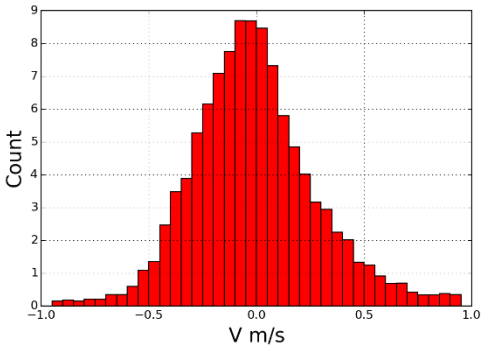

Figure A. 275: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

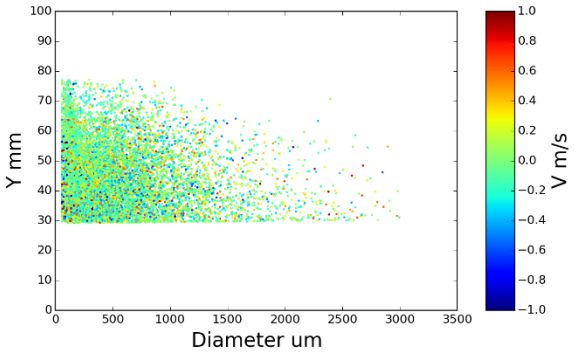

Figure A. 273: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.2.1 Matched Only Droplets for .LB Image

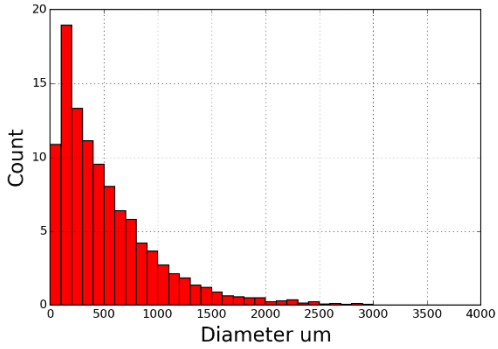

Figure A. 276: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

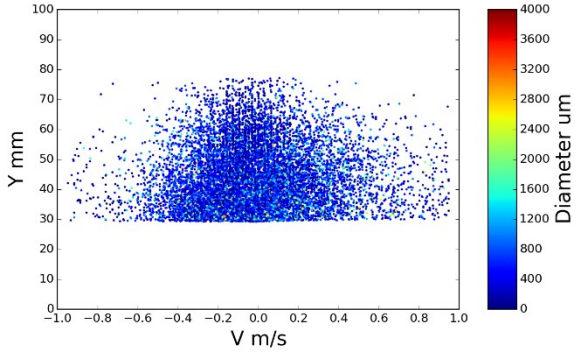

Figure A. 279: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

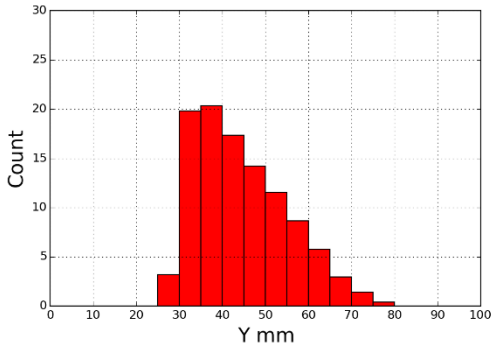

Figure A. 277: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

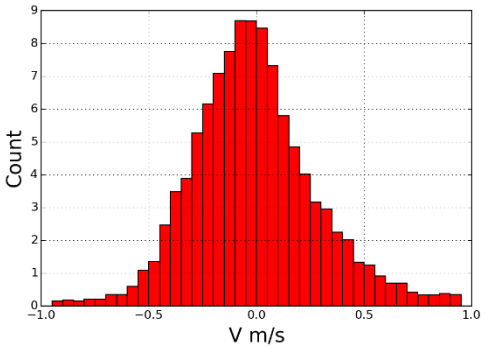

Figure A. 280: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

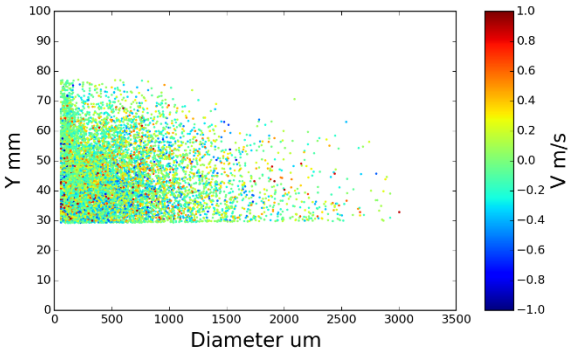

Figure A. 278: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	65.14	70.93	57.1	3018	414.4	430.7	57.1	2986	386.5	419.0
40-60mm	75.11	83.77	57.1	3004	348.8	363.0	57.1	2963	324.8	355.5
60-80mm	17.47	19.48	57.1	2818	274.0	294.2	57.1	2700	260.7	288.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	157.75	174.23	57.1	3018	367.6	388.6	57.1	2986	342.8	378.5
			Height A (mm)				Height B (mm)			
Highest Particle			77.1847				77.2030			
Lowest Particle			29.2468				29.2468			

Table A. 31: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	34.77	57.1	2988	535.9	469.1	57.1	2884	528.3	465.5	-0.950	0.950	-0.030	0.220	-0.950	0.950	0.030	0.330
40-60mm	46.25	57.1	2914	443.5	391.2	57.1	2963	438.8	391.9	-0.950	0.950	-0.030	0.200	-0.950	0.950	0.020	0.300
60-80mm	10.09	57.1	2818	378.4	338.3	57.1	2700	370.4	334.5	-0.950	0.810	-0.030	0.160	-0.930	0.950	0.020	0.240
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	91.11	57.1	2988	471.6	421.0	57.1	2963	465.2	419.3	-0.950	0.950	-0.030	0.200	-0.950	0.950	0.020	0.300

Table A. 32: Matched Droplet Info

A.5.2.1 All Droplets for .LA Image

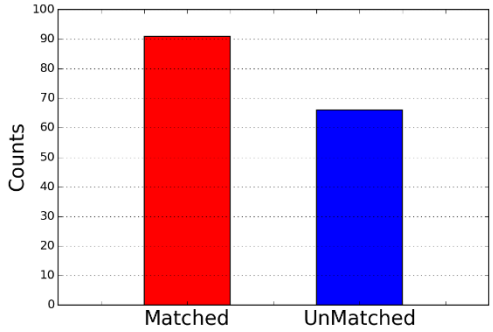

Figure A. 281: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

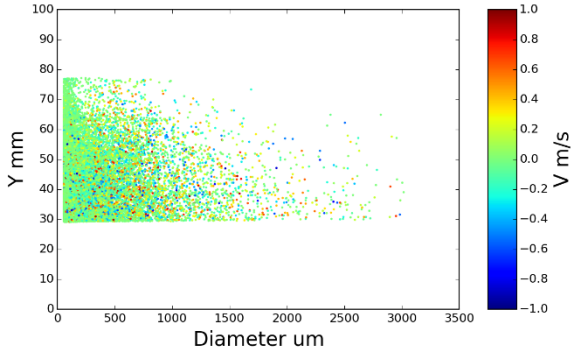

Figure A. 284: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

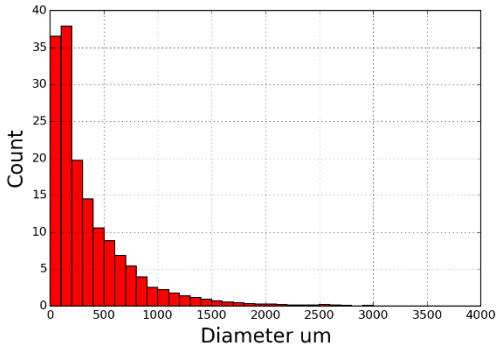

Figure A. 282: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

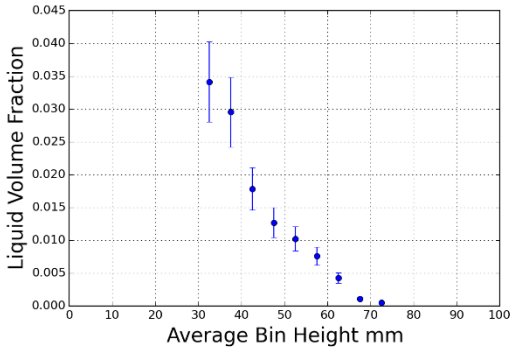

Figure A. 285: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

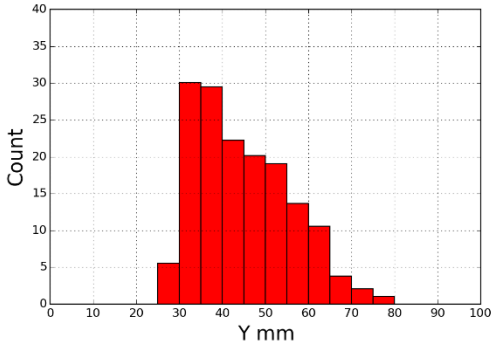

Figure A. 283: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

A.5.2.1 All Droplets for .LB Image

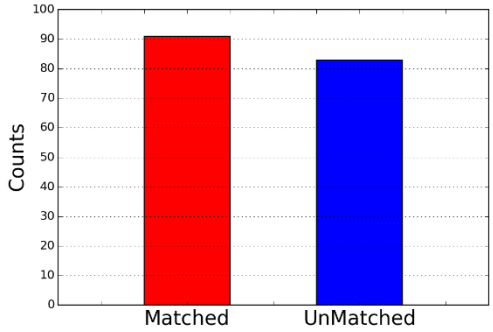

Figure A. 286: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

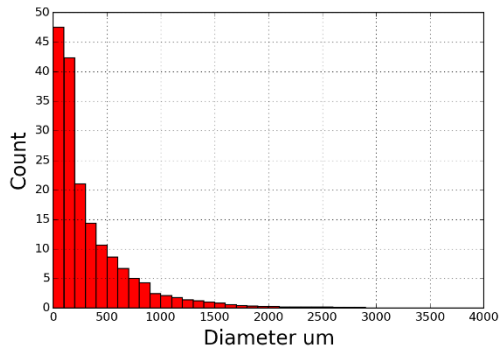

Figure A. 287: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

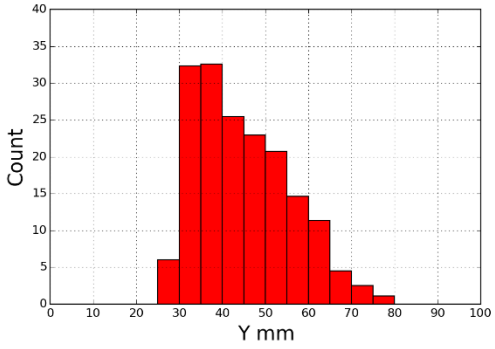

Figure A. 288: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

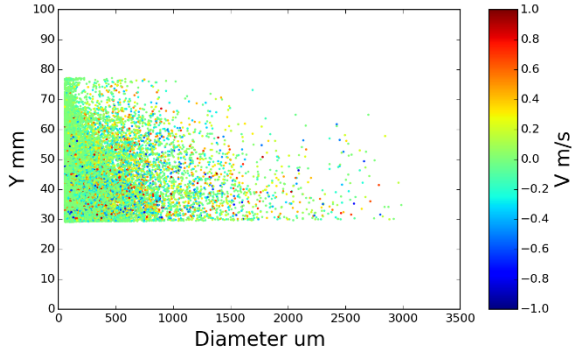

Figure A. 289: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

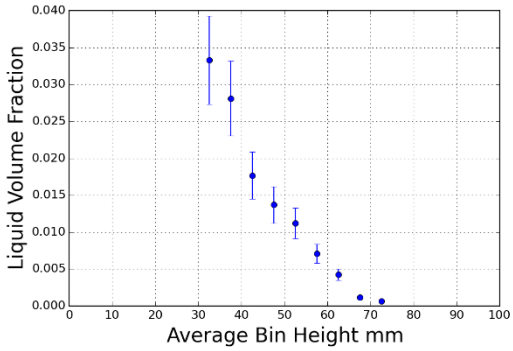

Figure A. 290: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.2.1 Matched Only Droplets for .LA Image

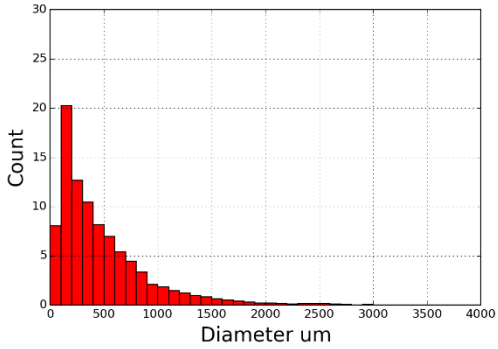

Figure A. 291: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

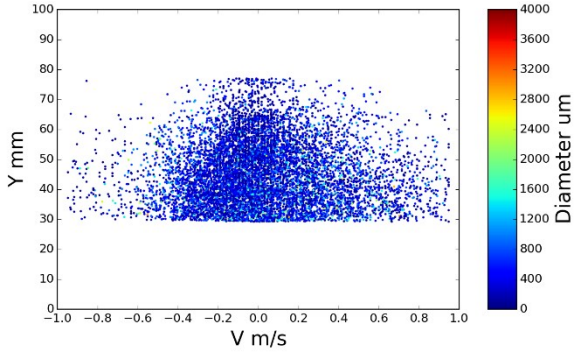

Figure A. 294: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

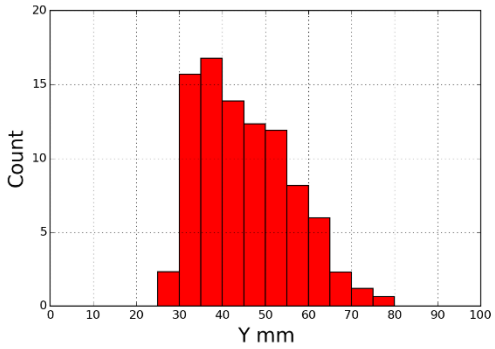

Figure A. 292: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

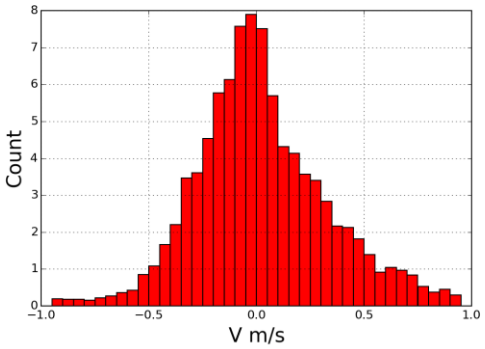

Figure A. 295: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

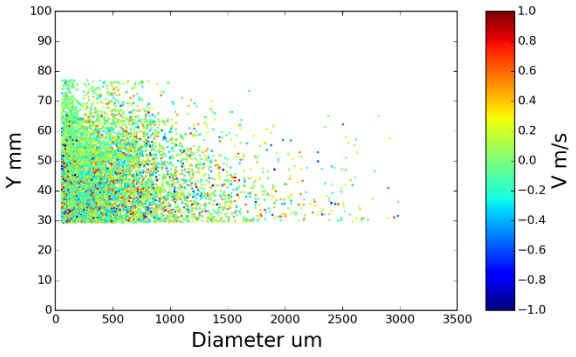

Figure A. 293: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.2.1 Matched Only Droplets for .LB Image

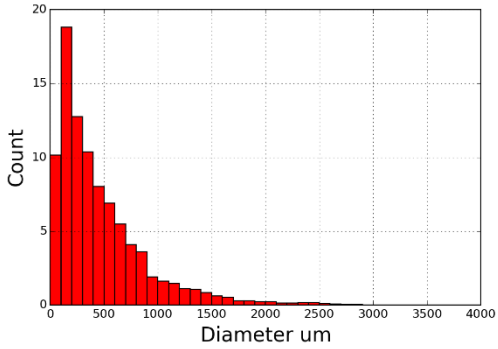

Figure A. 296: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

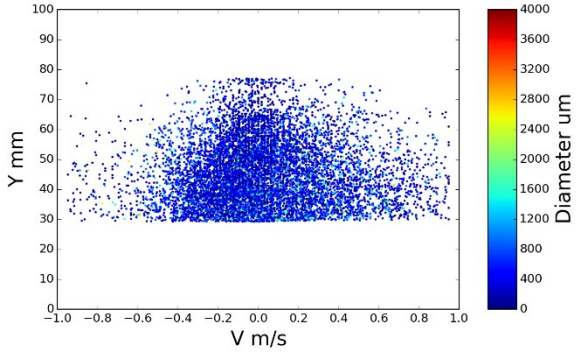

Figure A. 299: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

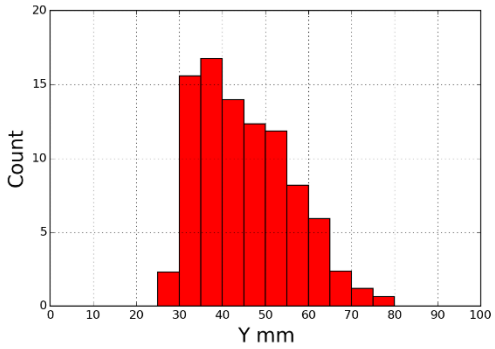

Figure A. 297: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

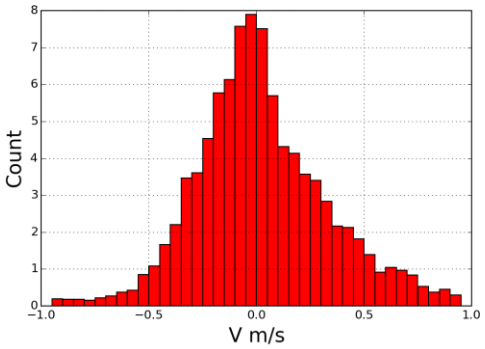

Figure A. 300: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

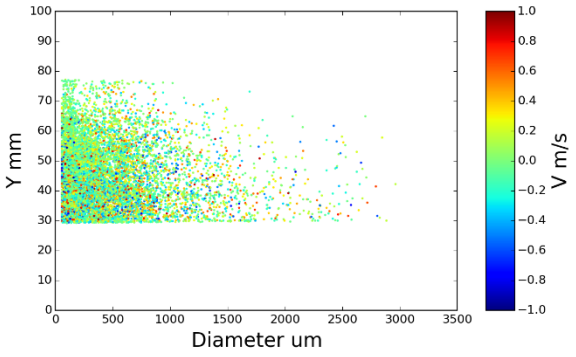

Figure A. 298: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.2.2 Lens 50mm Mag 0_13x

A.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	119.99	119.82	128.5	3412	631.4	522.9	128.5	3414	633.6	527.5
40-60mm	70.33	70.88	128.5	3365	556.4	395.9	128.5	3350	552.2	392.3
60-80mm	14.81	14.63	128.5	2696	523.3	309.5	128.5	2447	520.9	304.8
80-100mm	1.06	1.02	128.5	1582	509.1	264.0	128.5	1622	528.6	270.3
All	206.19	206.35	128.5	3412	597.4	470.6	128.5	3414	597.1	472.5
			Height A (mm)				Height B (mm)			
Highest Particle			99.0937				99.1218			
Lowest Particle			20.7298				20.7298			

Table A. 33: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	65.73	128.5	3398	719.2	531.6	128.5	3407	703.6	522.6	-0.950	0.950	-0.040	0.310	-0.950	0.950	0.000	0.390
40-60mm	47.82	128.5	3328	628.2	406.8	128.5	3350	620.4	398.1	-0.950	0.940	-0.020	0.210	-0.950	0.950	0.010	0.310
60-80mm	11.28	128.5	2696	581.8	298.5	128.5	2447	573.9	297.2	-0.950	0.850	-0.020	0.140	-0.830	0.890	0.030	0.250
80-100mm	0.91	128.5	1582	551.3	258.2	128.5	1622	553.5	267.7	-0.190	0.180	-0.000	0.080	-0.510	0.560	0.040	0.200
All	125.74	128.5	3398	671.1	471.0	128.5	3407	659.2	462.4	-0.950	0.950	-0.030	0.260	-0.950	0.950	0.010	0.350

Table A. 34: Matched Droplet Info

A.5.2.2 All Droplets for .LA Image

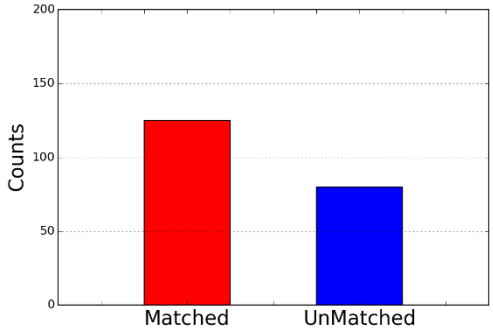

Figure A. 301: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

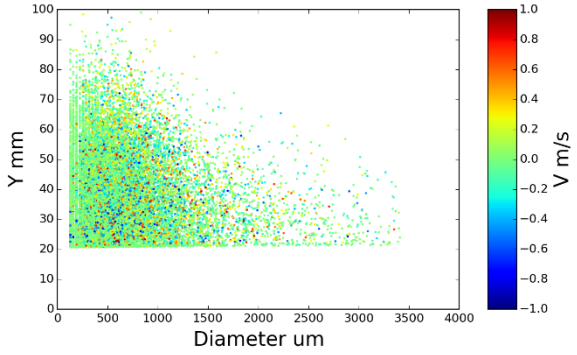

Figure A. 304: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

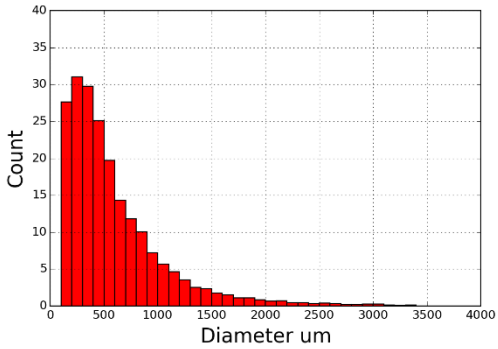

Figure A. 302: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

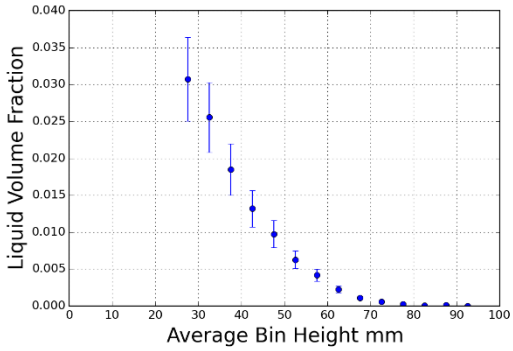

Figure A. 305: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

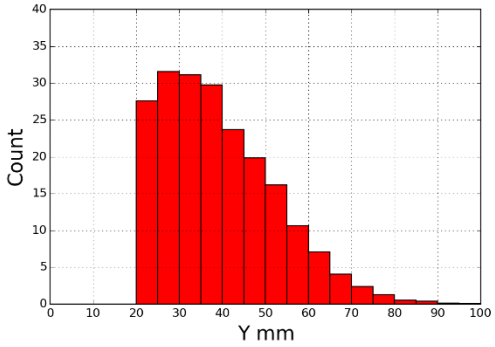

Figure A. 303: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

A.5.2.2 All Droplets for .LB Image

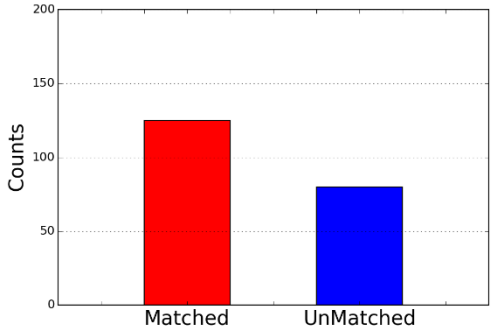

Figure A. 306: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

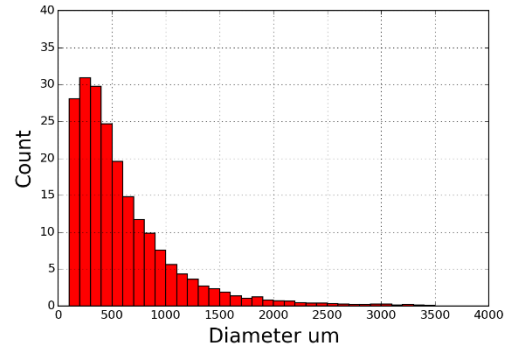

Figure A. 307: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

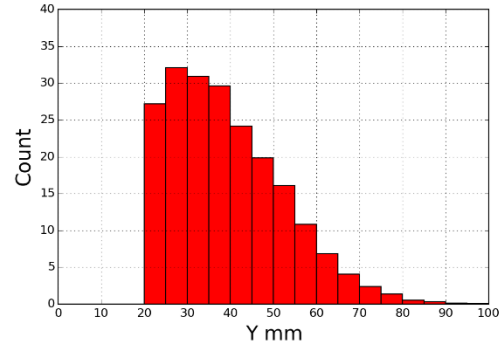

Figure A. 308: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

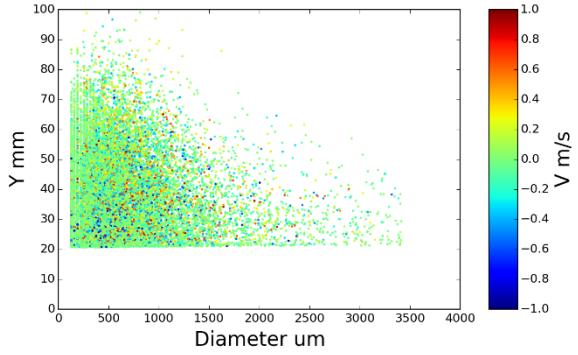

Figure A. 309: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

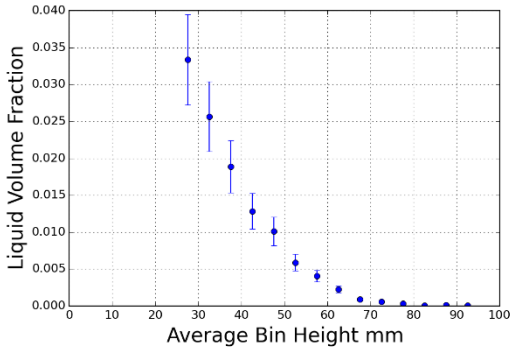

Figure A. 310: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.2.2 Matched Only Droplets for .LA Image

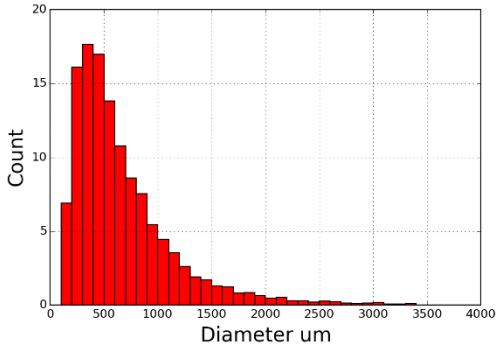

Figure A. 311: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

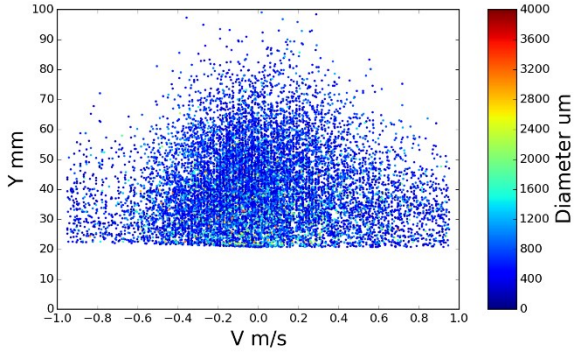

Figure A. 314: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

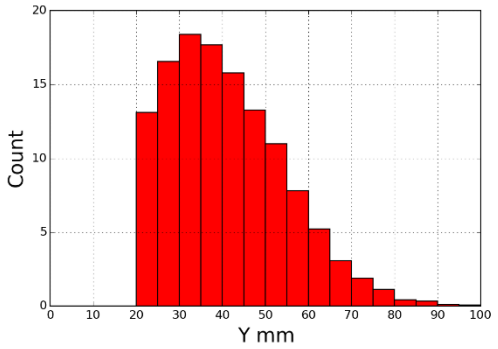

Figure A. 312: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

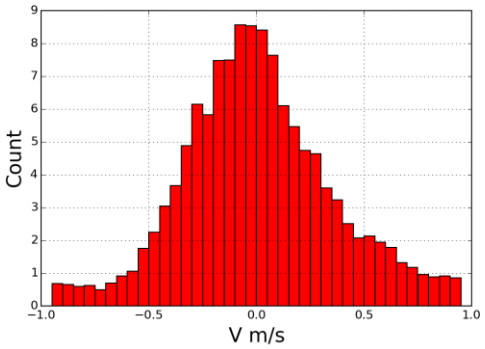

Figure A. 315: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

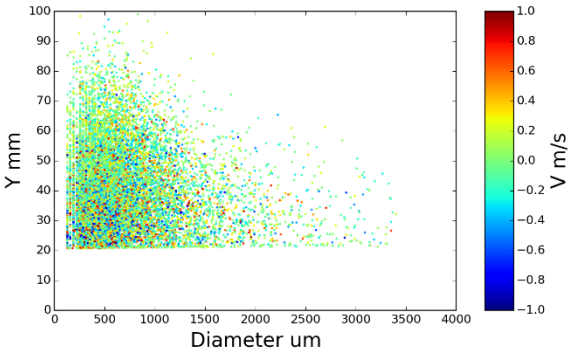

Figure A. 313: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.2.2 Matched Only Droplets for .LB Image

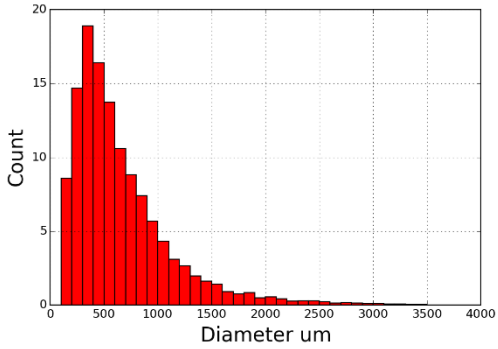

Figure A. 316: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

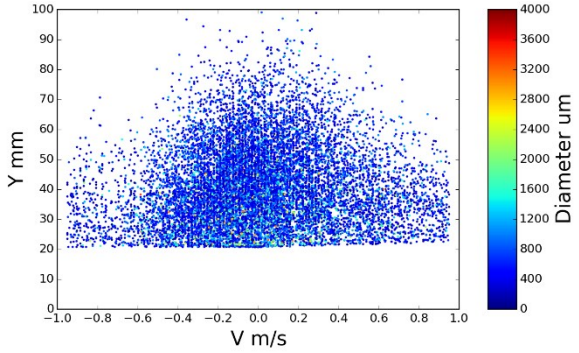

Figure A. 319: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

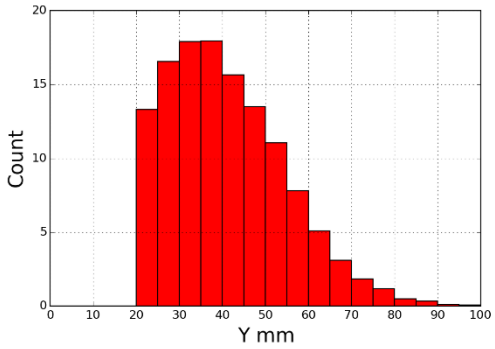

Figure A. 317: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

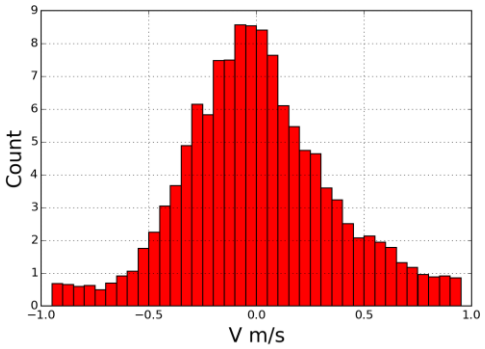

Figure A. 320: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

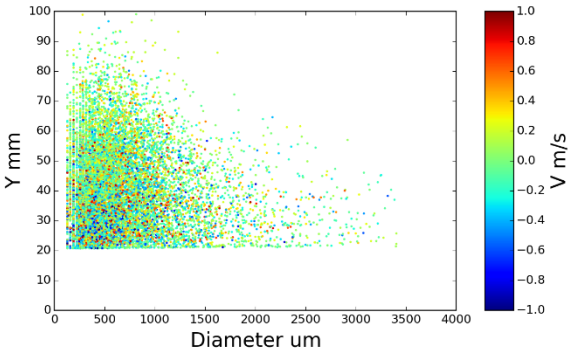

Figure A. 318: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	114.53	114.65	128.5	3414	680.4	527.5	128.5	3412	678.0	528.5
40-60mm	60.06	59.52	128.5	3275	608.5	398.7	128.5	3372	611.8	409.2
60-80mm	11.05	11.07	128.5	2353	601.5	320.3	128.5	2430	596.7	318.5
80-100mm	0.53	0.52	128.5	1151	599.5	242.8	222.6	1243	616.5	241.0
All	186.17	185.76	128.5	3414	652.2	479.5	128.5	3412	651.8	483.1
			Height A (mm)				Height B (mm)			
Highest Particle			98.1818				98.1484			
Lowest Particle			20.7298				20.7298			

Table A. 35: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	64.8	128.5	3375	769.6	536.2	128.5	3412	753.2	524.2	-0.950	0.950	-0.040	0.280	-0.950	0.950	-0.030	0.370
40-60mm	41.19	128.5	3275	680.8	404.9	128.5	3184	675.0	399.5	-0.950	0.930	-0.030	0.210	-0.940	0.940	-0.010	0.310
60-80mm	8.86	128.5	2353	659.2	306.0	128.5	2430	654.4	305.5	-0.710	0.900	-0.000	0.140	-0.780	0.900	0.020	0.250
80-100mm	0.47	257.0	1151	643.4	217.0	222.6	1243	645.0	228.3	-0.440	0.210	0.040	0.100	-0.310	0.640	0.110	0.260
All	115.32	128.5	3375	728.9	479.2	128.5	3412	717.3	469.7	-0.950	0.950	-0.030	0.250	-0.950	0.950	-0.020	0.340

Table A. 36: Matched Droplet Info

A.5.2.2 All Droplets for .LA Image

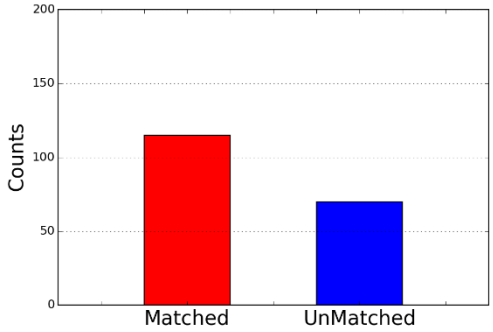

Figure A. 321: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

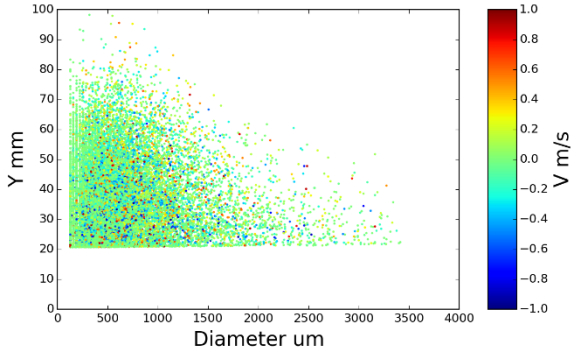

Figure A. 324: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

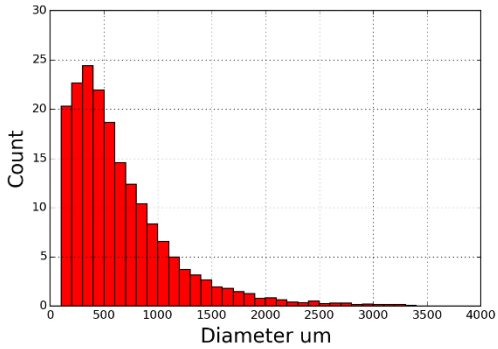

Figure A. 322: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

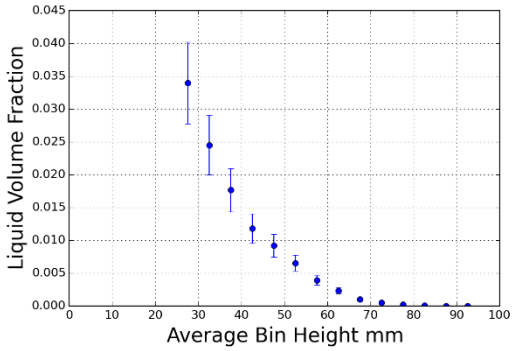

Figure A. 325: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

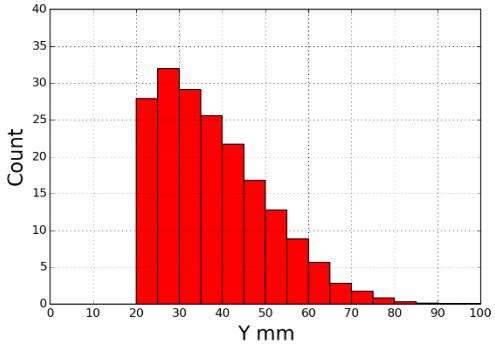

Figure A. 323: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

A.5.2.2 All Droplets for .LB Image

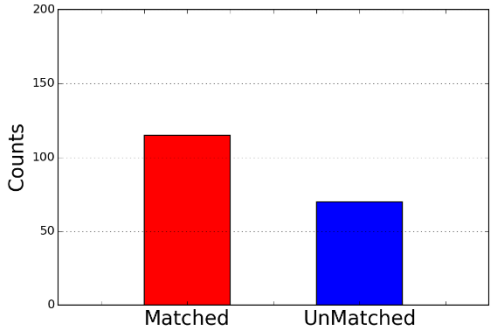

Figure A. 326: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

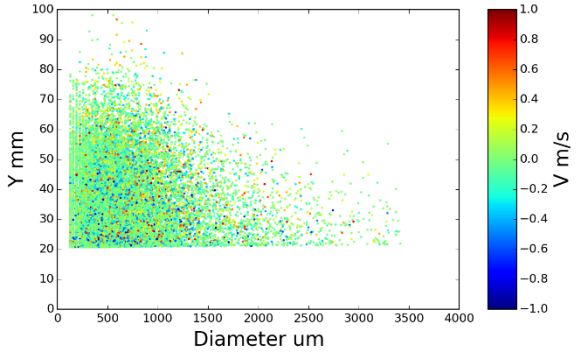

Figure A. 329: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

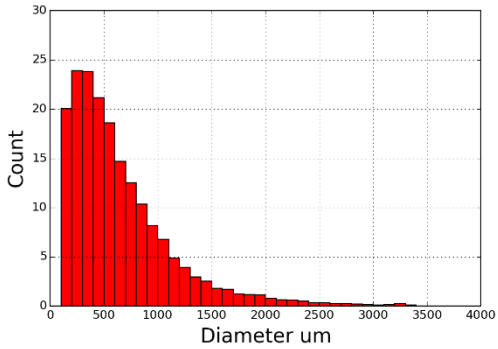

Figure A. 327: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

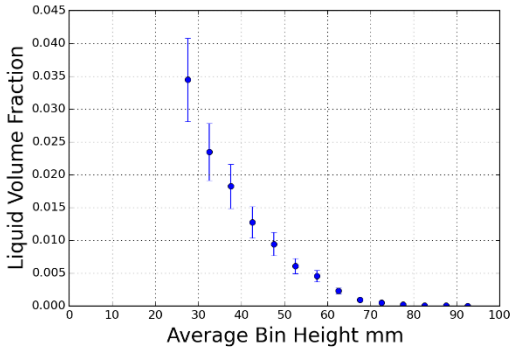

Figure A. 330: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

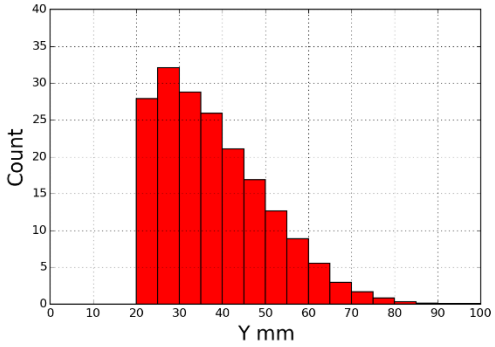

Figure A. 328: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

A.5.2.2 Matched Only Droplets for .LA Image

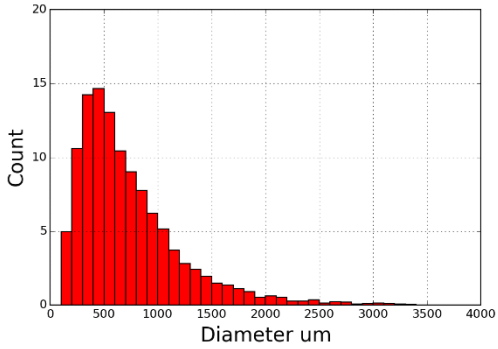

Figure A. 331: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

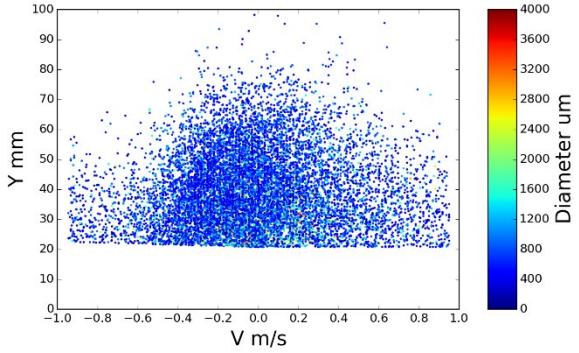

Figure A. 334: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

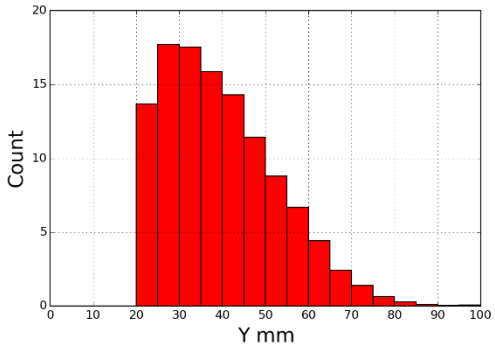

Figure A. 332: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

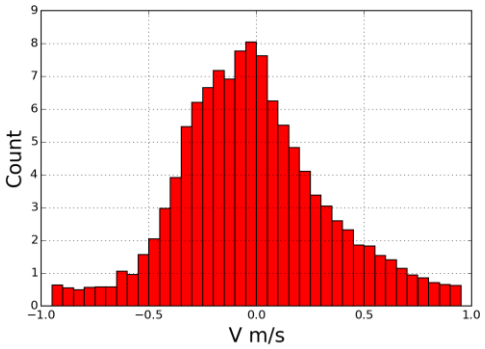

Figure A. 335: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

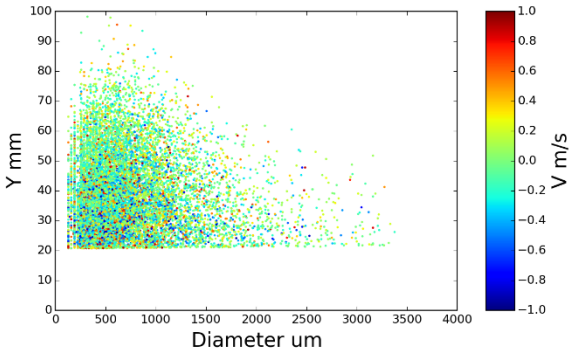

Figure A. 333: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.2.2 Matched Only Droplets for .LB Image

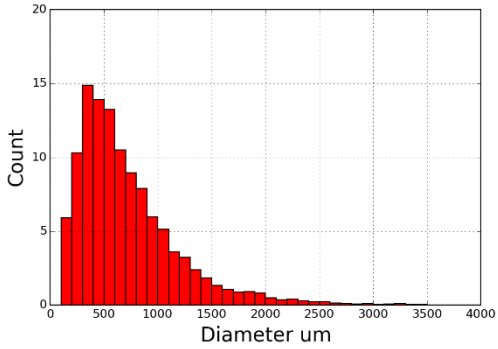

Figure A. 336: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

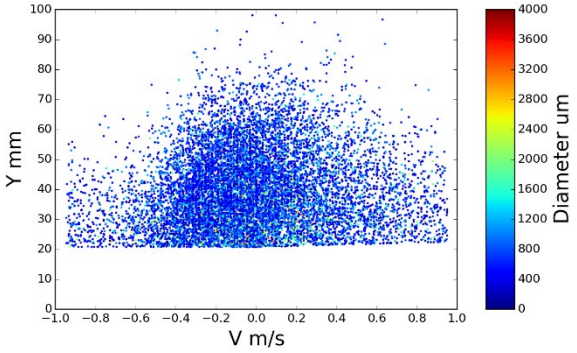

Figure A. 339: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

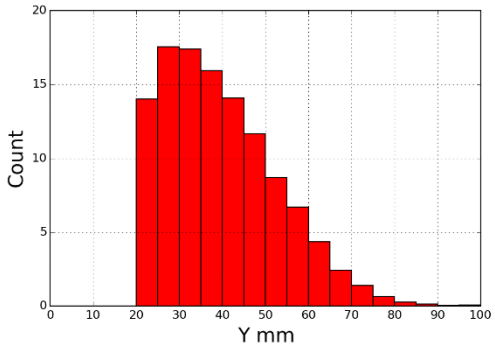

Figure A. 337: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

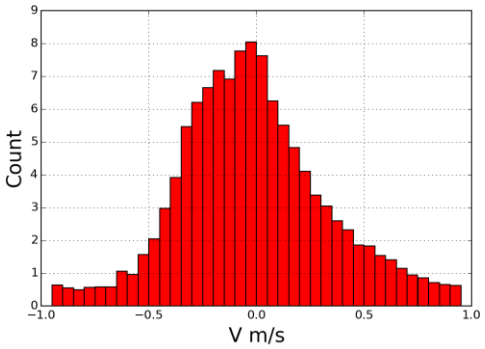

Figure A. 340: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

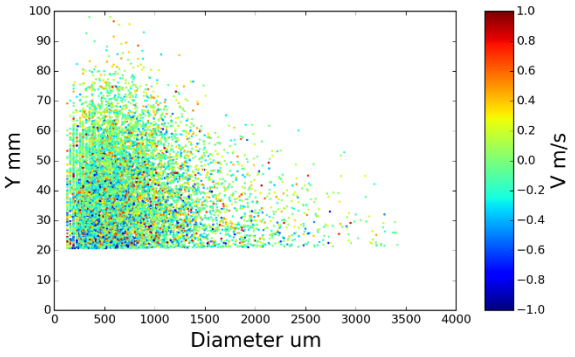

Figure A. 338: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	102.14	101.92	128.5	3407	706.7	559.0	128.5	3403	711.1	566.4
40-60mm	57.4	57.63	128.5	3292	634.6	435.7	128.5	3279	630.7	429.6
60-80mm	10.56	10.92	128.5	2324	613.5	329.3	128.5	2410	609.5	336.2
80-100mm	0.63	0.59	128.5	1350	552.8	289.9	128.5	1301	567.4	279.1
All	170.74	171.08	128.5	3407	676.1	509.1	128.5	3403	677.0	512.4
			Height A (mm)				Height B (mm)			
Highest Particle			100.5265				100.4527			
Lowest Particle			20.7298				20.7298			

Table A. 37: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	53.71	128.5	3407	830.0	583.8	128.5	3346	809.8	566.0	-0.950	0.950	-0.050	0.290	-0.950	0.950	-0.040	0.370
40-60mm	38.73	128.5	3292	712.8	439.4	128.5	3279	705.6	434.3	-0.950	0.940	-0.050	0.200	-0.950	0.950	-0.020	0.320
60-80mm	8.2	128.5	2324	673.1	322.2	128.5	2336	670.3	320.2	-0.930	0.920	-0.040	0.130	-0.880	0.930	-0.000	0.260
80-100mm	0.44	192.8	1350	660.8	266.2	222.6	1301	663.9	254.6	-0.310	0.160	-0.050	0.110	-0.460	0.570	-0.050	0.200
All	101.09	128.5	3407	771.6	517.5	128.5	3346	758.0	504.4	-0.950	0.950	-0.050	0.250	-0.950	0.950	-0.030	0.340

Table A. 38: Matched Droplet Info

A.5.2.2 All Droplets for .LA Image

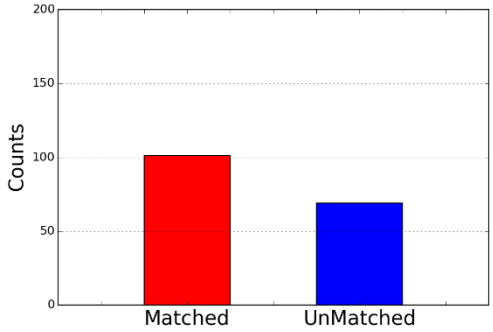

Figure A. 341: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

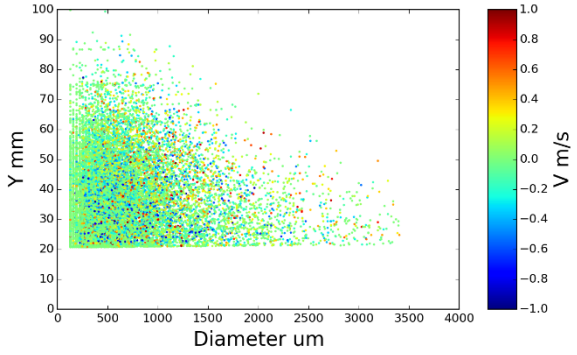

Figure A. 344: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

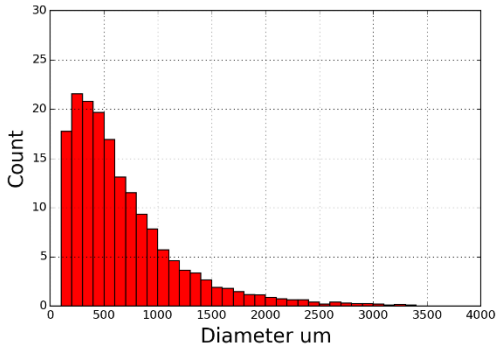

Figure A. 342: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

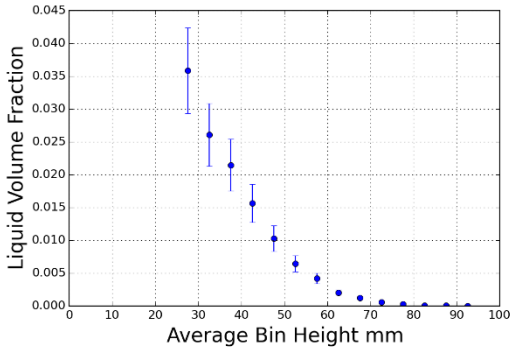

Figure A. 345: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

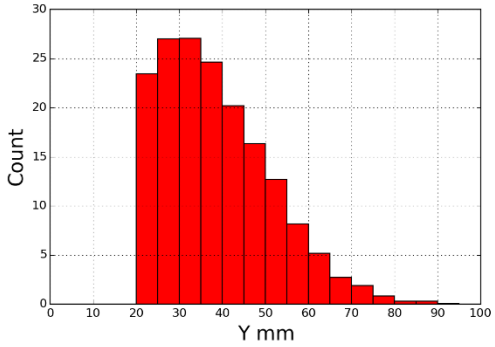

Figure A. 343: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

A.5.2.2 All Droplets for .LB Image

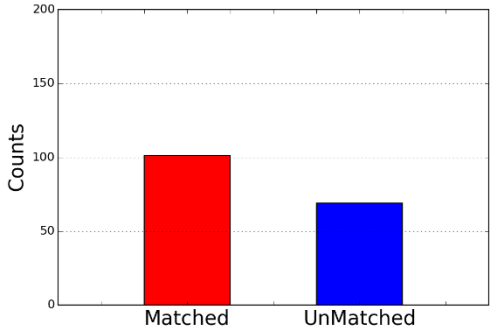

Figure A. 346: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

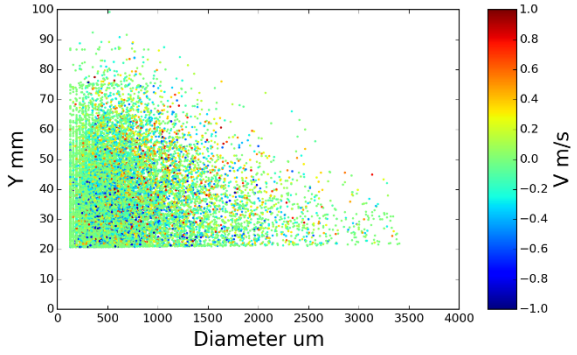

Figure A. 349: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

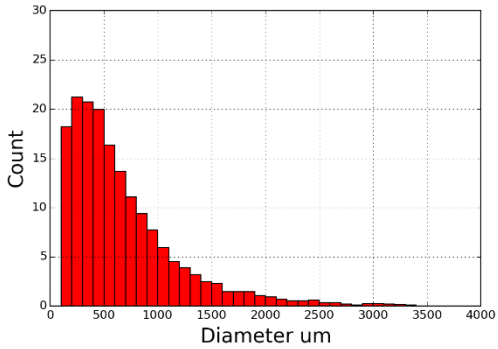

Figure A. 347: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

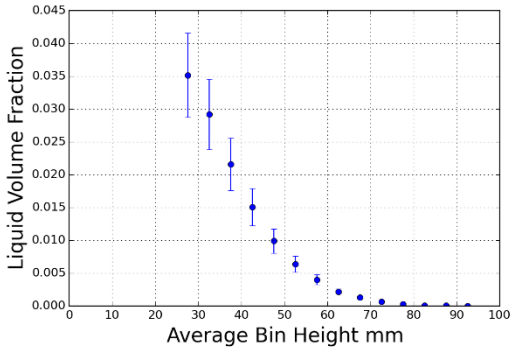

Figure A. 350: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

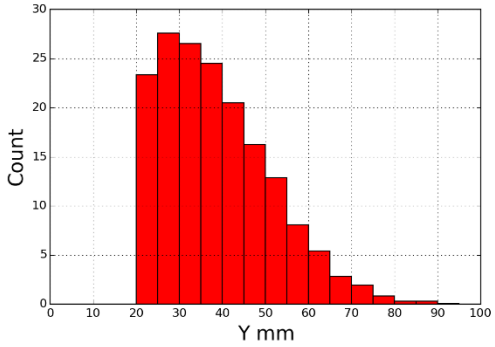

Figure A. 348: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

A.5.2.2 Matched Only Droplets for .LA Image

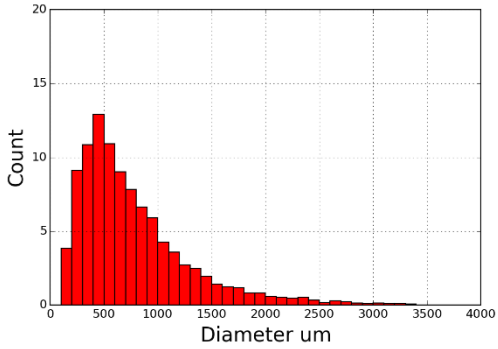

Figure A. 351: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

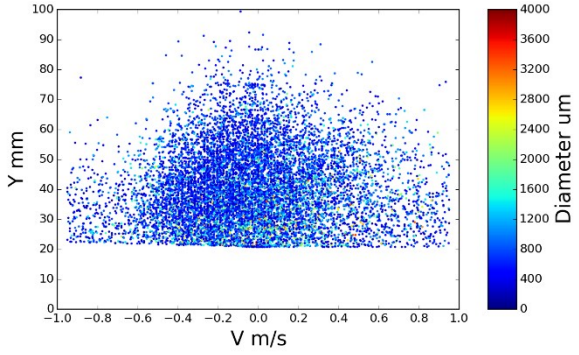

Figure A. 354: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

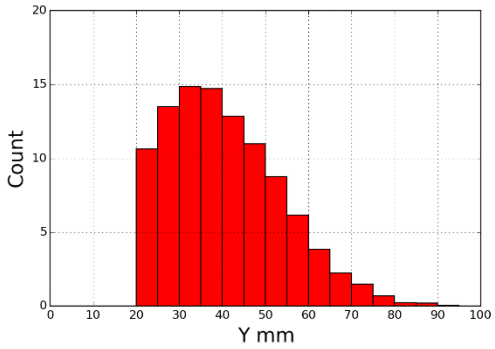

Figure A. 352: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

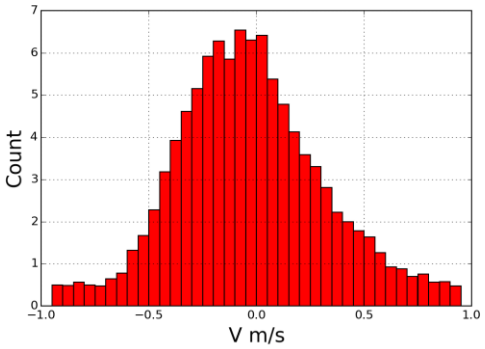

Figure A. 355: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

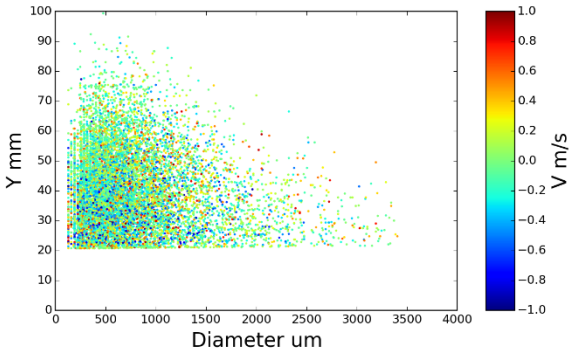

Figure A. 353: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.2.2 Matched Only Droplets for .LB Image

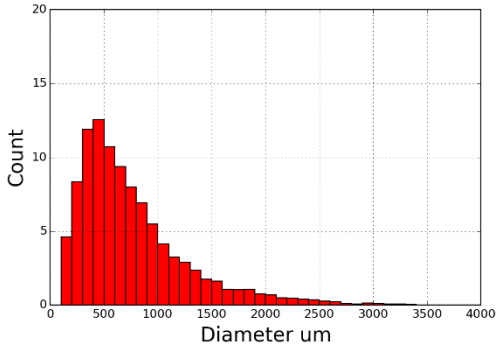

Figure A. 356: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

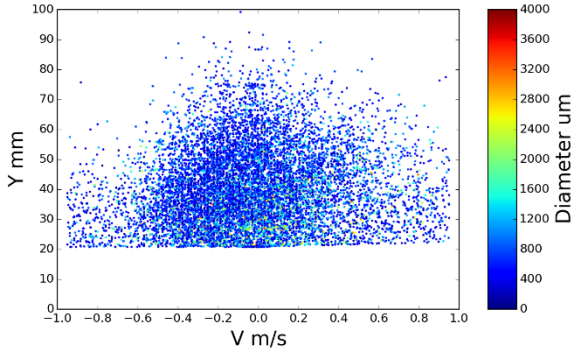

Figure A. 359: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

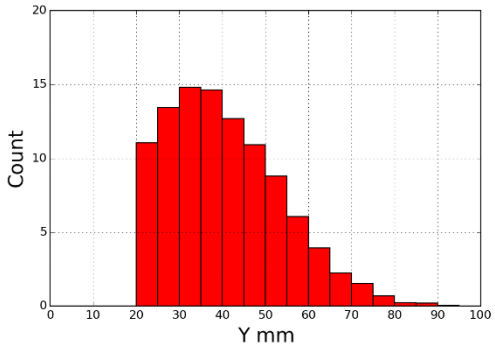

Figure A. 357: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

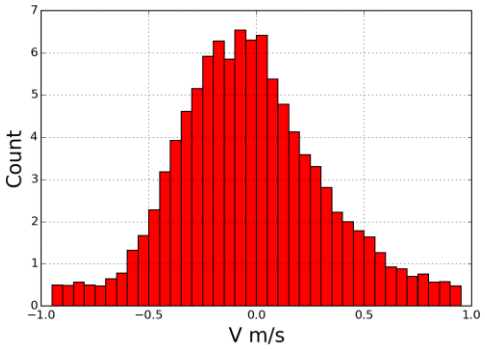

Figure A. 360: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

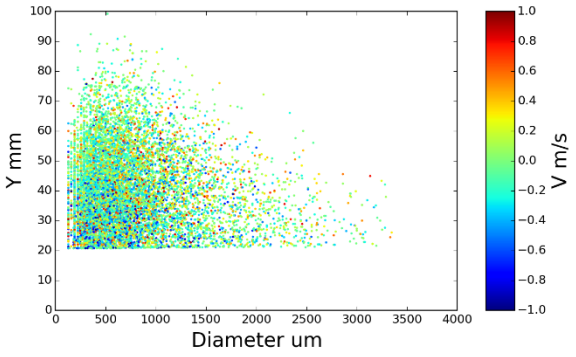

Figure A. 358: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	94.71	96.42	128.5	3406	707.6	559.0	128.5	3396	698.9	557.5
40-60mm	47.6	48.23	128.5	3396	618.5	441.4	128.5	3255	609.9	431.7
60-80mm	8.94	9.29	128.5	2593	590.1	364.2	128.5	2484	570.4	355.9
80-100mm	0.81	0.81	128.5	1185	435.2	240.8	128.5	1209	449.0	253.6
All	152.07	154.75	128.5	3406	671.3	515.9	128.5	3396	662.2	512.0
			Height A (mm)				Height B (mm)			
Highest Particle			100.1750				99.8618			
Lowest Particle			20.7298				20.7298			

Table A. 39: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	50.43	128.5	3369	832.9	588.0	128.5	3396	816.3	582.0	-0.950	0.950	-0.040	0.290	-0.950	0.950	-0.040	0.370
40-60mm	31.83	128.5	3396	702.4	448.0	128.5	3255	689.3	437.3	-0.940	0.950	-0.040	0.190	-0.950	0.950	-0.030	0.310
60-80mm	6.03	128.5	2593	676.9	372.9	128.5	2484	671.0	364.8	-0.940	0.540	-0.050	0.160	-0.930	0.940	-0.020	0.260
80-100mm	0.39	192.8	1185	578.6	240.8	222.6	1209	582.9	254.3	-0.330	0.350	0.000	0.120	-0.380	0.370	-0.000	0.170
All	88.68	128.5	3396	774.3	532.0	128.5	3396	760.1	524.5	-0.950	0.950	-0.040	0.250	-0.950	0.950	-0.040	0.340

Table A. 40: Matched Droplet Info

A.5.2.2 All Droplets for .LA Image

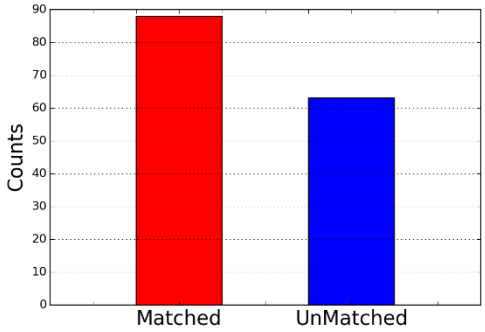

Figure A. 361: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

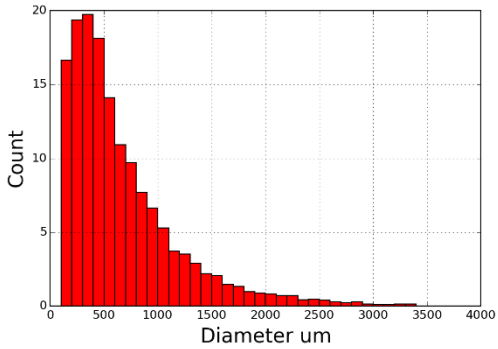

Figure A. 362: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

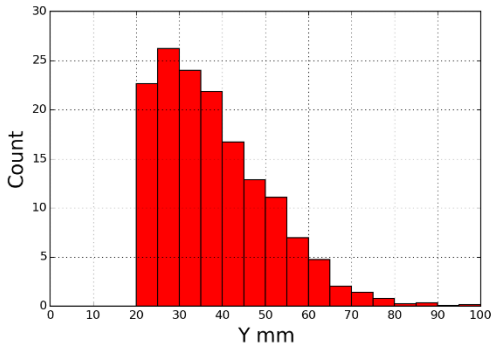

Figure A. 363: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

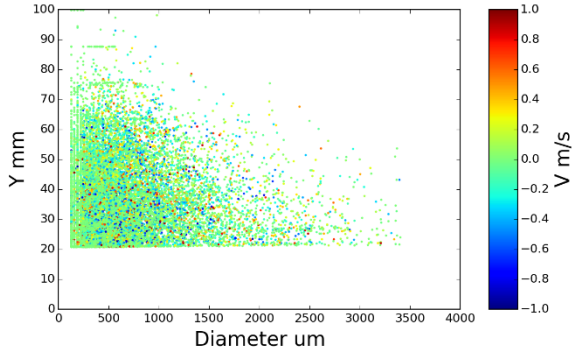

Figure A. 364: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

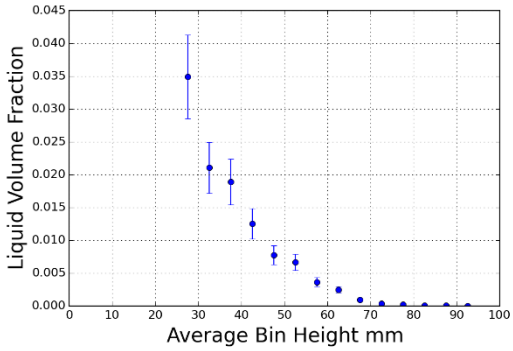

Figure A. 365: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.2.2 All Droplets for .LB Image

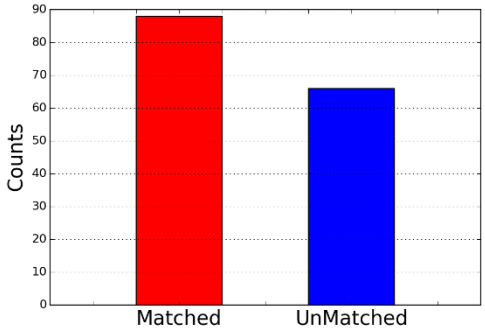

Figure A. 366: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

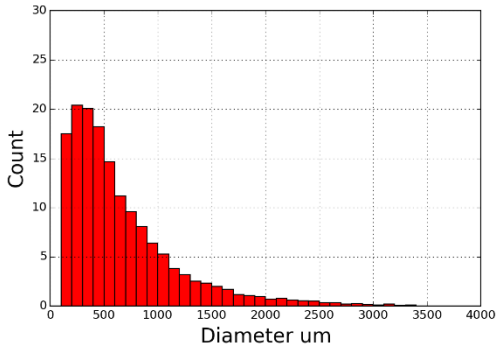

Figure A. 367: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

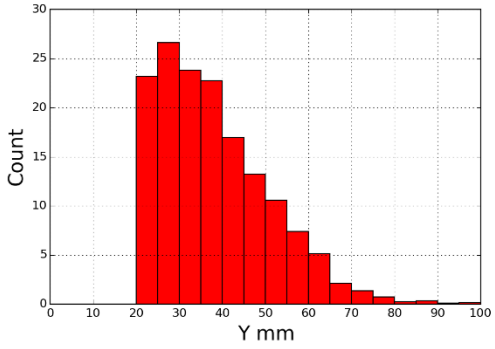

Figure A. 368: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

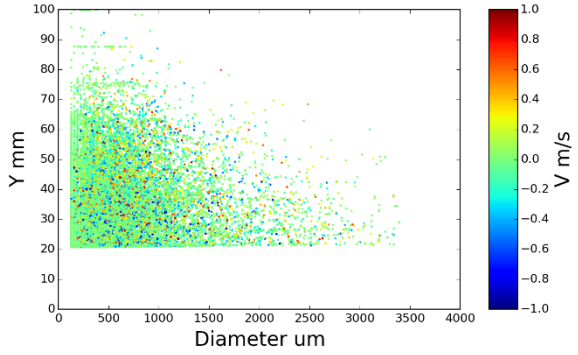

Figure A. 369: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

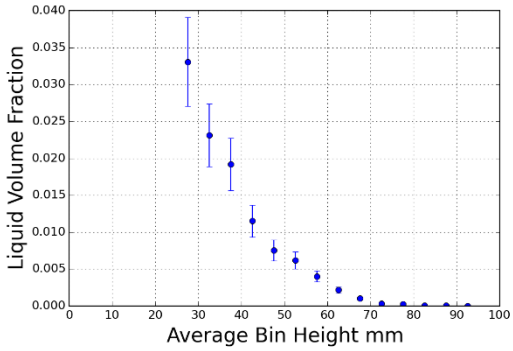

Figure A. 370: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.2.2 Matched Only Droplets for .LA Image

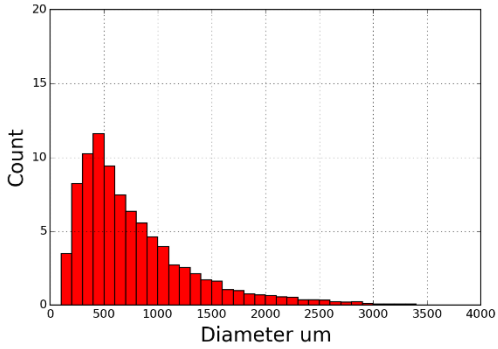

Figure A. 371: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

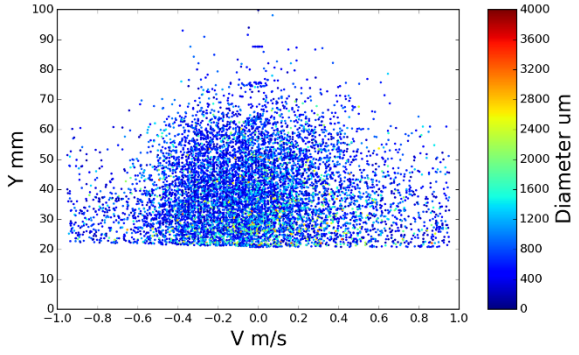

Figure A. 374: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

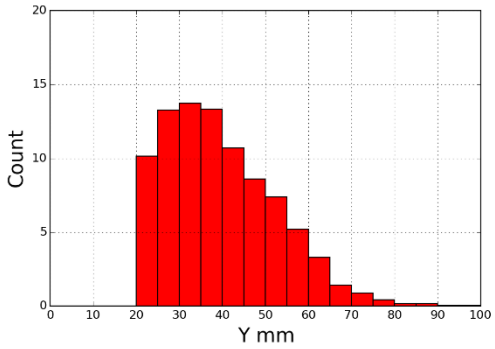

Figure A. 372: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

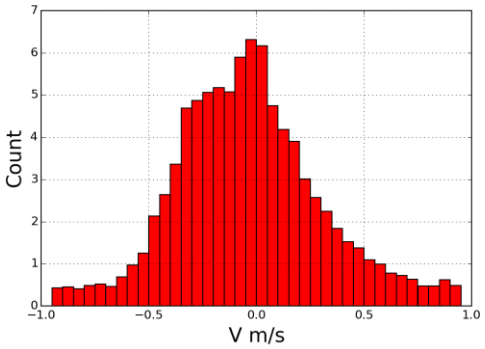

Figure A. 375: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

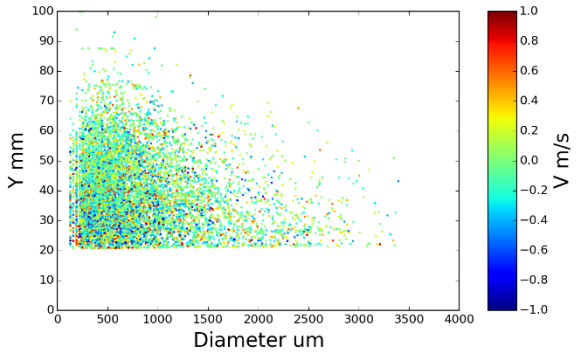

Figure A. 373: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.2.2 Matched Only Droplets for .LB Image

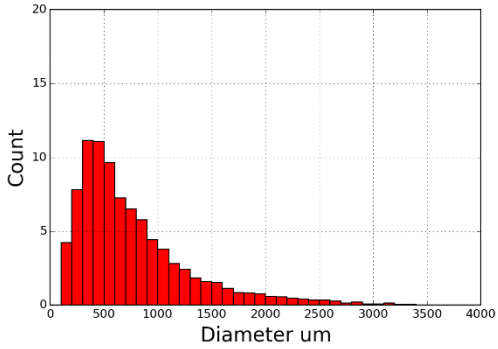

Figure A. 376: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

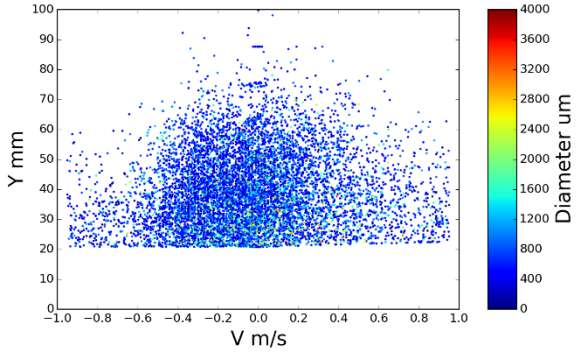

Figure A. 379: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

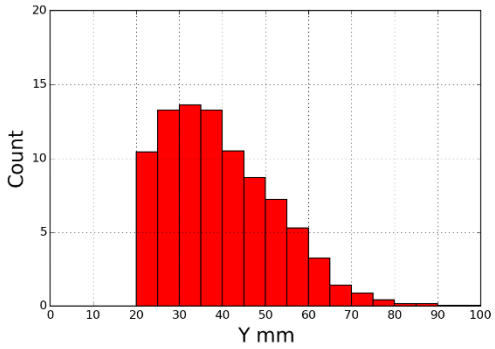

Figure A. 377: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

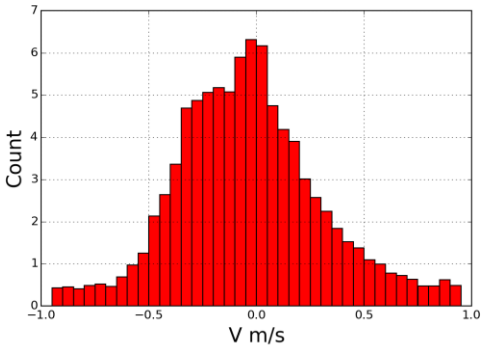

Figure A. 380: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

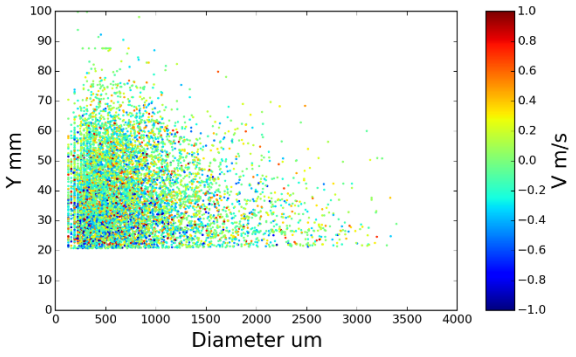

Figure A. 378: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	81.08	81.78	128.5	3392	698.6	584.1	128.5	3416	702.6	596.4
40-60mm	47.74	47.62	128.5	3402	599.4	445.2	128.5	3395	599.5	459.1
60-80mm	10.58	10.7	128.5	3051	552.8	364.4	128.5	2651	552.2	362.5
80-100mm	1.11	1.15	128.5	1427	452.7	236.0	128.5	1418	418.2	243.6
All	140.51	141.25	128.5	3402	652.0	527.1	128.5	3416	654.2	539.4
			Height A (mm)				Height B (mm)			
Highest Particle			99.5201				99.5201			
Lowest Particle			20.7298				20.7298			

Table A. 41: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	39.68	128.5	3392	848.2	638.6	128.5	3411	830.1	624.9	-0.950	0.950	-0.030	0.310	-0.950	0.950	0.000	0.380
40-60mm	29.6	128.5	3402	695.8	464.0	128.5	3253	684.4	464.5	-0.950	0.950	-0.040	0.220	-0.950	0.940	-0.010	0.320
60-80mm	6.85	128.5	2426	659.4	357.2	128.5	2651	646.6	357.8	-0.850	0.880	-0.030	0.150	-0.930	0.840	-0.010	0.240
80-100mm	0.59	203.2	1427	550.5	221.9	192.8	1418	529.0	231.0	-0.350	0.750	-0.020	0.140	-0.470	0.420	0.010	0.180
All	76.72	128.5	3402	770.2	559.0	128.5	3411	755.2	550.9	-0.950	0.950	-0.030	0.260	-0.950	0.950	-0.010	0.350

Table A. 42: Matched Droplet Info

A.5.2.2 All Droplets for .LA Image

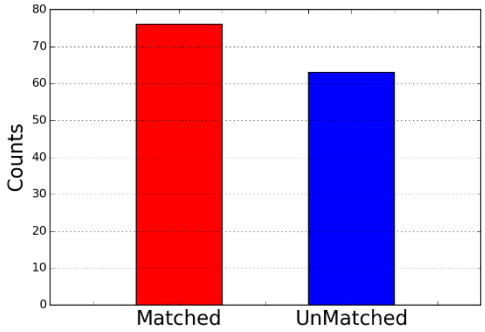

Figure A. 381: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

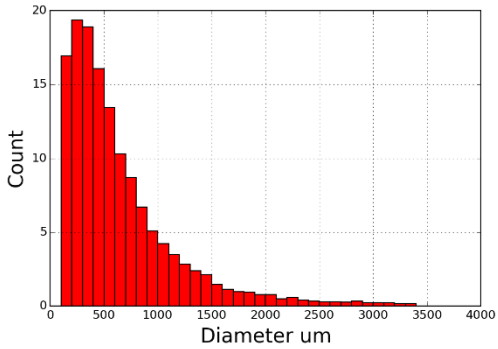

Figure A. 382: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

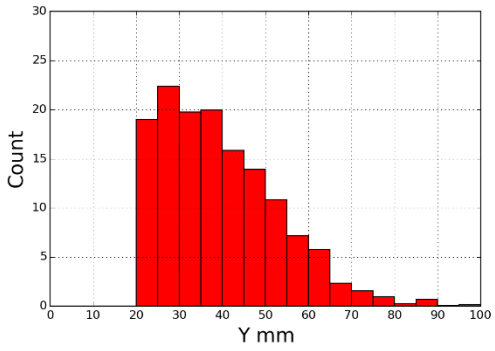

Figure A. 383: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

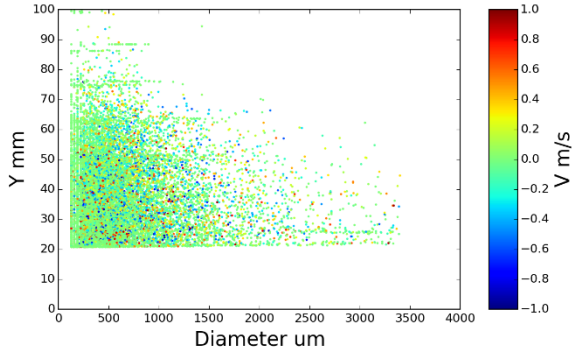

Figure A. 384: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

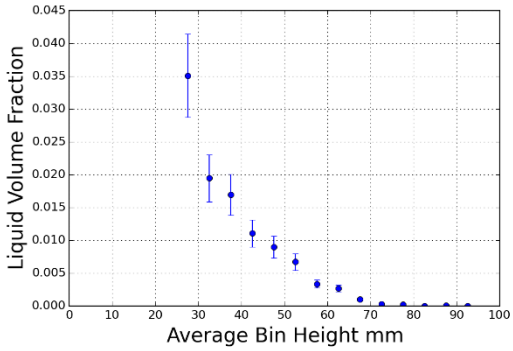

Figure A. 385: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.2.2 All Droplets for .LB Image

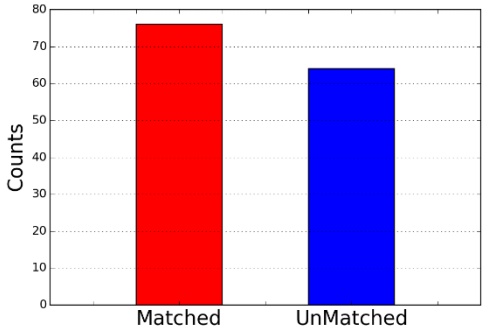

Figure A. 386: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

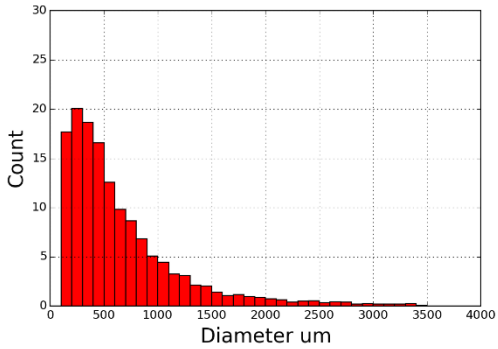

Figure A. 387: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

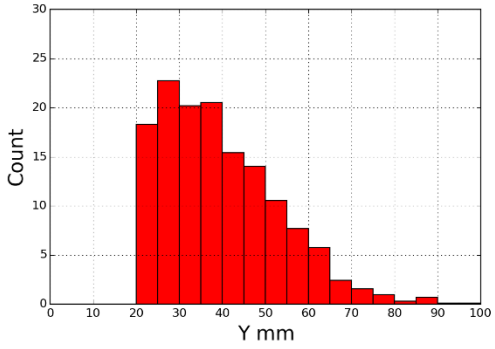

Figure A. 388: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

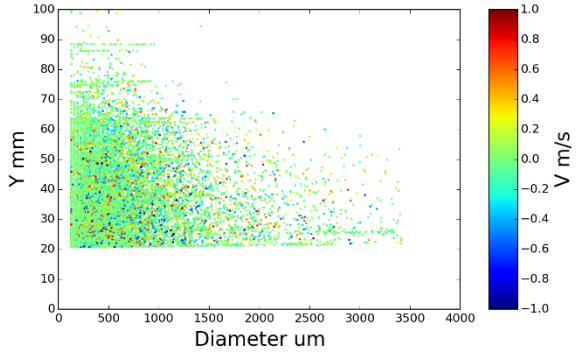

Figure A. 389: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

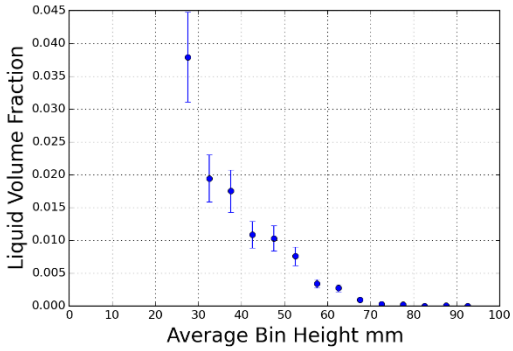

Figure A. 390: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.2.2 Matched Only Droplets for .LA Image

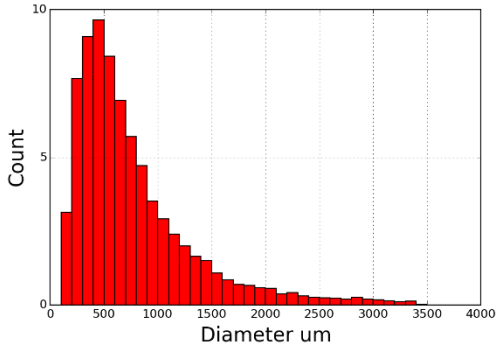

Figure A. 391: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

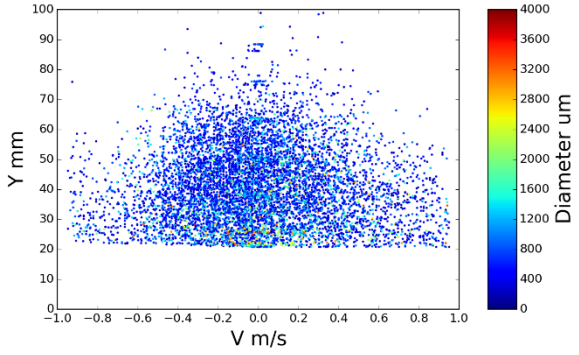

Figure A. 394: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

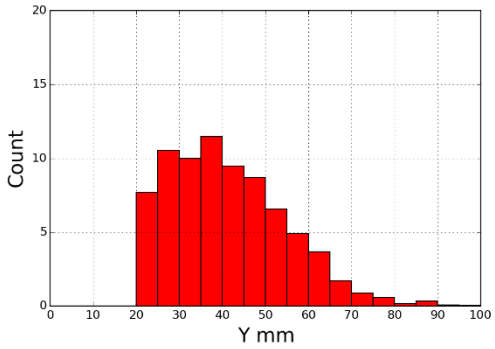

Figure A. 392: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

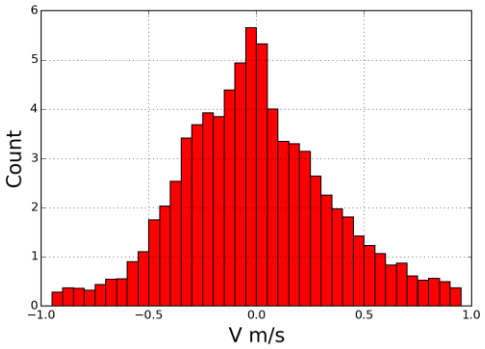

Figure A. 395: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

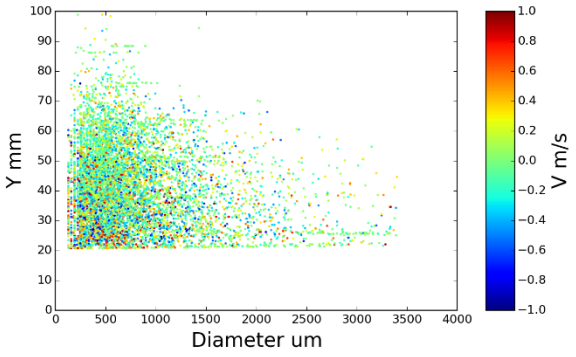

Figure A. 393: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.2.2 Matched Only Droplets for .LB Image

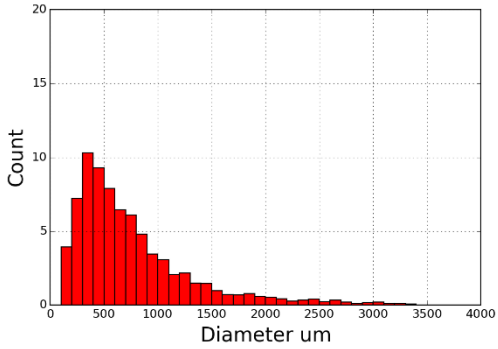

Figure A. 396: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

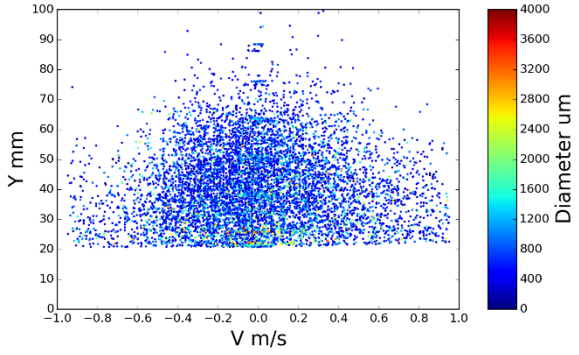

Figure A. 399: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

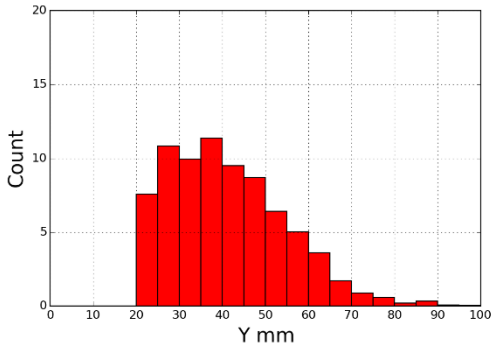

Figure A. 397: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

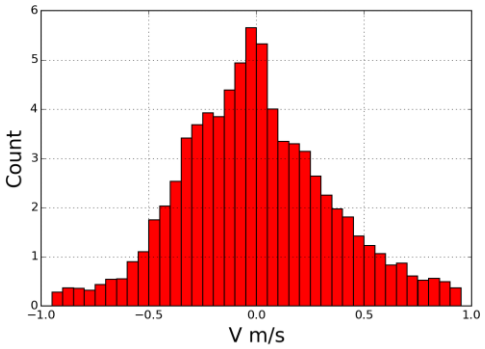

Figure A. 400: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

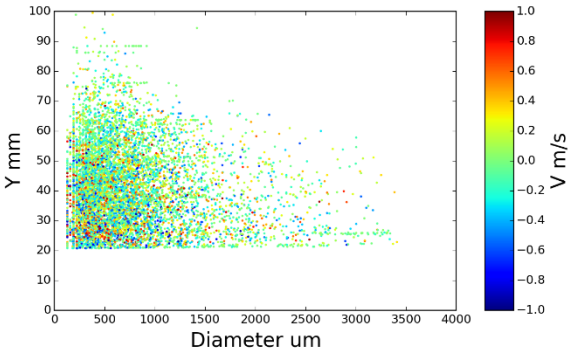

Figure A. 398: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.3 Liquid Level 3

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	18543 / 2.336
Ref Mass Flow (lb/hr) / (kg/s)	1642 / 0.207
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15252 / 20.685
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4718 / 14.88
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.2 / 12.87
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	55.3 / 12.96
Total Bundle Q (Btu/hr) / (kW)	110074 / 32.26
Total Bundle & Preboiler Q (Btu/hr) / (kW)	147373 / 43.19
Top Two Rows HTC Ratio	0.989
Bundle Inlet Quality	0.15
Bundle Exit Quality	0.98

Table A. 43: Thermal Conditions

A.5.3.1 Lens 100mm Mag 0_29x

A.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	20.78	21.4	57.1	1912	260.2	260.7	57.1	1882	256.0	259.0
40-60mm	18.18	18.35	57.1	1517	175.8	186.3	57.1	1469	174.4	185.8
60-80mm	4.87	4.87	57.1	659.1	109.2	64.7	57.1	797.8	108.0	65.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	43.83	44.62	57.1	1912	208.4	223.4	57.1	1882	206.3	222.4
			Height A (mm)				Height B (mm)			
Highest Particle			75.7229				75.8874			
Lowest Particle			27.9312				27.9312			

Table A. 44: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	14.84	57.1	1912	306.6	276.2	57.1	1882	307.5	279.1	-0.840	0.930	-0.010	0.120	-0.800	0.950	0.050	0.230
40-60mm	11.91	57.1	1517	214.6	211.4	57.1	1469	212.2	211.4	-0.690	0.870	-0.010	0.100	-0.760	0.910	0.040	0.160
60-80mm	2.97	57.1	659.1	125.9	74.4	57.1	797.8	122.1	76.2	-0.370	0.280	-0.020	0.060	-0.470	0.550	0.010	0.100
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	29.72	57.1	1912	251.7	245.4	57.1	1882	250.6	247.3	-0.840	0.930	-0.010	0.110	-0.800	0.950	0.040	0.190

Table A. 45: Matched Droplet Info

A.5.3.1 All Droplets for .LA Image

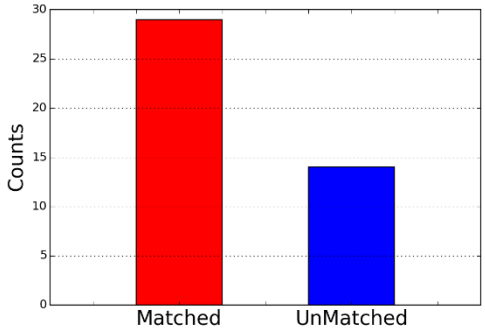

Figure A. 401: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

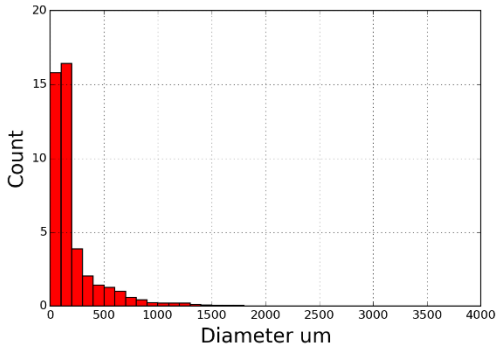

Figure A. 402: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

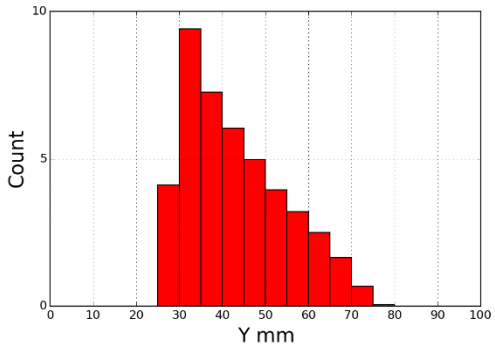

Figure A. 403: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

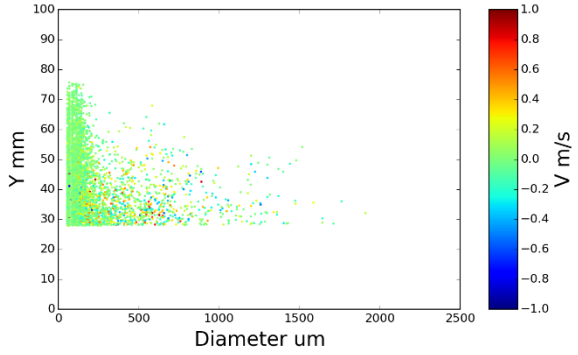

Figure A. 404: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

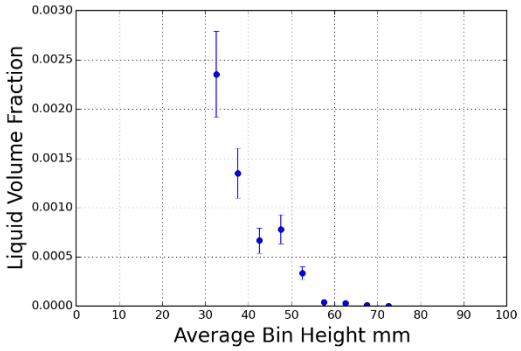

Figure A. 405: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.1 All Droplets for .LB Image

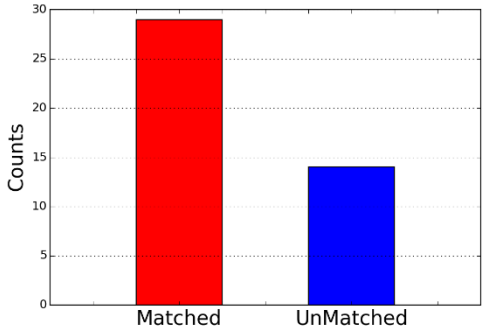

Figure A. 406: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

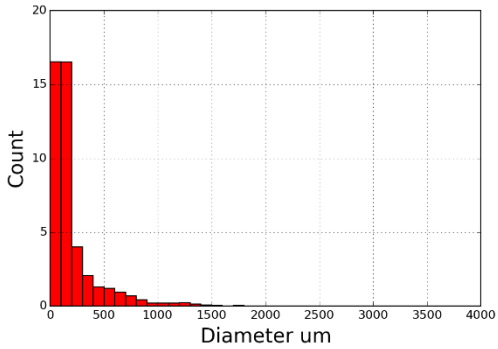

Figure A. 407: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

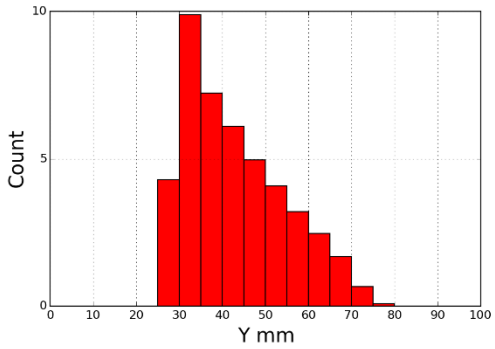

Figure A. 408: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

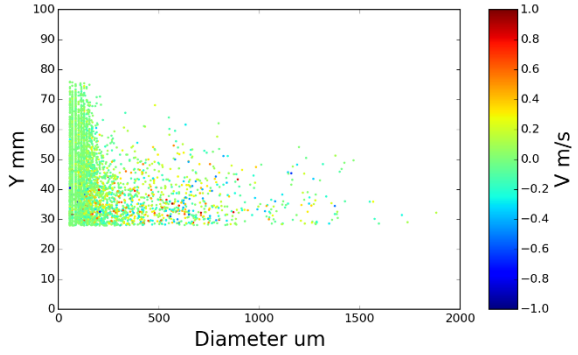

Figure A. 409: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

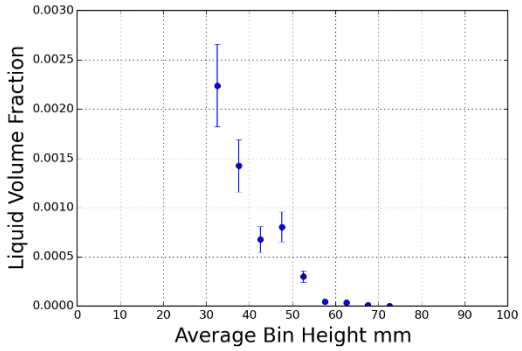

Figure A. 410: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.1 Matched Only Droplets for .LA Image

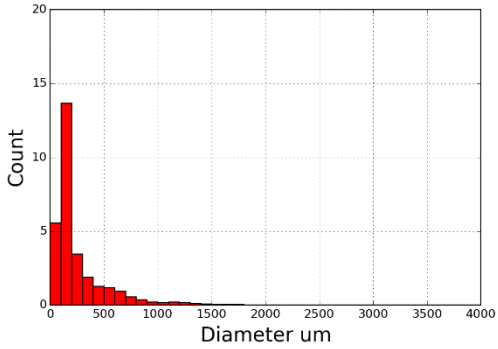

Figure A. 411: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

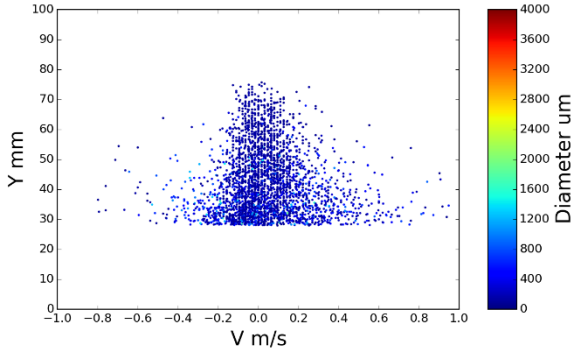

Figure A. 414: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

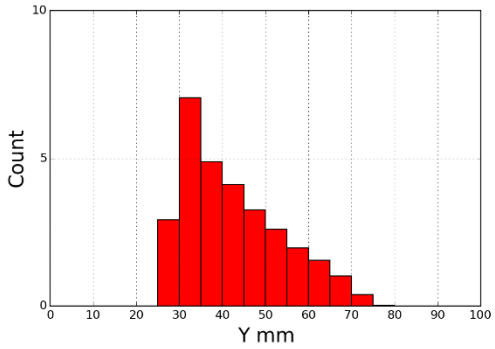

Figure A. 412: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

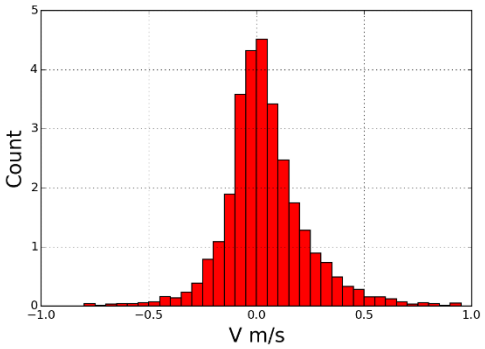

Figure A. 415: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

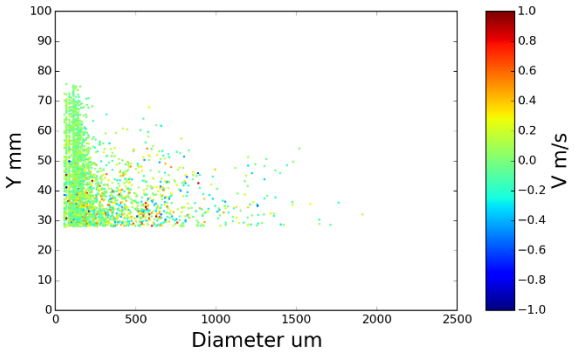

Figure A. 413: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.3.1 Matched Only Droplets for .LB Image

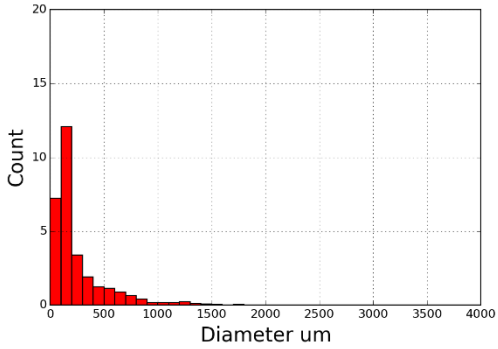

Figure A. 416: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

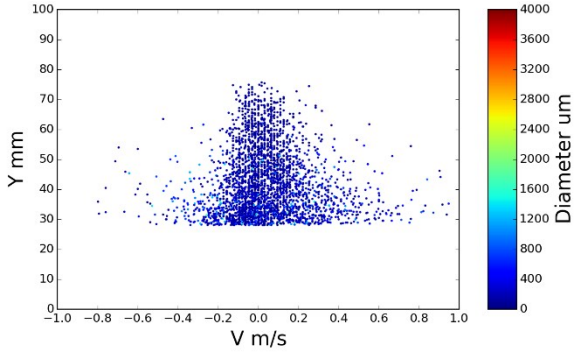

Figure A. 419: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

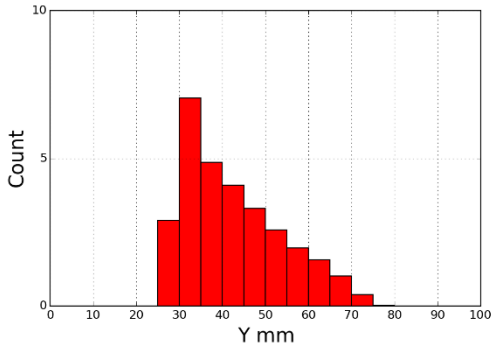

Figure A. 417: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

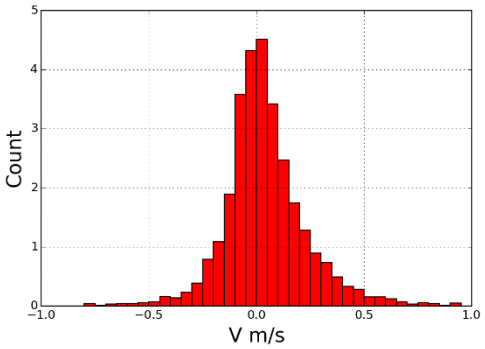

Figure A. 420: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

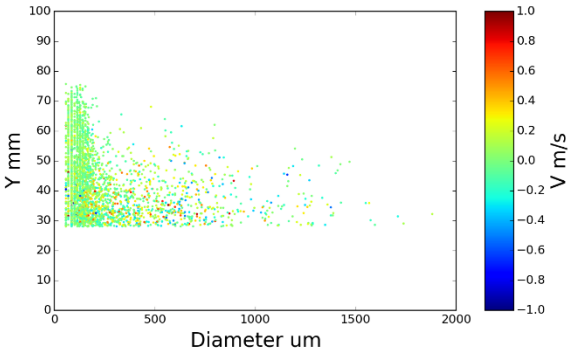

Figure A. 418: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	6.77	6.96	57.1	1421	200.0	198.4	57.1	1372	197.3	190.4
40-60mm	7.51	8.1	57.1	1322	114.1	108.8	57.1	1303	114.0	110.1
60-80mm	2.13	2.17	57.1	193.6	89.8	24.9	57.1	178.3	90.5	23.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	16.41	17.23	57.1	1421	146.4	154.3	57.1	1372	144.7	149.5
			Height A (mm)				Height B (mm)			
Highest Particle			75.7735				75.4193			
Lowest Particle			27.9439				27.9439			

Table A. 46: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	4.31	57.1	1421	251.4	215.6	57.1	1372	248.1	217.3	-0.730	0.590	-0.020	0.100	-0.850	0.850	-0.020	0.180
40-60mm	4.08	57.1	1322	139.7	140.1	57.1	1303	141.5	147.6	-0.950	0.870	-0.040	0.110	-0.650	0.510	-0.010	0.120
60-80mm	0.86	57.1	193.6	104.0	26.3	57.1	153.7	99.5	24.6	-0.210	0.070	-0.050	0.050	-0.170	0.220	0.010	0.080
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	9.25	57.1	1421	188.4	184.2	57.1	1372	186.9	186.9	-0.950	0.870	-0.030	0.100	-0.850	0.850	-0.010	0.150

Table A. 47: Matched Droplet Info

A.5.3.1 All Droplets for .LA Image

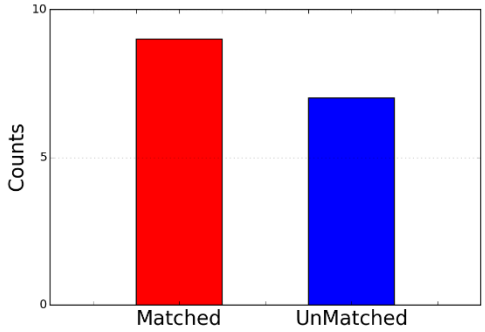

Figure A. 421: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

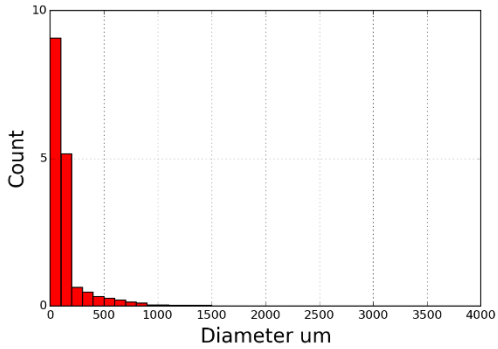

Figure A. 422: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

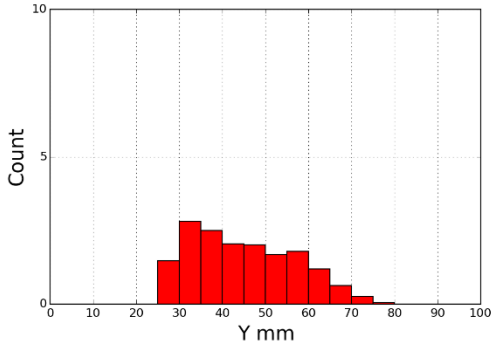

Figure A. 423: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

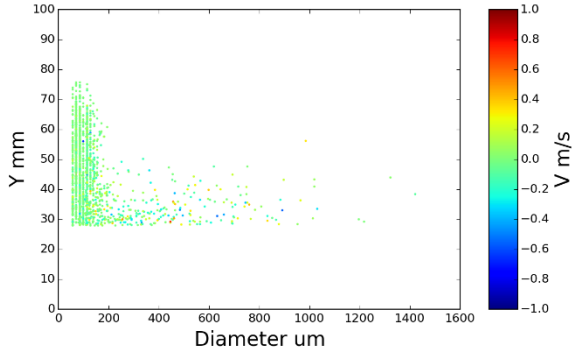

Figure A. 424: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

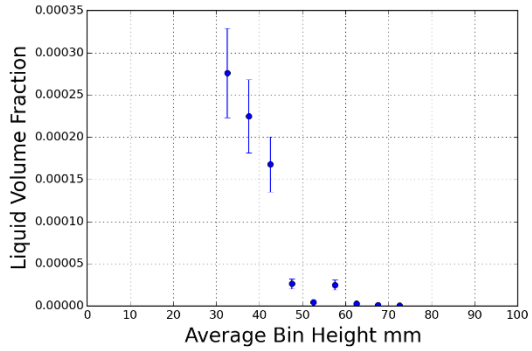

Figure A. 425: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.1 All Droplets for .LB Image

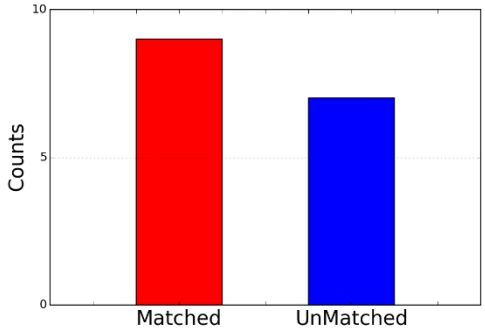

Figure A. 426: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

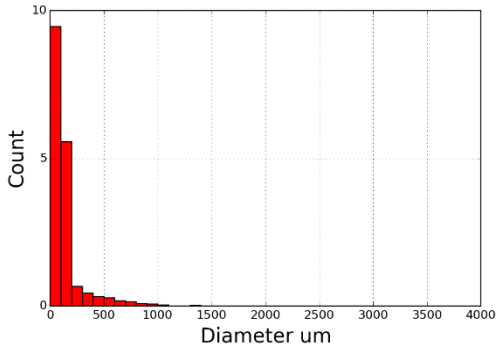

Figure A. 427: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

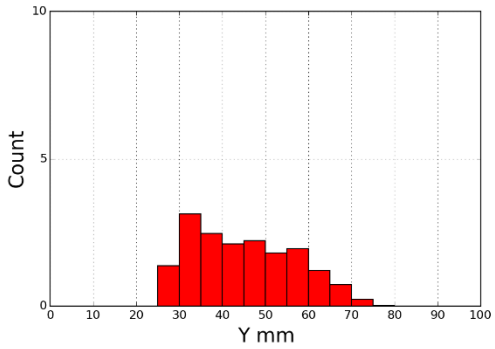

Figure A. 428: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

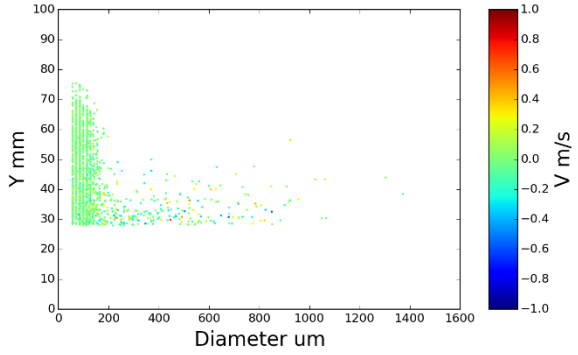

Figure A. 429: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

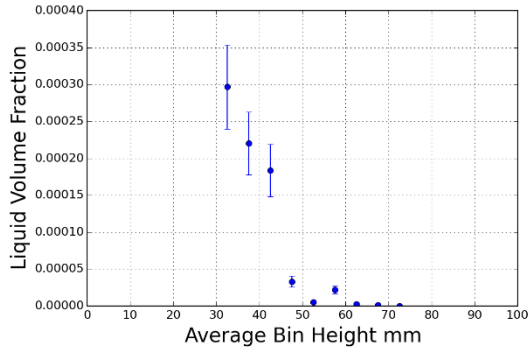

Figure A. 430: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.1 Matched Only Droplets for .LA Image

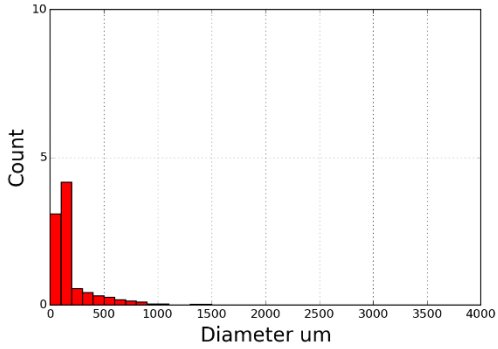

Figure A. 431: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

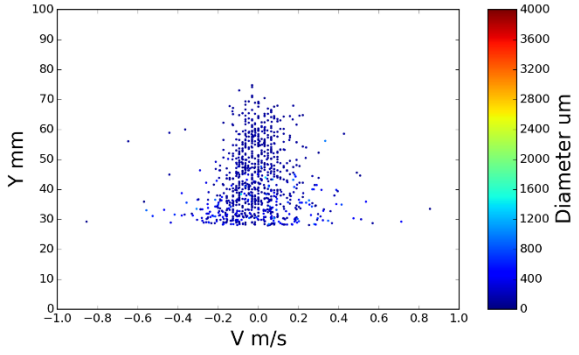

Figure A. 434: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

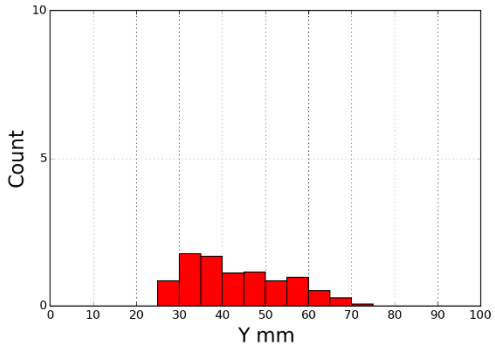

Figure A. 432: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

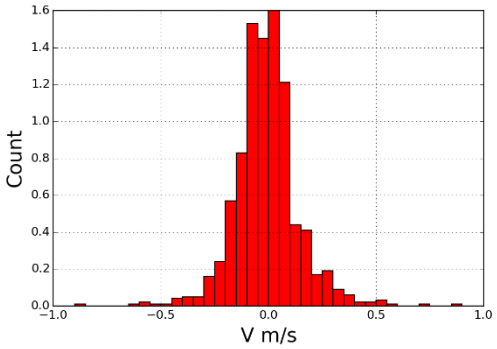

Figure A. 435: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

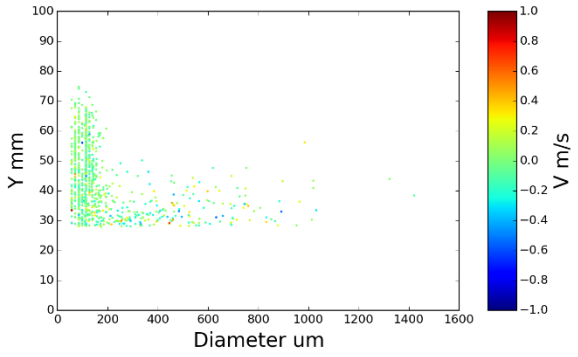

Figure A. 433: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.3.1 Matched Only Droplets for .LB Image

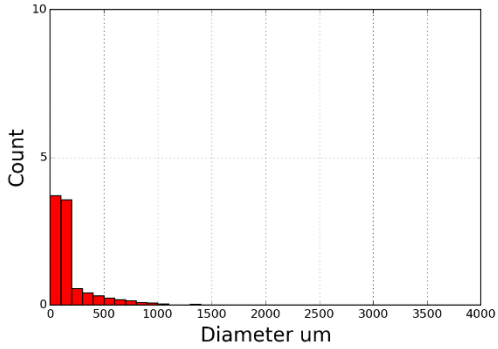

Figure A. 436: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

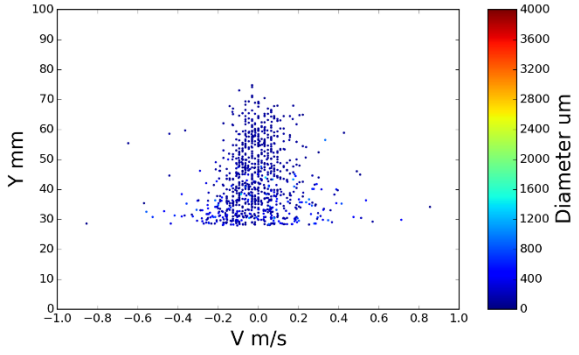

Figure A. 439: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

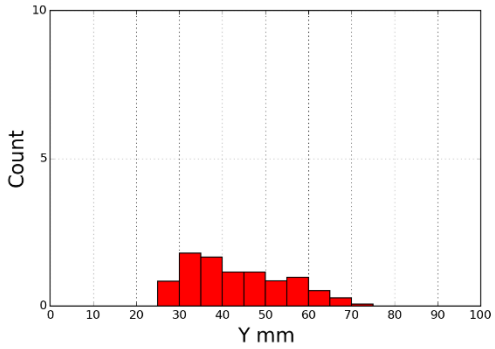

Figure A. 437: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

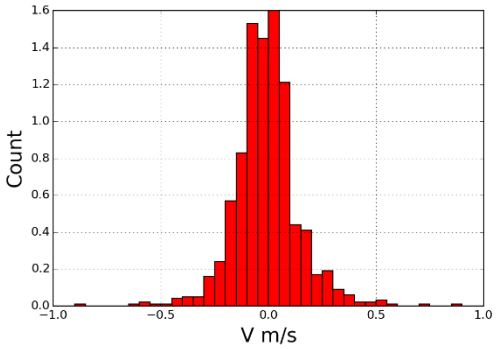

Figure A. 440: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

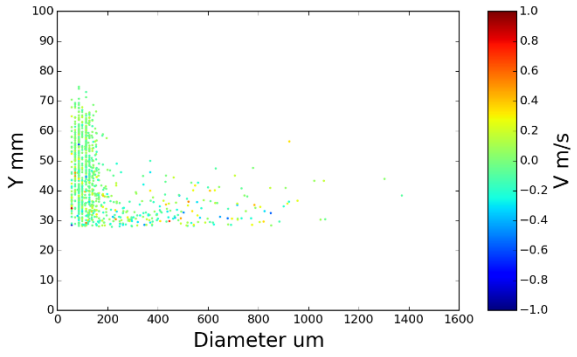

Figure A. 438: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	6.1	6.64	57.1	1982	287.0	297.0	57.1	2030	273.1	288.9
40-60mm	5.47	5.86	57.1	1395	132.4	146.0	57.1	1407	128.3	140.4
60-80mm	1.48	1.4	57.1	139.9	83.4	20.1	57.1	139.9	83.9	19.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	13.05	13.9	57.1	1982	199.1	239.2	57.1	2030	193.0	232.9
			Height A (mm)				Height B (mm)			
Highest Particle			75.2169				75.7356			
Lowest Particle			27.9439				27.9565			

Table A. 48: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	3.88	57.1	1982	376.3	325.6	57.1	2030	375.1	319.8	-0.910	0.480	-0.040	0.130	-0.900	0.820	-0.020	0.210
40-60mm	2.78	57.1	1395	161.2	173.4	57.1	1034	155.5	160.2	-0.950	0.760	-0.050	0.140	-0.760	0.630	-0.040	0.140
60-80mm	0.66	57.1	139.9	91.5	20.9	57.1	139.9	88.4	20.3	-0.160	0.090	-0.050	0.050	-0.190	0.220	-0.050	0.070
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	7.32	57.1	1982	268.9	284.6	57.1	2030	266.2	279.1	-0.950	0.760	-0.040	0.130	-0.900	0.820	-0.030	0.180

Table A. 49: Matched Droplet Info

A.5.3.1 All Droplets for .LA Image

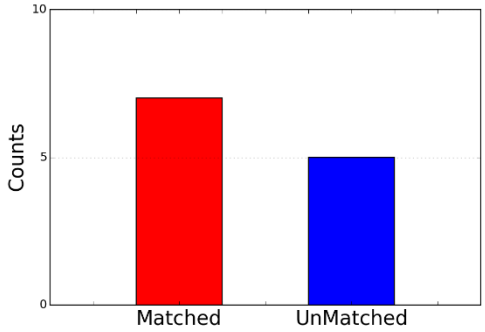

Figure A. 441: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

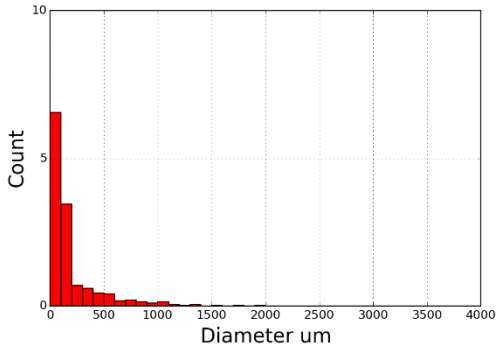

Figure A. 442: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

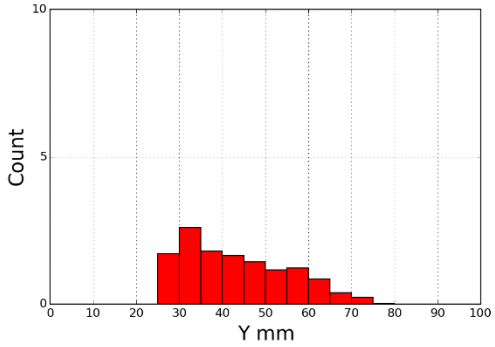

Figure A. 443: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

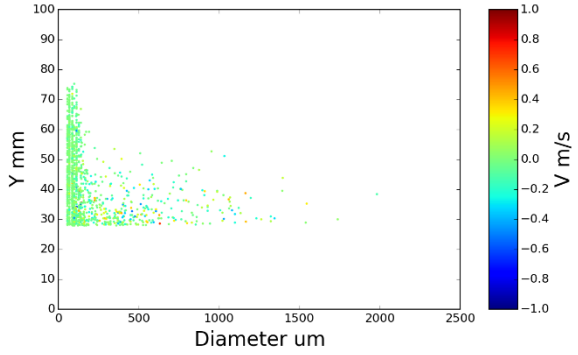

Figure A. 444: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

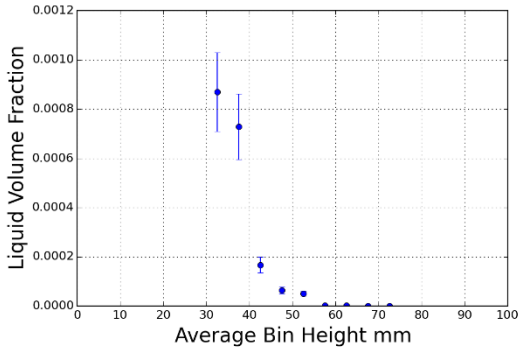

Figure A. 445: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.1 All Droplets for .LB Image

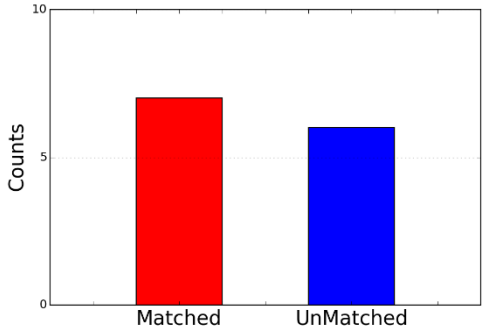

Figure A. 446: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

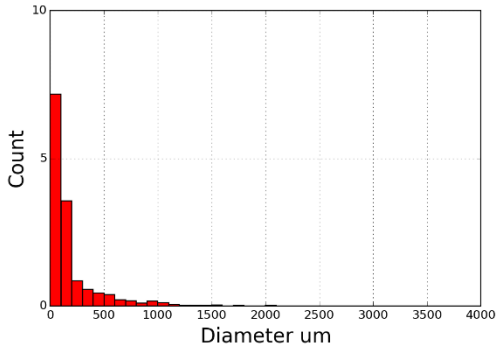

Figure A. 447: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

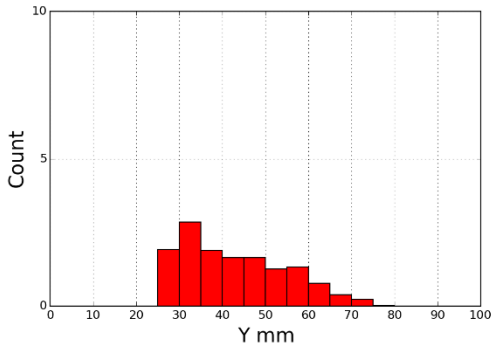

Figure A. 448: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

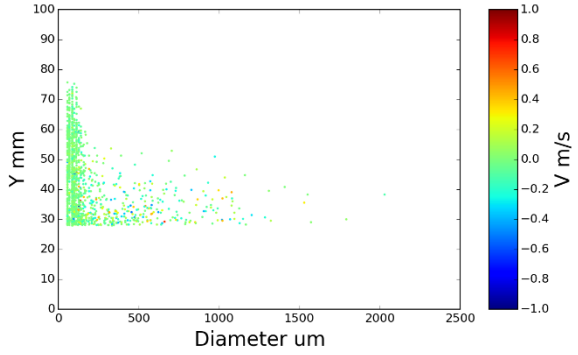

Figure A. 449: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

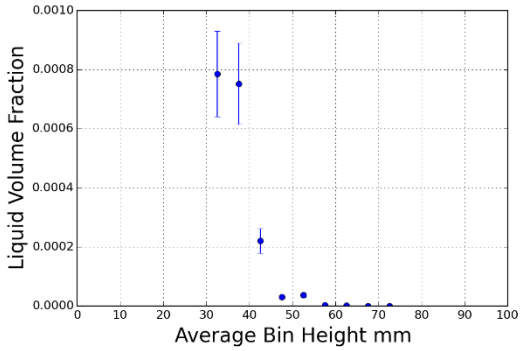

Figure A. 450: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.1 Matched Only Droplets for .LA Image

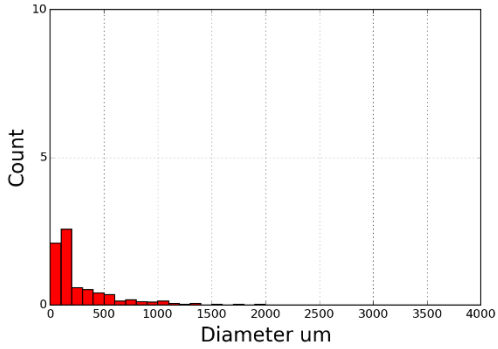

Figure A. 451: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

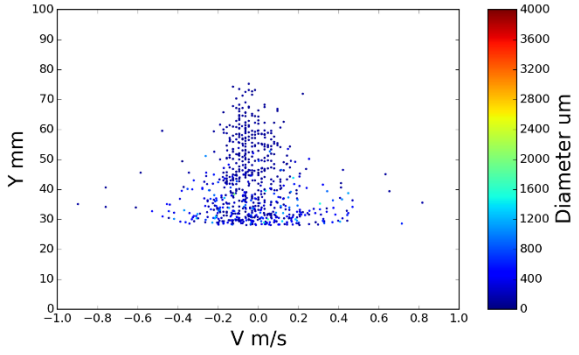

Figure A. 454: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

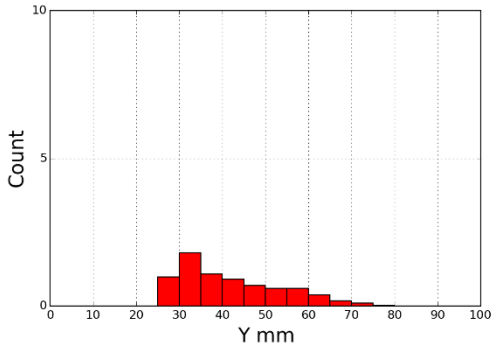

Figure A. 452: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

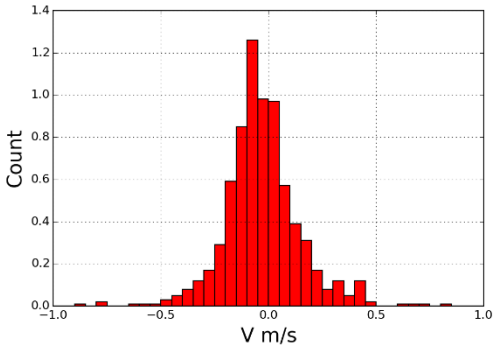

Figure A. 455: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

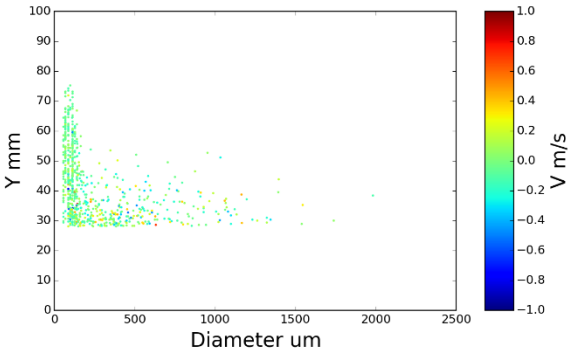

Figure A. 453: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.3.1 Matched Only Droplets for .LB Image

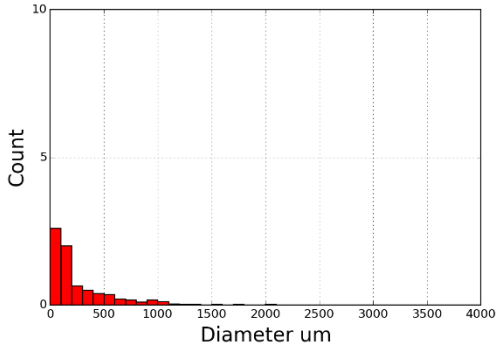

Figure A. 456: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

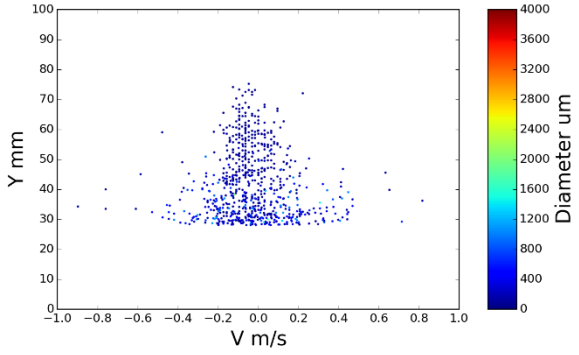

Figure A. 459: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

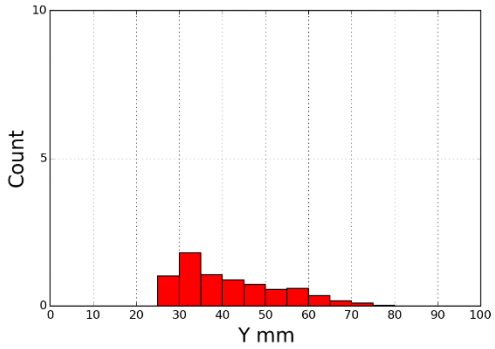

Figure A. 457: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

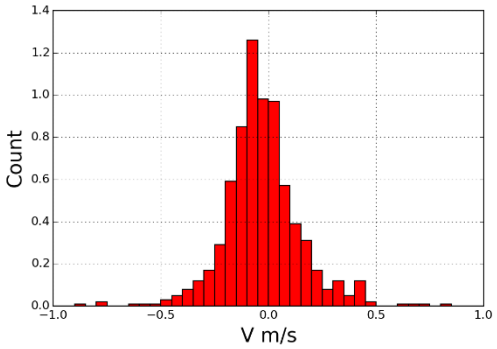

Figure A. 460: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

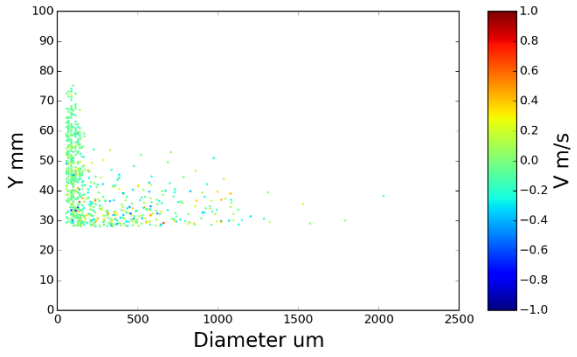

Figure A. 458: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	10.68	12.0	57.1	1947	284.3	259.7	57.1	1858	271.4	261.2
40-60mm	9.0	10.03	57.1	1490	182.0	202.4	57.1	1658	172.8	196.3
60-80mm	2.57	2.71	57.1	926.8	98.6	74.2	57.1	675.6	94.2	49.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	22.25	24.74	57.1	1947	221.5	232.0	57.1	1858	212.0	229.9
			Height A (mm)				Height B (mm)			
Highest Particle			75.7229				75.7608			
Lowest Particle			27.9439				27.9312			

Table A. 50: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	6.86	57.1	1947	348.4	278.4	57.1	1858	350.0	282.6	-0.870	0.890	-0.070	0.120	-0.760	0.820	-0.020	0.230
40-60mm	4.9	57.1	1490	242.4	238.6	57.1	1475	240.0	240.2	-0.920	0.810	-0.060	0.120	-0.920	0.720	-0.040	0.170
60-80mm	1.29	57.1	646.6	108.3	61.6	57.1	675.6	105.8	64.1	-0.360	0.050	-0.070	0.060	-0.190	0.700	-0.040	0.110
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	13.05	57.1	1947	284.8	261.5	57.1	1858	284.6	265.0	-0.920	0.890	-0.070	0.120	-0.920	0.820	-0.030	0.200

Table A. 51: Matched Droplet Info

A.5.3.1 All Droplets for .LA Image

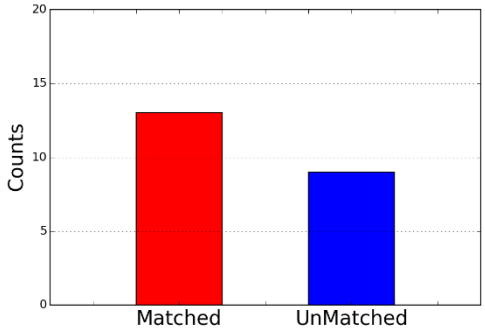

Figure A. 461: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

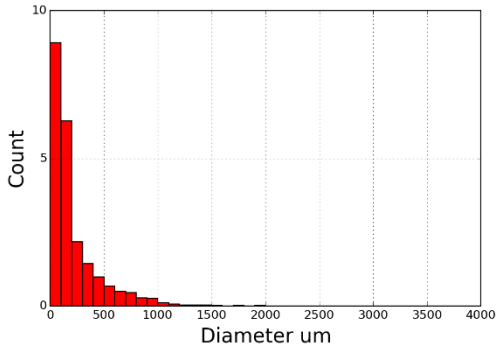

Figure A. 462: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

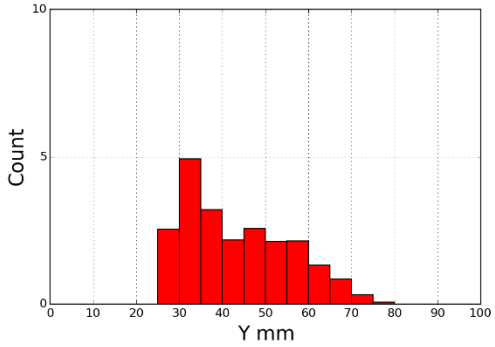

Figure A. 463: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

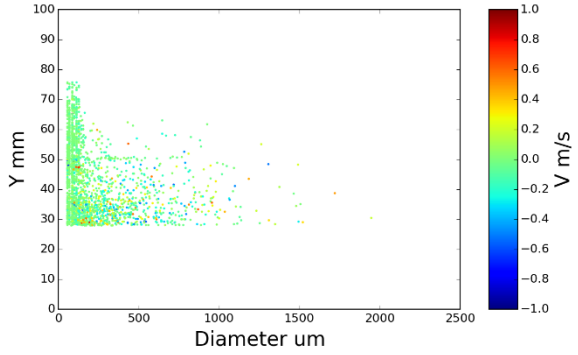

Figure A. 464: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

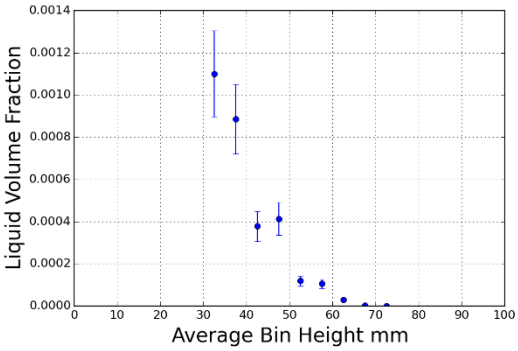

Figure A. 465: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.1 All Droplets for .LB Image

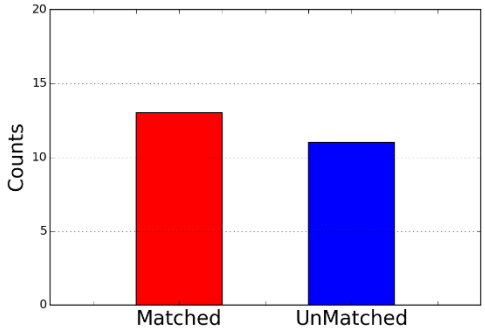

Figure A. 466: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

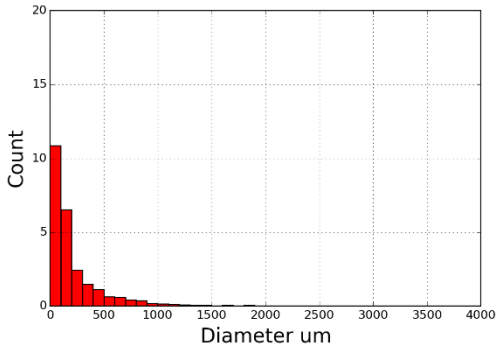

Figure A. 467: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

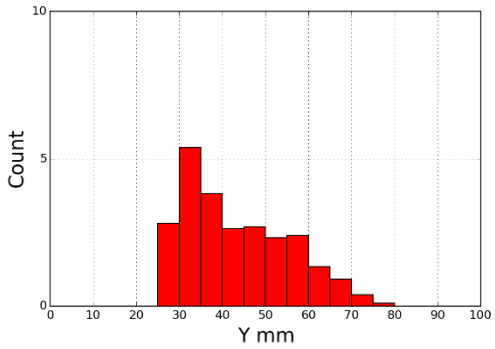

Figure A. 468: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

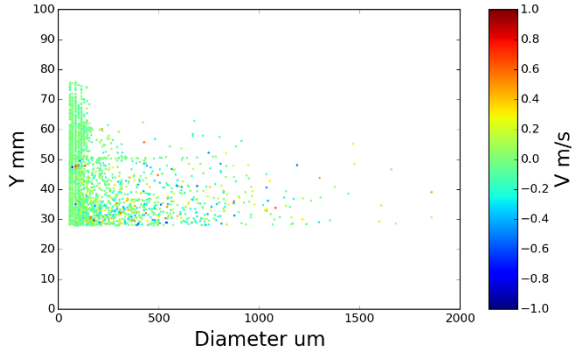

Figure A. 469: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

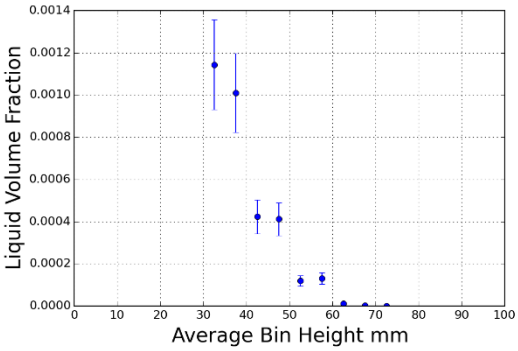

Figure A. 470: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.1 Matched Only Droplets for .LA Image

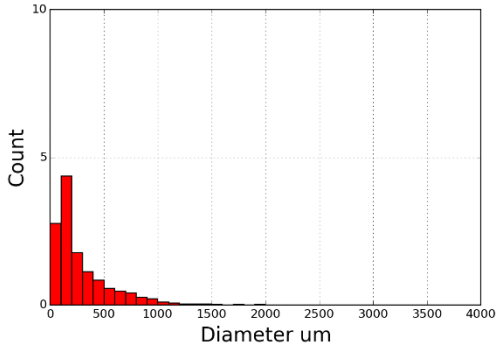

Figure A. 471: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

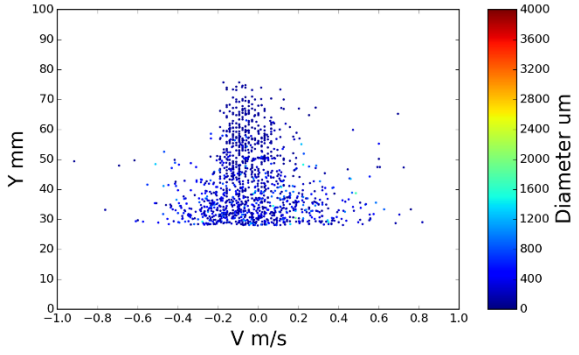

Figure A. 474: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

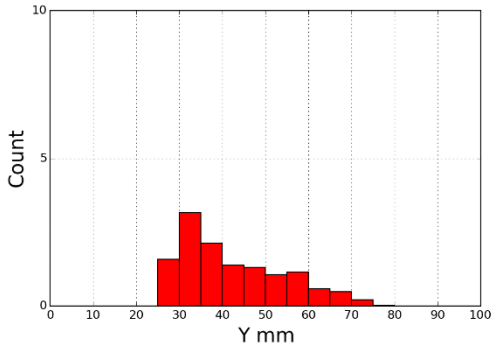

Figure A. 472: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

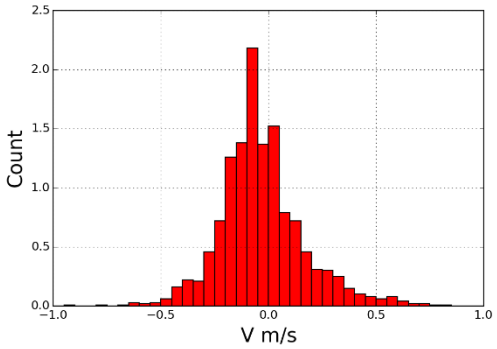

Figure A. 475: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

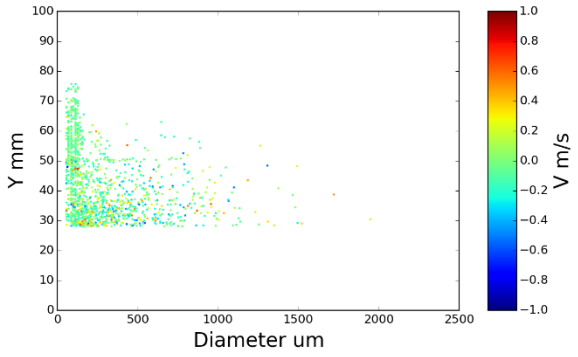

Figure A. 473: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.3.1 Matched Only Droplets for .LB Image

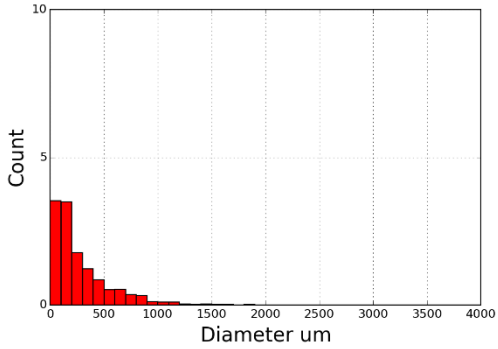

Figure A. 476: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

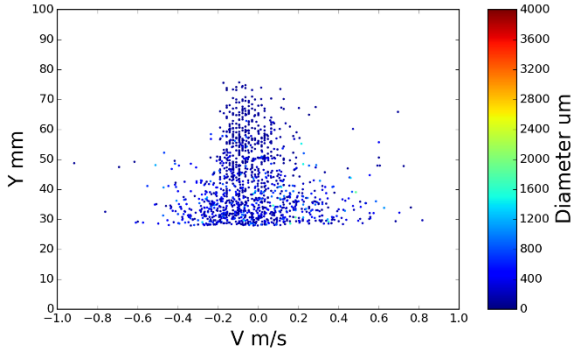

Figure A. 479: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

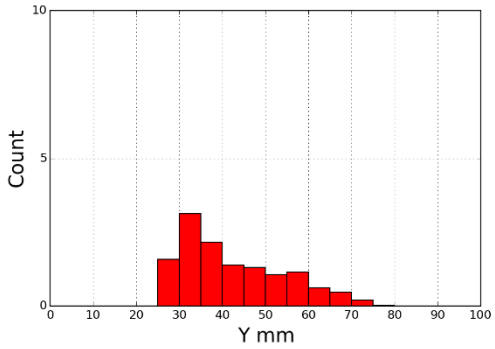

Figure A. 477: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

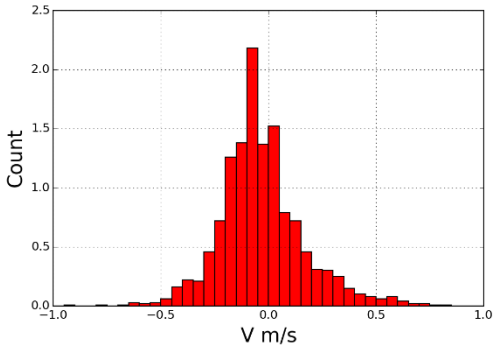

Figure A. 480: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

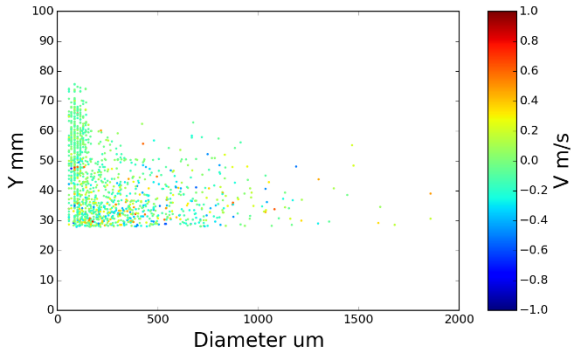

Figure A. 478: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	12.42	13.04	57.1	1593	299.6	263.4	57.1	1659	289.7	258.1
40-60mm	12.53	12.02	57.1	2064	189.8	218.3	57.1	1758	191.6	217.6
60-80mm	3.35	3.21	57.1	950.7	105.1	82.3	57.1	907.7	100.4	81.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	28.3	28.27	57.1	2064	228.0	238.8	57.1	1758	226.5	236.1
			Height A (mm)				Height B (mm)			
Highest Particle			75.5584				75.6065			
Lowest Particle			27.9312				27.9312			

Table A. 52: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	7.94	57.1	1593	370.9	276.0	57.1	1659	368.1	274.3	-0.820	0.820	-0.080	0.140	-0.910	0.860	0.030	0.270
40-60mm	6.61	57.1	2064	269.2	268.9	57.1	1758	262.4	259.9	-0.870	0.470	-0.080	0.110	-0.820	0.830	0.000	0.200
60-80mm	1.5	57.1	950.7	125.0	113.8	57.1	907.7	122.2	113.2	-0.550	0.130	-0.070	0.070	-0.450	0.530	-0.020	0.100
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	16.05	57.1	2064	306.0	272.7	57.1	1758	301.8	268.5	-0.870	0.820	-0.080	0.120	-0.910	0.860	0.010	0.230

Table A. 53: Matched Droplet Info

A.5.3.1 All Droplets for .LA Image

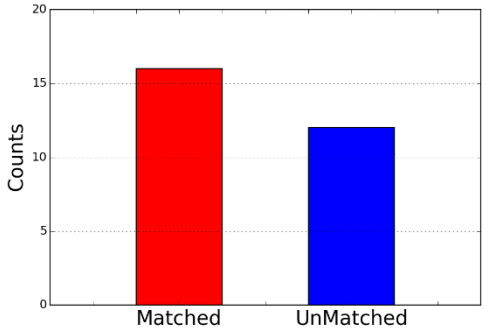

Figure A. 481: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

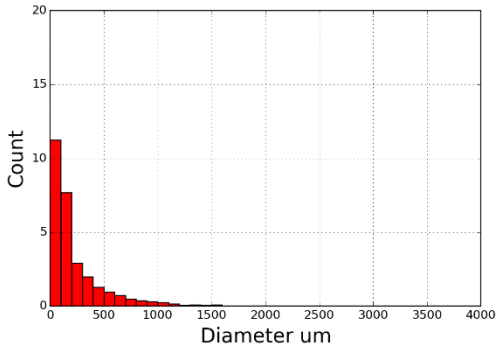

Figure A. 482: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

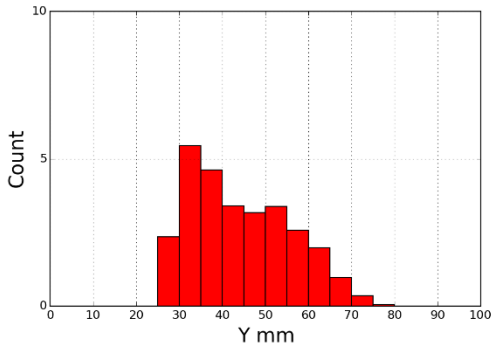

Figure A. 483: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

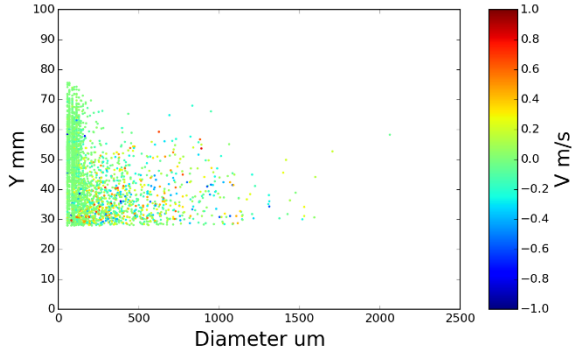

Figure A. 484: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

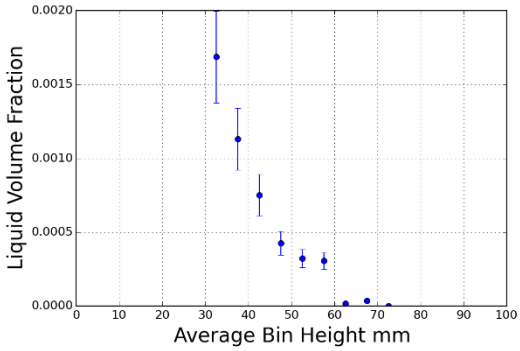

Figure A. 485: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.1 All Droplets for .LB Image

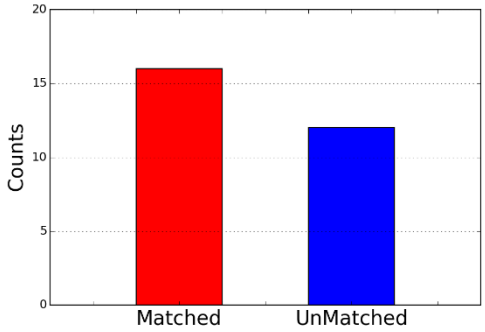

Figure A. 486: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

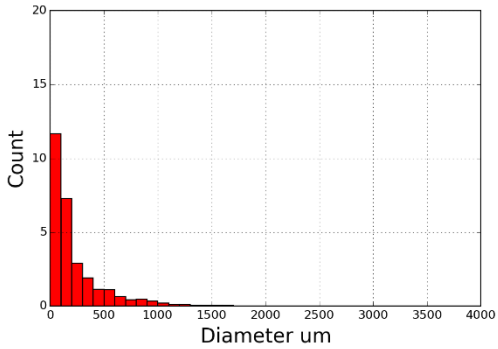

Figure A. 487: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

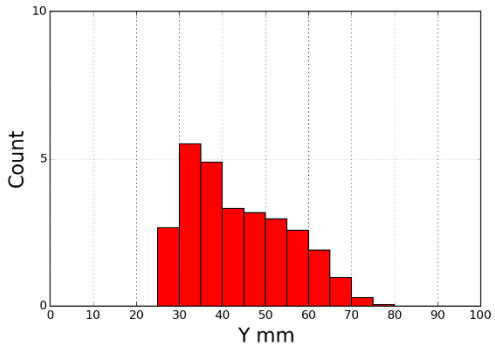

Figure A. 488: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

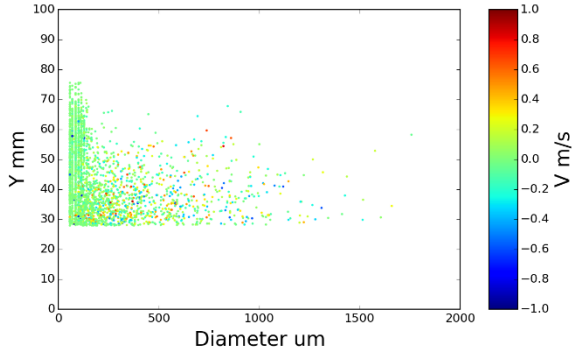

Figure A. 489: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

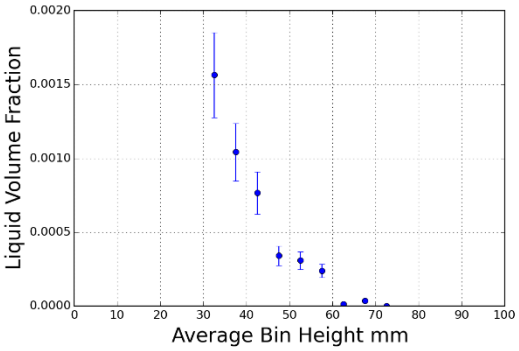

Figure A. 490: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.1 Matched Only Droplets for .LA Image

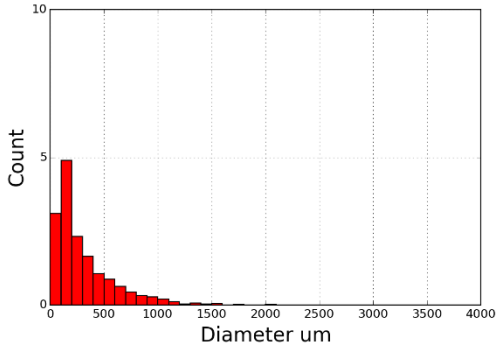

Figure A. 491: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

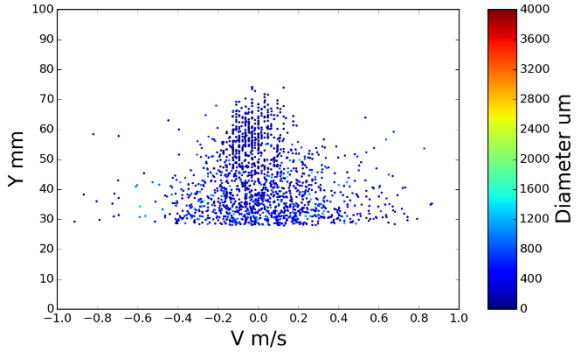

Figure A. 494: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

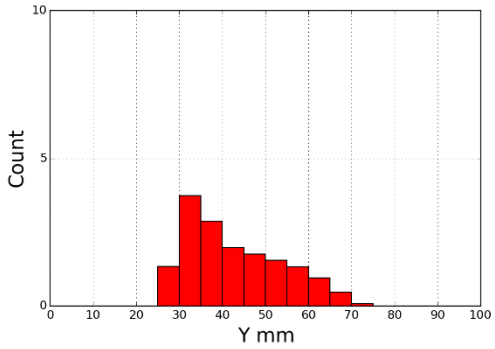

Figure A. 492: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

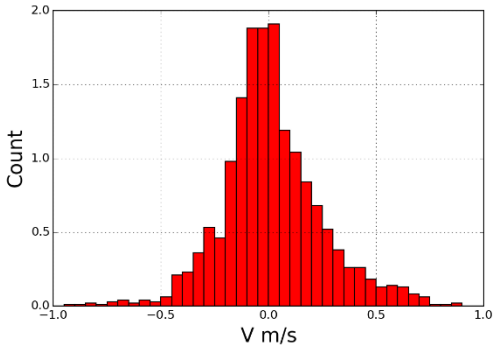

Figure A. 495: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

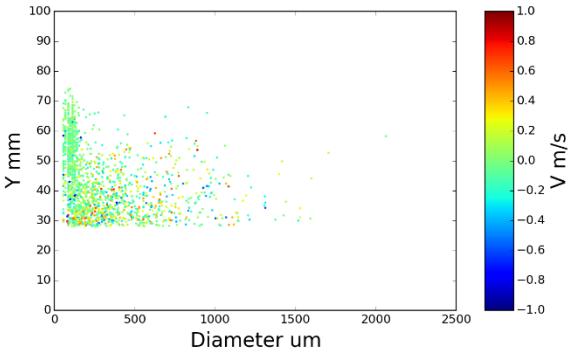

Figure A. 493: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.3.1 Matched Only Droplets for .LB Image

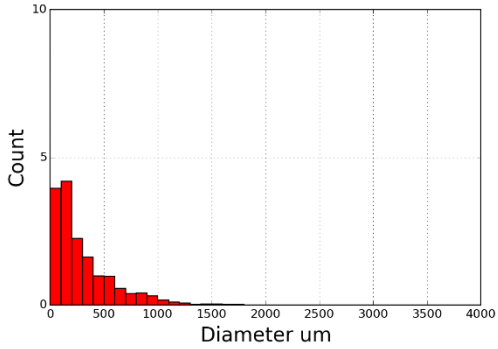

Figure A. 496: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

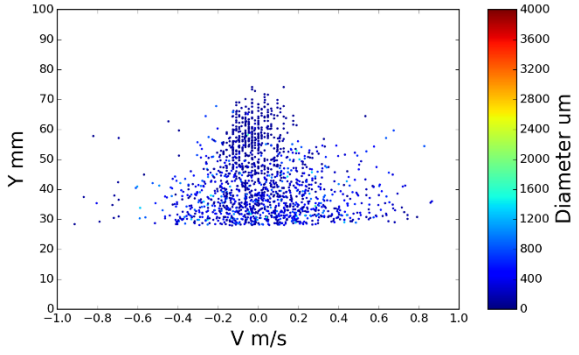

Figure A. 499: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

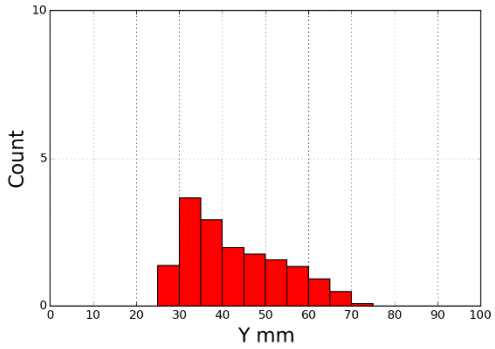

Figure A. 497: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

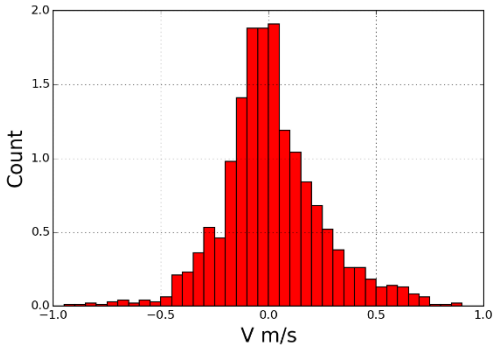

Figure A. 500: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

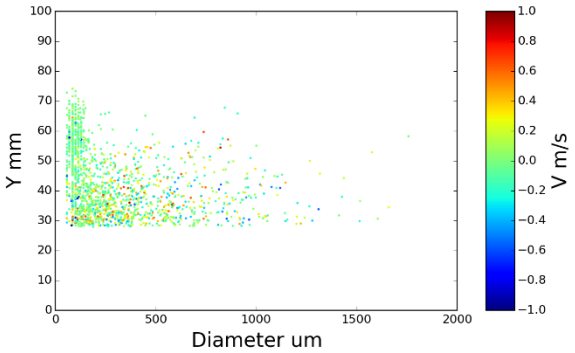

Figure A. 498: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.3.2 Lens 50mm Mag 0_13x

A.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	44.29	44.53	128.5	3410	609.3	466.0	128.5	3411	611.2	469.3
20-40mm	27.27	27.39	128.5	2312	478.4	307.4	128.5	2516	481.7	311.9
40-60mm	4.17	4.31	128.5	1440	450.3	253.5	128.5	1400	435.1	253.1
60-80mm	0.08	0.04	128.5	776.5	466.6	203.6	406.4	589.0	505.9	72.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	75.81	76.27	128.5	3410	553.3	411.0	128.5	3411	554.7	414.4
			Height A (mm)				Height B (mm)			
Highest Particle			76.5408				65.8525			
Lowest Particle			9.3967				9.3967			

Table A. 54: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	25.7	128.5	3410	686.8	475.0	128.5	3411	680.1	479.1	-0.950	0.950	-0.030	0.250	-0.950	0.950	0.010	0.330
20-40mm	19.35	128.5	2312	536.0	309.0	128.5	2516	529.8	300.9	-0.950	0.950	-0.020	0.160	-0.930	0.930	0.020	0.270
40-60mm	3.12	128.5	1440	503.6	250.0	128.5	1400	499.7	254.2	-0.840	0.820	-0.010	0.150	-0.800	0.890	0.000	0.220
60-80mm	0.06	416.5	776.5	568.5	115.3	406.4	589.0	505.9	72.8	-0.110	0.190	0.000	0.090	-0.380	-0.080	-0.200	0.090
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	48.23	128.5	3410	614.3	410.7	128.5	3411	607.5	410.4	-0.950	0.950	-0.020	0.210	-0.950	0.950	0.010	0.300

Table A. 55: Matched Droplet Info

A.5.3.2 All Droplets for .LA Image

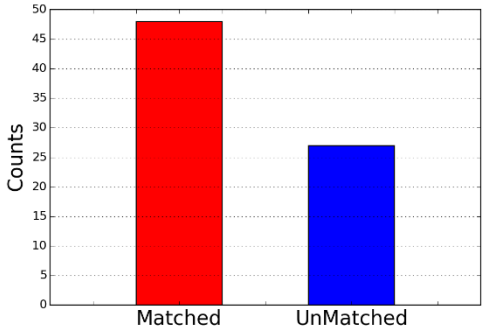

Figure A. 501: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

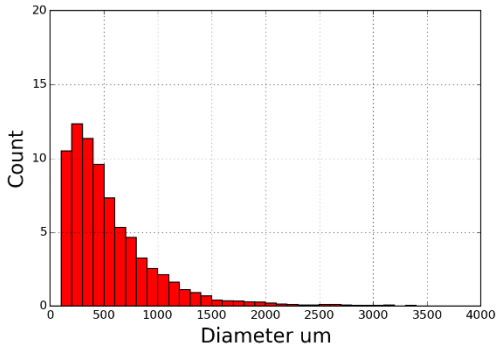

Figure A. 502: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

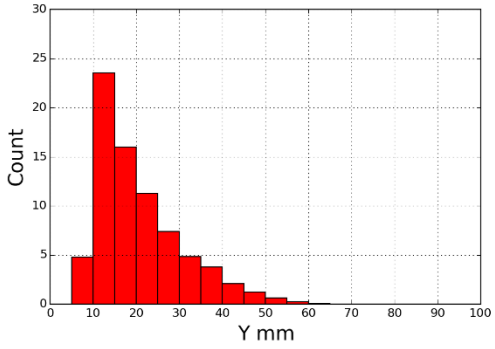

Figure A. 503: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

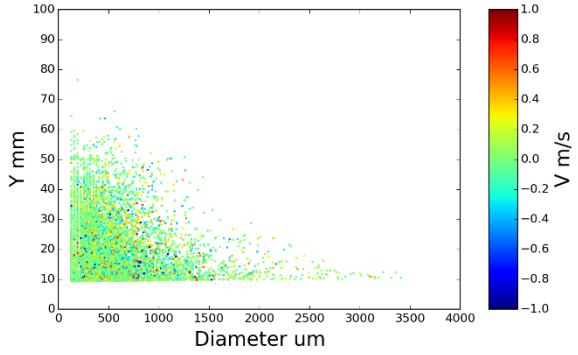

Figure A. 504: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

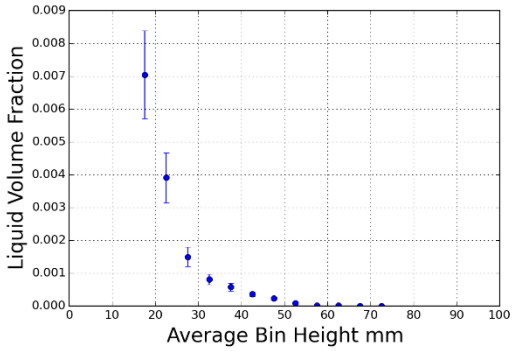

Figure A. 505: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.2 All Droplets for .LB Image

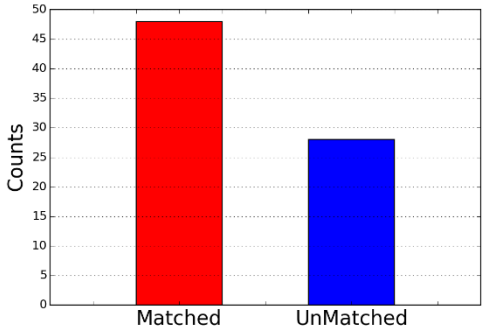

Figure A. 506: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

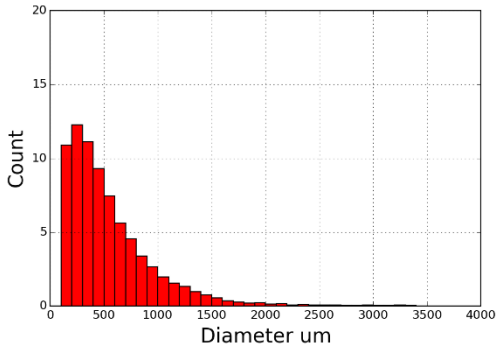

Figure A. 507: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

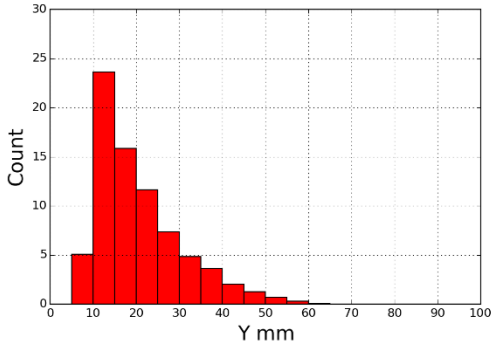

Figure A. 508: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

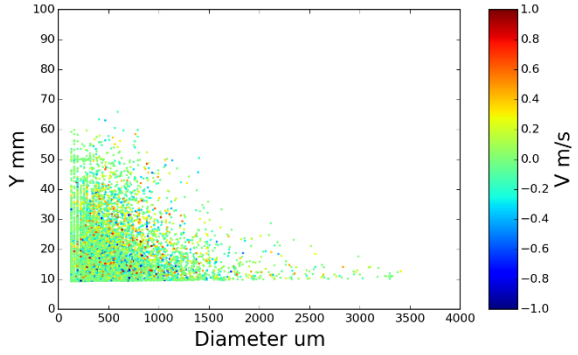

Figure A. 509: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

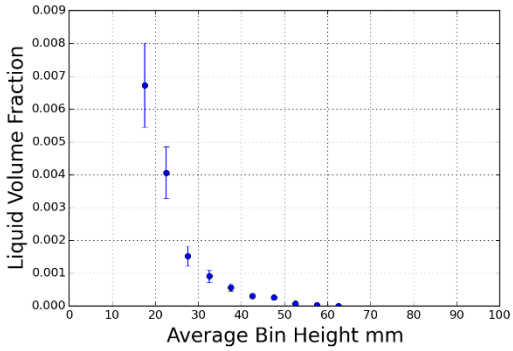

Figure A. 510: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.2 Matched Only Droplets for .LA Image

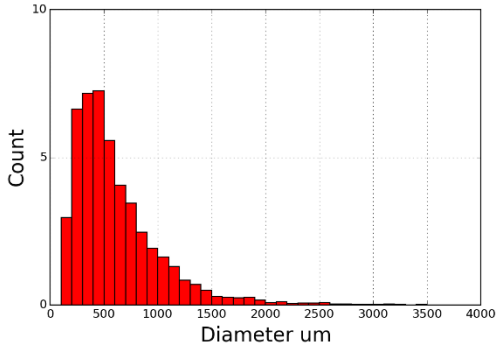

Figure A. 511: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

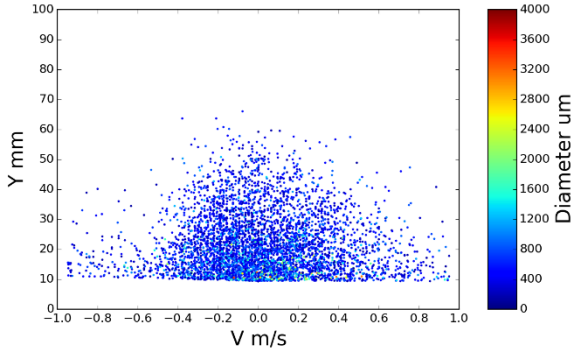

Figure A. 514: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

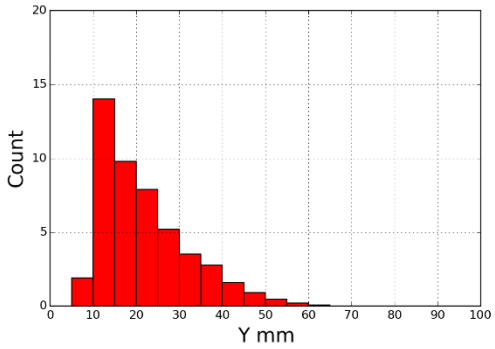

Figure A. 512: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

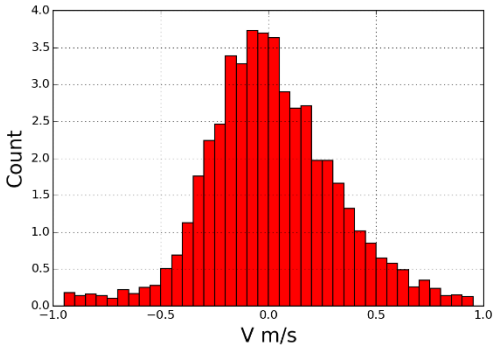

Figure A. 515: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

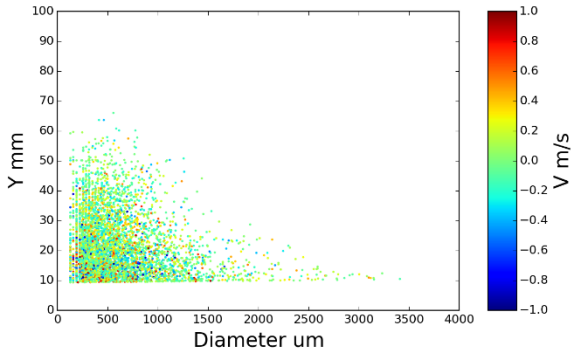

Figure A. 513: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.3.2 Matched Only Droplets for .LB Image

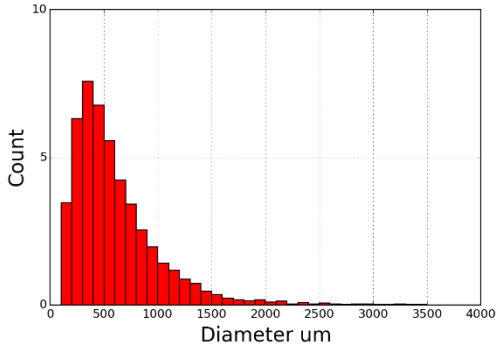

Figure A. 516: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

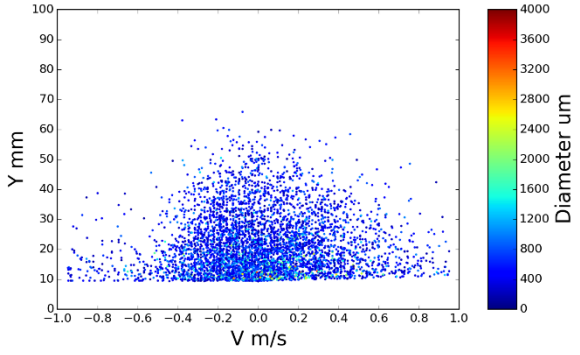

Figure A. 519: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

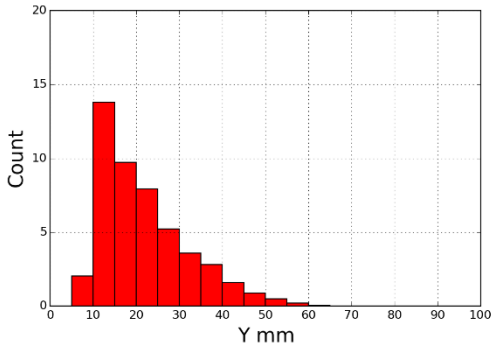

Figure A. 517: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

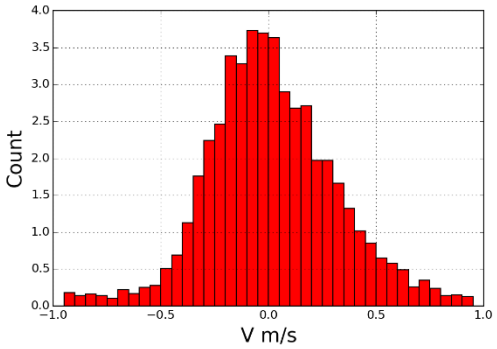

Figure A. 520: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

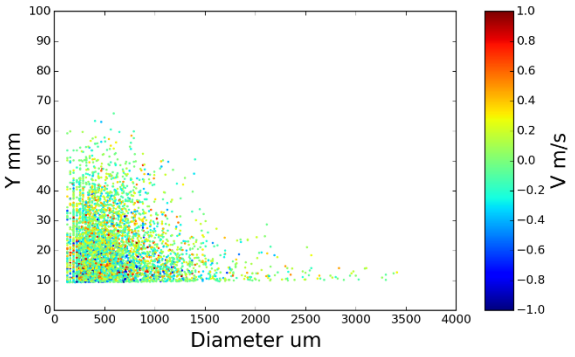

Figure A. 518: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	26.73	27.52	128.5	3328	595.9	451.1	128.5	3344	585.5	456.8
20-40mm	14.22	14.31	128.5	2540	499.0	331.0	128.5	2639	502.0	326.7
40-60mm	1.72	1.76	128.5	1804	570.4	344.4	128.5	2020	557.1	349.9
60-80mm	0.12	0.11	192.8	1822	694.1	428.6	192.8	1703	693.0	415.5
80-100mm	0.02	0.03	602.8	1030	816.5	213.7	128.5	1058	607.5	379.9
All	42.81	43.73	128.5	3328	563.1	413.3	128.5	3344	557.3	416.2
			Height A (mm)				Height B (mm)			
Highest Particle			84.6258				84.5475			
Lowest Particle			9.3967				9.3967			

Table A. 56: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	16.36	128.5	3328	680.6	474.7	128.5	3344	673.0	469.1	-0.940	0.910	-0.030	0.220	-0.950	0.950	-0.010	0.300
20-40mm	9.92	128.5	2540	566.2	334.3	128.5	2639	562.1	330.9	-0.870	0.840	-0.030	0.170	-0.950	0.940	-0.020	0.280
40-60mm	1.3	128.5	1804	643.2	337.4	128.5	2020	638.7	353.2	-0.870	0.900	-0.030	0.180	-0.620	0.600	-0.040	0.210
60-80mm	0.11	192.8	1822	739.7	418.9	213.1	1703	743.0	403.0	-0.280	0.050	-0.090	0.110	-0.300	0.130	-0.050	0.110
80-100mm	0.02	602.8	1030	816.5	213.7	636.1	1058	847.0	210.9	-0.000	0.040	0.020	0.020	-0.040	0.030	-0.010	0.040
All	27.71	128.5	3328	638.2	426.7	128.5	3344	632.1	422.4	-0.940	0.910	-0.030	0.200	-0.950	0.950	-0.020	0.290

Table A. 57: Matched Droplet Info

A.5.3.2 All Droplets for .LA Image

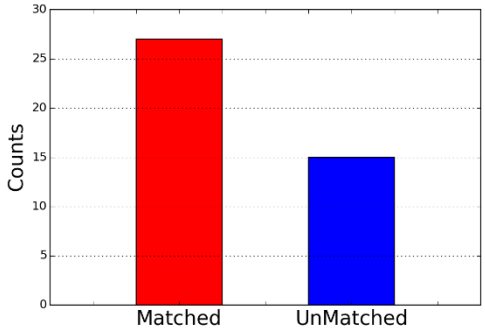

Figure A. 521: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

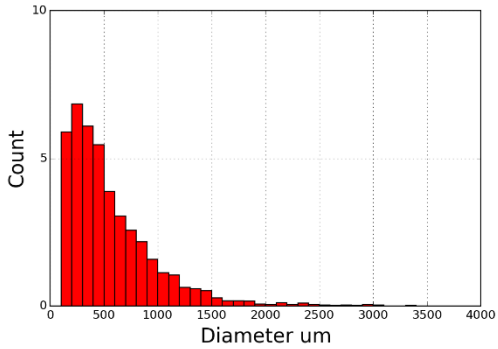

Figure A. 522: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

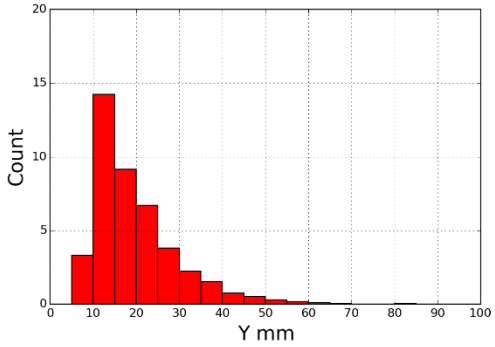

Figure A. 523: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

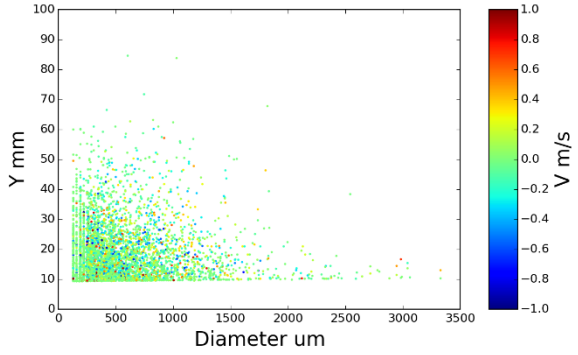

Figure A. 524: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

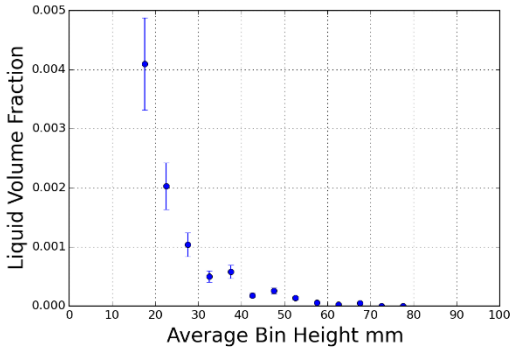

Figure A. 525: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.2 All Droplets for .LB Image

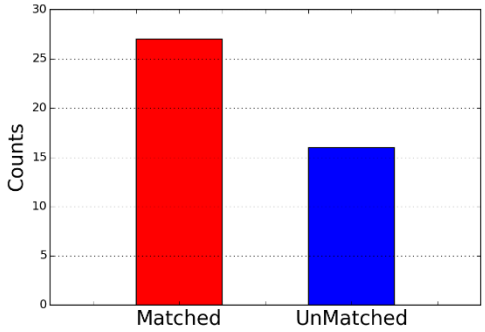

Figure A. 526: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

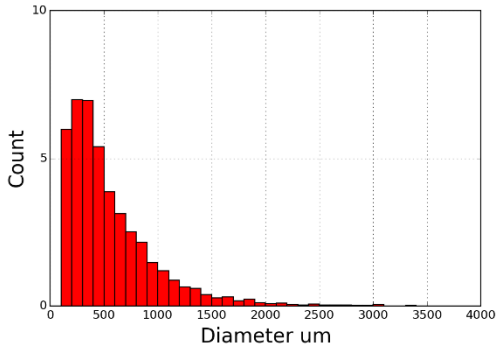

Figure A. 527: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

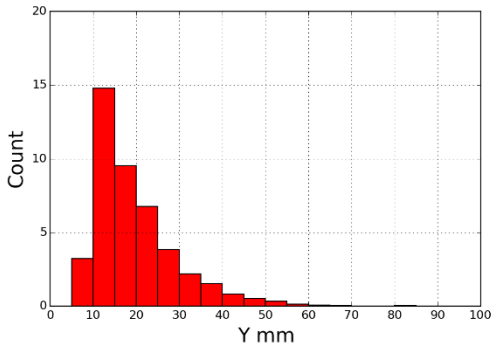

Figure A. 528: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

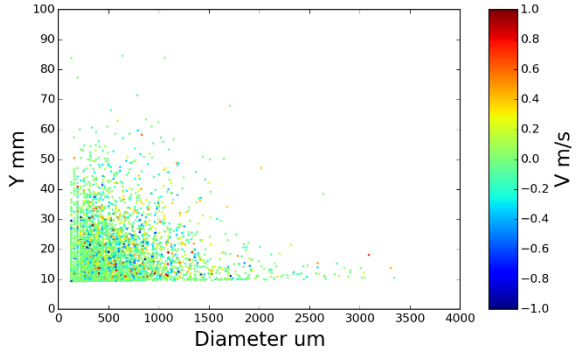

Figure A. 529: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

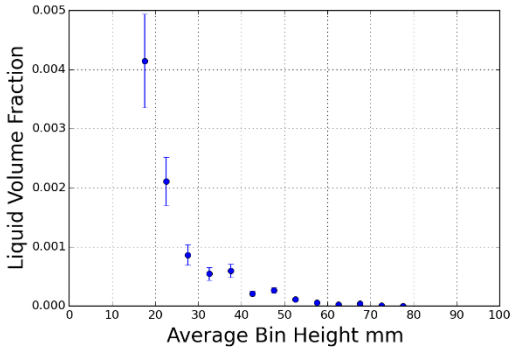

Figure A. 530: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.2 Matched Only Droplets for .LA Image

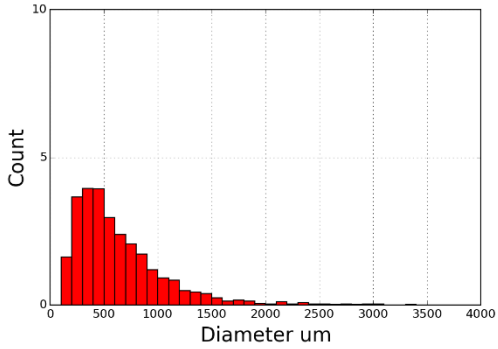

Figure A. 531: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

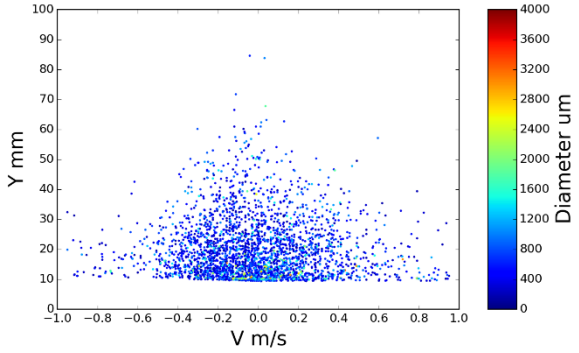

Figure A. 534: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

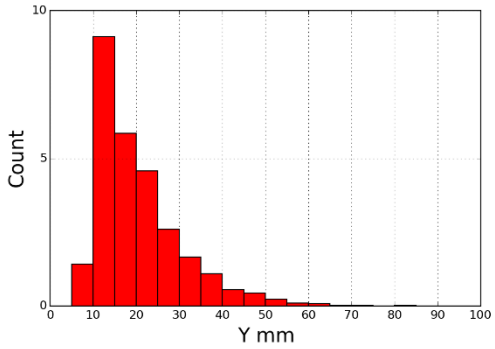

Figure A. 532: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

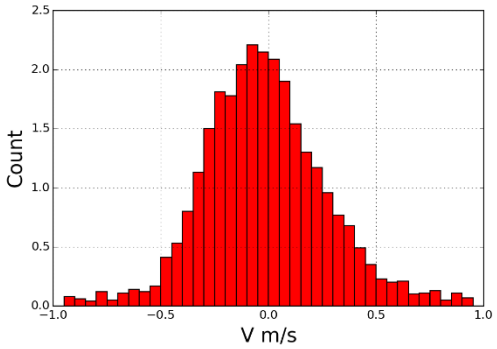

Figure A. 535: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

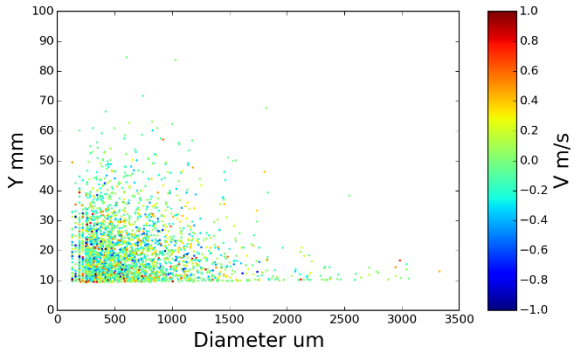

Figure A. 533: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.3.2 Matched Only Droplets for .LB Image

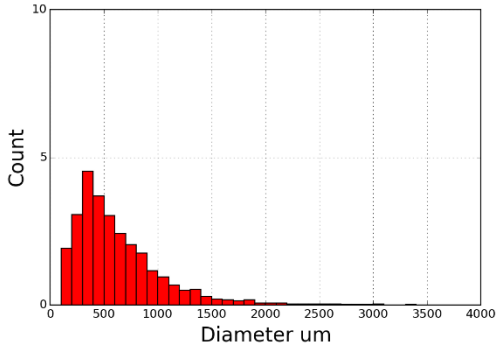

Figure A. 536: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

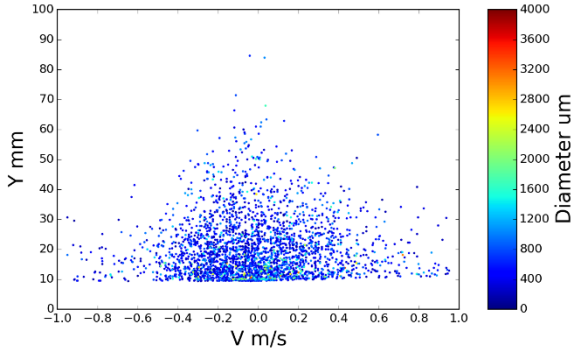

Figure A. 539: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

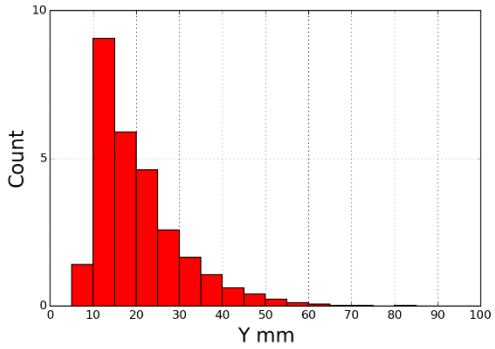

Figure A. 537: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

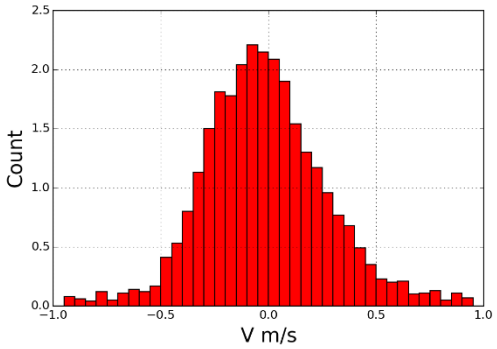

Figure A. 540: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

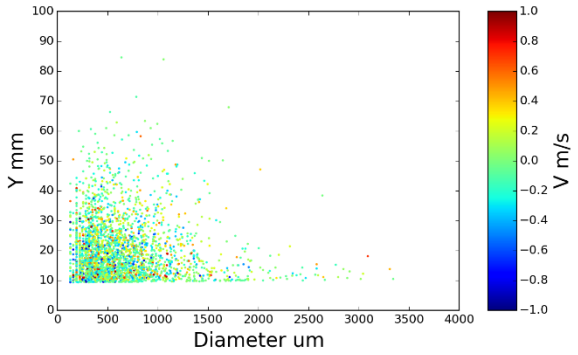

Figure A. 538: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	19.76	19.37	128.5	3309	521.0	373.8	128.5	3415	517.6	363.5
20-40mm	8.3	8.08	128.5	2551	473.8	313.3	128.5	1844	474.9	310.9
40-60mm	0.42	0.38	128.5	1461	600.8	346.4	192.8	1588	680.9	349.8
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	28.48	27.83	128.5	3309	508.5	357.7	128.5	3415	507.4	350.0
			Height A (mm)				Height B (mm)			
Highest Particle			59.1342				58.6398			
Lowest Particle			9.3967				9.3967			

Table A. 58: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	11.82	128.5	3309	605.6	393.8	128.5	3415	590.6	386.8	-0.920	0.930	-0.040	0.210	-0.940	0.940	-0.010	0.290
20-40mm	5.52	128.5	1899	551.2	316.0	128.5	1844	534.7	313.9	-0.950	0.820	-0.040	0.160	-0.940	0.900	-0.010	0.250
40-60mm	0.34	192.8	1461	676.9	338.6	192.8	1588	722.6	344.4	-0.300	0.150	-0.060	0.090	-0.430	0.410	0.020	0.210
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	17.68	128.5	3309	590.0	371.2	128.5	3415	576.0	366.6	-0.950	0.930	-0.040	0.200	-0.940	0.940	-0.010	0.280

Table A. 59: Matched Droplet Info

A.5.3.2 All Droplets for .LA Image

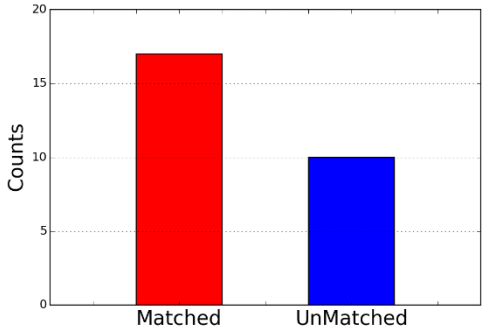

Figure A. 541: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

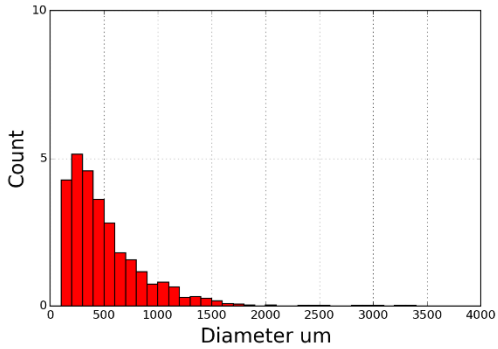

Figure A. 542: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

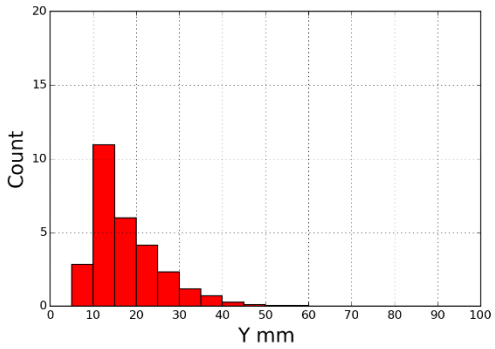

Figure A. 543: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

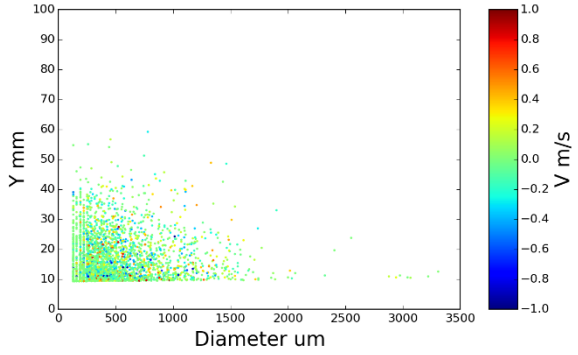

Figure A. 544: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

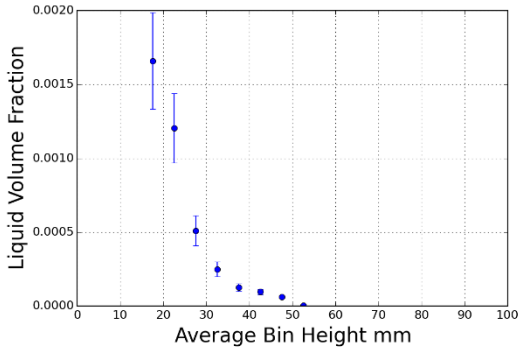

Figure A. 545: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.2 All Droplets for .LB Image

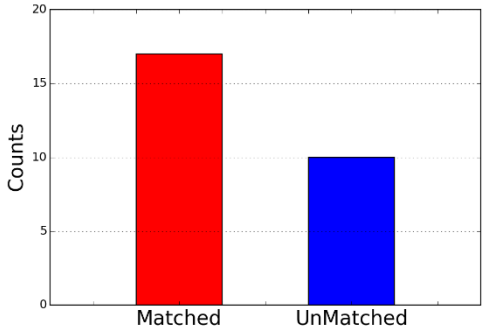

Figure A. 546: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

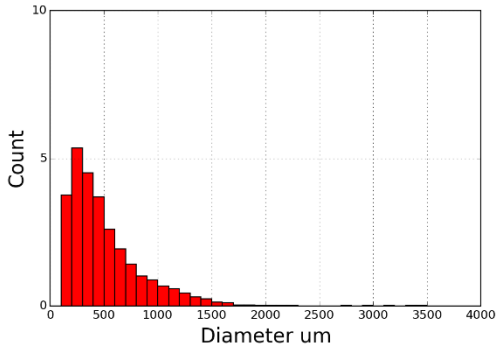

Figure A. 547: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

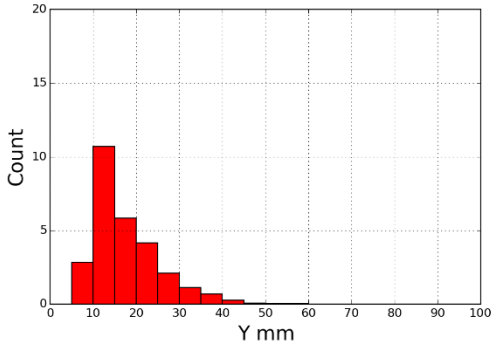

Figure A. 548: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

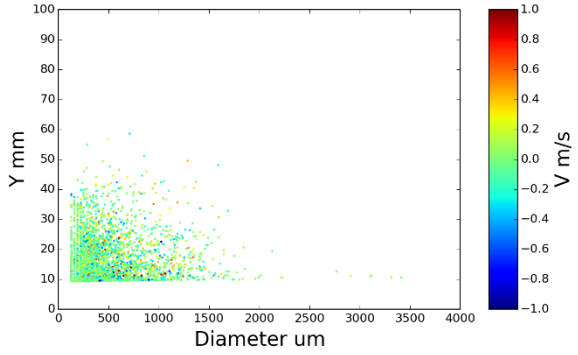

Figure A. 549: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

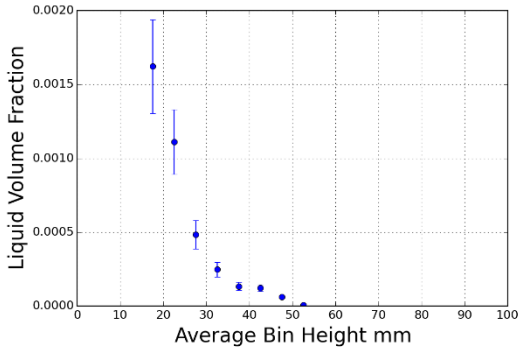

Figure A. 550: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.2 Matched Only Droplets for .LA Image

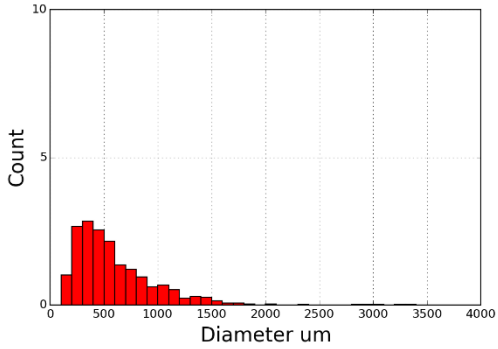

Figure A. 551: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

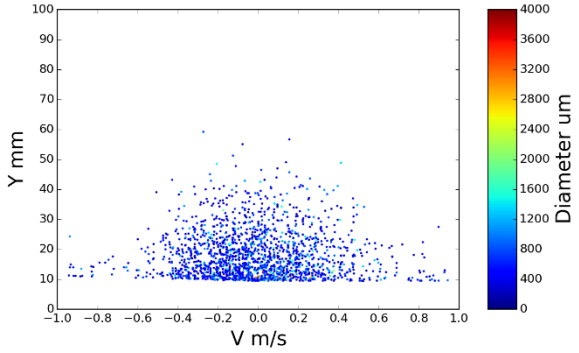

Figure A. 554: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

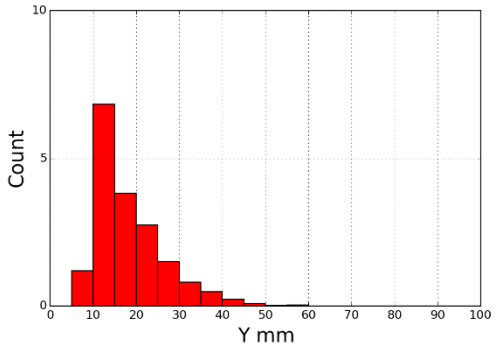

Figure A. 552: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

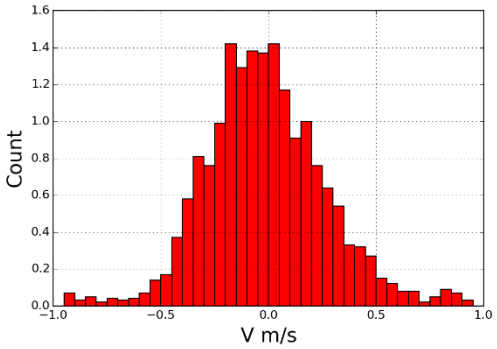

Figure A. 555: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

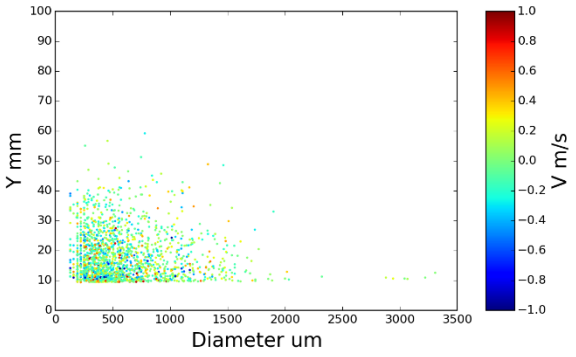

Figure A. 553: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.3.2 Matched Only Droplets for .LB Image

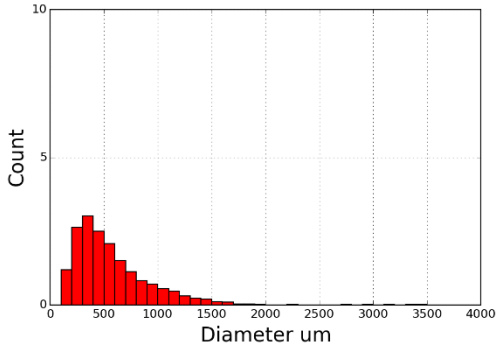

Figure A. 556: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

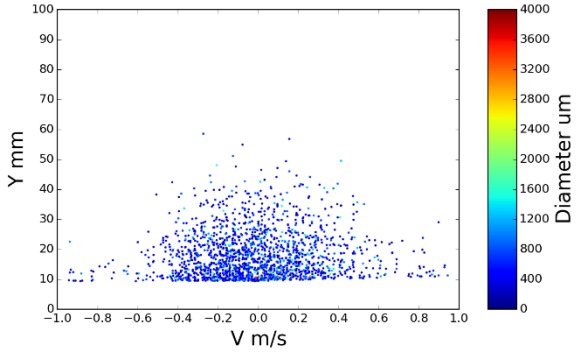

Figure A. 559: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

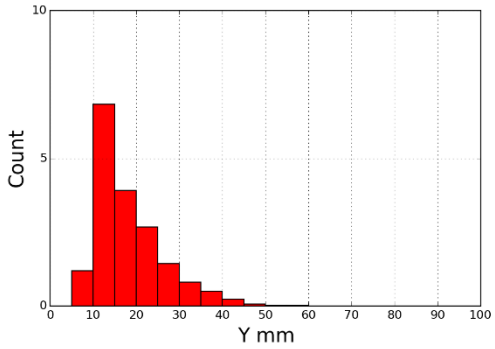

Figure A. 557: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

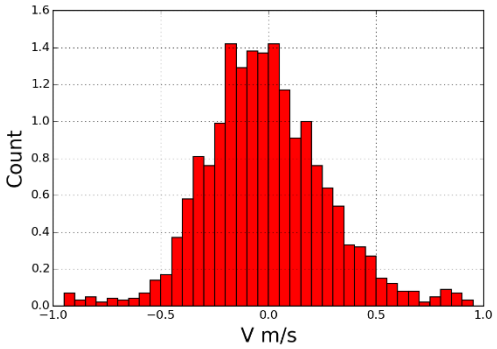

Figure A. 560: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

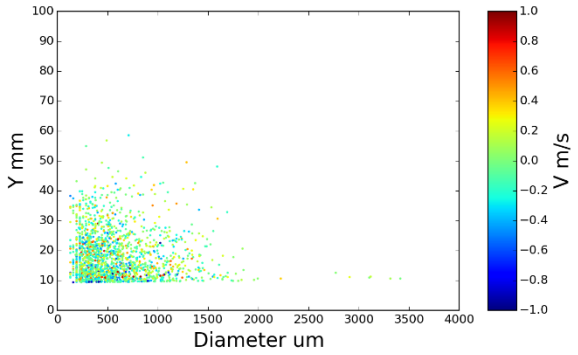

Figure A. 558: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	22.83	23.06	128.5	3169	559.3	388.1	128.5	3179	550.0	385.1
20-40mm	11.66	11.76	128.5	2049	455.0	294.1	128.5	1975	455.1	296.2
40-60mm	1.08	1.03	128.5	1274	439.3	253.4	128.5	1160	440.9	236.5
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	35.57	35.85	128.5	3169	521.5	359.9	128.5	3179	515.8	357.7
			Height A (mm)				Height B (mm)			
Highest Particle			59.9270				59.4372			
Lowest Particle			9.3967				9.3967			

Table A. 60: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	12.5	128.5	3169	653.8	408.6	128.5	2694	642.7	399.8	-0.950	0.920	-0.060	0.240	-0.930	0.950	0.010	0.310
20-40mm	7.37	128.5	2049	526.9	301.6	128.5	1975	515.5	301.0	-0.920	0.730	-0.070	0.160	-0.850	0.940	0.010	0.260
40-60mm	0.81	128.5	1274	497.6	247.5	128.5	1160	489.7	237.2	-0.420	0.670	-0.080	0.140	-0.620	0.470	0.020	0.200
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	20.68	128.5	3169	602.4	373.9	128.5	2694	590.8	367.3	-0.950	0.920	-0.060	0.210	-0.930	0.950	0.010	0.290

Table A. 61: Matched Droplet Info

A.5.3.2 All Droplets for .LA Image

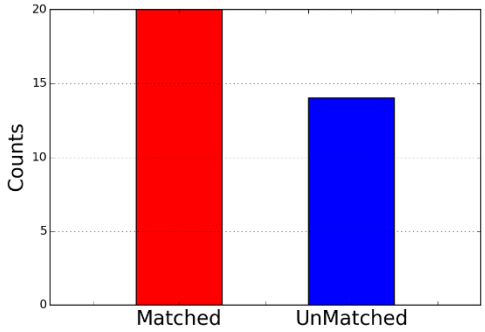

Figure A. 561: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

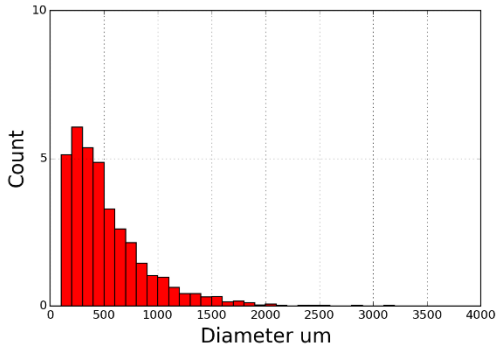

Figure A. 562: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

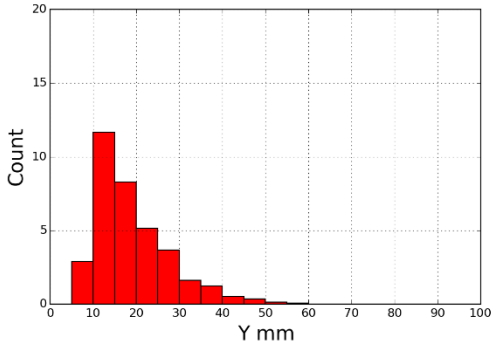

Figure A. 563: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

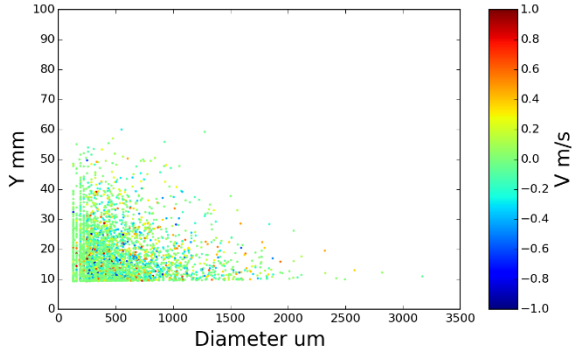

Figure A. 564: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

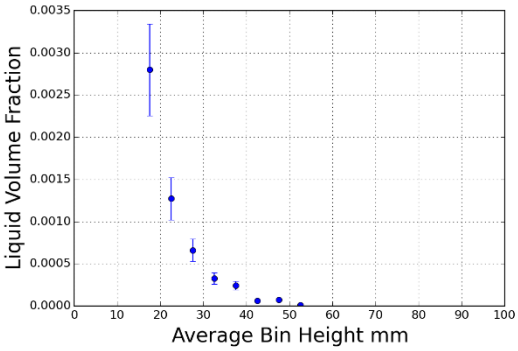

Figure A. 565: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.2 All Droplets for .LB Image

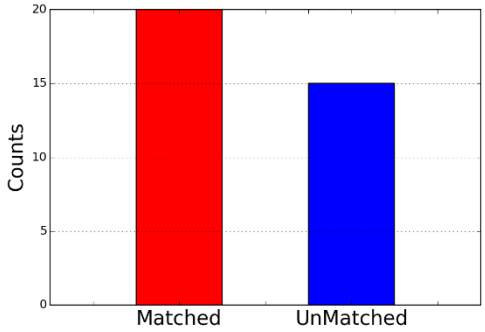

Figure A. 566: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

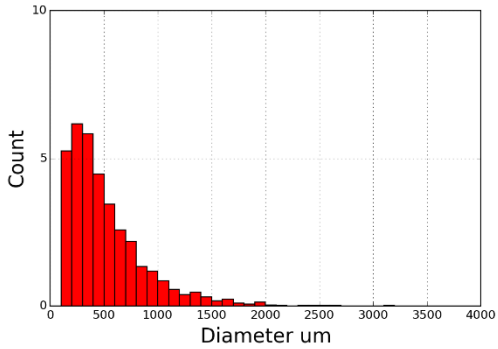

Figure A. 567: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

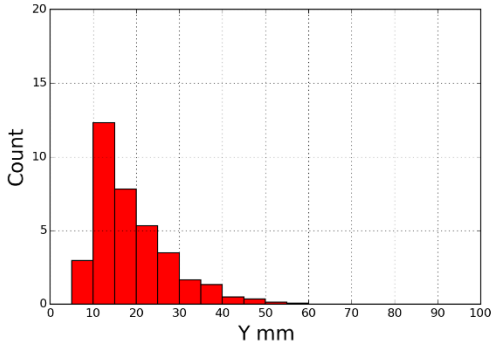

Figure A. 568: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

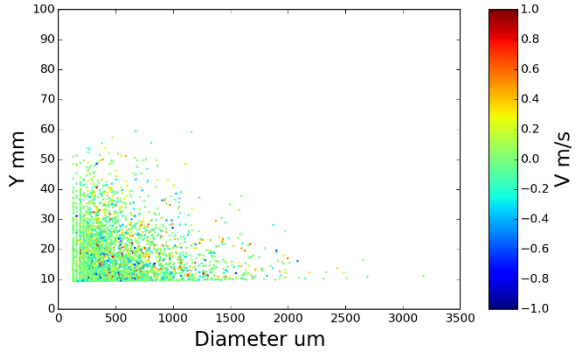

Figure A. 569: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

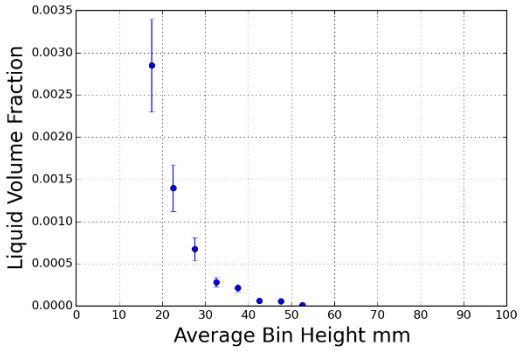

Figure A. 570: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.2 Matched Only Droplets for .LA Image

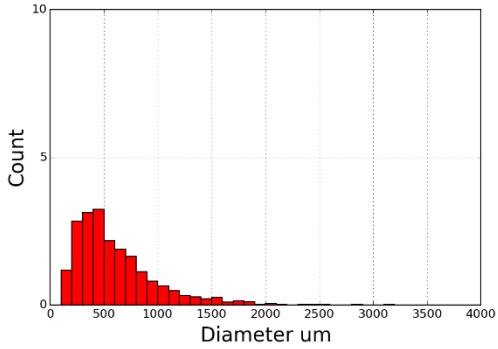

Figure A. 571: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

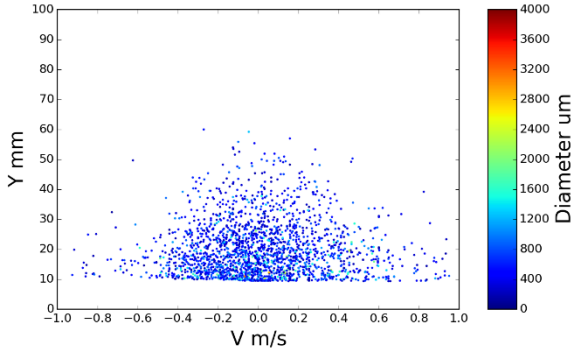

Figure A. 574: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

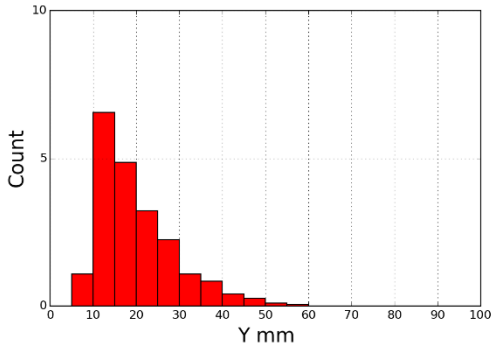

Figure A. 572: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

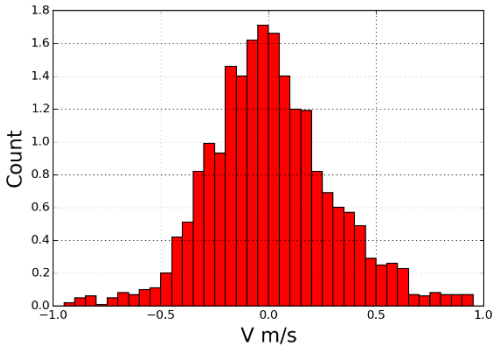

Figure A. 575: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

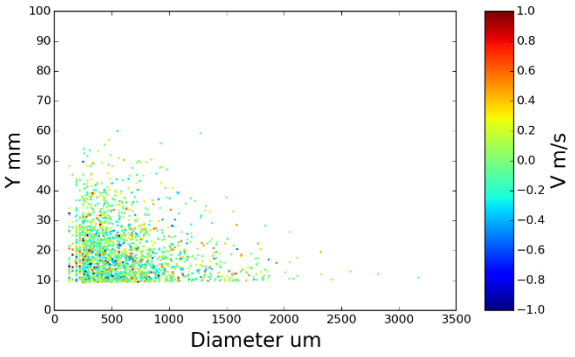

Figure A. 573: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.3.2 Matched Only Droplets for .LB Image

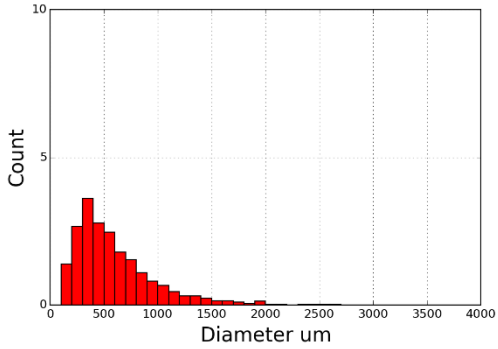

Figure A. 576: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

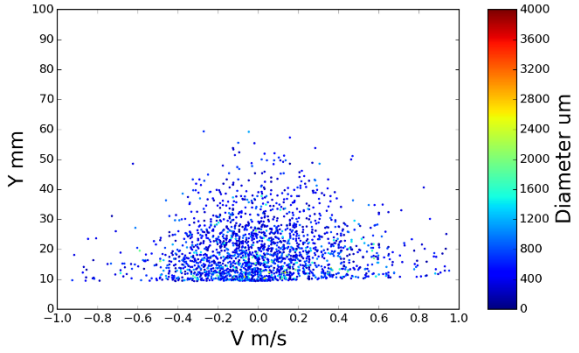

Figure A. 579: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

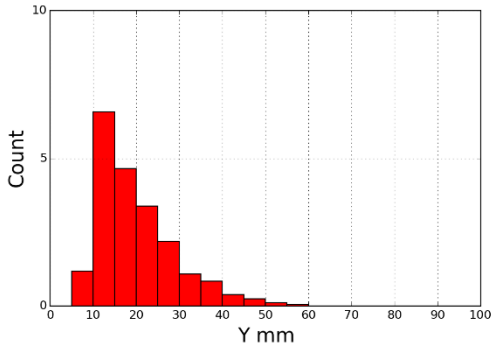

Figure A. 577: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

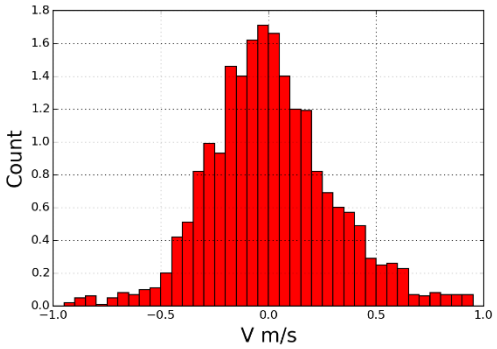

Figure A. 580: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

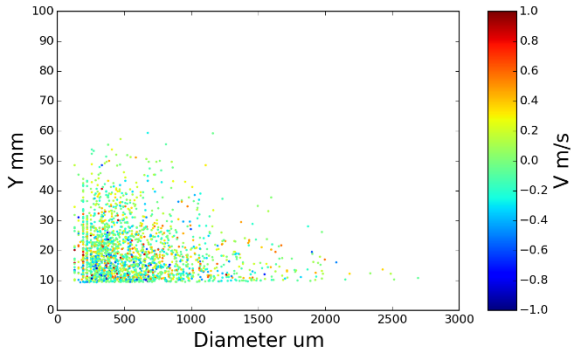

Figure A. 578: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.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	18.27	18.8	128.5	3223	578.3	440.0	128.5	3340	564.4	430.0
20-40mm	9.14	9.18	128.5	3100	483.1	332.5	128.5	2700	474.2	321.6
40-60mm	1.33	1.29	128.5	1889	461.7	317.2	128.5	1530	443.4	299.0
60-80mm	0.06	0.05	157.4	380.2	308.8	76.1	192.8	385.6	307.9	65.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	28.8	29.32	128.5	3223	542.1	406.1	128.5	3340	530.4	396.3
			Height A (mm)				Height B (mm)			
Highest Particle			64.2472				64.5022			
Lowest Particle			9.3967				9.3967			

Table A. 62: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	9.05	128.5	3103	696.3	478.0	128.5	3289	676.0	467.3	-0.940	0.940	-0.070	0.240	-0.920	0.920	-0.030	0.310
20-40mm	5.31	128.5	3100	572.2	351.2	128.5	2700	560.4	337.6	-0.910	0.540	-0.100	0.170	-0.900	0.940	-0.000	0.270
40-60mm	0.93	128.5	1889	550.8	333.0	128.5	1530	530.0	311.8	-0.380	0.180	-0.070	0.110	-0.350	0.490	-0.010	0.160
60-80mm	0.04	301.4	380.2	352.1	31.1	294.5	385.6	336.7	34.9	-0.190	0.030	-0.130	0.090	-0.100	0.140	0.020	0.090
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	15.33	128.5	3103	643.5	434.1	128.5	3289	626.0	421.7	-0.940	0.940	-0.080	0.210	-0.920	0.940	-0.020	0.290

Table A. 63: Matched Droplet Info

A.5.3.2 All Droplets for .LA Image

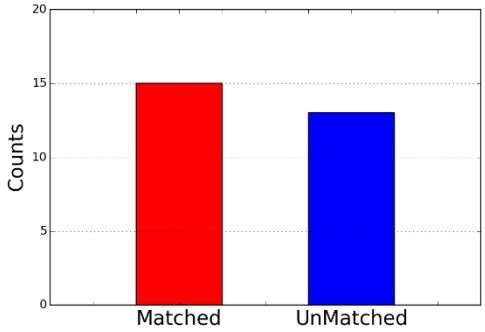

Figure A. 581: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

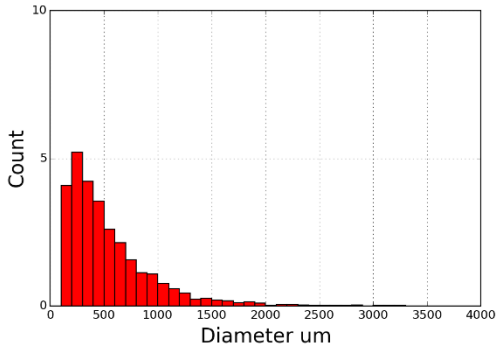

Figure A. 582: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

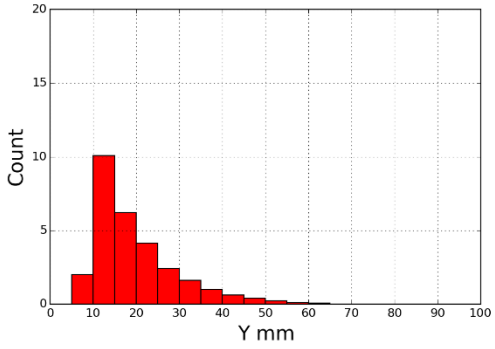

Figure A. 583: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

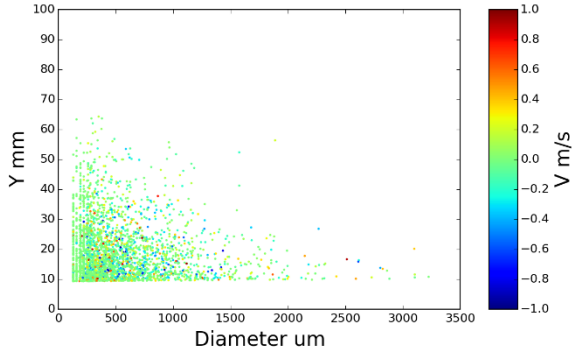

Figure A. 584: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

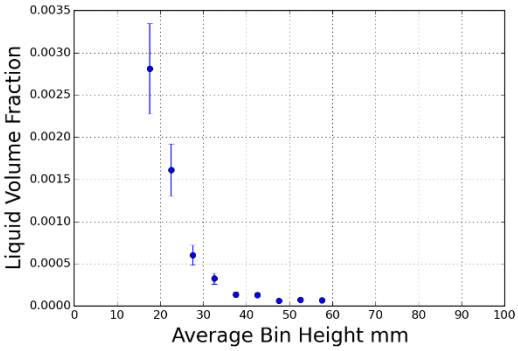

Figure A. 585: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.2 All Droplets for .LB Image

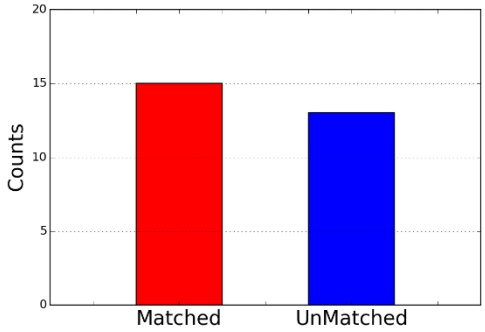

Figure A. 586: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

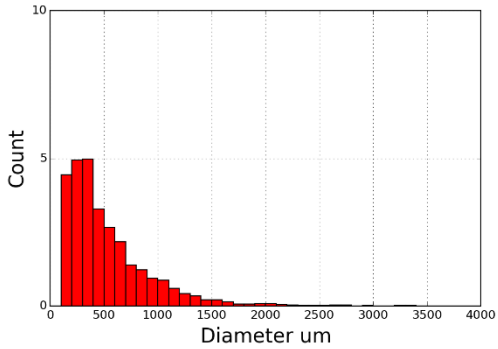

Figure A. 587: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

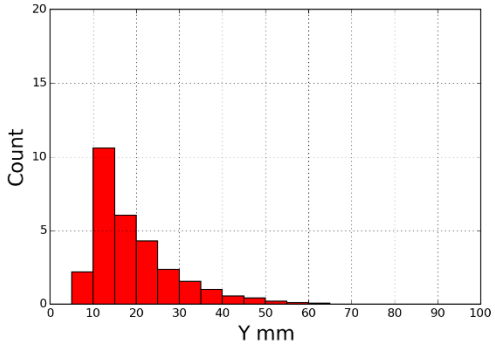

Figure A. 588: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

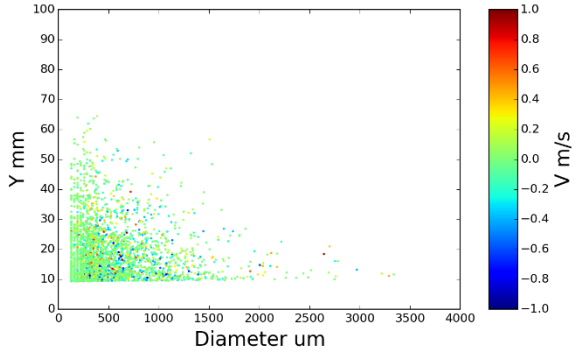

Figure A. 589: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

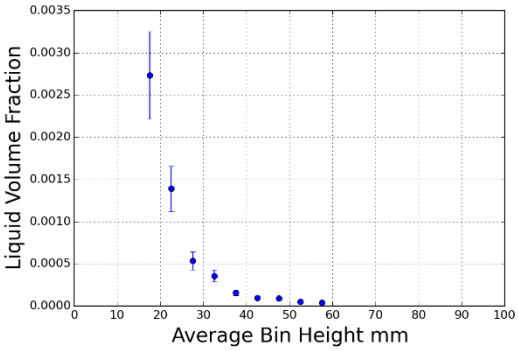

Figure A. 590: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.3.2 Matched Only Droplets for .LA Image

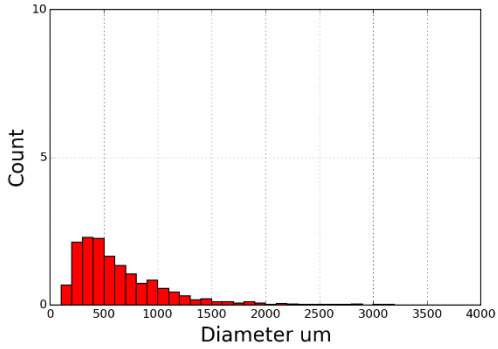

Figure A. 591: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

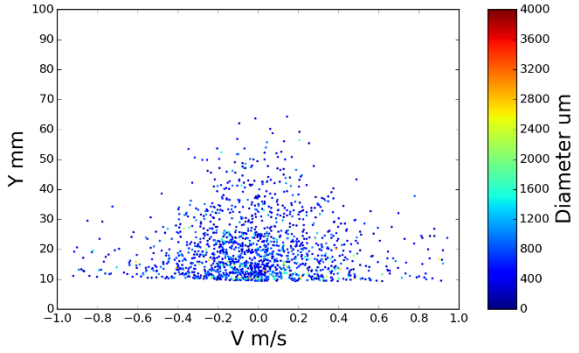

Figure A. 594: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

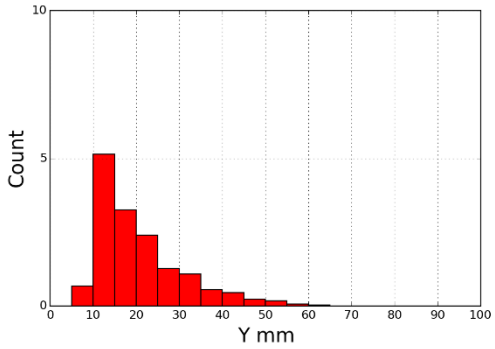

Figure A. 592: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

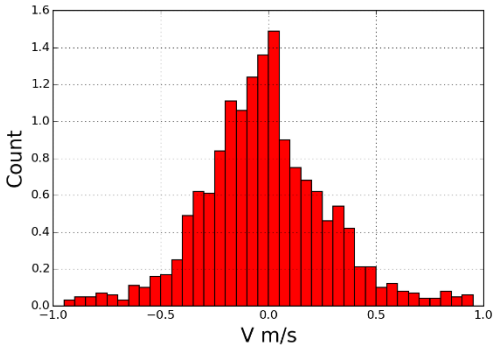

Figure A. 595: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

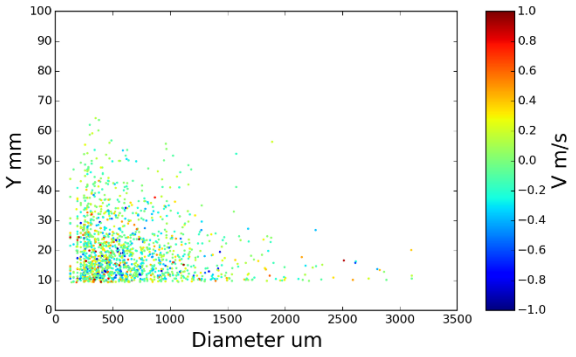

Figure A. 593: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.3.2 Matched Only Droplets for .LB Image

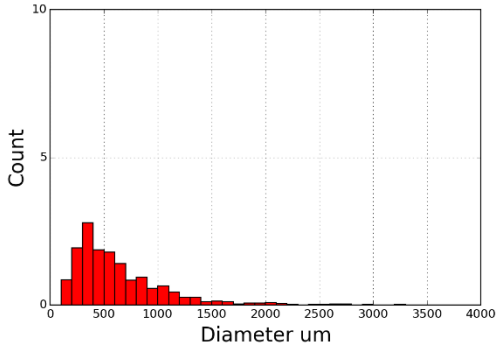

Figure A. 596: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

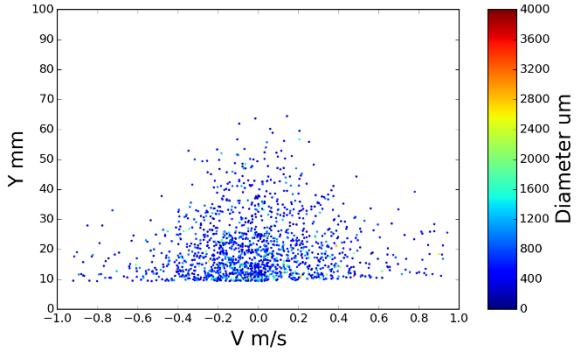

Figure A. 599: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

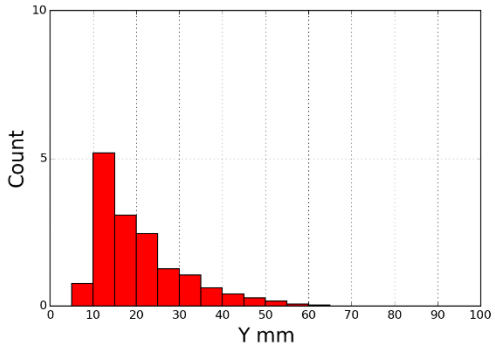

Figure A. 597: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

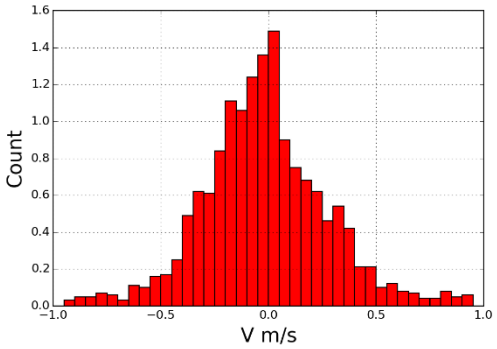

Figure A. 600: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

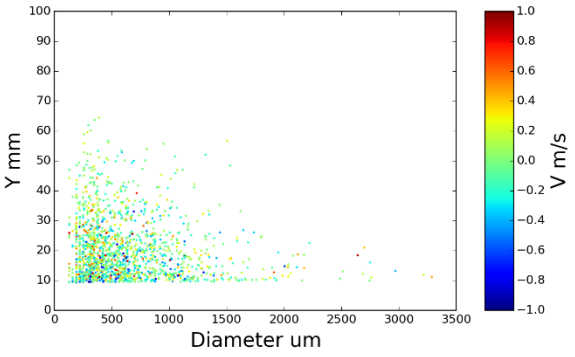

Figure A. 598: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4 Liquid Level 4

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	18365 / 2.314
Ref Mass Flow (lb/hr) / (kg/s)	1623 / 0.205
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15080 / 20.452
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4736 / 14.94
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	54.8 / 12.65
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	54.9 / 12.73
Total Bundle Q (Btu/hr) / (kW)	108545 / 31.81
Total Bundle & Preboiler Q (Btu/hr) / (kW)	144844 / 42.45
Top Two Rows HTC Ratio	0.899
Bundle Inlet Quality	0.15
Bundle Exit Quality	0.98

Table A. 64: Thermal Conditions

A.5.4.1 Lens 100mm Mag 0_29x

A.5.4.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	9.77	10.14	57.1	1346	156.0	153.5	57.1	1334	153.2	150.1
40-60mm	9.49	9.44	57.1	883.1	116.1	79.3	57.1	893.2	116.4	83.3
60-80mm	2.44	2.53	57.1	361.1	100.3	37.8	57.1	365.6	100.9	41.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	21.7	22.11	57.1	1346	132.3	118.3	57.1	1334	131.5	117.9
			Height A (mm)				Height B (mm)			
Highest Particle			77.1144				77.1144			
Lowest Particle			29.2721				29.2689			

Table A. 65: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	6.26	57.1	1346	185.4	175.7	57.1	1334	182.1	170.6	-0.880	0.700	-0.060	0.110	-0.920	0.880	0.010	0.160
40-60mm	5.58	57.1	883.1	135.6	92.8	57.1	893.2	132.2	95.2	-0.870	0.950	-0.050	0.100	-0.950	0.560	0.020	0.120
60-80mm	1.38	57.1	361.1	114.4	41.5	57.1	365.6	111.3	42.3	-0.360	0.220	-0.030	0.070	-0.790	0.220	0.030	0.120
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	13.22	57.1	1346	157.0	138.6	57.1	1334	153.7	136.2	-0.880	0.950	-0.050	0.100	-0.950	0.880	0.020	0.140

Table A. 66: Matched Droplet Info

A.5.4.1 All Droplets for .LA Image

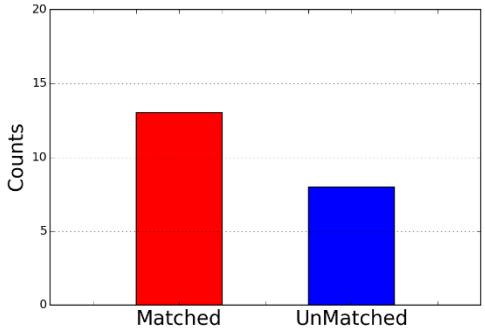

Figure A. 601: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

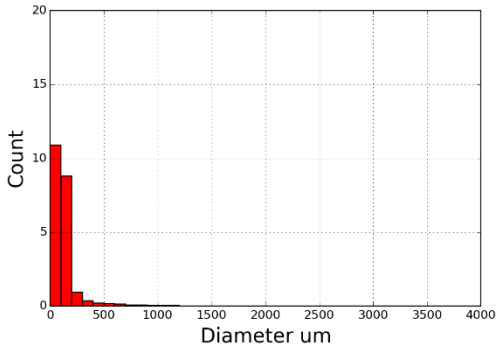

Figure A. 602: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

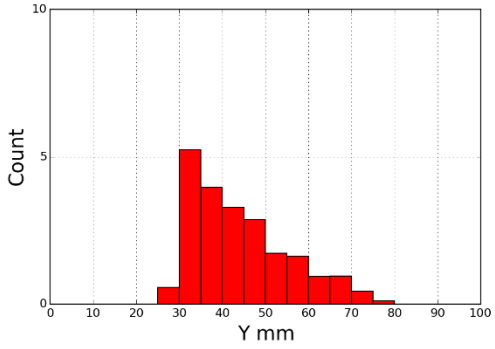

Figure A. 603: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

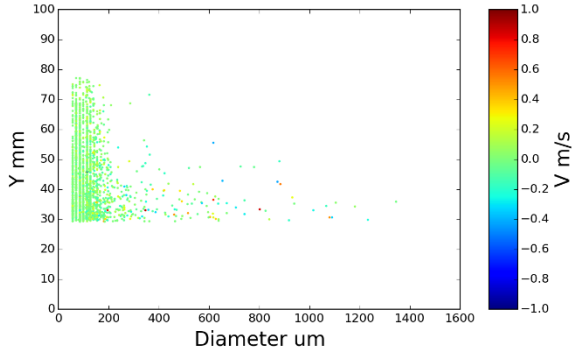

Figure A. 604: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

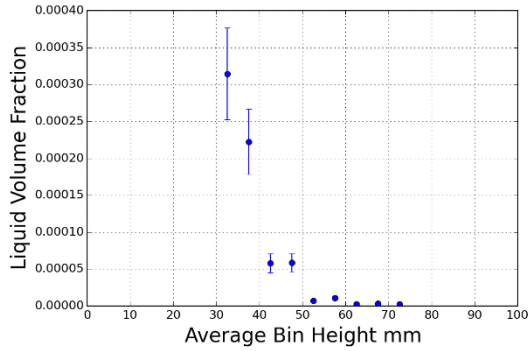

Figure A. 605: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 All Droplets for .LB Image

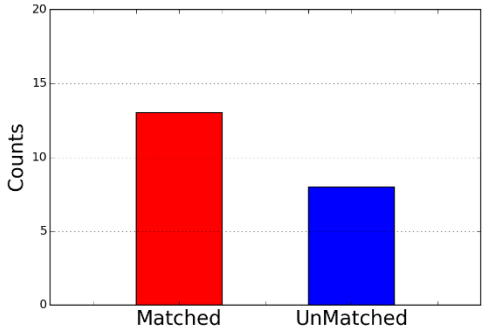

Figure A. 606: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

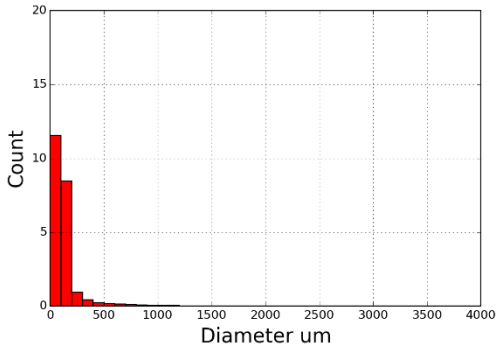

Figure A. 607: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

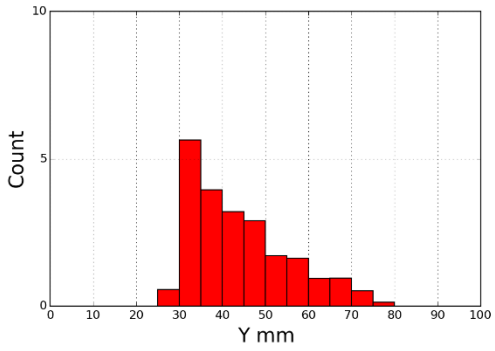

Figure A. 608: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

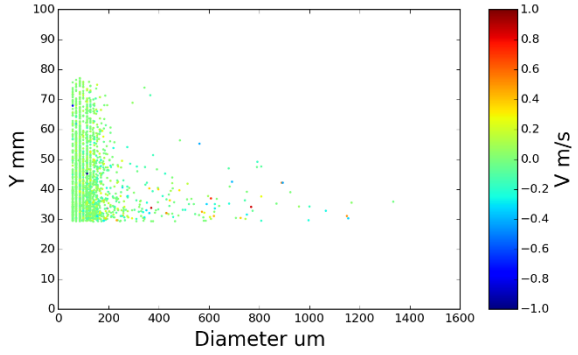

Figure A. 609: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

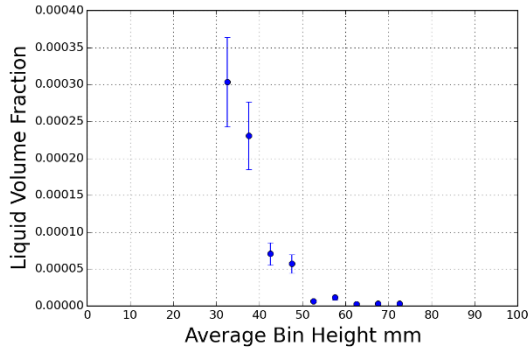

Figure A. 610: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 Matched Only Droplets for .LA Image

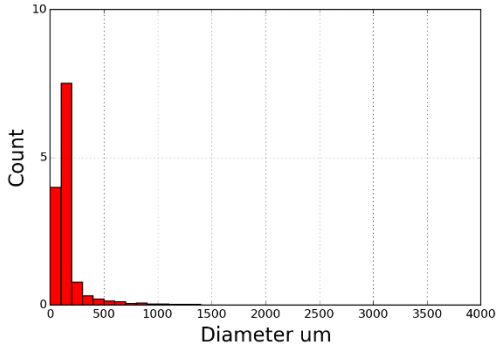

Figure A. 611: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

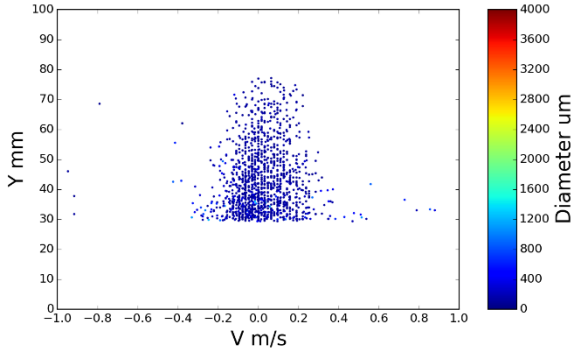

Figure A. 614: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

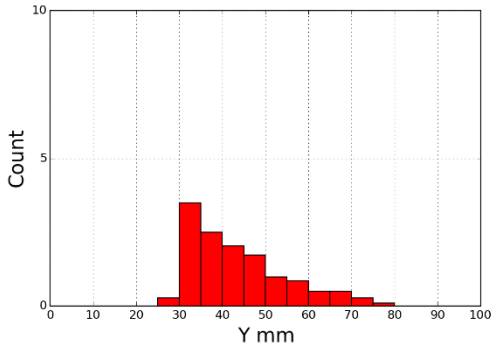

Figure A. 612: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

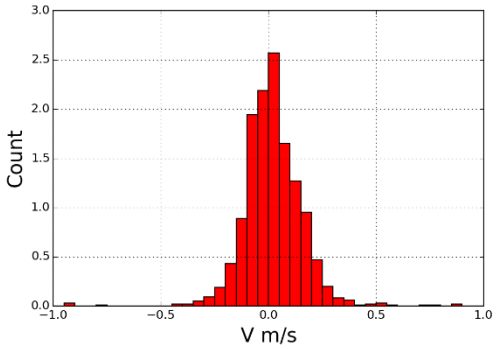

Figure A. 615: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

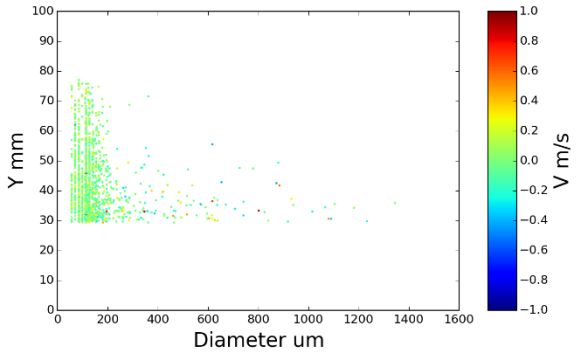

Figure A. 613: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 Matched Only Droplets for .LB Image

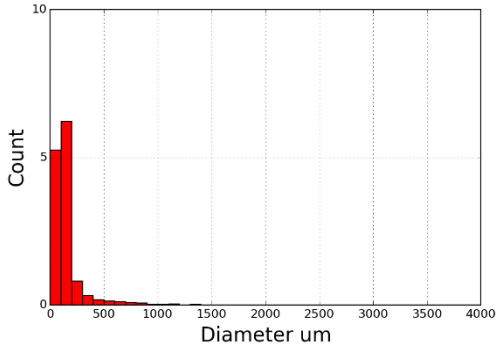

Figure A. 616: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

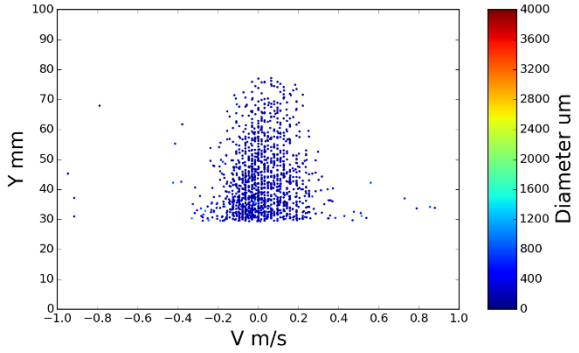

Figure A. 619: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

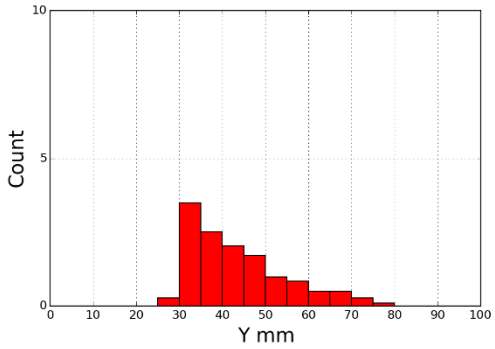

Figure A. 617: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

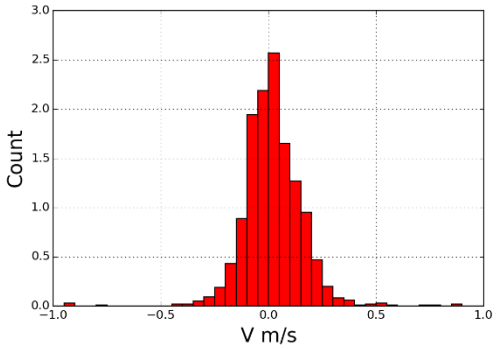

Figure A. 620: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

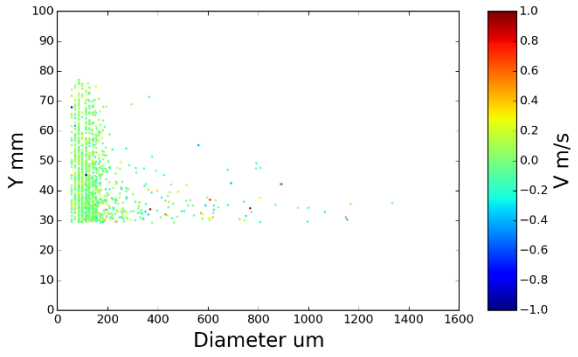

Figure A. 618: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	7.27	7.51	57.1	1783	216.7	236.2	57.1	1700	215.0	231.5
40-60mm	4.16	4.22	57.1	1225	137.6	168.6	57.1	1279	136.0	166.4
60-80mm	0.77	0.84	57.1	1276	104.1	136.9	57.1	1323	103.9	136.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	12.2	12.57	57.1	1783	182.6	214.2	57.1	1700	181.1	210.6
			Height A (mm)				Height B (mm)			
Highest Particle			76.7349				76.7096			
Lowest Particle			29.2468				29.2594			

Table A. 67: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	4.74	57.1	1783	278.6	268.7	57.1	1700	275.9	265.0	-0.830	0.470	-0.040	0.110	-0.920	0.930	0.000	0.190
40-60mm	1.97	57.1	1225	194.6	229.6	57.1	1279	190.4	226.6	-0.310	0.160	-0.030	0.070	-0.420	0.440	-0.000	0.120
60-80mm	0.37	57.1	1276	131.5	193.0	57.1	1323	131.7	200.6	-0.510	0.270	-0.030	0.110	-0.210	0.220	-0.010	0.100
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	7.08	57.1	1783	247.6	259.0	57.1	1700	244.6	256.0	-0.830	0.470	-0.040	0.100	-0.920	0.930	-0.000	0.170

Table A. 68: Matched Droplet Info

A.5.4.1 All Droplets for .LA Image

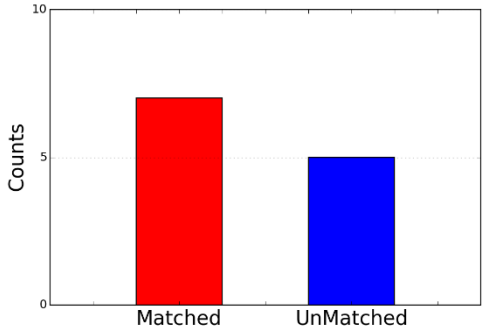

Figure A. 621: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

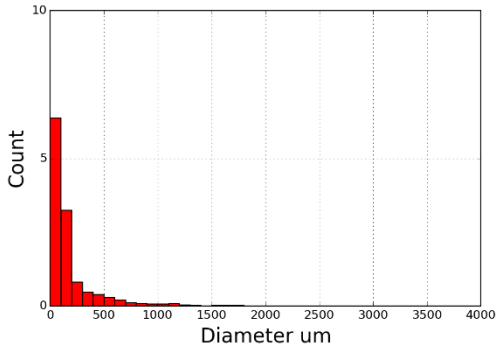

Figure A. 622: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

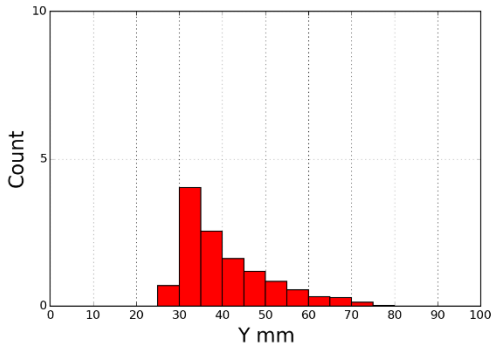

Figure A. 623: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

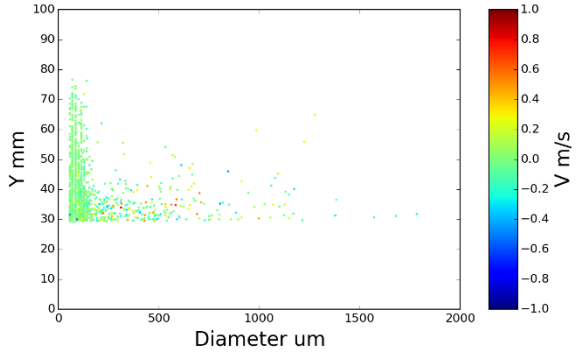

Figure A. 624: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

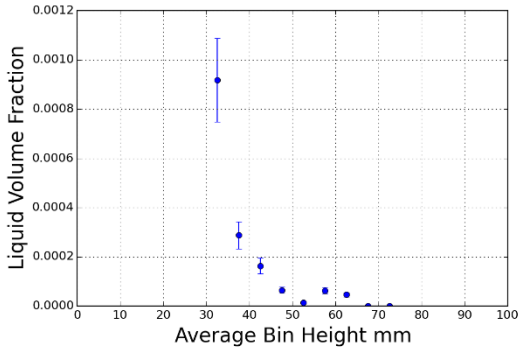

Figure A. 625: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 All Droplets for .LB Image

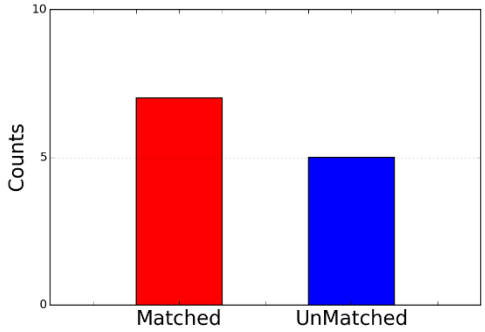

Figure A. 626: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

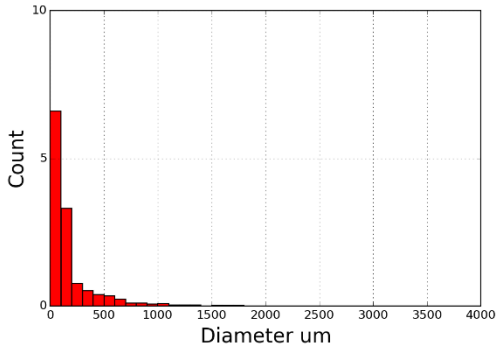

Figure A. 627: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

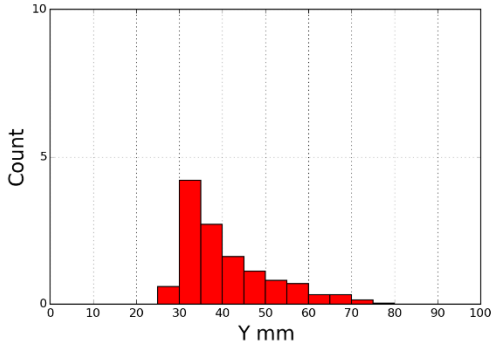

Figure A. 628: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

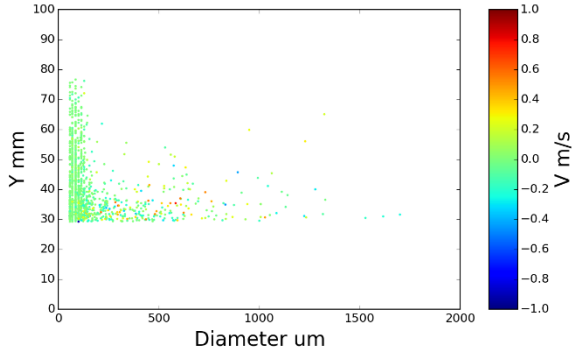

Figure A. 629: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

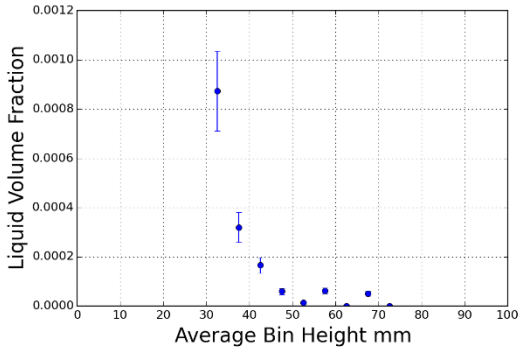

Figure A. 630: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 Matched Only Droplets for .LA Image

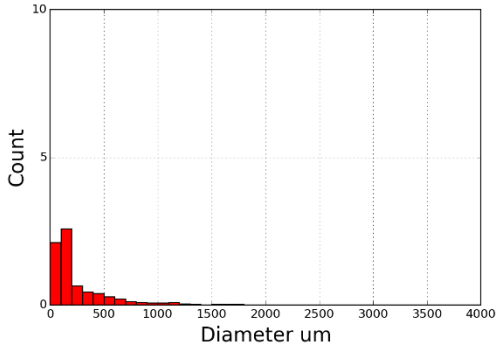

Figure A. 631: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

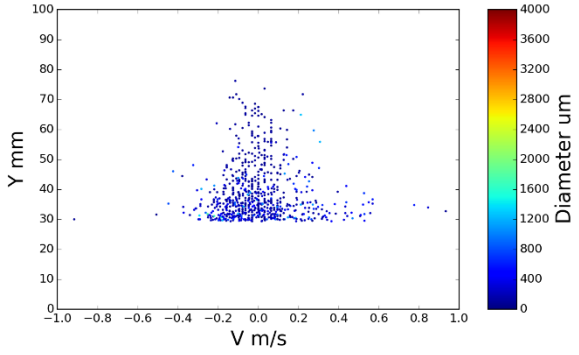

Figure A. 634: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

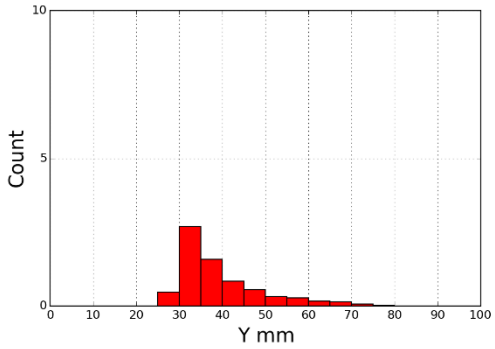

Figure A. 632: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

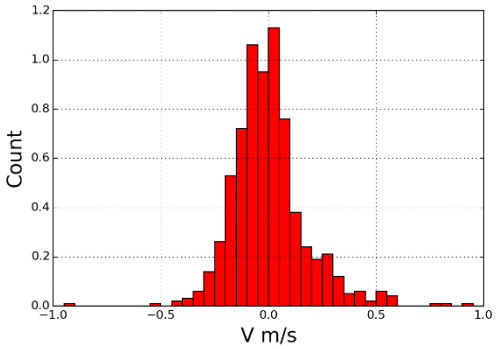

Figure A. 635: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

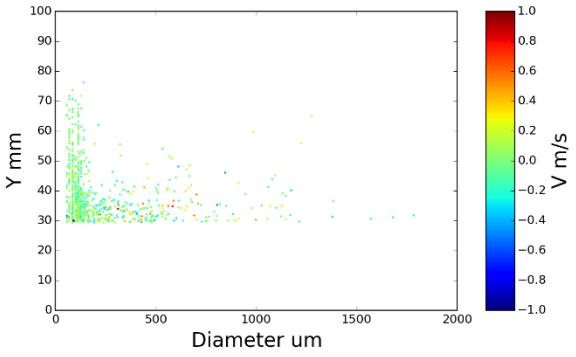

Figure A. 633: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 Matched Only Droplets for .LB Image

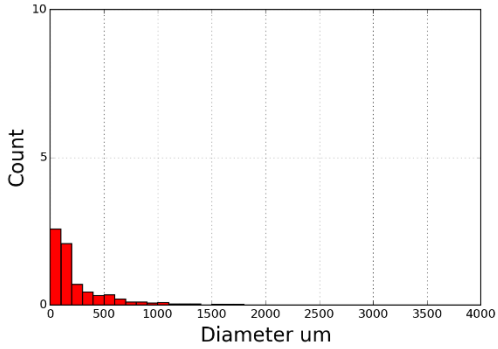

Figure A. 636: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

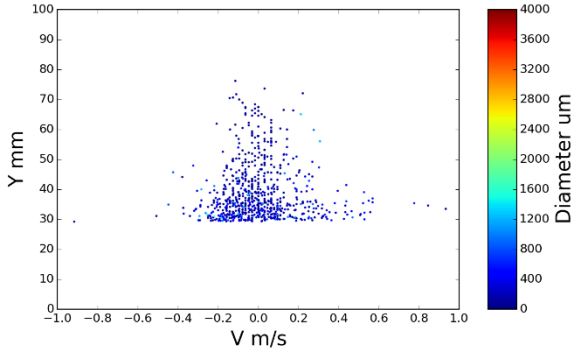

Figure A. 639: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

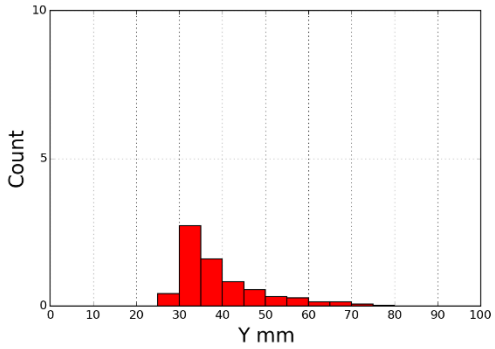

Figure A. 637: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

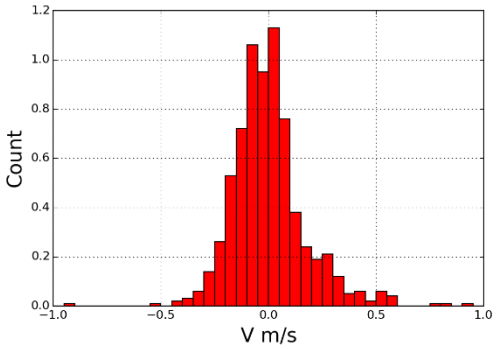

Figure A. 640: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

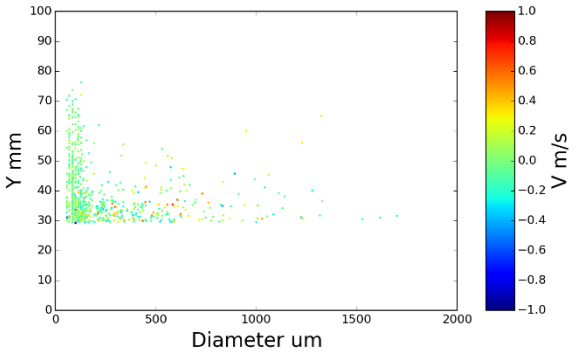

Figure A. 638: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	3.4	3.34	57.1	1132	142.8	152.3	57.1	979.0	139.1	146.5
40-60mm	2.44	2.57	57.1	878.5	95.5	74.2	57.1	1039	94.4	77.1
60-80mm	0.34	0.51	57.1	139.9	83.8	19.4	57.1	153.7	78.0	17.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	6.18	6.42	57.1	1132	120.9	124.7	57.1	1039	116.3	119.0
			Height A (mm)				Height B (mm)			
Highest Particle			74.7868				74.5591			
Lowest Particle			29.2594				29.2810			

Table A. 69: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	1.78	57.1	1132	185.3	187.5	57.1	979.0	178.8	179.2	-0.300	0.910	-0.050	0.120	-0.320	0.760	-0.030	0.140
40-60mm	1.09	57.1	878.5	115.8	104.1	57.1	1039	113.2	113.3	-0.730	0.090	-0.090	0.090	-0.760	0.340	-0.020	0.120
60-80mm	0.17	57.1	139.9	89.3	22.7	57.1	153.7	84.2	23.4	-0.160	0.000	-0.070	0.050	-0.130	0.130	-0.010	0.060
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	3.04	57.1	1132	155.1	160.7	57.1	1039	150.3	157.3	-0.730	0.910	-0.070	0.110	-0.760	0.760	-0.030	0.130

Table A. 70: Matched Droplet Info

A.5.4.1 All Droplets for .LA Image

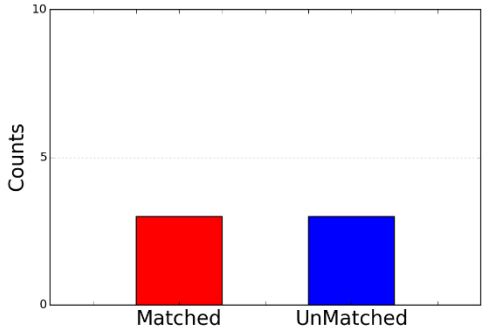

Figure A. 641: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

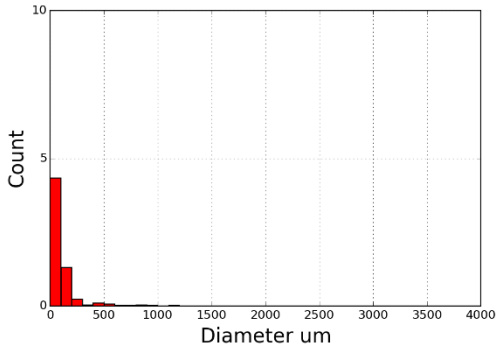

Figure A. 642: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

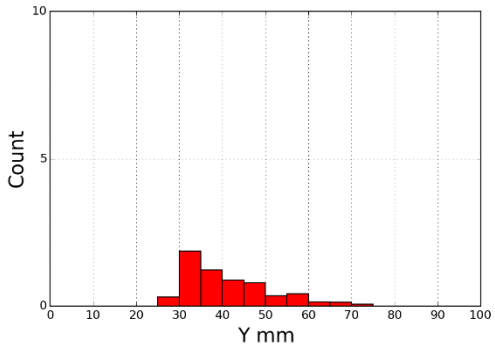

Figure A. 643: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

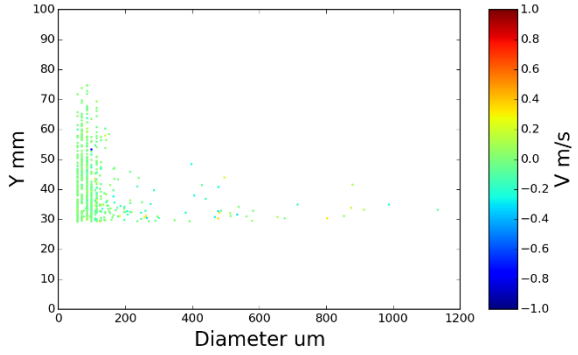

Figure A. 644: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

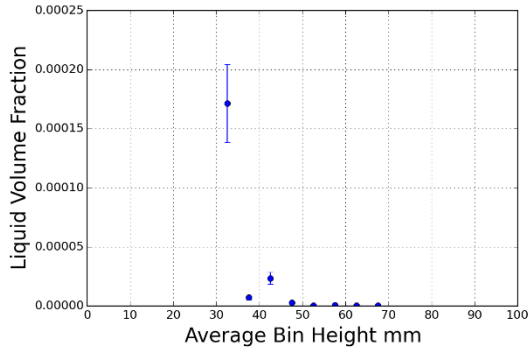

Figure A. 645: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 All Droplets for .LB Image

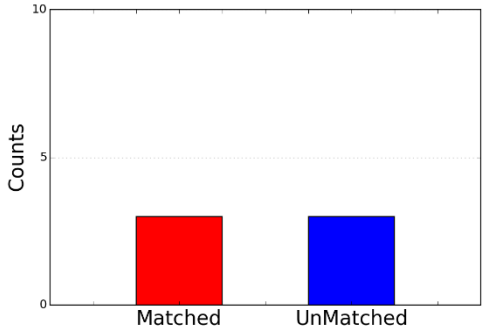

Figure A. 646: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

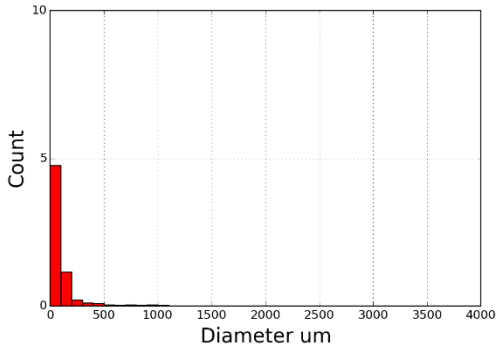

Figure A. 647: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

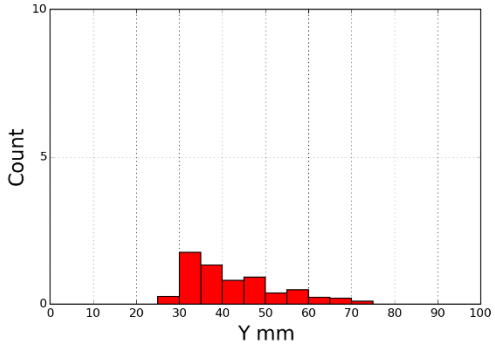

Figure A. 648: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

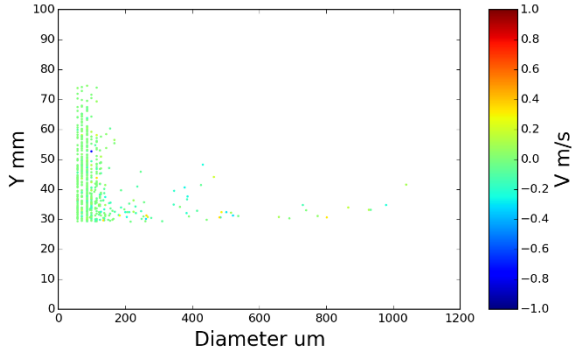

Figure A. 649: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

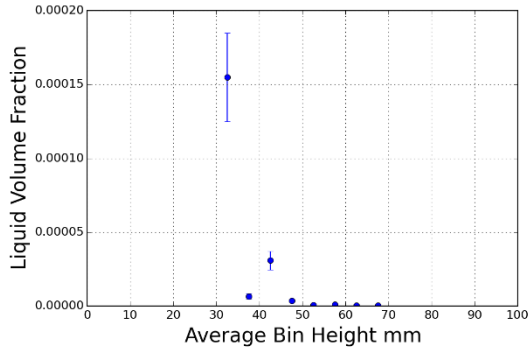

Figure A. 650: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 Matched Only Droplets for .LA Image

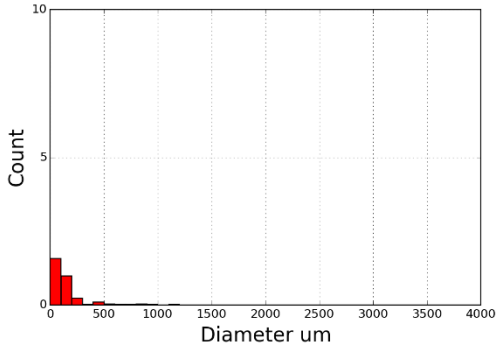

Figure A. 651: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

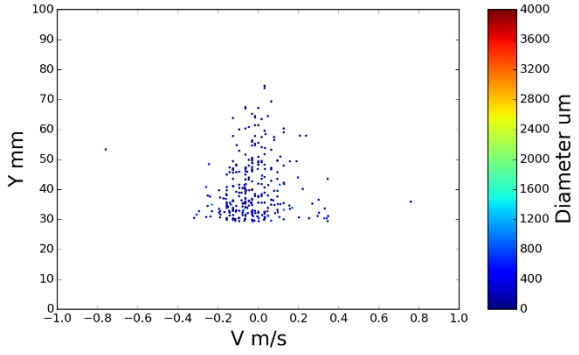

Figure A. 654: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

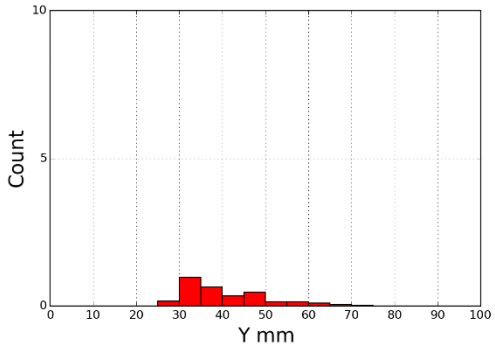

Figure A. 652: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

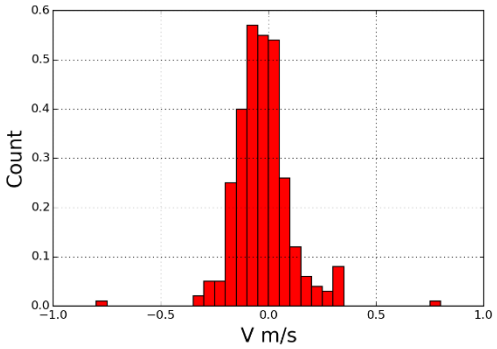

Figure A. 655: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

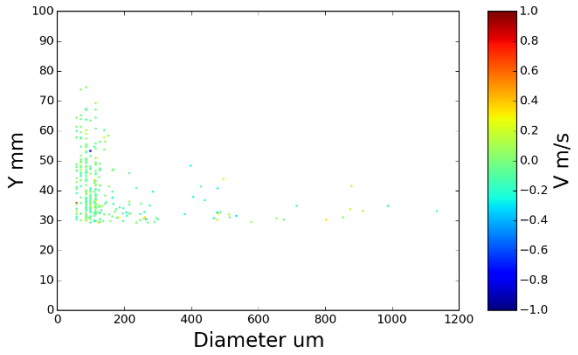

Figure A. 653: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 Matched Only Droplets for .LB Image

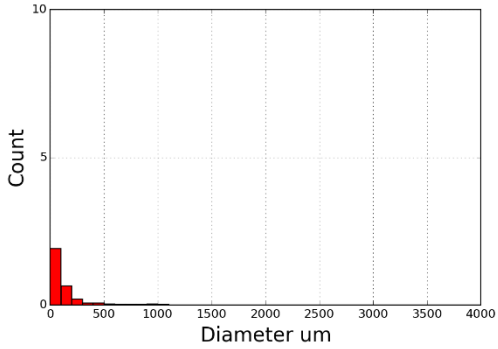

Figure A. 656: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

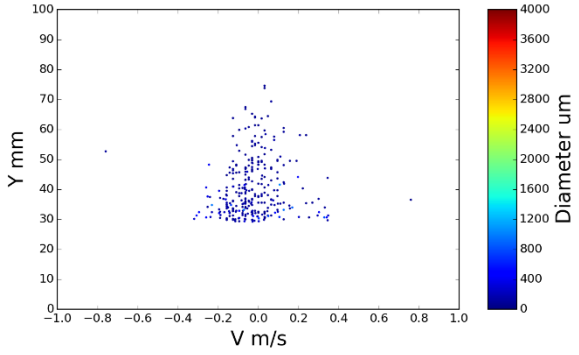

Figure A. 659: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

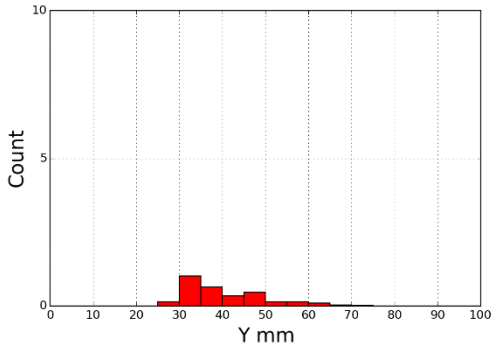

Figure A. 657: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

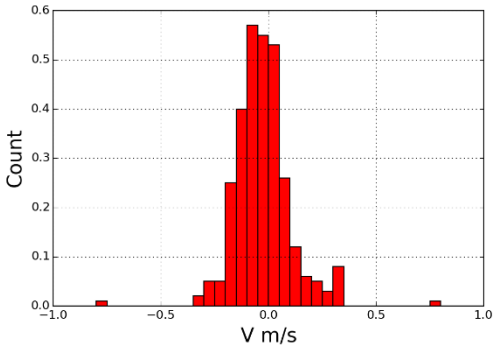

Figure A. 660: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

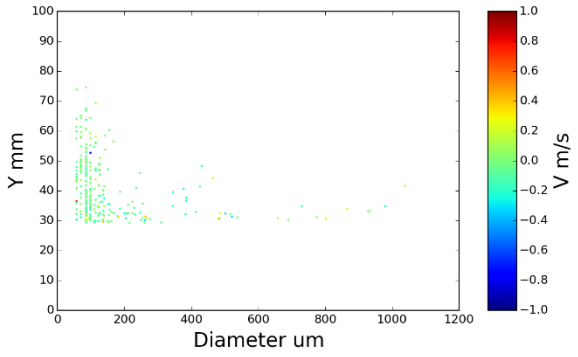

Figure A. 658: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	4.11	4.36	57.1	1257	215.8	200.6	57.1	1355	213.9	212.3
40-60mm	2.34	2.44	57.1	1275	167.3	197.7	57.1	1247	158.7	191.6
60-80mm	0.5	0.59	57.1	127.7	77.6	16.3	57.1	114.2	73.8	15.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	6.95	7.39	57.1	1275	189.6	196.1	57.1	1355	184.5	201.1
			Height A (mm)				Height B (mm)			
Highest Particle			76.3933				76.3807			
Lowest Particle			29.3257				29.2594			

Table A. 71: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	2.46	57.1	1257	274.8	219.9	57.1	1219	271.1	221.6	-0.440	0.900	-0.090	0.130	-0.490	0.780	-0.040	0.170
40-60mm	1.23	57.1	1275	234.7	247.7	57.1	1247	229.5	243.2	-0.280	0.660	-0.080	0.110	-0.550	0.410	-0.030	0.160
60-80mm	0.22	57.1	127.7	79.9	18.1	57.1	114.2	79.2	16.6	-0.160	0.030	-0.060	0.060	-0.160	0.060	-0.060	0.060
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	3.91	57.1	1275	251.2	227.7	57.1	1247	247.2	227.1	-0.440	0.900	-0.080	0.120	-0.550	0.780	-0.030	0.160

Table A. 72: Matched Droplet Info

A.5.4.1 All Droplets for .LA Image

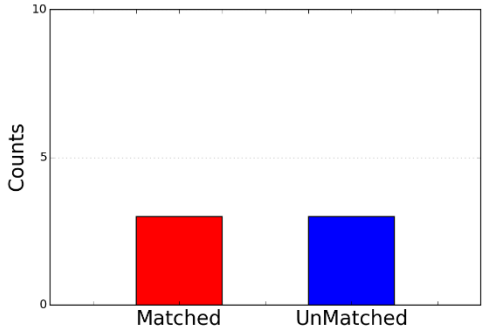

Figure A. 661: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

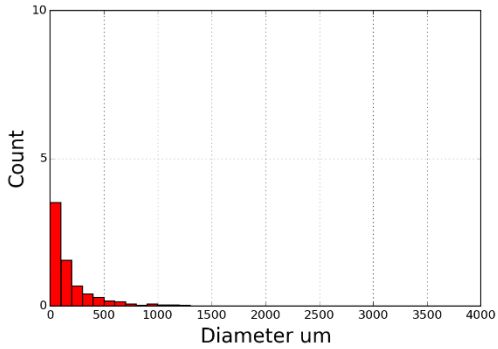

Figure A. 662: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

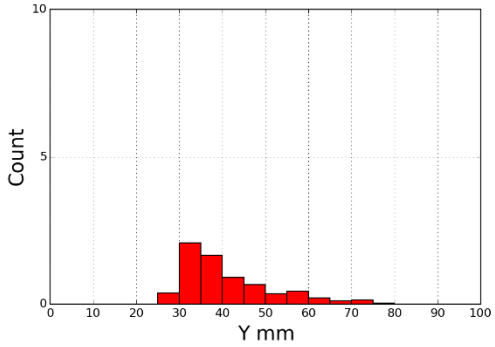

Figure A. 663: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

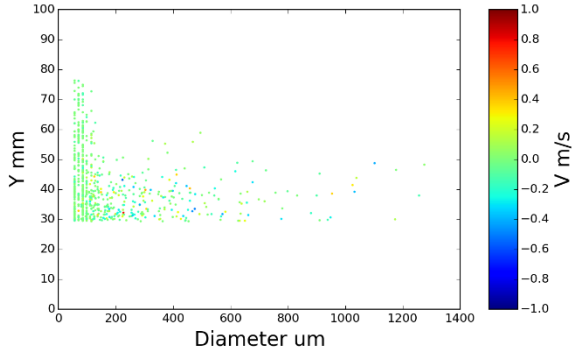

Figure A. 664: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

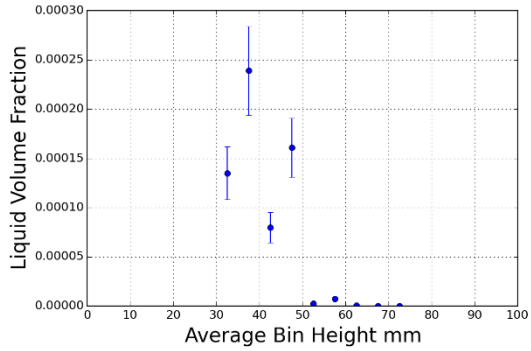

Figure A. 665: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 All Droplets for .LB Image

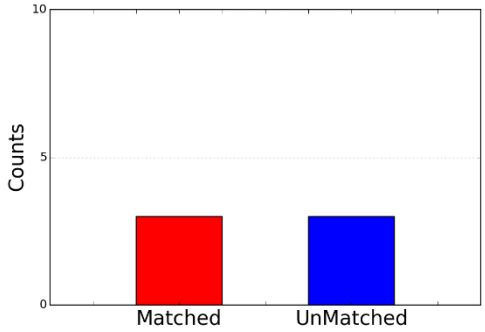

Figure A. 666: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

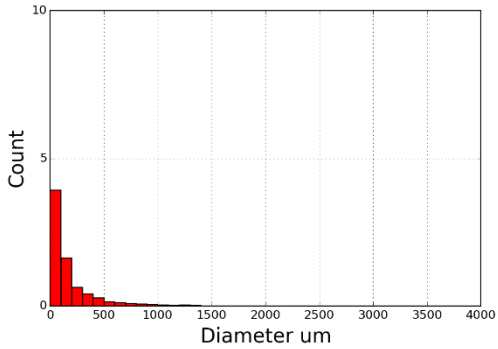

Figure A. 667: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

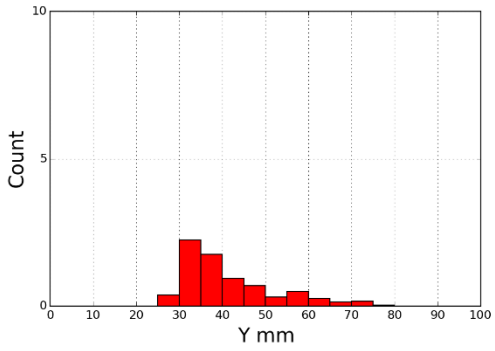

Figure A. 668: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

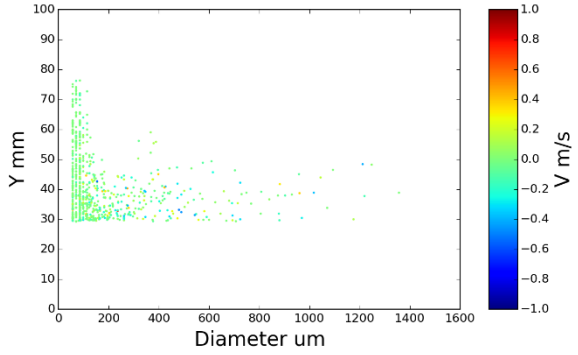

Figure A. 669: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

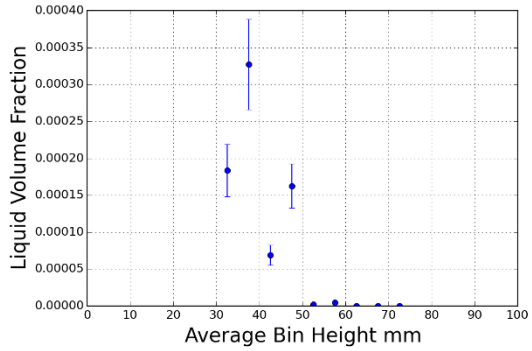

Figure A. 670: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 Matched Only Droplets for .LA Image

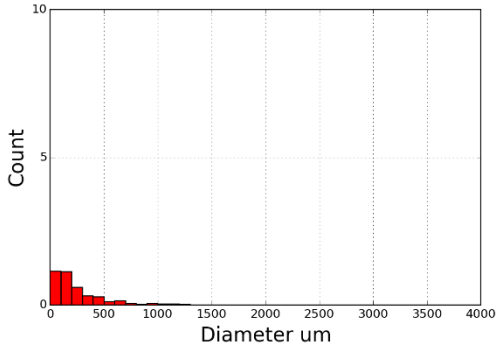

Figure A. 671: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

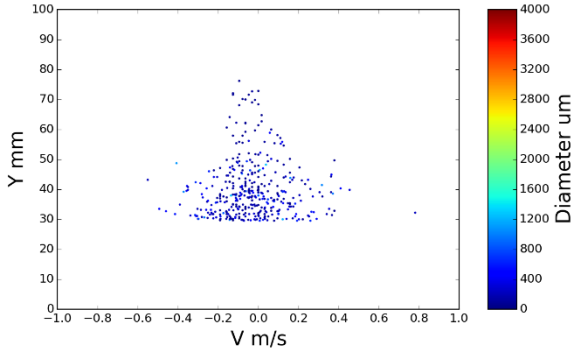

Figure A. 674: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

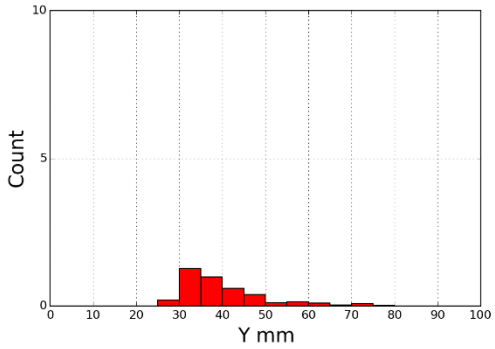

Figure A. 672: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

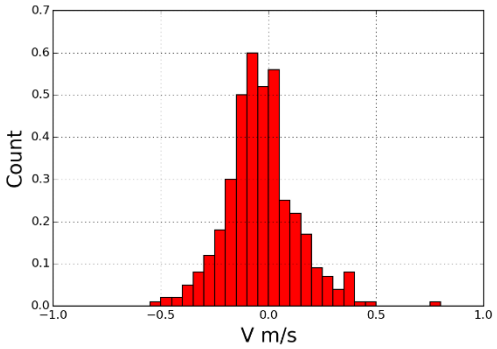

Figure A. 675: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

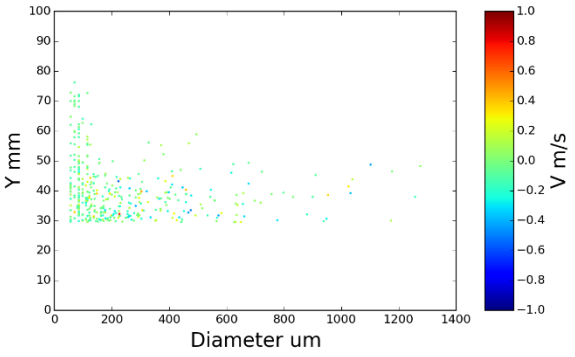

Figure A. 673: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 Matched Only Droplets for .LB Image

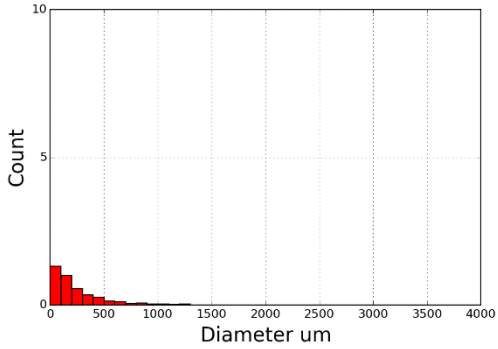

Figure A. 676: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

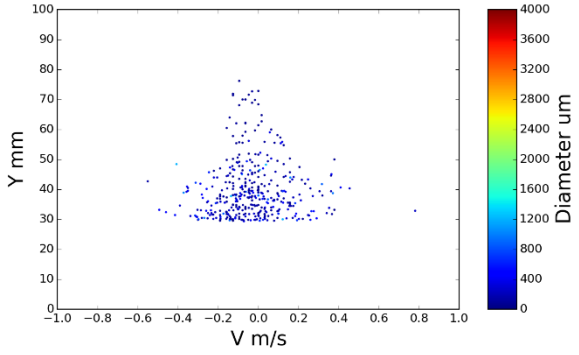

Figure A. 679: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

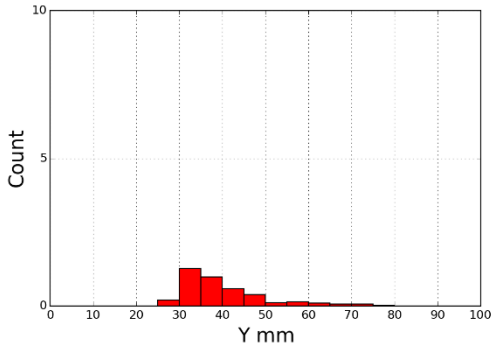

Figure A. 677: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

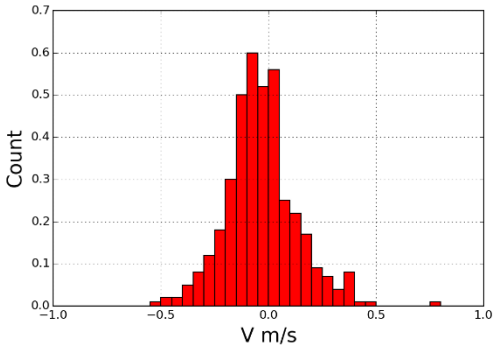

Figure A. 680: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

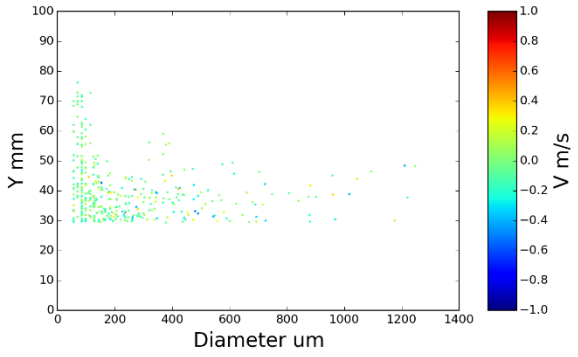

Figure A. 678: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	4.44	4.46	57.1	1608	234.8	234.8	57.1	1391	222.2	216.9
40-60mm	3.61	3.4	57.1	1090	149.7	165.5	57.1	1075	149.4	165.6
60-80mm	0.84	0.8	57.1	139.9	78.3	19.9	57.1	168.9	80.4	22.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	8.89	8.66	57.1	1608	185.4	203.8	57.1	1391	180.5	193.0
			Height A (mm)				Height B (mm)			
Highest Particle			77.0891				76.7476			
Lowest Particle			29.2847				29.2773			

Table A. 73: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	2.51	57.1	1608	316.9	265.6	57.1	1391	305.2	251.7	-0.750	0.950	-0.090	0.140	-0.480	0.780	0.020	0.210
40-60mm	1.53	57.1	1090	218.2	218.6	57.1	1075	213.7	216.9	-0.410	0.360	-0.080	0.090	-0.920	0.540	-0.020	0.170
60-80mm	0.25	57.1	139.9	90.8	22.0	57.1	168.9	89.7	24.9	-0.220	0.030	-0.090	0.050	-0.140	0.220	-0.000	0.090
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	4.29	57.1	1608	268.5	249.9	57.1	1391	259.8	239.8	-0.750	0.950	-0.090	0.120	-0.920	0.780	0.000	0.190

Table A. 74: Matched Droplet Info

A.5.4.1 All Droplets for .LA Image

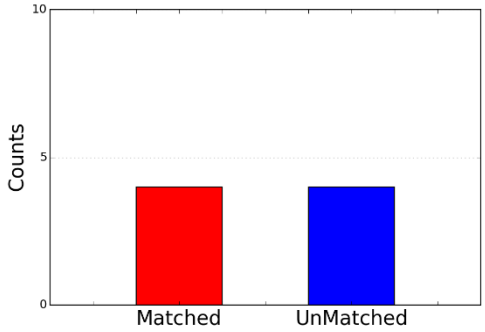

Figure A. 681: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

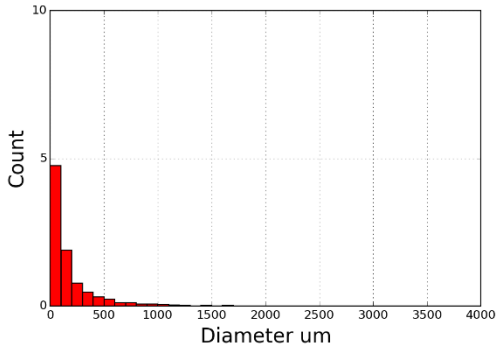

Figure A. 682: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

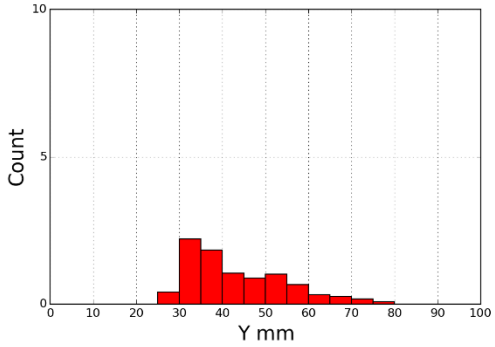

Figure A. 683: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

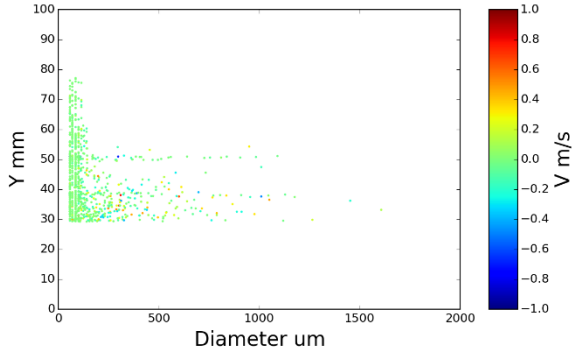

Figure A. 684: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

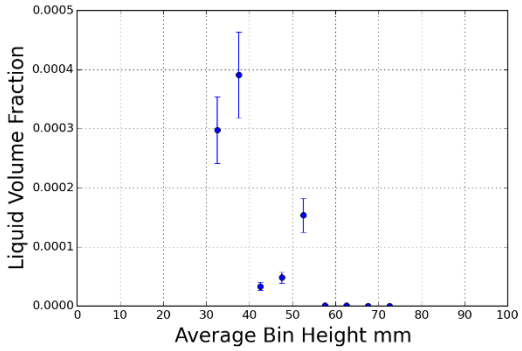

Figure A. 685: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 All Droplets for .LB Image

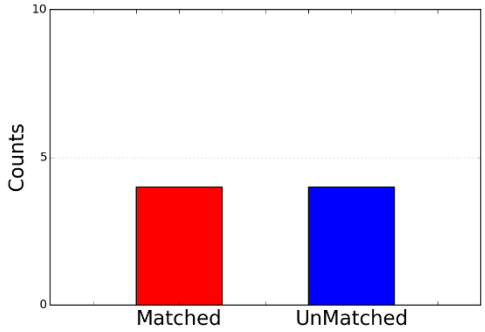

Figure A. 686: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

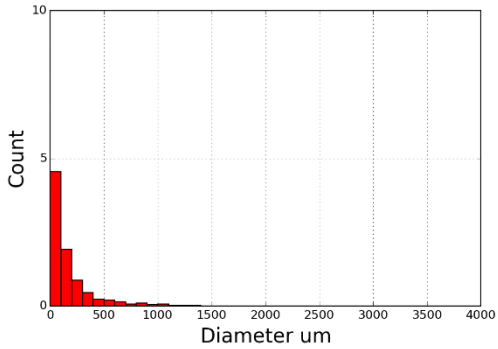

Figure A. 687: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

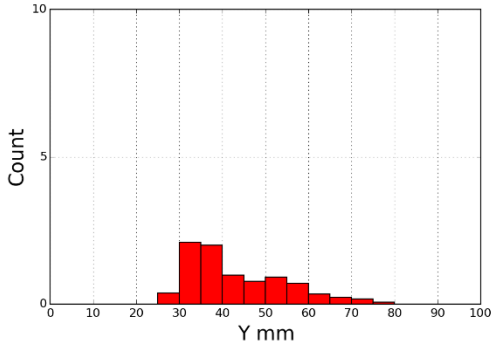

Figure A. 688: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

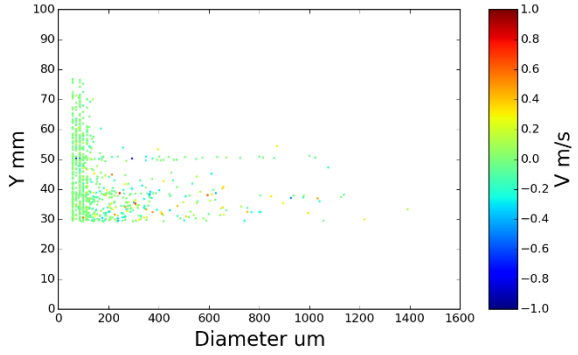

Figure A. 689: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

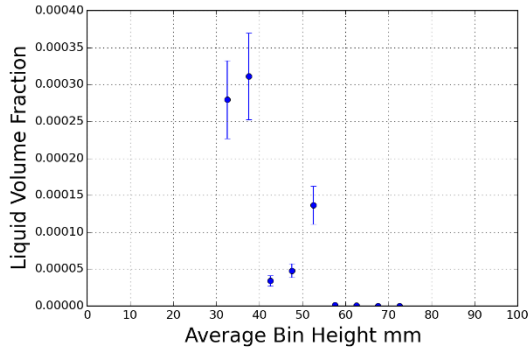

Figure A. 690: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 Matched Only Droplets for .LA Image

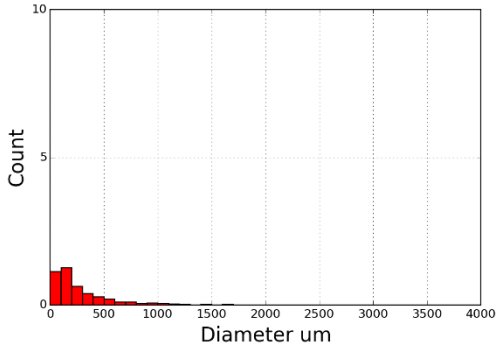

Figure A. 691: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

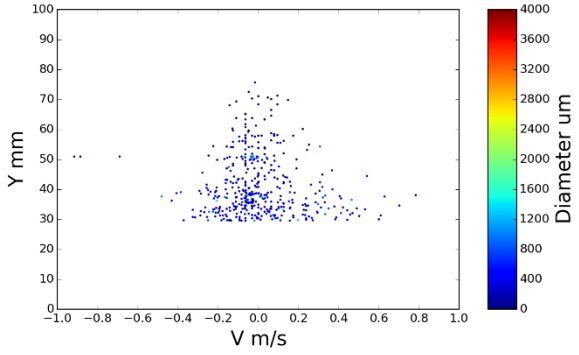

Figure A. 694: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

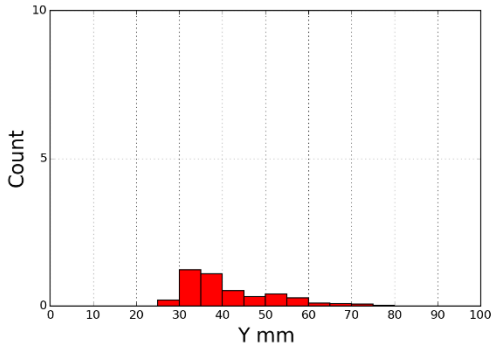

Figure A. 692: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

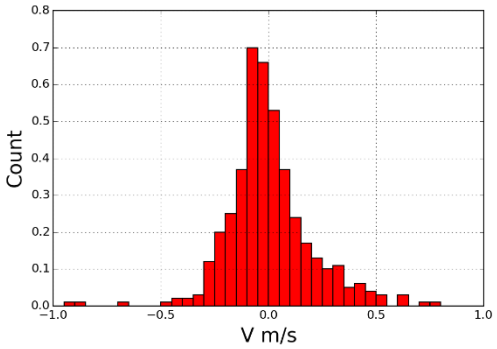

Figure A. 695: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

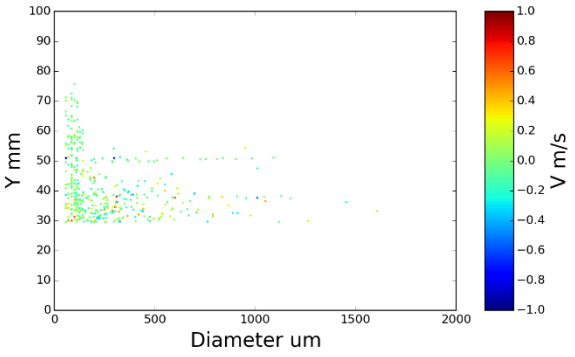

Figure A. 693: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.1 Matched Only Droplets for .LB Image

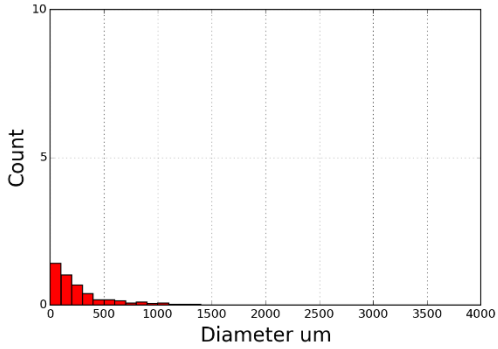

Figure A. 696: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

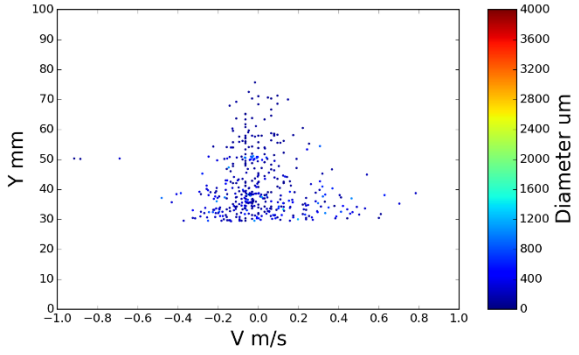

Figure A. 699: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

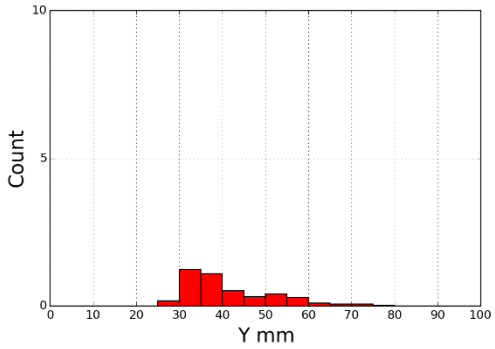

Figure A. 697: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

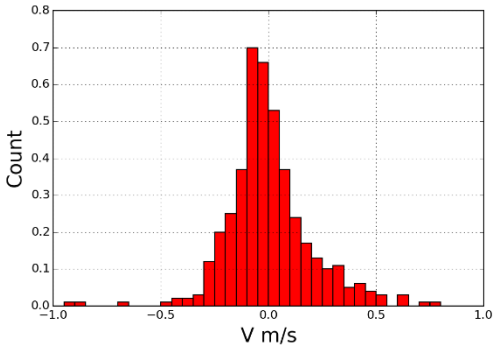

Figure A. 700: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

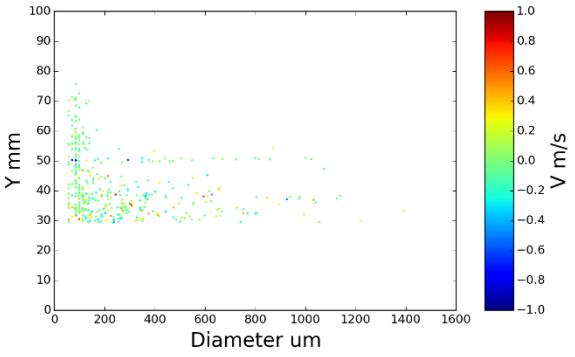

Figure A. 698: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 Lens 50mm Mag 0_13x

A.5.4.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	22.82	23.09	128.5	2693	519.0	383.1	128.5	3366	519.5	377.8
20-40mm	7.21	7.47	128.5	2024	455.1	316.2	128.5	1789	449.4	313.6
40-60mm	0.5	0.55	157.4	1228	402.1	232.1	128.5	1006	371.2	215.0
60-80mm	0.01	0.01	878.8	878.8	878.8	0.0	1032	1032	1032	0.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	30.54	31.12	128.5	2693	502.1	367.5	128.5	3366	500.2	362.8
			Height A (mm)				Height B (mm)			
Highest Particle			61.2977				61.3100			
Lowest Particle			5.6950				5.7436			

Table A. 75: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	14.66	128.5	2693	580.7	381.4	128.5	2658	576.9	379.8	-0.930	0.940	-0.010	0.200	-0.950	0.950	0.030	0.280
20-40mm	4.96	128.5	2024	536.7	325.3	128.5	1789	534.6	319.9	-0.930	0.850	-0.020	0.130	-0.940	0.730	0.030	0.250
40-60mm	0.34	157.4	1228	482.1	237.1	157.4	1006	468.9	214.6	-0.130	0.190	-0.000	0.090	-0.310	0.290	-0.030	0.160
60-80mm	0.01	878.8	878.8	878.8	0.0	1032	1032	1032	0.0	-0.010	-0.010	-0.010	0.000	0.010	0.010	0.010	0.000
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	19.97	128.5	2693	568.3	366.8	128.5	2658	564.6	364.2	-0.930	0.940	-0.020	0.180	-0.950	0.950	0.030	0.270

Table A. 76: Matched Droplet Info

A.5.4.2 All Droplets for .LA Image

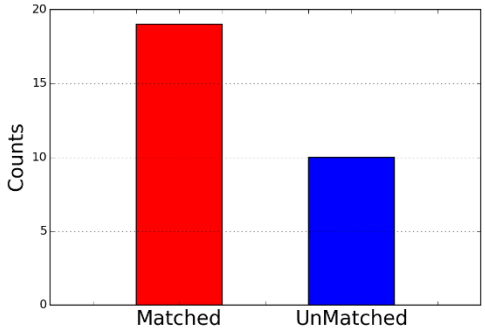

Figure A. 701: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

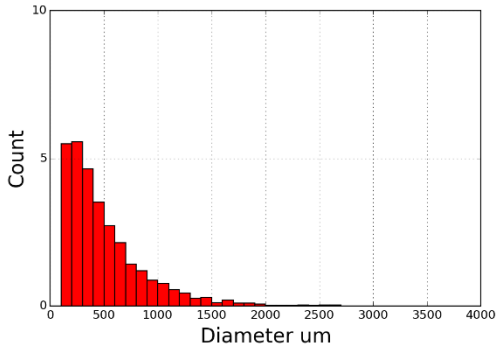

Figure A. 702: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

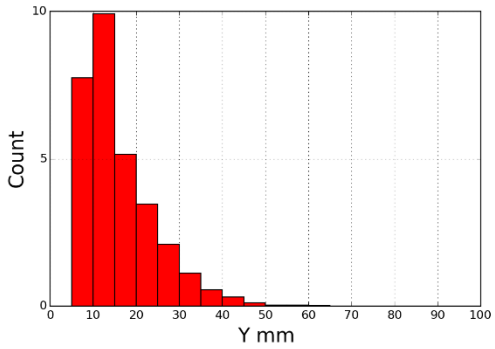

Figure A. 703: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

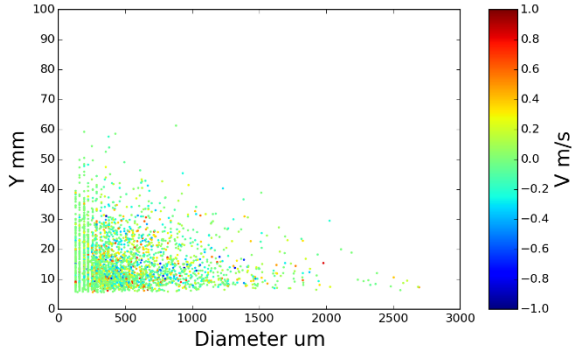

Figure A. 704: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

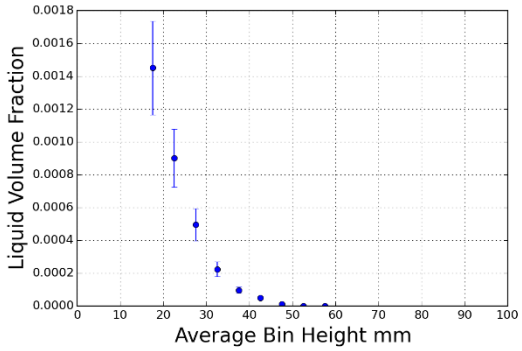

Figure A. 705: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 All Droplets for .LB Image

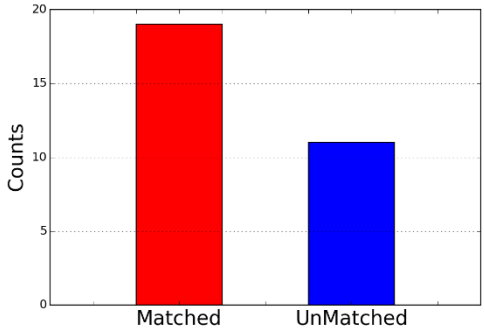

Figure A. 706: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

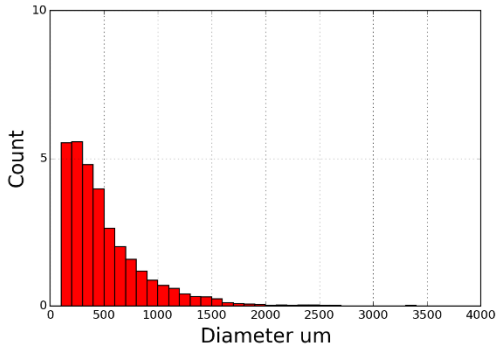

Figure A. 707: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

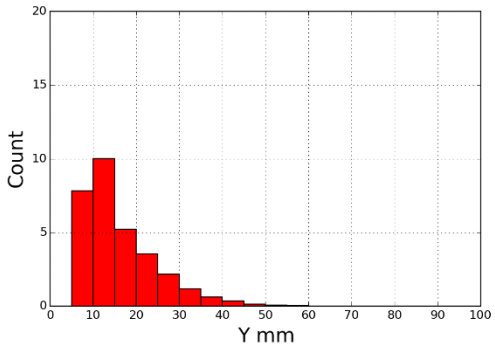

Figure A. 708: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

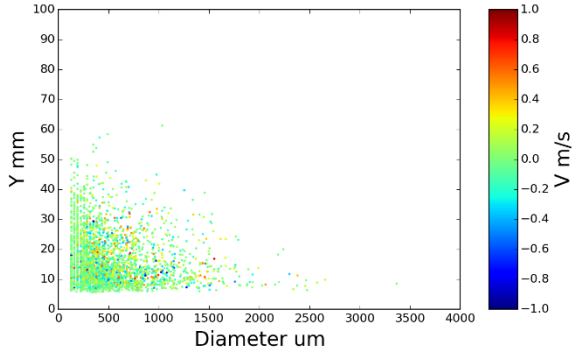

Figure A. 709: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

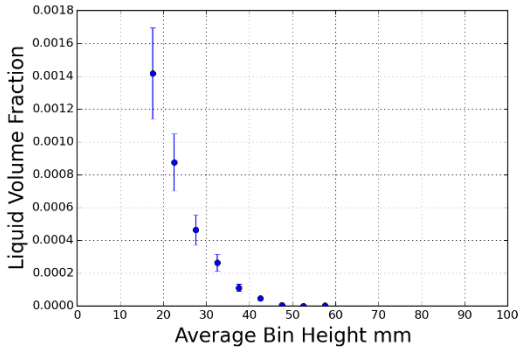

Figure A. 710: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 Matched Only Droplets for .LA Image

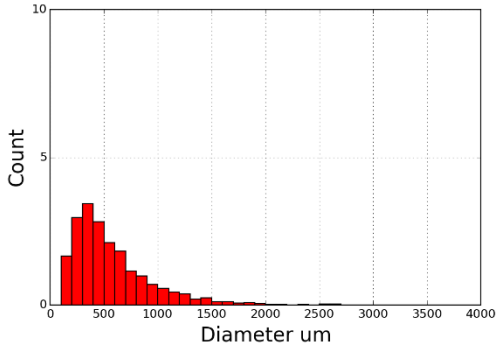

Figure A. 711: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

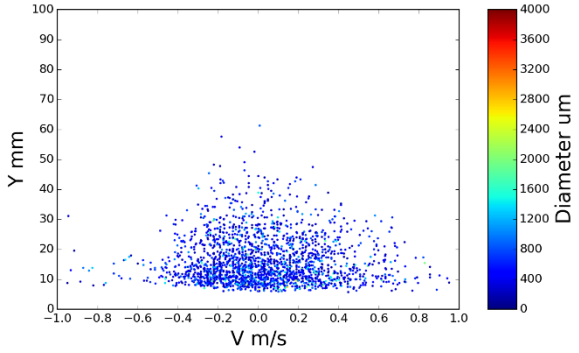

Figure A. 714: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

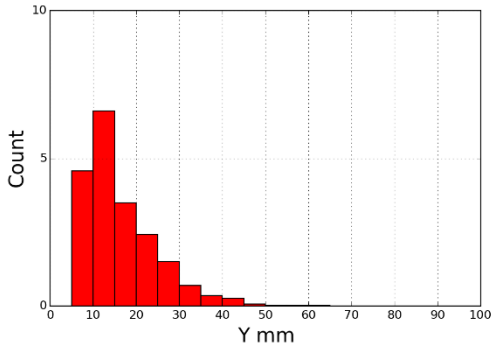

Figure A. 712: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

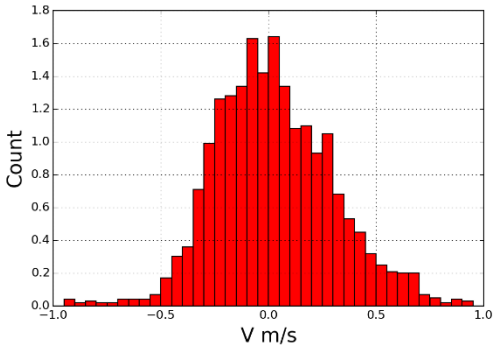

Figure A. 715: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

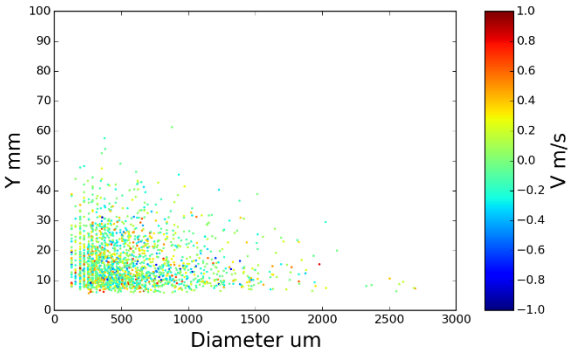

Figure A. 713: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 Matched Only Droplets for .LB Image

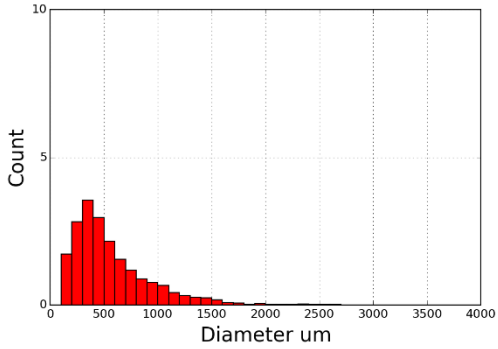

Figure A. 716: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

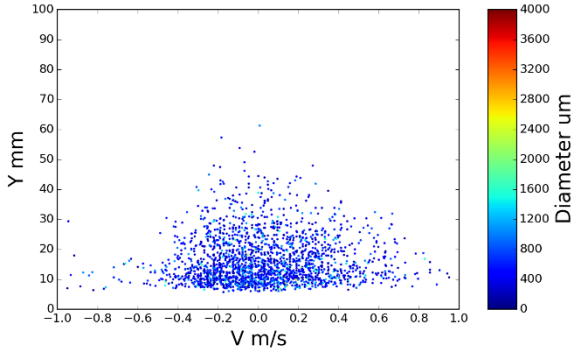

Figure A. 719: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

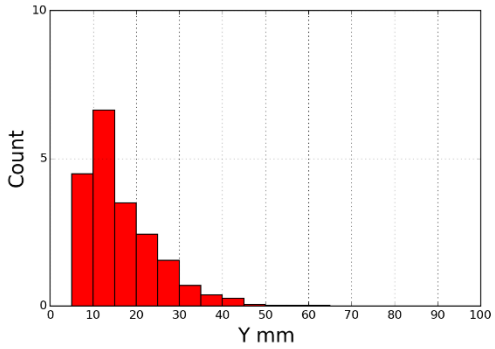

Figure A. 717: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

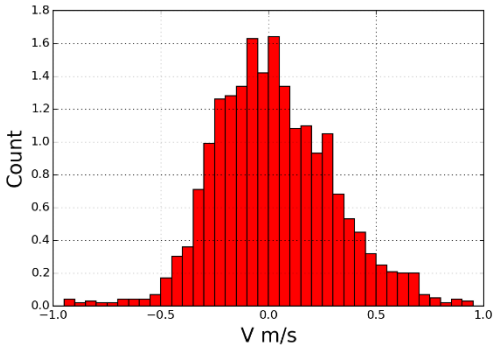

Figure A. 720: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

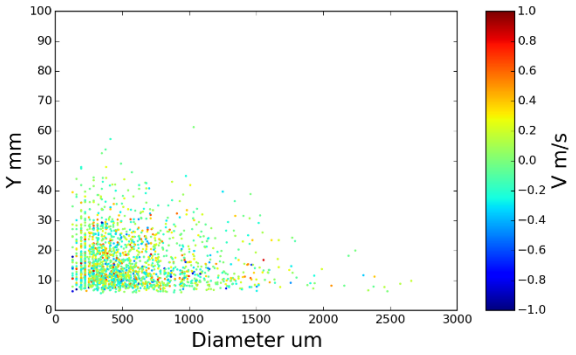

Figure A. 718: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	15.36	15.75	128.5	2459	479.5	316.4	128.5	2337	473.9	307.7
20-40mm	2.53	2.46	128.5	1623	395.7	258.8	128.5	1806	407.0	255.1
40-60mm	0.04	0.03	128.5	549.0	350.1	190.9	363.5	552.8	480.8	83.6
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	17.93	18.24	128.5	2459	467.4	310.1	128.5	2337	464.9	301.8
			Height A (mm)				Height B (mm)			
Highest Particle			47.0664				47.1000			
Lowest Particle			5.6950				5.6950			

Table A. 77: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	10.46	128.5	2459	541.5	319.7	128.5	2337	541.7	317.9	-0.920	0.940	-0.040	0.170	-0.930	0.870	-0.020	0.250
20-40mm	1.91	128.5	1623	455.2	264.1	128.5	1806	450.6	263.9	-0.440	0.190	-0.040	0.090	-0.540	0.620	-0.040	0.200
40-60mm	0.02	529.9	549.0	539.5	9.6	526.0	552.8	539.4	13.4	-0.100	-0.050	-0.070	0.030	-0.320	0.020	-0.150	0.170
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	12.39	128.5	2459	528.2	313.1	128.5	2337	527.8	311.7	-0.920	0.940	-0.040	0.160	-0.930	0.870	-0.020	0.240

Table A. 78: Matched Droplet Info

A.5.4.2 All Droplets for .LA Image

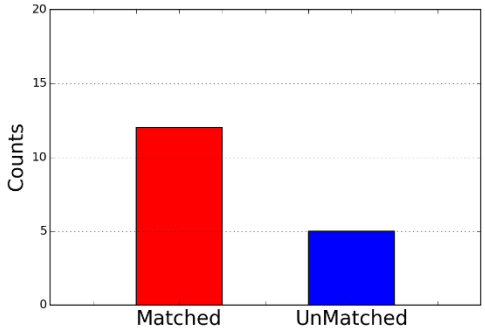

Figure A. 721: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

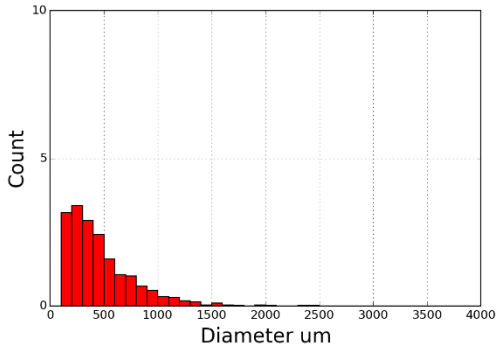

Figure A. 722: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

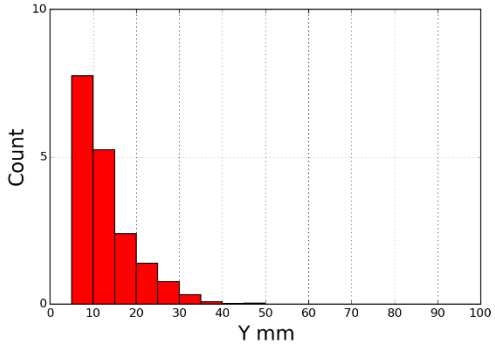

Figure A. 723: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

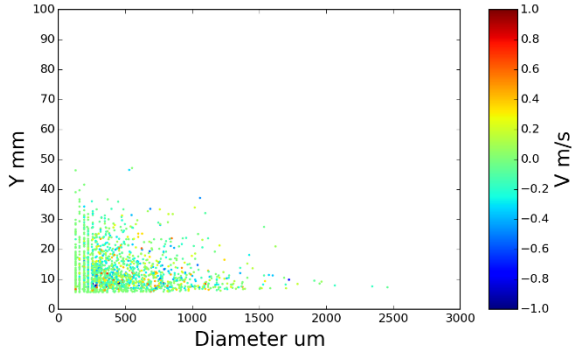

Figure A. 724: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

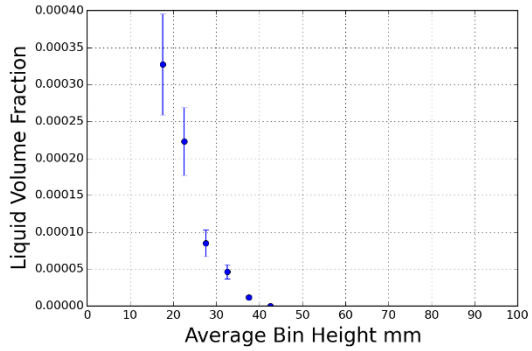

Figure A. 725: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 All Droplets for .LB Image

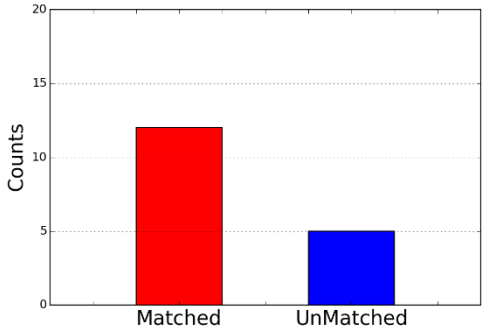

Figure A. 726: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

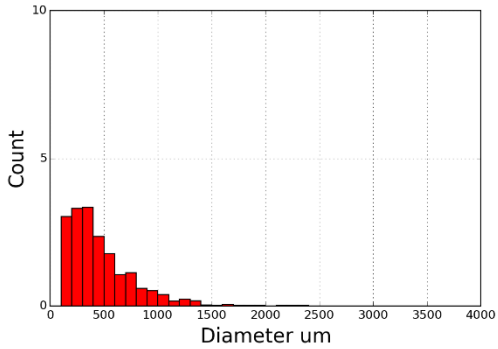

Figure A. 727: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

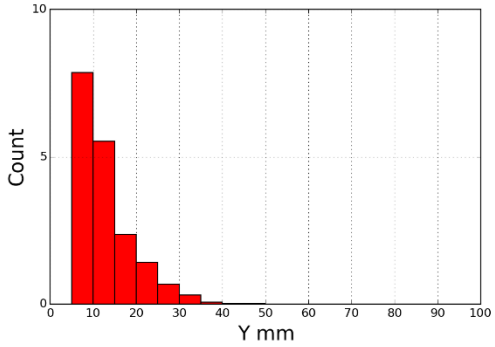

Figure A. 728: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

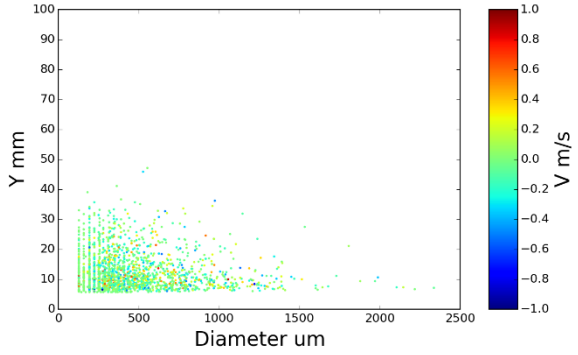

Figure A. 729: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

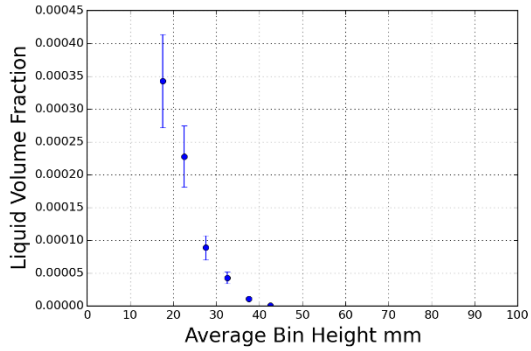

Figure A. 730: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 Matched Only Droplets for .LA Image

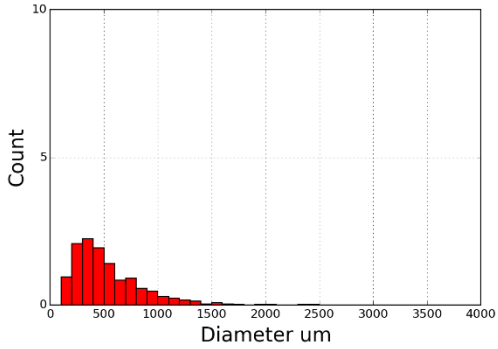

Figure A. 731: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

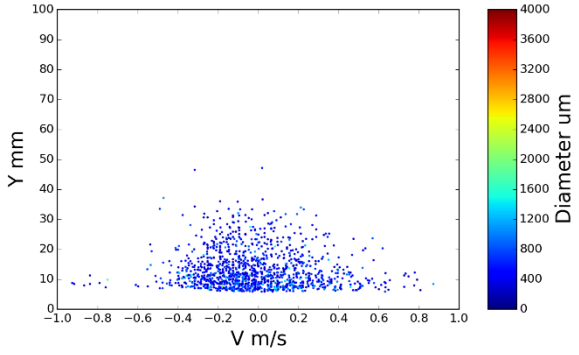

Figure A. 734: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

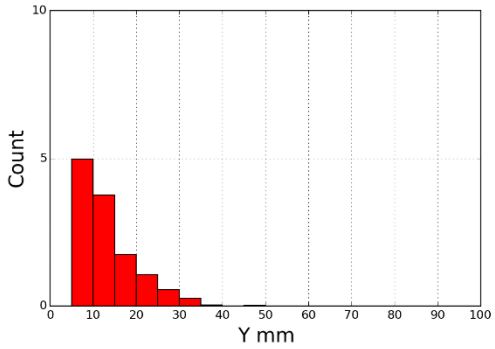

Figure A. 732: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

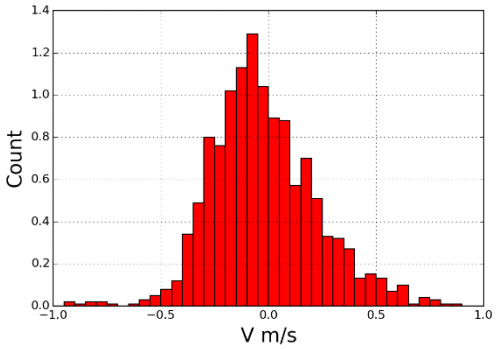

Figure A. 735: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

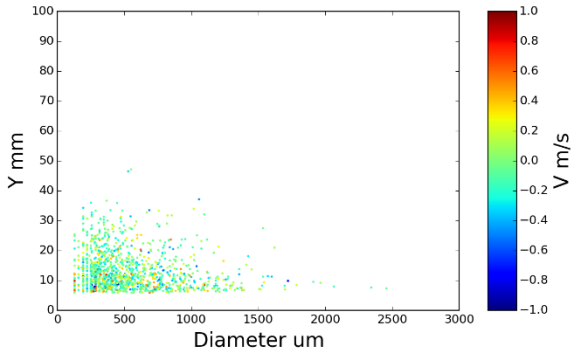

Figure A. 733: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 Matched Only Droplets for .LB Image

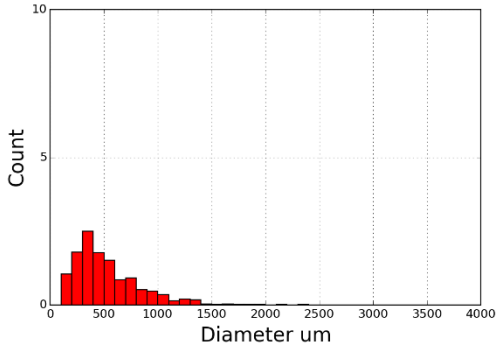

Figure A. 736: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

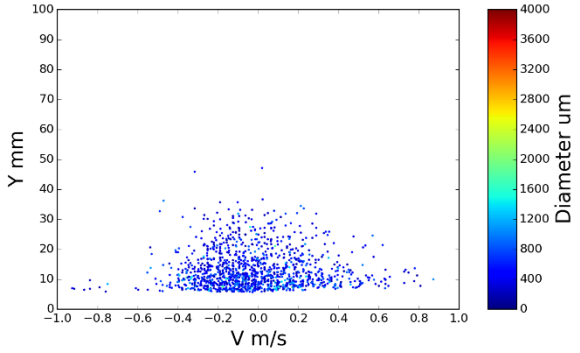

Figure A. 739: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

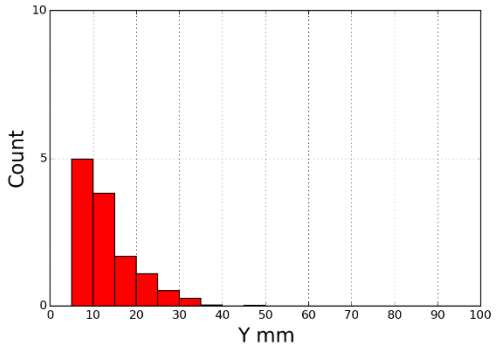

Figure A. 737: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

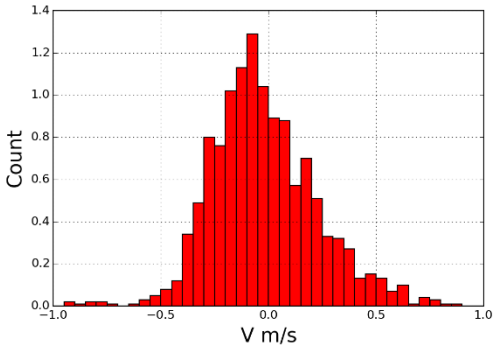

Figure A. 740: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

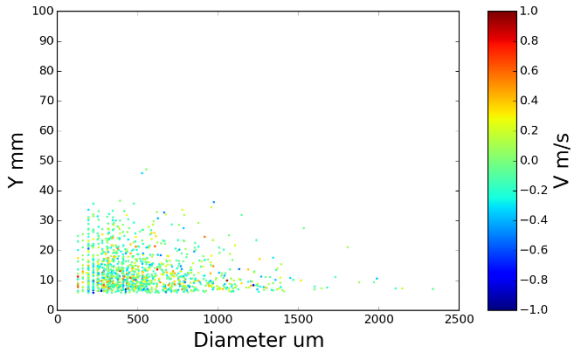

Figure A. 738: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	23.71	24.12	128.5	2929	517.1	351.8	128.5	3268	519.8	358.1
20-40mm	4.12	4.34	128.5	1735	435.7	274.6	128.5	1791	427.4	258.3
40-60mm	0.1	0.1	128.5	802.6	474.9	224.4	314.8	800.0	524.8	172.4
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	27.93	28.56	128.5	2929	505.0	342.3	128.5	3268	505.8	345.9
			Height A (mm)				Height B (mm)			
Highest Particle			48.3221				48.9153			
Lowest Particle			5.6950				5.6950			

Table A. 79: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	15.26	128.5	2929	591.5	360.5	128.5	2872	588.0	361.4	-0.930	0.920	-0.050	0.180	-0.950	0.930	-0.030	0.280
20-40mm	3.0	128.5	1735	496.7	281.0	128.5	1791	484.3	267.6	-0.350	0.560	-0.060	0.110	-0.840	0.610	-0.050	0.200
40-60mm	0.08	257.0	802.6	546.4	190.9	314.8	800.0	519.1	174.4	-0.190	0.060	-0.050	0.070	-0.190	0.570	0.250	0.220
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	18.34	128.5	2929	575.8	349.9	128.5	2872	570.8	349.3	-0.930	0.920	-0.050	0.170	-0.950	0.930	-0.040	0.270

Table A. 80: Matched Droplet Info

A.5.4.2 All Droplets for .LA Image

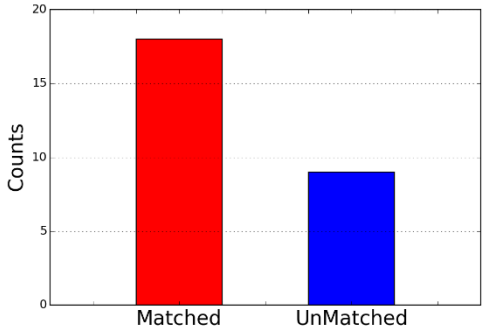

Figure A. 741: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

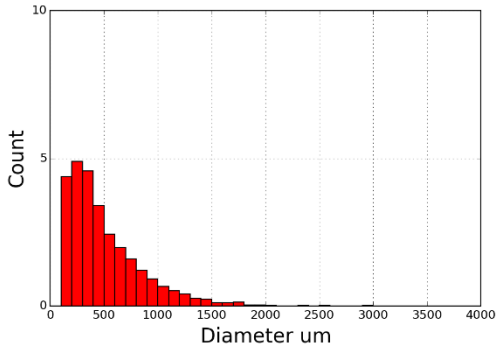

Figure A. 742: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

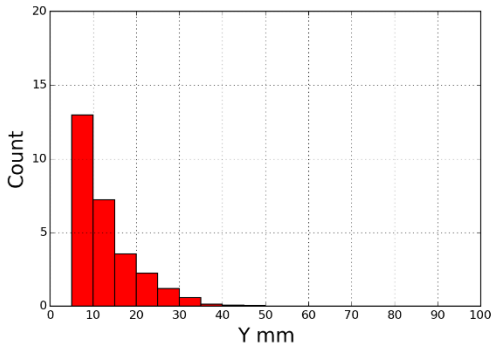

Figure A. 743: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

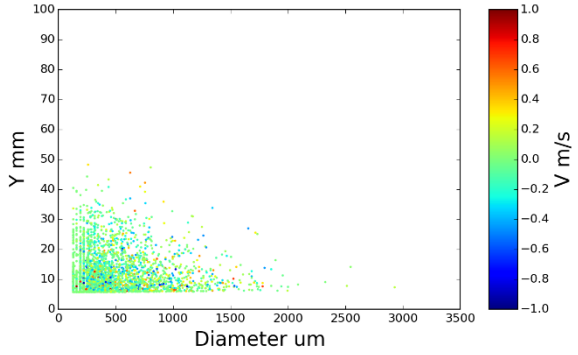

Figure A. 744: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

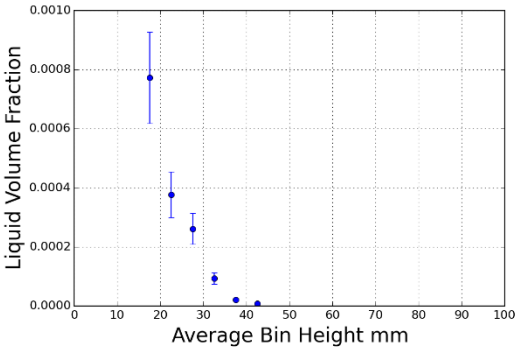

Figure A. 745: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 All Droplets for .LB Image

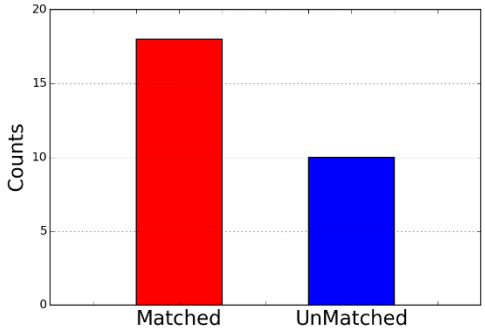

Figure A. 746: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

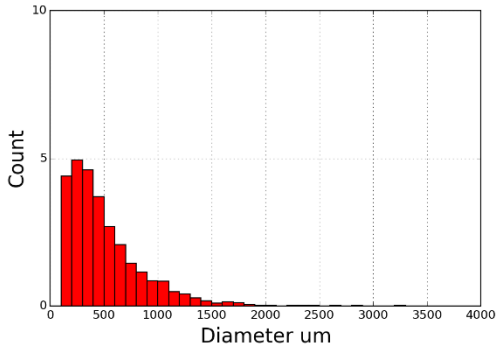

Figure A. 747: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

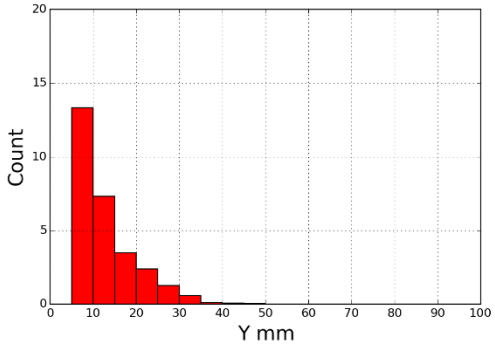

Figure A. 748: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

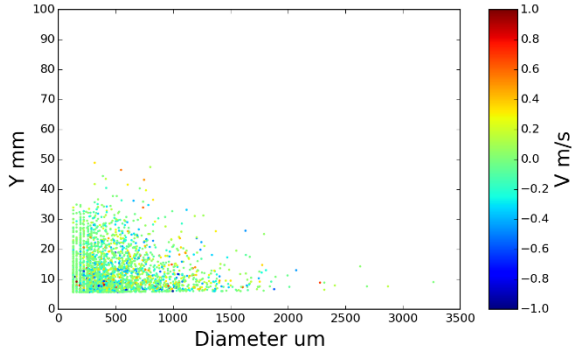

Figure A. 749: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

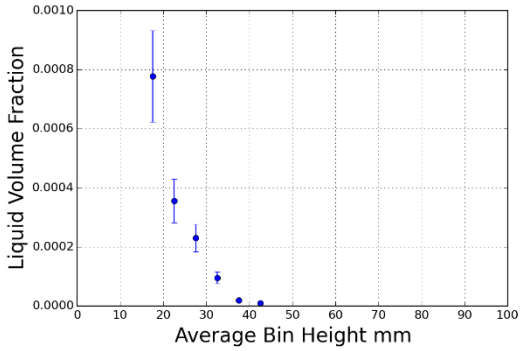

Figure A. 750: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 Matched Only Droplets for .LA Image

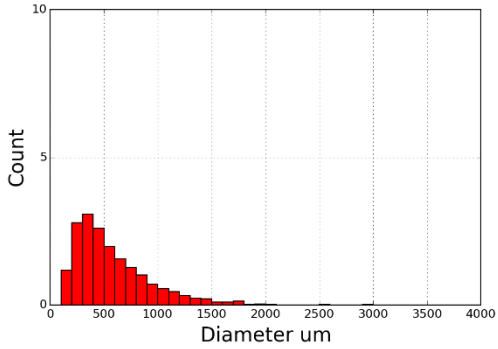

Figure A. 751: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

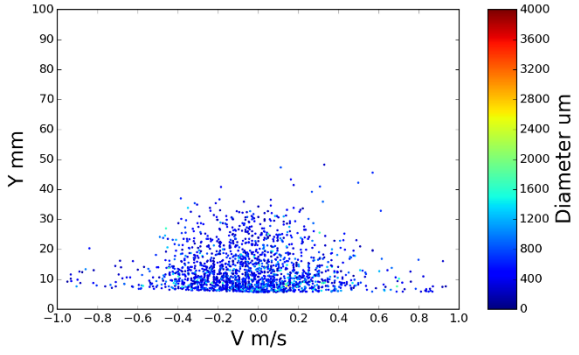

Figure A. 754: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

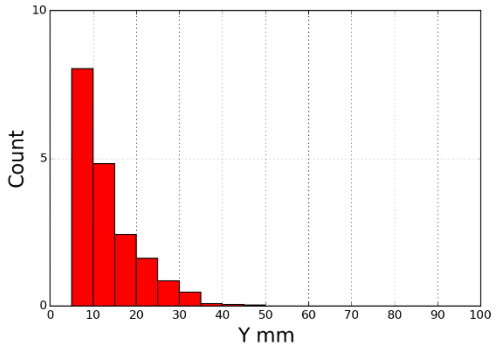

Figure A. 752: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

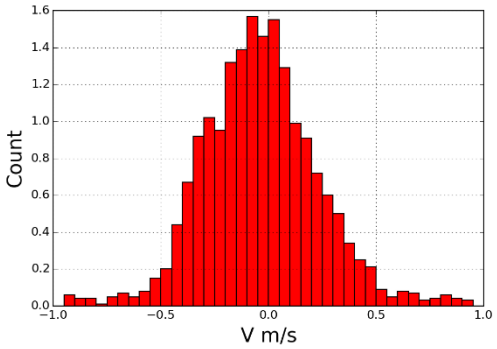

Figure A. 755: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

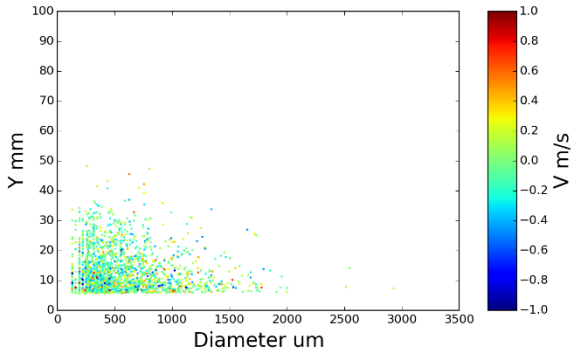

Figure A. 753: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 Matched Only Droplets for .LB Image

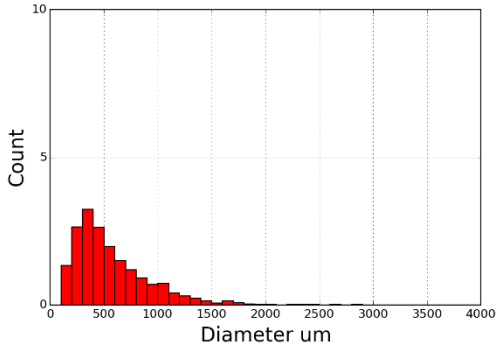

Figure A. 756: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

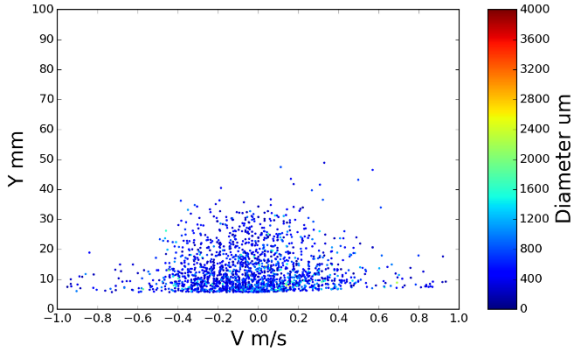

Figure A. 759: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

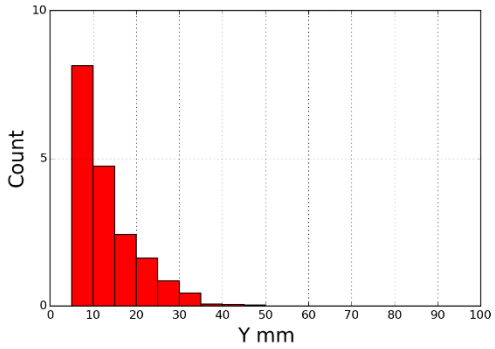

Figure A. 757: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

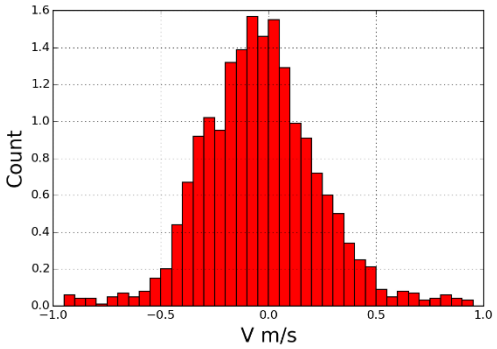

Figure A. 760: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

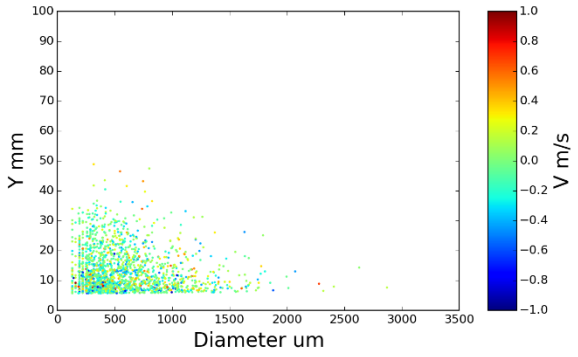

Figure A. 758: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	20.14	20.87	128.5	3354	550.3	409.9	128.5	2838	541.7	386.8
20-40mm	4.46	4.39	128.5	2090	442.3	287.2	128.5	1883	435.2	282.0
40-60mm	0.1	0.12	192.8	908.8	513.0	182.6	128.5	652.2	396.6	168.0
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	24.7	25.38	128.5	3354	530.7	392.1	128.5	2838	522.6	372.3
			Height A (mm)				Height B (mm)			
Highest Particle			48.5214				48.7463			
Lowest Particle			5.6950				5.6950			

Table A. 81: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	12.63	128.5	3282	633.5	419.5	128.5	2838	619.2	403.7	-0.930	0.930	-0.060	0.190	-0.920	0.940	-0.020	0.280
20-40mm	2.85	157.4	2090	512.5	301.7	128.5	1883	500.2	287.8	-0.940	0.880	-0.070	0.170	-0.610	0.840	-0.020	0.230
40-60mm	0.1	192.8	908.8	513.0	182.6	222.6	652.2	469.1	122.1	-0.280	0.040	-0.170	0.100	-0.250	0.610	0.110	0.230
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	15.58	128.5	3282	610.6	402.2	128.5	2838	596.4	386.7	-0.940	0.930	-0.060	0.190	-0.920	0.940	-0.020	0.270

Table A. 82: Matched Droplet Info

A.5.4.2 All Droplets for .LA Image

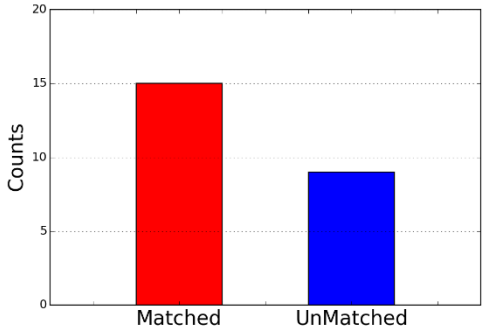

Figure A. 761: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

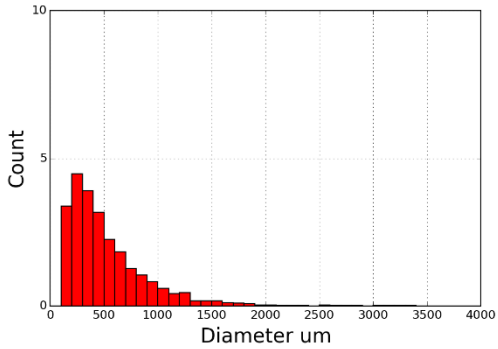

Figure A. 762: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

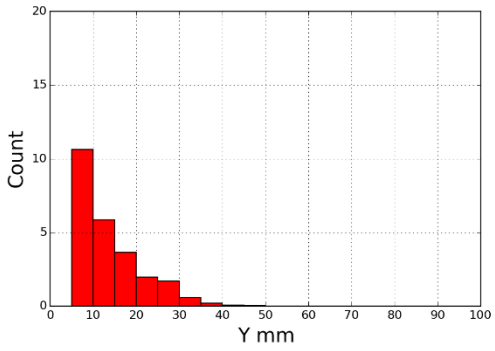

Figure A. 763: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

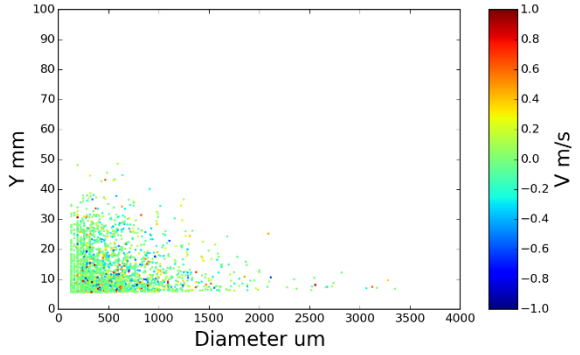

Figure A. 764: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

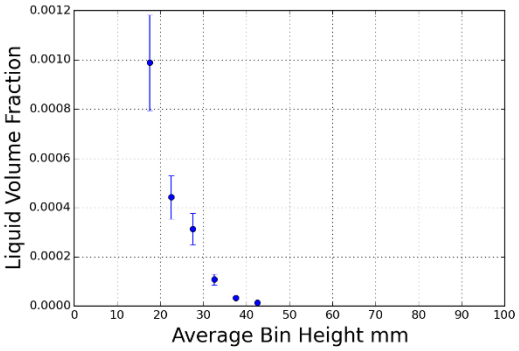

Figure A. 765: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 All Droplets for .LB Image

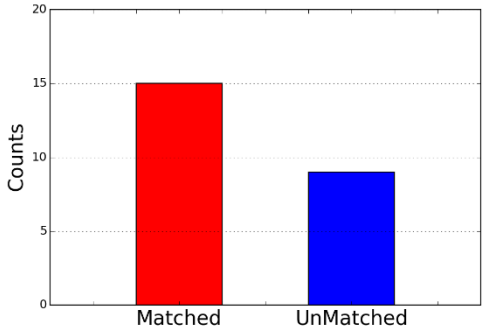

Figure A. 766: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

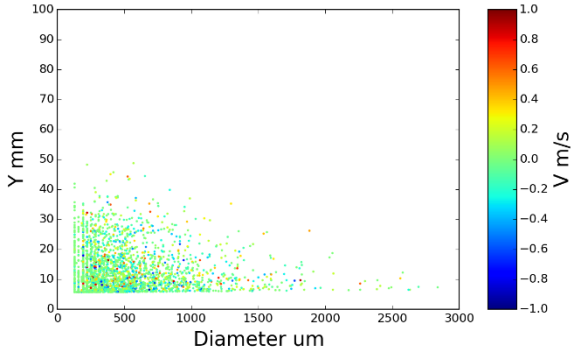

Figure A. 769: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

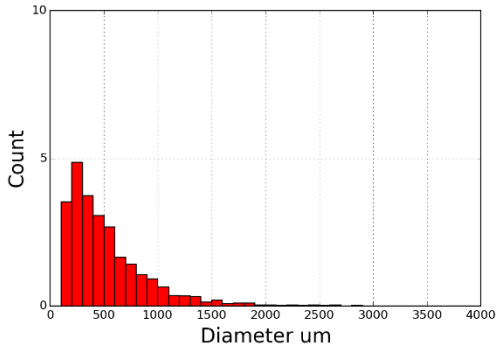

Figure A. 767: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

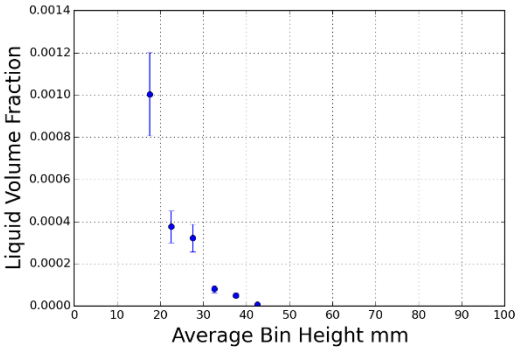

Figure A. 770: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

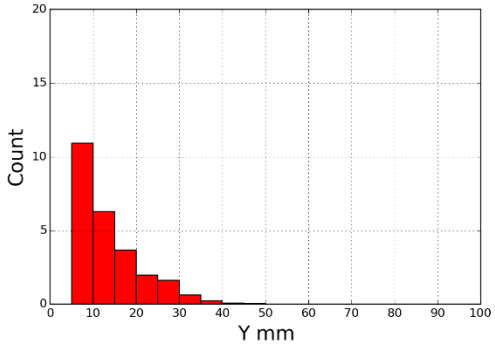

Figure A. 768: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 Matched Only Droplets for .LA Image

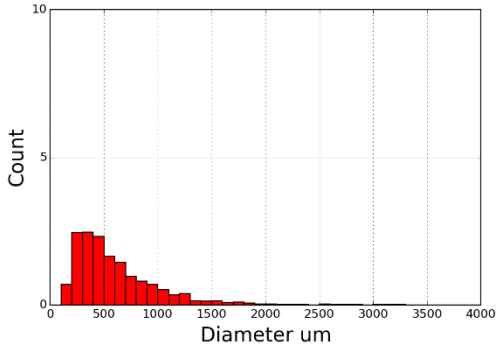

Figure A. 771: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

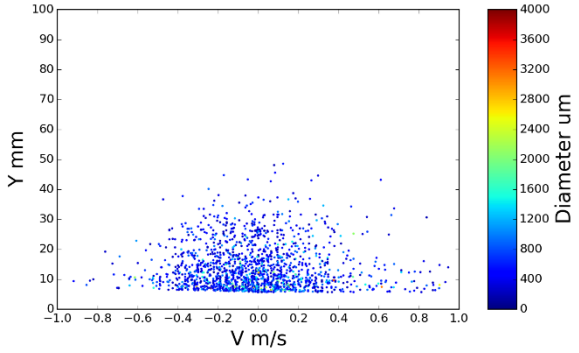

Figure A. 774: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

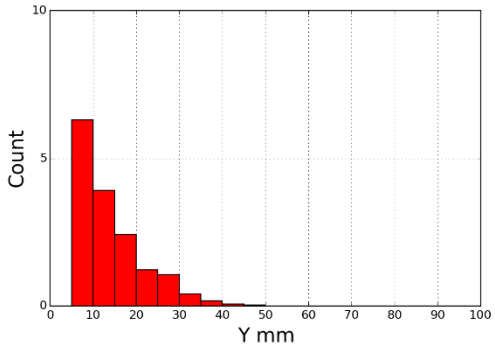

Figure A. 772: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

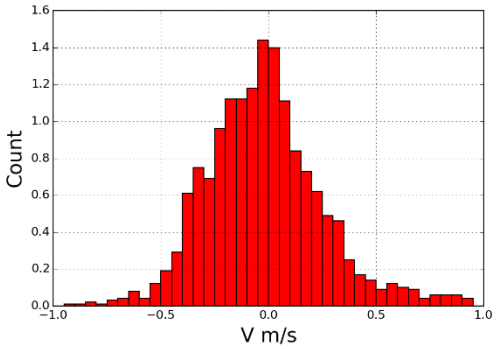

Figure A. 775: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

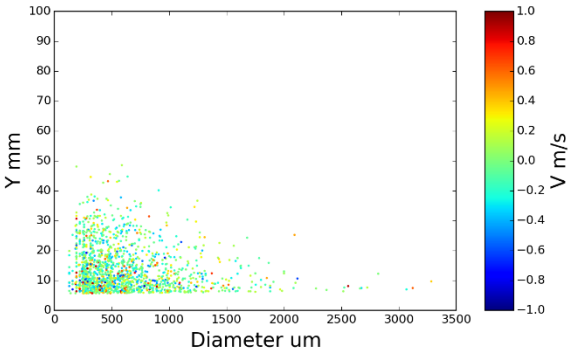

Figure A. 773: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 Matched Only Droplets for .LB Image

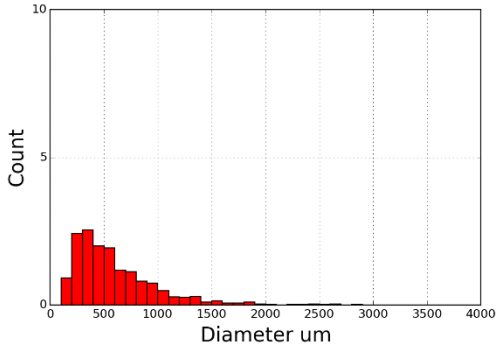

Figure A. 776: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

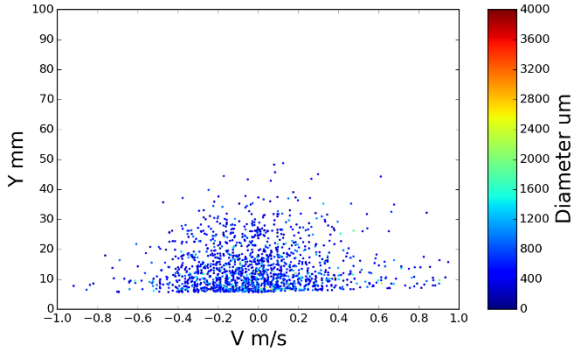

Figure A. 779: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

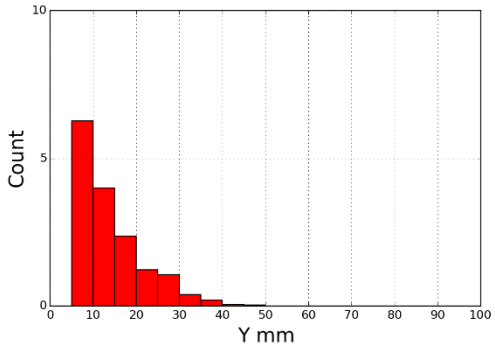

Figure A. 777: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

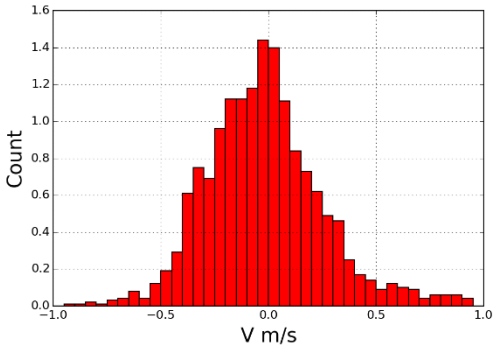

Figure A. 780: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

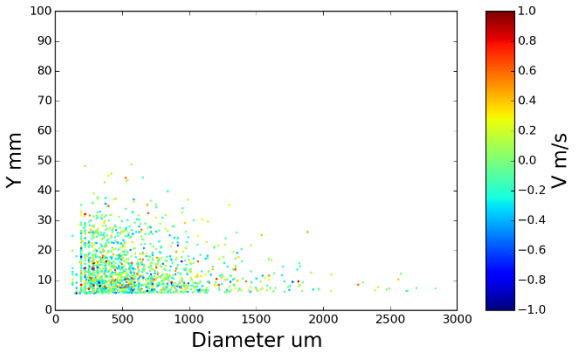

Figure A. 778: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	16.31	16.25	128.5	2925	501.8	351.5	128.5	2793	511.6	357.9
20-40mm	3.23	3.54	128.5	2403	388.6	242.3	128.5	2434	380.8	240.8
40-60mm	0.16	0.21	128.5	895.0	445.4	237.4	128.5	1022	400.1	240.8
60-80mm	0.01	0.04	485.2	485.2	485.2	0.0	181.8	578.4	286.4	168.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	19.71	20.04	128.5	2925	482.8	337.8	128.5	2793	486.8	342.6
			Height A (mm)				Height B (mm)			
Highest Particle			61.9606				61.9616			
Lowest Particle			5.6950				5.6950			

Table A. 83: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	9.67	128.5	2925	603.2	374.0	128.5	2793	597.1	371.5	-0.920	0.910	-0.090	0.200	-0.870	0.940	-0.030	0.250
20-40mm	2.06	128.5	2403	454.0	248.8	128.5	2434	441.6	248.6	-0.570	0.710	-0.080	0.150	-0.850	0.570	0.030	0.220
40-60mm	0.11	192.8	895.0	533.4	213.4	192.8	810.3	498.5	180.8	-0.130	0.050	-0.040	0.060	-0.200	0.380	0.060	0.180
60-80mm	0.01	485.2	485.2	485.2	0.0	578.4	578.4	578.4	0.0	-0.020	-0.020	-0.020	0.000	-0.010	-0.010	-0.010	0.000
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	11.85	128.5	2925	576.5	358.5	128.5	2793	568.5	356.2	-0.920	0.910	-0.090	0.190	-0.870	0.940	-0.020	0.250

Table A. 84: Matched Droplet Info

A.5.4.2 All Droplets for .LA Image

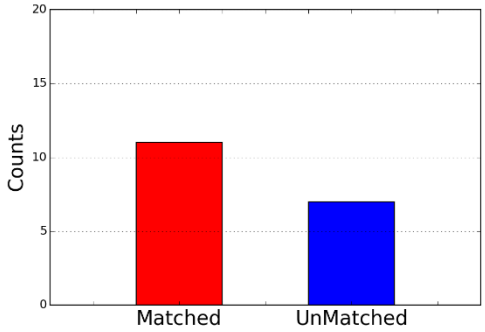

Figure A. 781: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

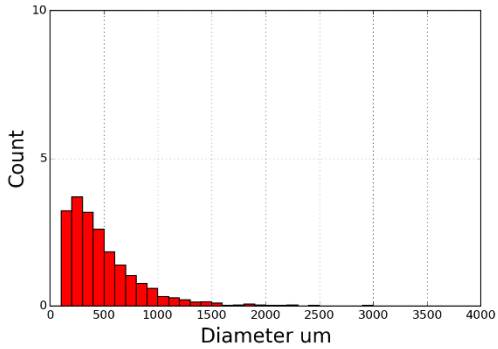

Figure A. 782: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

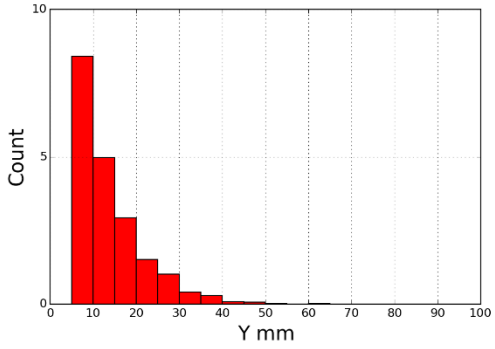

Figure A. 783: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

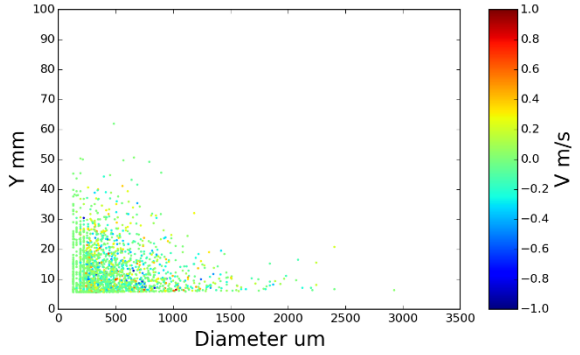

Figure A. 784: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

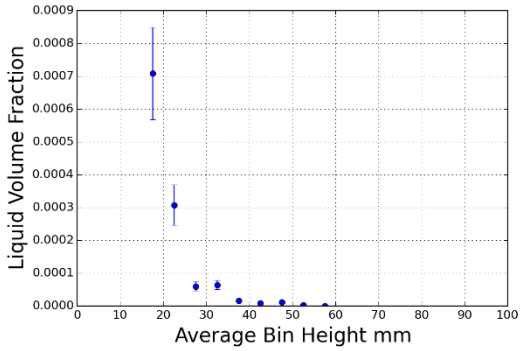

Figure A. 785: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 All Droplets for .LB Image

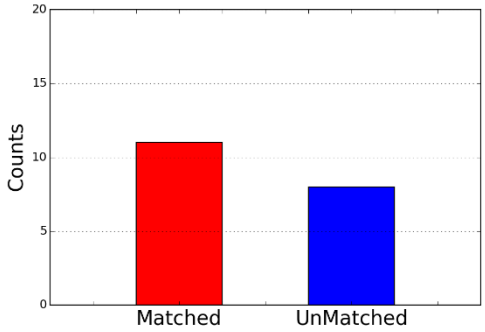

Figure A. 786: CHC Count Comparison R-134a 55F 5000Btu 15000Lb Tri

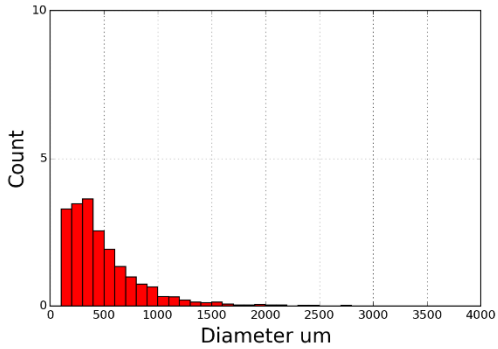

Figure A. 787: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

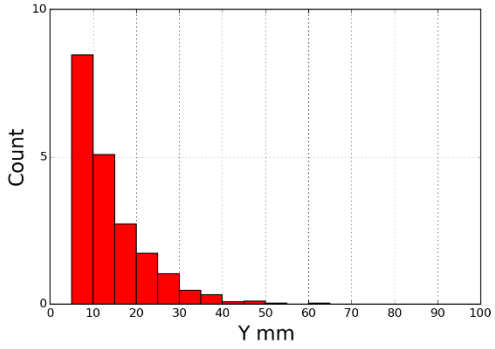

Figure A. 788: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

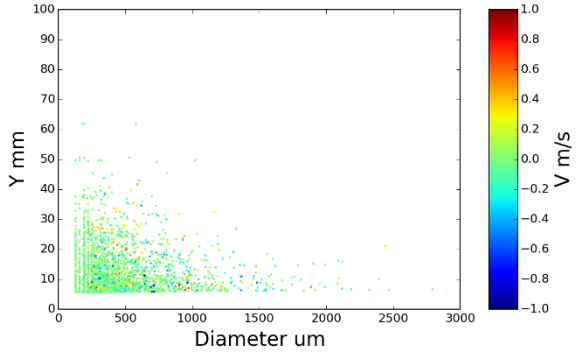

Figure A. 789: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

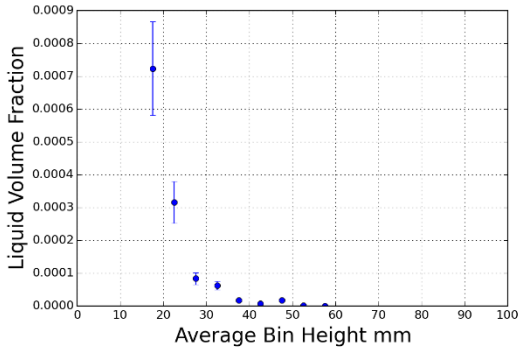

Figure A. 790: Void Fraction R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 Matched Only Droplets for .LA Image

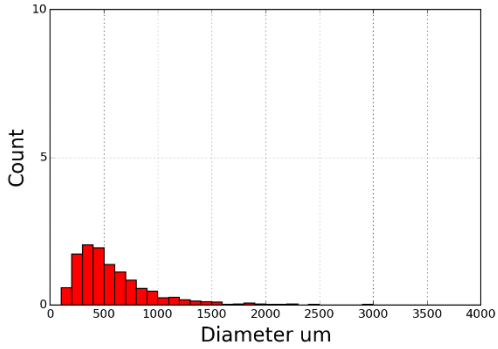

Figure A. 791: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

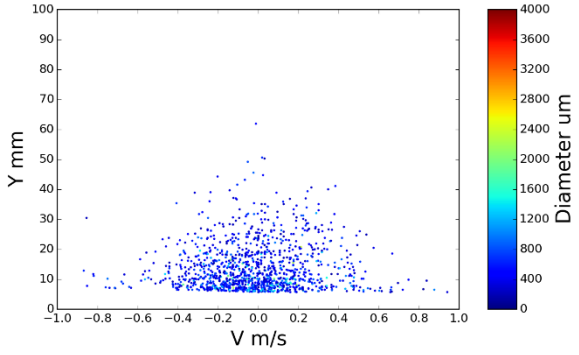

Figure A. 794: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

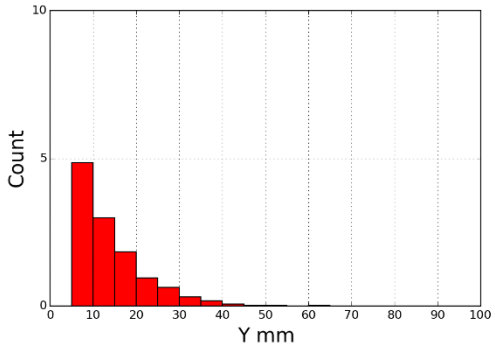

Figure A. 792: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

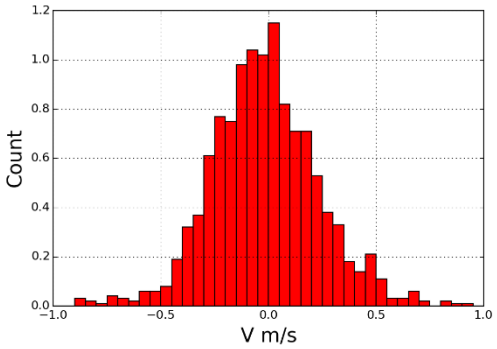

Figure A. 795: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

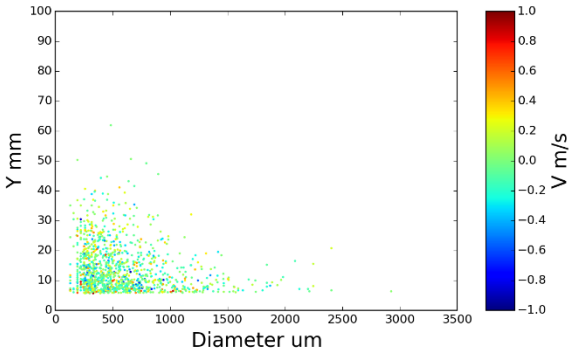

Figure A. 793: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.5.4.2 Matched Only Droplets for .LB Image

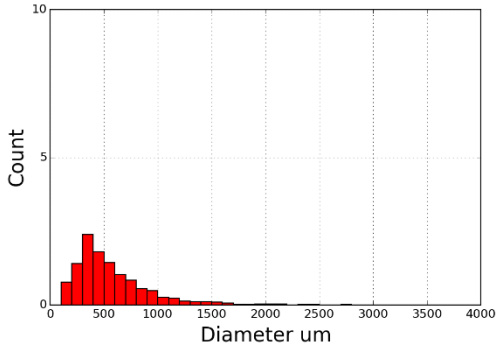

Figure A. 796: Droplet Diameter Histogram R-134a 55F 5000Btu 15000Lb Tri

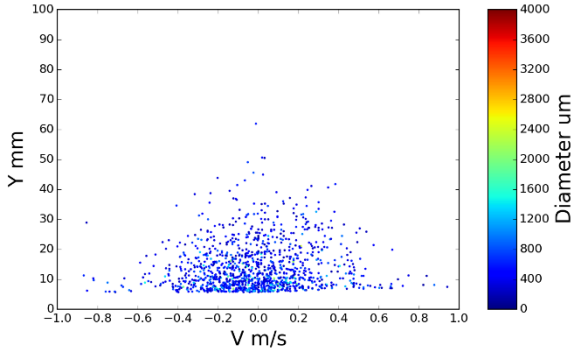

Figure A. 799: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 15000Lb Tri

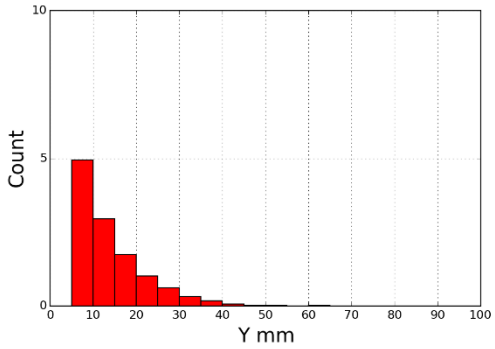

Figure A. 797: Droplet Height Histogram R-134a 55F 5000Btu 15000Lb Tri

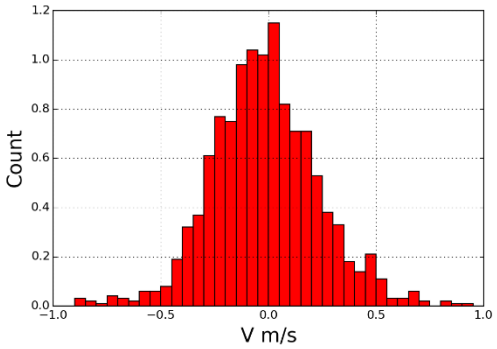

Figure A. 800: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 15000Lb Tri

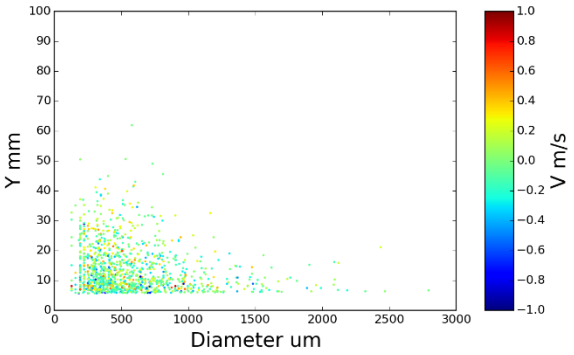

Figure A. 798: Droplet Height vs Diameter R-134a 55F 5000Btu 15000Lb Tri

A.6 - 1556 R-134a 55F 7500Btu 15000Lb Tri

A.6.1 Liquid Level 1

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	23940 / 3.016
Ref Mass Flow (lb/hr) / (kg/s)	1623 / 0.205
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15080 / 20.452
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	7244 / 22.85
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.0 / 12.76
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	55.2 / 12.87
Total Bundle Q (Btu/hr) / (kW)	156588 / 45.89
Total Bundle & Preboiler Q (Btu/hr) / (kW)	156588 / 45.89
Top Two Rows HTC Ratio	1.072
Bundle Inlet Quality	0.00
Bundle Exit Quality	0.04

Table A. 85: Thermal Conditions

A.6.1.1 Lens 100mm Mag 0_29x

A.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	158.46	157.89	57.2	3032	408.3	425.2	57.2	3027	411.3	423.5
20-40mm	71.38	69.35	57.2	2709	339.2	369.5	57.2	2719	342.3	370.8
40-60mm	6.64	6.36	57.2	1539	257.0	275.4	57.2	1513	263.4	279.3
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	249.4	246.58	57.2	3032	386.1	409.7	57.2	3027	389.6	409.3
			Height A (mm)				Height B (mm)			
Highest Particle			46.9101				46.9091			
Lowest Particle			-1.0402				-1.0402			

Table A. 86: All Droplet Info

Matched Only Droplets																		
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	102.49	57.2	2989	501.9	446.7	57.2	3027	498.2	442.2	-0.950	0.950	-0.060	0.190	-0.950	0.950	0.010	0.290
20-40mm	46.97	57.2	2709	436.2	397.7	57.2	2719	432.9	399.4	-0.950	0.930	-0.070	0.160	-0.930	0.940	0.030	0.250
40-60mm	4.19	57.2	1539	340.9	306.7	57.2	1513	336.0	305.8	-0.940	0.730	-0.070	0.140	-0.820	0.910	0.040	0.220
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	160.25	57.2	2989	481.4	433.9	57.2	3027	477.4	431.1	-0.950	0.950	-0.060	0.180	-0.950	0.950	0.010	0.280

Table A. 87: Matched Droplet Info

A.6.1.1 All Droplets for .LA Image

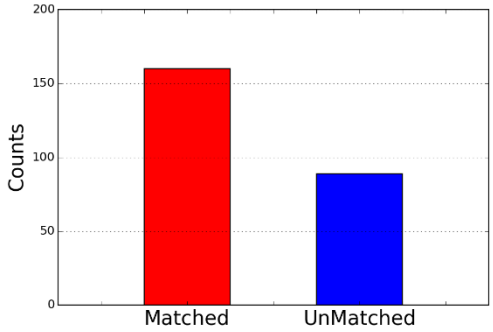

Figure A. 801: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

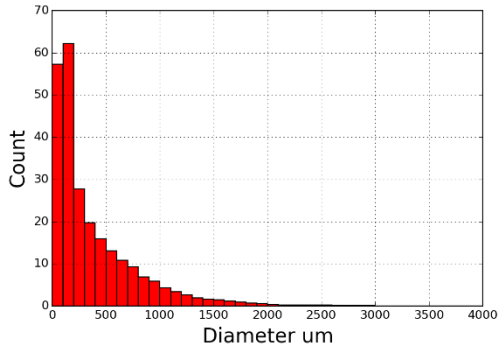

Figure A. 802: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

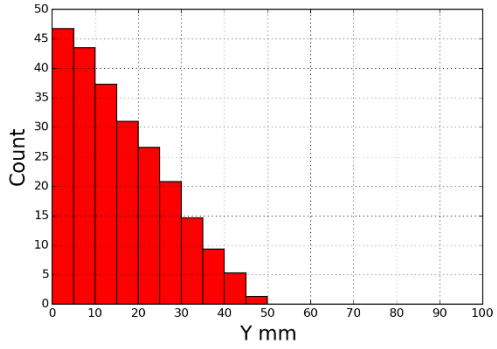

Figure A. 803: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

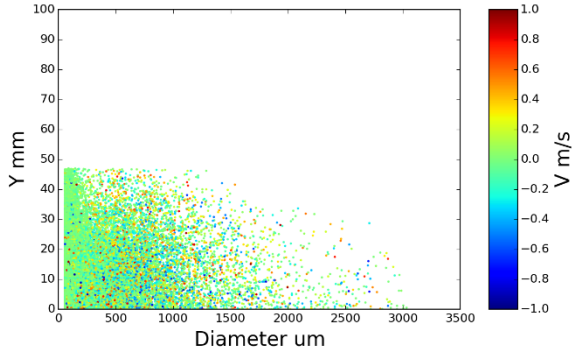

Figure A. 804: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

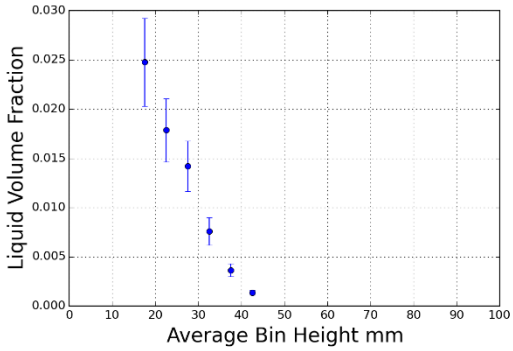

Figure A. 805: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 All Droplets for .LB Image

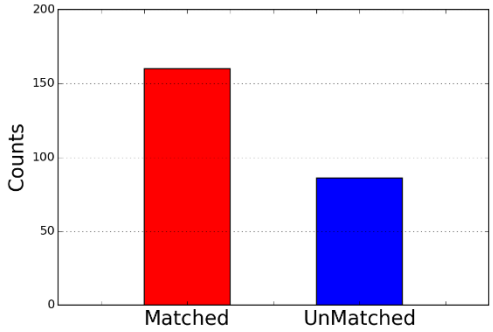

Figure A. 806: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

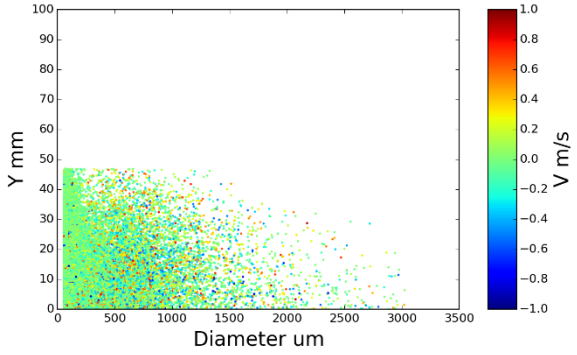

Figure A. 809: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

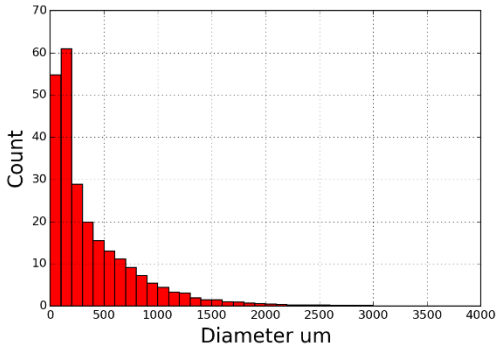

Figure A. 807: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

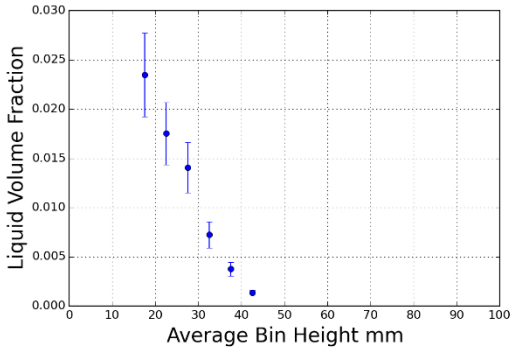

Figure A. 810: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

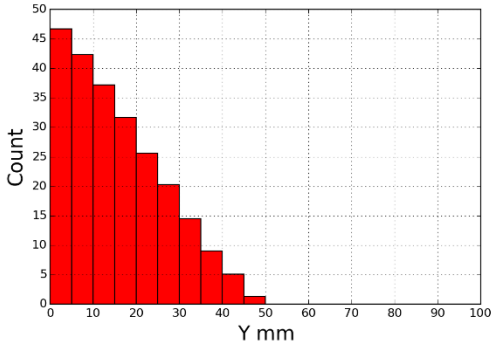

Figure A. 808: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 Matched Only Droplets for .LA Image

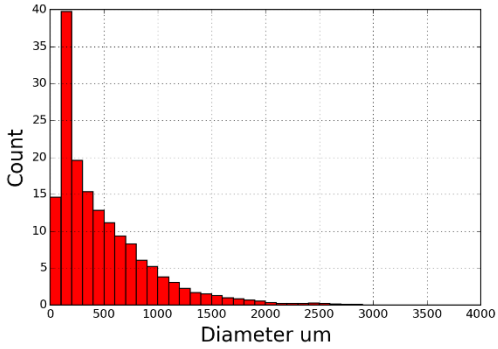

Figure A. 811: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

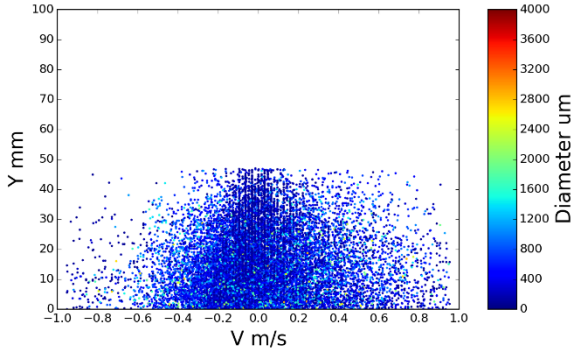

Figure A. 814: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

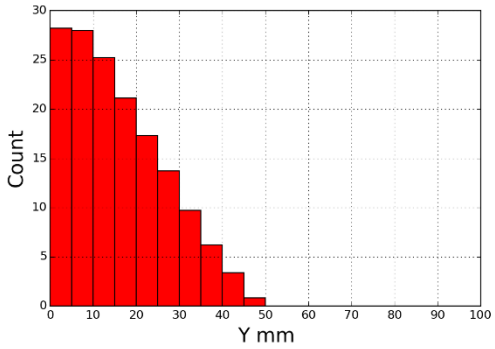

Figure A. 812: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

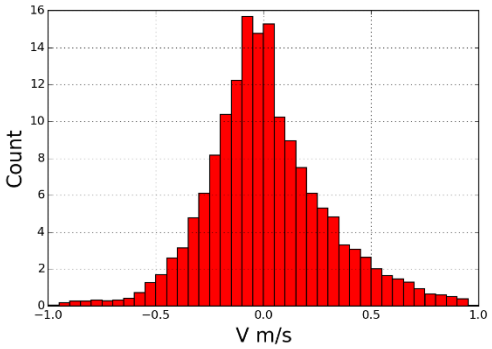

Figure A. 815: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

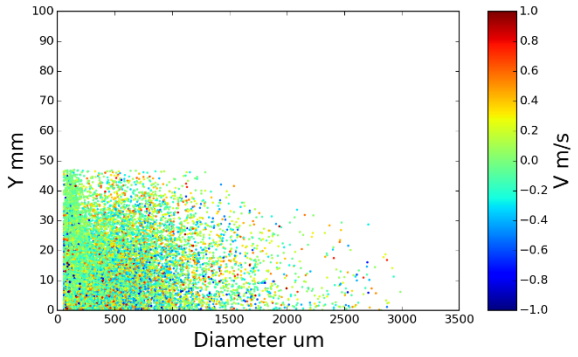

Figure A. 813: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 Matched Only Droplets for .LB Image

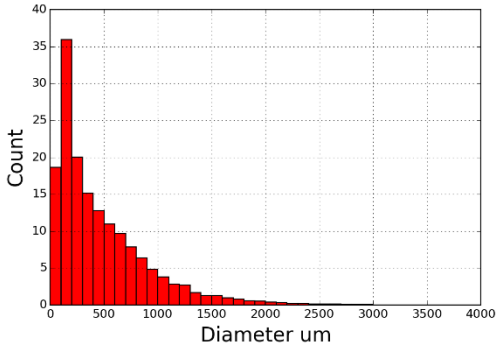

Figure A. 816: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

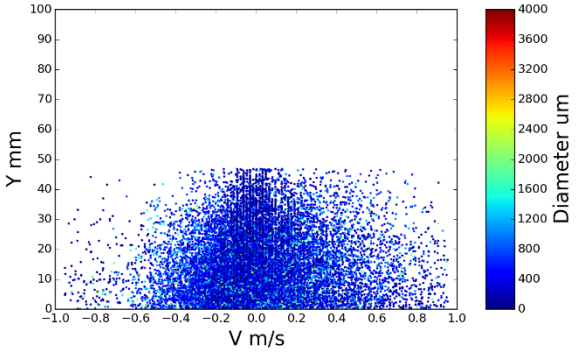

Figure A. 819: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

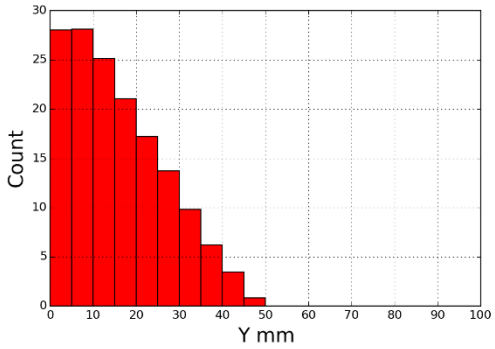

Figure A. 817: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

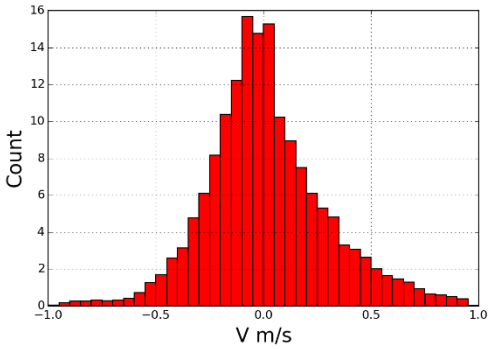

Figure A. 820: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

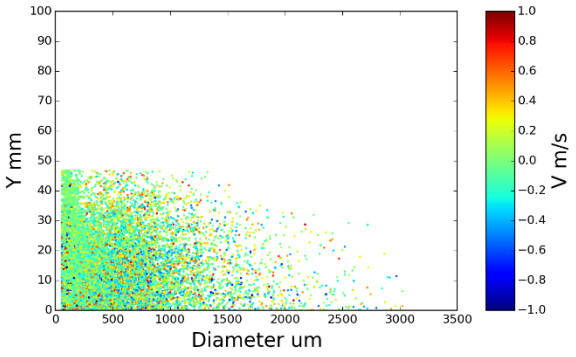

Figure A. 818: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.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	144.14	140.65	57.2	3005	458.2	469.4	57.2	3038	467.4	473.9
20-40mm	63.37	61.47	57.2	2997	387.5	402.4	57.2	2856	395.2	402.9
40-60mm	5.37	4.75	57.2	2142	312.6	351.6	57.2	2026	329.0	360.2
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	224.11	218.31	57.2	3005	436.2	450.5	57.2	3038	445.5	454.7
			Height A (mm)				Height B (mm)			
Highest Particle			46.9121				46.9345			
Lowest Particle			-1.0402				-1.0402			

Table A. 88: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	92.03	57.2	3005	565.4	493.9	57.2	3035	561.1	491.5	-0.950	0.950	-0.060	0.170	-0.950	0.950	-0.030	0.300
20-40mm	41.6	57.2	2822	502.7	423.8	57.2	2856	500.2	423.3	-0.940	0.920	-0.060	0.150	-0.950	0.950	-0.010	0.250
40-60mm	3.11	57.2	2142	448.4	394.9	57.2	2026	445.8	394.3	-0.860	0.860	-0.060	0.120	-0.730	0.820	-0.040	0.200
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	142.54	57.2	3005	547.6	475.4	57.2	3035	543.9	473.8	-0.950	0.950	-0.060	0.170	-0.950	0.950	-0.020	0.290

Table A. 89: Matched Droplet Info

A.6.1.1 All Droplets for .LA Image

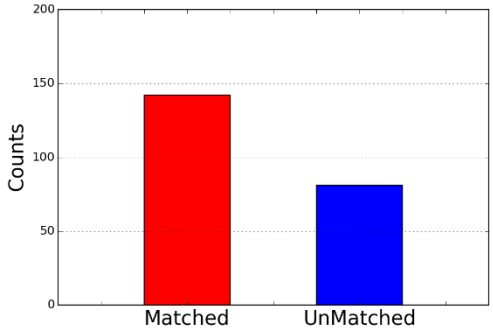

Figure A. 821: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

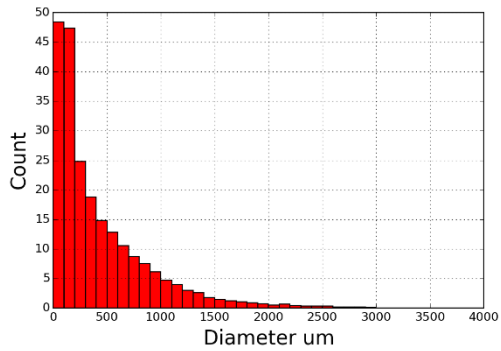

Figure A. 822: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

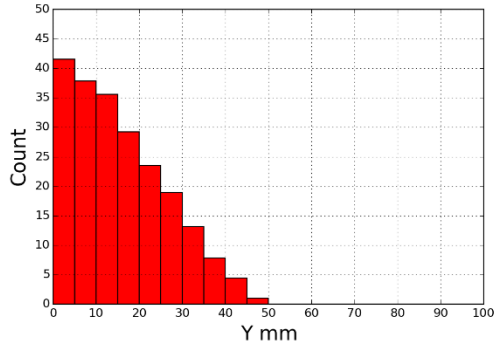

Figure A. 823: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

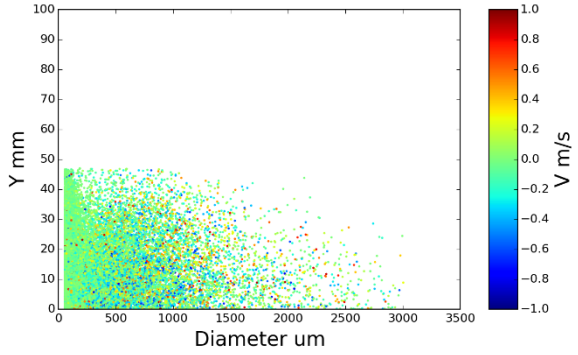

Figure A. 824: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

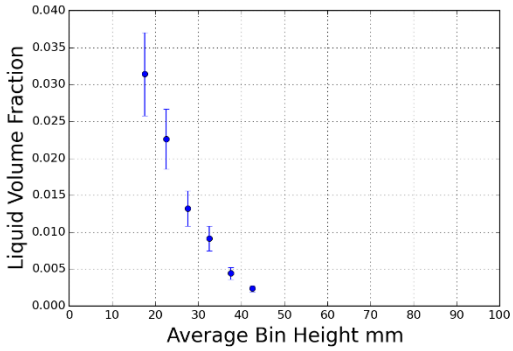

Figure A. 825: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 All Droplets for .LB Image

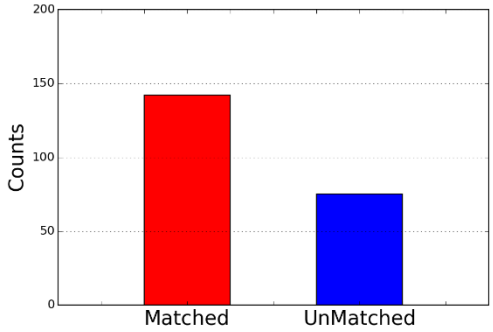

Figure A. 826: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

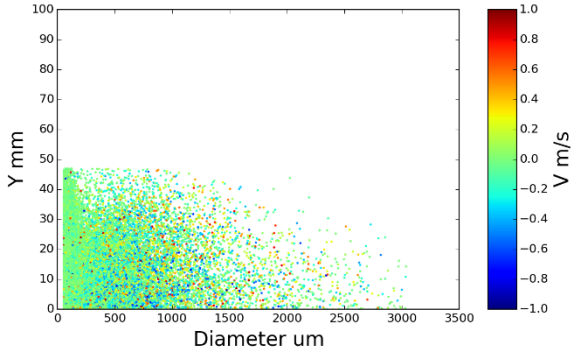

Figure A. 829: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

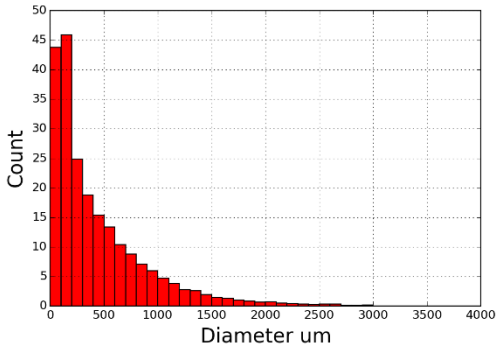

Figure A. 827: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

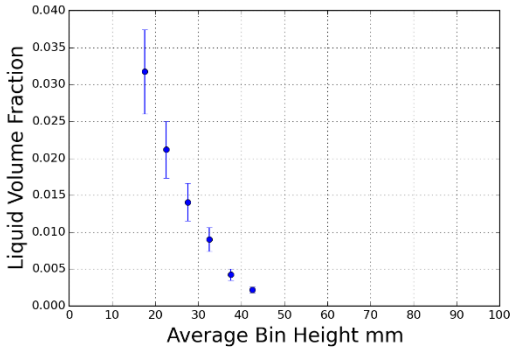

Figure A. 830: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

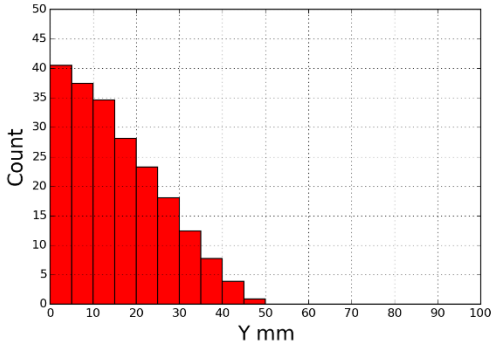

Figure A. 828: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 Matched Only Droplets for .LA Image

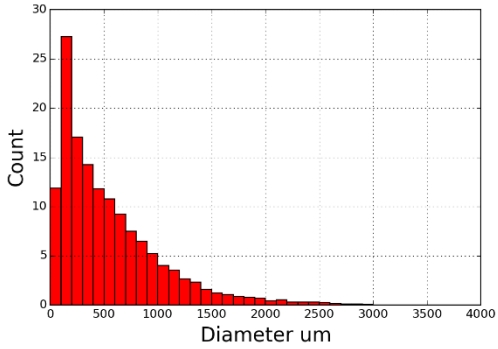

Figure A. 831: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

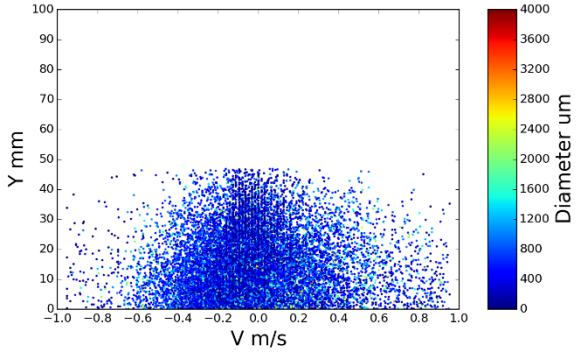

Figure A. 834: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

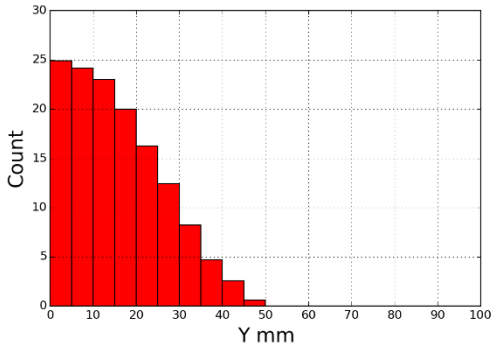

Figure A. 832: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

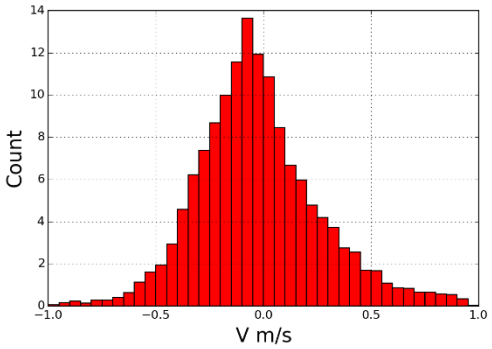

Figure A. 835: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

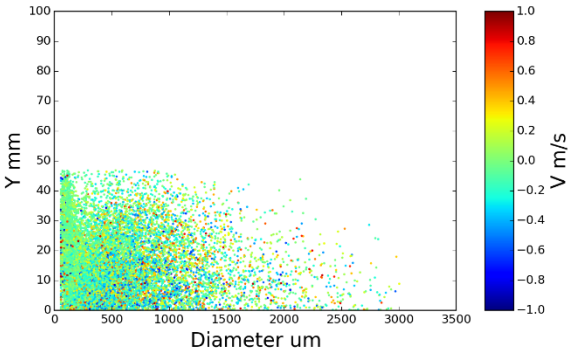

Figure A. 833: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 Matched Only Droplets for .LB Image

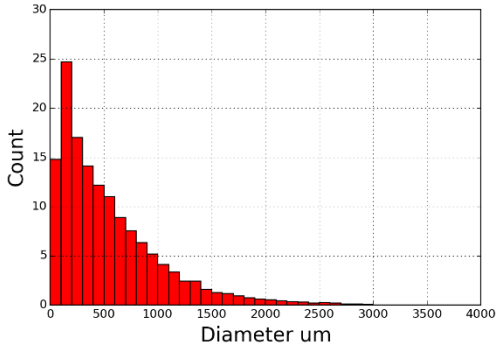

Figure A. 836: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

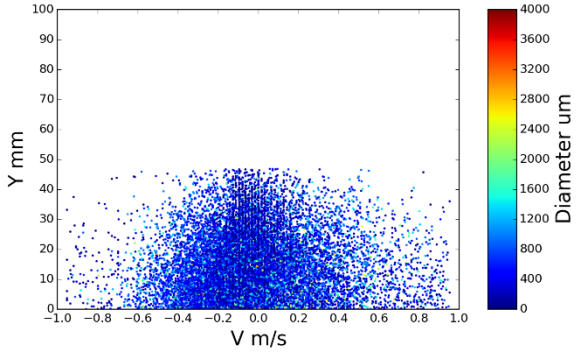

Figure A. 839: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

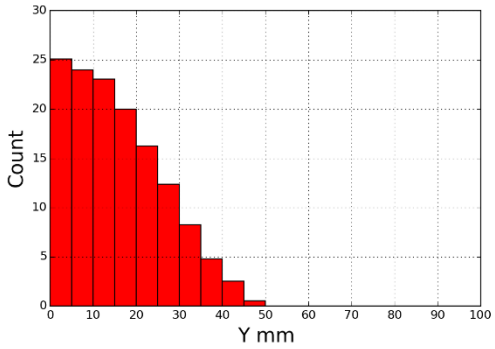

Figure A. 837: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

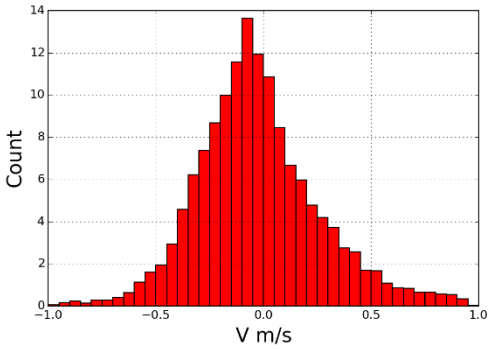

Figure A. 840: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

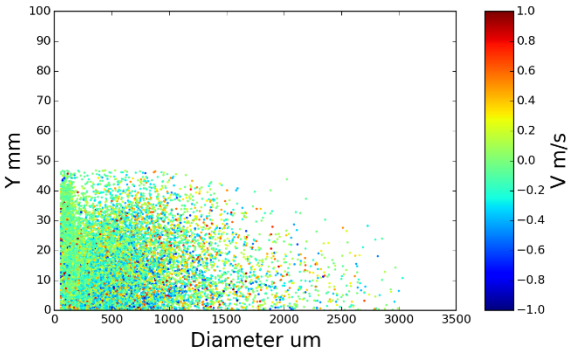

Figure A. 838: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.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	127.28	125.77	57.2	3034	469.2	493.9	57.2	3043	484.4	501.2
20-40mm	59.9	59.09	57.2	3038	398.6	427.1	57.2	2938	401.9	424.7
40-60mm	3.88	3.93	57.2	2539	329.5	355.7	57.2	2566	324.8	356.9
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	200.49	198.48	57.2	3038	447.8	475.2	57.2	3043	457.5	478.6
			Height A (mm)				Height B (mm)			
Highest Particle			46.9218				46.9091			
Lowest Particle			-1.0402				-1.0402			

Table A. 90: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	76.65	57.2	3034	602.9	525.0	57.2	3033	597.9	520.4	-0.950	0.950	-0.060	0.190	-0.950	0.950	-0.020	0.300
20-40mm	36.26	57.2	2847	543.2	456.5	57.2	2886	538.1	453.2	-0.950	0.950	-0.060	0.180	-0.950	0.940	-0.010	0.260
40-60mm	2.39	57.2	2539	452.6	388.9	57.2	2566	446.7	383.6	-0.600	0.350	-0.060	0.110	-0.470	0.520	-0.000	0.170
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	119.61	57.2	3034	584.3	506.0	57.2	3033	578.7	500.8	-0.950	0.950	-0.060	0.190	-0.950	0.950	-0.020	0.290

Table A. 91: Matched Droplet Info

A.6.1.1 All Droplets for .LA Image

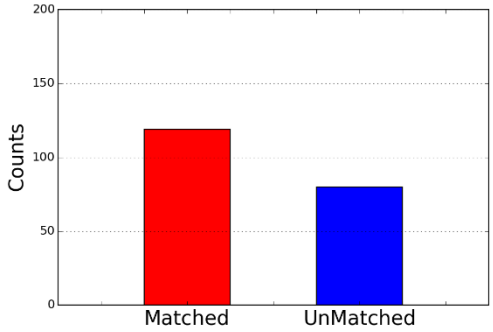

Figure A. 841: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

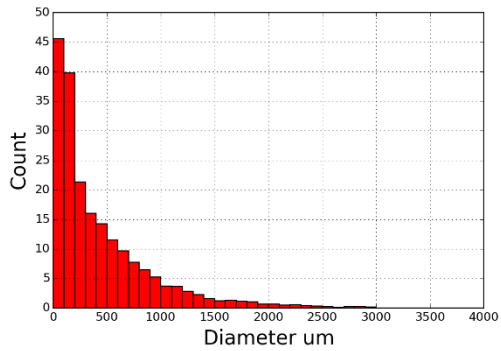

Figure A. 842: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

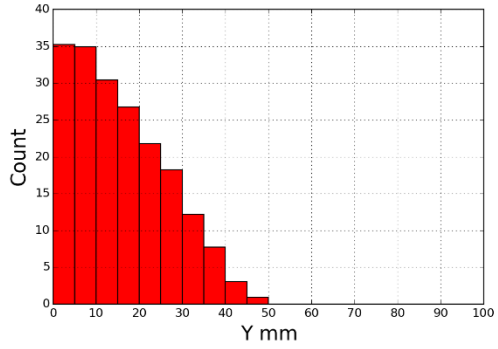

Figure A. 843: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

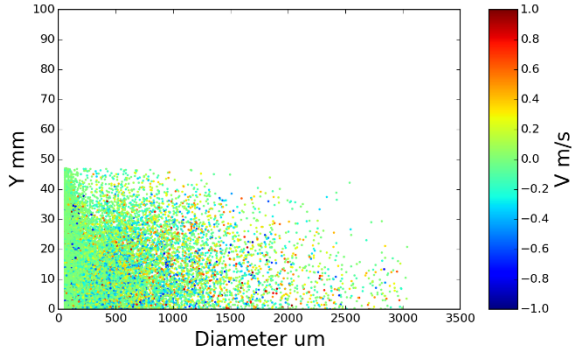

Figure A. 844: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

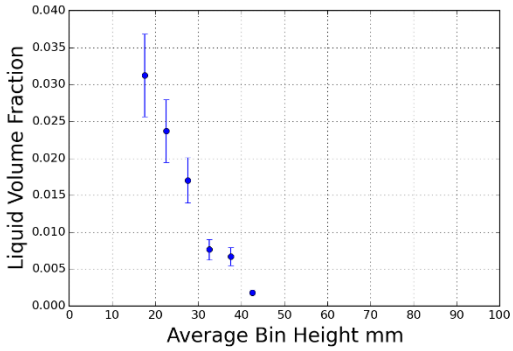

Figure A. 845: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 All Droplets for .LB Image

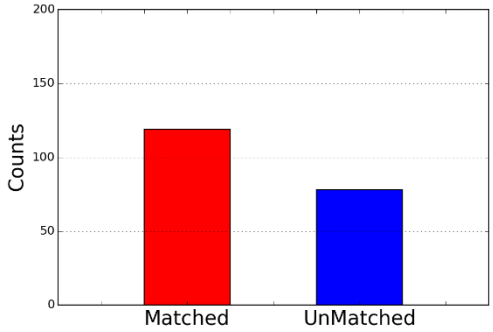

Figure A. 846: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

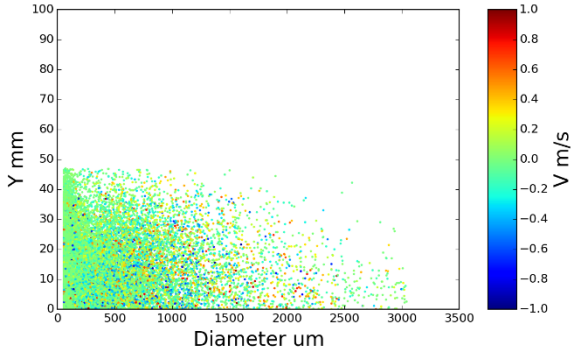

Figure A. 849: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

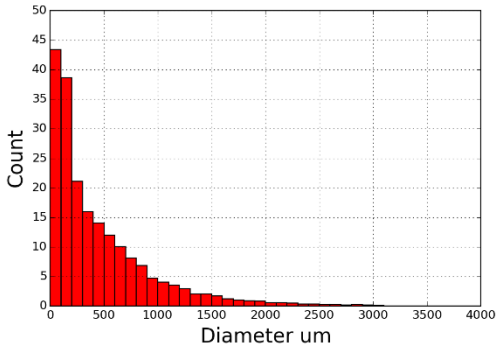

Figure A. 847: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

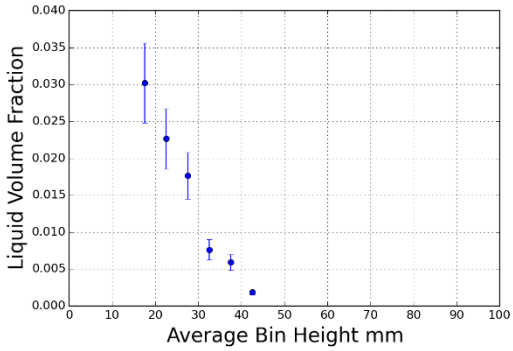

Figure A. 850: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

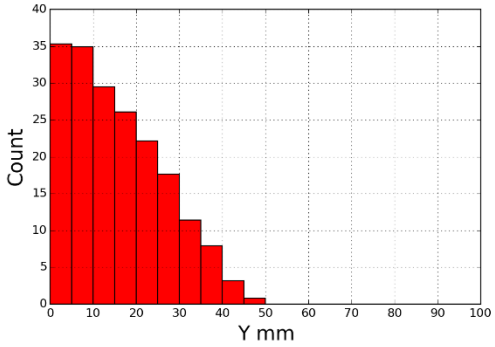

Figure A. 848: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 Matched Only Droplets for .LA Image

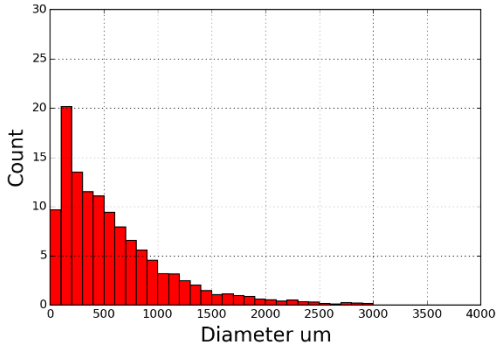

Figure A. 851: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

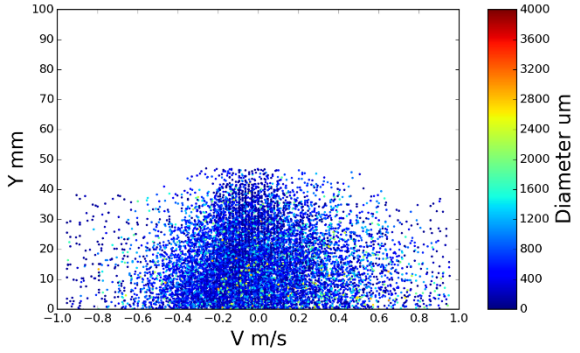

Figure A. 854: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

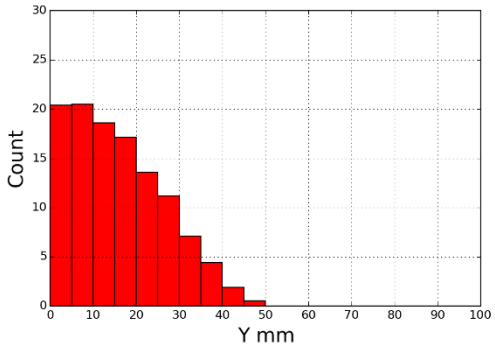

Figure A. 852: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

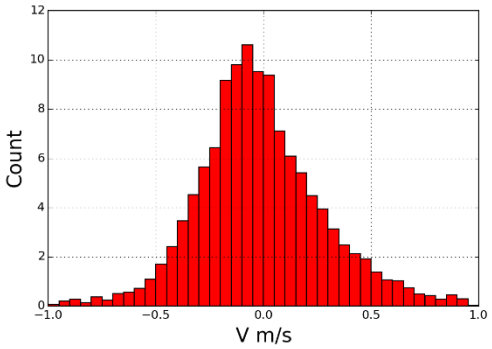

Figure A. 855: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

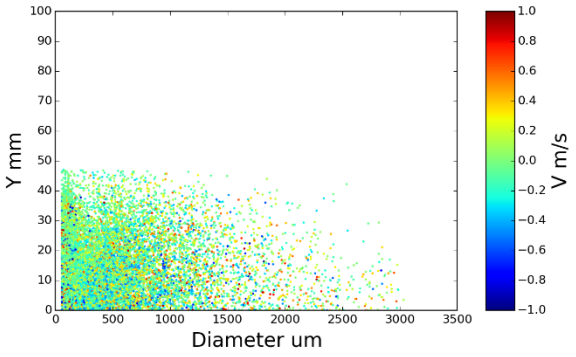

Figure A. 853: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 Matched Only Droplets for .LB Image

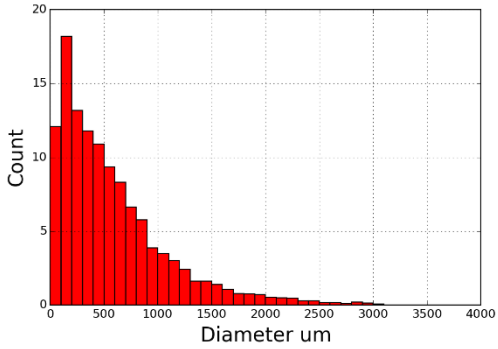

Figure A. 856: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

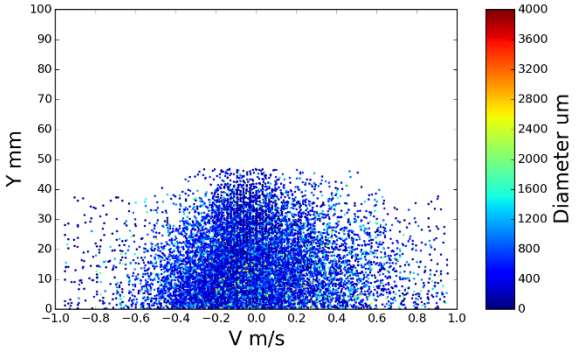

Figure A. 859: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

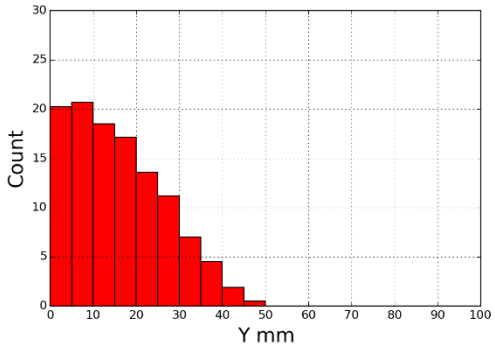

Figure A. 857: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

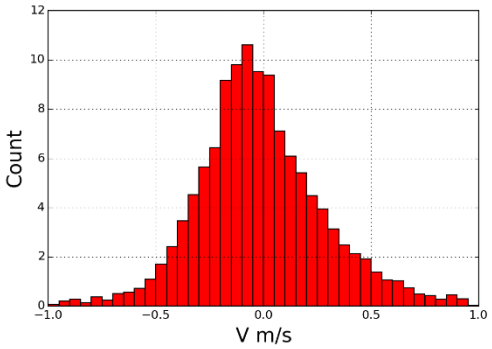

Figure A. 860: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

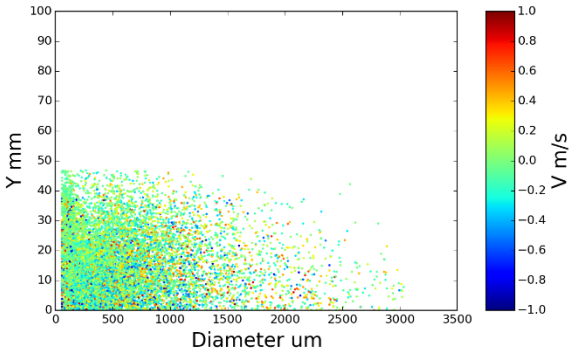

Figure A. 858: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 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	120.96	120.85	57.2	3036	436.5	473.7	57.2	3020	441.4	471.2
20-40mm	53.01	52.76	57.2	2869	362.5	402.6	57.2	2825	363.0	396.4
40-60mm	3.17	3.2	57.2	2418	309.6	359.3	57.2	2355	297.3	338.6
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	185.78	185.24	57.2	3036	414.1	454.5	57.2	3020	418.5	452.0
			Height A (mm)				Height B (mm)			
Highest Particle			46.7442				46.8711			
Lowest Particle			-1.0402				-1.0402			

Table A. 92: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	69.04	57.2	3015	571.4	507.8	57.2	3020	567.8	506.8	-0.950	0.950	-0.050	0.200	-0.950	0.950	-0.040	0.310
20-40mm	30.96	57.2	2869	503.6	442.9	57.2	2825	496.0	434.9	-0.940	0.900	-0.060	0.170	-0.950	0.950	-0.030	0.270
40-60mm	1.77	57.2	2418	455.9	397.9	57.2	2355	442.2	387.5	-0.490	0.830	-0.030	0.150	-0.680	0.710	-0.030	0.220
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	105.32	57.2	3021	553.5	492.4	57.2	3020	547.6	488.1	-0.950	0.950	-0.050	0.190	-0.950	0.950	-0.030	0.300

Table A. 93: Matched Droplet Info

A.6.1.1 All Droplets for .LA Image

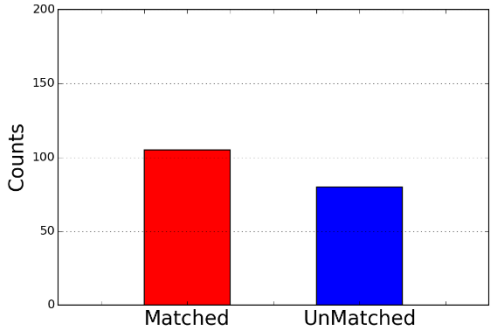

Figure A. 861: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

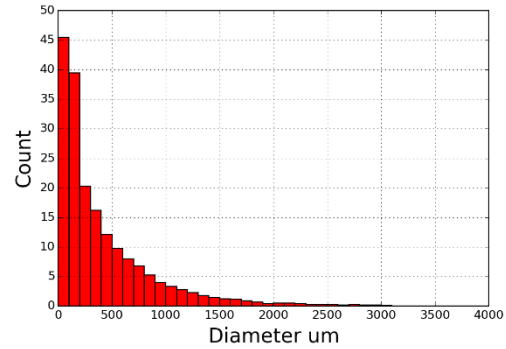

Figure A. 862: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

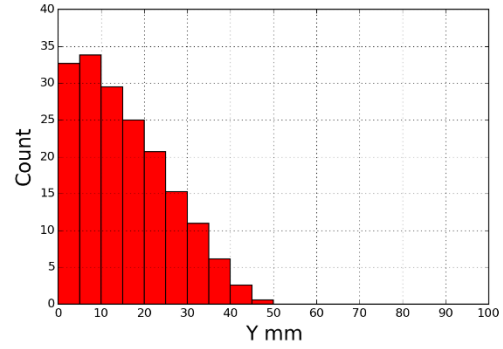

Figure A. 863: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

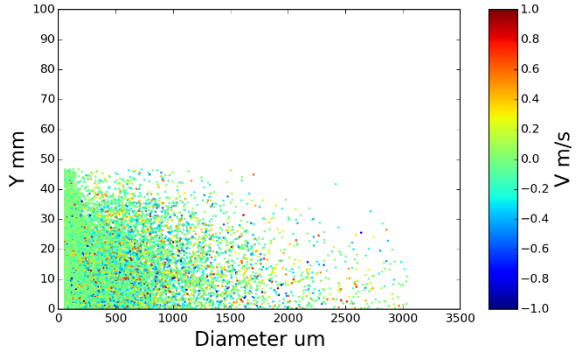

Figure A. 864: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

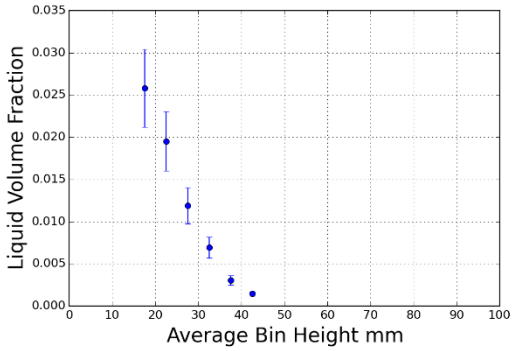

Figure A. 865: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 All Droplets for .LB Image

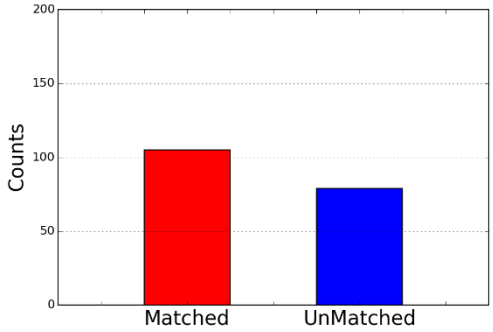

Figure A. 866: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

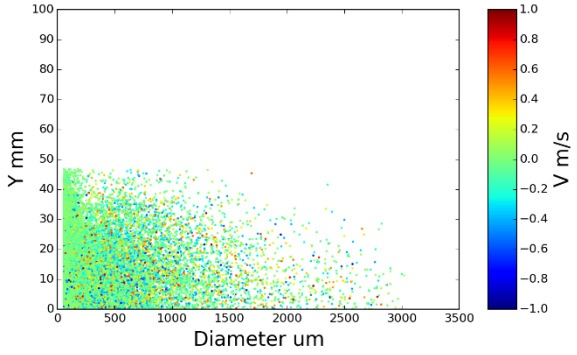

Figure A. 869: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

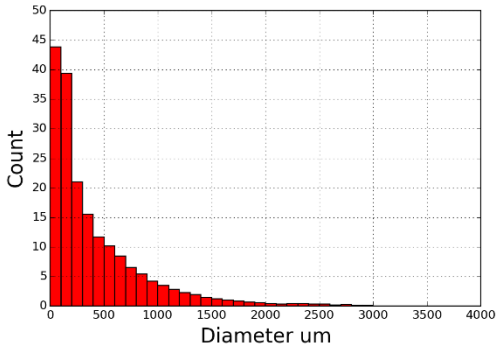

Figure A. 867: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

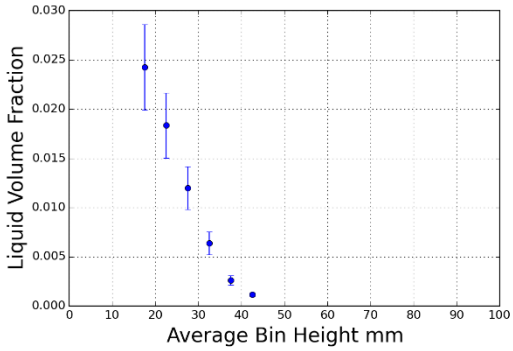

Figure A. 870: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

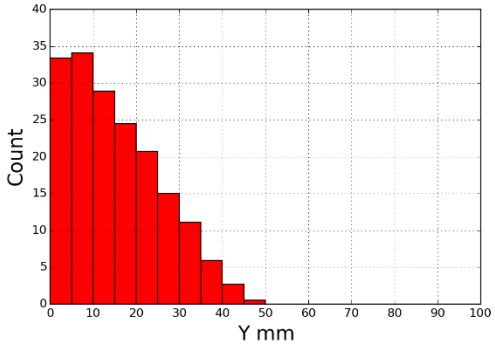

Figure A. 868: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 Matched Only Droplets for .LA Image

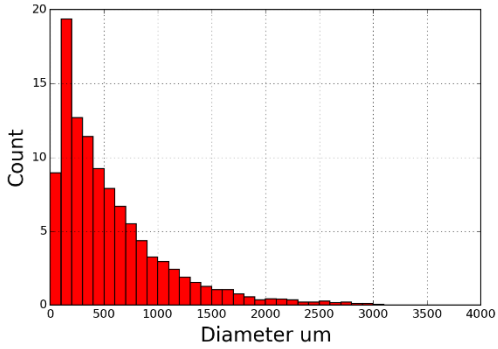

Figure A. 871: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

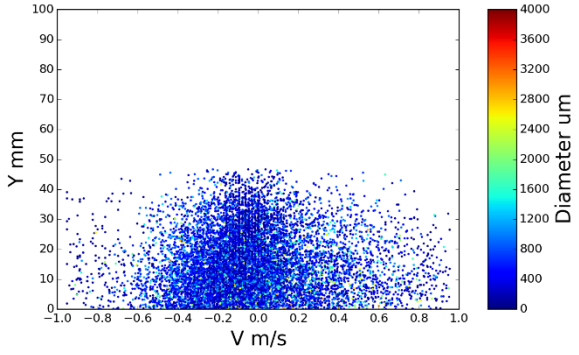

Figure A. 874: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

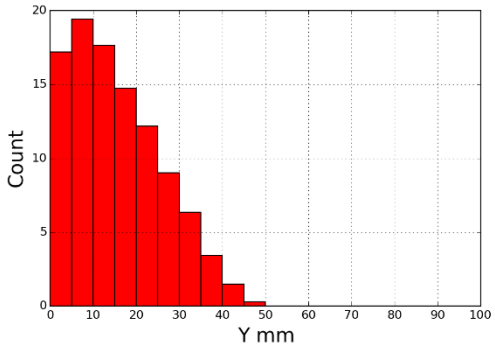

Figure A. 872: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

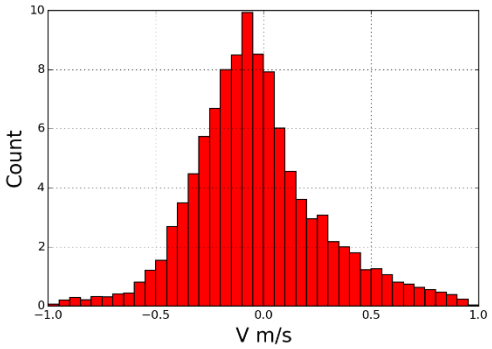

Figure A. 875: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

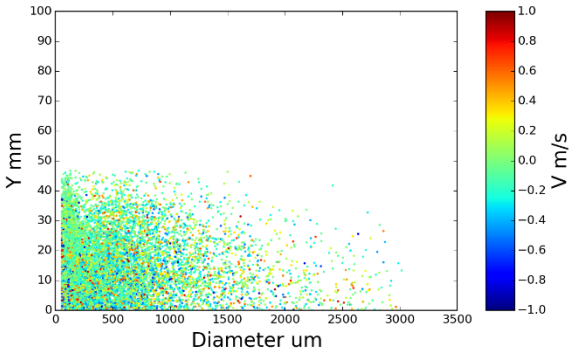

Figure A. 873: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 Matched Only Droplets for .LB Image

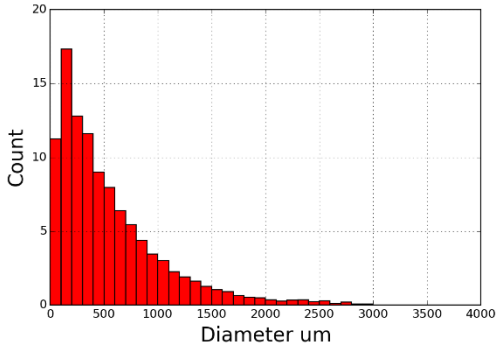

Figure A. 876: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

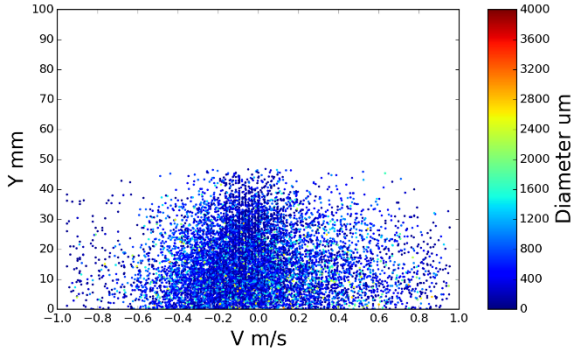

Figure A. 879: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

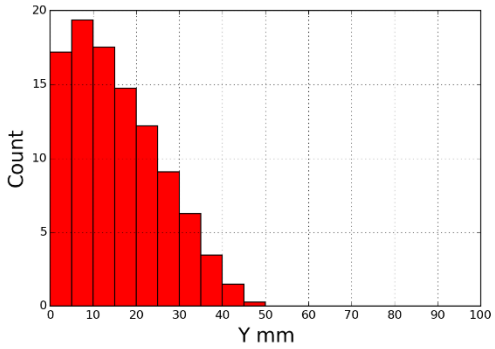

Figure A. 877: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

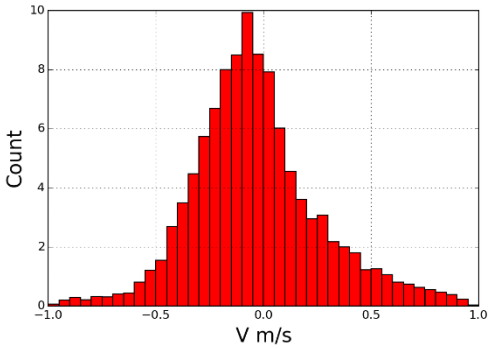

Figure A. 880: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

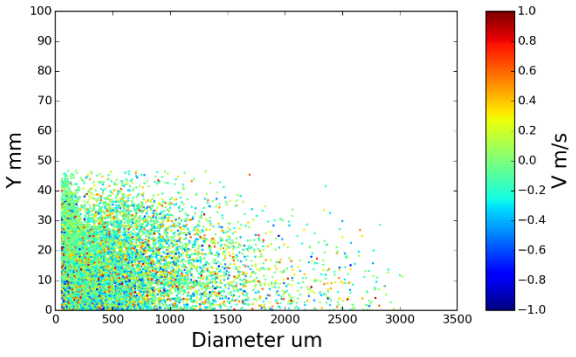

Figure A. 878: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 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	109.24	109.57	57.2	3019	401.3	442.2	57.2	3039	400.8	441.6
20-40mm	53.25	52.09	57.2	2900	334.4	371.3	57.2	2997	342.3	372.5
40-60mm	4.16	3.9	57.2	2548	302.4	318.0	57.2	2280	319.4	336.1
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	174.36	172.78	57.2	3019	378.8	420.9	57.2	3039	382.4	420.8
			Height A (mm)				Height B (mm)			
Highest Particle			46.8981				46.9218			
Lowest Particle			-1.0402				-1.0402			

Table A. 94: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	59.0	57.2	3019	535.5	481.1	57.2	3039	530.0	478.1	-0.950	0.950	-0.040	0.210	-0.950	0.950	-0.000	0.320
20-40mm	30.48	57.2	2900	464.7	416.2	57.2	2997	461.5	415.7	-0.950	0.950	-0.040	0.190	-0.950	0.950	0.000	0.280
40-60mm	2.45	57.2	2548	412.6	357.5	57.2	2280	420.9	373.6	-0.590	0.420	-0.020	0.120	-0.870	0.930	-0.020	0.220
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	94.81	57.2	3019	512.1	461.7	57.2	3039	507.1	459.4	-0.950	0.950	-0.040	0.200	-0.950	0.950	0.000	0.310

Table A. 95: Matched Droplet Info

A.6.1.1 All Droplets for .LA Image

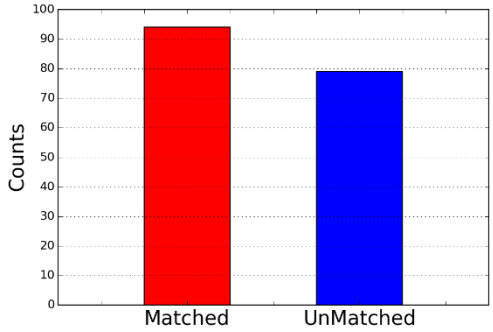

Figure A. 881: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

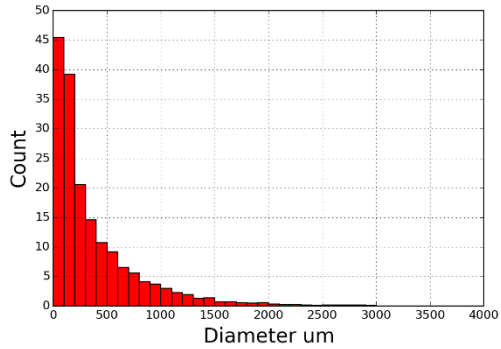

Figure A. 882: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

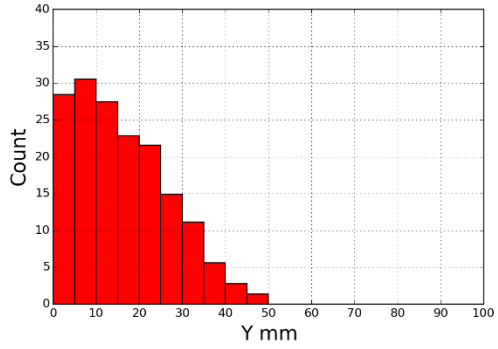

Figure A. 883: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

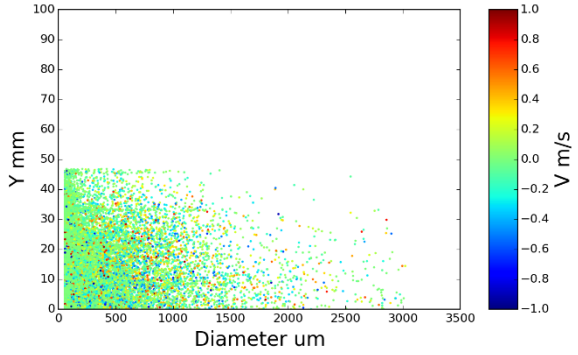

Figure A. 884: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

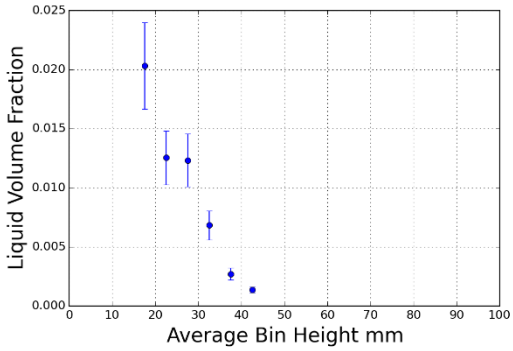

Figure A. 885: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 All Droplets for .LB Image

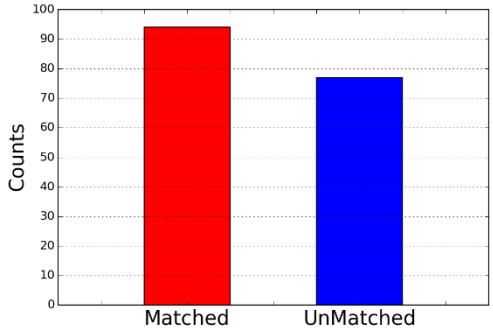

Figure A. 886: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

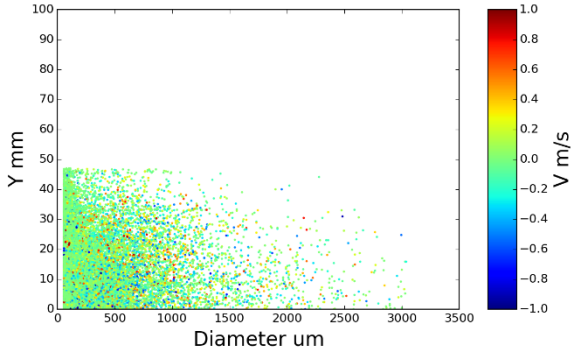

Figure A. 889: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

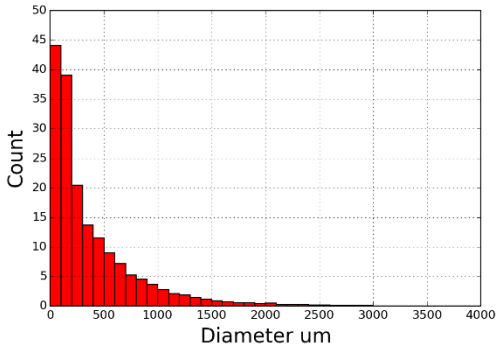

Figure A. 887: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

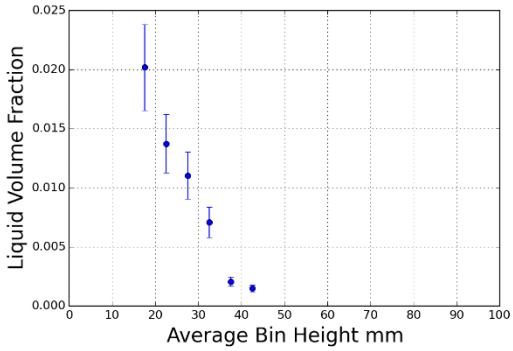

Figure A. 890: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

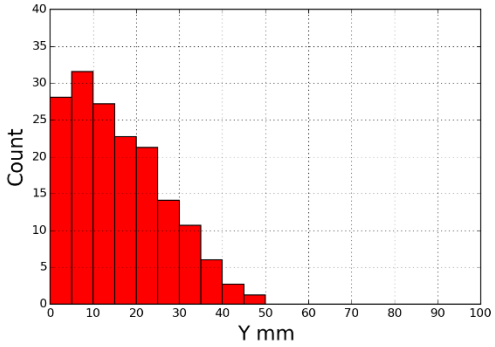

Figure A. 888: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 Matched Only Droplets for .LA Image

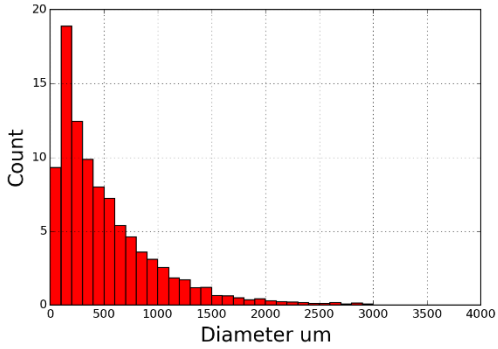

Figure A. 891: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

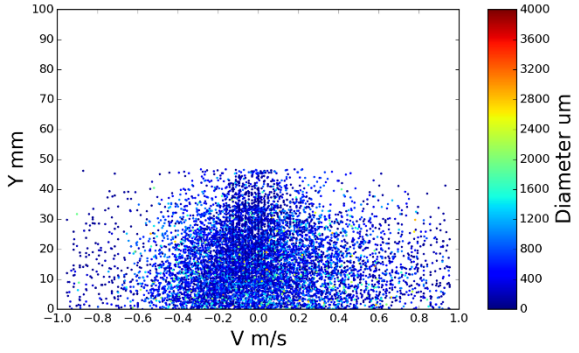

Figure A. 894: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

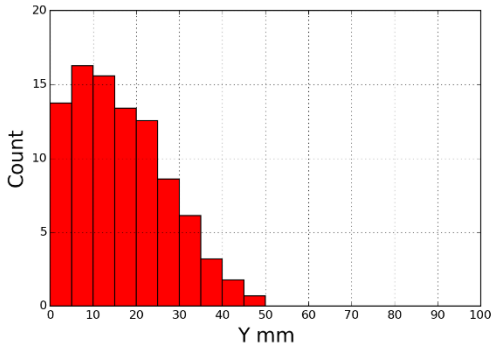

Figure A. 892: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

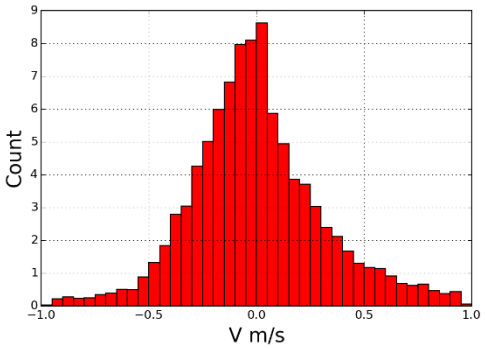

Figure A. 895: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

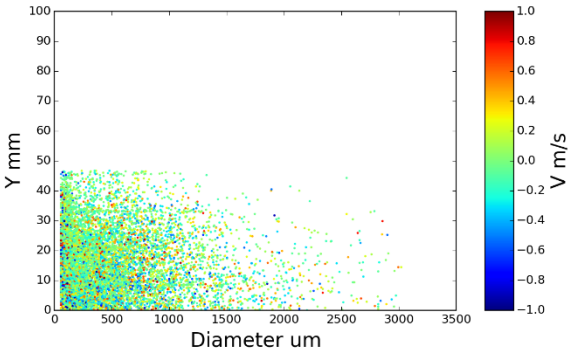

Figure A. 893: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.1.1 Matched Only Droplets for .LB Image

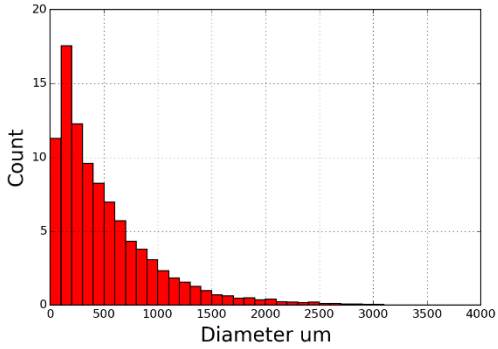

Figure A. 896: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

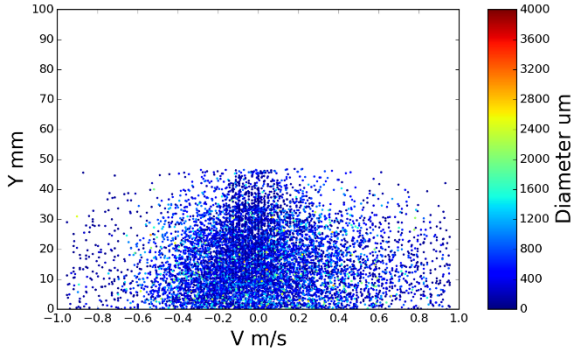

Figure A. 899: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

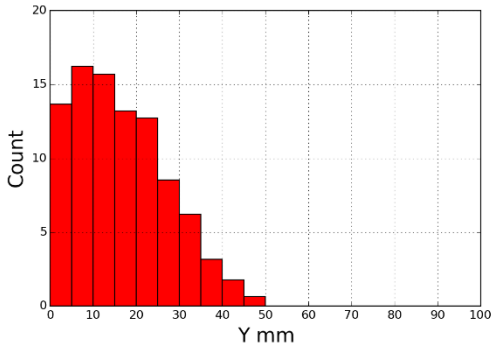

Figure A. 897: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

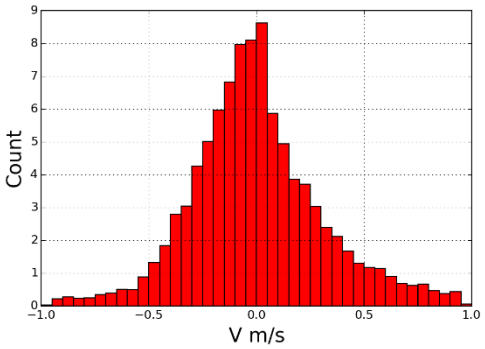

Figure A. 900: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

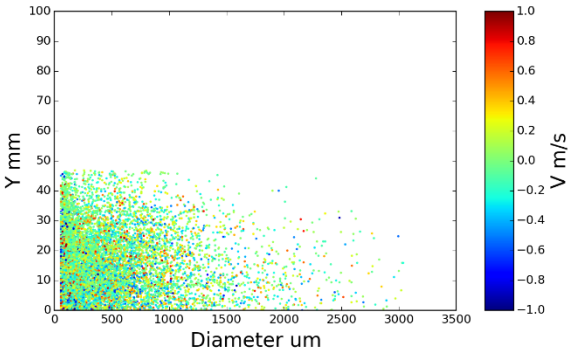

Figure A. 898: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 Lens 50mm Mag 0_13x

A.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	59.77	59.37	128.6	3418	612.5	488.1	128.6	3400	612.2	485.6
40-60mm	70.0	68.89	128.6	3322	592.2	422.1	128.6	3289	596.3	420.5
60-80mm	12.36	12.34	128.6	1837	567.5	304.6	128.6	2021	555.7	293.2
80-100mm	0.56	0.53	128.6	1767	541.6	281.4	128.6	1738	545.3	262.2
All	142.69	141.13	128.6	3418	598.4	442.4	128.6	3400	599.2	439.9
			Height A (mm)				Height B (mm)			
Highest Particle			98.7301				99.2519			
Lowest Particle			30.0854				30.0854			

Table A. 96: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	34.96	128.6	3264	696.5	507.7	128.6	3400	683.3	495.0	-0.950	0.950	-0.070	0.280	-0.950	0.950	-0.010	0.360
40-60mm	47.21	128.6	3246	667.6	427.9	128.6	3289	659.8	424.3	-0.950	0.950	-0.080	0.210	-0.950	0.950	0.010	0.320
60-80mm	9.71	128.6	1837	614.7	286.4	128.6	2021	600.8	282.0	-0.930	0.890	-0.070	0.140	-0.810	0.900	0.040	0.270
80-100mm	0.45	128.6	1767	596.5	259.6	128.6	1738	585.6	262.6	-0.210	0.170	-0.050	0.100	-0.630	0.600	-0.040	0.220
All	92.33	128.6	3264	672.6	448.1	128.6	3400	662.1	440.6	-0.950	0.950	-0.080	0.230	-0.950	0.950	0.000	0.330

Table A. 97: Matched Droplet Info

A.6.1.2 All Droplets for .LA Image

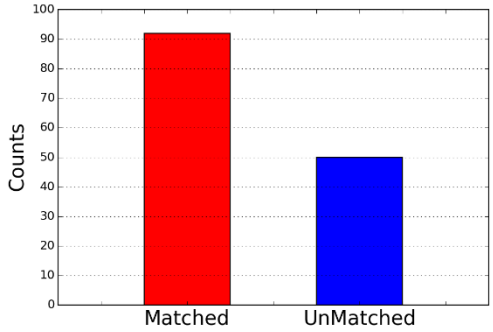

Figure A. 901: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

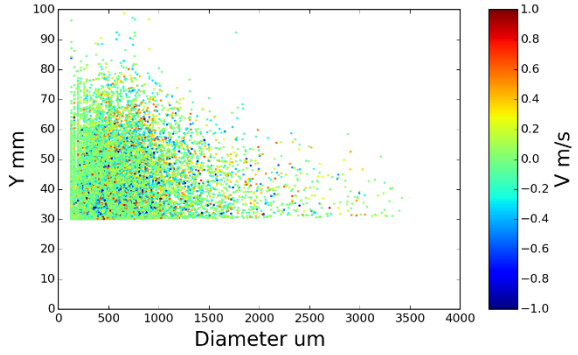

Figure A. 904: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

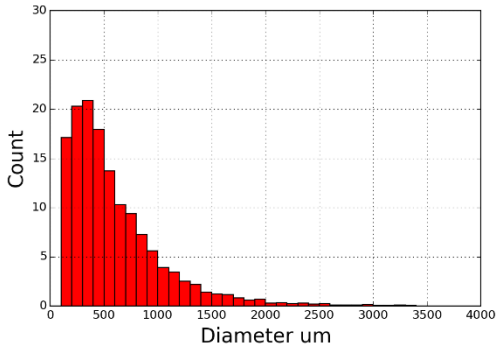

Figure A. 902: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

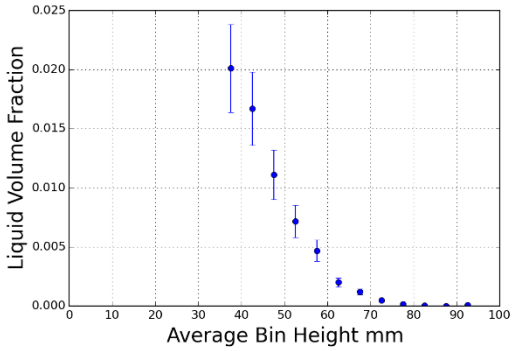

Figure A. 905: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

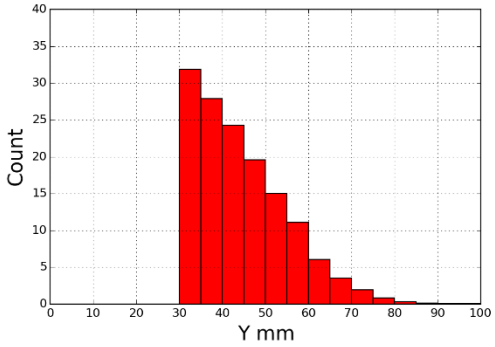

Figure A. 903: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 All Droplets for .LB Image

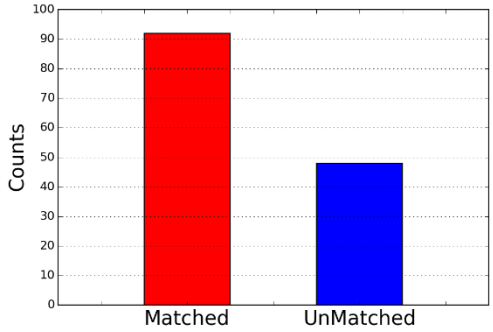

Figure A. 906: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

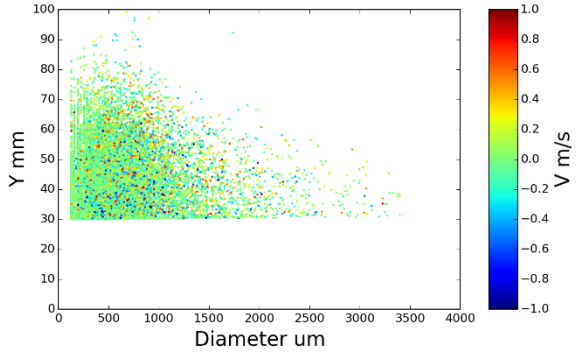

Figure A. 909: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

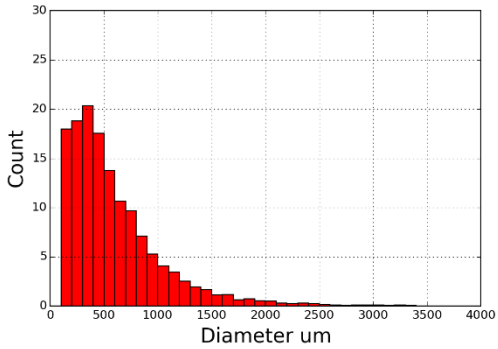

Figure A. 907: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

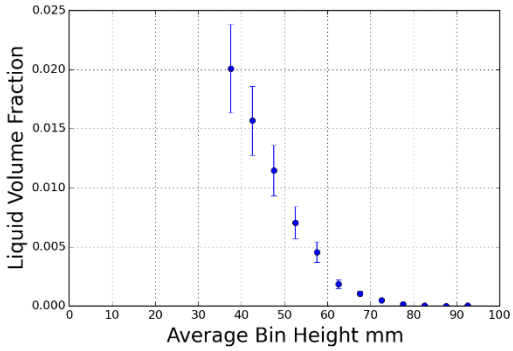

Figure A. 910: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

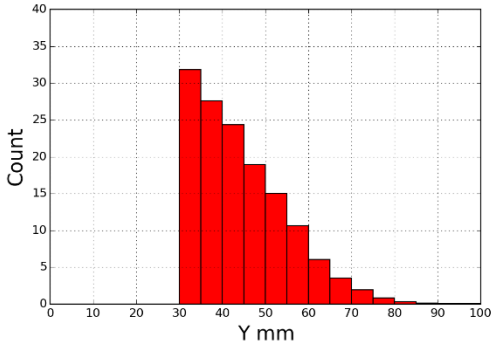

Figure A. 908: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 Matched Only Droplets for .LA Image

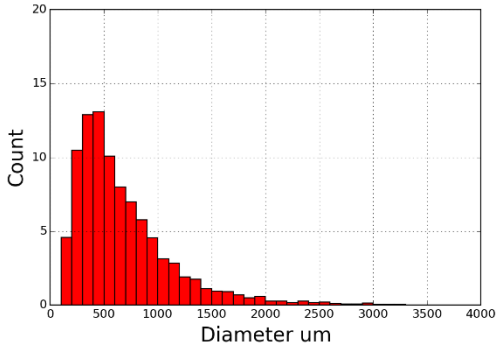

Figure A. 911: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

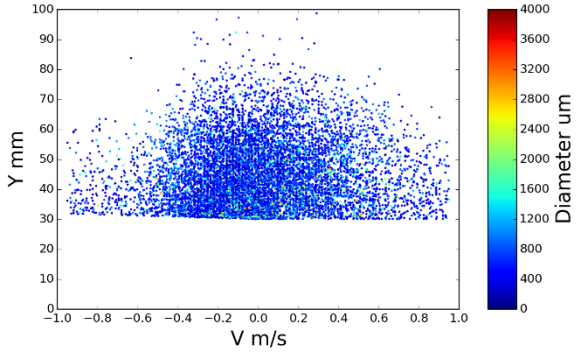

Figure A. 914: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

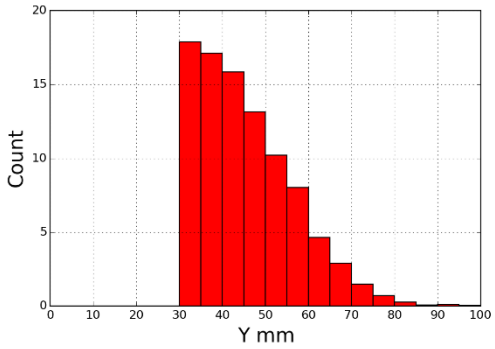

Figure A. 912: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

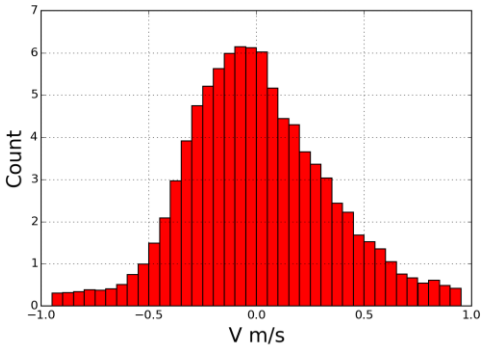

Figure A. 915: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

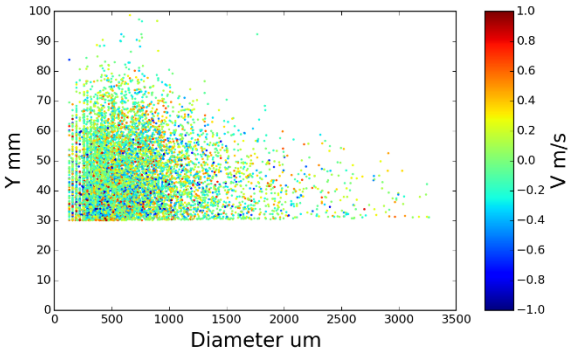

Figure A. 913: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 Matched Only Droplets for .LB Image

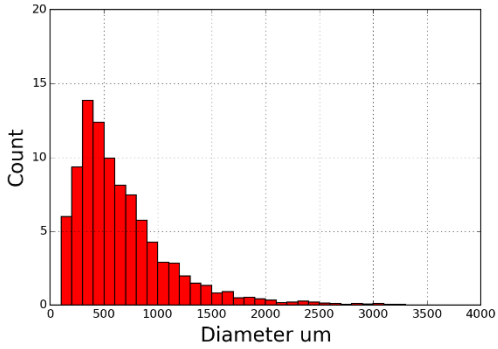

Figure A. 916: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

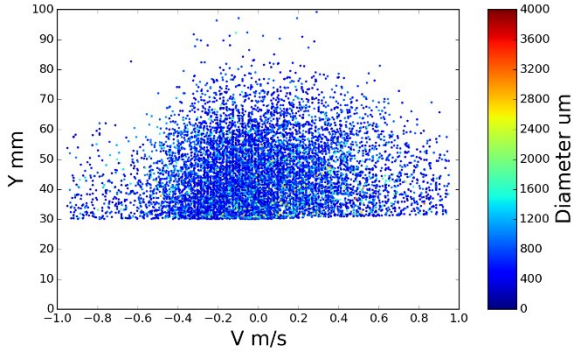

Figure A. 919: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

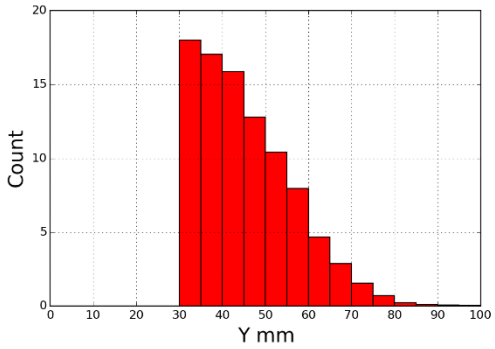

Figure A. 917: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

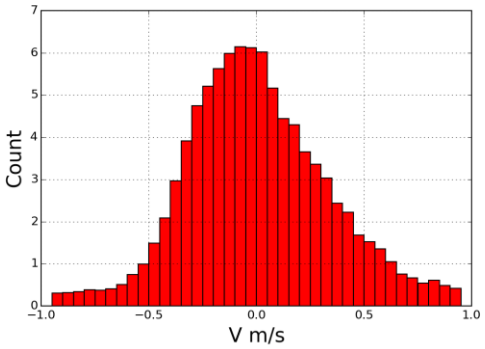

Figure A. 920: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

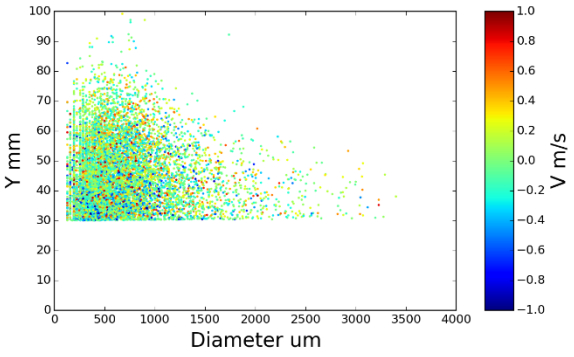

Figure A. 918: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.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	63.93	64.26	128.6	3391	667.9	511.0	128.6	3406	667.4	509.9
40-60mm	75.76	75.96	128.6	3401	634.0	422.9	128.6	3315	636.3	422.5
60-80mm	13.64	13.86	128.6	2396	620.5	329.1	128.6	2445	616.9	320.0
80-100mm	0.66	0.64	128.6	1559	625.8	289.7	157.5	1650	613.8	298.9
All	153.99	154.72	128.6	3401	646.9	454.6	128.6	3406	647.4	453.3
			Height A (mm)				Height B (mm)			
Highest Particle			98.4387				98.3261			
Lowest Particle			30.0854				30.0854			

Table A. 98: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	37.19	128.6	3316	763.2	524.1	128.6	3320	748.1	515.8	-0.950	0.950	-0.070	0.280	-0.950	0.950	0.000	0.370
40-60mm	51.75	128.6	3401	712.6	426.7	128.6	3228	703.3	416.7	-0.950	0.950	-0.070	0.210	-0.950	0.950	0.000	0.320
60-80mm	10.96	128.6	2396	670.6	316.6	128.6	2445	664.5	311.1	-0.930	0.880	-0.060	0.150	-0.790	0.890	-0.000	0.260
80-100mm	0.57	192.9	1559	675.9	275.4	222.7	1650	667.4	278.4	-0.310	0.190	-0.050	0.100	-0.410	0.440	-0.040	0.210
All	100.47	128.6	3401	726.5	455.8	128.6	3320	715.4	446.8	-0.950	0.950	-0.070	0.230	-0.950	0.950	0.000	0.340

Table A. 99: Matched Droplet Info

A.6.1.2 All Droplets for .LA Image

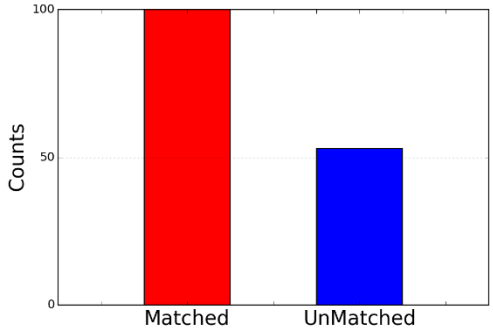

Figure A. 921: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

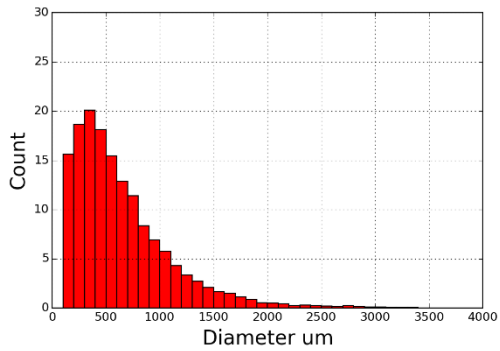

Figure A. 922: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

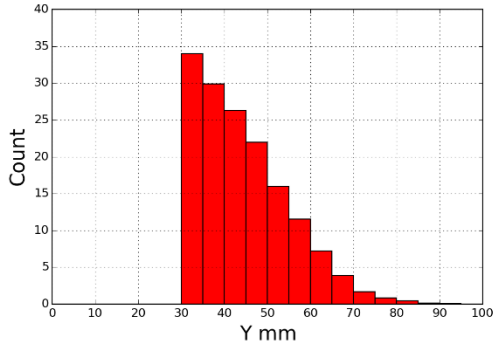

Figure A. 923: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

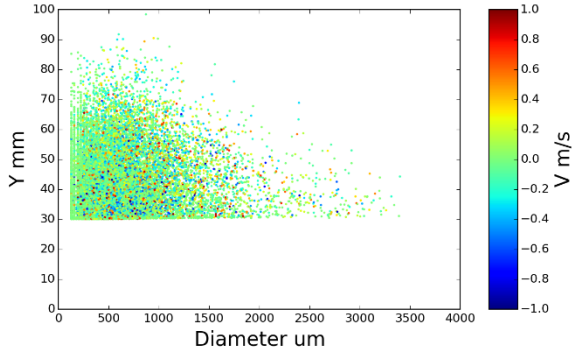

Figure A. 924: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

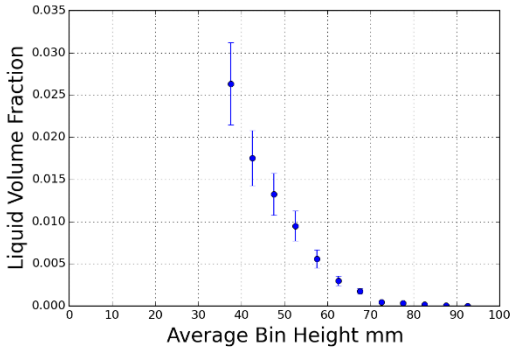

Figure A. 925: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 All Droplets for .LB Image

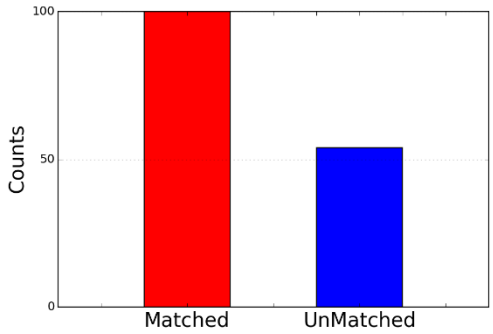

Figure A. 926: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

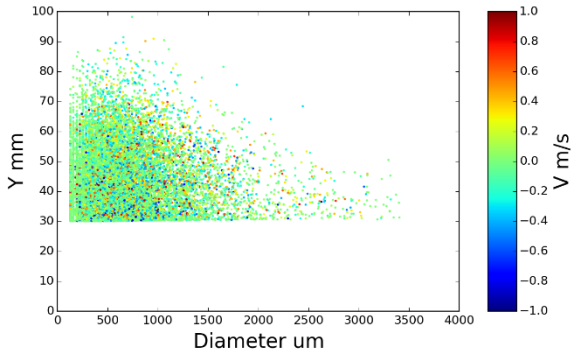

Figure A. 929: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

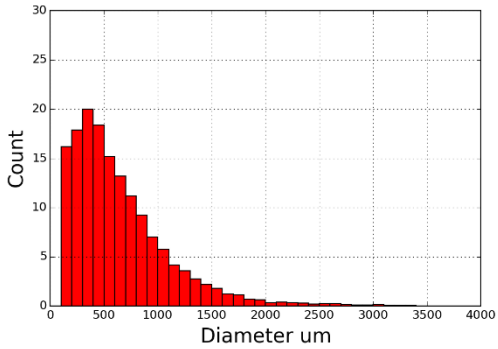

Figure A. 927: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

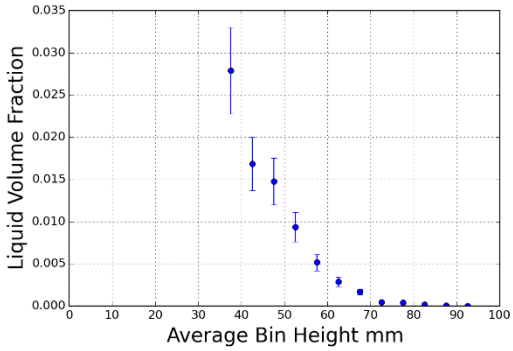

Figure A. 930: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

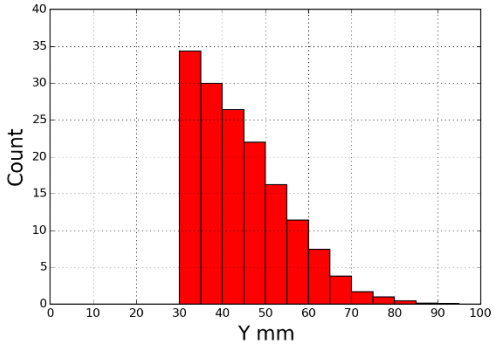

Figure A. 928: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 Matched Only Droplets for .LA Image

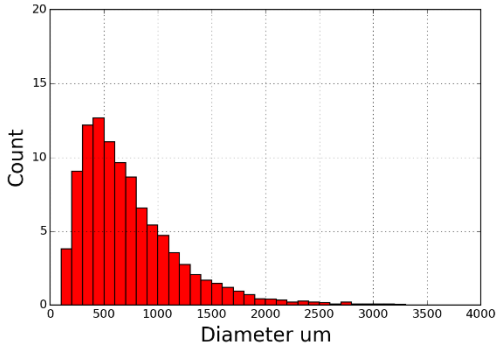

Figure A. 931: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

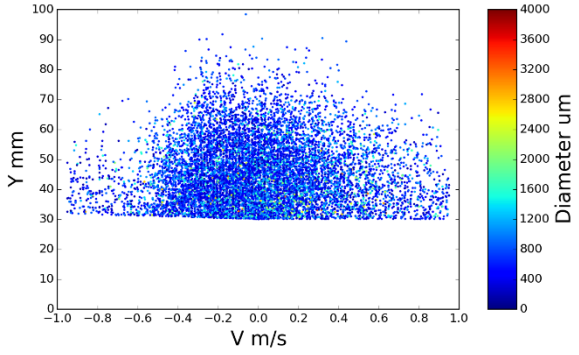

Figure A. 934: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

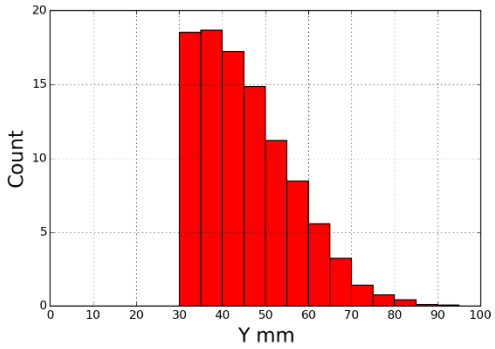

Figure A. 932: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

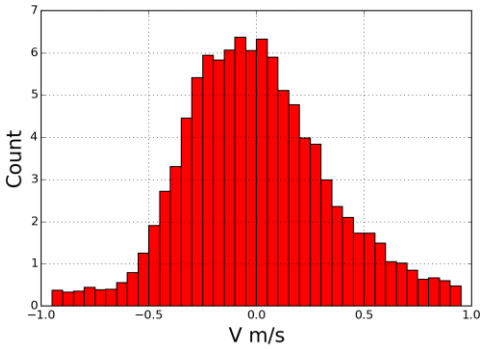

Figure A. 935: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

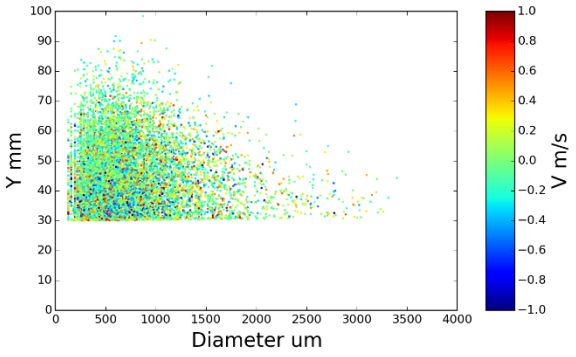

Figure A. 933: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 Matched Only Droplets for .LB Image

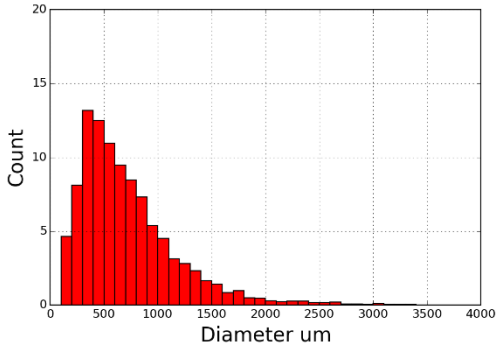

Figure A. 936: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

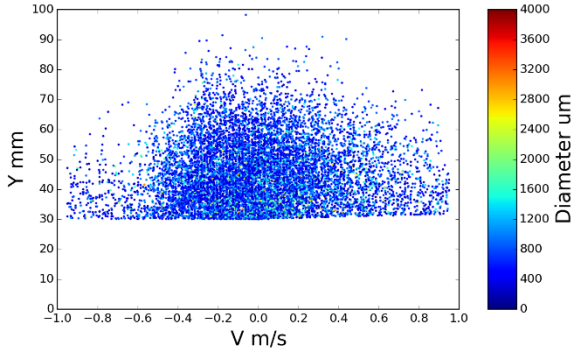

Figure A. 939: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

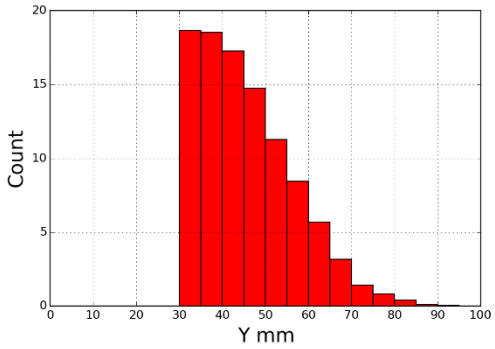

Figure A. 937: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

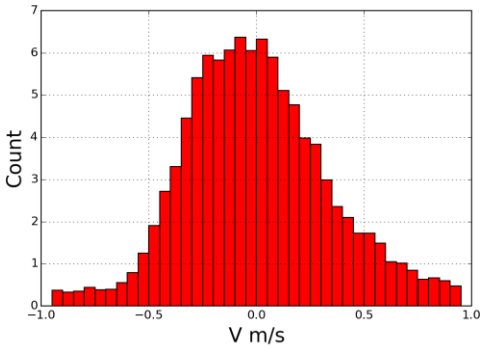

Figure A. 940: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

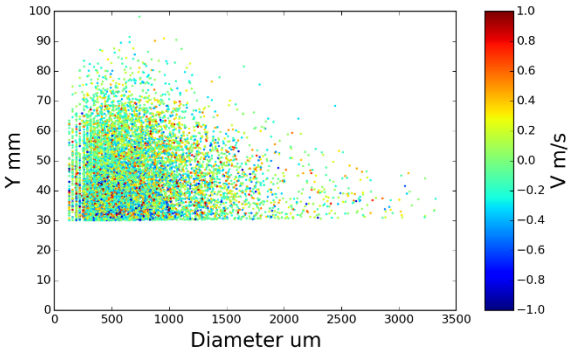

Figure A. 938: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.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	60.57	59.98	128.6	3391	678.4	531.5	128.6	3416	680.3	534.3
40-60mm	71.27	69.62	128.6	3324	652.2	451.7	128.6	3402	657.9	448.4
60-80mm	13.2	13.07	128.6	2305	649.7	360.6	128.6	2905	653.6	370.5
80-100mm	0.7	0.7	128.6	1347	613.3	292.6	192.9	1302	619.5	268.6
All	145.74	143.37	128.6	3391	662.7	479.1	128.6	3416	666.7	479.7
			Height A (mm)				Height B (mm)			
Highest Particle			98.8564				98.5958			
Lowest Particle			30.0854				30.0854			

Table A. 100: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	33.9	128.6	3391	785.5	558.2	128.6	3350	767.1	546.3	-0.950	0.950	-0.060	0.290	-0.950	0.950	-0.010	0.370
40-60mm	47.08	128.6	3071	737.7	457.3	128.6	3402	730.8	452.6	-0.950	0.950	-0.060	0.210	-0.950	0.950	-0.030	0.310
60-80mm	10.12	128.6	2305	717.5	355.0	128.6	2905	715.0	360.2	-0.900	0.740	-0.050	0.140	-0.880	0.930	-0.020	0.260
80-100mm	0.59	192.9	1347	670.9	276.6	192.9	1302	673.4	266.1	-0.370	0.210	-0.060	0.110	-0.600	0.260	-0.050	0.190
All	91.69	128.6	3391	752.7	487.5	128.6	3402	742.2	480.4	-0.950	0.950	-0.060	0.240	-0.950	0.950	-0.020	0.330

Table A. 101: Matched Droplet Info

A.6.1.2 All Droplets for .LA Image

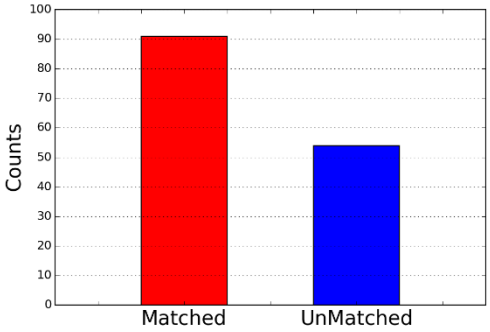

Figure A. 941: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

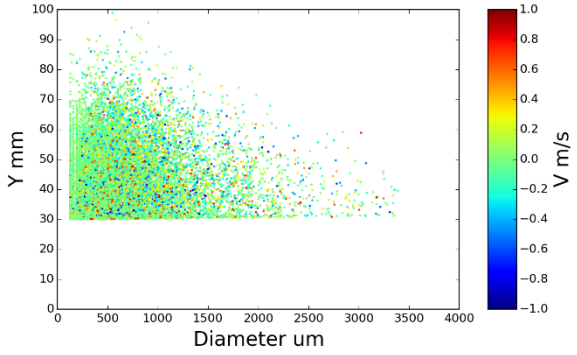

Figure A. 944: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

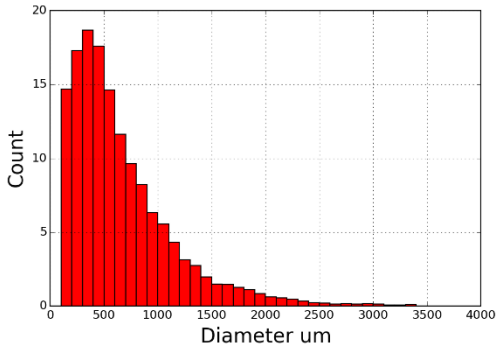

Figure A. 942: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

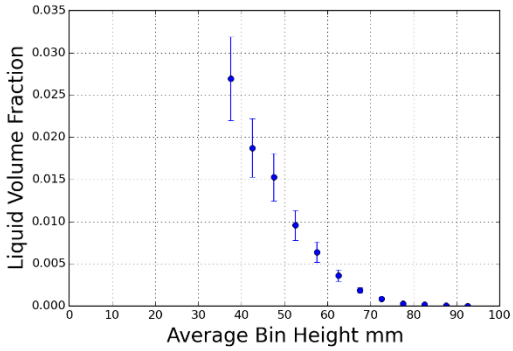

Figure A. 945: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

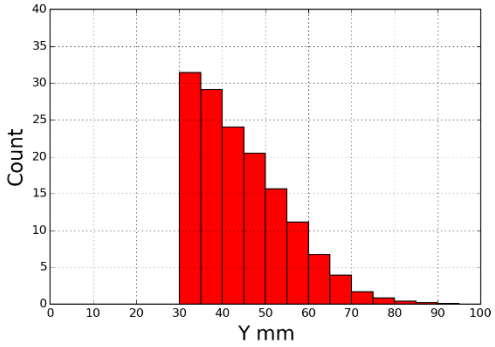

Figure A. 943: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 All Droplets for .LB Image

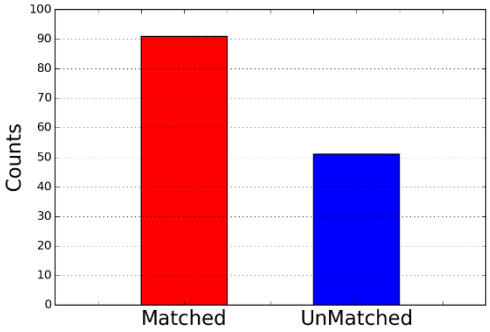

Figure A. 946: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

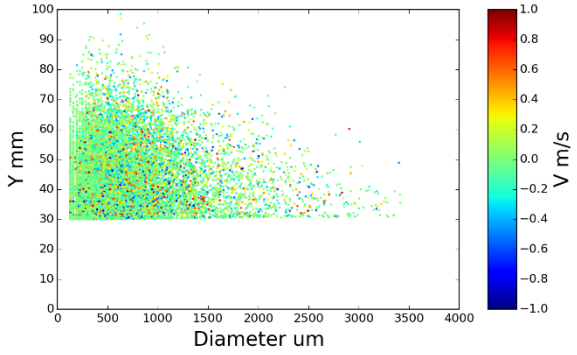

Figure A. 949: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

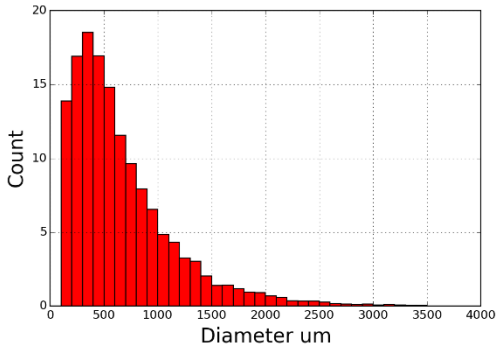

Figure A. 947: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

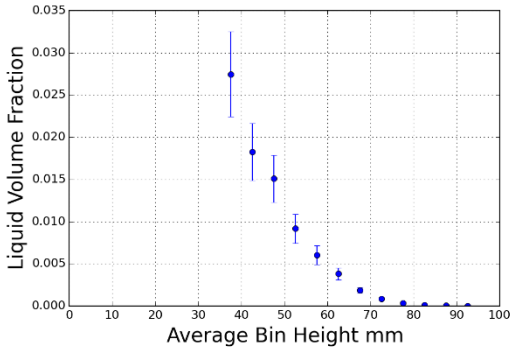

Figure A. 950: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

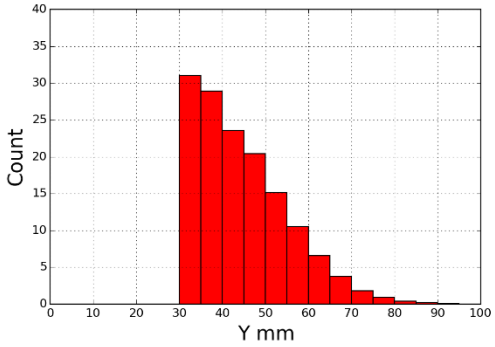

Figure A. 948: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 Matched Only Droplets for .LA Image

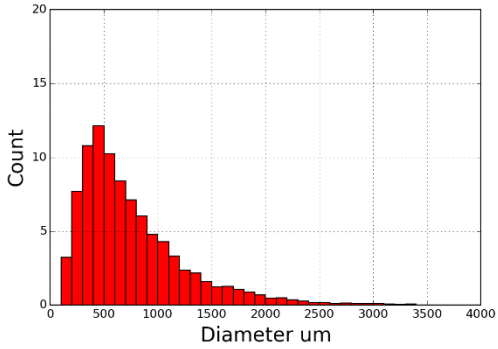

Figure A. 951: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

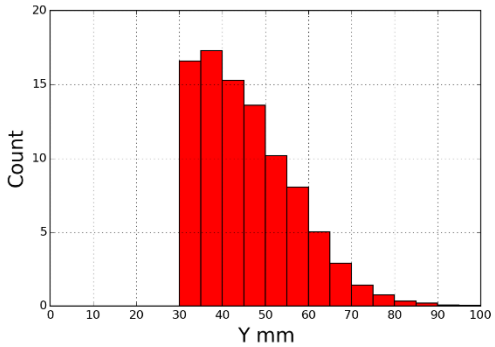

Figure A. 952: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

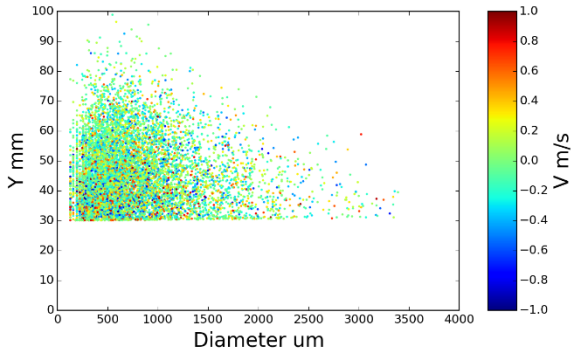

Figure A. 953: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

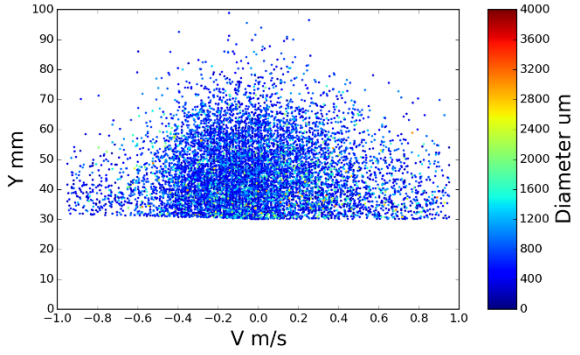

Figure A. 954: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

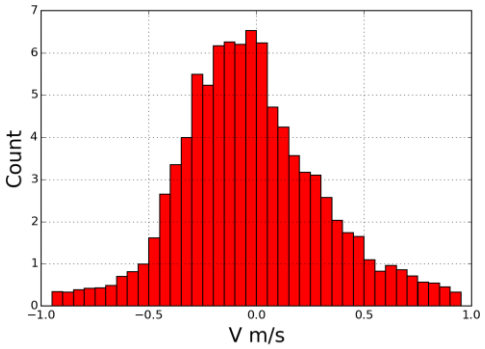

Figure A. 955: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 Matched Only Droplets for .LB Image

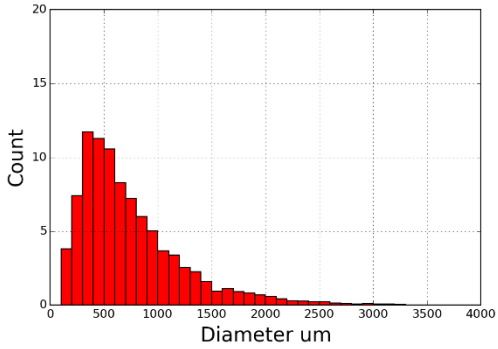

Figure A. 956: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

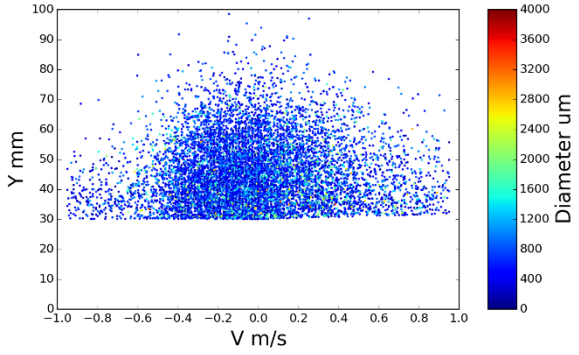

Figure A. 959: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

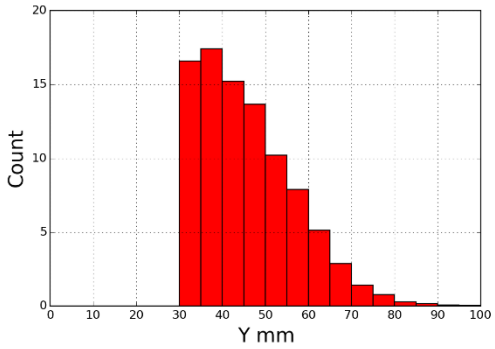

Figure A. 957: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

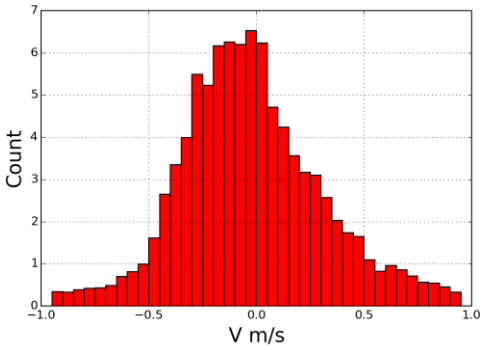

Figure A. 960: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

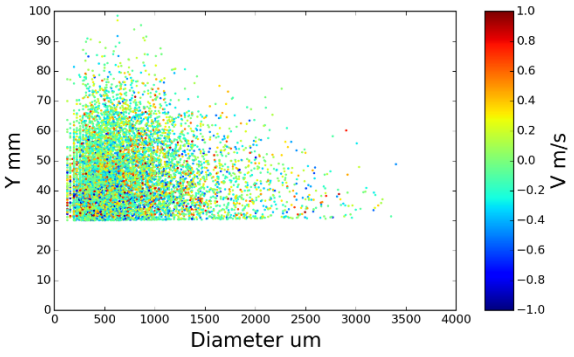

Figure A. 958: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 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	51.16	51.61	128.6	3342	692.1	556.4	128.6	3375	687.8	553.1
40-60mm	63.88	63.76	128.6	3361	650.4	480.3	128.6	3416	654.9	472.2
60-80mm	13.72	13.74	128.6	2696	655.2	411.5	128.6	3242	644.8	392.3
80-100mm	0.81	0.85	157.5	1235	610.6	294.9	128.6	1206	576.8	299.7
All	129.57	129.98	128.6	3361	667.1	504.8	128.6	3416	666.4	498.1
			Height A (mm)				Height B (mm)			
Highest Particle			99.6661				99.9473			
Lowest Particle			30.0854				30.0854			

Table A. 102: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	27.82	128.6	3322	829.8	591.9	128.6	3348	811.6	582.2	-0.950	0.950	-0.060	0.280	-0.950	0.950	-0.020	0.360
40-60mm	41.44	128.6	3361	747.5	489.8	128.6	3416	740.9	482.0	-0.950	0.950	-0.060	0.220	-0.950	0.950	-0.010	0.310
60-80mm	9.81	128.6	2696	739.5	400.1	128.6	2560	724.6	388.6	-0.930	0.900	-0.060	0.160	-0.940	0.940	-0.000	0.260
80-100mm	0.56	222.7	1235	688.2	282.4	192.9	1206	678.5	281.3	-0.330	0.100	-0.060	0.110	-0.490	0.420	0.020	0.210
All	79.63	128.6	3361	774.8	518.8	128.6	3416	763.2	509.8	-0.950	0.950	-0.060	0.240	-0.950	0.950	-0.010	0.320

Table A. 103: Matched Droplet Info

A.6.1.2 All Droplets for .LA Image

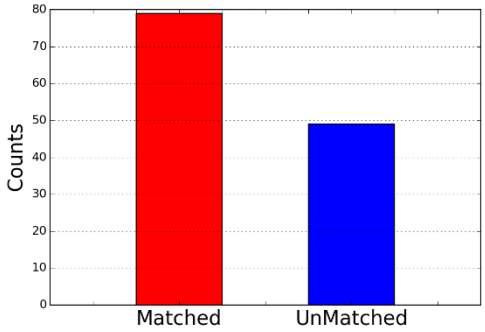

Figure A. 961: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

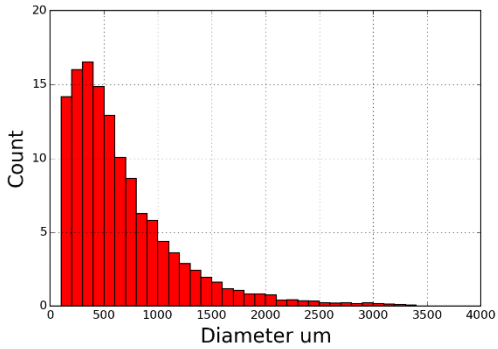

Figure A. 962: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

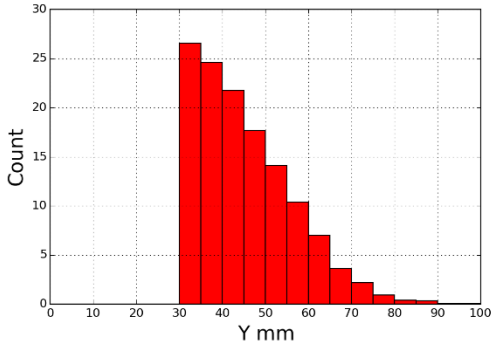

Figure A. 963: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

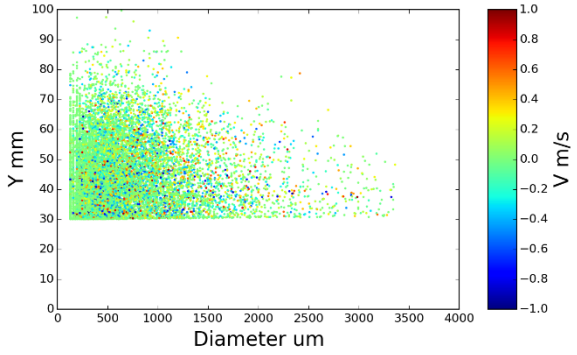

Figure A. 964: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

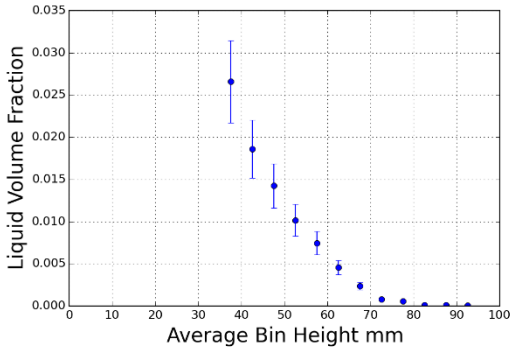

Figure A. 965: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 All Droplets for .LB Image

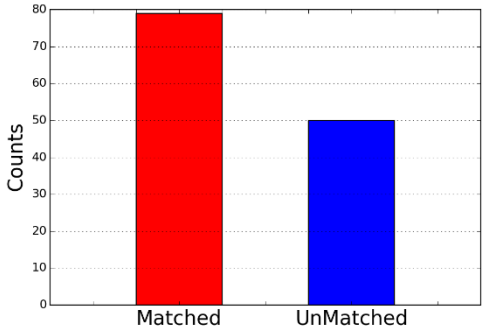

Figure A. 966: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

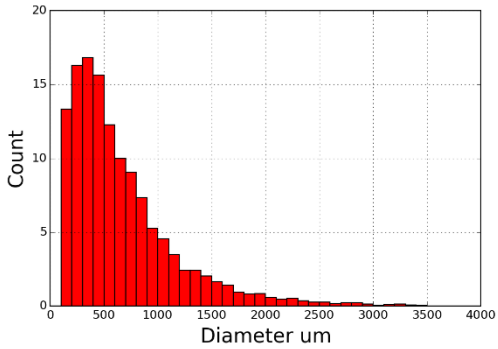

Figure A. 967: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

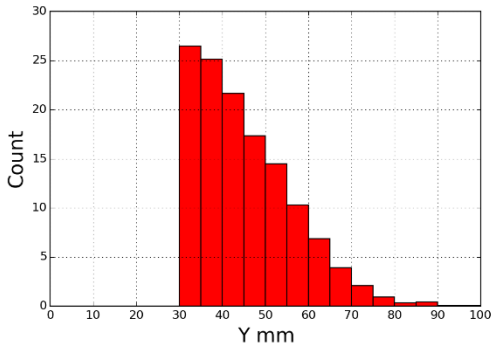

Figure A. 968: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

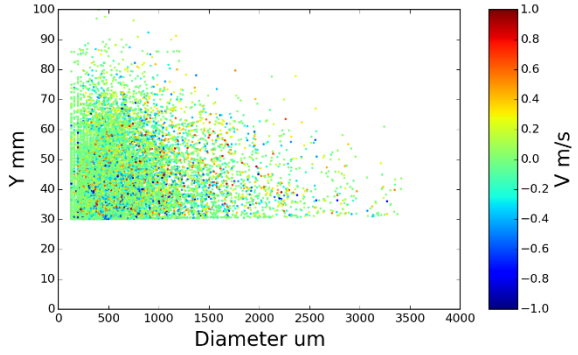

Figure A. 969: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

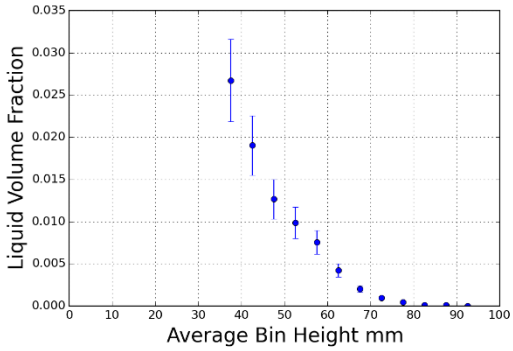

Figure A. 970: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 Matched Only Droplets for .LA Image

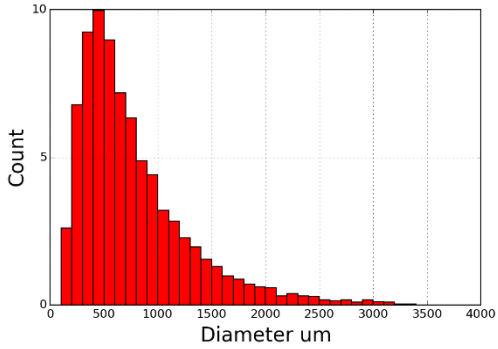

Figure A. 971: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

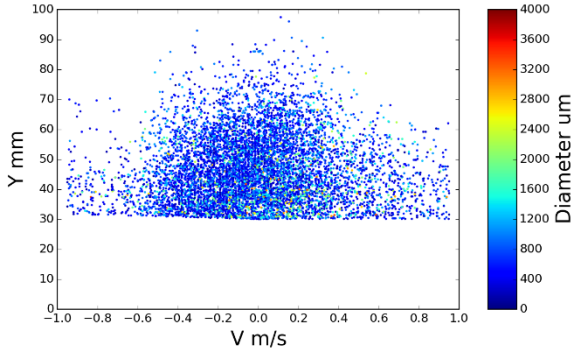

Figure A. 974: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

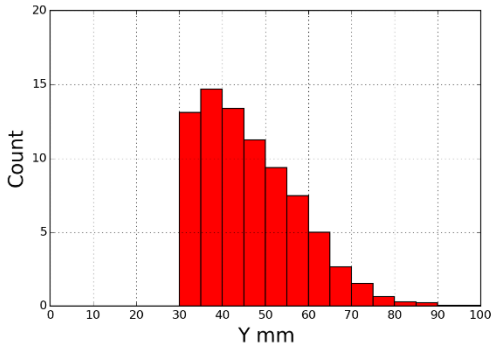

Figure A. 972: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

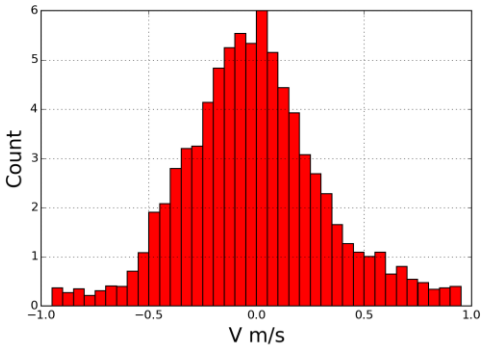

Figure A. 975: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

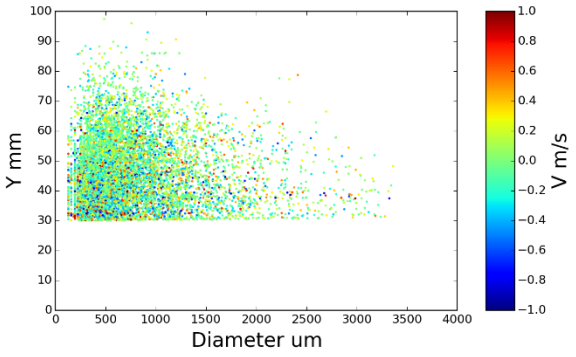

Figure A. 973: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 Matched Only Droplets for .LB Image

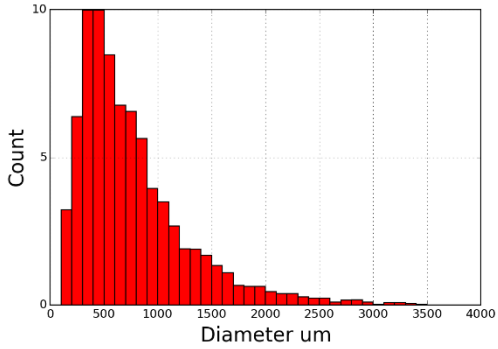

Figure A. 976: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

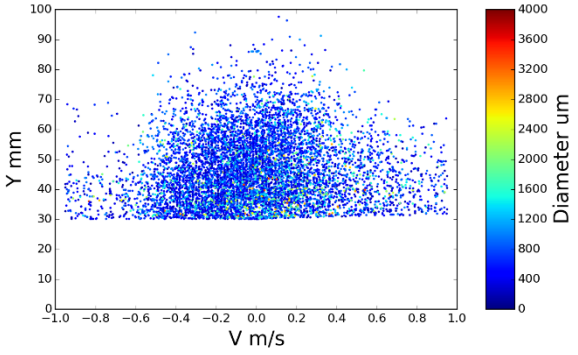

Figure A. 979: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

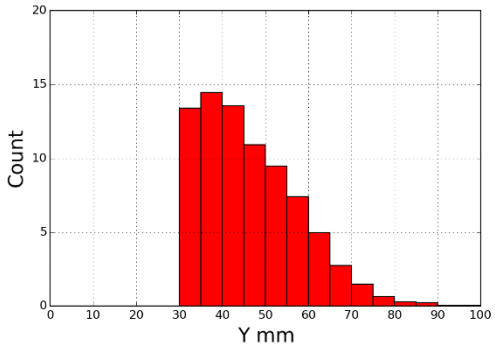

Figure A. 977: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

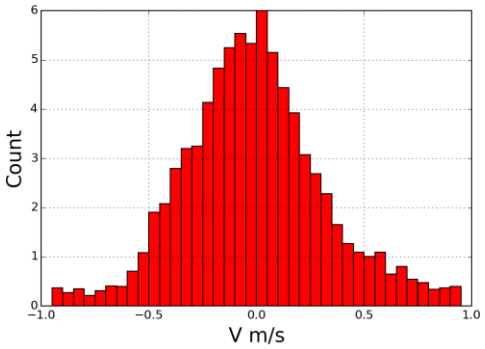

Figure A. 980: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

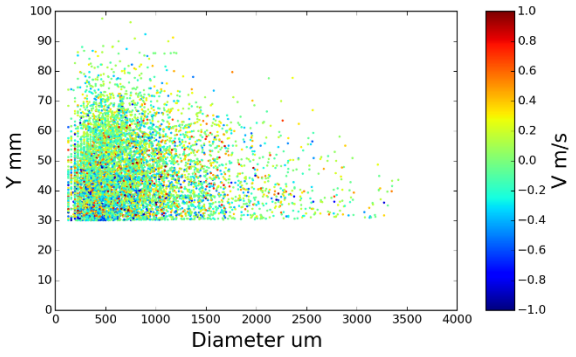

Figure A. 978: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 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	41.99	42.44	128.6	3396	687.3	560.5	128.6	3418	686.9	557.1
40-60mm	53.97	54.06	128.6	3372	636.8	497.4	128.6	3345	629.7	488.6
60-80mm	11.22	10.99	128.6	3307	567.0	376.3	128.6	3268	577.4	394.3
80-100mm	0.46	0.44	128.6	1395	569.5	297.2	249.0	1389	597.6	287.8
All	107.64	107.93	128.6	3396	648.9	513.0	128.6	3418	646.8	509.0
			Height A (mm)				Height B (mm)			
Highest Particle			95.5519				95.7229			
Lowest Particle			30.0854				30.0854			

Table A. 104: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	22.51	128.6	3396	818.2	594.2	128.6	3224	796.7	579.3	-0.950	0.950	-0.060	0.280	-0.950	0.950	-0.010	0.360
40-60mm	34.01	128.6	3372	738.9	513.2	128.6	3345	723.9	502.4	-0.950	0.950	-0.050	0.220	-0.950	0.950	-0.010	0.320
60-80mm	7.76	128.6	3307	651.7	383.1	128.6	3223	642.7	390.6	-0.870	0.860	-0.050	0.150	-0.810	0.890	-0.010	0.240
80-100mm	0.38	280.3	1395	634.4	280.9	249.0	1389	627.2	287.9	-0.250	0.280	-0.020	0.130	-0.520	0.480	0.010	0.260
All	64.66	128.6	3396	755.4	531.4	128.6	3345	739.0	520.6	-0.950	0.950	-0.050	0.230	-0.950	0.950	-0.010	0.330

Table A. 105: Matched Droplet Info

A.6.1.2 All Droplets for .LA Image

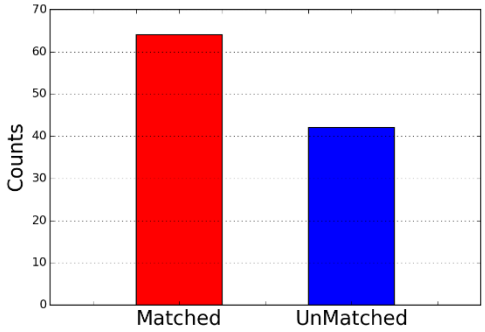

Figure A. 981: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

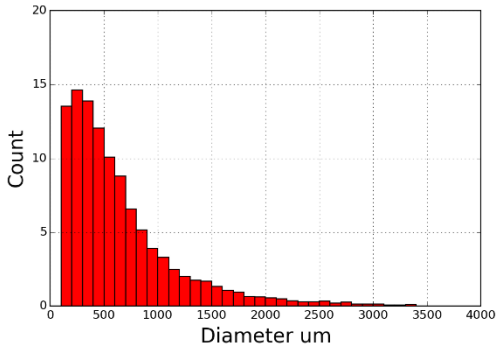

Figure A. 982: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

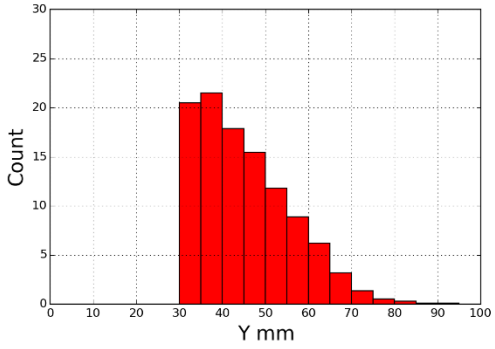

Figure A. 983: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

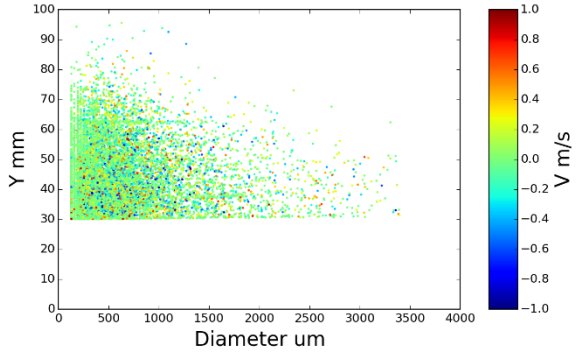

Figure A. 984: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

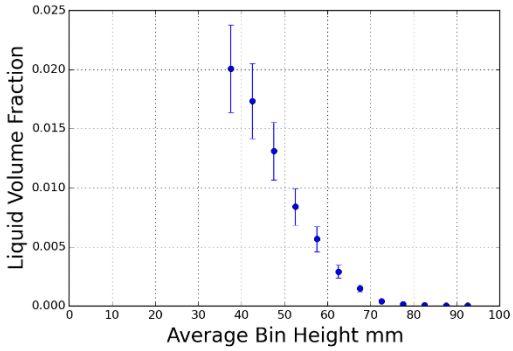

Figure A. 985: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 All Droplets for .LB Image

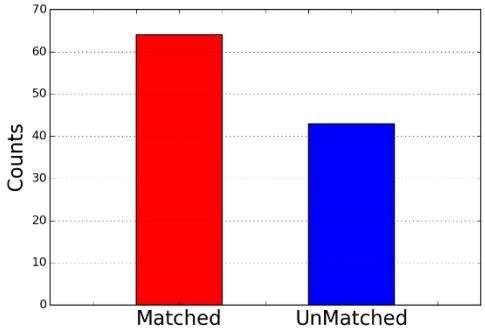

Figure A. 986: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

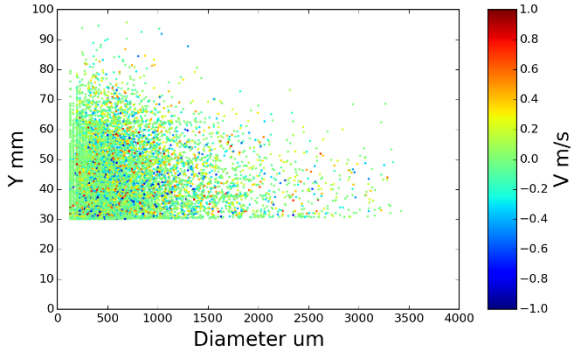

Figure A. 989: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

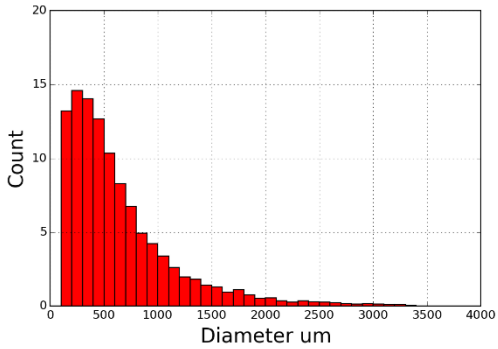

Figure A. 987: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

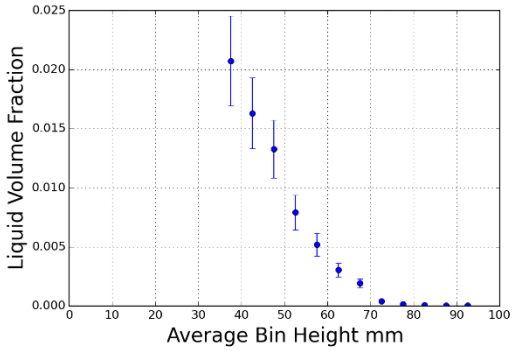

Figure A. 990: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

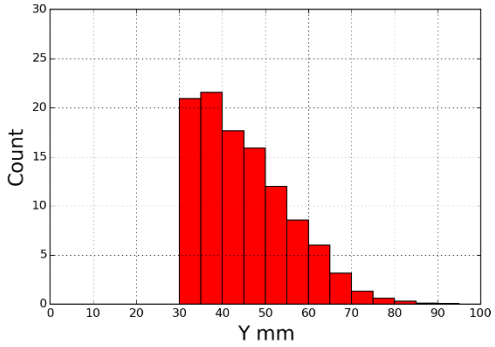

Figure A. 988: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 Matched Only Droplets for .LA Image

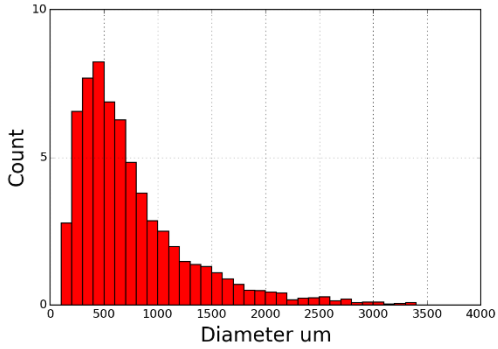

Figure A. 991: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

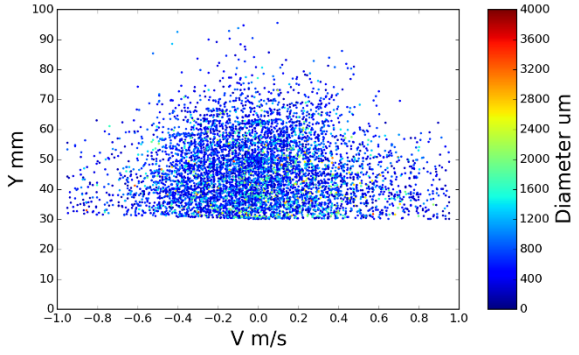

Figure A. 994: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

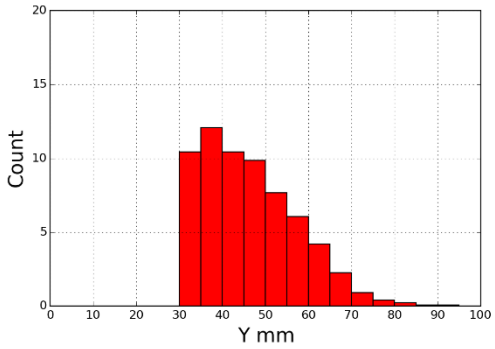

Figure A. 992: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

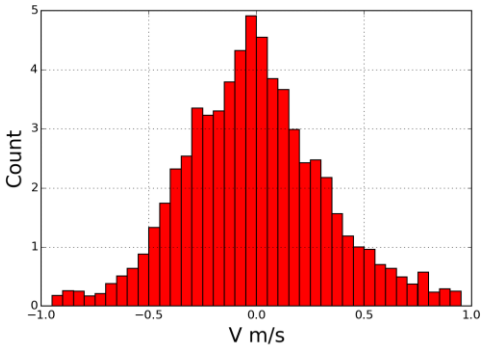

Figure A. 995: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

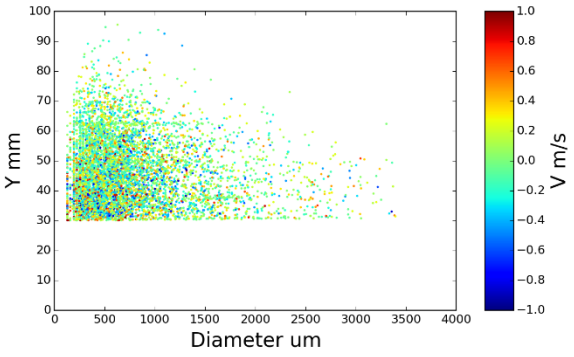

Figure A. 993: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.1.2 Matched Only Droplets for .LB Image

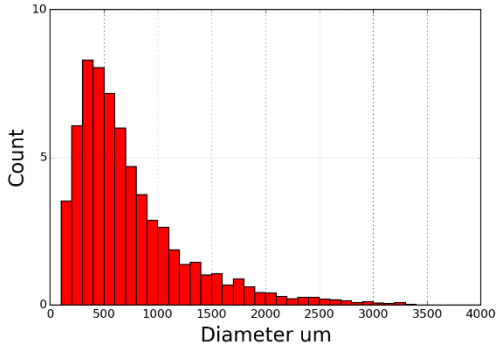

Figure A. 996: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

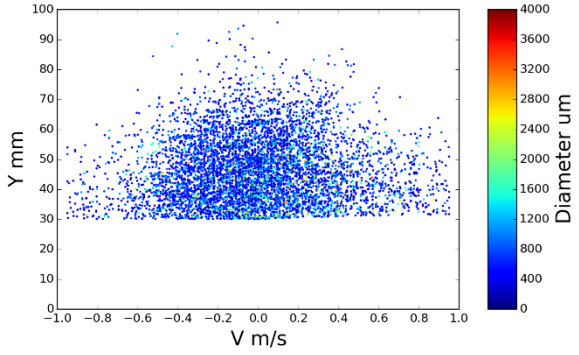

Figure A. 999: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

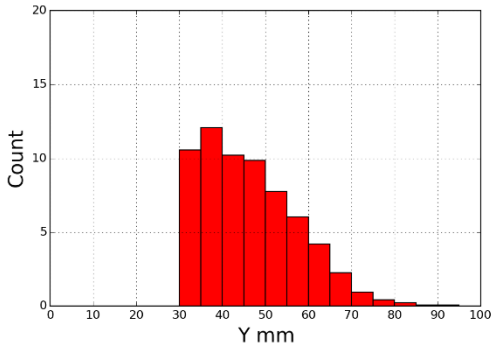

Figure A. 997: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

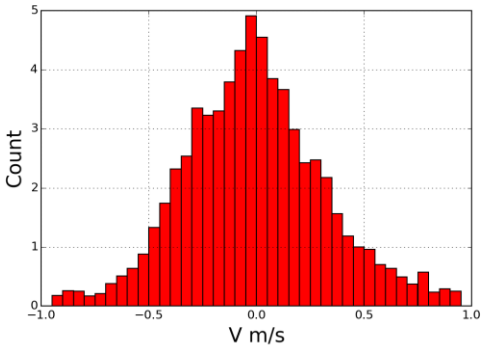

Figure A. 1000: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

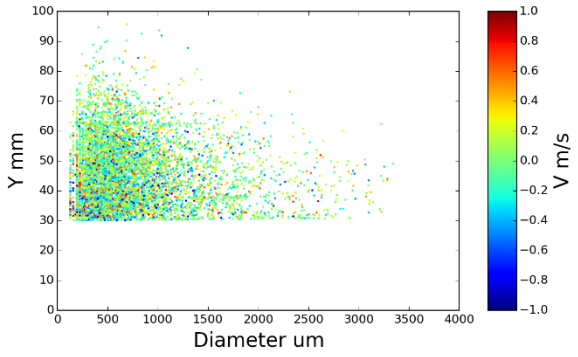

Figure A. 998: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.2 Liquid Level 2

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	23932 / 3.015
Ref Mass Flow (lb/hr) / (kg/s)	1624 / 0.205
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15090 / 20.465
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	7211 / 22.75
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.0 / 12.78
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	55.2 / 12.88
Total Bundle Q (Btu/hr) / (kW)	156863 / 45.97
Total Bundle & Preboiler Q (Btu/hr) / (kW)	156863 / 45.97
Top Two Rows HTC Ratio	1.071
Bundle Inlet Quality	0.00
Bundle Exit Quality	0.04

Table A. 106: Thermal Conditions

A.6.2.1 Lens 100mm Mag 0_29x

A.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	117.81	122.74	57.2	2991	380.1	372.2	57.2	3019	370.2	371.9
20-40mm	44.26	45.33	57.2	2027	256.9	275.7	57.2	2380	255.2	277.4
40-60mm	3.91	4.16	57.2	1140	178.5	191.7	57.2	1276	171.5	188.1
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	176.2	182.63	57.2	2991	347.4	352.4	57.2	3019	340.3	352.3
			Height A (mm)				Height B (mm)			
Highest Particle			46.9218				46.8884			
Lowest Particle			-1.0402				-1.0402			

Table A. 107: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	83.56	57.2	2897	450.4	385.5	57.2	3019	448.2	386.0	-0.950	0.930	-0.050	0.150	-0.950	0.940	0.030	0.270
20-40mm	29.55	57.2	2027	322.5	305.9	57.2	1959	320.1	307.4	-0.950	0.920	-0.040	0.120	-0.930	0.920	0.010	0.200
40-60mm	2.55	57.2	1140	222.7	220.6	57.2	1276	219.4	223.3	-0.800	0.160	-0.040	0.090	-0.420	0.590	-0.010	0.130
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	121.83	57.2	2897	419.1	371.7	57.2	3019	416.6	371.9	-0.950	0.930	-0.050	0.150	-0.950	0.940	0.020	0.250

Table A. 108: Matched Droplet Info

A.6.2.1 All Droplets for .LA Image

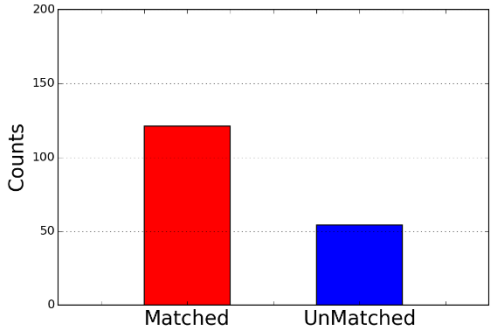

Figure A. 1001: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

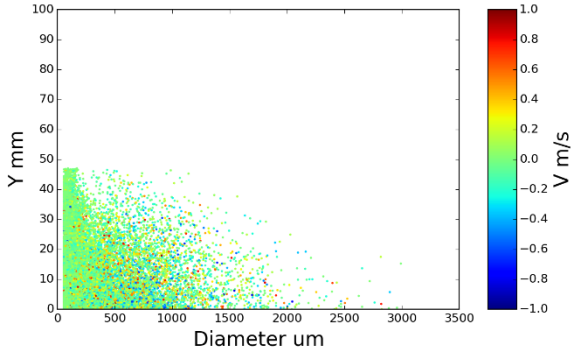

Figure A. 1004: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

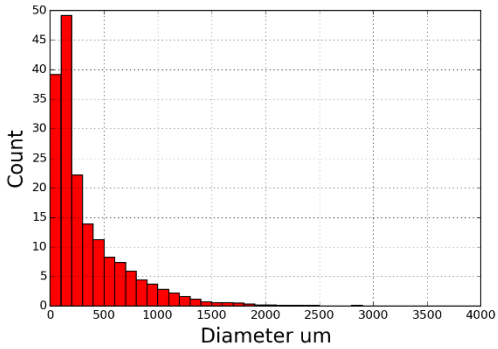

Figure A. 1002: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

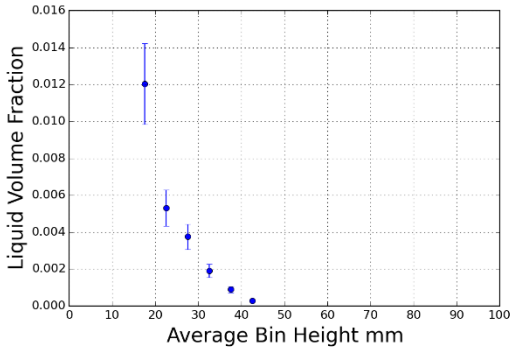

Figure A. 1005: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

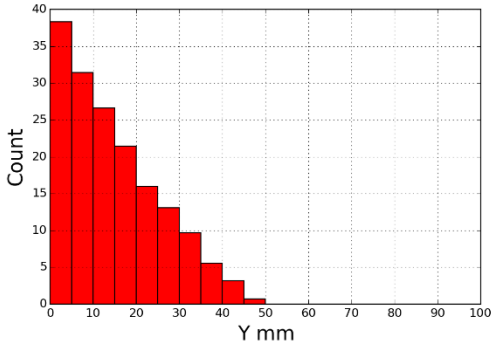

Figure A. 1003: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 All Droplets for .LB Image

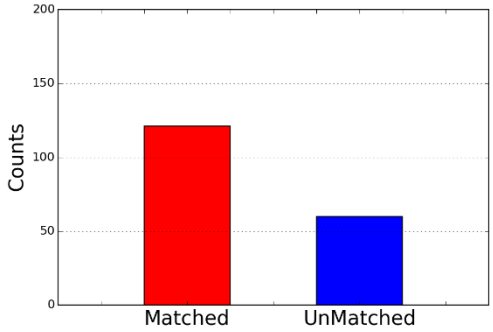

Figure A. 1006: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

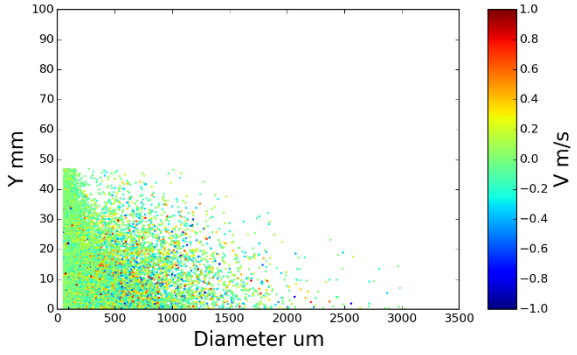

Figure A. 1009: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

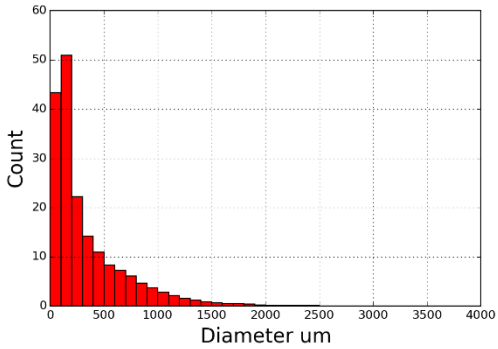

Figure A. 1007: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

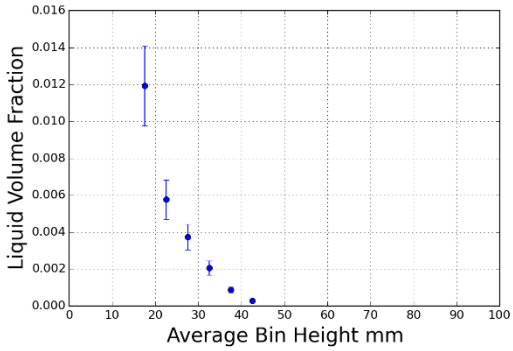

Figure A. 1010: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

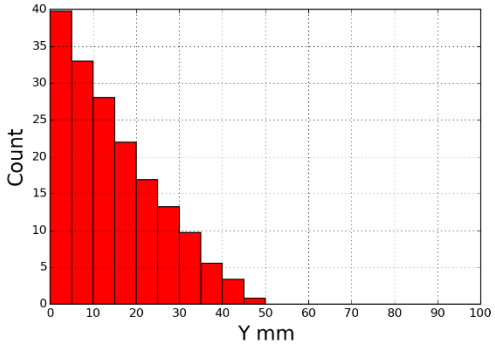

Figure A. 1008: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 Matched Only Droplets for .LA Image

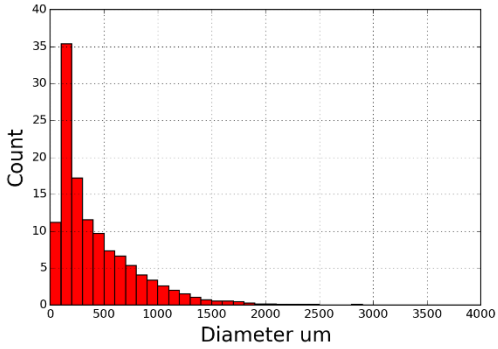

Figure A. 1011: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

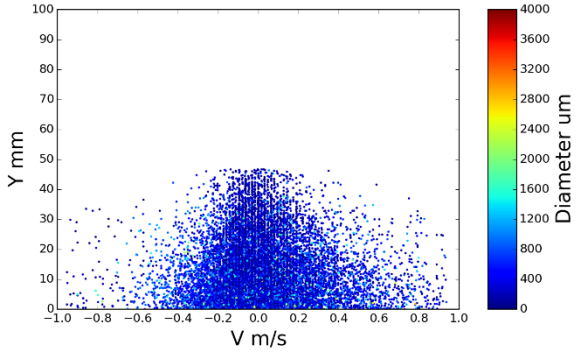

Figure A. 1014: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

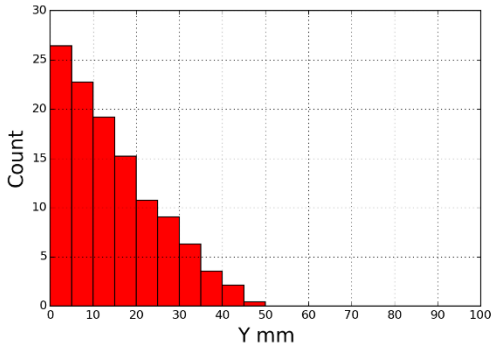

Figure A. 1012: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

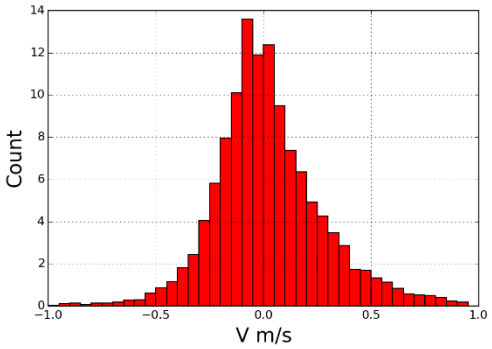

Figure A. 1015: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

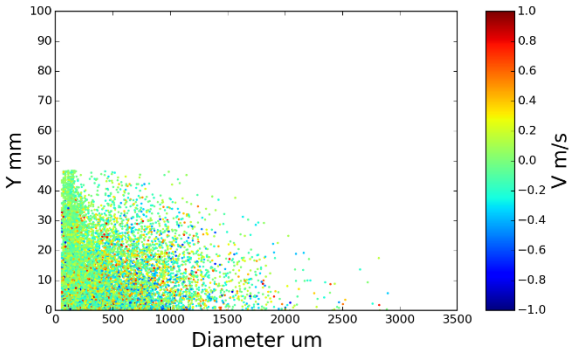

Figure A. 1013: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 Matched Only Droplets for .LB Image

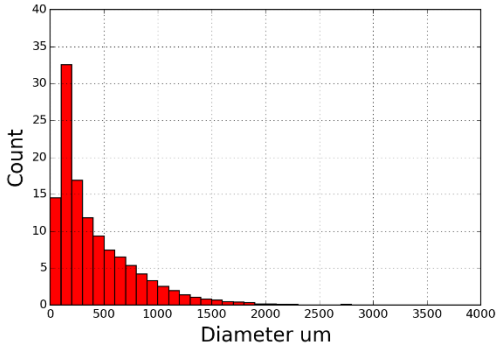

Figure A. 1016: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

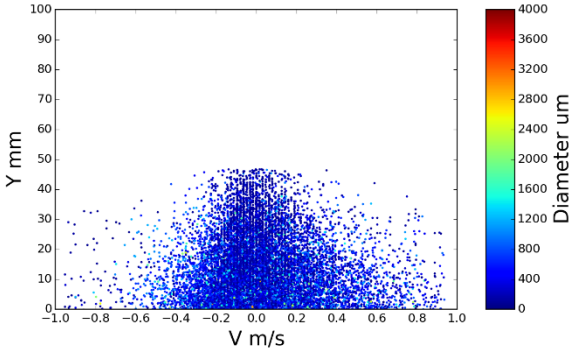

Figure A. 1019: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

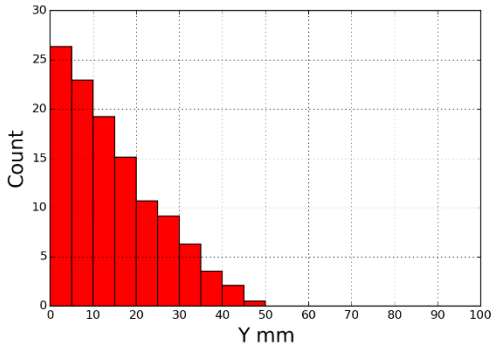

Figure A. 1017: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

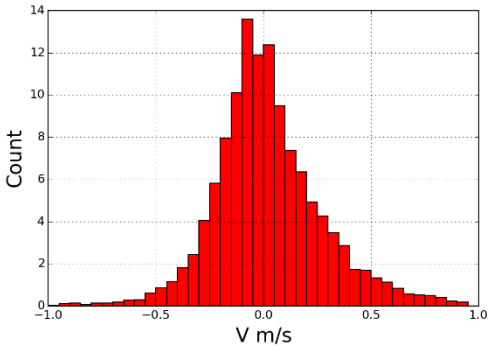

Figure A. 1020: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

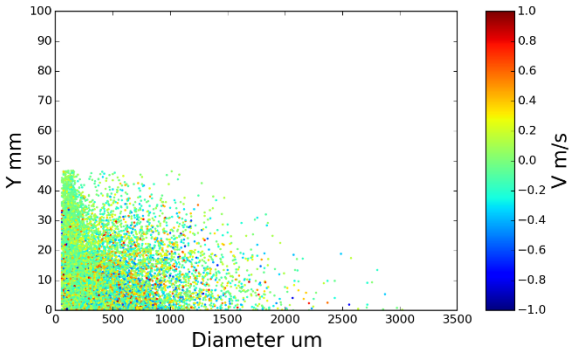

Figure A. 1018: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.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	92.99	98.3	57.2	2969	440.0	421.3	57.2	3020	420.1	417.2
20-40mm	30.72	31.95	57.2	2522	319.8	371.1	57.2	2655	310.7	369.0
40-60mm	2.28	2.54	57.2	1471	185.6	258.8	57.2	1503	181.1	265.7
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	134.47	142.39	57.2	2969	410.3	411.8	57.2	3020	393.5	408.9
			Height A (mm)				Height B (mm)			
Highest Particle			46.9218				46.9285			
Lowest Particle			-1.0402				-1.0402			

Table A. 109: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	62.76	57.2	2862	534.1	434.9	57.2	3020	528.6	433.8	-0.950	0.950	-0.050	0.160	-0.950	0.950	-0.030	0.270
20-40mm	18.84	57.2	2522	435.9	417.8	57.2	2655	432.7	417.9	-0.940	0.910	-0.050	0.140	-0.730	0.940	-0.020	0.210
40-60mm	1.17	57.2	1471	261.1	328.1	57.2	1503	272.8	356.6	-0.510	0.250	-0.040	0.100	-0.350	0.480	-0.040	0.130
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	87.61	57.2	2862	513.2	434.1	57.2	3020	509.2	434.4	-0.950	0.950	-0.040	0.150	-0.950	0.950	-0.030	0.260

Table A. 110: Matched Droplet Info

A.6.2.1 All Droplets for .LA Image

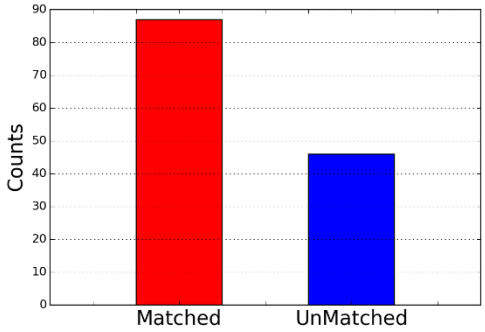

Figure A. 1021: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

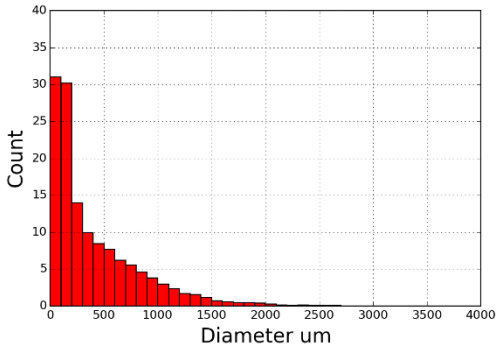

Figure A. 1022: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

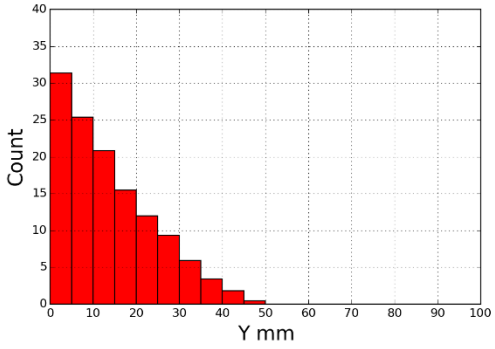

Figure A. 1023: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

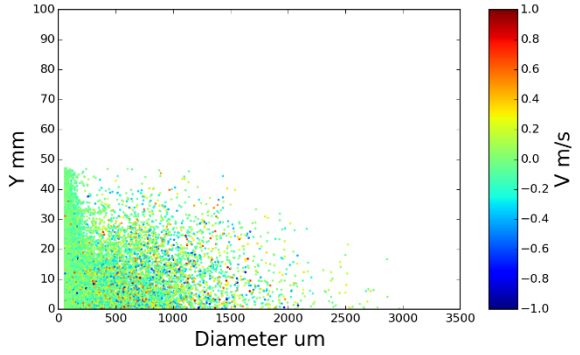

Figure A. 1024: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

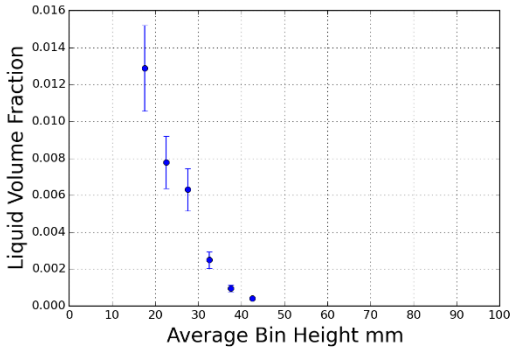

Figure A. 1025: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 All Droplets for .LB Image

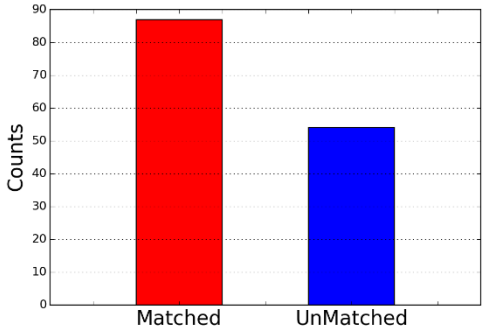

Figure A. 1026: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

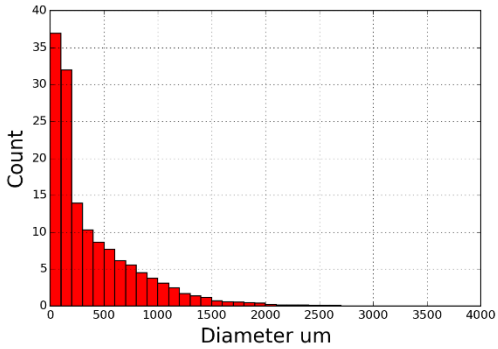

Figure A. 1027: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

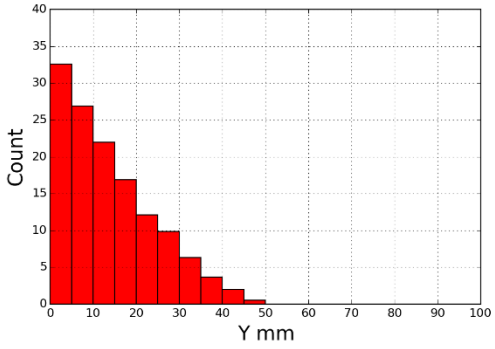

Figure A. 1028: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

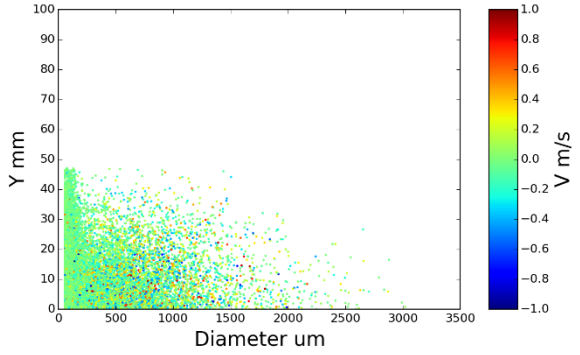

Figure A. 1029: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

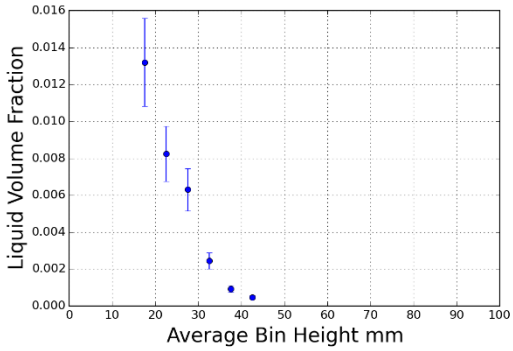

Figure A. 1030: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 Matched Only Droplets for .LA Image

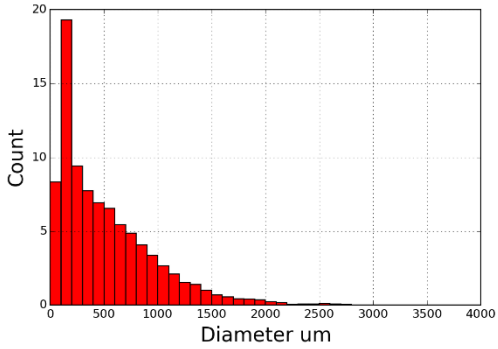

Figure A. 1031: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

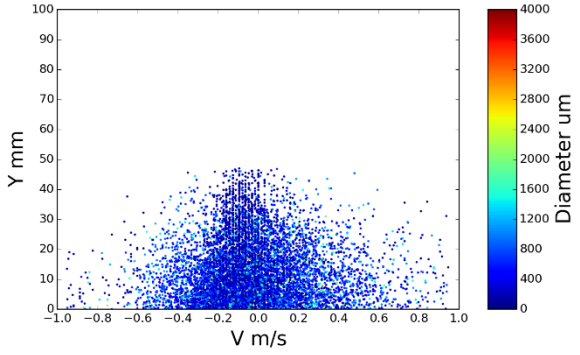

Figure A. 1034: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

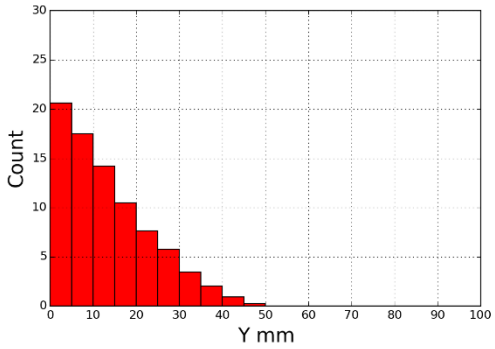

Figure A. 1032: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

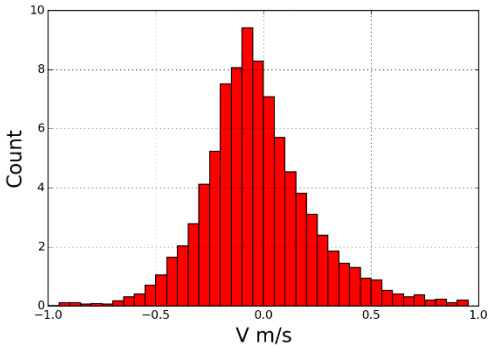

Figure A. 1035: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

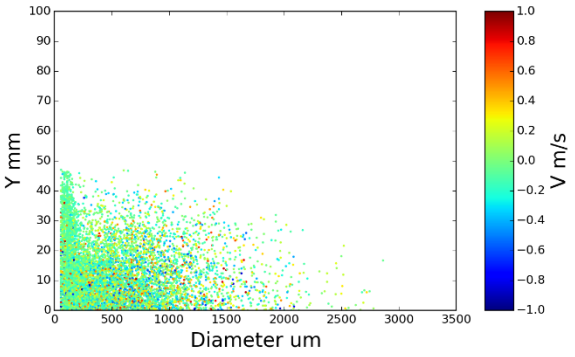

Figure A. 1033: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 Matched Only Droplets for .LB Image

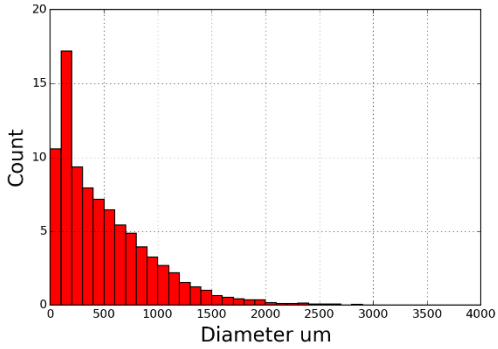

Figure A. 1036: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

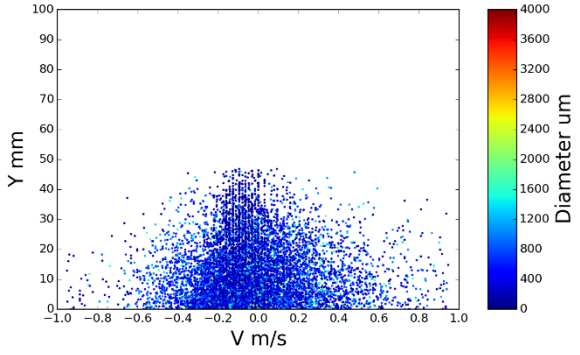

Figure A. 1039: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

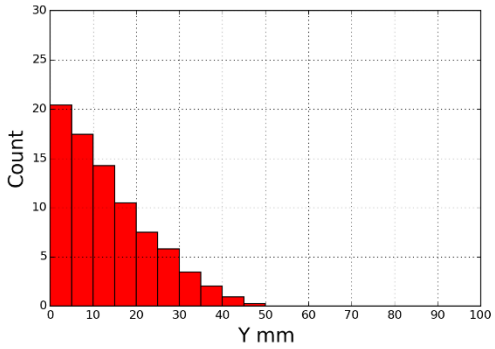

Figure A. 1037: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

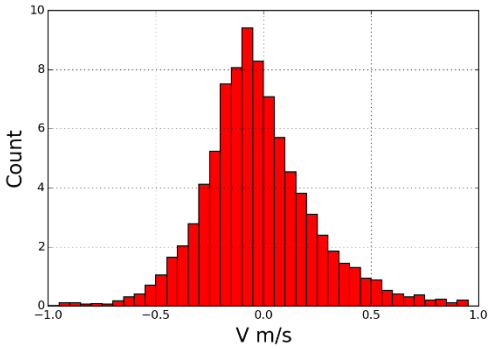

Figure A. 1040: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

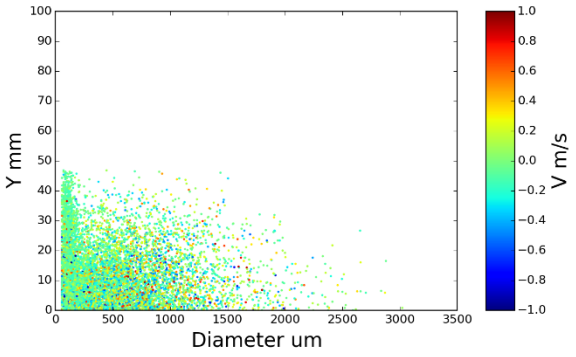

Figure A. 1038: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.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	85.1	92.09	57.2	3035	436.6	444.8	57.2	3042	413.5	434.6
20-40mm	28.02	30.56	57.2	2458	293.5	355.7	57.2	2587	274.7	345.9
40-60mm	2.17	2.43	57.2	1319	180.9	239.4	57.2	1293	175.9	230.1
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	123.44	133.69	57.2	3035	402.1	428.9	57.2	3042	380.5	419.0
			Height A (mm)				Height B (mm)			
Highest Particle			46.8964				46.9218			
Lowest Particle			-1.0402				-1.0402			

Table A. 111: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	53.5	57.2	3012	553.1	462.1	57.2	3042	547.9	459.9	-0.950	0.950	-0.040	0.170	-0.950	0.950	-0.060	0.270
20-40mm	16.72	57.2	2458	398.7	407.4	57.2	2587	395.9	410.6	-0.950	0.920	-0.050	0.160	-0.950	0.950	-0.050	0.230
40-60mm	1.24	57.2	1319	251.9	295.8	57.2	1293	258.8	299.4	-0.200	0.480	-0.050	0.080	-0.600	0.410	-0.070	0.120
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	75.62	57.2	3012	518.3	457.5	57.2	3042	513.4	455.3	-0.950	0.950	-0.050	0.170	-0.950	0.950	-0.050	0.260

Table A. 112: Matched Droplet Info

A.6.2.1 All Droplets for .LA Image

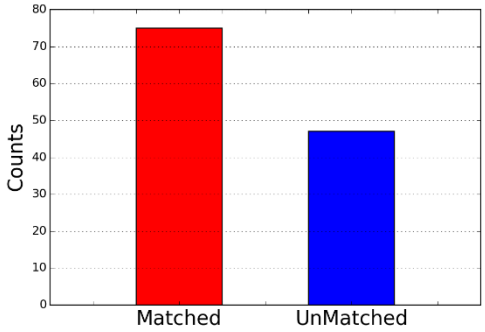

Figure A. 1041: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

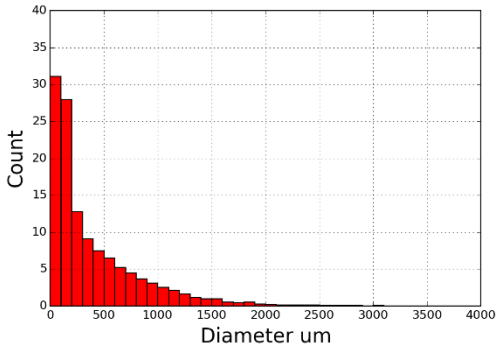

Figure A. 1042: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

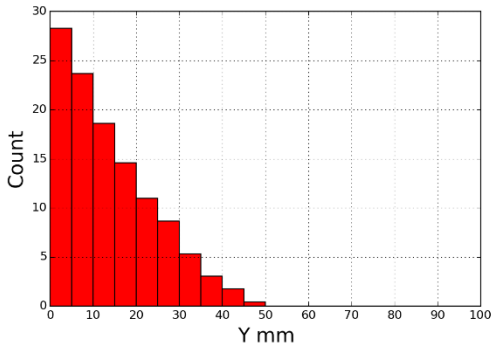

Figure A. 1043: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

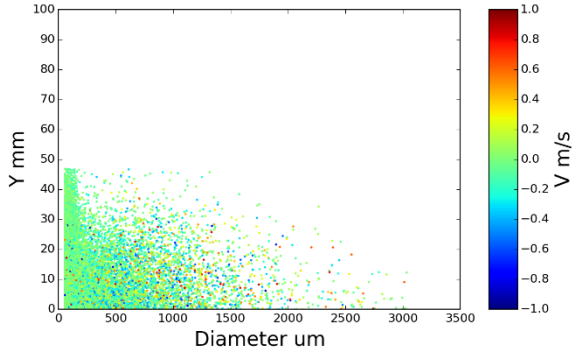

Figure A. 1044: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

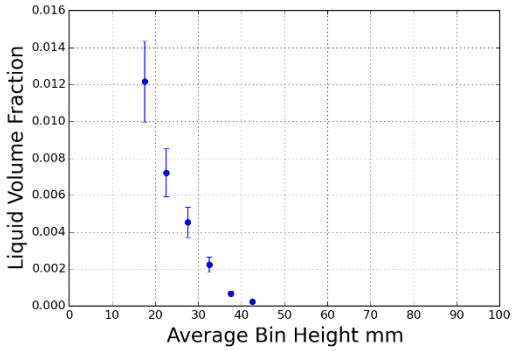

Figure A. 1045: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 All Droplets for .LB Image

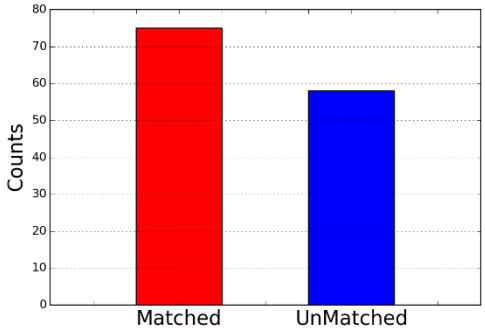

Figure A. 1046: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

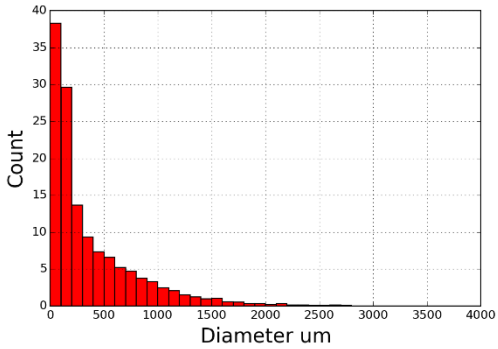

Figure A. 1047: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

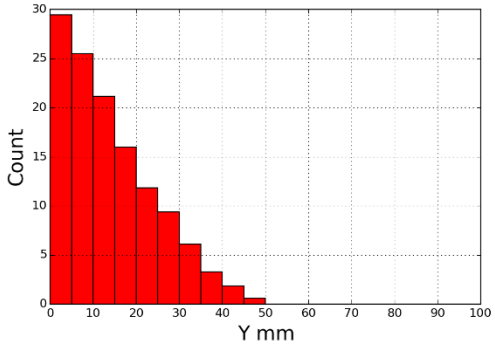

Figure A. 1048: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

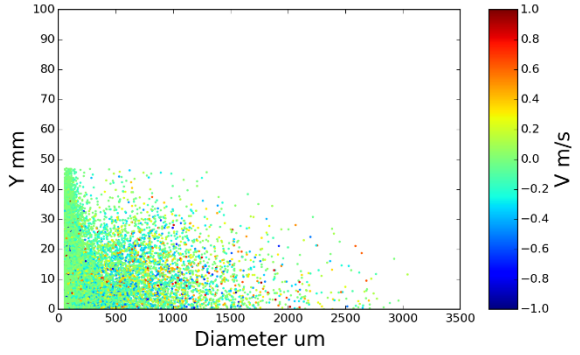

Figure A. 1049: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

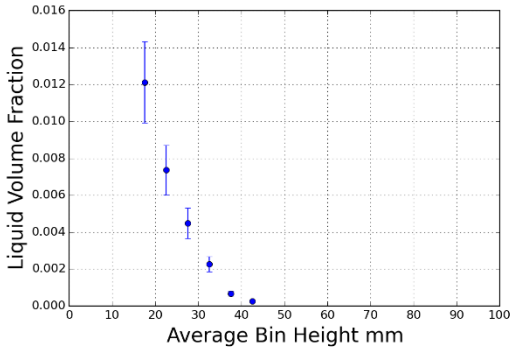

Figure A. 1050: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 Matched Only Droplets for .LA Image

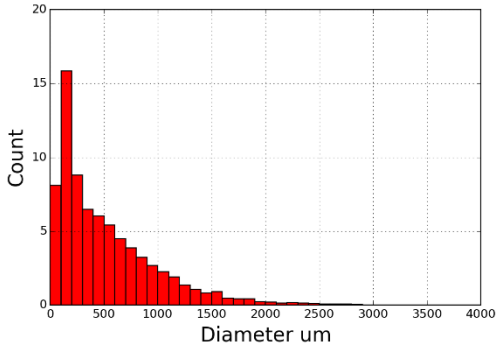

Figure A. 1051: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

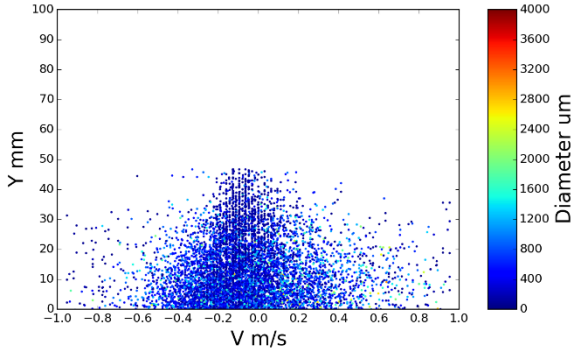

Figure A. 1054: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

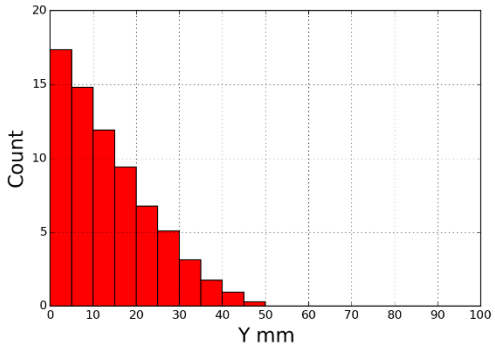

Figure A. 1052: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

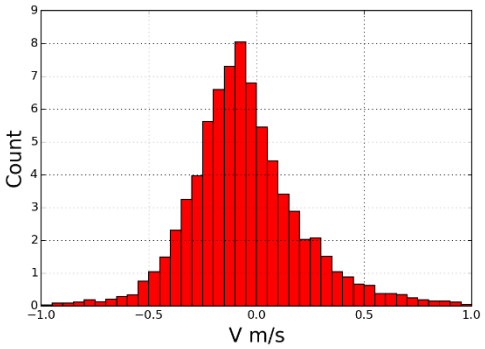

Figure A. 1055: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

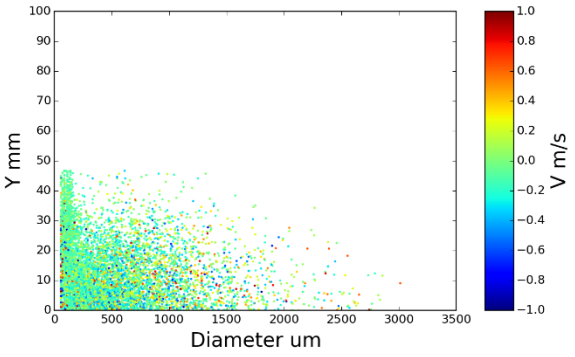

Figure A. 1053: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 Matched Only Droplets for .LB Image

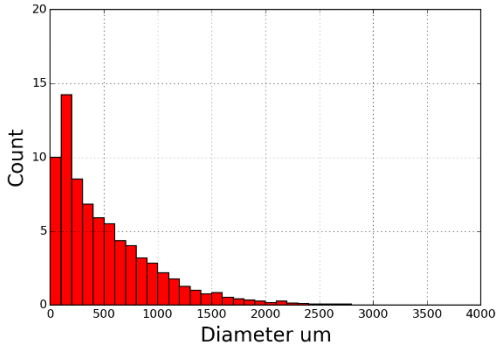

Figure A. 1056: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

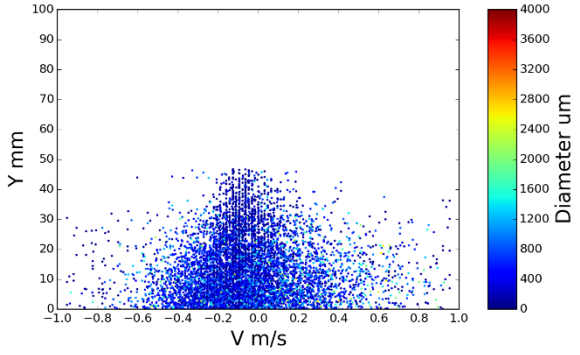

Figure A. 1059: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

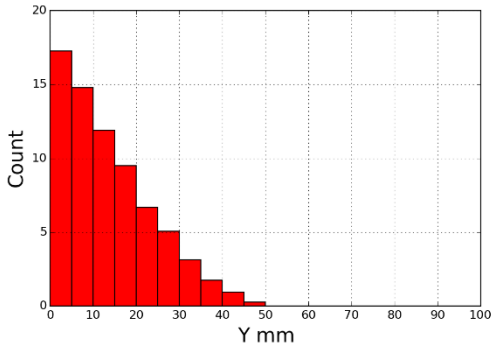

Figure A. 1057: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

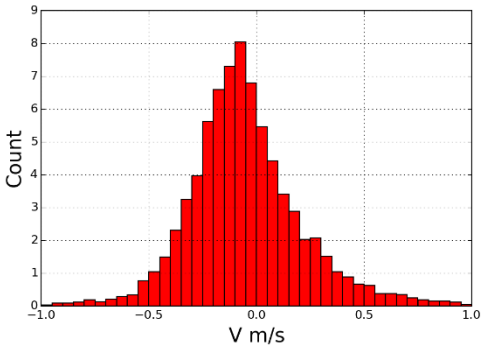

Figure A. 1060: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

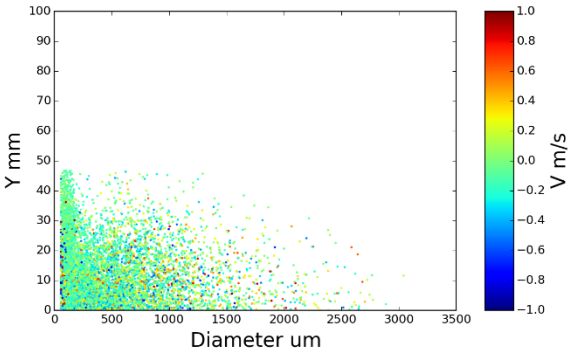

Figure A. 1058: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 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	87.9	95.88	57.2	3013	389.0	384.5	57.2	2964	367.5	379.2
20-40mm	37.69	38.66	57.2	2672	264.4	307.8	57.2	2580	257.9	302.7
40-60mm	2.86	2.99	57.2	1495	167.0	199.9	57.2	1334	165.9	194.0
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	135.93	145.31	57.2	3013	350.8	367.2	57.2	2964	336.6	363.4
			Height A (mm)				Height B (mm)			
Highest Particle			46.9218				46.9106			
Lowest Particle			-1.0402				-1.0402			

Table A. 113: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	55.73	57.2	3013	480.8	402.8	57.2	2964	476.9	401.2	-0.950	0.920	-0.060	0.180	-0.950	0.950	-0.030	0.280
20-40mm	22.9	57.2	2672	345.4	348.1	57.2	2580	341.4	347.4	-0.920	0.940	-0.060	0.160	-0.920	0.900	-0.030	0.220
40-60mm	1.54	57.2	1495	223.9	242.5	57.2	1334	218.4	230.7	-0.400	0.290	-0.060	0.090	-0.920	0.380	-0.040	0.140
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	83.87	57.2	3013	442.2	394.1	57.2	2964	437.8	392.5	-0.950	0.940	-0.060	0.170	-0.950	0.950	-0.030	0.260

Table A. 114: Matched Droplet Info

A.6.2.1 All Droplets for .LA Image

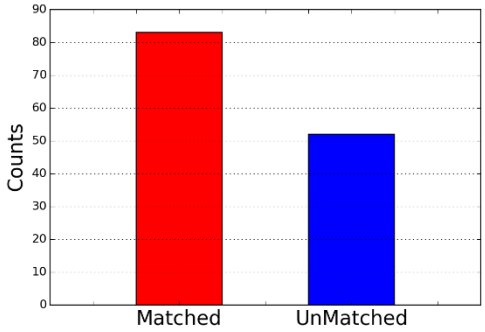

Figure A. 1061: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

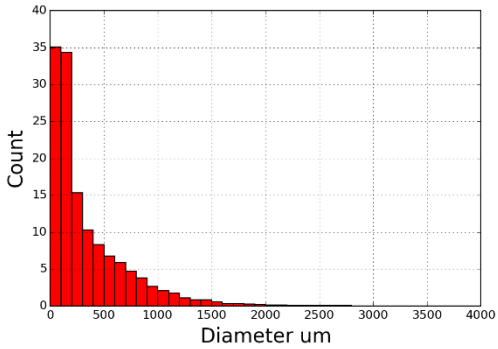

Figure A. 1062: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

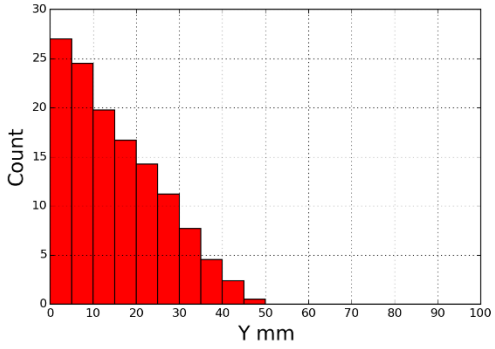

Figure A. 1063: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

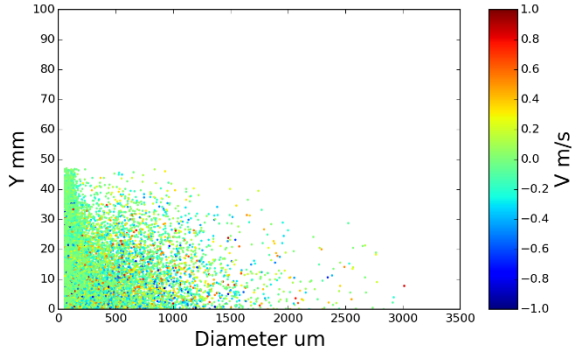

Figure A. 1064: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

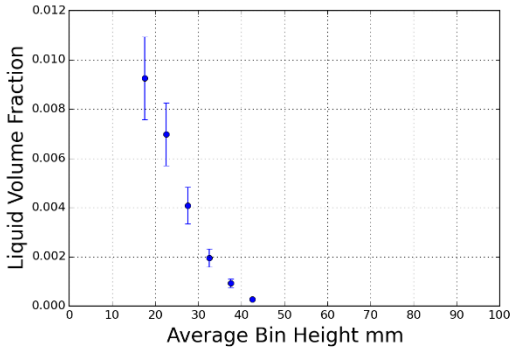

Figure A. 1065: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 All Droplets for .LB Image

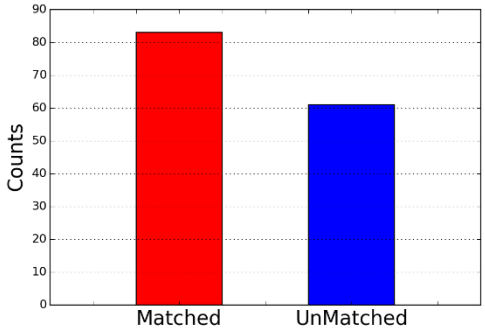

Figure A. 1066: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

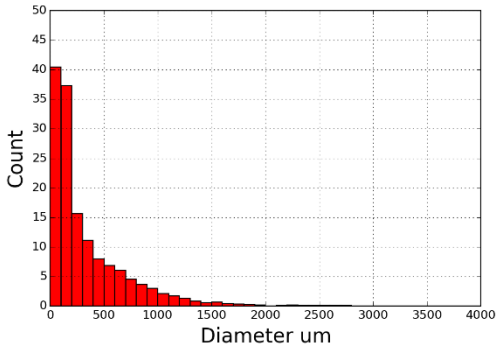

Figure A. 1067: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

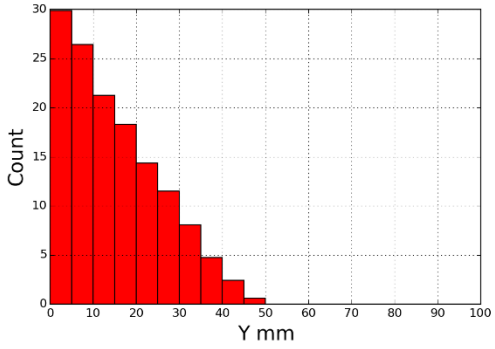

Figure A. 1068: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

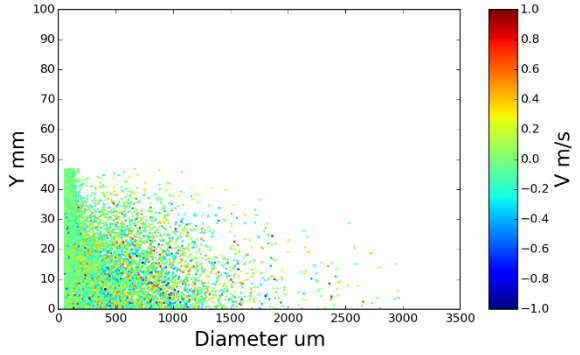

Figure A. 1069: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

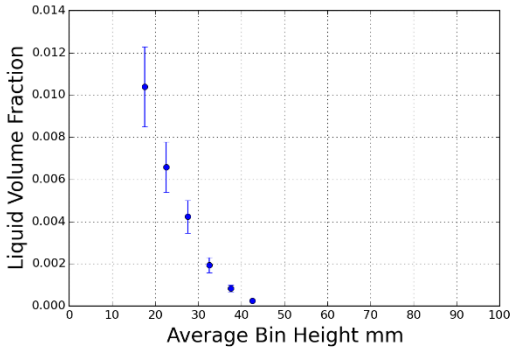

Figure A. 1070: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 Matched Only Droplets for .LA Image

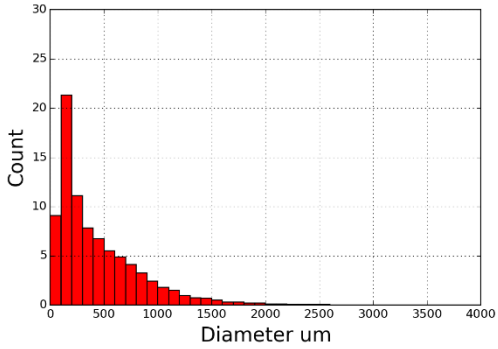

Figure A. 1071: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

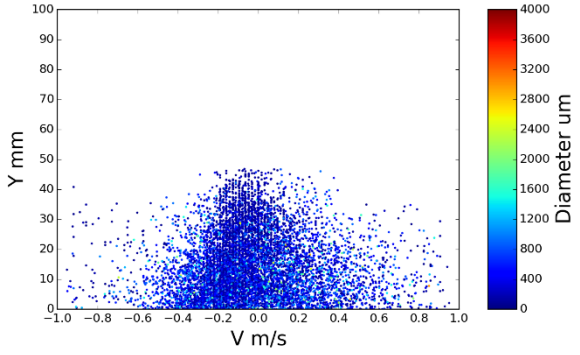

Figure A. 1074: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

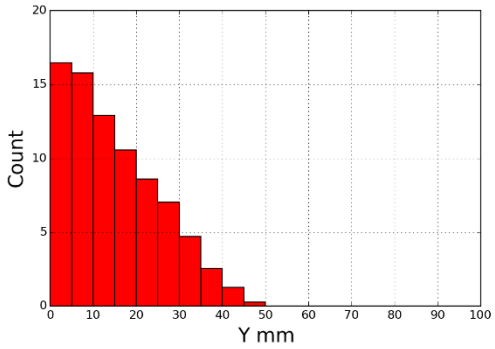

Figure A. 1072: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

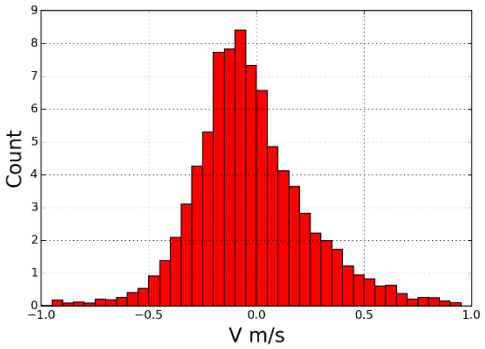

Figure A. 1075: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

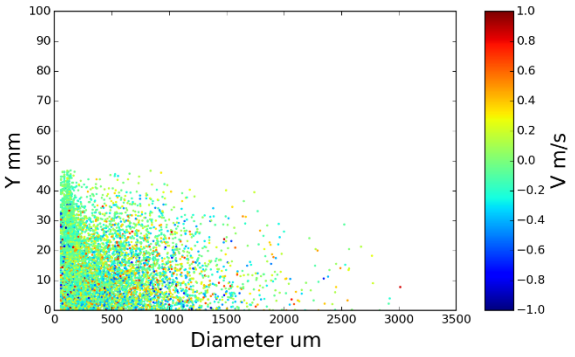

Figure A. 1073: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 Matched Only Droplets for .LB Image

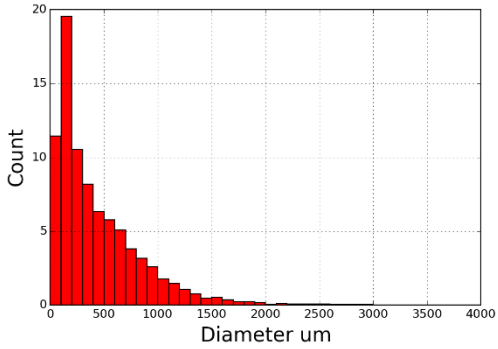

Figure A. 1076: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

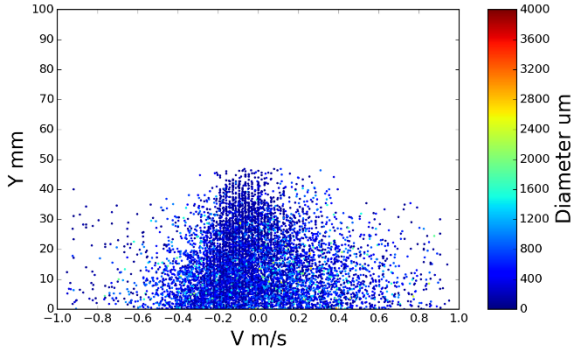

Figure A. 1079: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

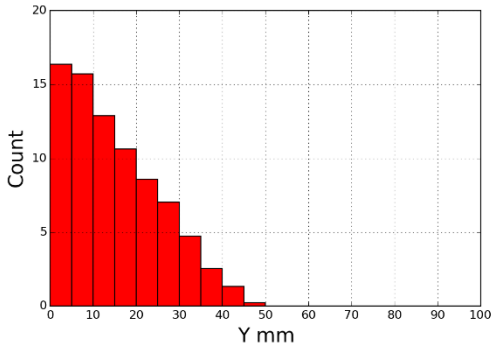

Figure A. 1077: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

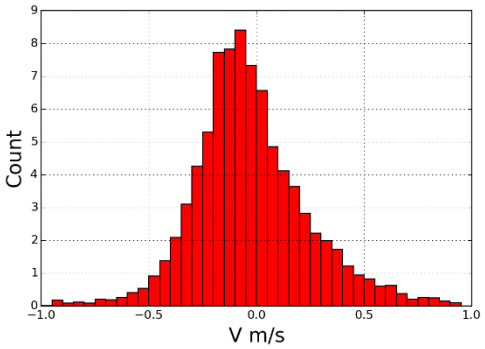

Figure A. 1080: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

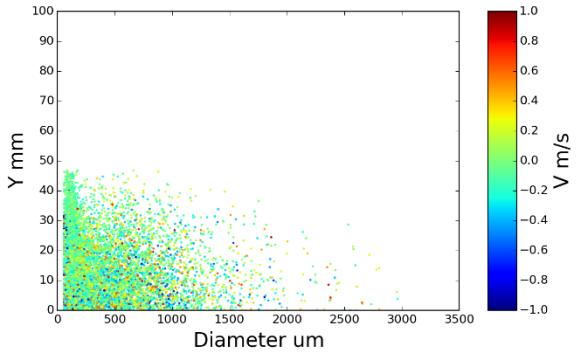

Figure A. 1078: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 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	84.47	90.16	57.2	2988	367.6	370.1	57.2	3013	357.7	373.8
20-40mm	38.68	42.25	57.2	2636	273.3	283.0	57.2	2681	262.2	280.5
40-60mm	2.8	2.88	57.2	1486	188.8	199.3	57.2	1648	182.4	204.3
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	131.76	141.11	57.2	2988	338.0	347.4	57.2	3013	328.2	350.3
			Height A (mm)				Height B (mm)			
Highest Particle			46.9345				46.9345			
Lowest Particle			-1.0402				-1.0402			

Table A. 115: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	53.88	57.2	2964	459.2	399.5	57.2	2977	457.5	401.0	-0.950	0.950	-0.070	0.180	-0.950	0.950	0.030	0.290
20-40mm	25.5	57.2	2636	343.4	311.8	57.2	2681	341.9	313.0	-0.950	0.940	-0.070	0.150	-0.920	0.920	0.010	0.230
40-60mm	1.53	57.2	1486	255.9	236.2	57.2	1648	254.6	249.6	-0.840	0.100	-0.070	0.110	-0.520	0.530	-0.030	0.140
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	83.61	57.2	2964	424.0	378.6	57.2	2977	422.1	379.6	-0.950	0.950	-0.070	0.170	-0.950	0.950	0.020	0.270

Table A. 116: Matched Droplet Info

A.6.2.1 All Droplets for .LA Image

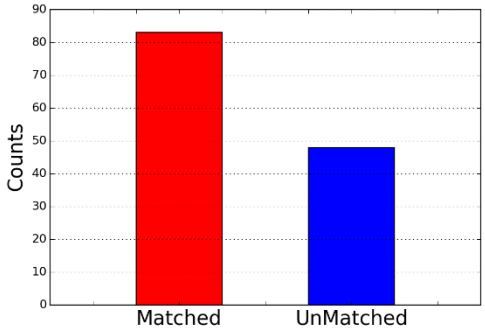

Figure A. 1081: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

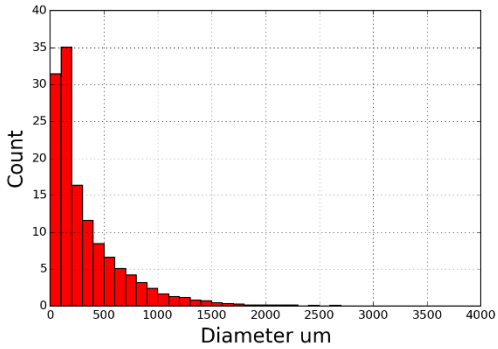

Figure A. 1082: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

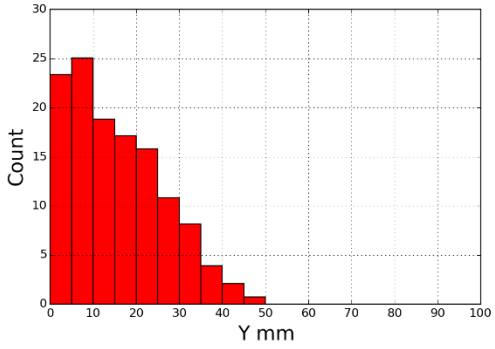

Figure A. 1083: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

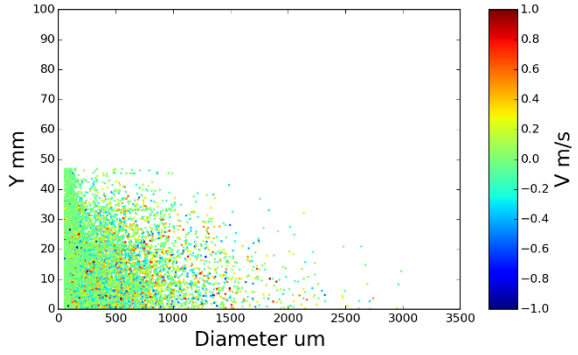

Figure A. 1084: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

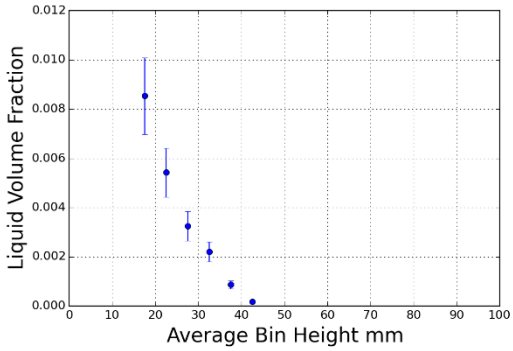

Figure A. 1085: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 All Droplets for .LB Image

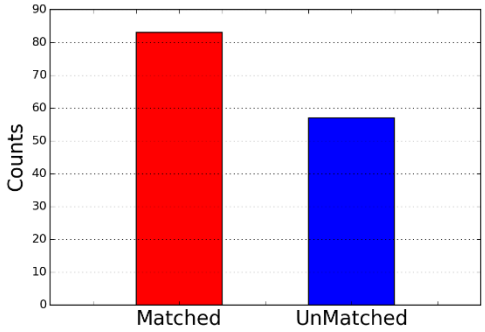

Figure A. 1086: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

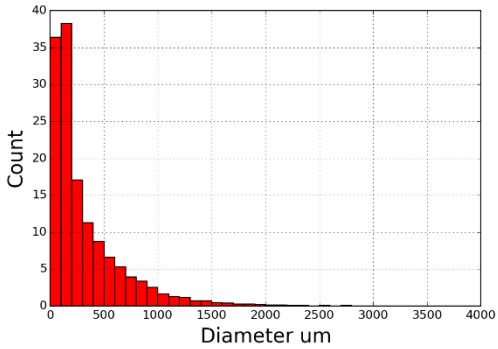

Figure A. 1087: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

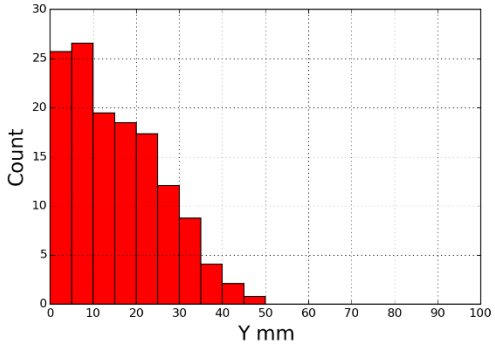

Figure A. 1088: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

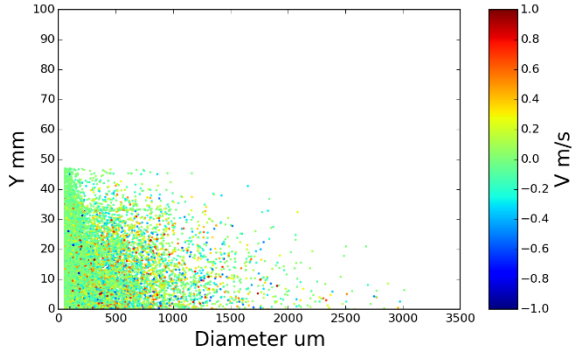

Figure A. 1089: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

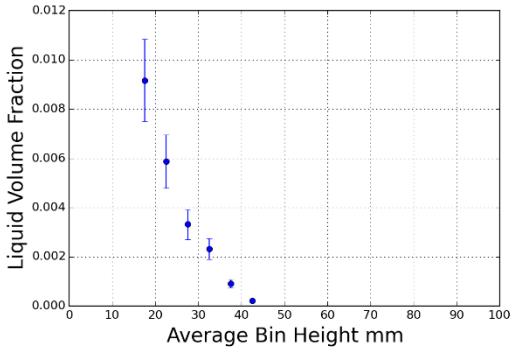

Figure A. 1090: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 Matched Only Droplets for .LA Image

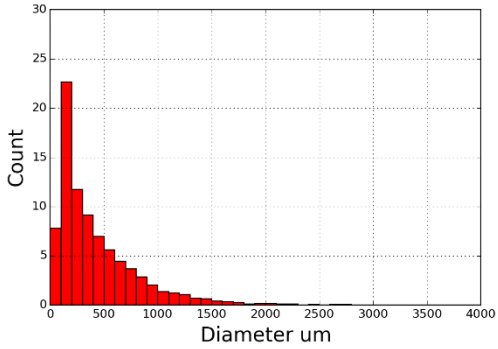

Figure A. 1091: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

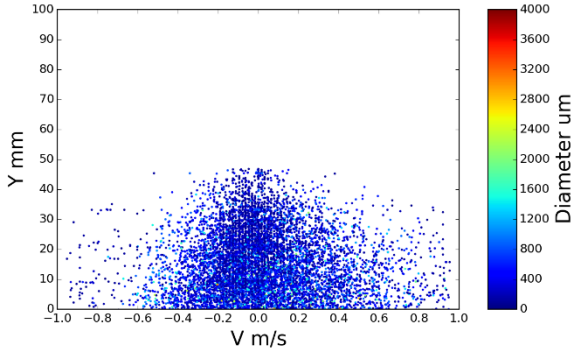

Figure A. 1094: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

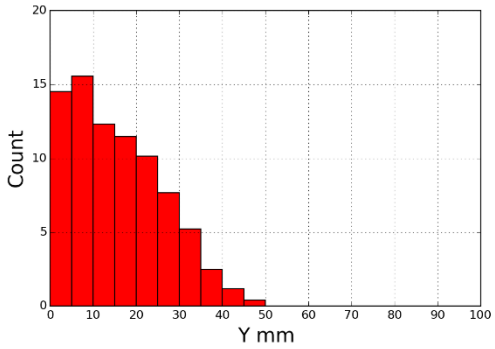

Figure A. 1092: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

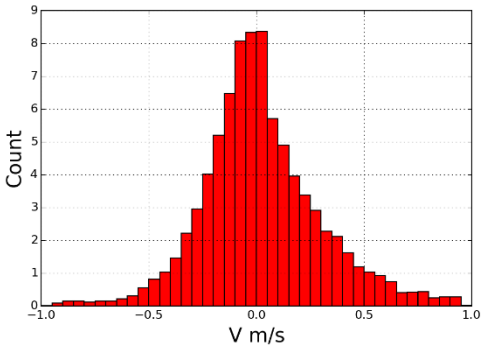

Figure A. 1095: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

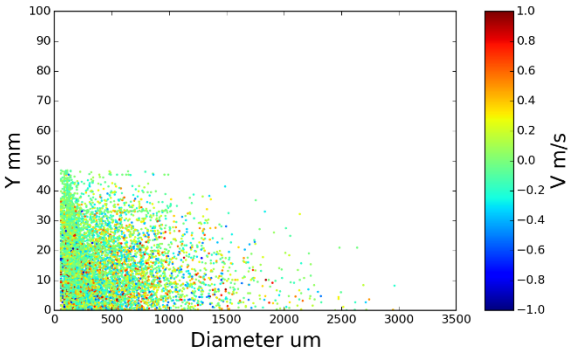

Figure A. 1093: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.2.1 Matched Only Droplets for .LB Image

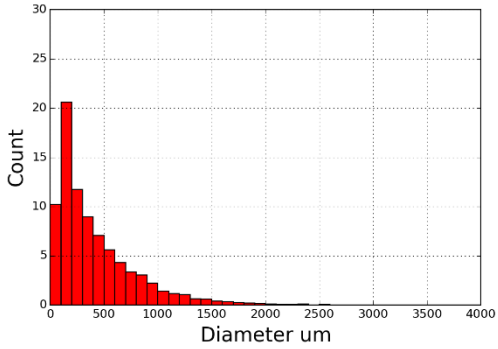

Figure A. 1096: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

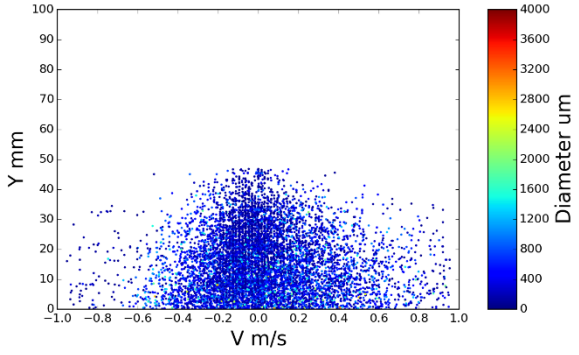

Figure A. 1099: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

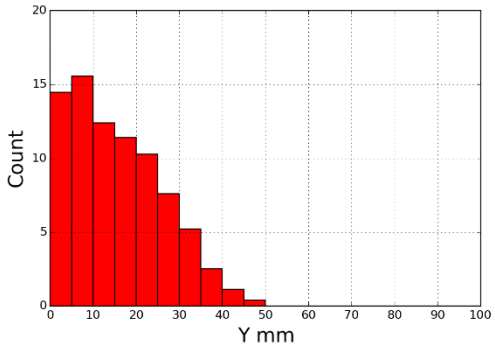

Figure A. 1097: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

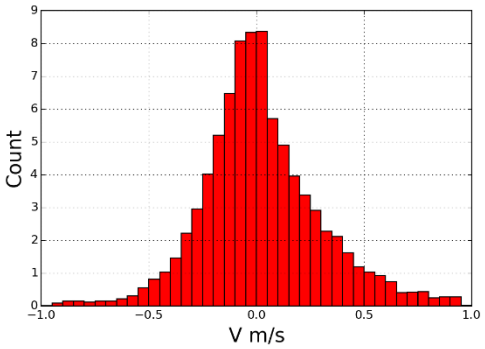

Figure A. 1100: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

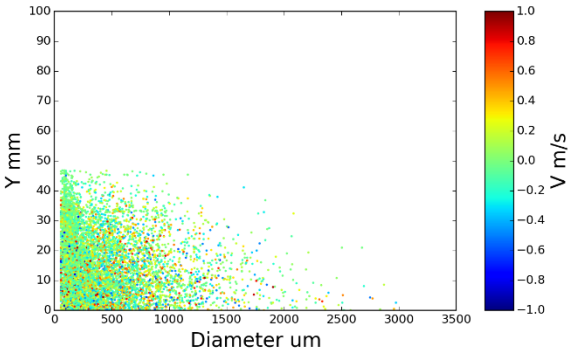

Figure A. 1098: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 Lens 50mm Mag 0_13x

A.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	119.89	120.33	128.6	3414	613.2	477.6	128.6	3403	611.4	474.2
40-60mm	48.64	48.84	128.6	2894	527.6	343.0	128.6	2814	522.8	336.7
60-80mm	7.39	7.19	128.6	2054	480.6	286.2	128.6	2091	480.9	290.2
80-100mm	0.27	0.25	128.6	800.5	397.6	201.3	157.5	815.8	416.2	194.8
All	176.19	176.62	128.6	3414	583.7	439.5	128.6	3403	581.3	435.9
			Height A (mm)				Height B (mm)			
Highest Particle			97.6556				97.6352			
Lowest Particle			20.0570				20.0570			

Table A. 117: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	71.13	128.6	3414	695.4	489.5	128.6	3395	685.0	483.6	-0.950	0.950	-0.050	0.270	-0.950	0.950	0.010	0.360
40-60mm	34.69	128.6	2894	592.8	343.5	128.6	2814	586.8	337.4	-0.950	0.910	-0.050	0.190	-0.950	0.950	0.010	0.290
60-80mm	5.48	128.6	2054	559.8	282.2	128.6	2091	551.8	287.3	-0.940	0.950	-0.030	0.140	-0.850	0.920	-0.010	0.230
80-100mm	0.2	157.5	800.5	468.0	172.2	157.5	815.8	466.8	180.7	-0.190	0.080	-0.040	0.080	-0.340	0.410	-0.050	0.180
All	111.5	128.6	3414	656.4	443.0	128.6	3395	647.4	437.2	-0.950	0.950	-0.050	0.240	-0.950	0.950	0.010	0.330

Table A. 118: Matched Droplet Info

A.6.2.2 All Droplets for .LA Image

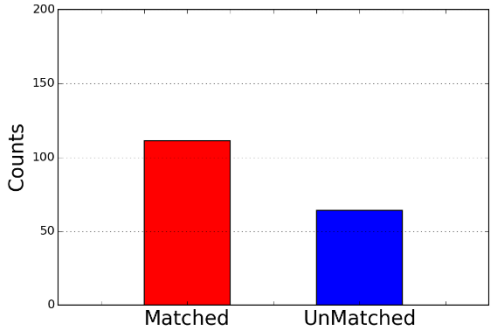

Figure A. 1101: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

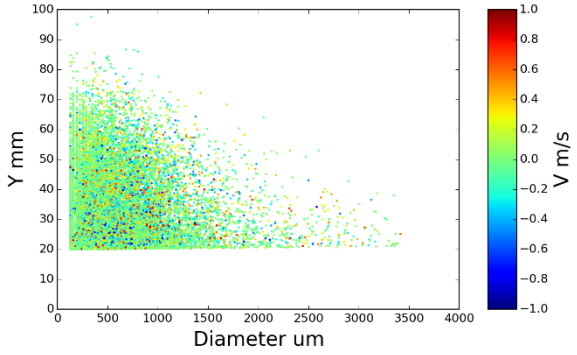

Figure A. 1104: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

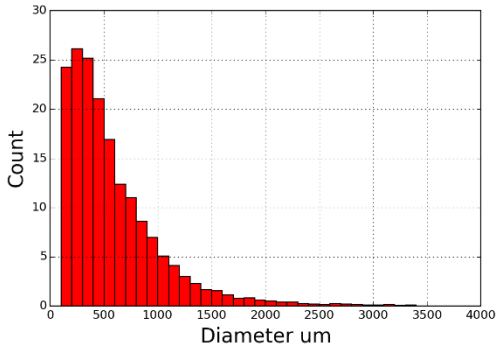

Figure A. 1102: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

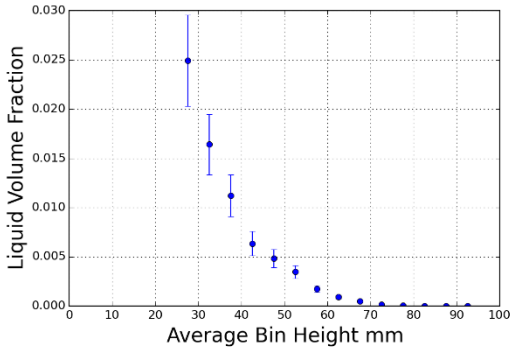

Figure A. 1105: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

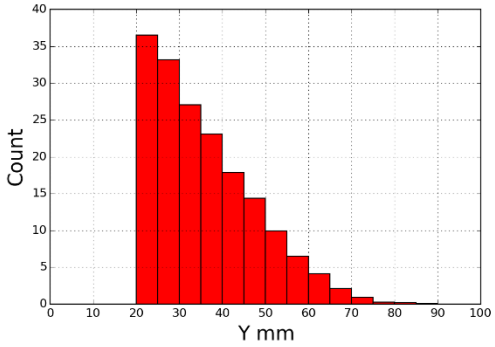

Figure A. 1103: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 All Droplets for .LB Image

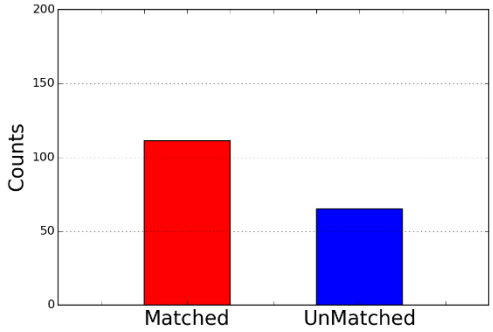

Figure A. 1106: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

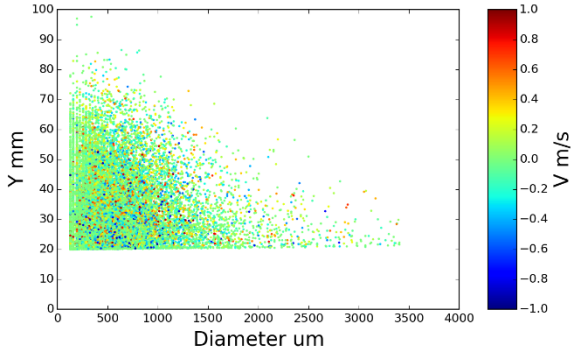

Figure A. 1109: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

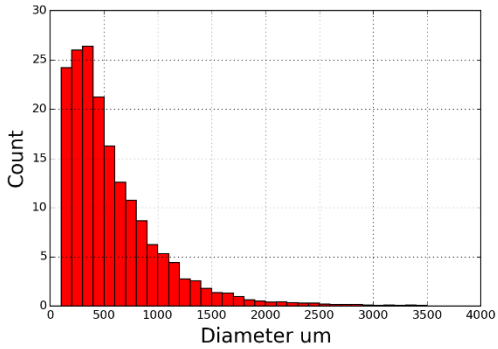

Figure A. 1107: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

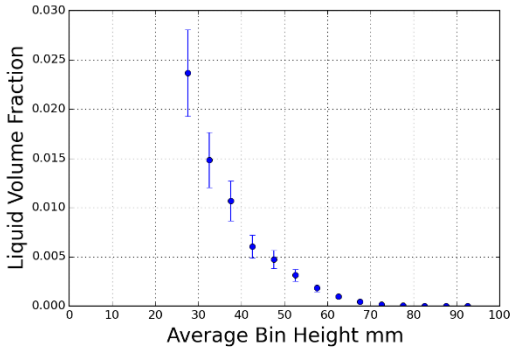

Figure A. 1110: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

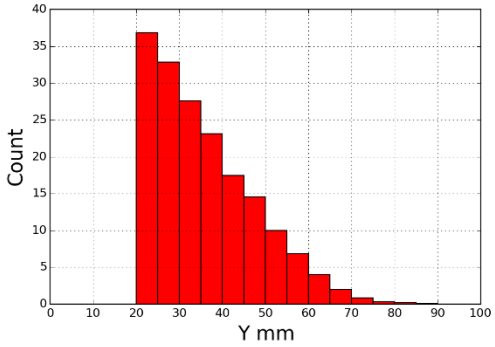

Figure A. 1108: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 Matched Only Droplets for .LA Image

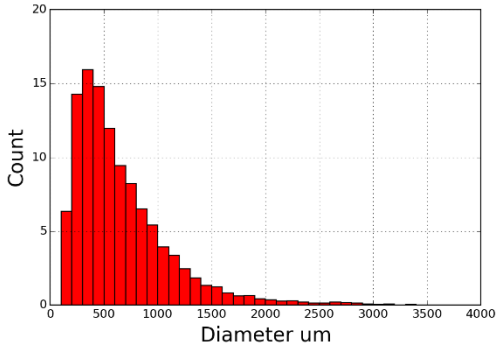

Figure A. 1111: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

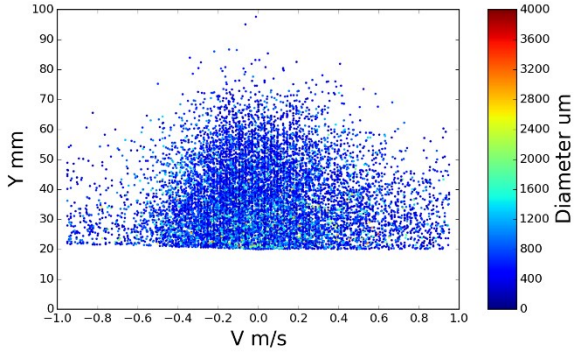

Figure A. 1114: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

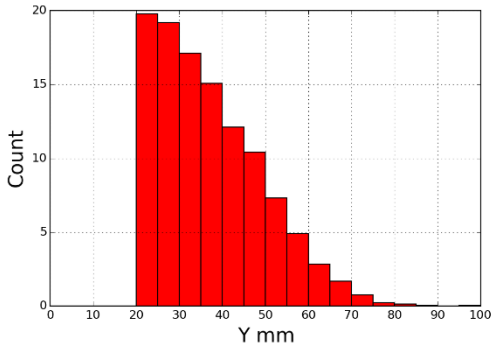

Figure A. 1112: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

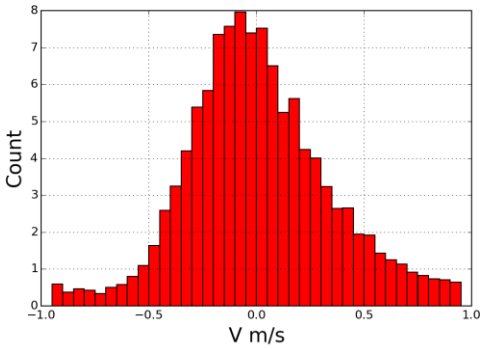

Figure A. 1115: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

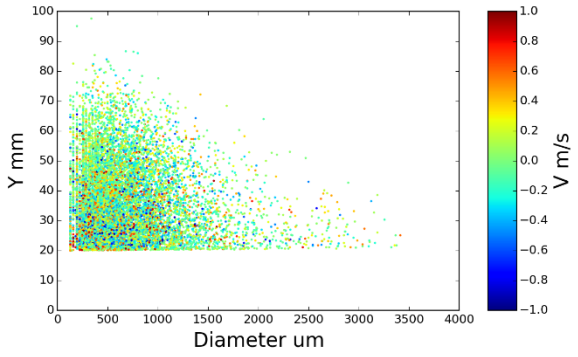

Figure A. 1113: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 Matched Only Droplets for .LB Image

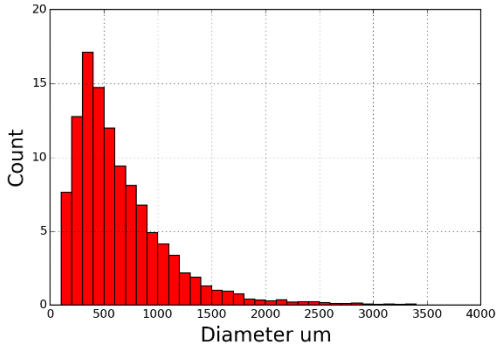

Figure A. 1116: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

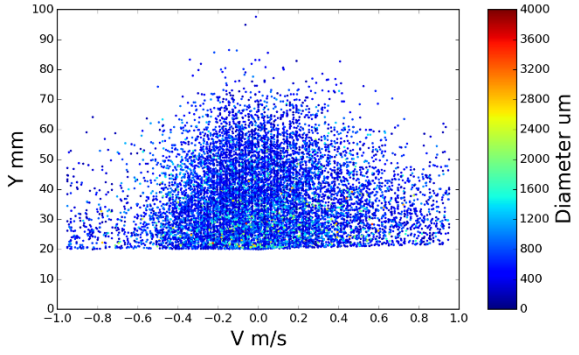

Figure A. 1119: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

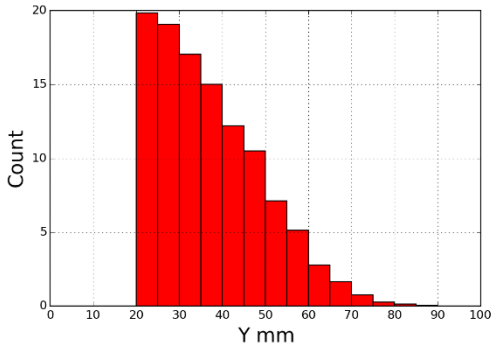

Figure A. 1117: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

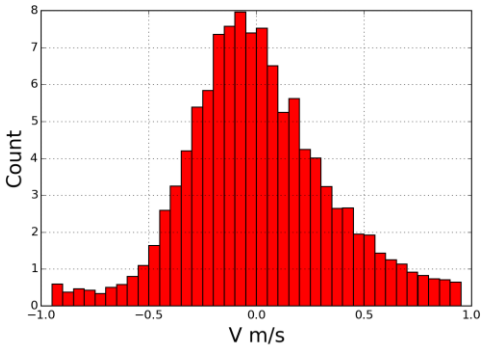

Figure A. 1120: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

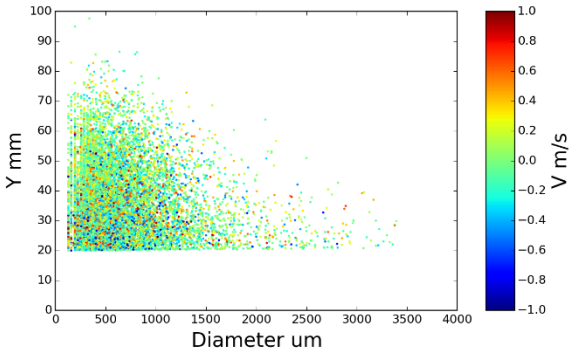

Figure A. 1118: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.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	118.32	116.71	128.6	3399	663.7	498.6	128.6	3413	662.2	498.7
40-60mm	42.43	42.36	128.6	3386	618.3	383.1	128.6	3356	617.1	383.7
60-80mm	6.25	6.2	128.6	2375	592.1	336.0	128.6	2462	590.5	331.7
80-100mm	0.23	0.22	157.5	1125	608.7	222.2	222.7	1064	635.3	228.6
All	167.23	165.49	128.6	3399	649.4	466.8	128.6	3413	648.0	466.7
			Height A (mm)				Height B (mm)			
Highest Particle			95.9798				95.8807			
Lowest Particle			20.0570				20.0570			

Table A. 119: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	69.35	128.6	3392	751.9	509.9	128.6	3367	737.8	500.9	-0.950	0.950	-0.050	0.280	-0.950	0.950	-0.010	0.360
40-60mm	31.07	128.6	3337	688.6	382.5	128.6	3356	680.6	377.5	-0.950	0.930	-0.050	0.170	-0.950	0.950	-0.020	0.290
60-80mm	4.97	128.6	2375	661.8	326.5	128.6	2462	649.0	323.6	-0.810	0.580	-0.040	0.120	-0.810	0.780	0.000	0.230
80-100mm	0.19	380.4	1125	664.6	193.0	301.6	1064	654.9	215.1	-0.210	0.200	-0.070	0.110	-0.170	0.760	0.120	0.220
All	105.58	128.6	3392	728.9	469.0	128.6	3367	716.6	461.1	-0.950	0.950	-0.050	0.240	-0.950	0.950	-0.010	0.340

Table A. 120: Matched Droplet Info

A.6.2.2 All Droplets for .LA Image

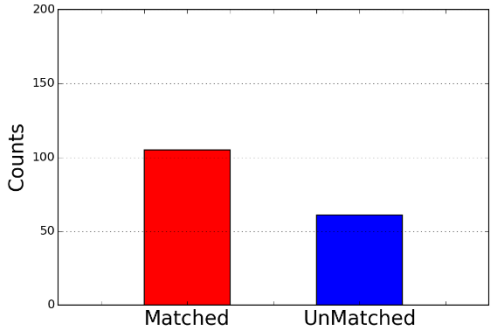

Figure A. 1121: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

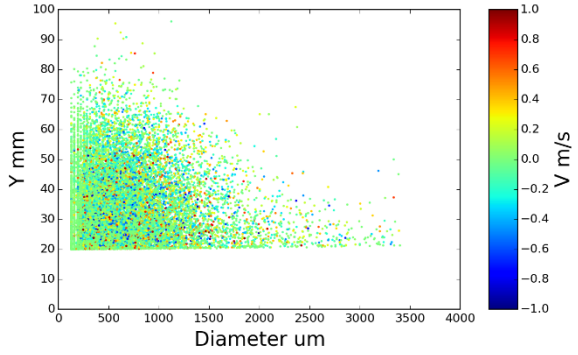

Figure A. 1124: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

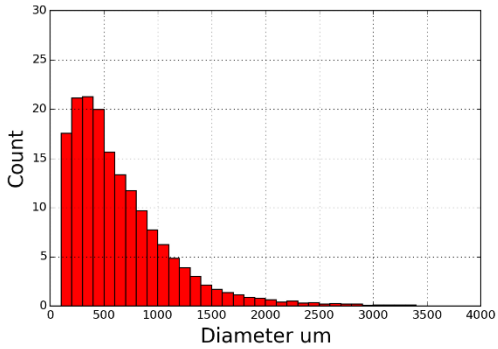

Figure A. 1122: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

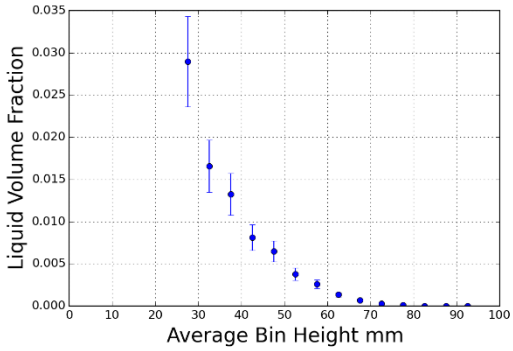

Figure A. 1125: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

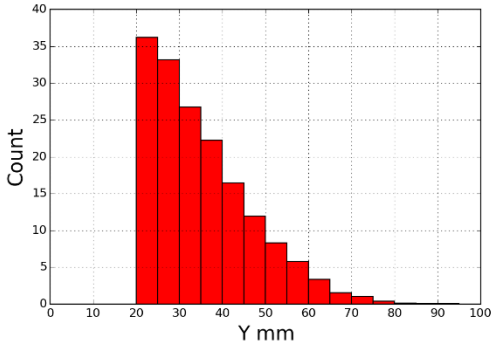

Figure A. 1123: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 All Droplets for .LB Image

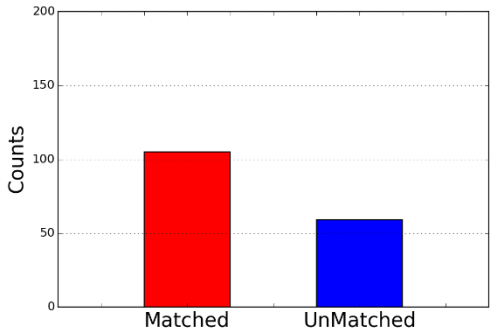

Figure A. 1126: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

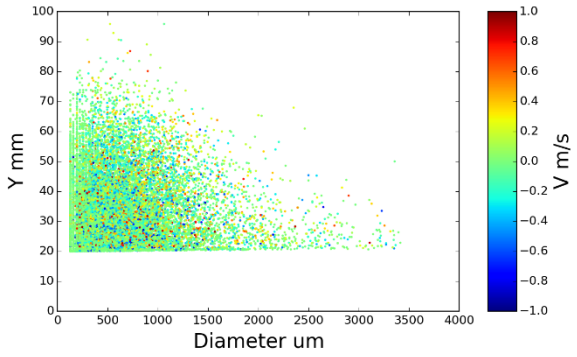

Figure A. 1129: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

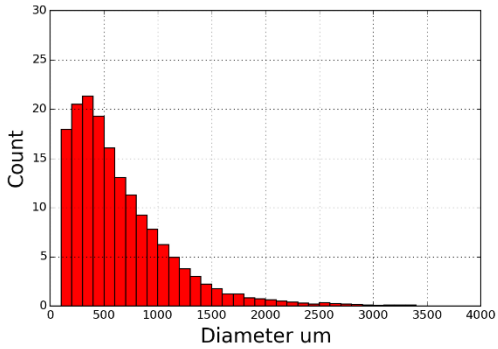

Figure A. 1127: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

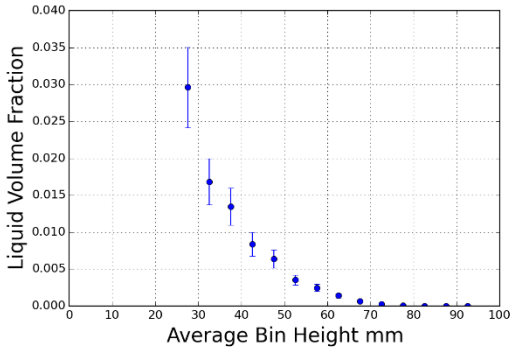

Figure A. 1130: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

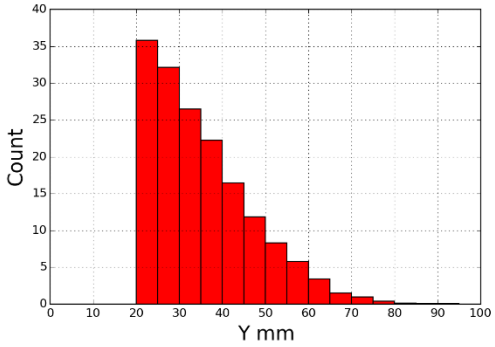

Figure A. 1128: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 Matched Only Droplets for .LA Image

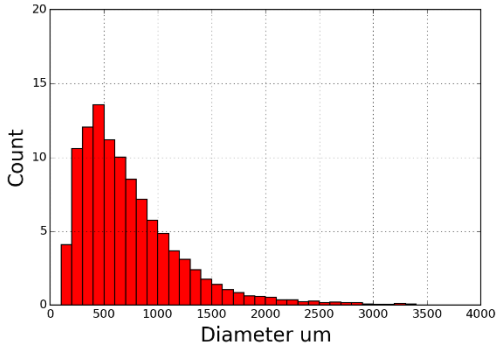

Figure A. 1131: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

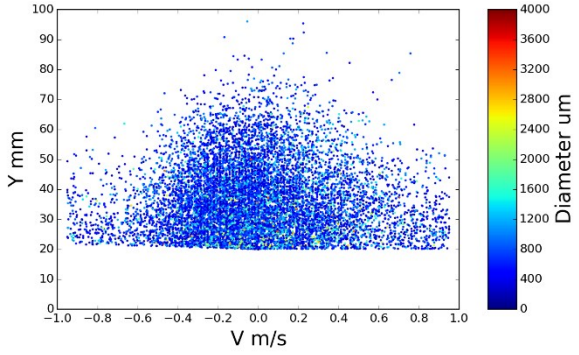

Figure A. 1134: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

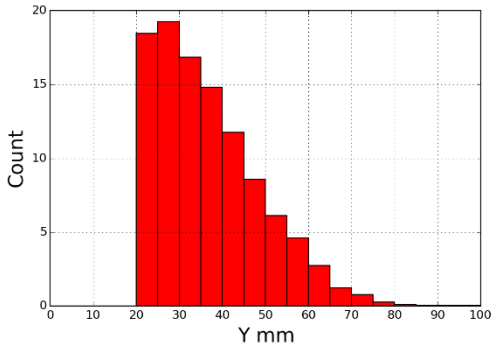

Figure A. 1132: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

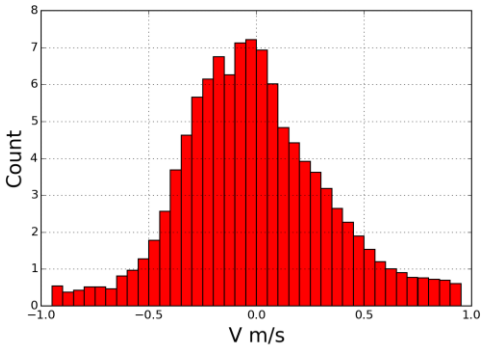

Figure A. 1135: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

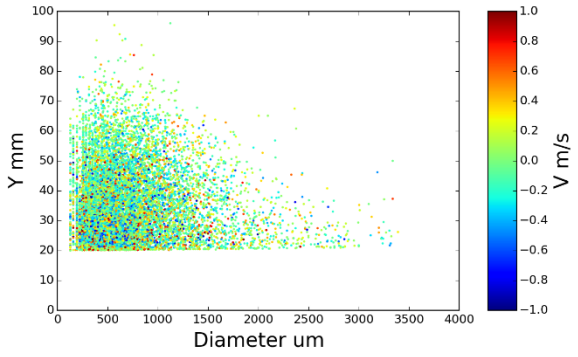

Figure A. 1133: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 Matched Only Droplets for .LB Image

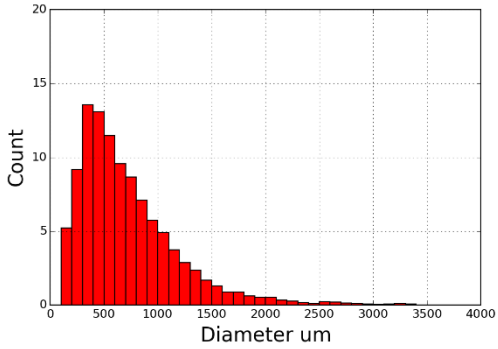

Figure A. 1136: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

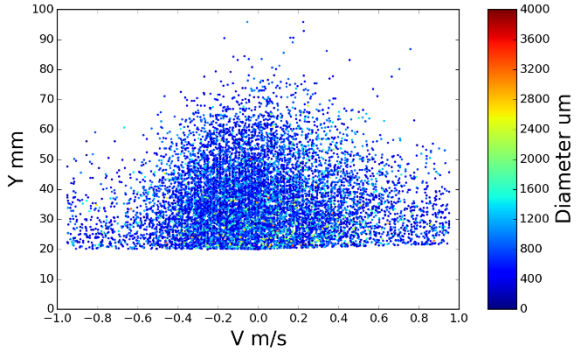

Figure A. 1139: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

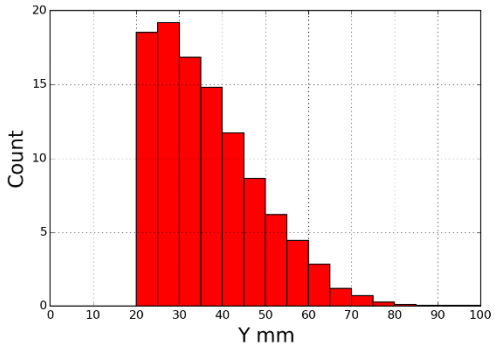

Figure A. 1137: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

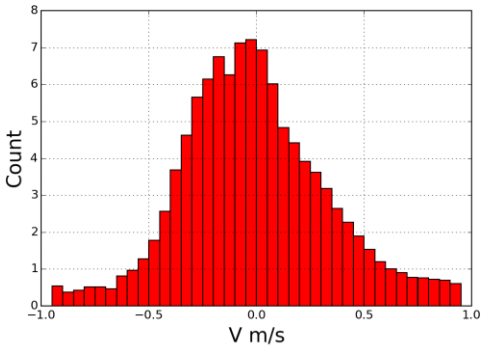

Figure A. 1140: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

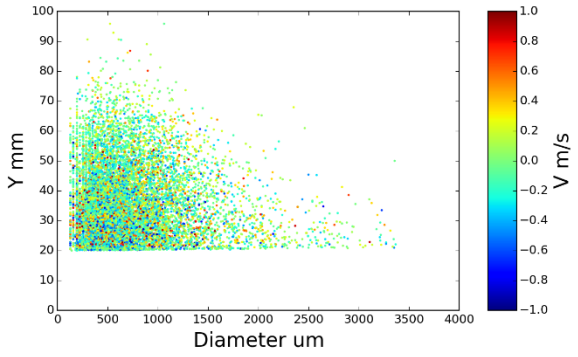

Figure A. 1138: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.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	104.86	105.43	128.6	3411	687.0	520.1	128.6	3389	686.2	520.5
40-60mm	37.68	37.82	128.6	3084	646.3	411.2	128.6	3406	641.8	412.1
60-80mm	4.7	4.45	128.6	2178	610.8	355.4	128.6	2175	625.2	356.1
80-100mm	0.21	0.2	128.6	985.6	499.6	242.1	157.5	907.0	488.2	215.1
All	147.45	147.91	128.6	3411	673.9	490.1	128.6	3406	672.7	490.8
			Height A (mm)				Height B (mm)			
Highest Particle			91.5501				91.0852			
Lowest Particle			20.0570				20.0570			

Table A. 121: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	58.7	128.6	3411	794.2	530.2	128.6	3389	778.3	521.3	-0.950	0.950	-0.060	0.280	-0.950	0.950	-0.030	0.350
40-60mm	26.93	128.6	3084	723.5	409.6	128.6	3406	716.6	408.4	-0.950	0.950	-0.060	0.180	-0.950	0.950	-0.020	0.280
60-80mm	3.29	157.5	2178	722.0	340.0	128.6	2175	712.1	335.3	-0.950	0.890	-0.040	0.140	-0.840	0.760	-0.030	0.230
80-100mm	0.18	157.5	985.6	541.4	231.2	157.5	907.0	510.6	215.2	-0.370	0.160	-0.050	0.120	-0.340	0.350	-0.100	0.180
All	89.1	128.6	3411	769.7	491.4	128.6	3406	756.8	484.6	-0.950	0.950	-0.060	0.250	-0.950	0.950	-0.030	0.330

Table A. 122: Matched Droplet Info

A.6.2.2 All Droplets for .LA Image

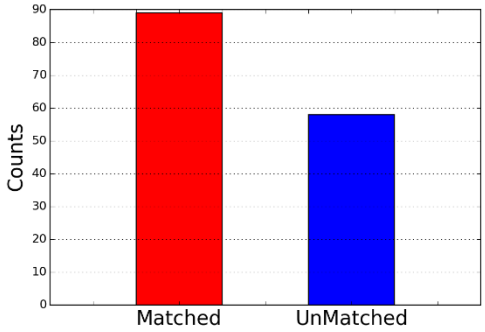

Figure A. 1141: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

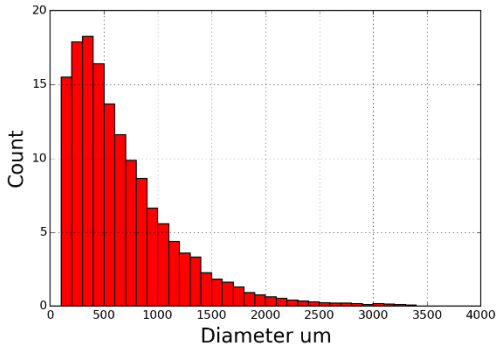

Figure A. 1142: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

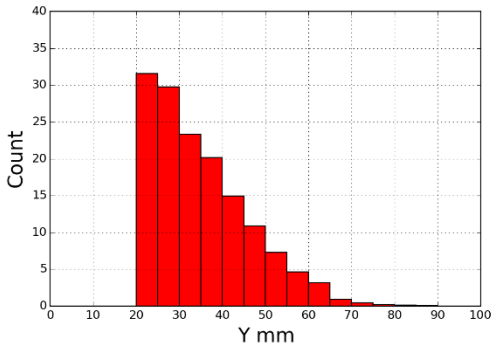

Figure A. 1143: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

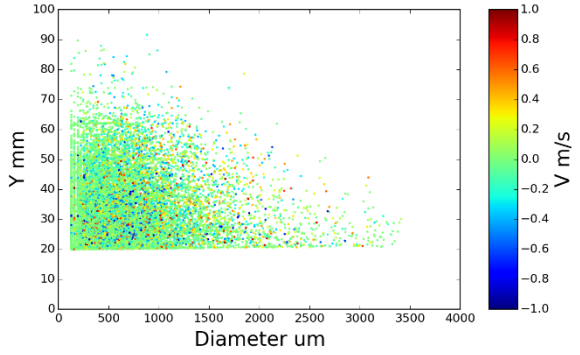

Figure A. 1144: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

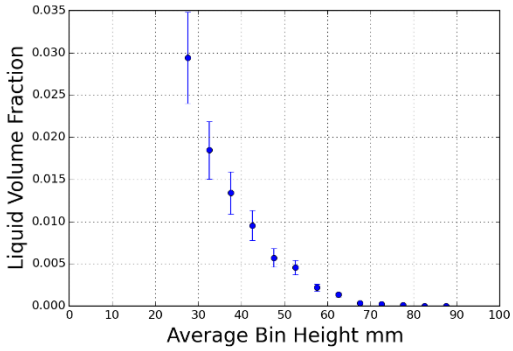

Figure A. 1145: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 All Droplets for .LB Image

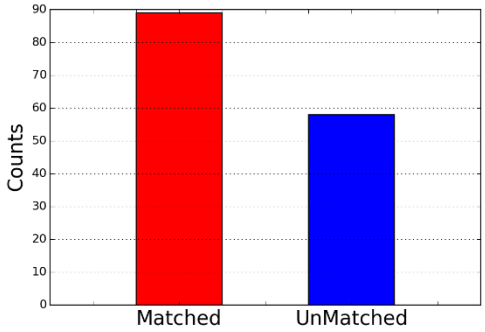

Figure A. 1146: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

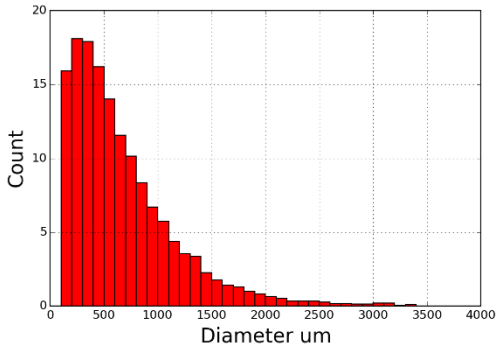

Figure A. 1147: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

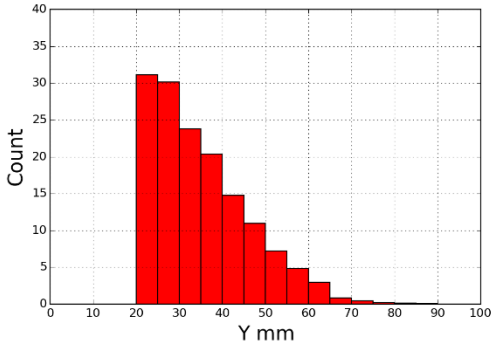

Figure A. 1148: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

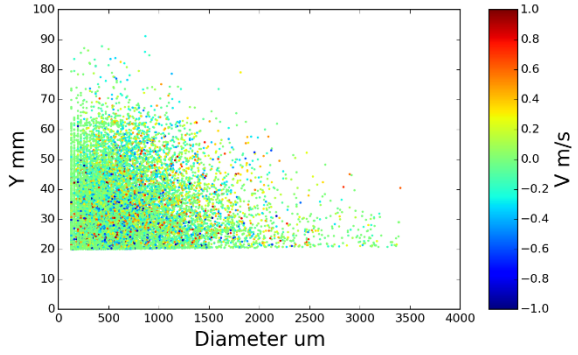

Figure A. 1149: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

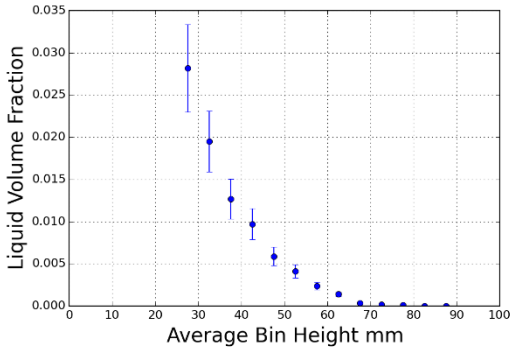

Figure A. 1150: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 Matched Only Droplets for .LA Image

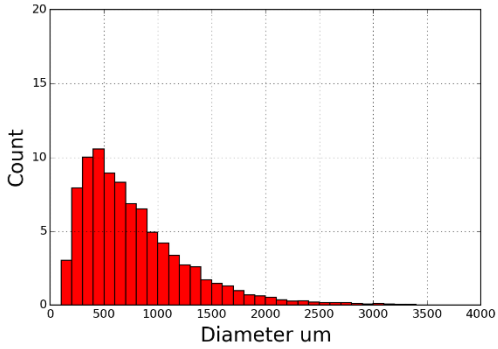

Figure A. 1151: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

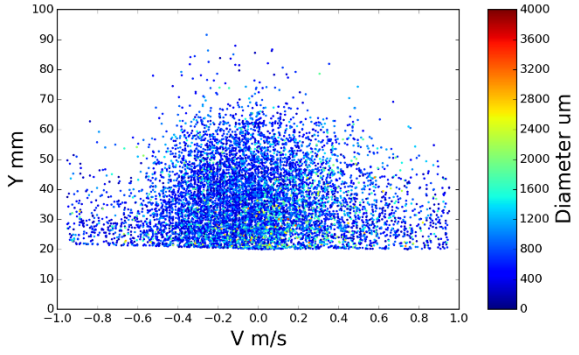

Figure A. 1154: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

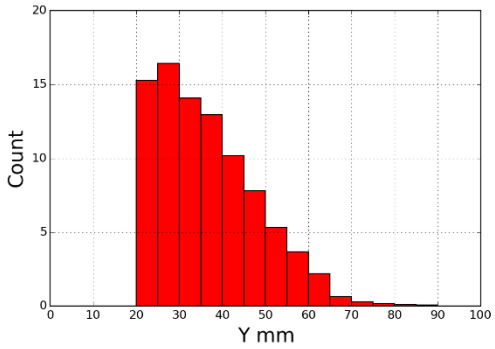

Figure A. 1152: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

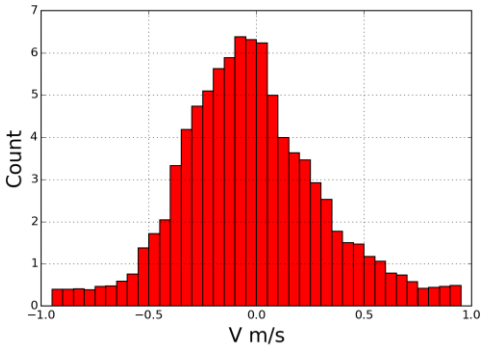

Figure A. 1155: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

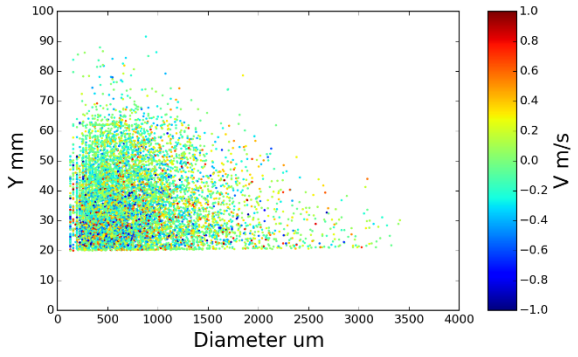

Figure A. 1153: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 Matched Only Droplets for .LB Image

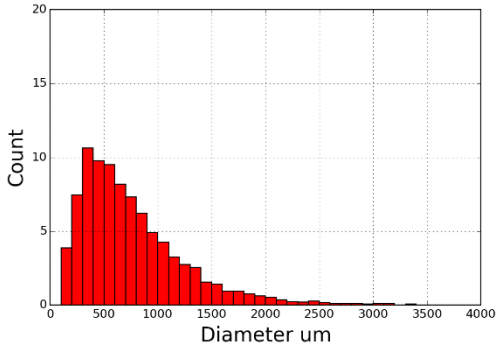

Figure A. 1156: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

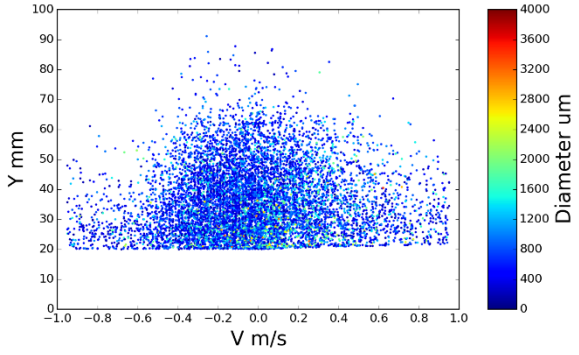

Figure A. 1159: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

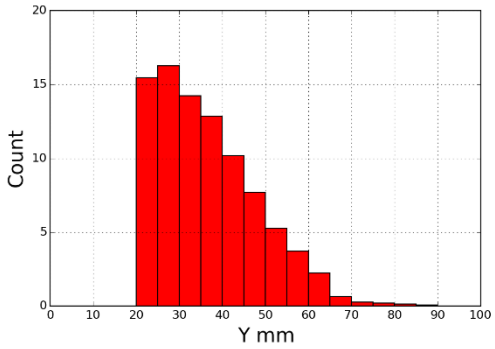

Figure A. 1157: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

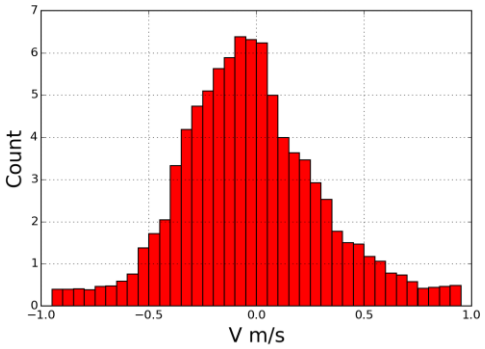

Figure A. 1160: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

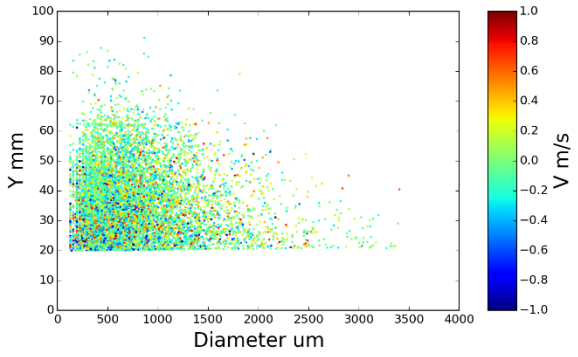

Figure A. 1158: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	87.75	88.23	128.6	3414	671.9	529.6	128.6	3406	670.8	524.3
40-60mm	33.38	33.92	128.6	2994	607.1	418.1	128.6	3157	604.1	417.1
60-80mm	4.2	4.28	128.6	2639	576.9	336.8	128.6	2382	576.4	336.1
80-100mm	0.08	0.09	222.7	1304	606.6	357.9	128.6	1108	549.4	356.6
All	125.41	126.53	128.6	3414	651.4	497.6	128.6	3406	649.6	493.3
			Height A (mm)				Height B (mm)			
Highest Particle			91.9603				92.1936			
Lowest Particle			20.0570				20.0570			

Table A. 123: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	48.82	128.6	3414	788.2	556.1	128.6	3406	773.1	546.1	-0.950	0.950	-0.050	0.270	-0.950	0.950	-0.040	0.340
40-60mm	23.17	128.6	2994	693.7	426.7	128.6	3157	685.3	420.6	-0.940	0.910	-0.050	0.170	-0.950	0.900	-0.010	0.270
60-80mm	3.07	128.6	2639	661.9	332.5	128.6	2382	655.6	325.8	-0.590	0.660	-0.070	0.140	-0.540	0.630	-0.020	0.220
80-100mm	0.04	406.6	1304	805.0	383.1	315.0	1108	772.6	336.3	-0.080	0.110	-0.010	0.080	-0.180	0.430	0.100	0.230
All	75.1	128.6	3414	753.9	513.8	128.6	3406	741.1	504.7	-0.950	0.950	-0.050	0.240	-0.950	0.950	-0.030	0.320

Table A. 124: Matched Droplet Info

A.6.2.2 All Droplets for .LA Image

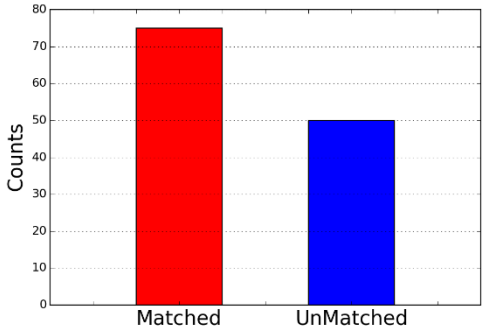

Figure A. 1161: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

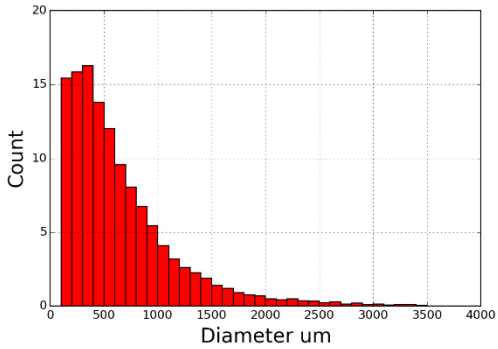

Figure A. 1162: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

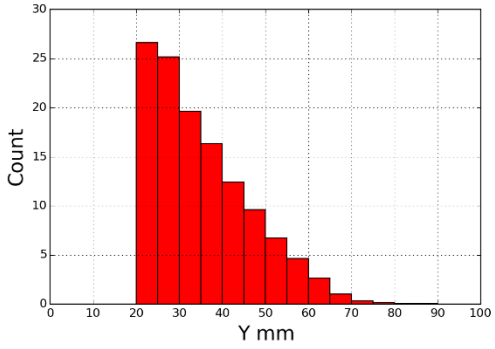

Figure A. 1163: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

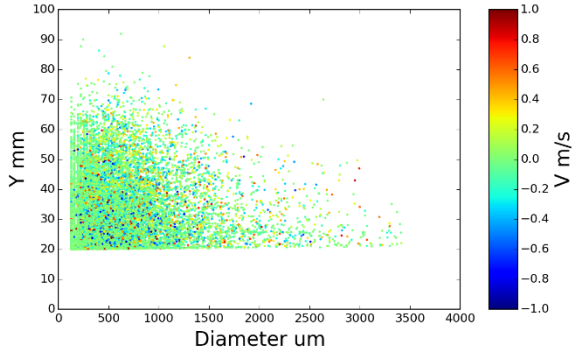

Figure A. 1164: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

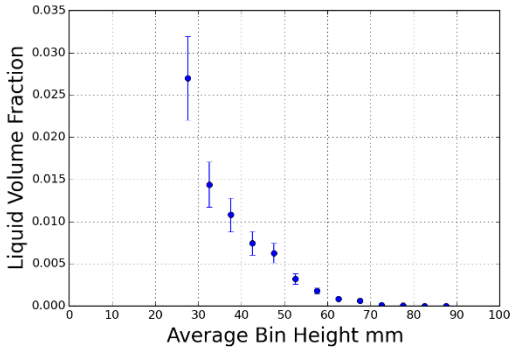

Figure A. 1165: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 All Droplets for .LB Image

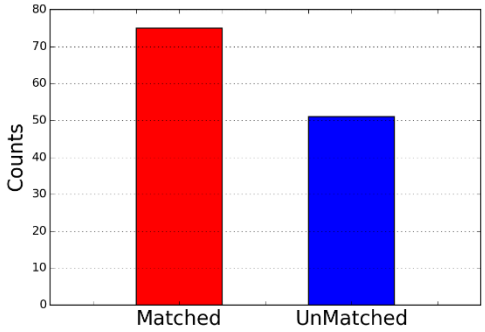

Figure A. 1166: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

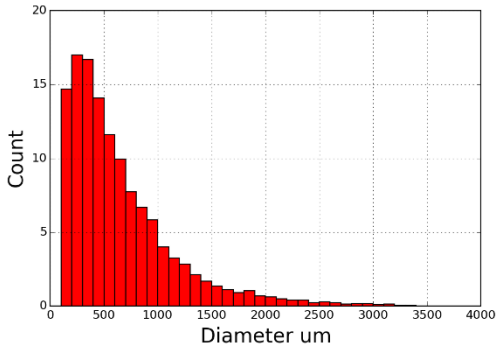

Figure A. 1167: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

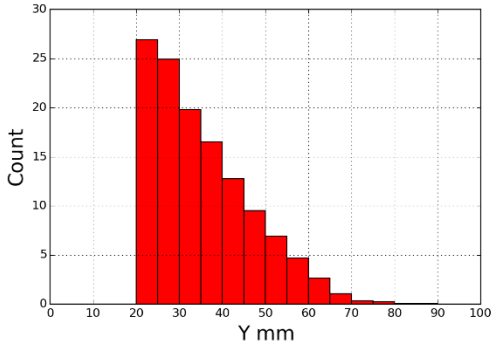

Figure A. 1168: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

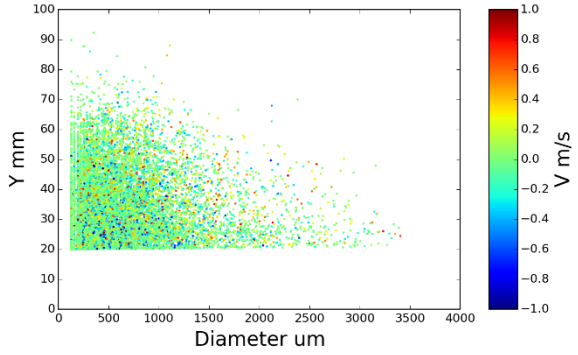

Figure A. 1169: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

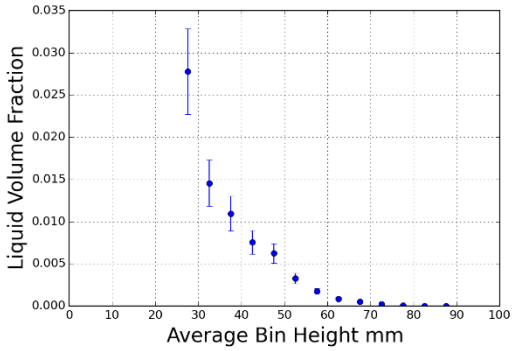

Figure A. 1170: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 Matched Only Droplets for .LA Image

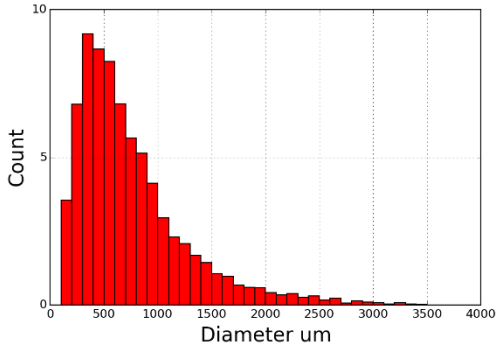

Figure A. 1171: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

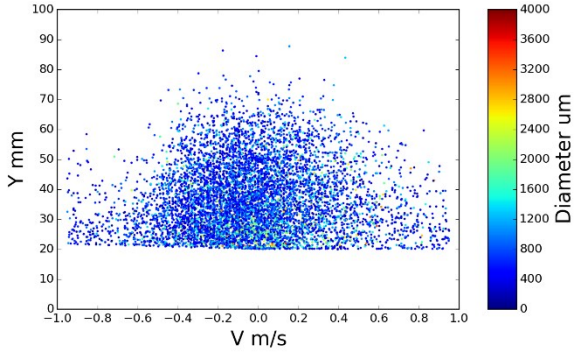

Figure A. 1174: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

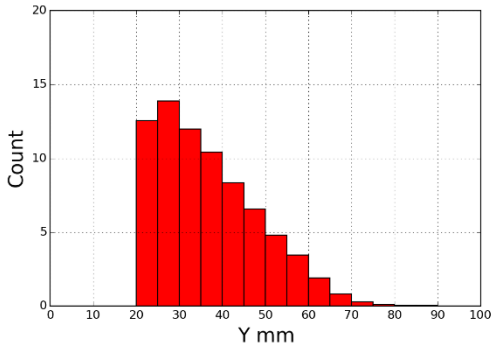

Figure A. 1172: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

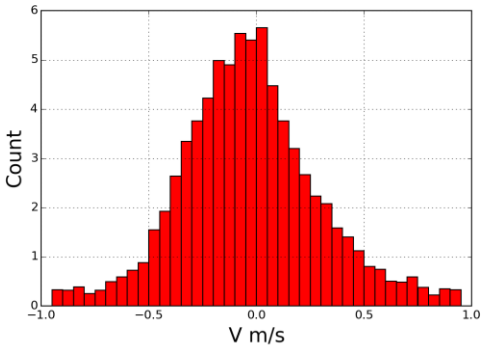

Figure A. 1175: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

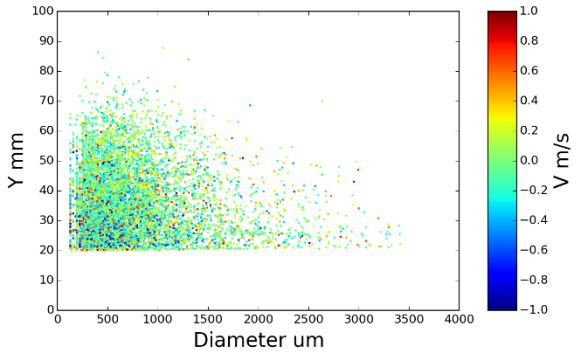

Figure A. 1173: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 Matched Only Droplets for .LB Image

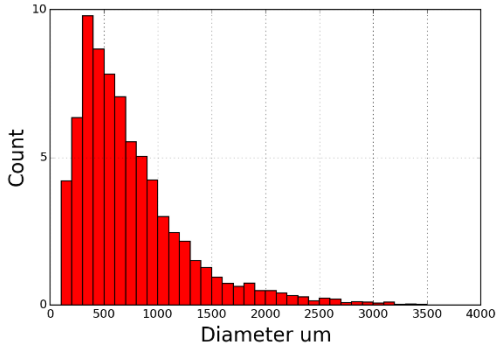

Figure A. 1176: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

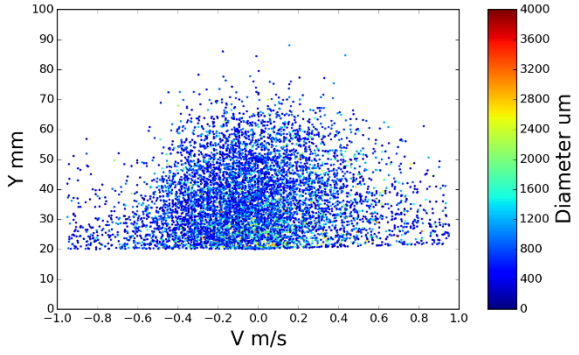

Figure A. 1179: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

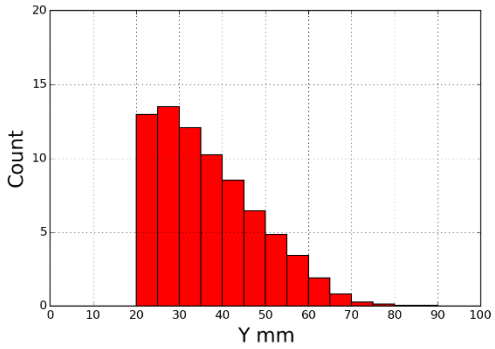

Figure A. 1177: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

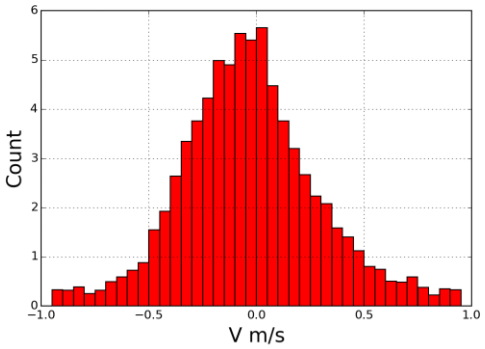

Figure A. 1180: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

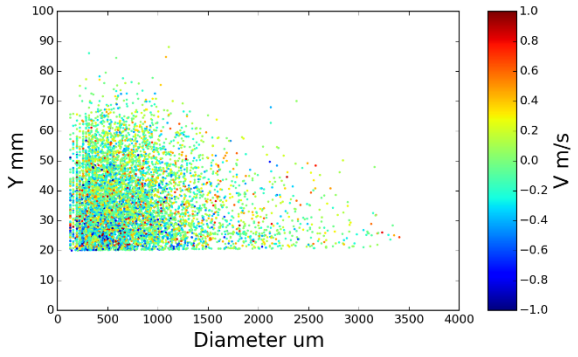

Figure A. 1178: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 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	79.75	78.02	128.6	3401	662.1	528.1	128.6	3379	658.9	521.2
40-60mm	31.78	32.73	128.6	3406	560.0	408.1	128.6	3082	549.8	396.9
60-80mm	4.59	4.74	128.6	2224	531.0	340.3	128.6	2231	521.7	344.9
80-100mm	0.1	0.1	249.0	747.0	408.1	148.3	249.0	665.1	391.4	129.4
All	116.22	115.61	128.6	3406	628.8	493.9	128.6	3379	622.1	485.5
			Height A (mm)				Height B (mm)			
Highest Particle			90.8397				91.0678			
Lowest Particle			20.0570				20.0570			

Table A. 125: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	41.96	128.6	3401	773.8	553.8	128.6	3379	756.8	541.3	-0.950	0.950	-0.070	0.280	-0.950	0.950	0.010	0.360
40-60mm	21.82	128.6	3071	638.2	416.6	128.6	3040	626.6	402.6	-0.950	0.950	-0.070	0.180	-0.920	0.940	0.030	0.310
60-80mm	3.32	128.6	2224	620.5	341.6	128.6	2231	620.4	348.1	-0.680	0.430	-0.070	0.120	-0.520	0.840	0.010	0.230
80-100mm	0.08	257.2	747.0	433.5	153.1	249.0	665.1	406.6	138.3	-0.220	0.050	-0.040	0.090	-0.280	0.410	-0.030	0.220
All	67.18	128.6	3401	721.7	508.2	128.6	3379	707.1	495.5	-0.950	0.950	-0.070	0.250	-0.950	0.950	0.020	0.340

Table A. 126: Matched Droplet Info

A.6.2.2 All Droplets for .LA Image

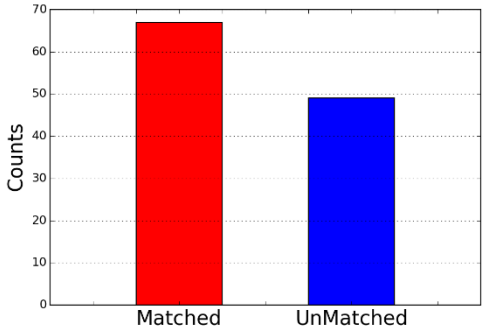

Figure A. 1181: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

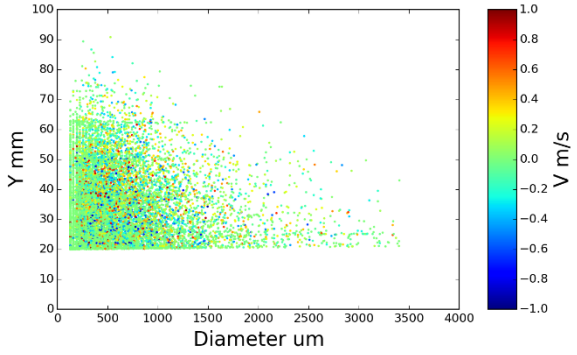

Figure A. 1184: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

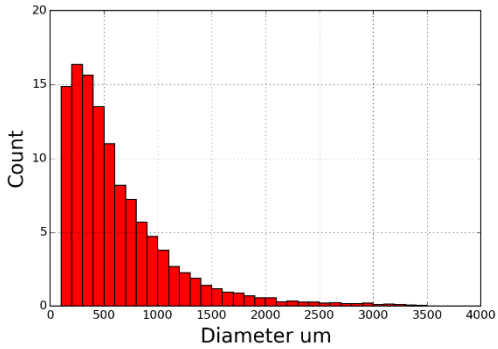

Figure A. 1182: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

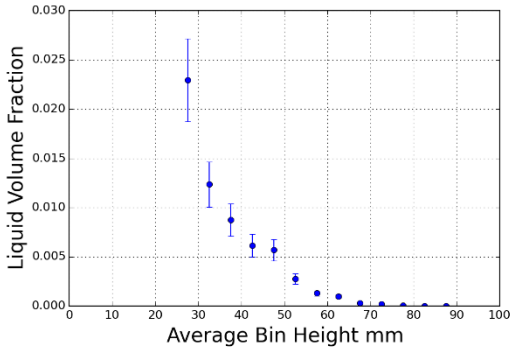

Figure A. 1185: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

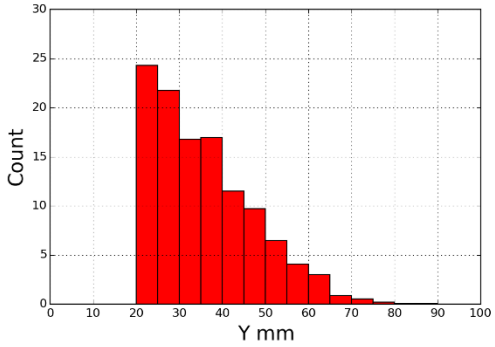

Figure A. 1183: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 All Droplets for .LB Image

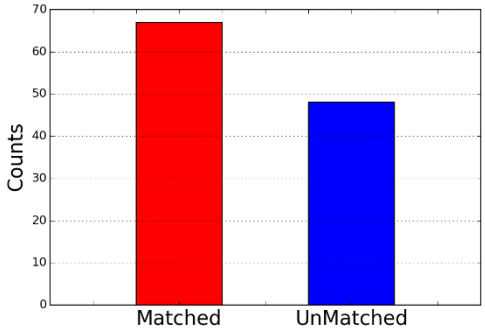

Figure A. 1186: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

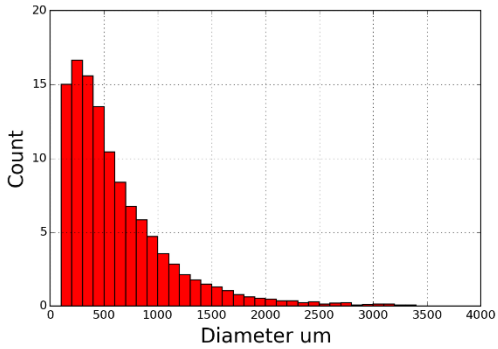

Figure A. 1187: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

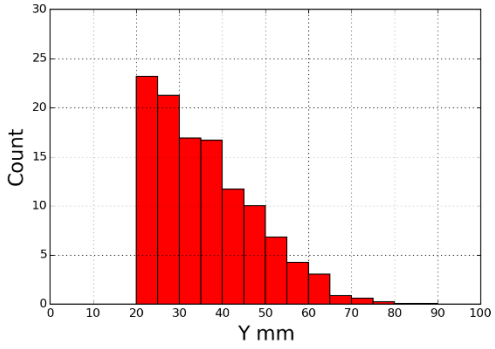

Figure A. 1188: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

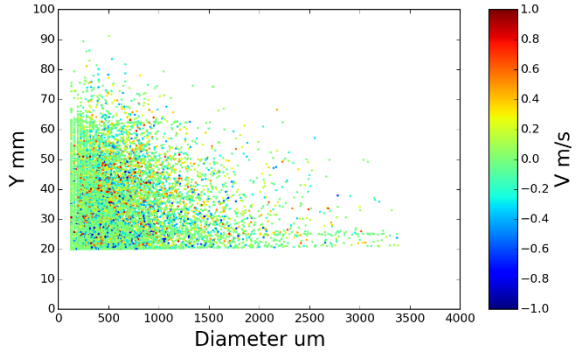

Figure A. 1189: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

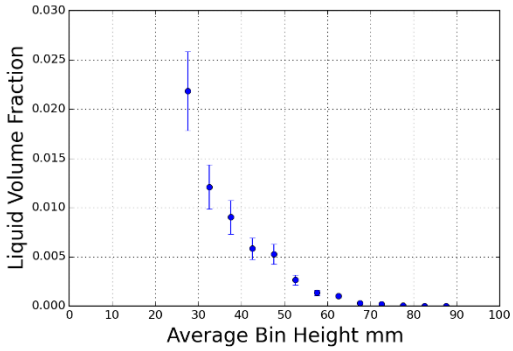

Figure A. 1190: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 Matched Only Droplets for .LA Image

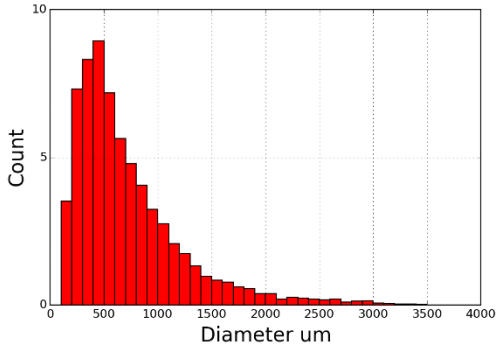

Figure A. 1191: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

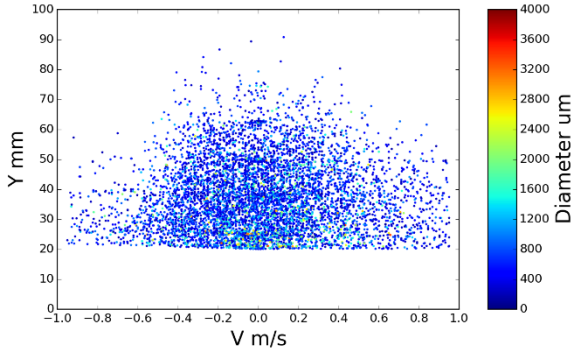

Figure A. 1194: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

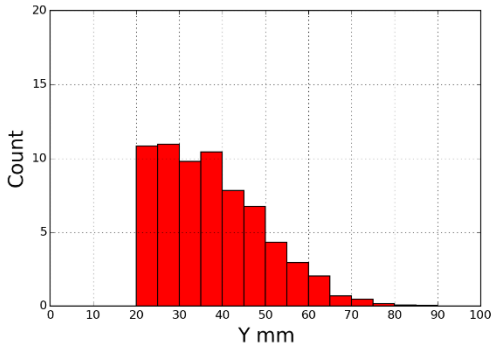

Figure A. 1192: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

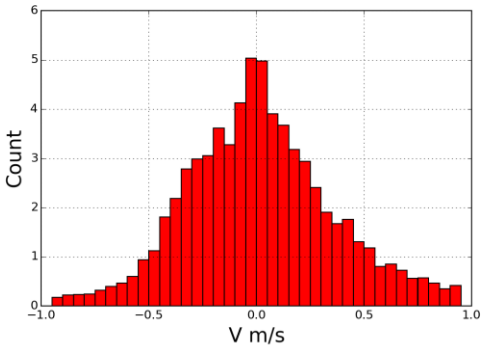

Figure A. 1195: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

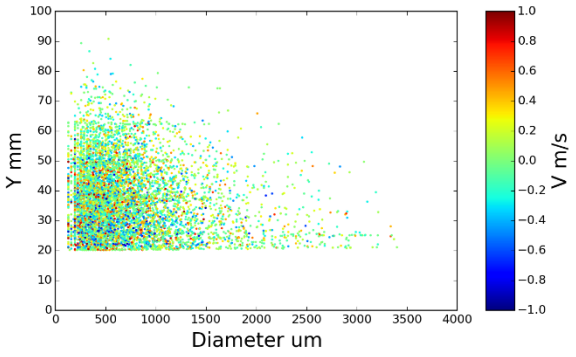

Figure A. 1193: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.2.2 Matched Only Droplets for .LB Image

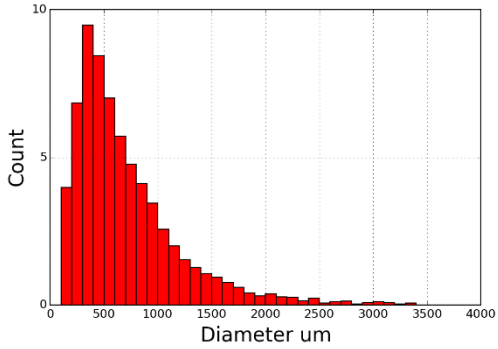

Figure A. 1196: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

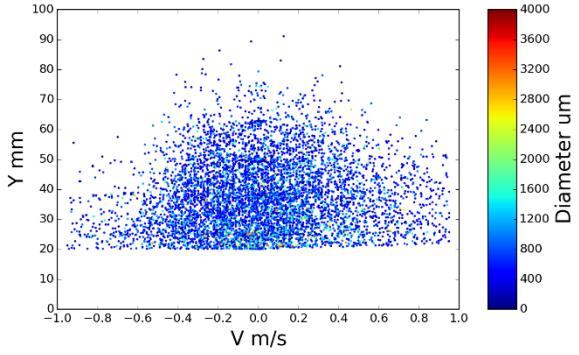

Figure A. 1199: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

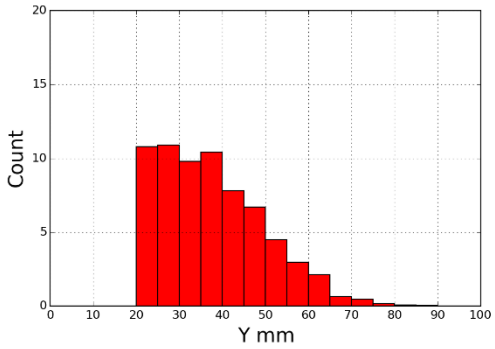

Figure A. 1197: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

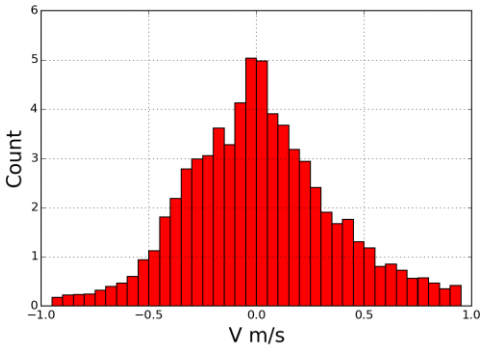

Figure A. 1200: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

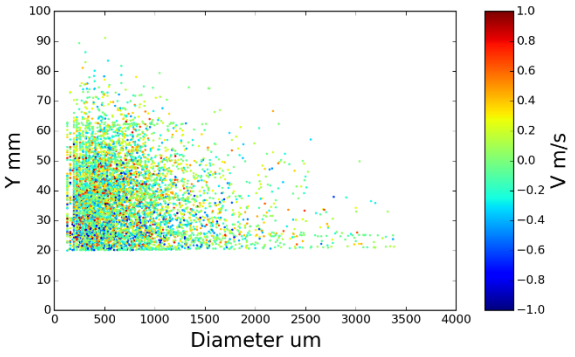

Figure A. 1198: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.3 Liquid Level 3

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	23926 / 3.015
Ref Mass Flow (lb/hr) / (kg/s)	1627 / 0.205
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15113 / 20.497
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	7130 / 22.49
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	54.9 / 12.73
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	55.1 / 12.83
Total Bundle Q (Btu/hr) / (kW)	157032 / 46.02
Total Bundle & Preboiler Q (Btu/hr) / (kW)	157032 / 46.02
Top Two Rows HTC Ratio	1.027
Bundle Inlet Quality	0.00
Bundle Exit Quality	0.04

Table A. 127: Thermal Conditions

A.6.3.1 Lens 100mm Mag 0_29x

A.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	50.95	52.6	57.2	2816	287.7	285.5	57.2	2707	286.4	288.9
20-40mm	18.12	18.84	57.2	1995	173.5	192.3	57.2	1859	170.3	185.3
40-60mm	1.61	1.63	57.2	662.1	104.9	57.8	57.2	659.0	103.1	58.5
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	75.43	78.12	57.2	2816	257.6	268.0	57.2	2707	255.3	269.6
			Height A (mm)				Height B (mm)			
Highest Particle			46.9091				46.9218			
Lowest Particle			-1.0402				-1.0402			

Table A. 128: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	37.26	57.2	2816	341.2	303.5	57.2	2707	340.7	305.6	-0.920	0.950	-0.050	0.130	-0.940	0.940	0.040	0.220
20-40mm	11.35	57.2	1774	215.1	220.6	57.2	1859	213.7	223.4	-0.900	0.890	-0.040	0.100	-0.940	0.950	0.040	0.150
40-60mm	0.84	57.2	662.1	121.8	70.0	57.2	659.0	116.6	68.5	-0.240	0.110	-0.030	0.070	-0.130	0.240	0.030	0.100
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	52.51	57.2	2816	311.2	291.1	57.2	2707	310.4	294.1	-0.920	0.950	-0.050	0.120	-0.940	0.950	0.050	0.210

Table A. 129: Matched Droplet Info

A.6.3.1 All Droplets for .LA Image

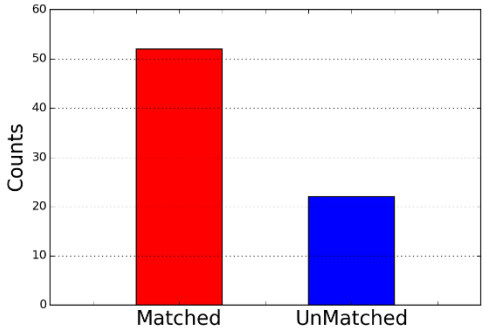

Figure A. 1201: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

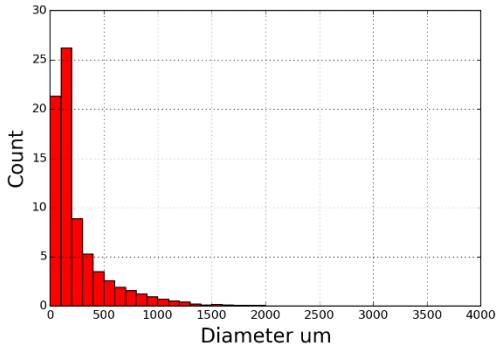

Figure A. 1202: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

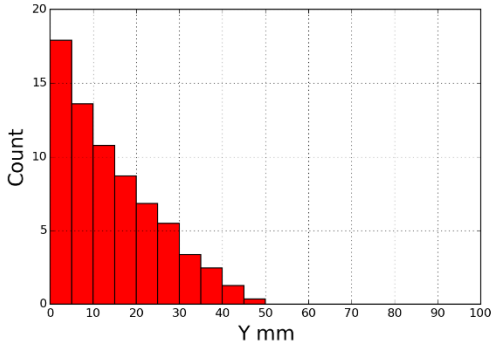

Figure A. 1203: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

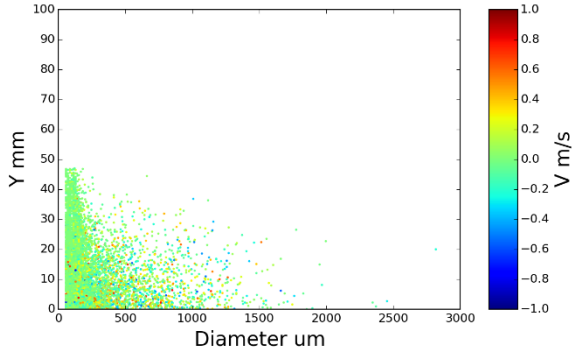

Figure A. 1204: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

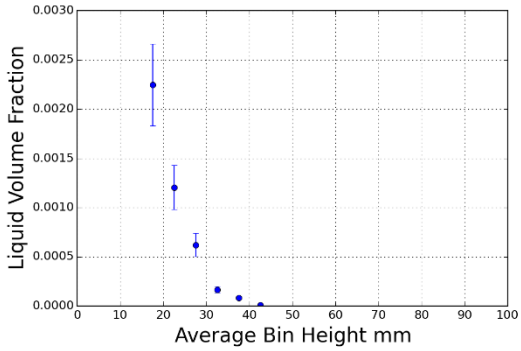

Figure A. 1205: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.1 All Droplets for .LB Image

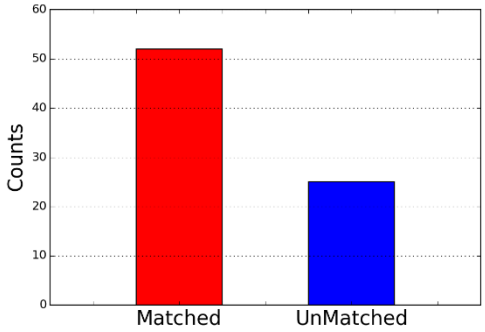

Figure A. 1206: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

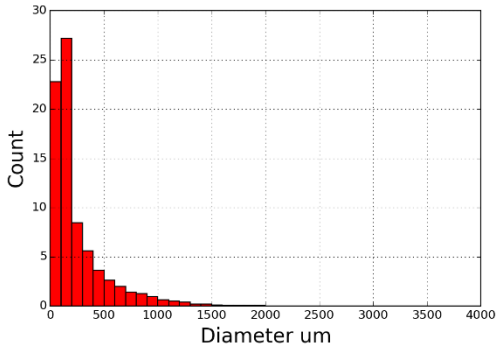

Figure A. 1207: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

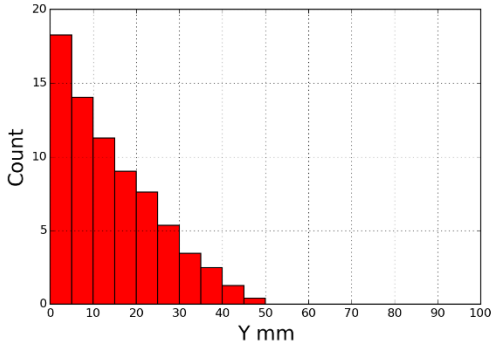

Figure A. 1208: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

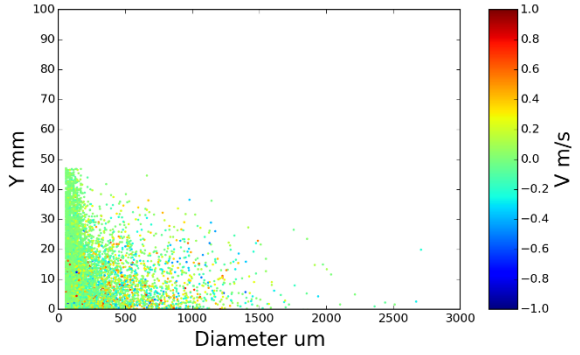

Figure A. 1209: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

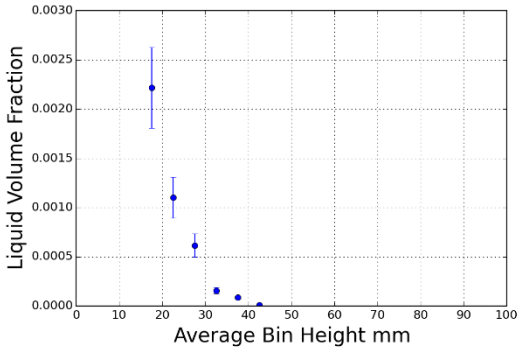

Figure A. 1210: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.1 Matched Only Droplets for .LA Image

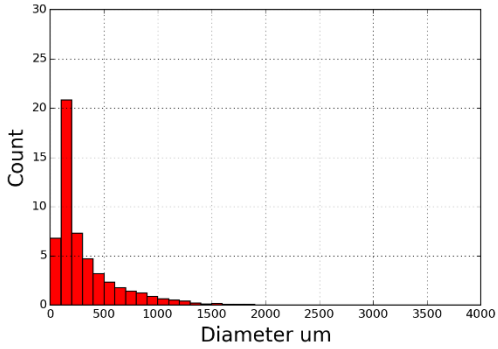

Figure A. 1211: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

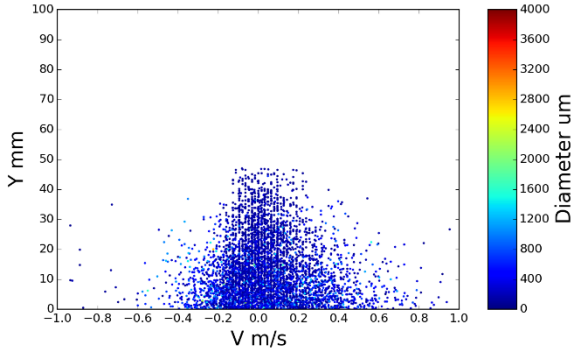

Figure A. 1214: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

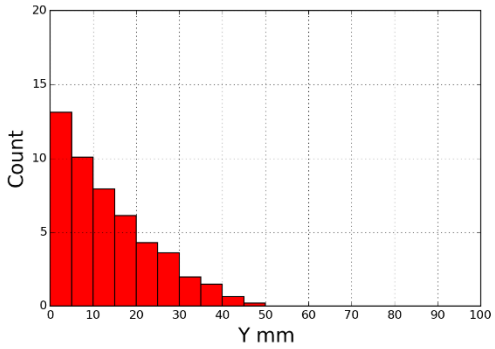

Figure A. 1212: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

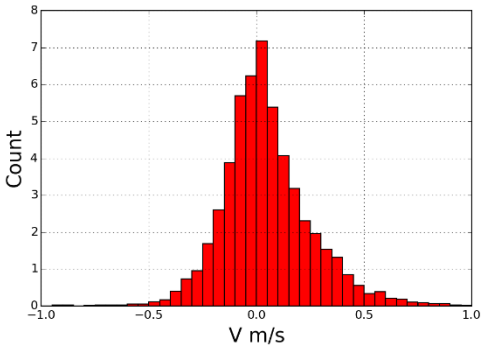

Figure A. 1215: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

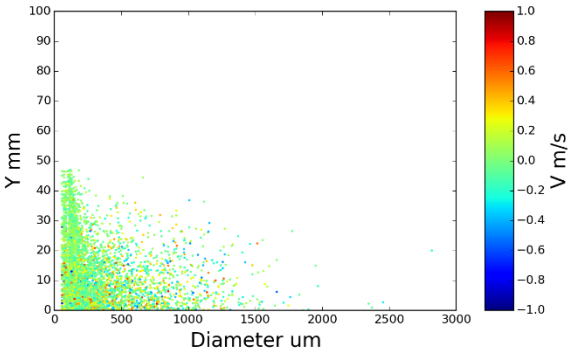

Figure A. 1213: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.3.1 Matched Only Droplets for .LB Image

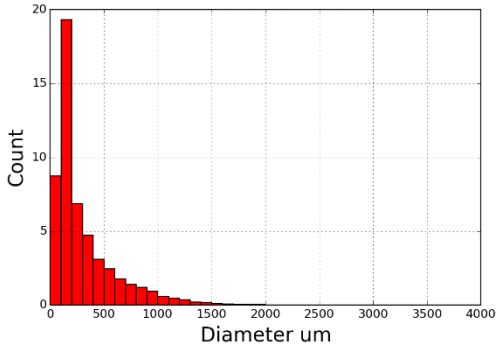

Figure A. 1216: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

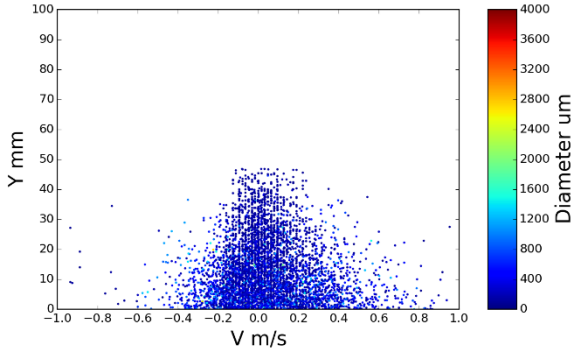

Figure A. 1219: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

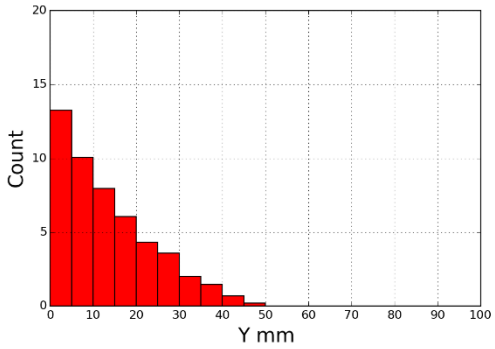

Figure A. 1217: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

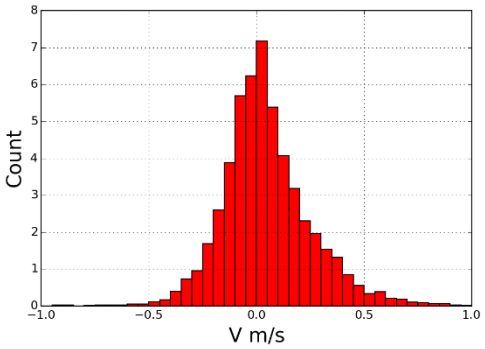

Figure A. 1220: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

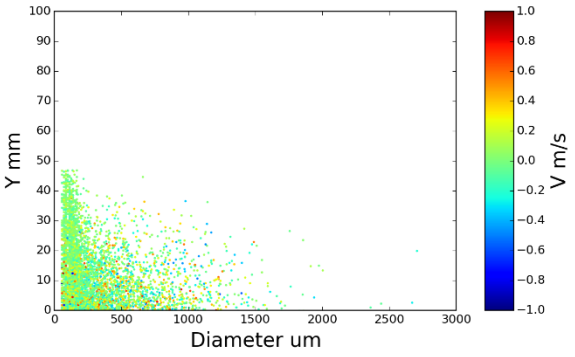

Figure A. 1218: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.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	38.95	41.52	57.2	2261	346.9	343.0	57.2	2489	335.7	341.1
20-40mm	10.35	10.53	57.2	2192	195.5	265.8	57.2	2178	196.0	267.1
40-60mm	0.9	0.8	57.2	711.7	95.1	70.9	57.2	696.5	98.3	73.2
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	54.74	57.34	57.2	2261	317.4	333.7	57.2	2489	310.3	332.1
			Height A (mm)				Height B (mm)			
Highest Particle			46.9218				46.7422			
Lowest Particle			-1.0402				-1.0279			

Table A. 130: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	27.56	57.2	2261	424.1	360.5	57.2	2116	425.5	362.5	-0.920	0.790	-0.040	0.130	-0.950	0.940	-0.020	0.230
20-40mm	5.85	57.2	2192	270.9	326.9	57.2	2178	267.2	330.1	-0.600	0.710	-0.030	0.100	-0.600	0.870	-0.040	0.160
40-60mm	0.41	57.2	711.7	121.8	97.6	57.2	696.5	117.5	96.2	-0.140	0.100	-0.030	0.040	-0.190	0.130	-0.090	0.060
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	36.56	57.2	2261	400.2	360.1	57.2	2178	399.0	361.1	-0.920	0.790	-0.040	0.130	-0.950	0.940	-0.020	0.220

Table A. 131: Matched Droplet Info

A.6.3.1 All Droplets for .LA Image

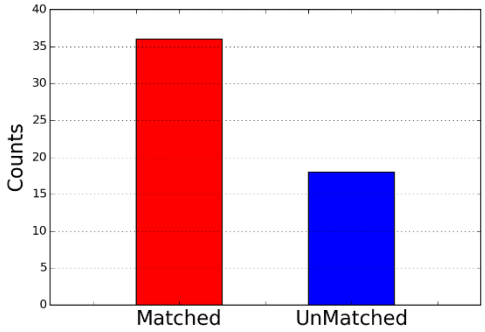

Figure A. 1221: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

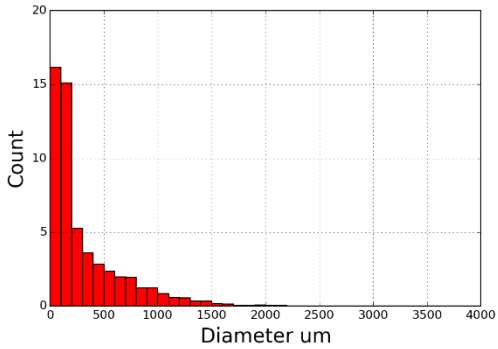

Figure A. 1222: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

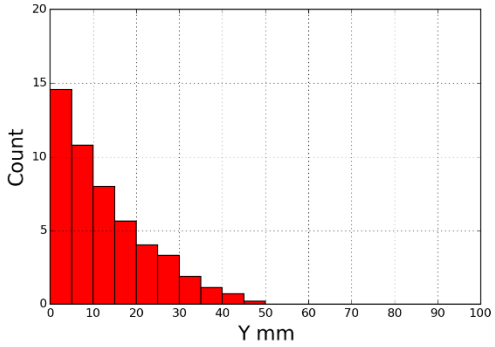

Figure A. 1223: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

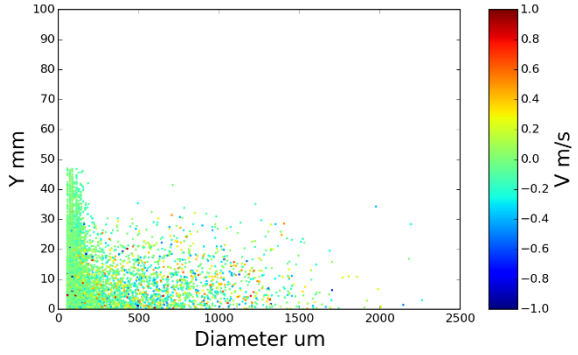

Figure A. 1224: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

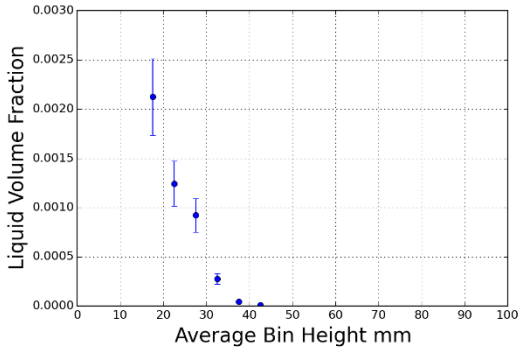

Figure A. 1225: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.1 All Droplets for .LB Image

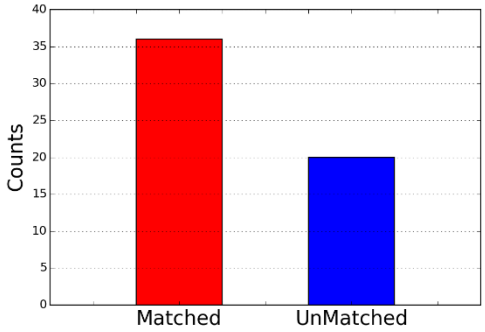

Figure A. 1226: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

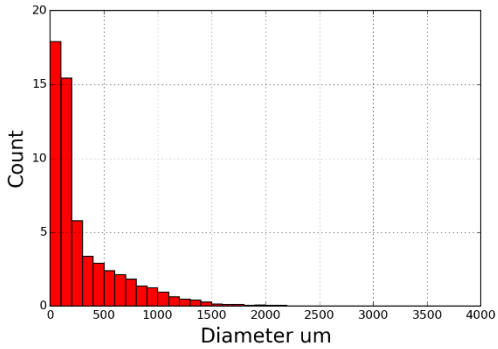

Figure A. 1227: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

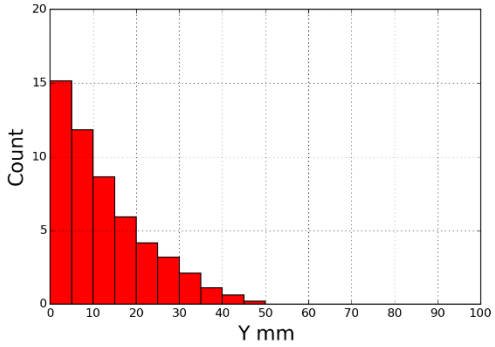

Figure A. 1228: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

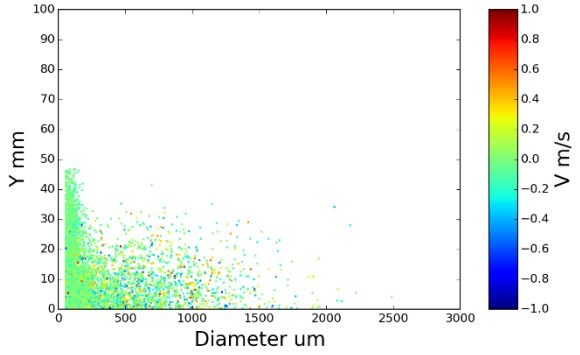

Figure A. 1229: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

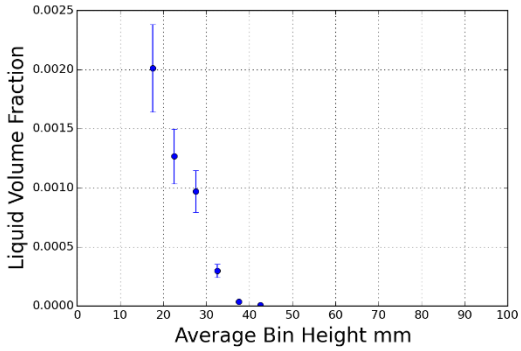

Figure A. 1230: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.1 Matched Only Droplets for .LA Image

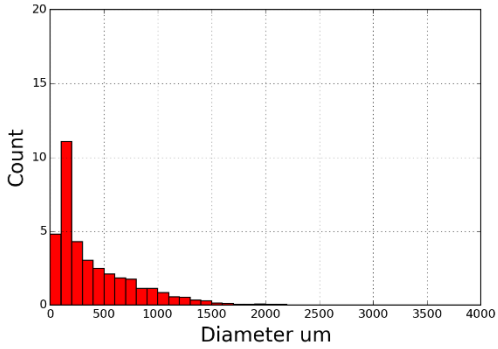

Figure A. 1231: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

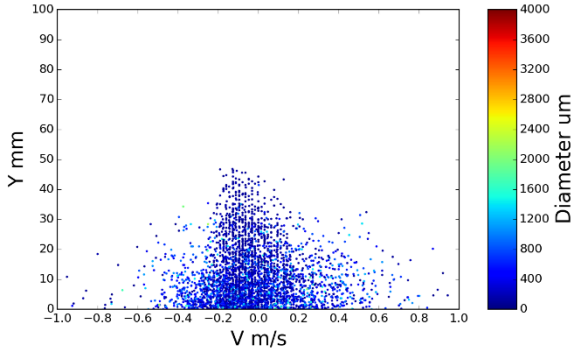

Figure A. 1234: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

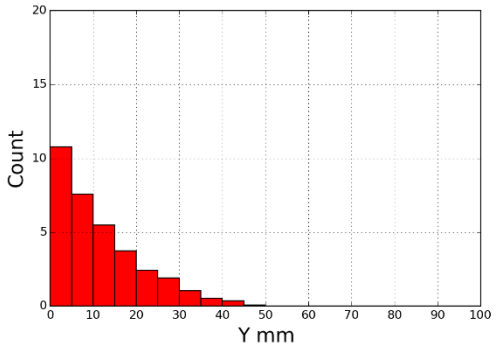

Figure A. 1232: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

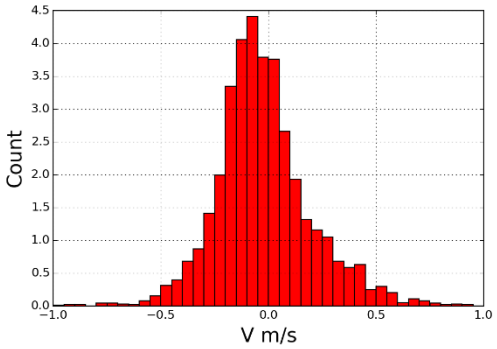

Figure A. 1235: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

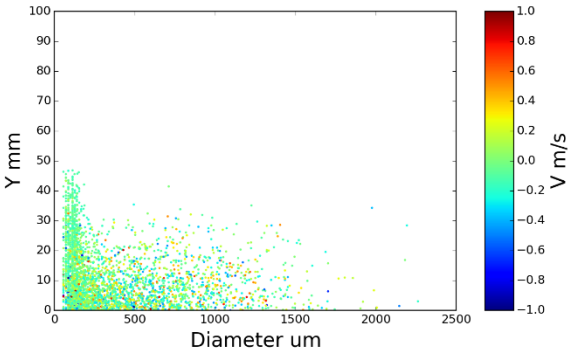

Figure A. 1233: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.3.1 Matched Only Droplets for .LB Image

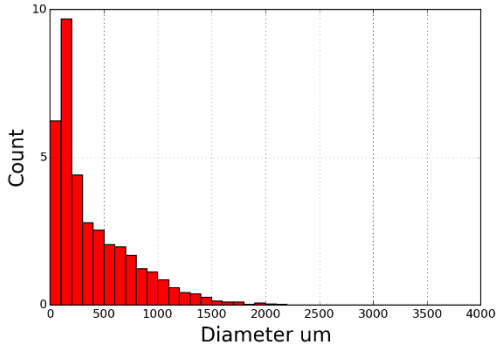

Figure A. 1236: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

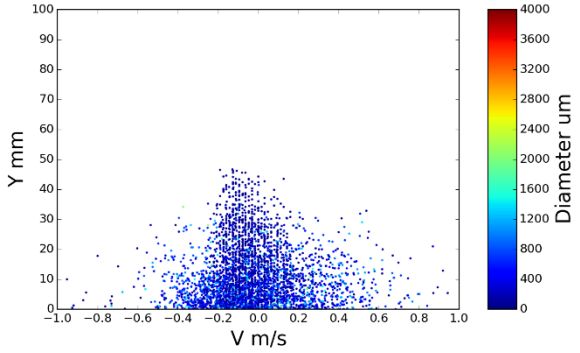

Figure A. 1239: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

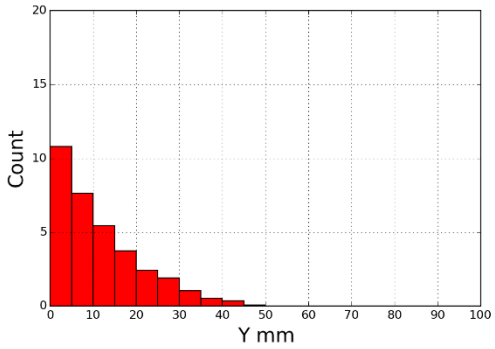

Figure A. 1237: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

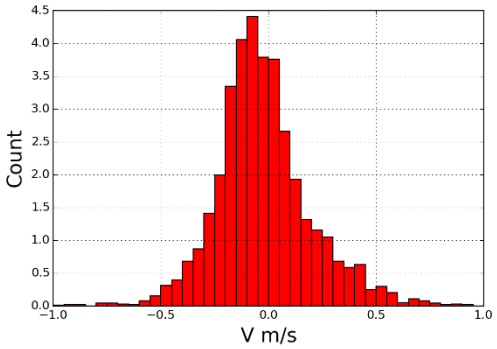

Figure A. 1240: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

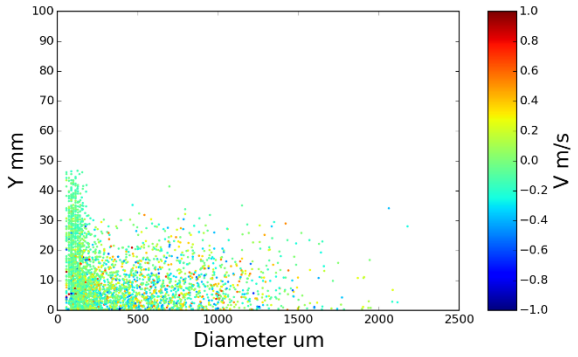

Figure A. 1238: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.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	31.42	34.13	57.2	2526	360.1	355.5	57.2	2350	343.6	351.1
20-40mm	9.57	9.96	57.2	1849	190.4	249.0	57.2	1962	186.2	251.2
40-60mm	0.97	1.14	57.2	1167	133.8	178.2	57.2	1157	125.3	167.8
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	45.81	49.28	57.2	2526	320.5	340.4	57.2	2350	308.6	337.6
			Height A (mm)				Height B (mm)			
Highest Particle			46.4038				46.9218			
Lowest Particle			-1.0402				-1.0402			

Table A. 132: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	21.31	57.2	2126	450.4	375.7	57.2	2350	446.9	374.6	-0.930	0.730	-0.040	0.130	-0.900	0.920	-0.050	0.220
20-40mm	5.51	57.2	1849	254.4	304.1	57.2	1962	250.9	309.9	-0.860	0.840	-0.050	0.130	-0.820	0.800	-0.080	0.170
40-60mm	0.51	57.2	1167	183.5	234.2	57.2	1157	182.0	237.9	-0.820	0.950	-0.050	0.190	-0.410	0.160	-0.090	0.090
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	29.72	57.2	2126	410.0	371.2	57.2	2350	407.6	372.5	-0.930	0.950	-0.050	0.140	-0.900	0.920	-0.050	0.210

Table A. 133: Matched Droplet Info

A.6.3.1 All Droplets for .LA Image

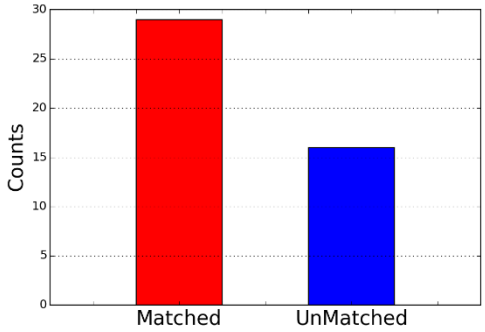

Figure A. 1241: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

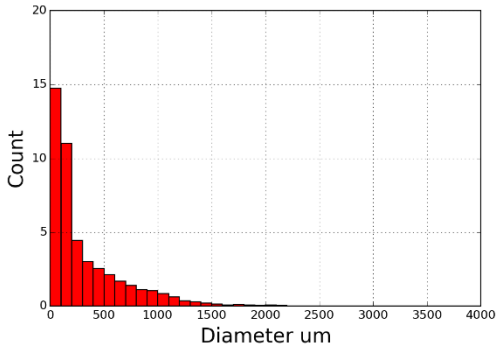

Figure A. 1242: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

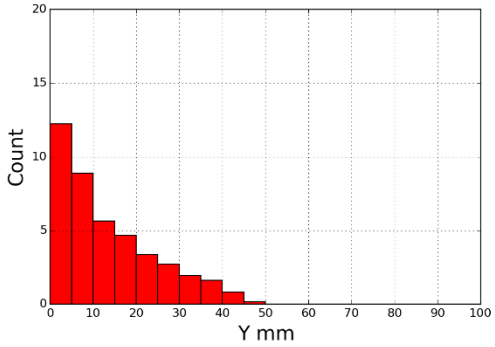

Figure A. 1243: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

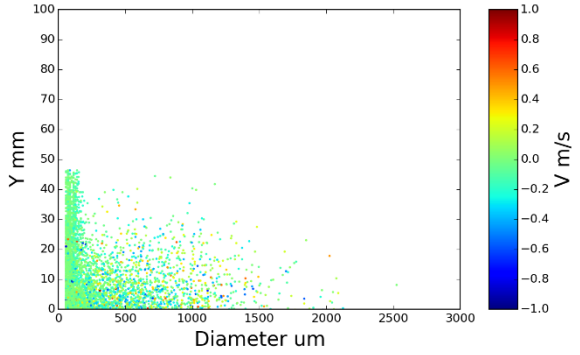

Figure A. 1244: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

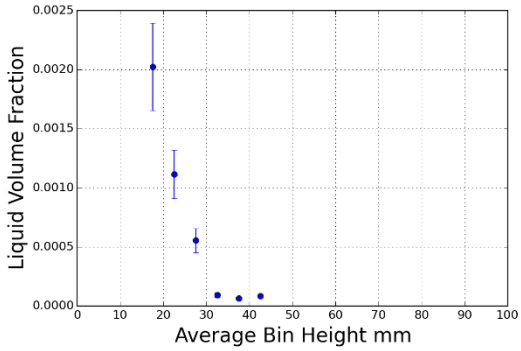

Figure A. 1245: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.1 All Droplets for .LB Image

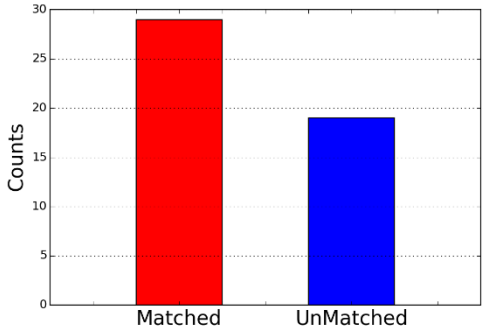

Figure A. 1246: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

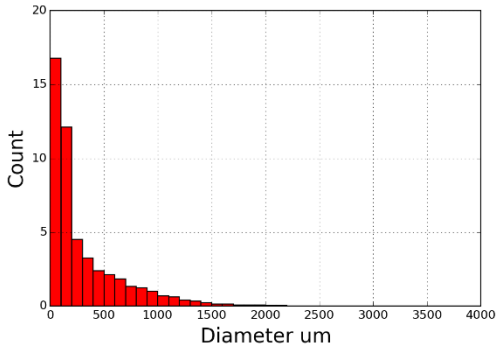

Figure A. 1247: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

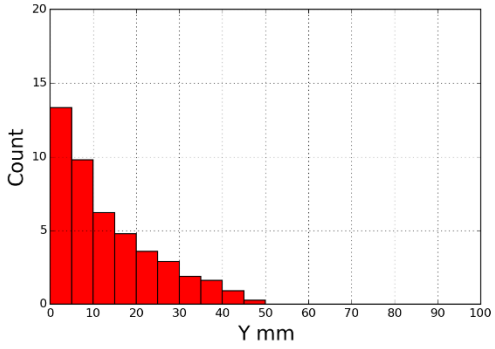

Figure A. 1248: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

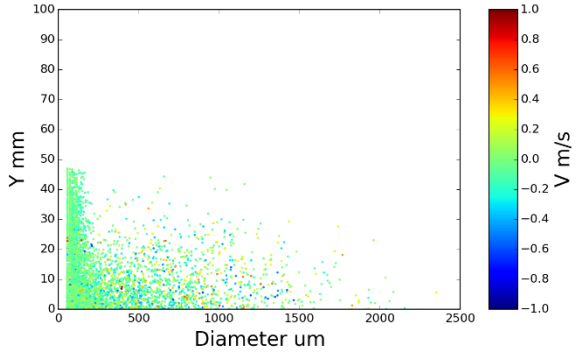

Figure A. 1249: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

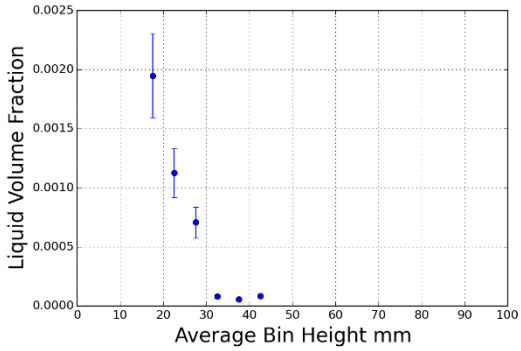

Figure A. 1250: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.1 Matched Only Droplets for .LA Image

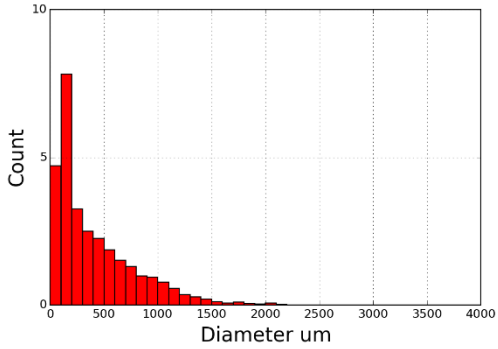

Figure A. 1251: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

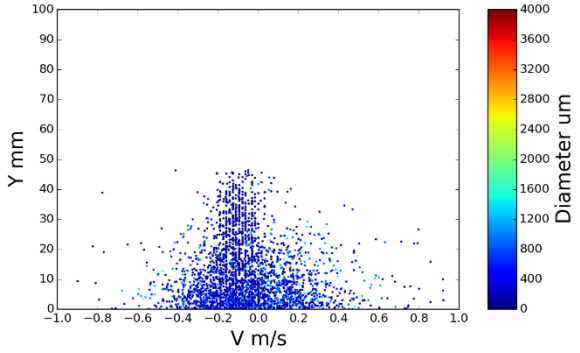

Figure A. 1254: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

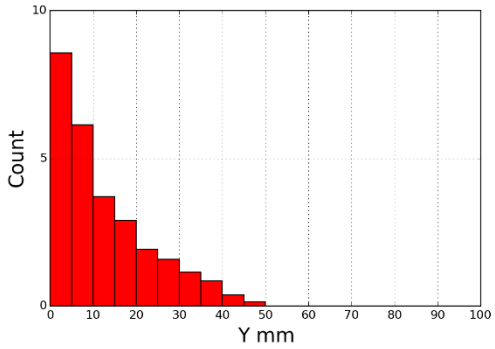

Figure A. 1252: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

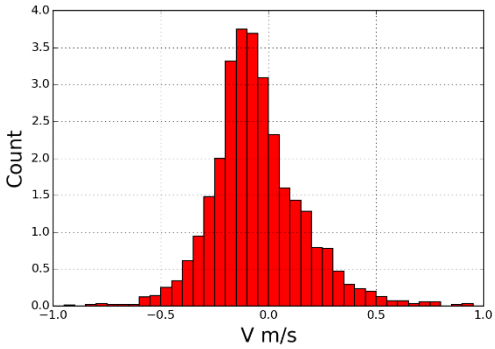

Figure A. 1255: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

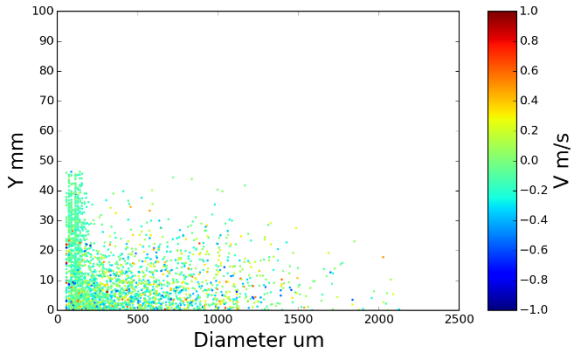

Figure A. 1253: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.3.1 Matched Only Droplets for .LB Image

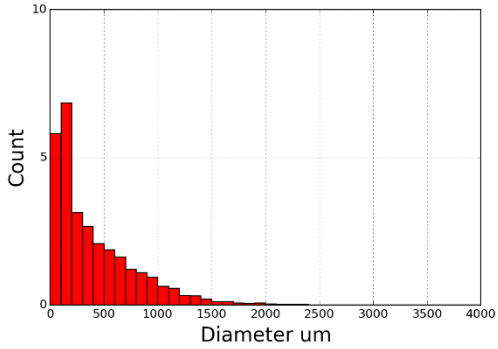

Figure A. 1256: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

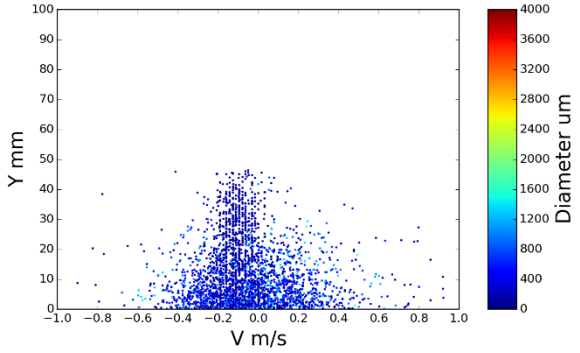

Figure A. 1259: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

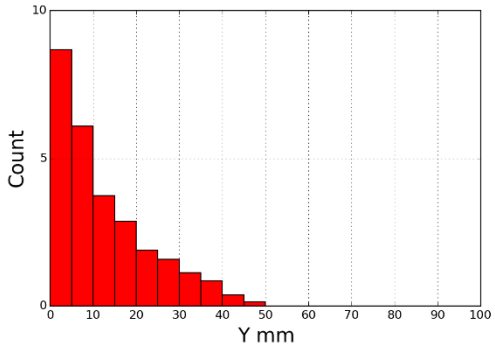

Figure A. 1257: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

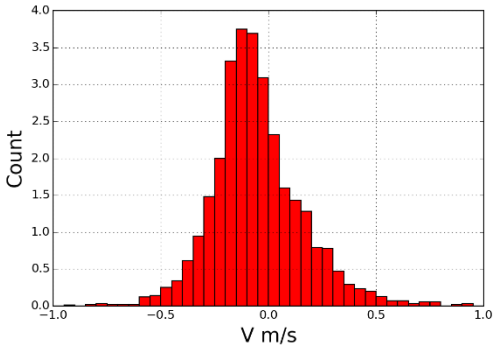

Figure A. 1260: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

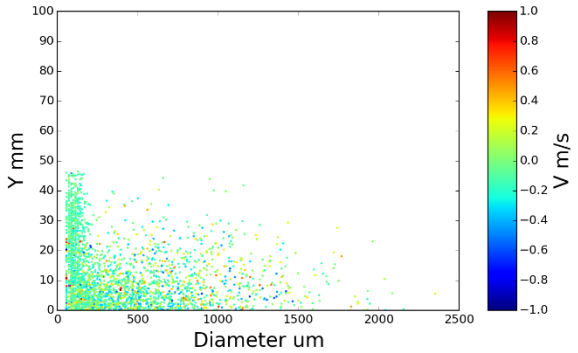

Figure A. 1258: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.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	37.05	39.52	57.2	2499	317.1	322.2	57.2	2560	305.0	316.1
20-40mm	14.85	15.13	57.2	1693	153.9	177.8	57.2	1710	152.3	179.0
40-60mm	1.36	1.41	57.2	755.2	108.9	78.6	57.2	679.9	107.8	74.4
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	56.76	59.81	57.2	2499	271.5	296.0	57.2	2560	264.6	292.4
			Height A (mm)				Height B (mm)			
Highest Particle			46.8203				46.6301			
Lowest Particle			-1.0402				-1.0402			

Table A. 134: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	24.56	57.2	2499	397.4	345.8	57.2	2251	395.6	343.6	-0.940	0.860	-0.080	0.140	-0.860	0.860	-0.040	0.230
20-40mm	8.44	57.2	1693	195.4	219.9	57.2	1710	192.8	220.5	-0.860	0.680	-0.060	0.100	-0.950	0.770	-0.050	0.140
40-60mm	0.74	57.2	755.2	129.8	99.7	57.2	679.9	127.9	96.6	-0.360	0.770	-0.040	0.130	-0.570	0.440	-0.070	0.120
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	35.54	57.2	2499	346.5	329.3	57.2	2443	345.0	328.6	-0.940	0.860	-0.070	0.130	-0.950	0.860	-0.040	0.210

Table A. 135: Matched Droplet Info

A.6.3.1 All Droplets for .LA Image

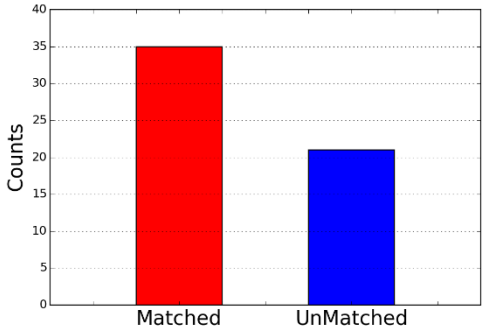

Figure A. 1261: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

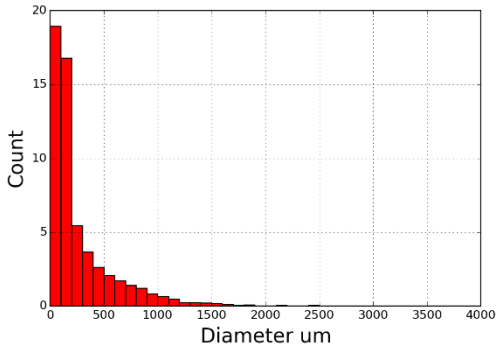

Figure A. 1262: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

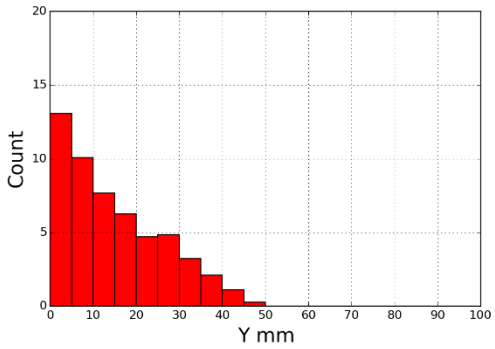

Figure A. 1263: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

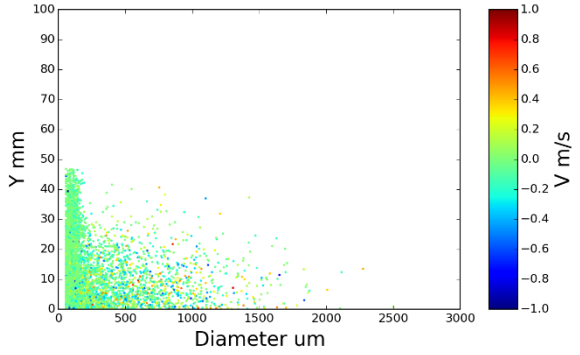

Figure A. 1264: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

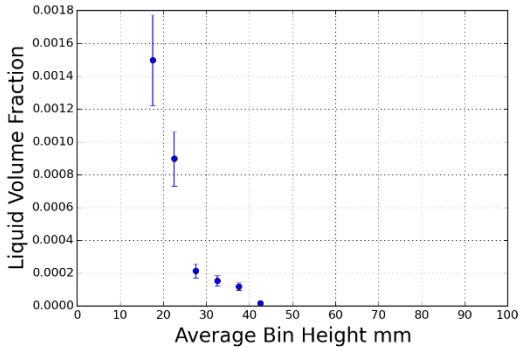

Figure A. 1265: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.1 All Droplets for .LB Image

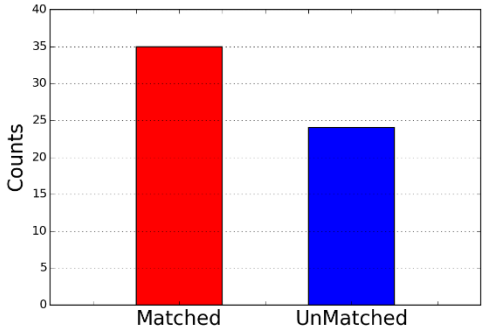

Figure A. 1266: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

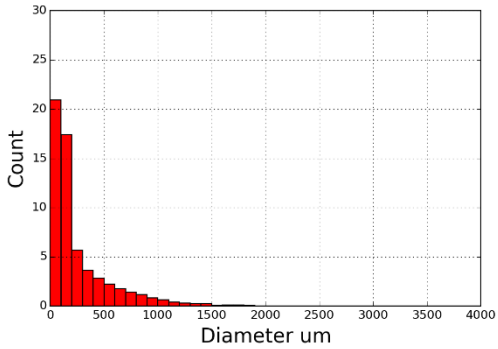

Figure A. 1267: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

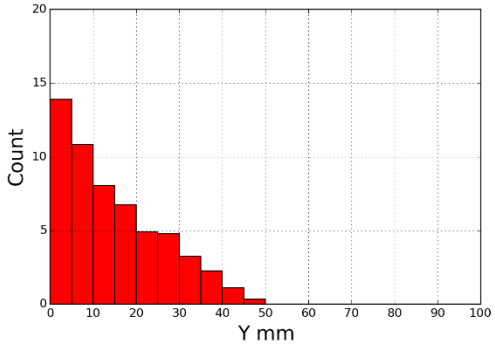

Figure A. 1268: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

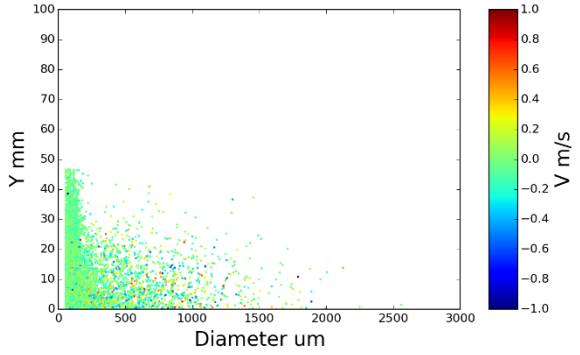

Figure A. 1269: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

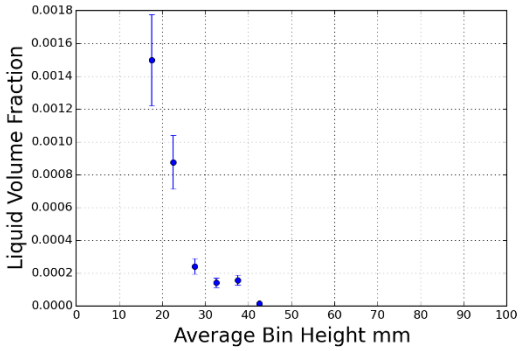

Figure A. 1270: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.1 Matched Only Droplets for .LA Image

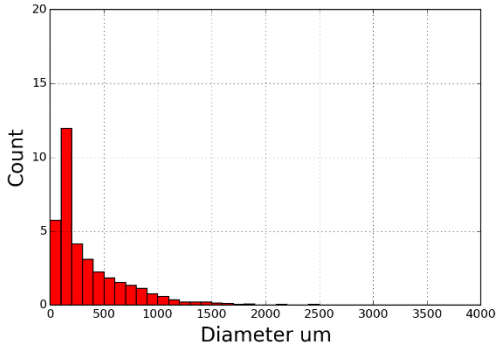

Figure A. 1271: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

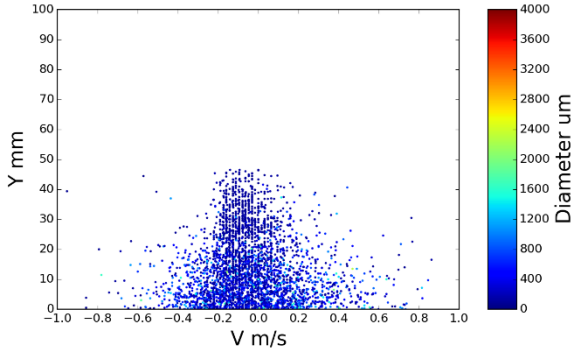

Figure A. 1274: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

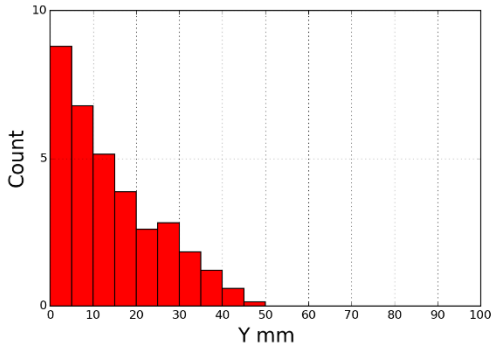

Figure A. 1272: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

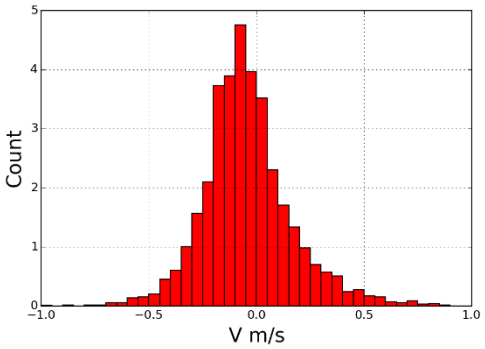

Figure A. 1275: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

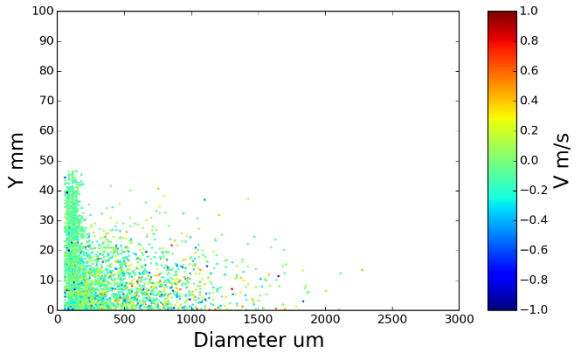

Figure A. 1273: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.3.1 Matched Only Droplets for .LB Image

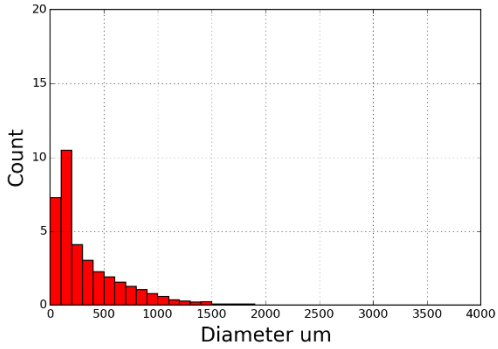

Figure A. 1276: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

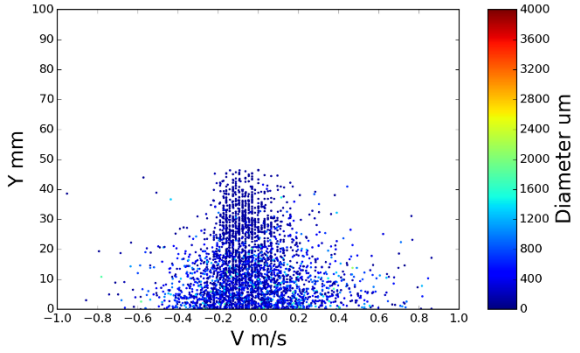

Figure A. 1279: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

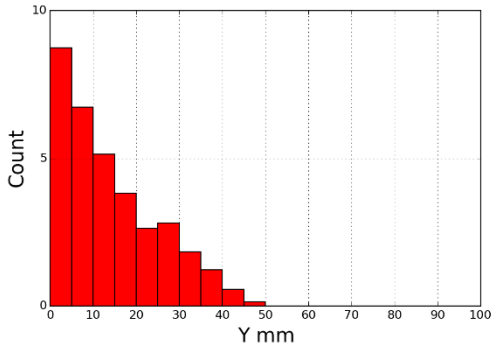

Figure A. 1277: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

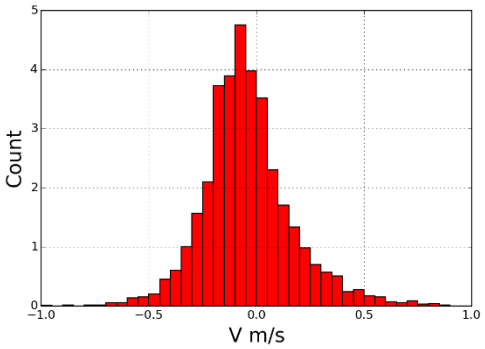

Figure A. 1280: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

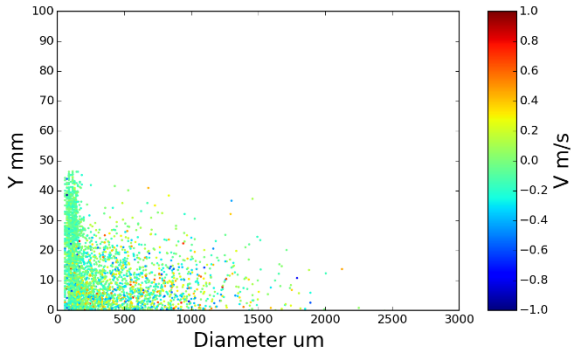

Figure A. 1278: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.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	37.99	40.01	57.2	2694	302.4	298.2	57.2	2459	296.9	295.9
20-40mm	17.5	17.36	57.2	2188	180.2	198.2	57.2	2214	182.2	200.9
40-60mm	1.39	1.54	57.2	562.4	106.3	77.6	57.2	646.5	104.0	74.5
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	60.0	62.28	57.2	2694	264.6	276.9	57.2	2459	262.4	275.7
			Height A (mm)				Height B (mm)			
Highest Particle			46.9218				46.9091			
Lowest Particle			-1.0402				-1.0402			

Table A. 136: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	25.29	57.2	2392	374.7	318.8	57.2	2459	374.4	319.3	-0.950	0.950	-0.090	0.150	-0.890	0.930	0.030	0.250
20-40mm	10.5	57.2	2188	231.9	236.0	57.2	2214	231.1	237.0	-0.810	0.870	-0.070	0.110	-0.900	0.810	-0.010	0.160
40-60mm	0.77	57.2	562.4	125.4	98.0	57.2	646.5	123.7	99.2	-0.280	0.050	-0.060	0.070	-0.160	0.370	-0.020	0.090
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	38.44	57.2	2392	333.8	305.3	57.2	2459	333.3	305.6	-0.950	0.950	-0.080	0.140	-0.900	0.930	0.020	0.230

Table A. 137: Matched Droplet Info

A.6.3.1 All Droplets for .LA Image

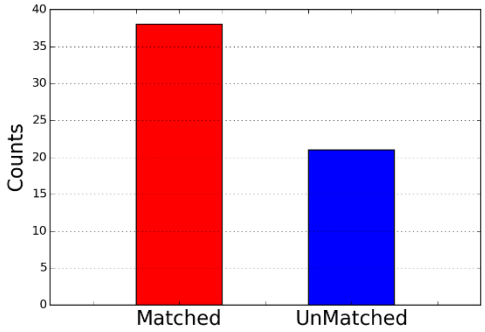

Figure A. 1281: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

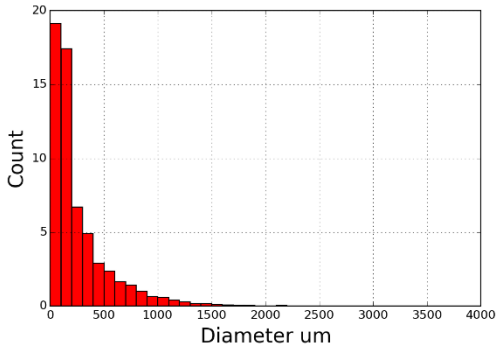

Figure A. 1282: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

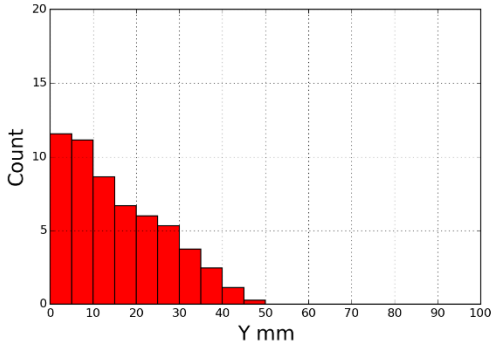

Figure A. 1283: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

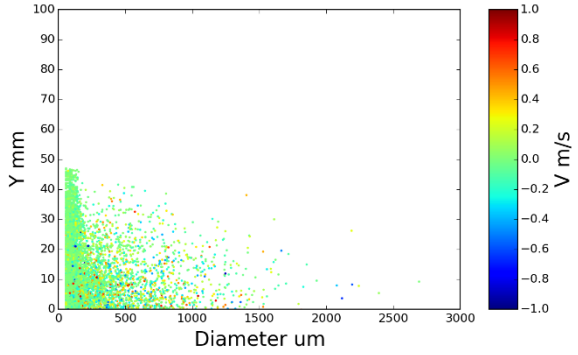

Figure A. 1284: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

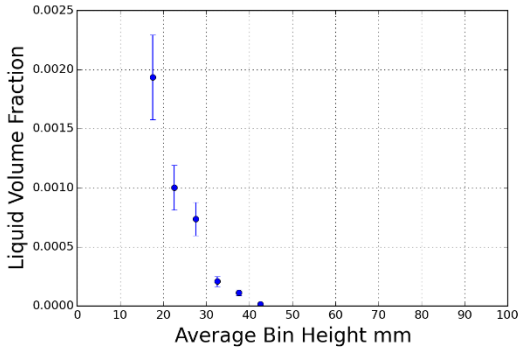

Figure A. 1285: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.1 All Droplets for .LB Image

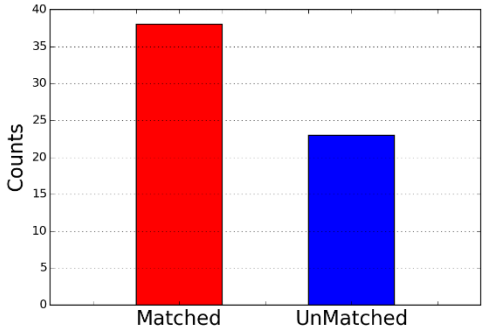

Figure A. 1286: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

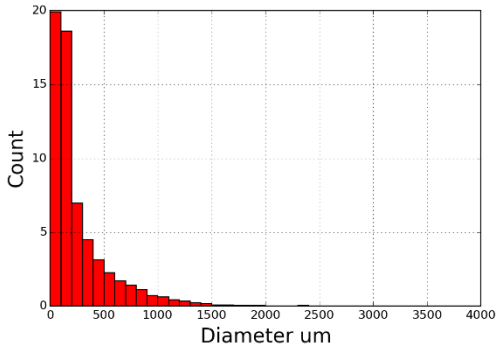

Figure A. 1287: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

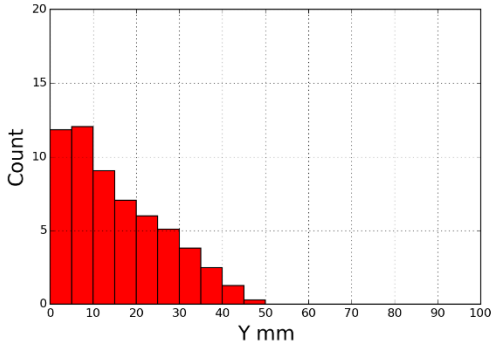

Figure A. 1288: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

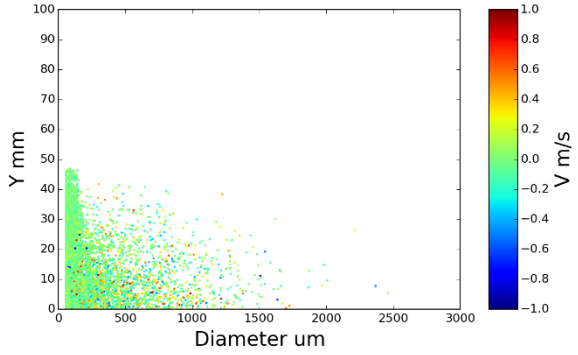

Figure A. 1289: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

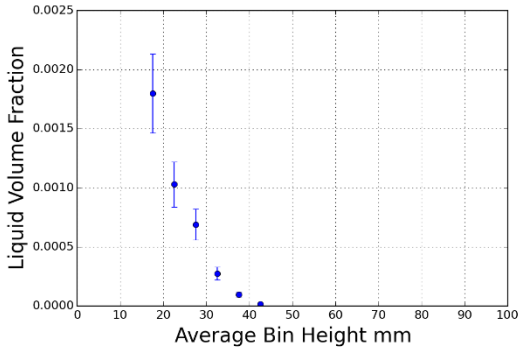

Figure A. 1290: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.1 Matched Only Droplets for .LA Image

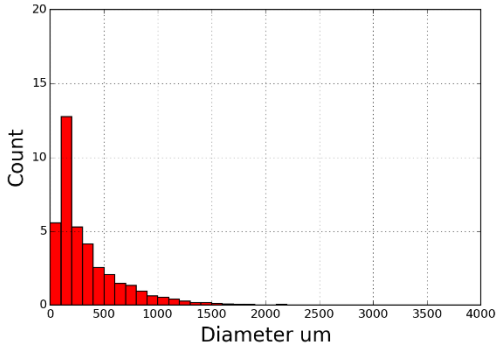

Figure A. 1291: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

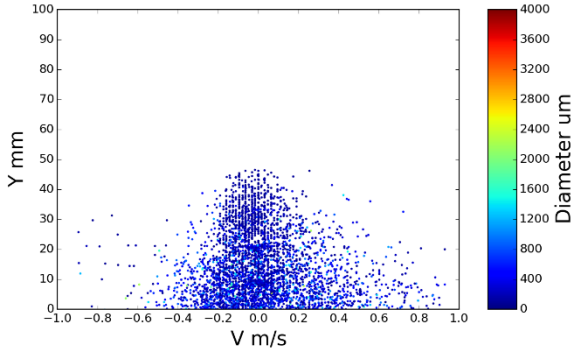

Figure A. 1294: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

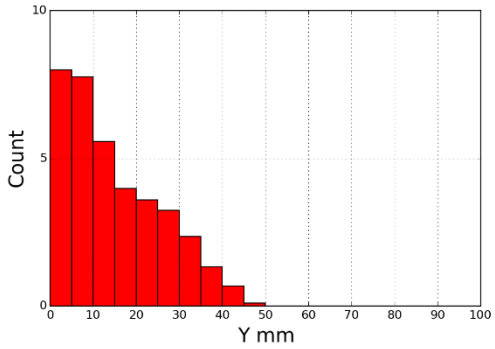

Figure A. 1292: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

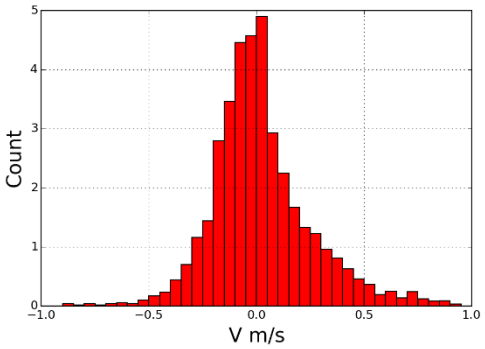

Figure A. 1295: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

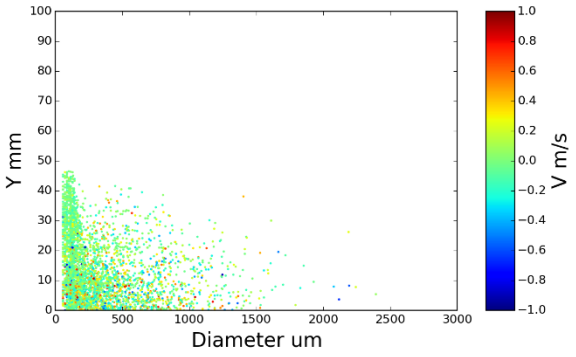

Figure A. 1293: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.3.1 Matched Only Droplets for .LB Image

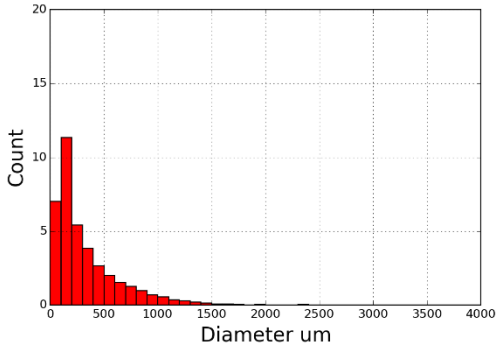

Figure A. 1296: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

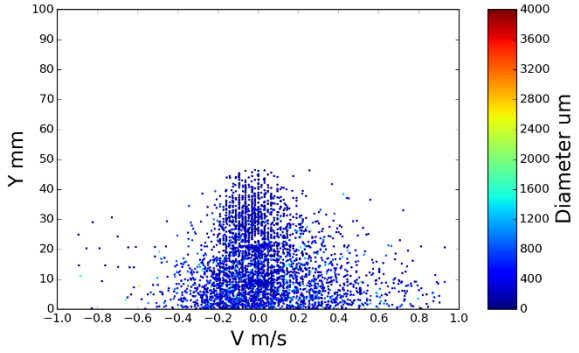

Figure A. 1299: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

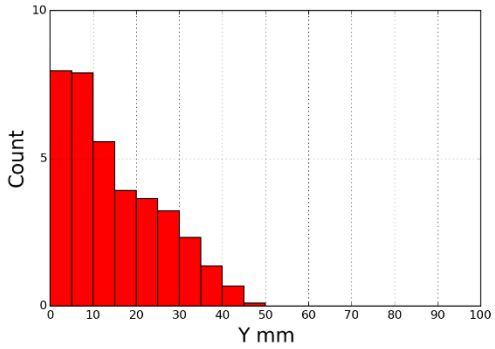

Figure A. 1297: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

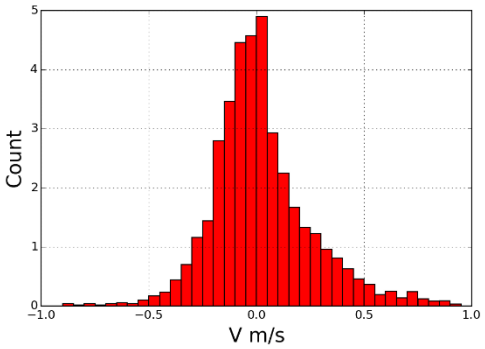

Figure A. 1300: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

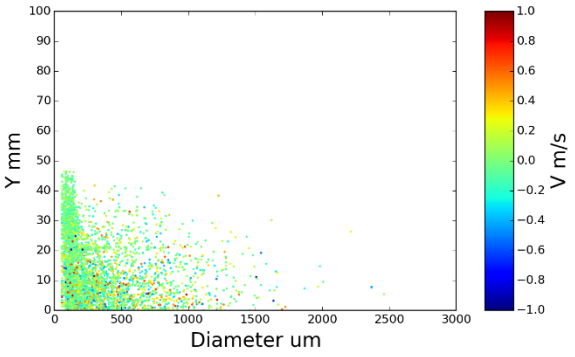

Figure A. 1298: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.3.2 Lens 50mm Mag 0_13x

A.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	65.71	65.71	128.6	3373	677.0	531.6	128.6	3417	667.7	523.5
20-40mm	62.16	61.99	128.6	3380	537.0	371.7	128.6	3157	537.1	369.2
40-60mm	12.04	12.32	128.6	2019	496.1	302.0	128.6	2188	486.8	304.1
60-80mm	0.41	0.41	128.6	1233	533.3	305.2	128.6	1336	535.7	299.7
80-100mm	0.01	0.01	192.9	192.9	192.9	0.0	192.9	192.9	192.9	0.0
All	140.33	140.44	128.6	3380	599.0	455.1	128.6	3417	593.7	449.1
			Height A (mm)				Height B (mm)			
Highest Particle			87.7492				87.7492			
Lowest Particle			10.0855				10.0855			

Table A. 138: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	36.83	128.6	3373	775.8	551.2	128.6	3417	760.9	540.4	-0.950	0.950	-0.070	0.290	-0.950	0.950	0.020	0.350
20-40mm	41.59	128.6	3380	597.7	367.1	128.6	3157	591.8	363.6	-0.950	0.950	-0.060	0.210	-0.950	0.950	0.010	0.310
40-60mm	9.18	128.6	2019	550.6	297.9	128.6	2188	546.3	301.6	-0.950	0.850	-0.050	0.140	-0.950	0.920	0.020	0.240
60-80mm	0.32	157.5	1233	610.7	295.0	128.6	1336	603.3	300.5	-0.170	0.120	-0.030	0.070	-0.260	0.600	0.070	0.190
80-100mm	0.01	192.9	192.9	192.9	0.0	192.9	192.9	192.9	0.0	-0.060	-0.060	-0.060	0.000	-0.000	-0.000	0.000	0.000
All	87.93	128.6	3380	667.4	457.5	128.6	3417	657.7	449.9	-0.950	0.950	-0.060	0.240	-0.950	0.950	0.020	0.320

Table A. 139: Matched Droplet Info

A.6.3.2 All Droplets for .LA Image

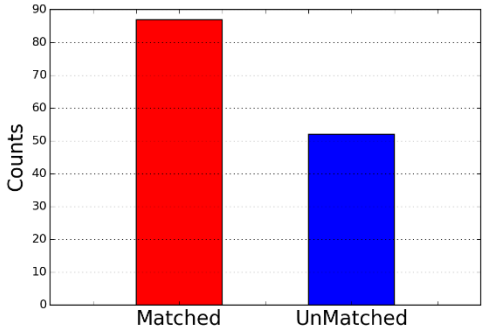

Figure A. 1301: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

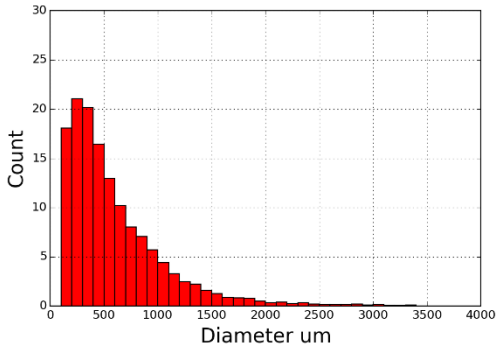

Figure A. 1302: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

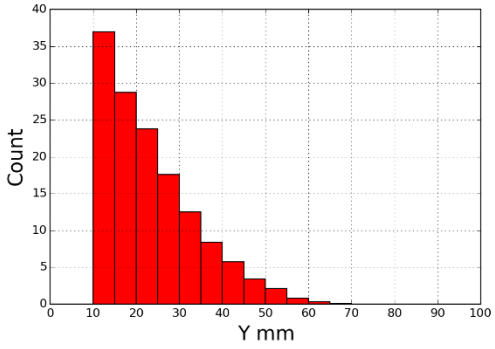

Figure A. 1303: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

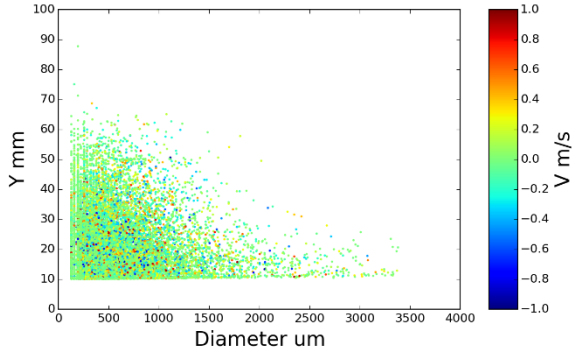

Figure A. 1304: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

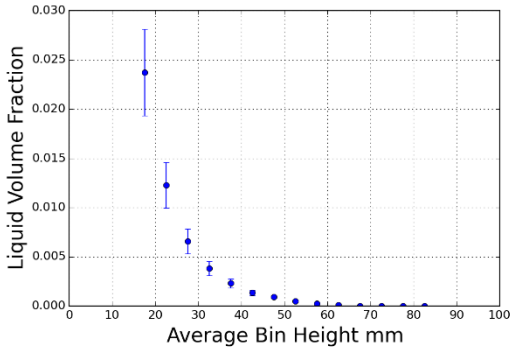

Figure A. 1305: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.2 All Droplets for .LB Image

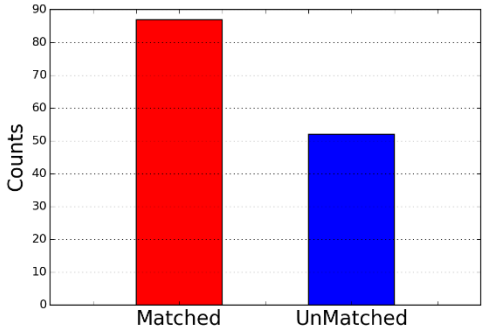

Figure A. 1306: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

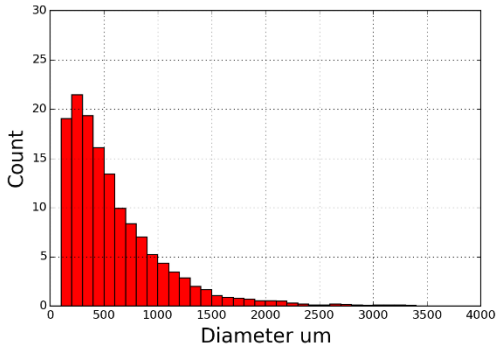

Figure A. 1307: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

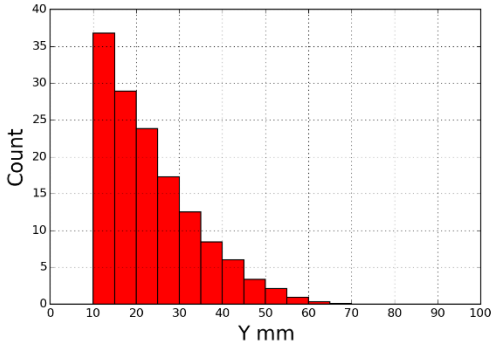

Figure A. 1308: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

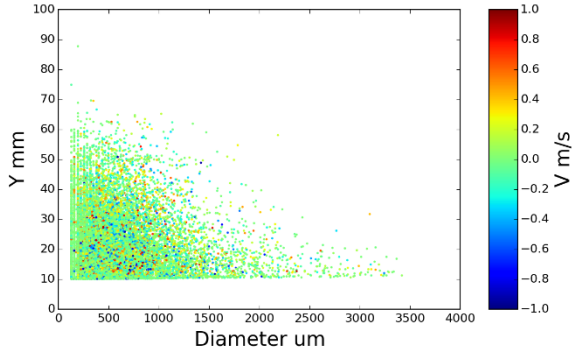

Figure A. 1309: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

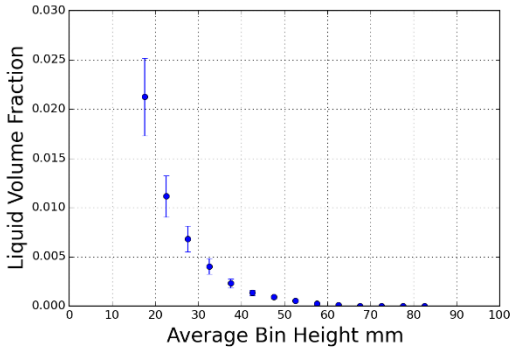

Figure A. 1310: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.2 Matched Only Droplets for .LA Image

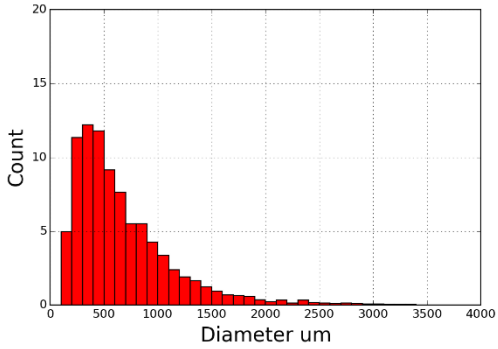

Figure A. 1311: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

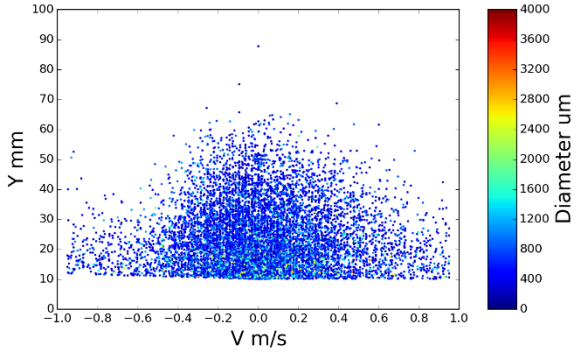

Figure A. 1314: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

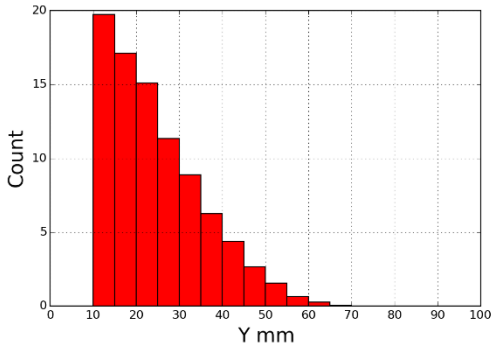

Figure A. 1312: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

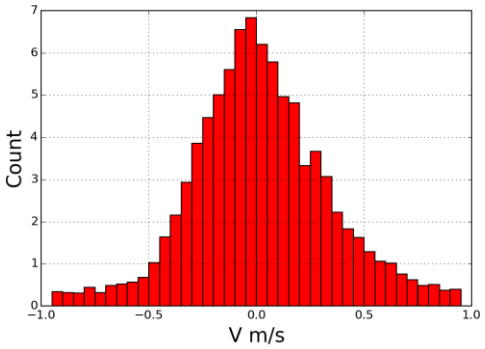

Figure A. 1315: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

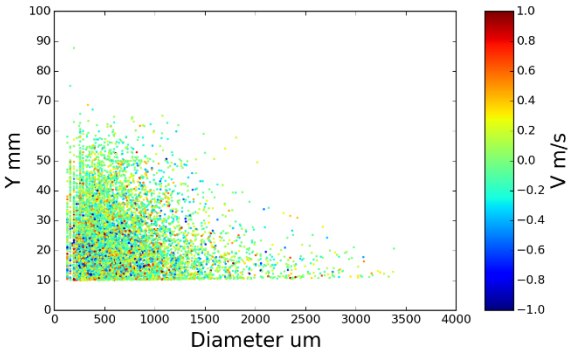

Figure A. 1313: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.3.2 Matched Only Droplets for .LB Image

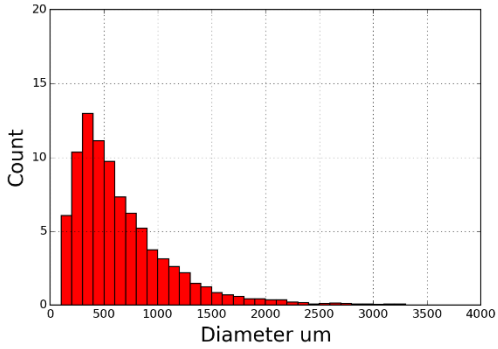

Figure A. 1316: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

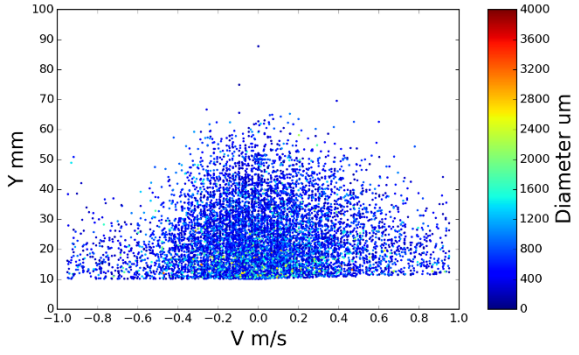

Figure A. 1319: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

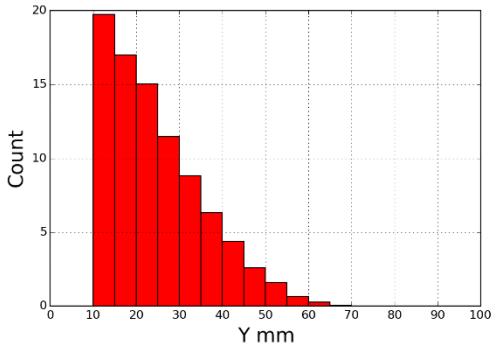

Figure A. 1317: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

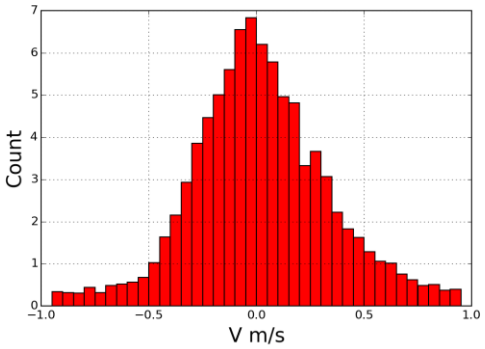

Figure A. 1320: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

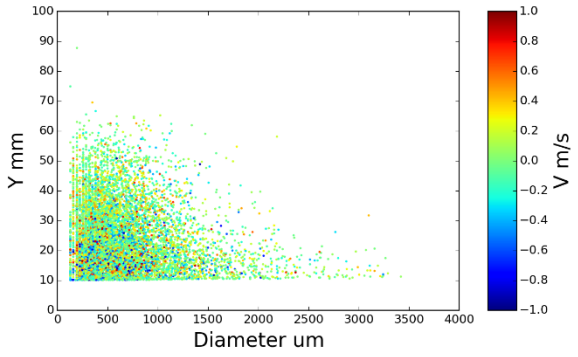

Figure A. 1318: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.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	66.67	67.21	128.6	3381	699.5	536.1	128.6	3417	700.5	548.1
20-40mm	57.64	57.84	128.6	3322	572.1	379.4	128.6	3154	572.2	380.4
40-60mm	8.8	8.86	128.6	1951	573.3	335.0	128.6	2258	568.0	334.4
60-80mm	0.48	0.45	128.6	1164	484.1	295.1	128.6	1302	509.9	313.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	133.59	134.36	128.6	3381	635.5	466.2	128.6	3417	635.9	473.8
			Height A (mm)				Height B (mm)			
Highest Particle			71.4244				71.1621			
Lowest Particle			10.0855				10.0855			

Table A. 140: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	36.73	128.6	3283	810.8	563.7	128.6	3404	794.6	558.9	-0.950	0.950	-0.060	0.300	-0.950	0.950	0.000	0.360
20-40mm	39.38	128.6	3322	643.5	387.0	128.6	3154	637.9	382.3	-0.950	0.950	-0.060	0.200	-0.950	0.950	-0.000	0.300
40-60mm	6.89	128.6	1951	645.8	327.1	128.6	2258	636.6	327.1	-0.400	0.890	-0.050	0.100	-0.730	0.920	-0.010	0.220
60-80mm	0.36	192.9	1164	555.0	298.3	192.9	1302	567.8	315.8	-0.280	0.260	-0.070	0.100	-0.320	0.590	0.020	0.220
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	83.36	128.6	3322	717.0	476.4	128.6	3404	706.3	471.0	-0.950	0.950	-0.060	0.240	-0.950	0.950	-0.000	0.320

Table A. 141: Matched Droplet Info

A.6.3.2 All Droplets for .LA Image

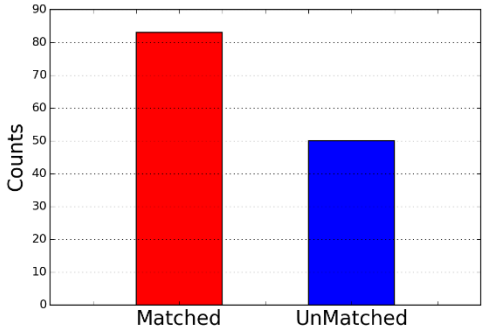

Figure A. 1321: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

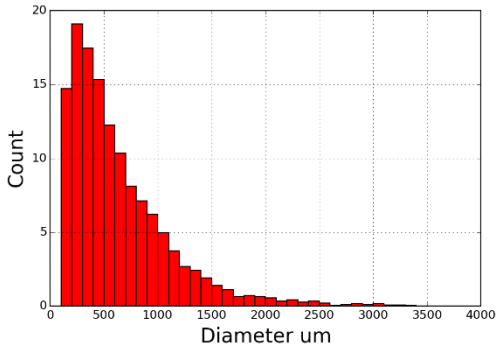

Figure A. 1322: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

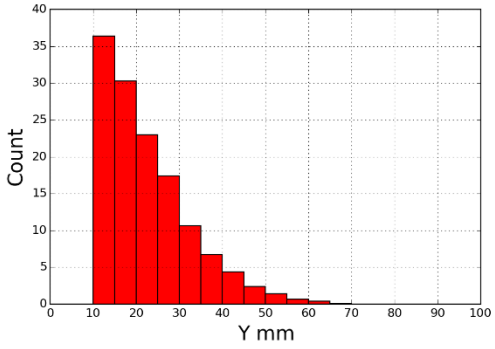

Figure A. 1323: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

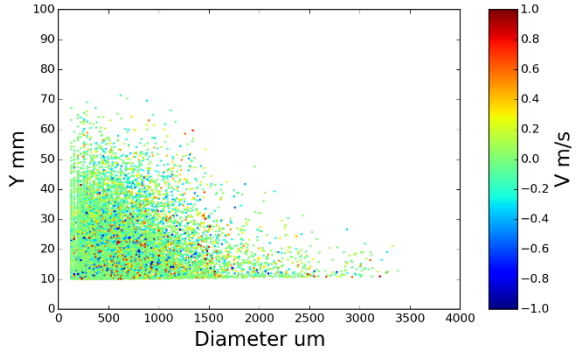

Figure A. 1324: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

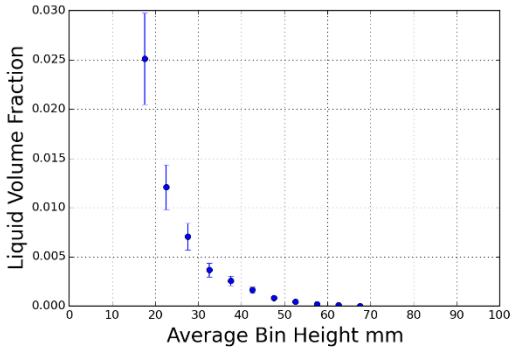

Figure A. 1325: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.2 All Droplets for .LB Image

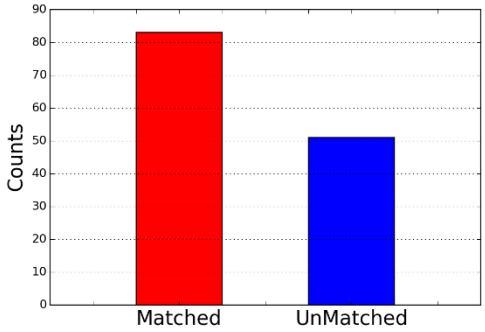

Figure A. 1326: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

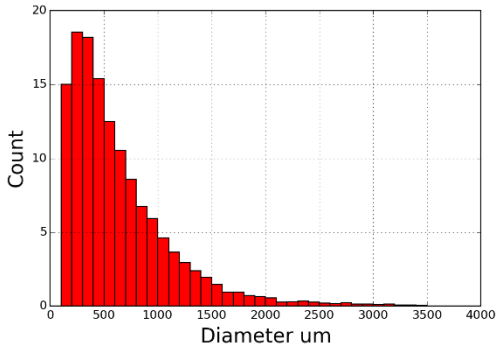

Figure A. 1327: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

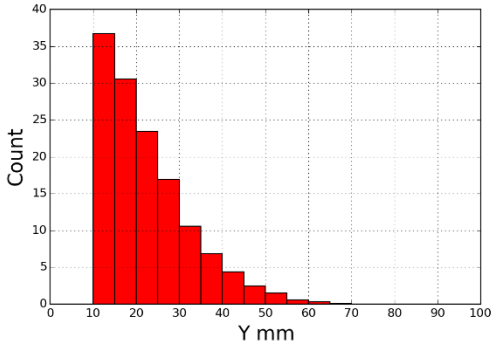

Figure A. 1328: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

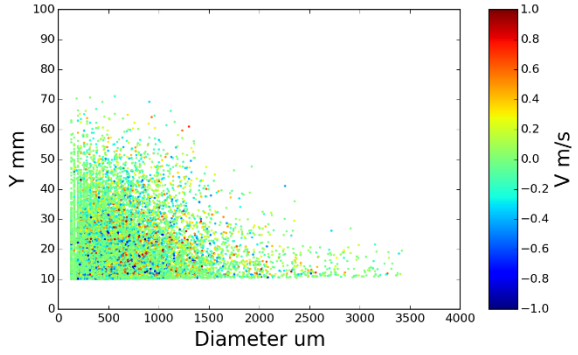

Figure A. 1329: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

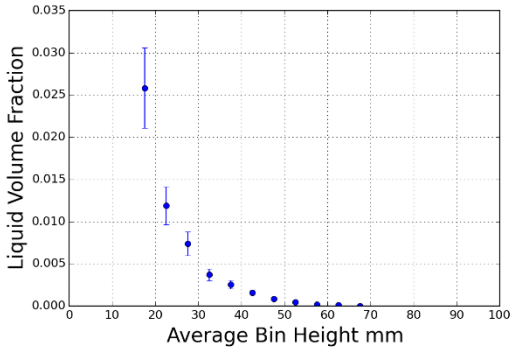

Figure A. 1330: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.2 Matched Only Droplets for .LA Image

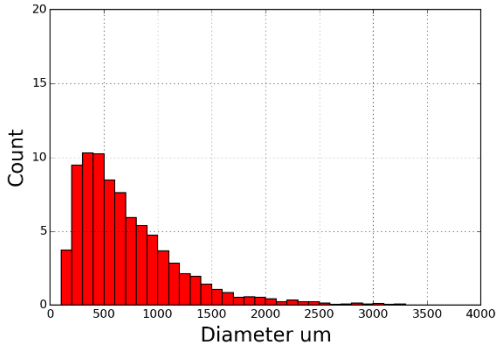

Figure A. 1331: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

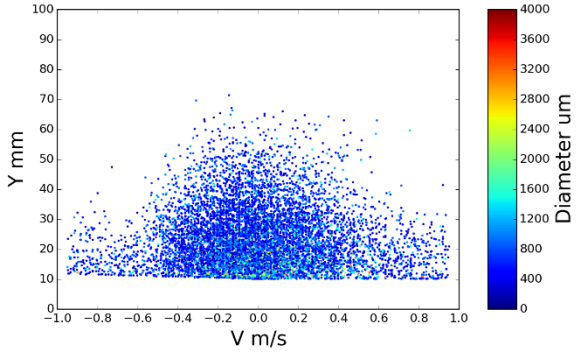

Figure A. 1334: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

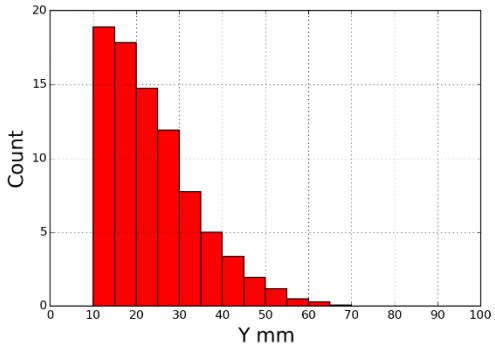

Figure A. 1332: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

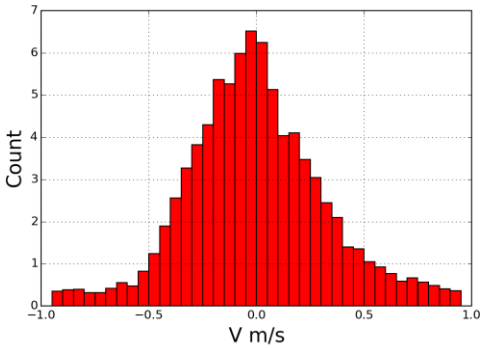

Figure A. 1335: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

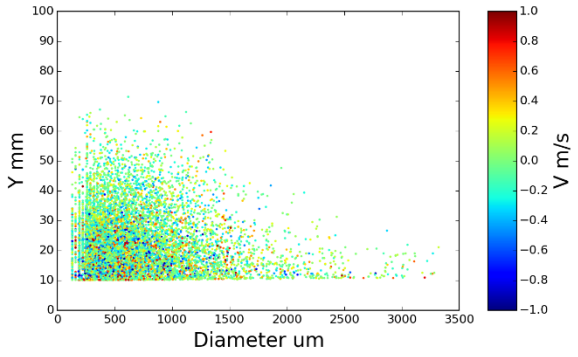

Figure A. 1333: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.3.2 Matched Only Droplets for .LB Image

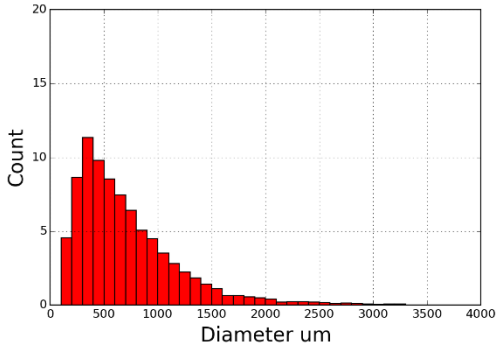

Figure A. 1336: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

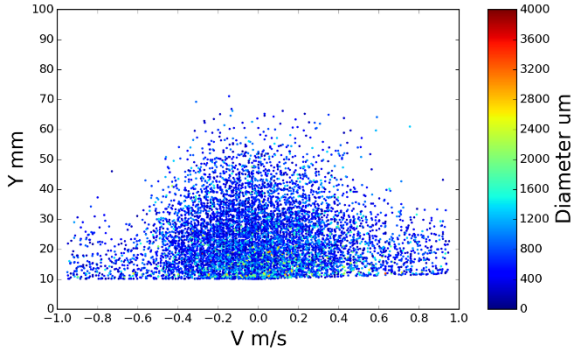

Figure A. 1339: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

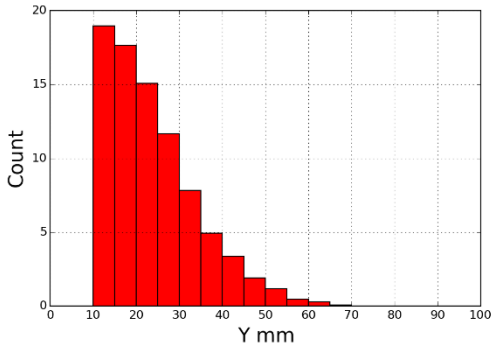

Figure A. 1337: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

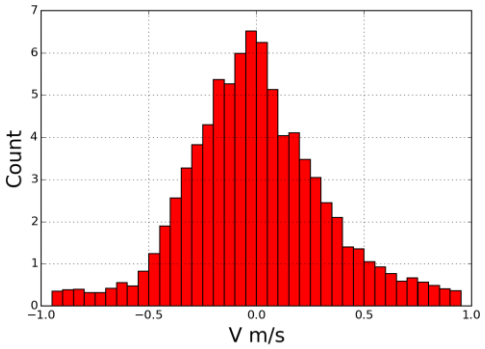

Figure A. 1340: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

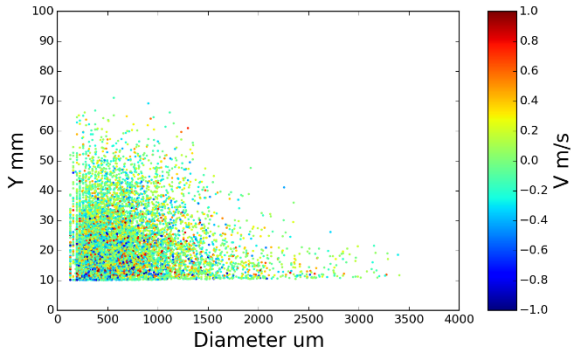

Figure A. 1338: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.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	60.92	60.46	128.6	3410	713.4	546.9	128.6	3400	719.1	550.0
20-40mm	53.01	53.29	128.6	3390	584.8	407.3	128.6	3339	587.3	415.0
40-60mm	8.24	8.24	128.6	2053	595.8	358.0	128.6	2482	600.7	367.9
60-80mm	0.31	0.29	128.6	2463	694.8	482.6	157.5	2672	720.6	518.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	122.48	122.28	128.6	3410	649.7	483.5	128.6	3400	653.7	488.5
			Height A (mm)				Height B (mm)			
Highest Particle			76.5738				70.9109			
Lowest Particle			10.0855				10.0855			

Table A. 142: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	31.37	128.6	3363	845.0	567.7	128.6	3400	830.4	555.7	-0.950	0.950	-0.070	0.300	-0.940	0.950	-0.020	0.350
20-40mm	34.81	128.6	3186	667.4	415.6	128.6	3270	660.6	413.8	-0.950	0.950	-0.070	0.200	-0.940	0.950	-0.040	0.300
40-60mm	5.99	128.6	2053	681.7	354.7	128.6	2047	680.1	356.8	-0.760	0.870	-0.070	0.140	-0.860	0.920	-0.040	0.230
60-80mm	0.22	257.2	2463	853.5	476.8	287.5	2672	873.2	514.1	-0.390	0.110	-0.100	0.090	-0.340	0.700	0.040	0.240
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	72.39	128.6	3363	746.1	491.4	128.6	3400	736.8	484.5	-0.950	0.950	-0.070	0.240	-0.940	0.950	-0.030	0.320

Table A. 143: Matched Droplet Info

A.6.3.2 All Droplets for .LA Image

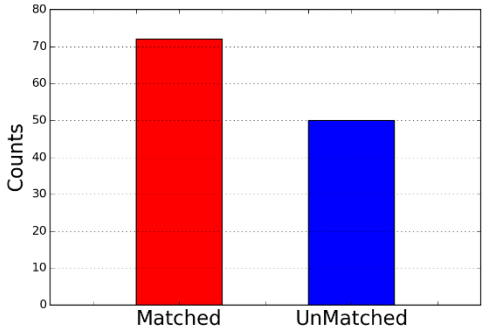

Figure A. 1341: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

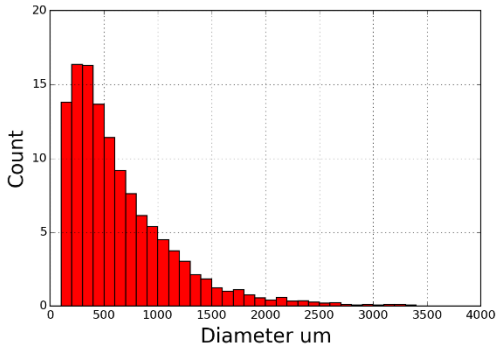

Figure A. 1342: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

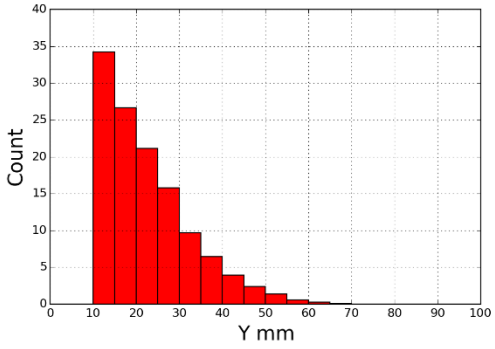

Figure A. 1343: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

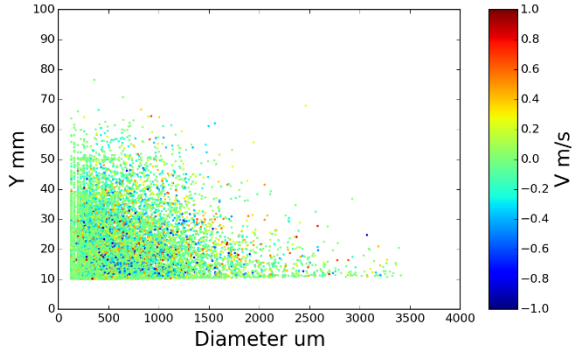

Figure A. 1344: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

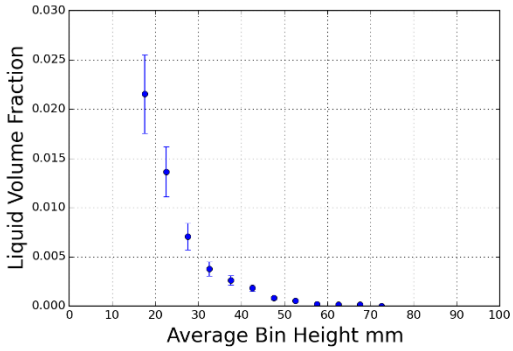

Figure A. 1345: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.2 All Droplets for .LB Image

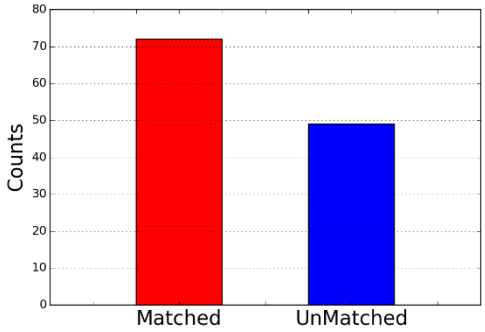

Figure A. 1346: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

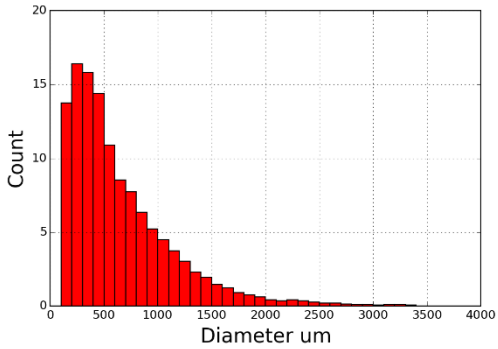

Figure A. 1347: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

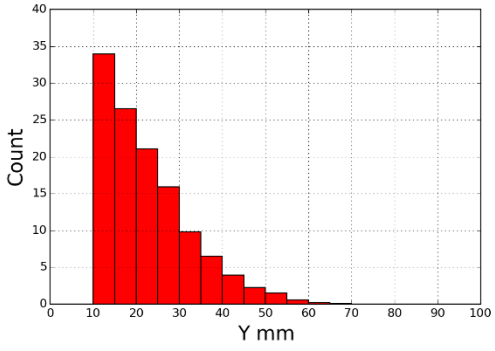

Figure A. 1348: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

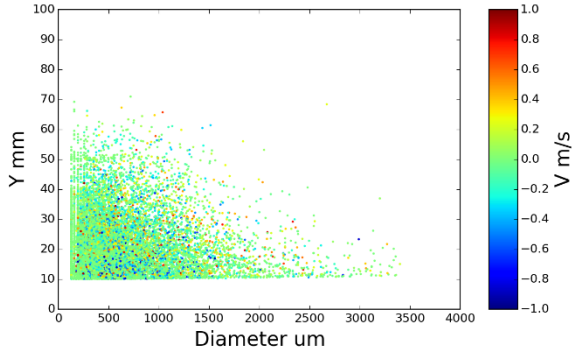

Figure A. 1349: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

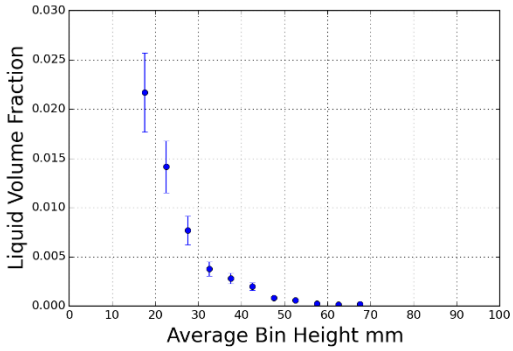

Figure A. 1350: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.2 Matched Only Droplets for .LA Image

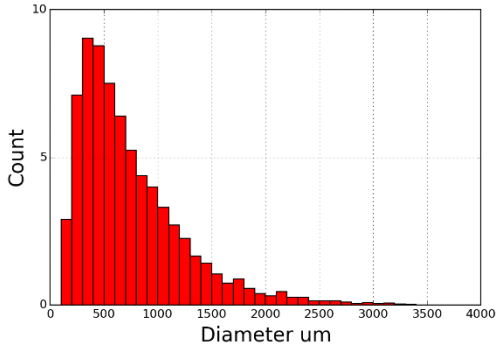

Figure A. 1351: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

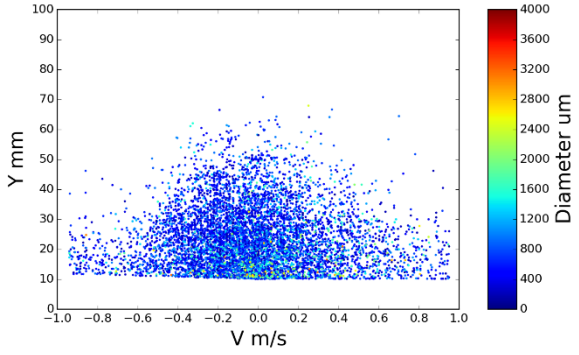

Figure A. 1354: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

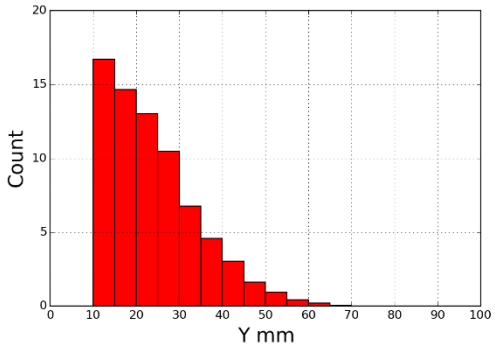

Figure A. 1352: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

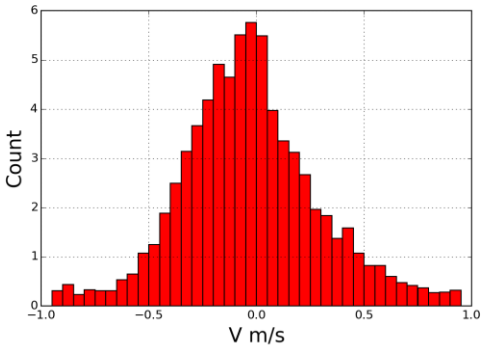

Figure A. 1355: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

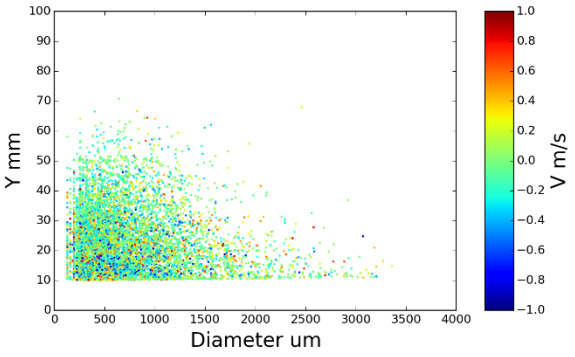

Figure A. 1353: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.3.2 Matched Only Droplets for .LB Image

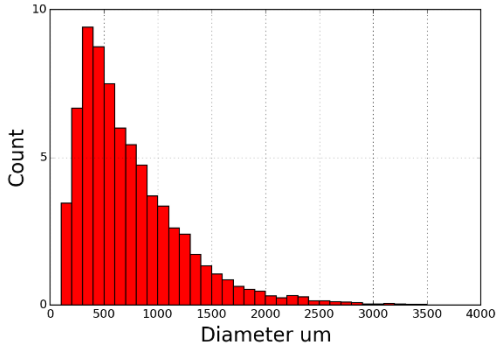

Figure A. 1356: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

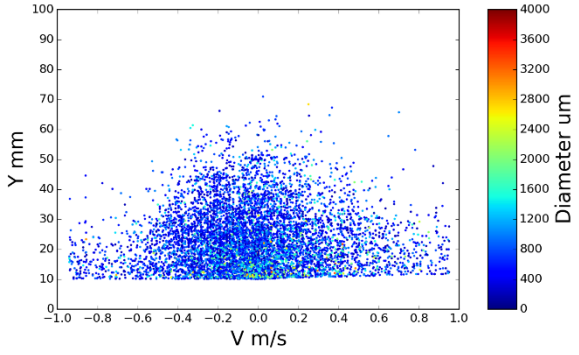

Figure A. 1359: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

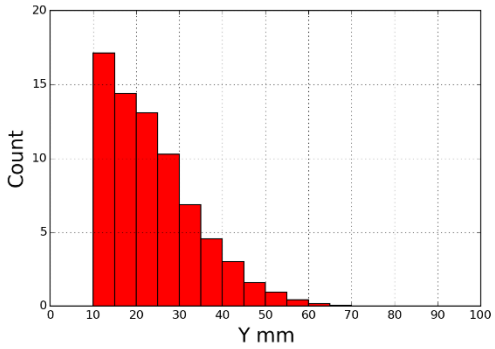

Figure A. 1357: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

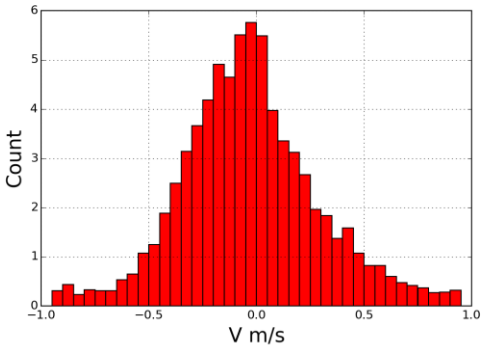

Figure A. 1360: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

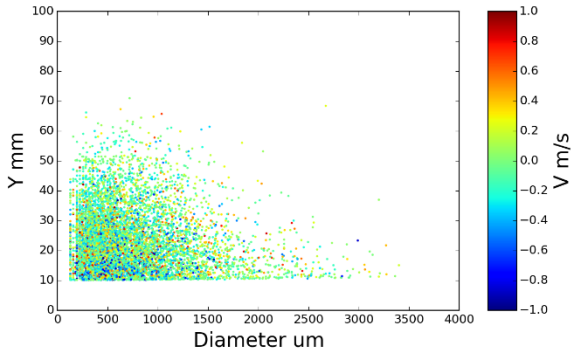

Figure A. 1358: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.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	56.09	55.79	128.6	3418	700.9	557.4	128.6	3406	704.4	560.2
20-40mm	49.9	50.25	128.6	3221	563.4	397.0	128.6	3362	561.9	398.5
40-60mm	9.13	9.11	128.6	2365	489.8	325.3	128.6	2344	491.3	320.5
60-80mm	0.68	0.62	128.6	1106	474.2	252.0	128.6	1166	525.7	260.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	115.8	115.77	128.6	3418	623.7	482.8	128.6	3406	624.8	484.6
			Height A (mm)				Height B (mm)			
Highest Particle			75.2421				76.0551			
Lowest Particle			10.0855				10.0855			

Table A. 144: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	26.4	128.6	3418	856.2	603.6	128.6	3406	830.8	591.9	-0.950	0.950	-0.070	0.310	-0.940	0.950	-0.030	0.360
20-40mm	31.55	128.6	3092	649.0	403.6	128.6	3362	643.8	403.9	-0.940	0.950	-0.090	0.210	-0.950	0.940	-0.030	0.300
40-60mm	6.4	128.6	2365	572.9	331.0	128.6	2344	566.5	321.0	-0.850	0.850	-0.100	0.130	-0.940	0.890	-0.020	0.230
60-80mm	0.47	192.9	1106	576.6	220.6	192.9	1166	591.9	233.8	-0.290	0.040	-0.090	0.090	-0.470	0.330	-0.040	0.160
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	64.82	128.6	3418	725.4	501.1	128.6	3406	712.6	493.5	-0.950	0.950	-0.080	0.250	-0.950	0.950	-0.030	0.320

Table A. 145: Matched Droplet Info

A.6.3.2 All Droplets for .LA Image

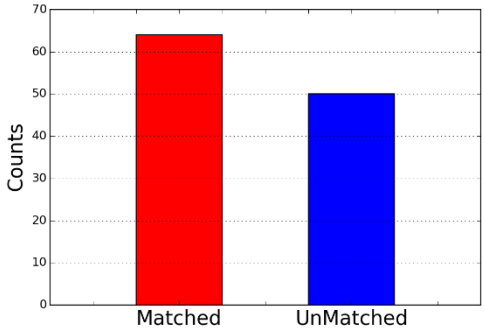

Figure A. 1361: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

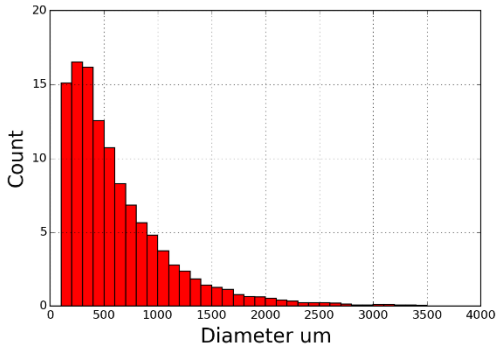

Figure A. 1362: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

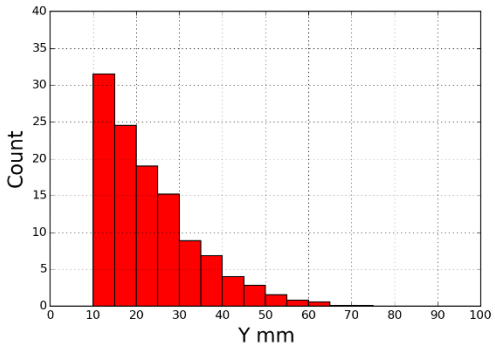

Figure A. 1363: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

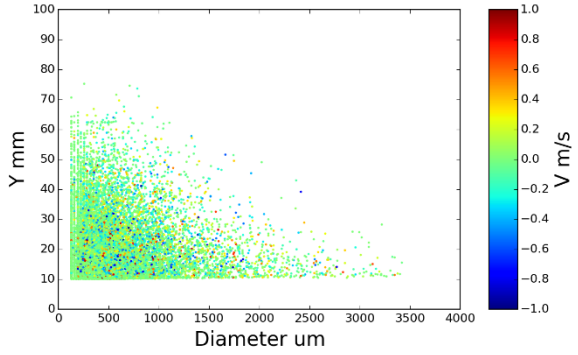

Figure A. 1364: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

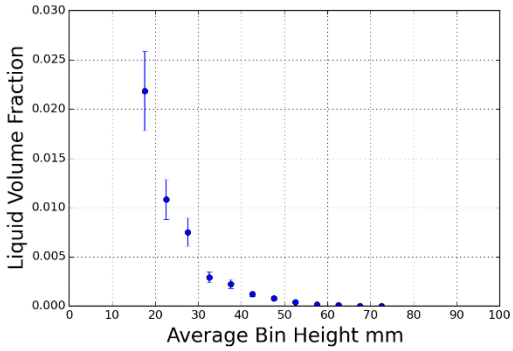

Figure A. 1365: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.2 All Droplets for .LB Image

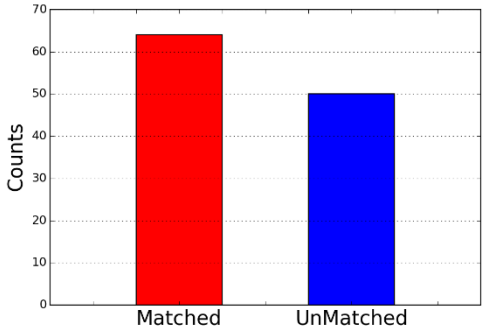

Figure A. 1366: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

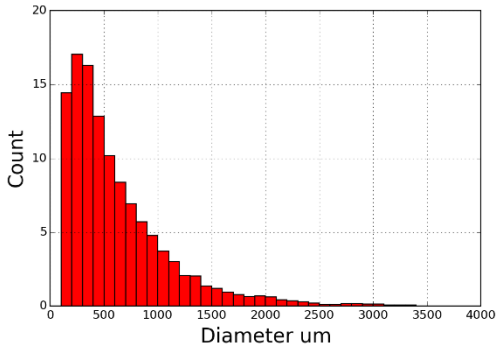

Figure A. 1367: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

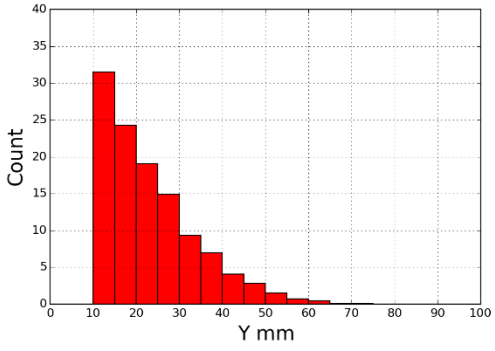

Figure A. 1368: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

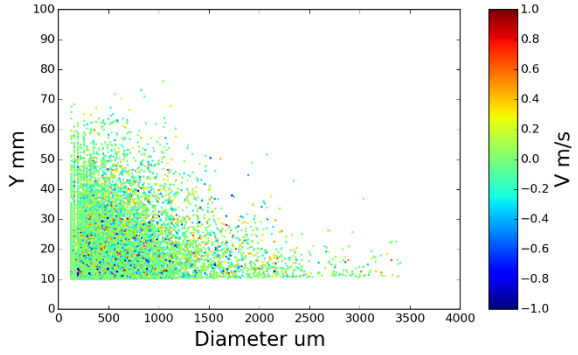

Figure A. 1369: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

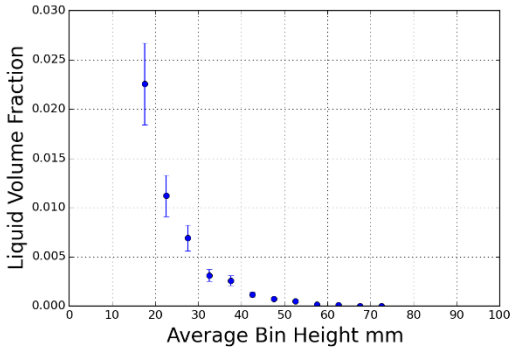

Figure A. 1370: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.2 Matched Only Droplets for .LA Image

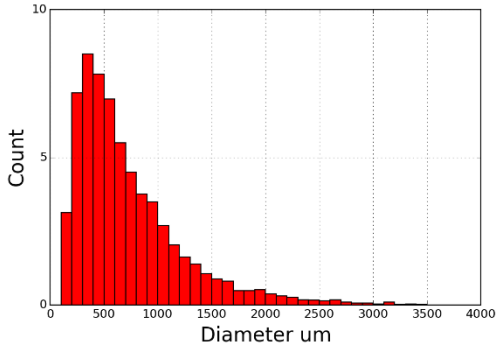

Figure A. 1371: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

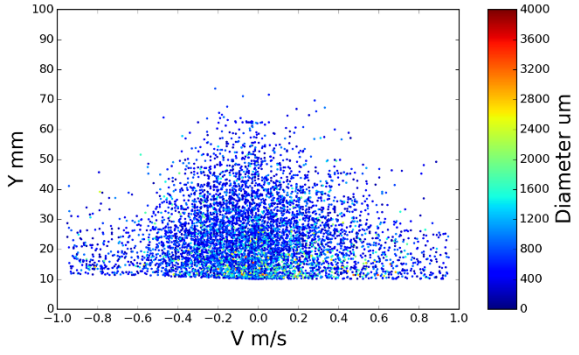

Figure A. 1374: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

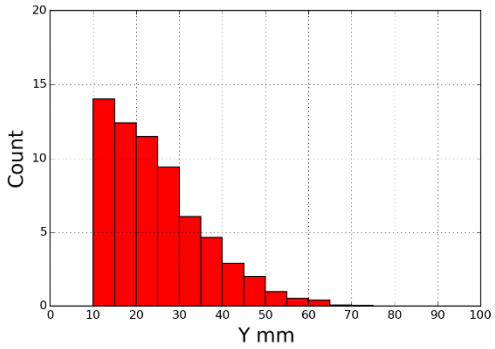

Figure A. 1372: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

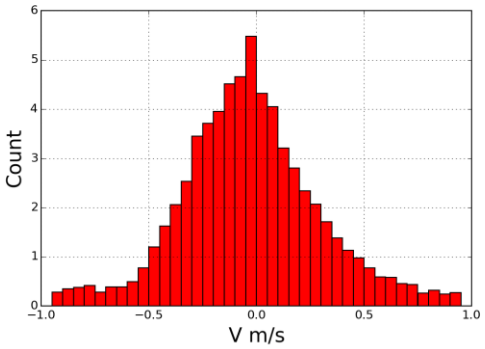

Figure A. 1375: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

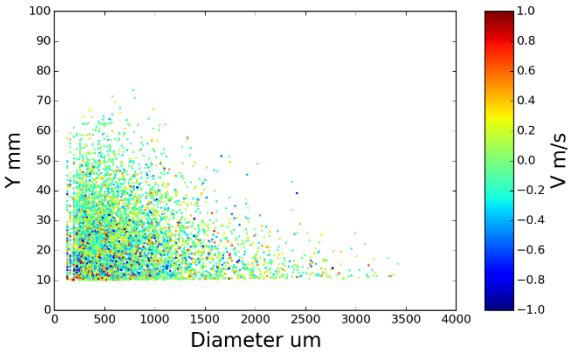

Figure A. 1373: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.3.2 Matched Only Droplets for .LB Image

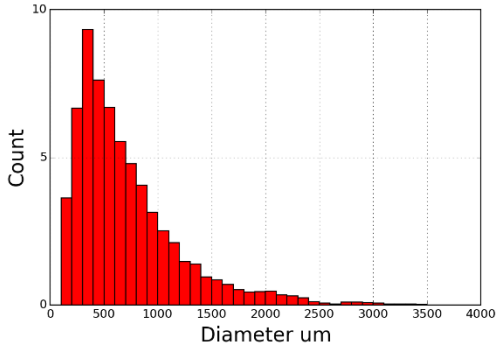

Figure A. 1376: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

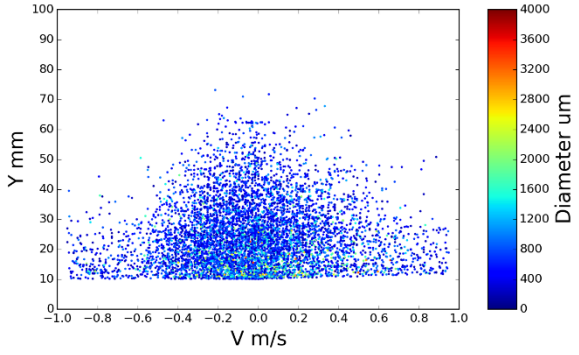

Figure A. 1379: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

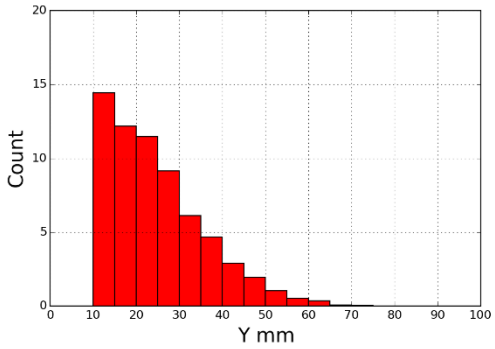

Figure A. 1377: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

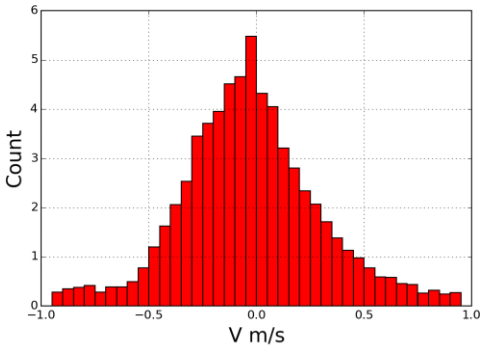

Figure A. 1380: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

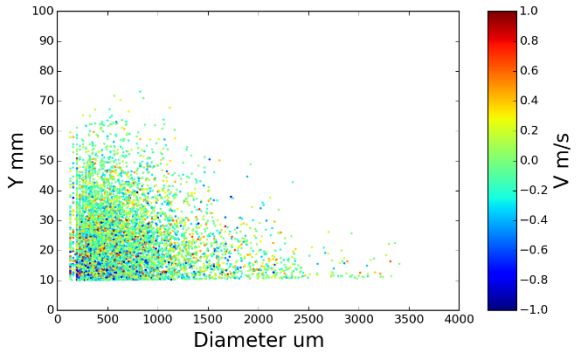

Figure A. 1378: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.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	47.49	47.44	128.6	3414	665.5	534.1	128.6	3401	664.6	540.3
20-40mm	40.13	41.19	128.6	3247	542.4	396.9	128.6	3345	542.5	398.4
40-60mm	9.16	9.08	128.6	2054	477.1	342.1	128.6	2993	481.1	345.6
60-80mm	0.46	0.46	128.6	1110	479.3	269.7	128.6	1324	462.7	273.0
80-100mm	0.01	0.01	571.5	571.5	571.5	0.0	564.2	564.2	564.2	0.0
All	97.25	98.18	128.6	3414	596.1	469.7	128.6	3401	595.5	473.1
			Height A (mm)				Height B (mm)			
Highest Particle			80.4875				80.5594			
Lowest Particle			10.0855				10.0855			

Table A. 146: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	21.38	128.6	3414	795.3	576.6	128.6	3326	766.0	555.9	-0.950	0.940	-0.090	0.340	-0.950	0.950	-0.000	0.390
20-40mm	23.73	128.6	3247	634.5	410.4	128.6	3345	627.3	412.3	-0.950	0.930	-0.090	0.200	-0.950	0.930	-0.010	0.310
40-60mm	6.21	128.6	2054	565.0	346.1	128.6	2351	555.0	344.0	-0.910	0.920	-0.100	0.140	-0.730	0.800	-0.020	0.240
60-80mm	0.33	157.5	1010	525.2	223.6	157.5	1084	521.7	225.9	-0.350	0.190	-0.090	0.130	-0.450	0.420	-0.040	0.230
80-100mm	0.01	571.5	571.5	571.5	0.0	564.2	564.2	564.2	0.0	-0.160	-0.160	-0.160	0.000	0.040	0.040	0.040	0.000
All	51.66	128.6	3414	692.0	487.6	128.6	3345	675.3	476.2	-0.950	0.940	-0.090	0.260	-0.950	0.950	-0.010	0.340

Table A. 147: Matched Droplet Info

A.6.3.2 All Droplets for .LA Image

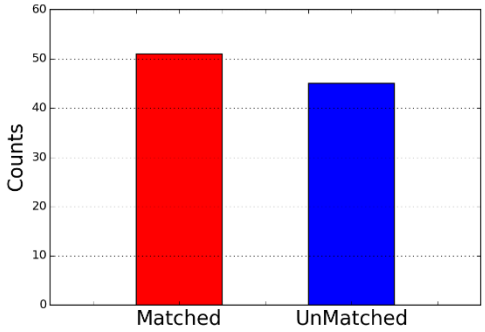

Figure A. 1381: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

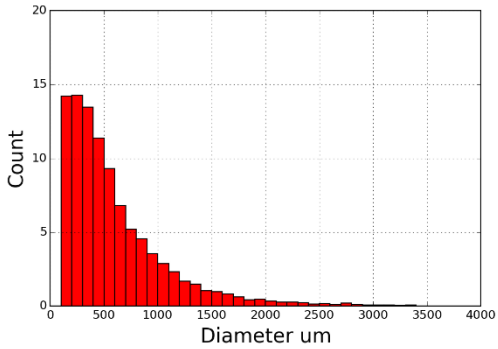

Figure A. 1382: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

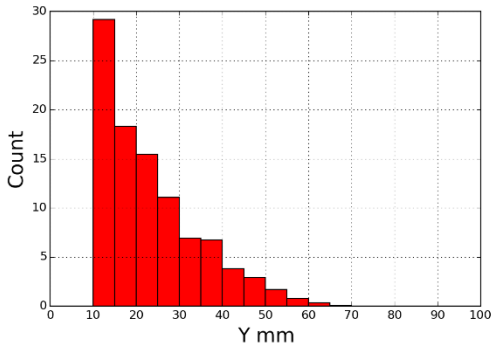

Figure A. 1383: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

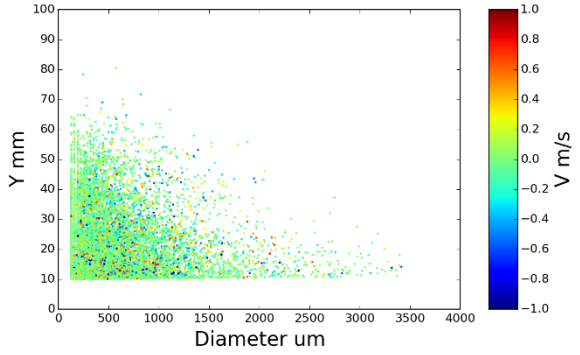

Figure A. 1384: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

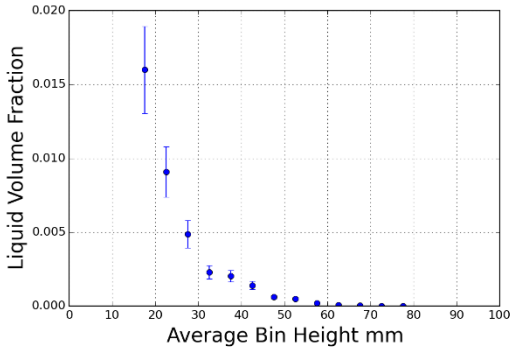

Figure A. 1385: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.2 All Droplets for .LB Image

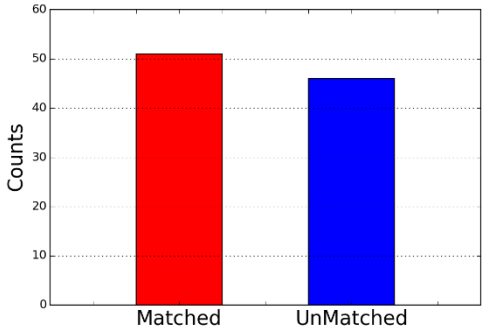

Figure A. 1386: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

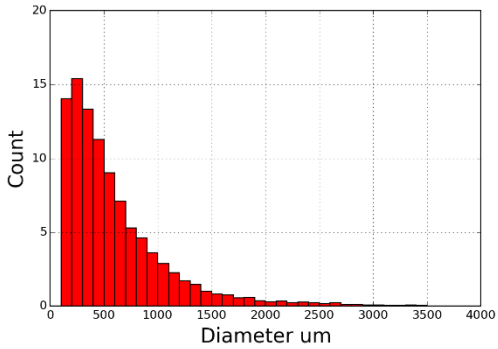

Figure A. 1387: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

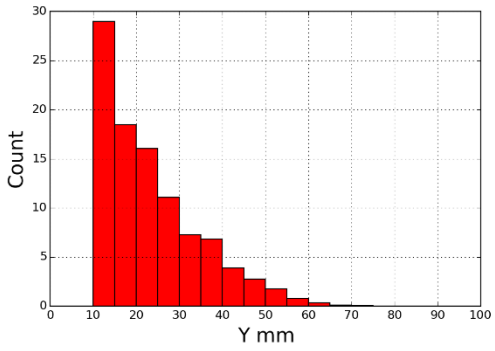

Figure A. 1388: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

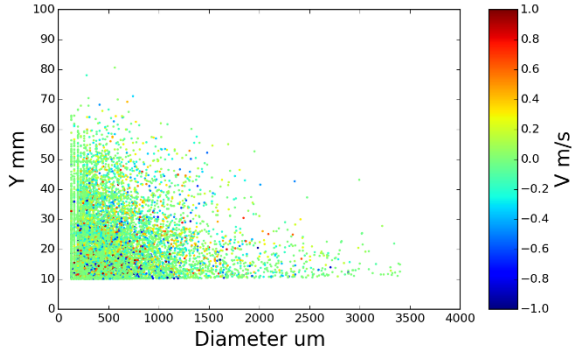

Figure A. 1389: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

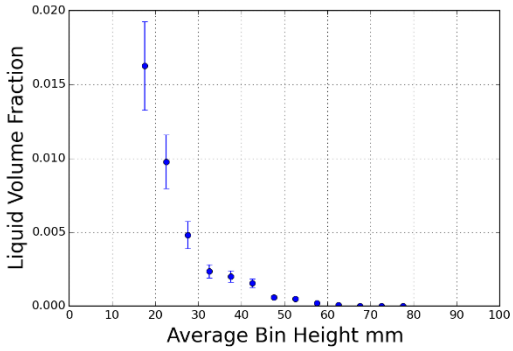

Figure A. 1390: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.3.2 Matched Only Droplets for .LA Image

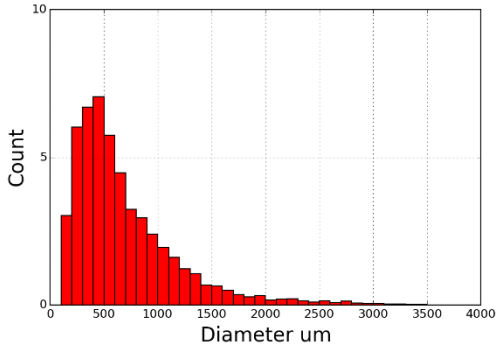

Figure A. 1391: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

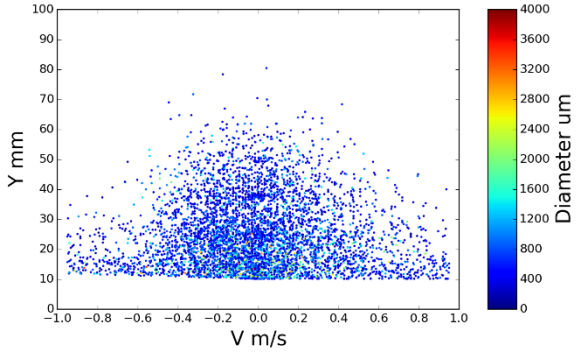

Figure A. 1394: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

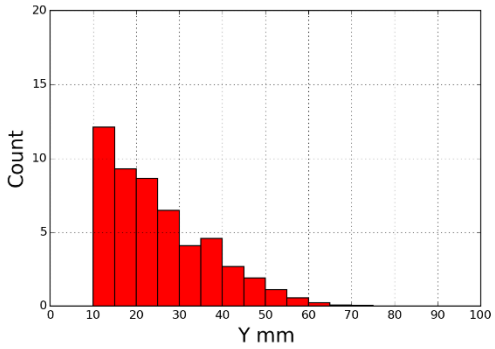

Figure A. 1392: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

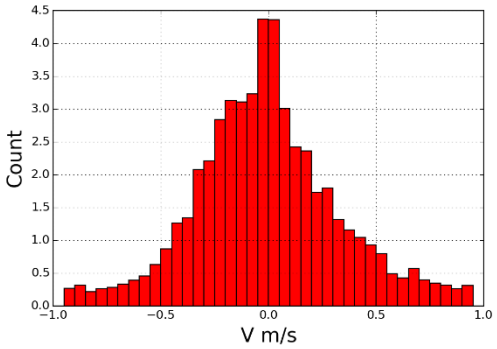

Figure A. 1395: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

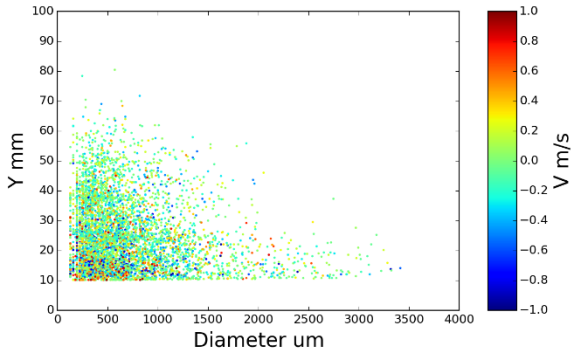

Figure A. 1393: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.3.2 Matched Only Droplets for .LB Image

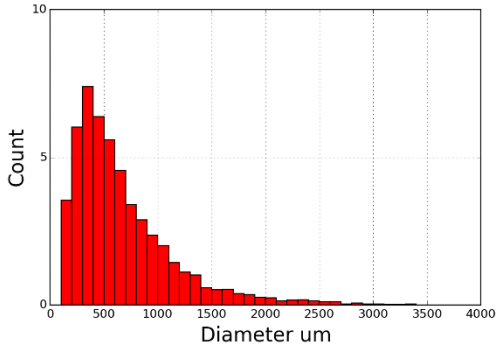

Figure A. 1396: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

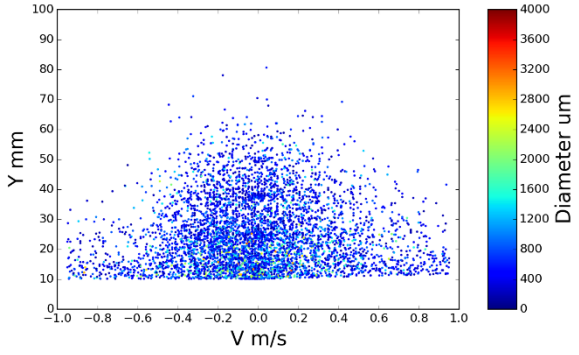

Figure A. 1399: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

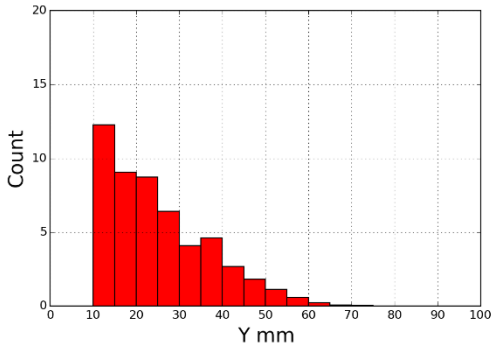

Figure A. 1397: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

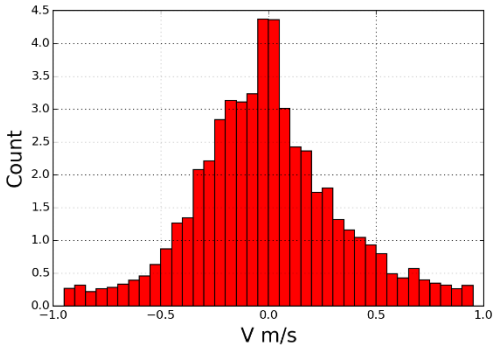

Figure A. 1400: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

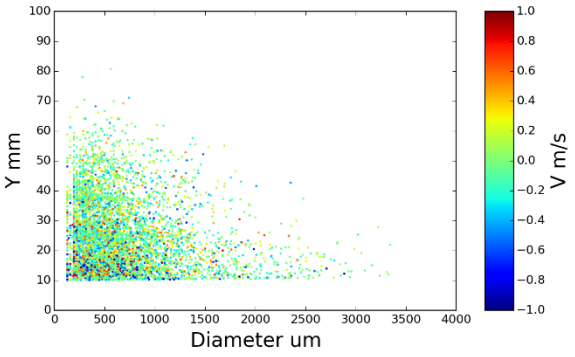

Figure A. 1398: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4 Liquid Level 4

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	23934 / 3.016
Ref Mass Flow (lb/hr) / (kg/s)	1625 / 0.205
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	15099 / 20.478
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	7061 / 22.27
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.0 / 12.79
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	55.2 / 12.88
Total Bundle Q (Btu/hr) / (kW)	156879 / 45.98
Total Bundle & Preboiler Q (Btu/hr) / (kW)	156879 / 45.98
Top Two Rows HTC Ratio	0.987
Bundle Inlet Quality	0.00
Bundle Exit Quality	0.04

Table A. 148: Thermal Conditions

A.6.4.1 Lens 100mm Mag 0_29x

A.6.4.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	34.23	35.08	57.2	3032	255.7	261.7	57.2	2765	251.4	256.2
20-40mm	10.7	10.8	57.2	1611	133.7	138.8	57.2	1590	131.1	140.6
40-60mm	0.94	0.9	57.2	566.1	92.3	56.4	57.2	516.1	95.4	52.6
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	49.3	50.16	57.2	3032	228.4	244.5	57.2	2765	225.4	241.3
			Height A (mm)				Height B (mm)			
Highest Particle			46.7315				46.9218			
Lowest Particle			-1.0402				-1.0402			

Table A. 149: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	24.94	57.2	3032	305.9	278.8	57.2	2765	303.4	277.4	-0.930	0.890	-0.050	0.110	-0.890	0.950	0.030	0.200
20-40mm	6.45	57.2	1611	160.7	167.1	57.2	1590	155.9	166.1	-0.440	0.900	-0.040	0.080	-0.770	0.380	0.010	0.110
40-60mm	0.39	57.2	566.1	109.3	81.5	57.2	516.1	110.4	73.8	-0.190	0.060	-0.040	0.050	-0.220	0.140	-0.030	0.080
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	34.18	57.2	3032	278.6	267.3	57.2	2765	276.2	267.0	-0.930	0.900	-0.050	0.110	-0.890	0.950	0.030	0.190

Table A. 150: Matched Droplet Info

A.6.4.1 All Droplets for .LA Image

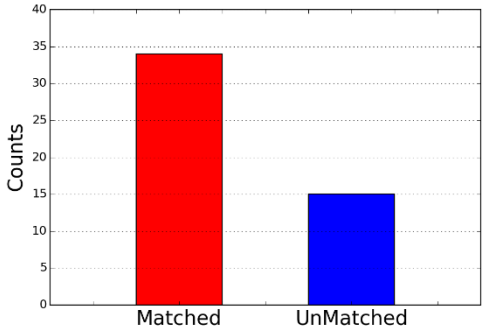

Figure A. 1401: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

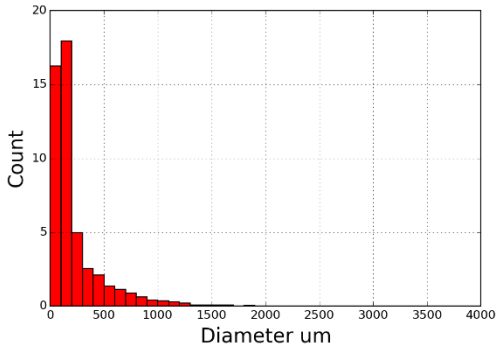

Figure A. 1402: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

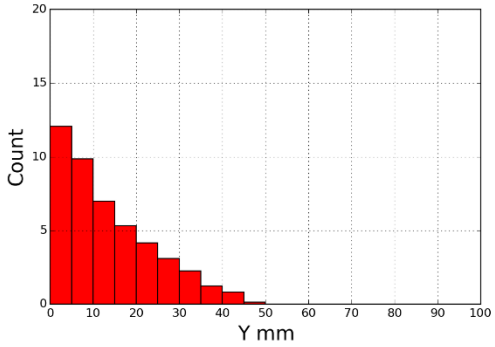

Figure A. 1403: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

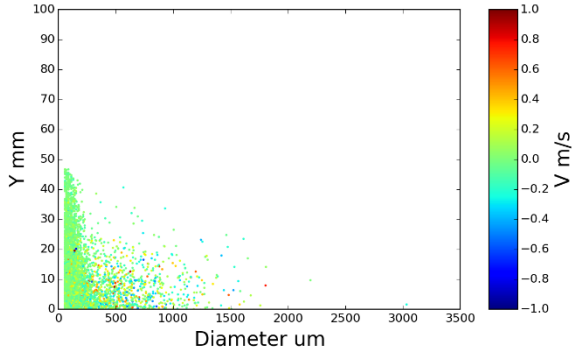

Figure A. 1404: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

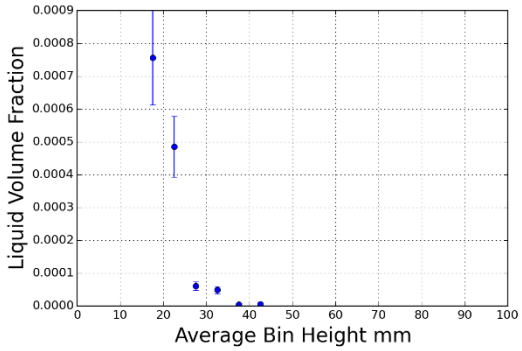

Figure A. 1405: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 All Droplets for .LB Image

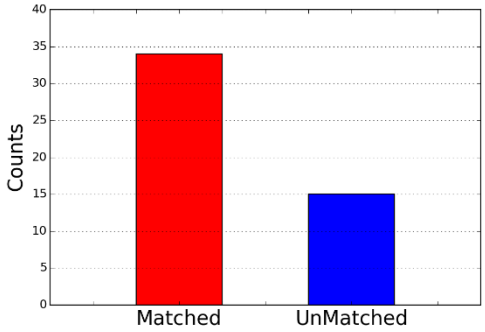

Figure A. 1406: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

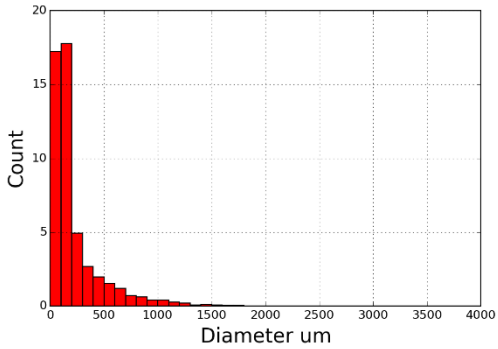

Figure A. 1407: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

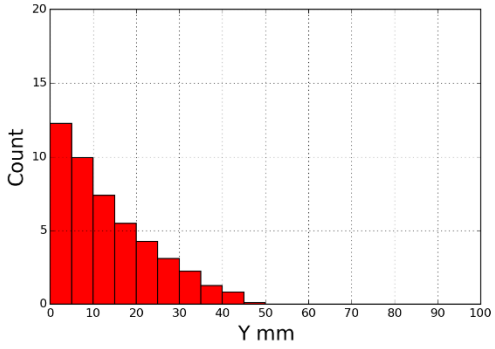

Figure A. 1408: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

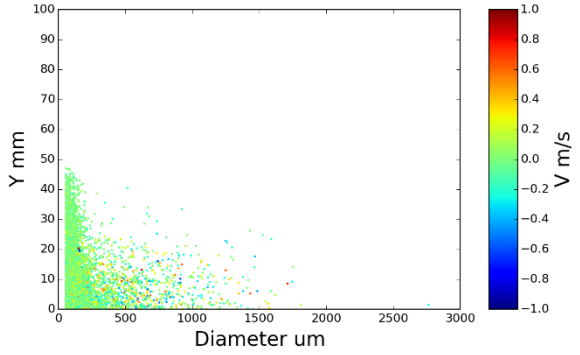

Figure A. 1409: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

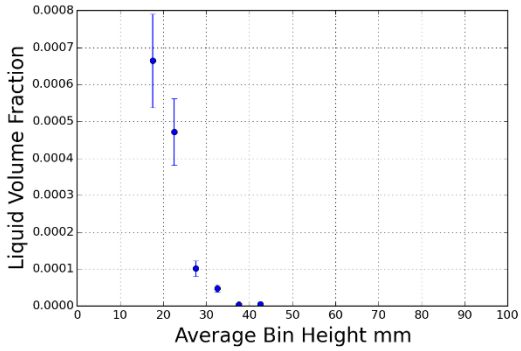

Figure A. 1410: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 Matched Only Droplets for .LA Image

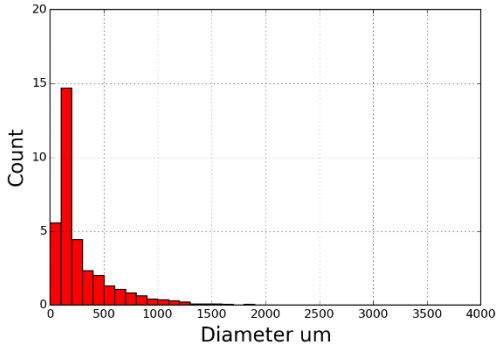

Figure A. 1411: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

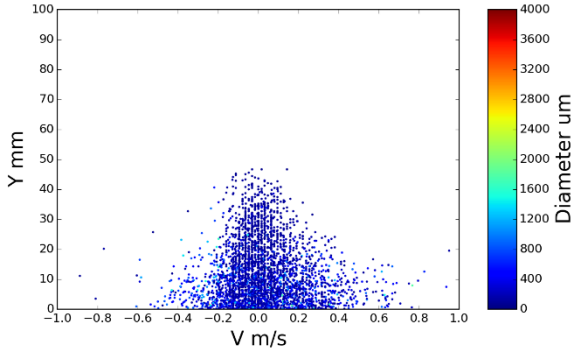

Figure A. 1414: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

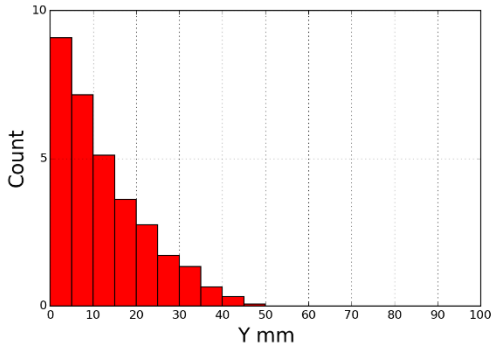

Figure A. 1412: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

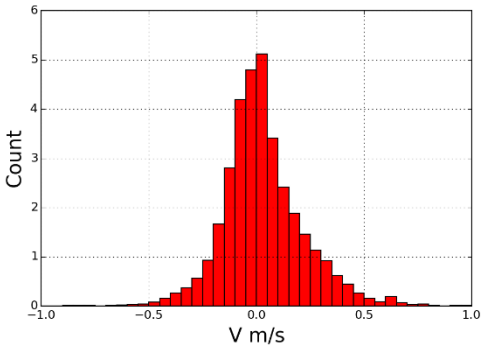

Figure A. 1415: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

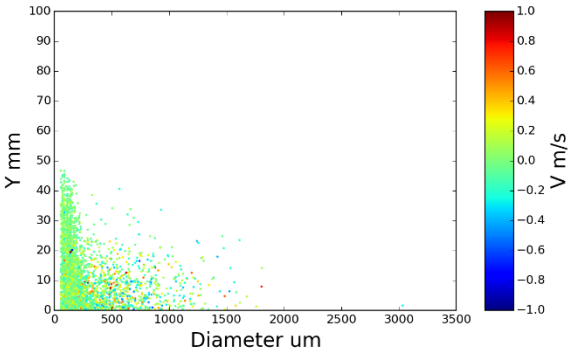

Figure A. 1413: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 Matched Only Droplets for .LB Image

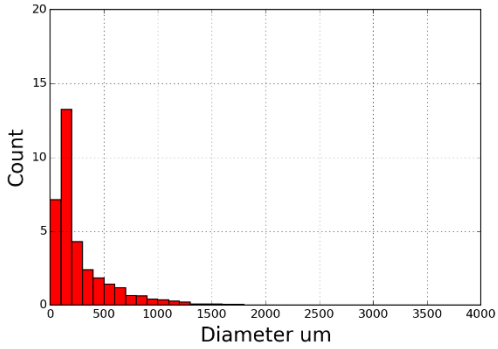

Figure A. 1416: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

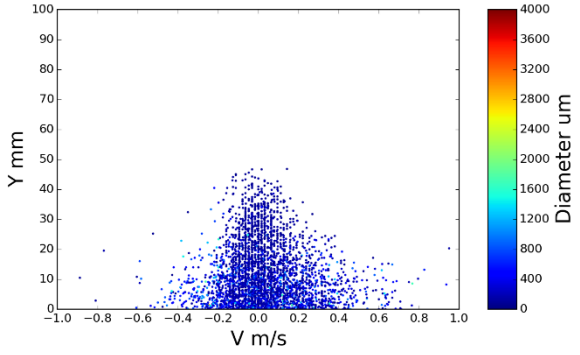

Figure A. 1419: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

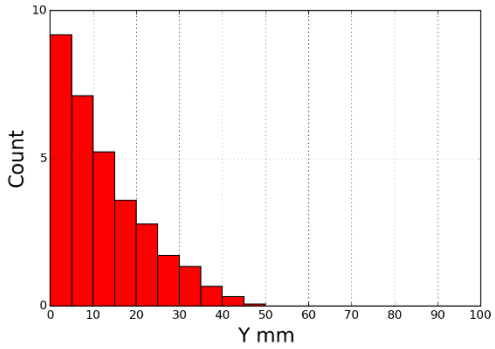

Figure A. 1417: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

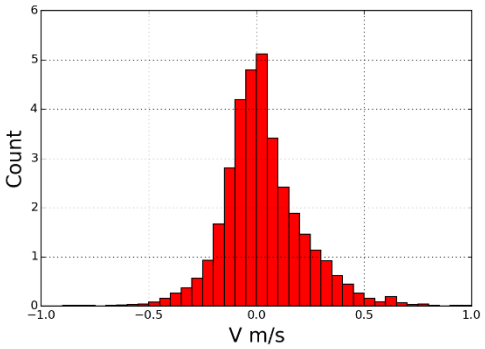

Figure A. 1420: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

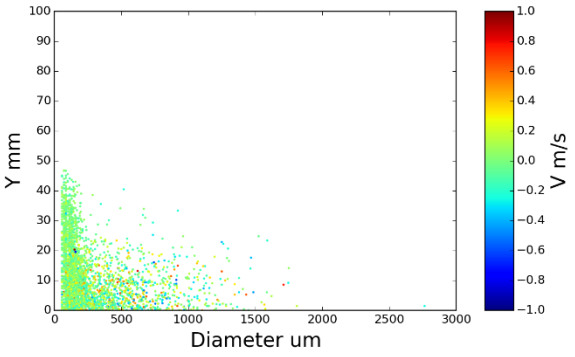

Figure A. 1418: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	22.66	23.47	57.2	1980	290.6	285.6	57.2	1942	285.5	285.5
20-40mm	5.59	5.7	57.2	1725	140.4	182.8	57.2	1724	143.7	184.8
40-60mm	0.71	0.66	57.2	137.3	85.0	21.8	57.2	140.2	87.7	20.8
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	31.75	32.5	57.2	1980	263.8	277.8	57.2	1942	261.3	278.5
			Height A (mm)				Height B (mm)			
Highest Particle			46.7315				46.6174			
Lowest Particle			-1.0402				-1.0402			

Table A. 151: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	15.77	57.2	1980	359.5	306.9	57.2	1942	359.0	309.9	-0.920	0.920	-0.050	0.130	-0.930	0.920	-0.020	0.200
20-40mm	3.11	57.2	1725	183.1	231.2	57.2	1724	180.0	227.5	-0.870	0.780	-0.030	0.100	-0.810	0.560	-0.070	0.110
40-60mm	0.38	57.2	137.3	92.8	23.0	57.2	140.2	88.7	20.8	-0.160	0.110	-0.030	0.050	-0.190	0.050	-0.080	0.050
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	20.98	57.2	1980	332.2	304.5	57.2	1942	331.4	306.8	-0.920	0.920	-0.050	0.120	-0.930	0.920	-0.030	0.190

Table A. 152: Matched Droplet Info

A.6.4.1 All Droplets for .LA Image

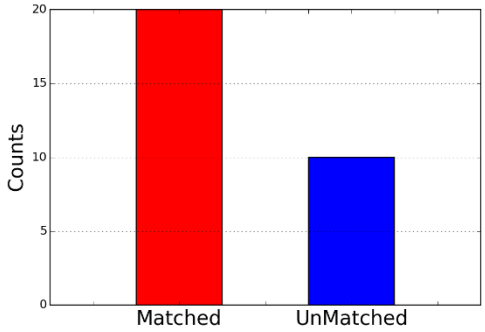

Figure A. 1421: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

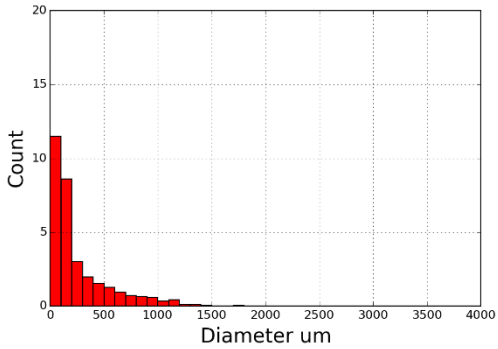

Figure A. 1422: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

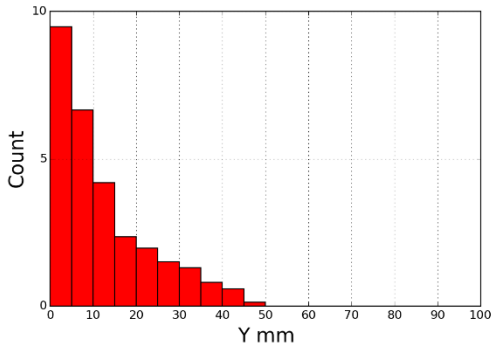

Figure A. 1423: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

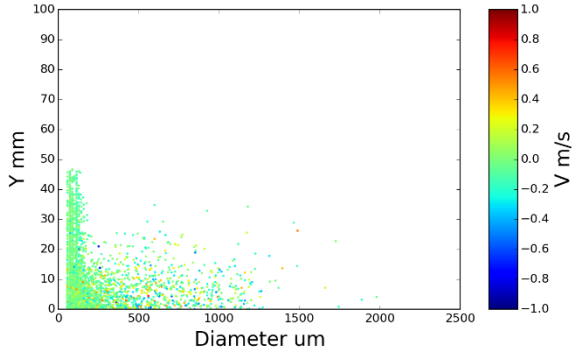

Figure A. 1424: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

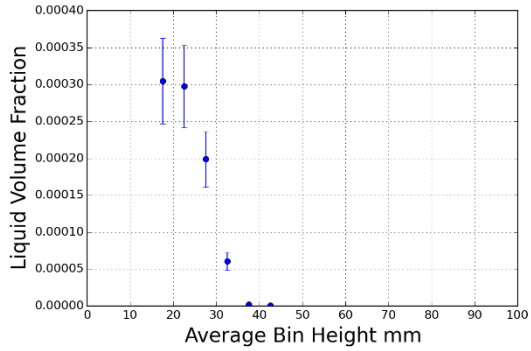

Figure A. 1425: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 All Droplets for .LB Image

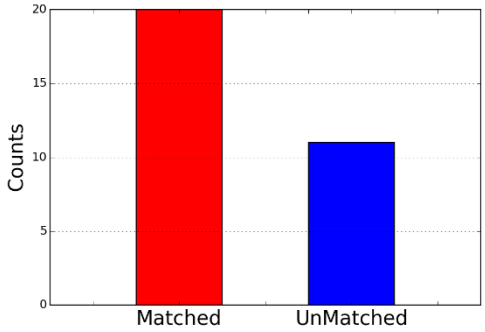

Figure A. 1426: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

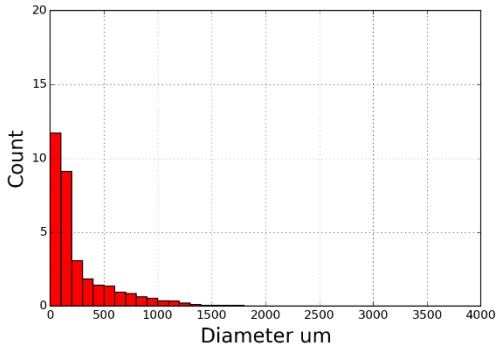

Figure A. 1427: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

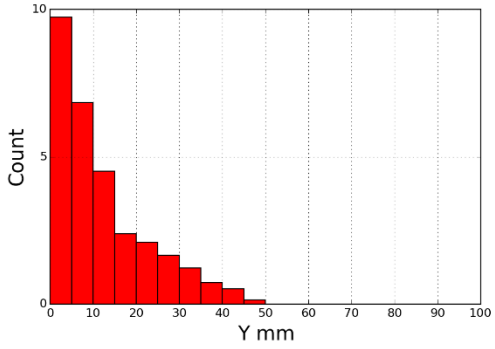

Figure A. 1428: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

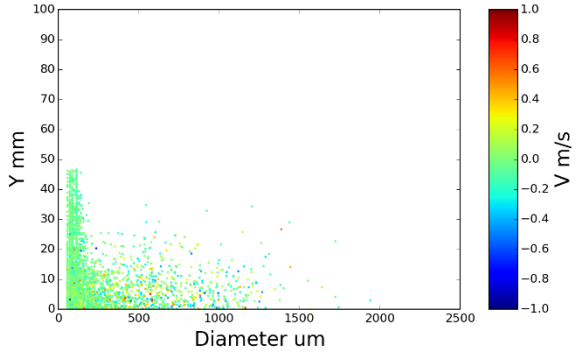

Figure A. 1429: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

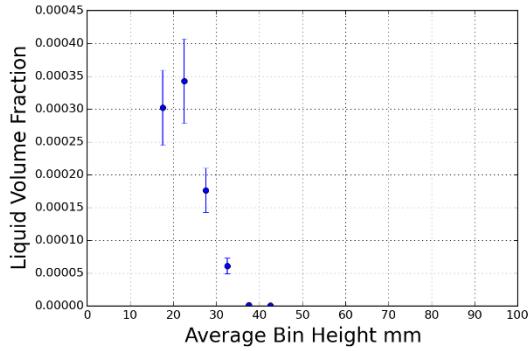

Figure A. 1430: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 Matched Only Droplets for .LA Image

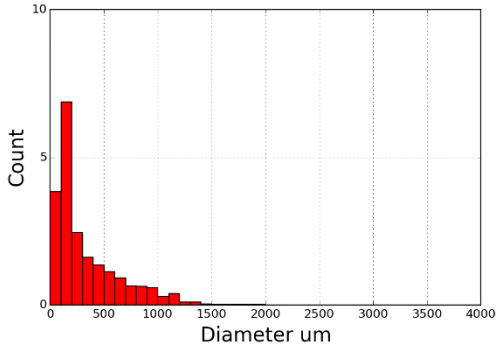

Figure A. 1431: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

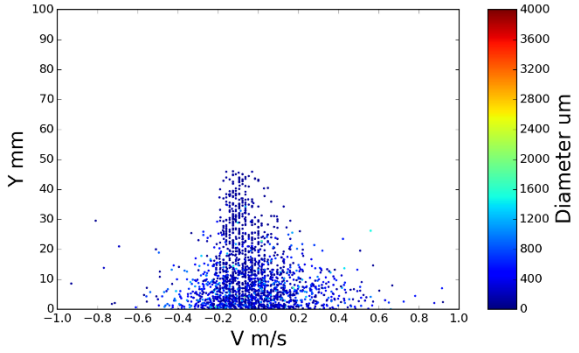

Figure A. 1434: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

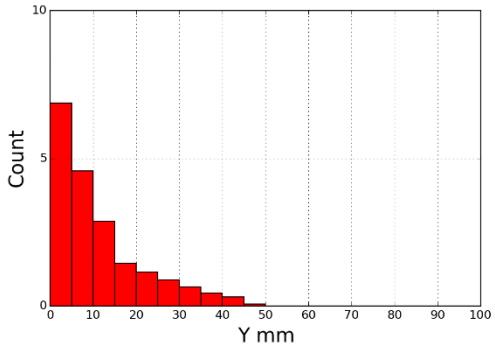

Figure A. 1432: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

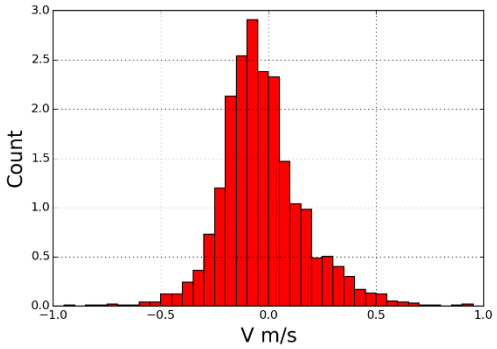

Figure A. 1435: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

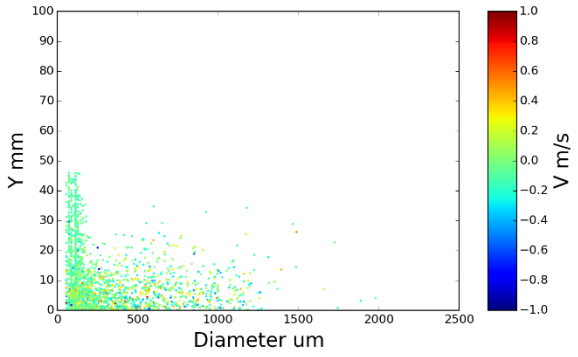

Figure A. 1433: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 Matched Only Droplets for .LB Image

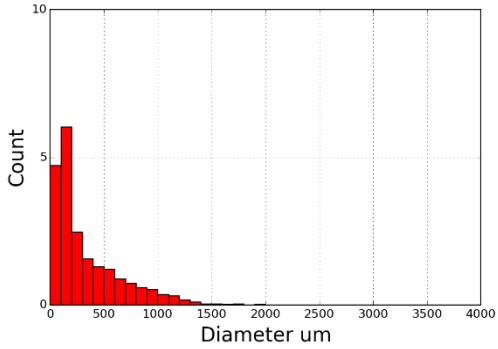

Figure A. 1436: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

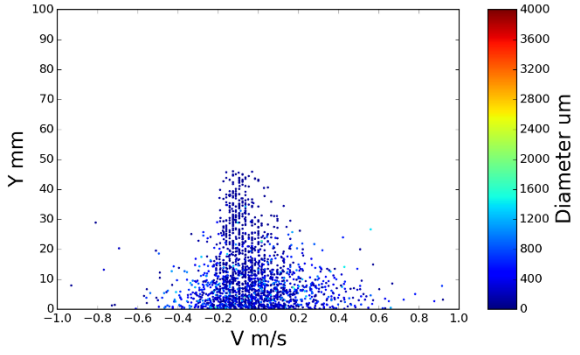

Figure A. 1439: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

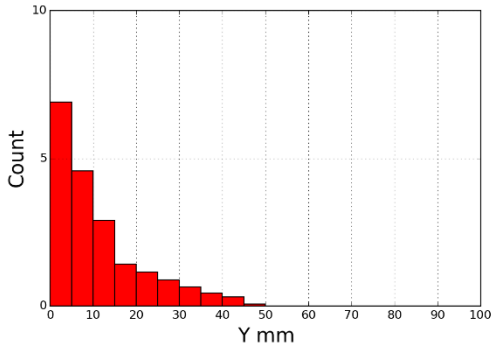

Figure A. 1437: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

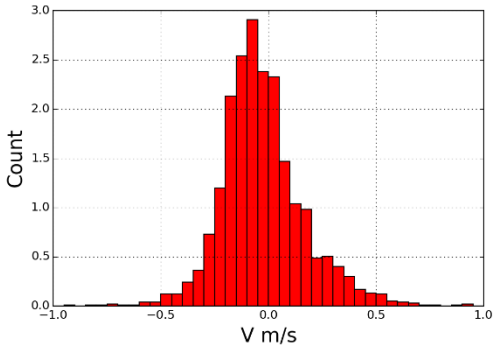

Figure A. 1440: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

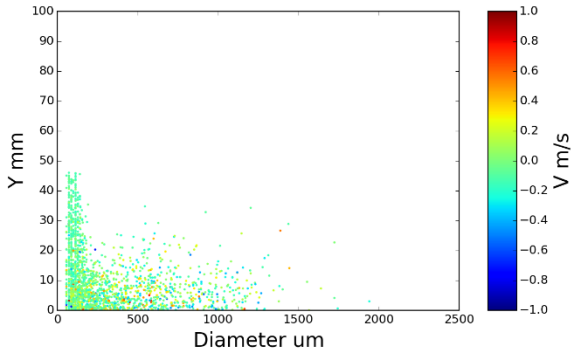

Figure A. 1438: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	21.59	22.51	57.2	2503	289.0	303.7	57.2	2625	284.4	307.4
20-40mm	6.77	6.87	57.2	1678	130.7	173.2	57.2	1645	130.8	179.8
40-60mm	0.78	0.81	57.2	156.8	90.2	24.7	57.2	169.4	90.0	25.6
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	32.01	33.23	57.2	2503	256.4	289.2	57.2	2625	253.1	290.3
			Height A (mm)				Height B (mm)			
Highest Particle			46.7823				46.9218			
Lowest Particle			-1.0402				-1.0402			

Table A. 153: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	13.56	57.2	2503	371.1	333.2	57.2	2625	370.2	336.4	-0.950	0.710	-0.070	0.130	-0.920	0.920	-0.030	0.220
20-40mm	3.2	57.2	1678	176.8	235.0	57.2	1645	173.2	240.2	-0.700	0.900	-0.060	0.100	-0.540	0.490	-0.080	0.110
40-60mm	0.37	57.2	156.8	101.7	26.1	57.2	169.4	98.6	24.8	-0.820	0.030	-0.090	0.140	-0.810	0.820	-0.090	0.200
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	18.86	57.2	2503	338.5	326.8	57.2	2625	336.9	329.6	-0.950	0.900	-0.070	0.130	-0.920	0.920	-0.030	0.210

Table A. 154: Matched Droplet Info

A.6.4.1 All Droplets for .LA Image

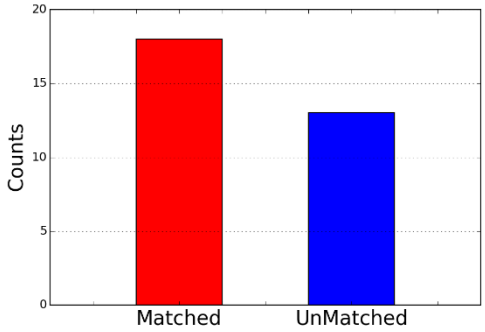

Figure A. 1441: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

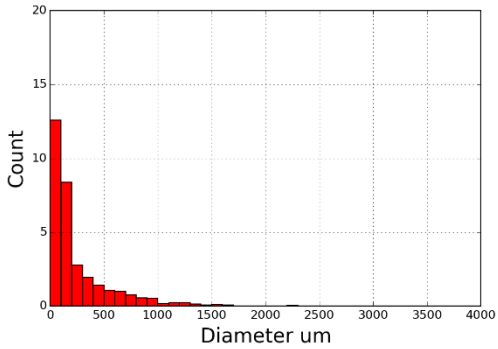

Figure A. 1442: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

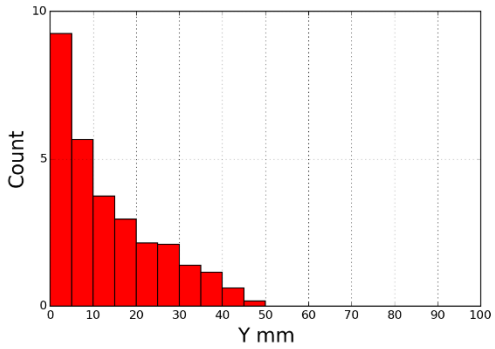

Figure A. 1443: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

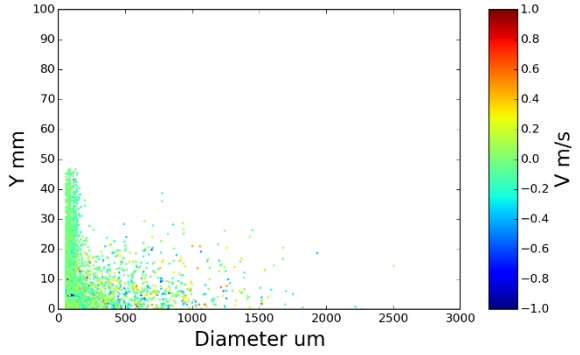

Figure A. 1444: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

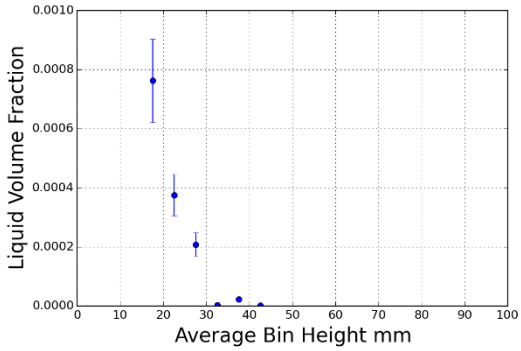

Figure A. 1445: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 All Droplets for .LB Image

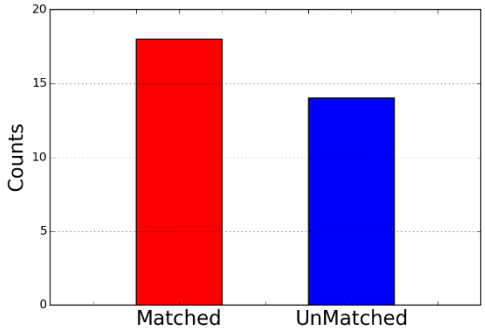

Figure A. 1446: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

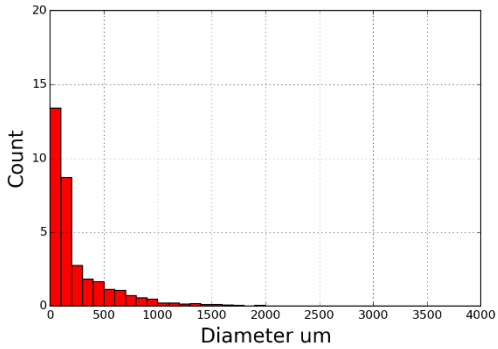

Figure A. 1447: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

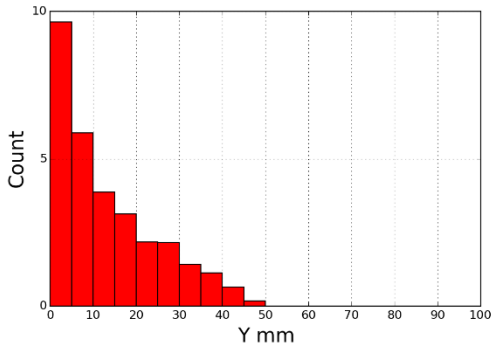

Figure A. 1448: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

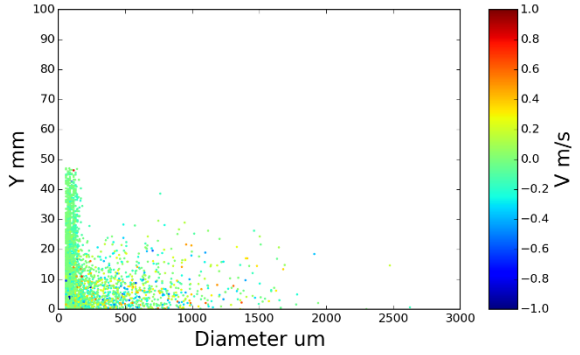

Figure A. 1449: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

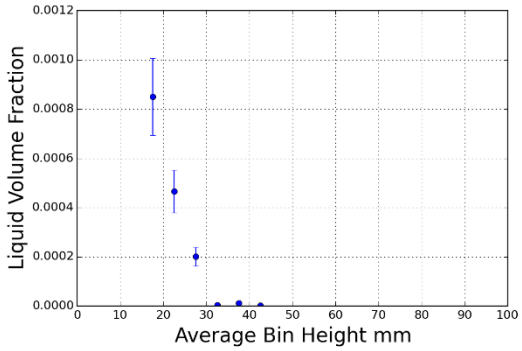

Figure A. 1450: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 Matched Only Droplets for .LA Image

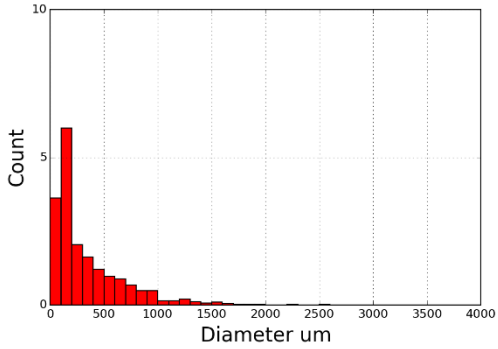

Figure A. 1451: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

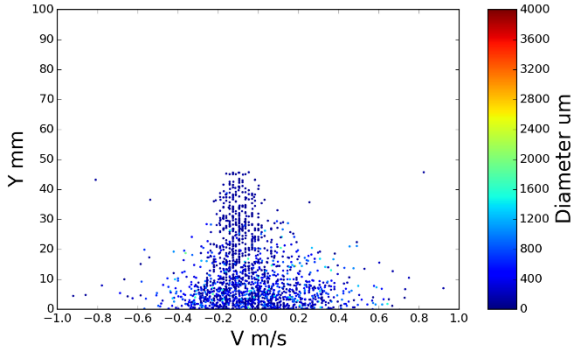

Figure A. 1454: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

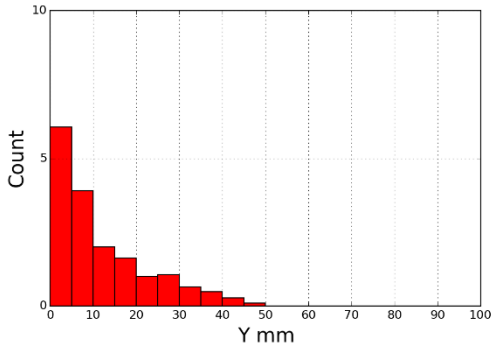

Figure A. 1452: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

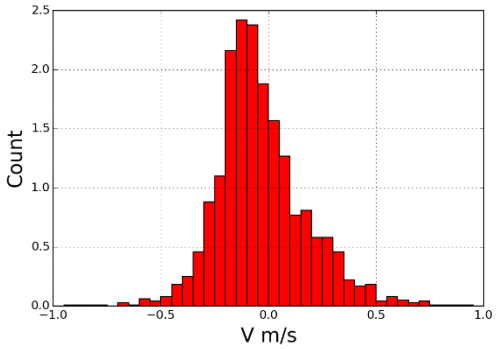

Figure A. 1455: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

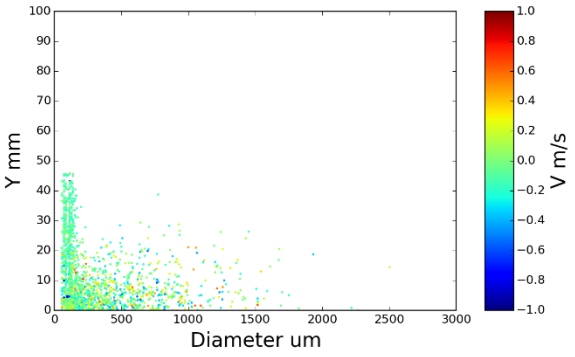

Figure A. 1453: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 Matched Only Droplets for .LB Image

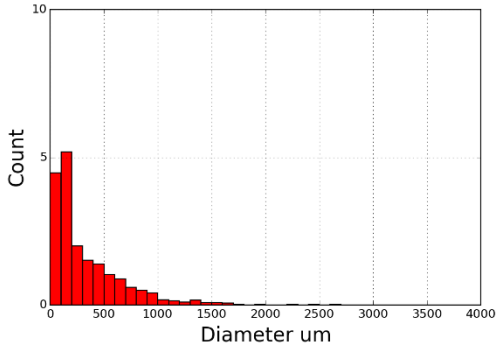

Figure A. 1456: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

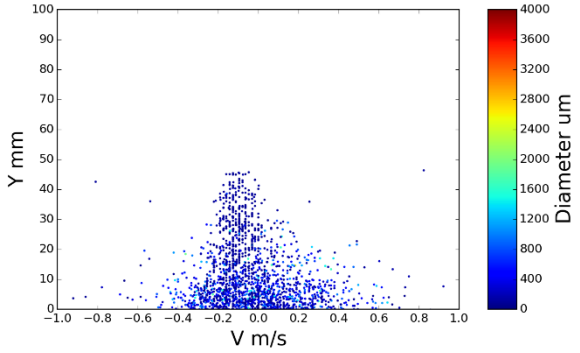

Figure A. 1459: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

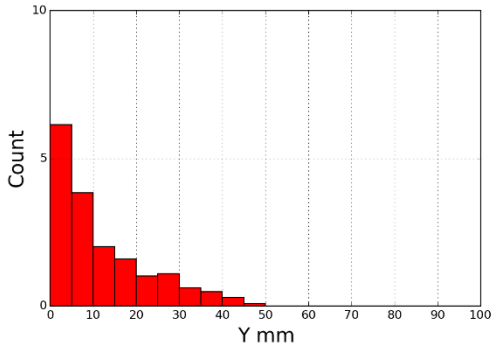

Figure A. 1457: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

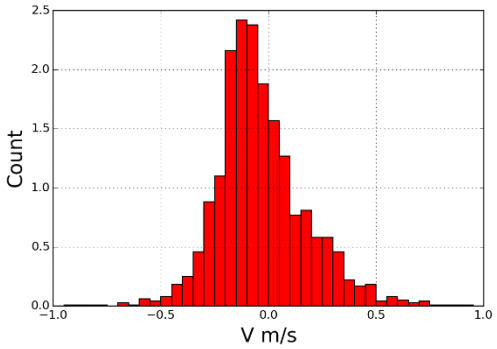

Figure A. 1460: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

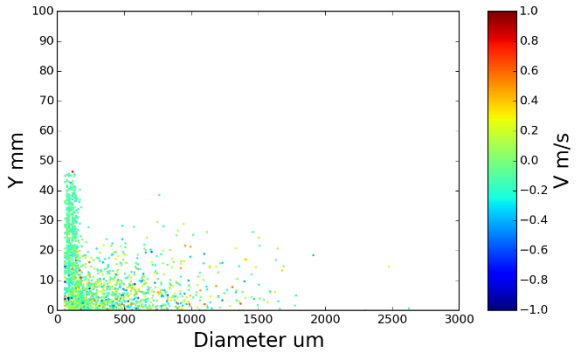

Figure A. 1458: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	21.36	22.64	57.2	2124	265.8	270.3	57.2	1814	255.9	265.5
20-40mm	9.82	10.37	57.2	1272	124.0	127.2	57.2	1398	123.5	129.9
40-60mm	0.77	0.79	57.2	154.2	85.8	23.5	57.2	143.1	82.5	22.7
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	33.96	36.07	57.2	2124	222.9	244.6	57.2	1814	217.3	241.7
			Height A (mm)				Height B (mm)			
Highest Particle			46.8838				46.8203			
Lowest Particle			-1.0402				-1.0402			

Table A. 155: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	14.1	57.2	2124	330.4	295.4	57.2	1814	329.2	293.4	-0.860	0.950	-0.080	0.130	-0.850	0.910	-0.050	0.200
20-40mm	5.51	57.2	1272	150.4	160.5	57.2	1398	147.9	162.0	-0.590	0.330	-0.070	0.070	-0.630	0.430	-0.060	0.110
40-60mm	0.32	57.2	154.2	96.2	27.4	57.2	143.1	91.8	24.4	-0.160	0.030	-0.060	0.040	-0.190	0.040	-0.070	0.060
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	21.17	57.2	2124	282.8	277.9	57.2	1814	280.7	276.6	-0.860	0.950	-0.080	0.120	-0.850	0.910	-0.050	0.180

Table A. 156: Matched Droplet Info

A.6.4.1 All Droplets for .LA Image

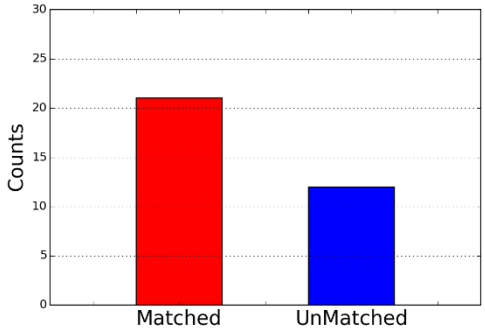

Figure A. 1461: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

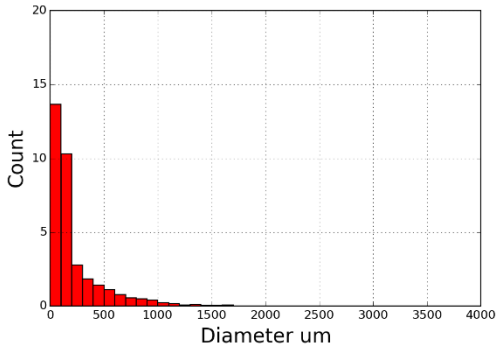

Figure A. 1462: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

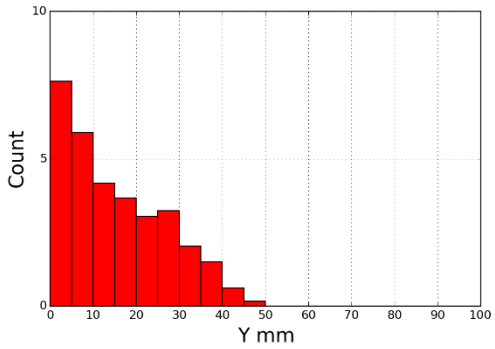

Figure A. 1463: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

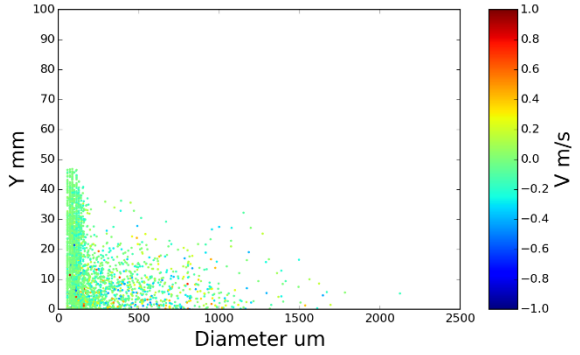

Figure A. 1464: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

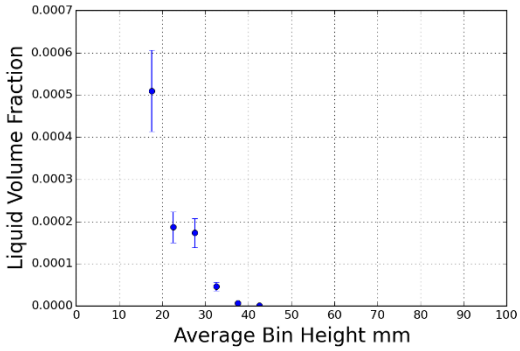

Figure A. 1465: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 All Droplets for .LB Image

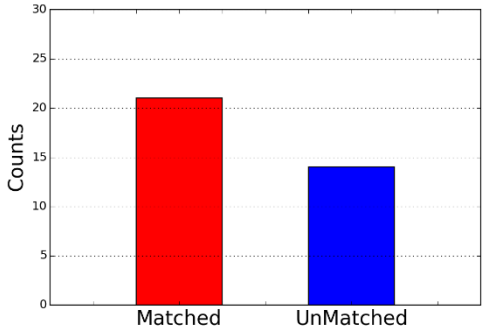

Figure A. 1466: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

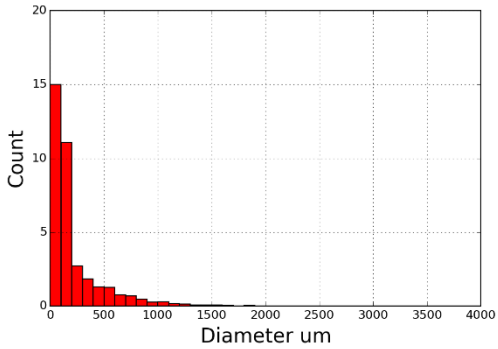

Figure A. 1467: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

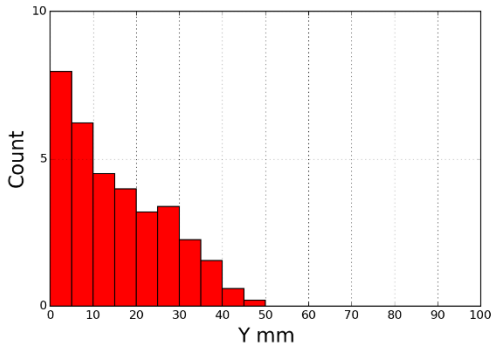

Figure A. 1468: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

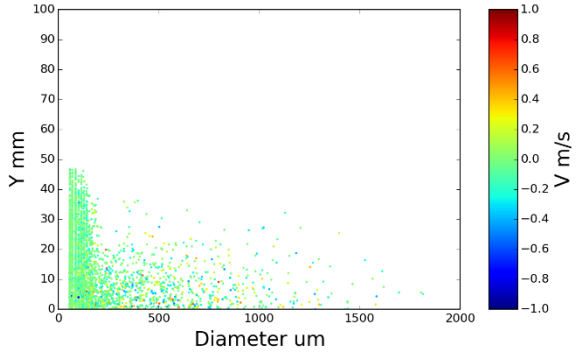

Figure A. 1469: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

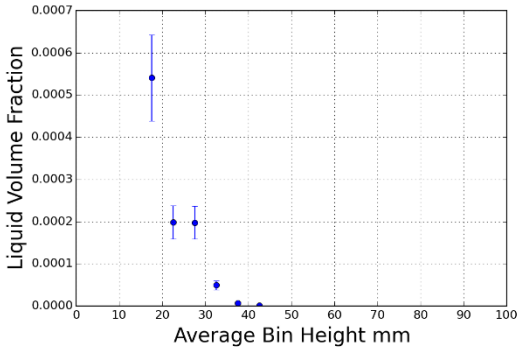

Figure A. 1470: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 Matched Only Droplets for .LA Image

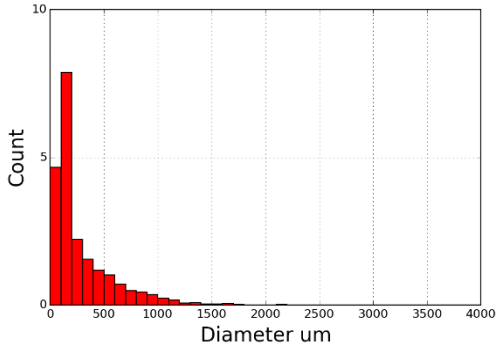

Figure A. 1471: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

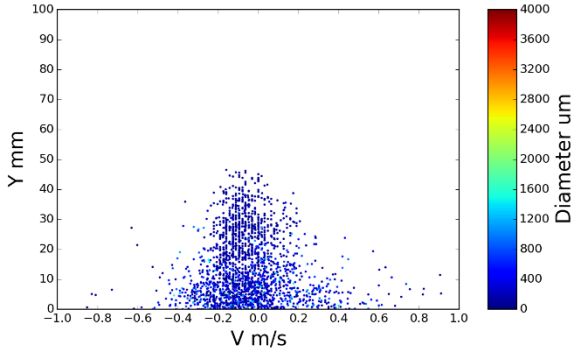

Figure A. 1474: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

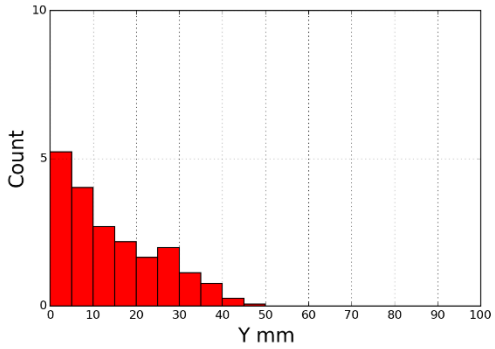

Figure A. 1472: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

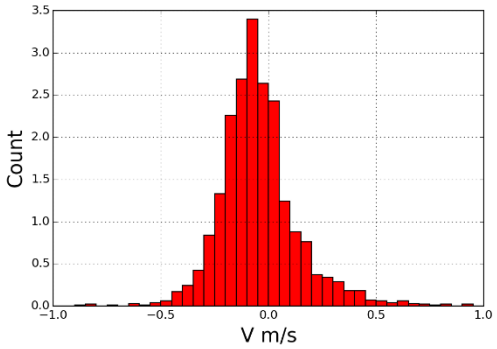

Figure A. 1475: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

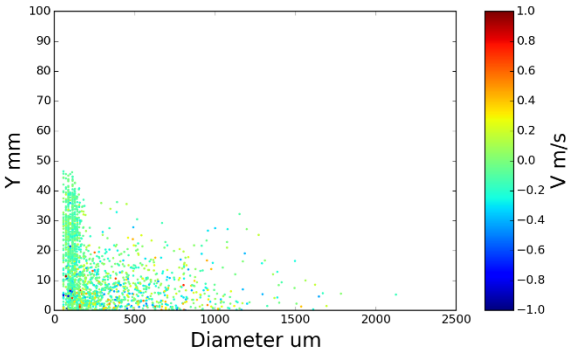

Figure A. 1473: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 Matched Only Droplets for .LB Image

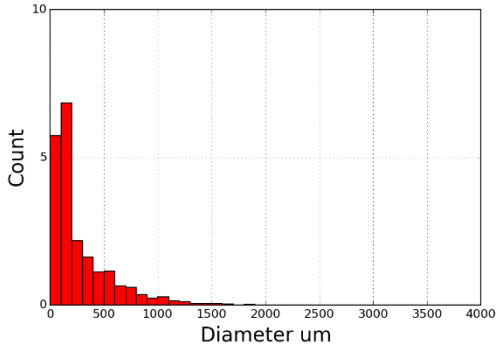

Figure A. 1476: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

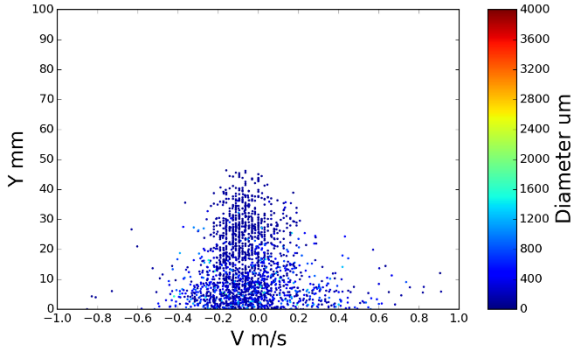

Figure A. 1479: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

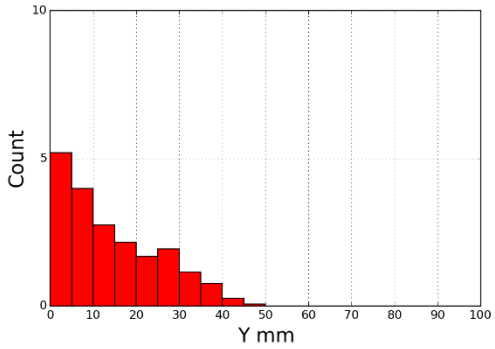

Figure A. 1477: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

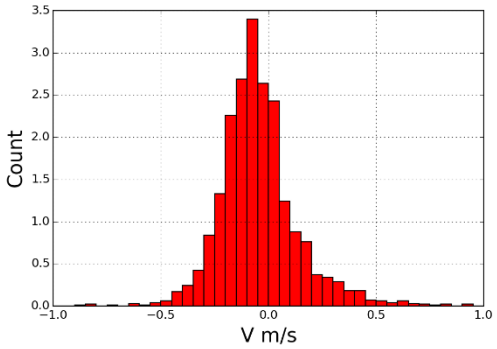

Figure A. 1480: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

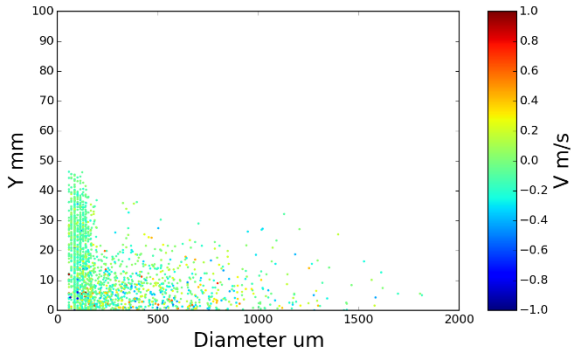

Figure A. 1478: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	22.57	23.34	57.2	2239	252.0	256.2	57.2	2307	247.1	254.8
20-40mm	12.6	12.77	57.2	1087	126.5	114.5	57.2	1829	126.8	123.1
40-60mm	1.22	1.43	57.2	247.9	96.1	29.2	57.2	154.2	89.9	26.3
60-80mm	0.0	0.0	-	-	-	-	-	-	-	-
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	38.48	39.77	57.2	2239	207.6	224.3	57.2	2307	204.8	224.6
			Height A (mm)				Height B (mm)			
Highest Particle			46.7950				46.6808			
Lowest Particle			-1.0402				-1.0402			

Table A. 157: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	15.31	57.2	2239	309.5	280.2	57.2	2307	308.9	279.3	-0.940	0.940	-0.120	0.130	-0.950	0.920	-0.000	0.210
20-40mm	7.23	57.2	1087	155.2	141.6	57.2	1093	151.3	142.1	-0.630	0.930	-0.100	0.100	-0.950	0.730	-0.010	0.130
40-60mm	0.71	57.2	176.5	104.0	25.7	57.2	154.2	101.7	25.8	-0.220	0.060	-0.070	0.050	-0.170	0.290	-0.010	0.080
60-80mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	24.47	57.2	2239	260.7	255.0	57.2	2307	258.6	254.6	-0.940	0.940	-0.110	0.120	-0.950	0.920	-0.000	0.190

Table A. 158: Matched Droplet Info

A.6.4.1 All Droplets for .LA Image

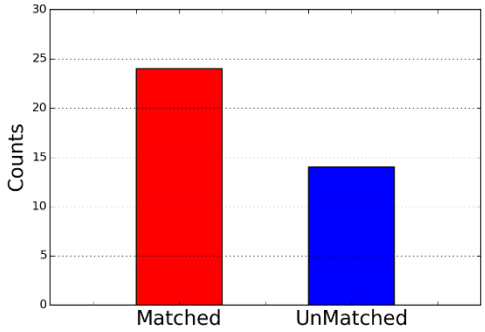

Figure A. 1481: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

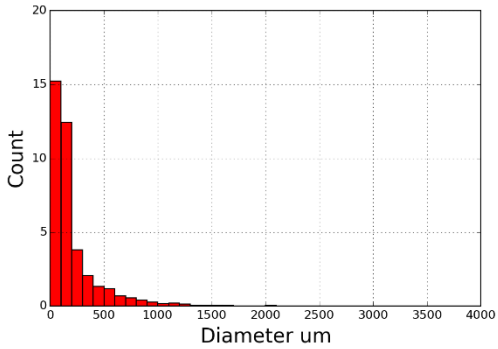

Figure A. 1482: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

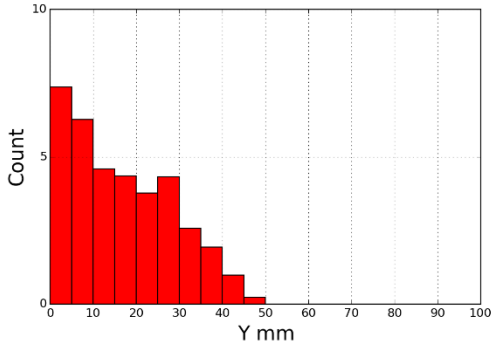

Figure A. 1483: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

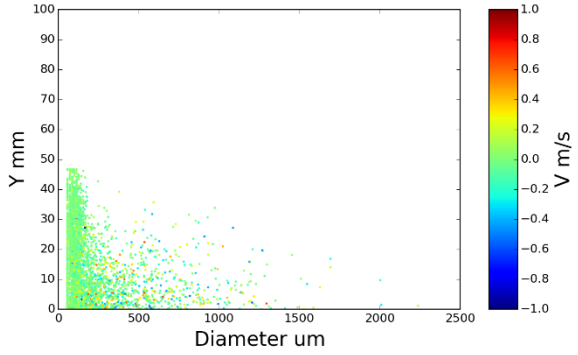

Figure A. 1484: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

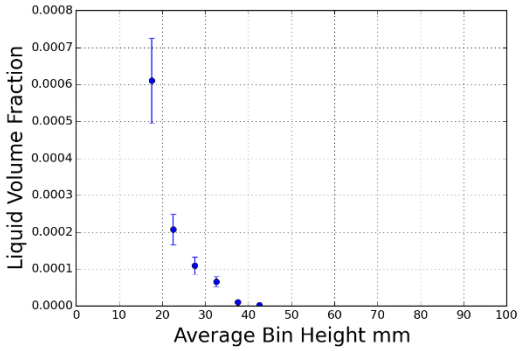

Figure A. 1485: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 All Droplets for .LB Image

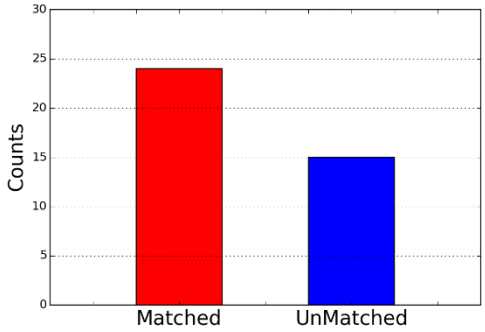

Figure A. 1486: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

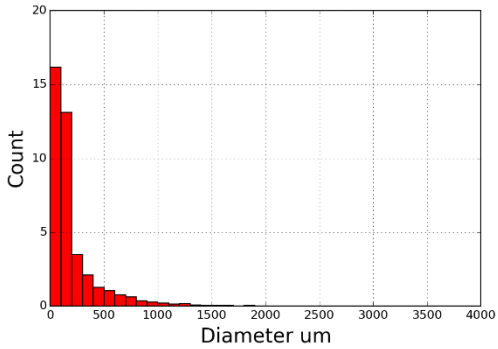

Figure A. 1487: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

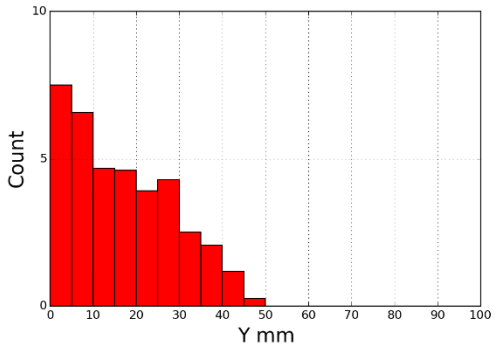

Figure A. 1488: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

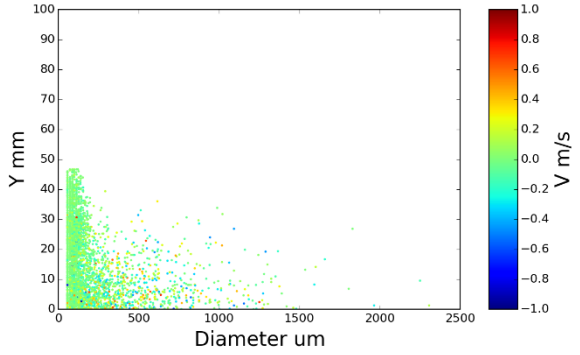

Figure A. 1489: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

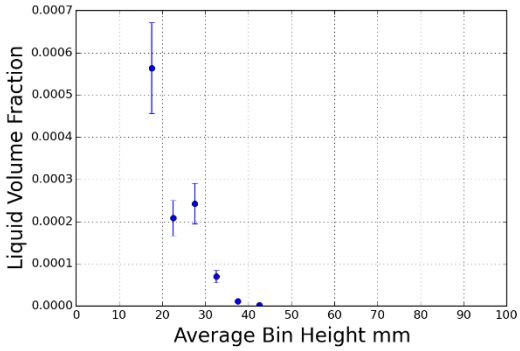

Figure A. 1490: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 Matched Only Droplets for .LA Image

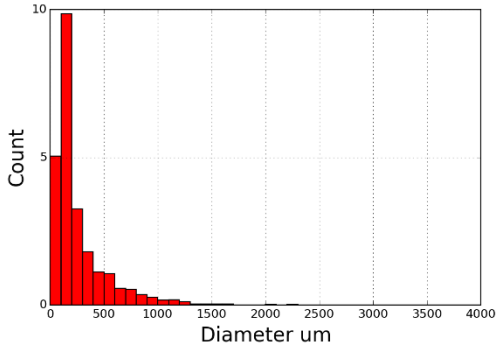

Figure A. 1491: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

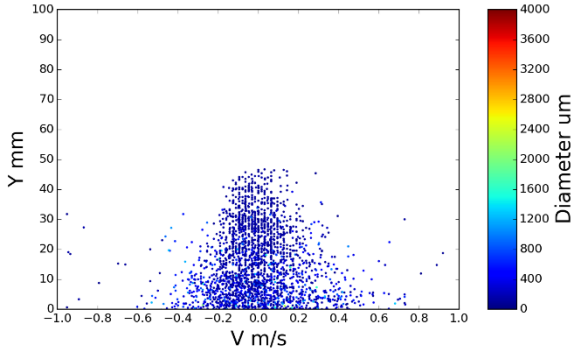

Figure A. 1494: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

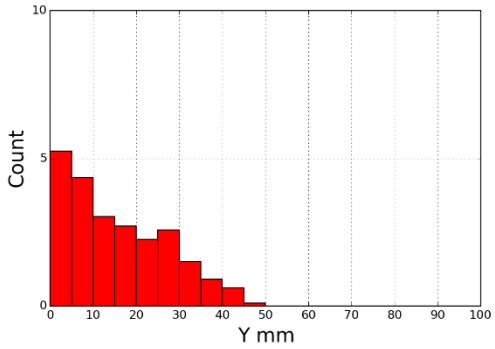

Figure A. 1492: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

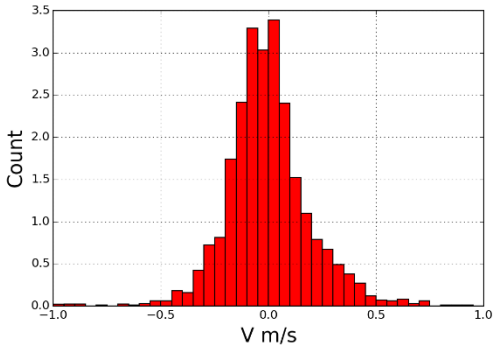

Figure A. 1495: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

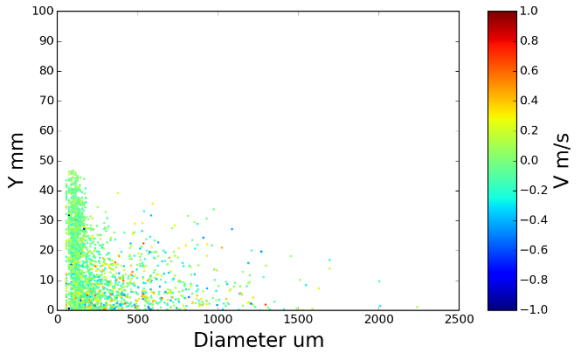

Figure A. 1493: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.1 Matched Only Droplets for .LB Image

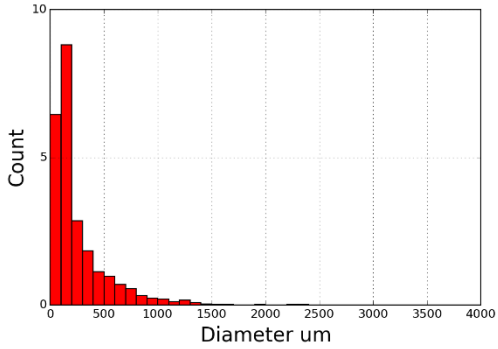

Figure A. 1496: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

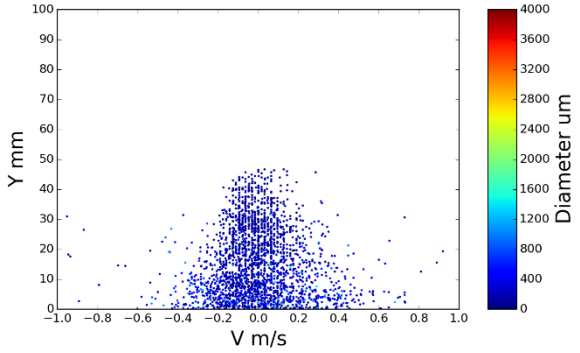

Figure A. 1499: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

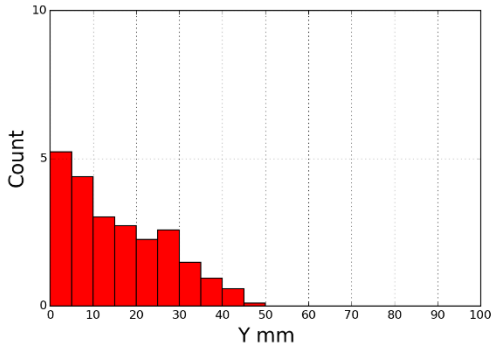

Figure A. 1497: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

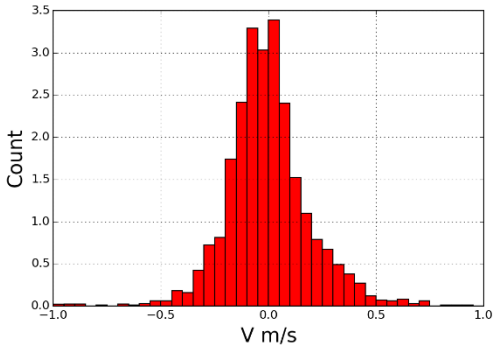

Figure A. 1500: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

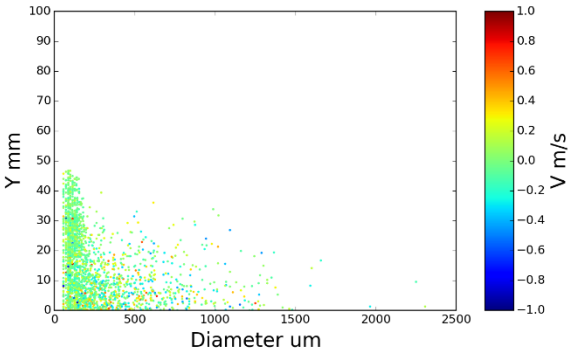

Figure A. 1498: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 Lens 50mm Mag 0_13x

A.6.4.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	79.08	78.69	128.6	3417	685.1	546.0	128.6	3408	690.5	552.5
20-40mm	33.48	33.42	128.6	2887	494.2	331.9	128.6	3050	498.6	334.3
40-60mm	4.29	4.38	128.6	2132	424.4	266.6	128.6	2044	411.6	263.2
60-80mm	0.14	0.15	157.5	1215	458.6	321.9	128.6	1159	411.4	301.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	116.99	116.64	128.6	3417	620.6	494.6	128.6	3408	624.7	499.9
			Height A (mm)				Height B (mm)			
Highest Particle			72.4447				72.2254			
Lowest Particle			5.0712				5.0712			

Table A. 159: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	45.4	128.6	3364	774.1	560.0	128.6	3391	761.7	551.8	-0.950	0.950	-0.070	0.270	-0.950	0.950	0.010	0.330
20-40mm	23.83	128.6	2887	557.6	335.2	128.6	2747	553.5	331.4	-0.950	0.920	-0.070	0.150	-0.930	0.940	0.010	0.280
40-60mm	3.11	128.6	2132	486.2	269.3	128.6	2044	483.7	272.4	-0.950	0.310	-0.060	0.110	-0.430	0.760	0.010	0.210
60-80mm	0.09	192.9	1215	614.6	304.2	128.6	1159	537.1	298.3	-0.210	0.010	-0.050	0.060	-0.180	0.230	-0.010	0.140
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	72.43	128.6	3364	690.3	498.8	128.6	3391	680.3	490.7	-0.950	0.950	-0.070	0.230	-0.950	0.950	0.010	0.310

Table A. 160: Matched Droplet Info

A.6.4.2 All Droplets for .LA Image

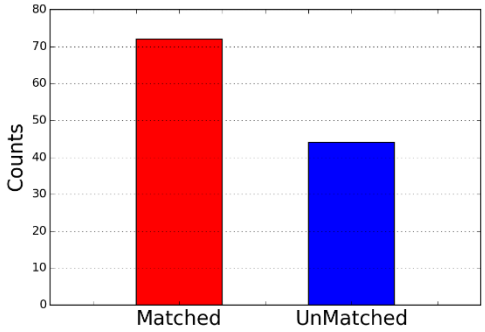

Figure A. 1501: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

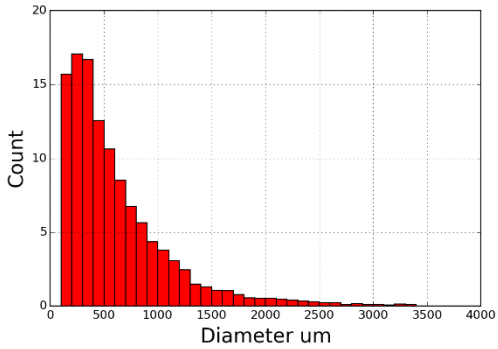

Figure A. 1502: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

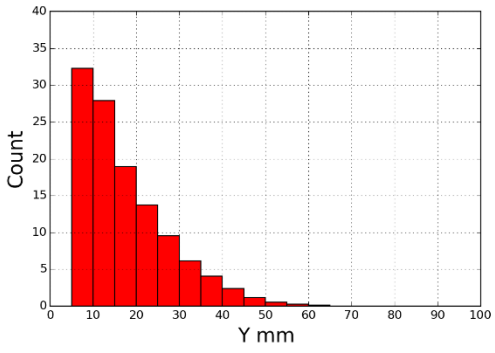

Figure A. 1503: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

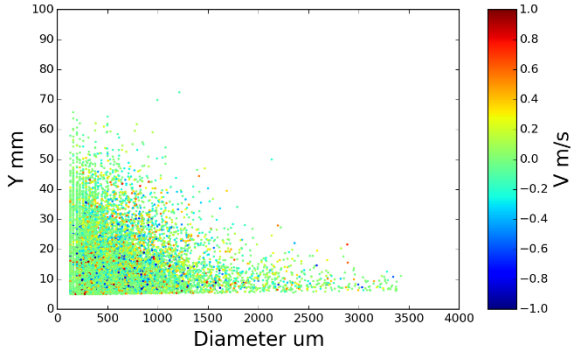

Figure A. 1504: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

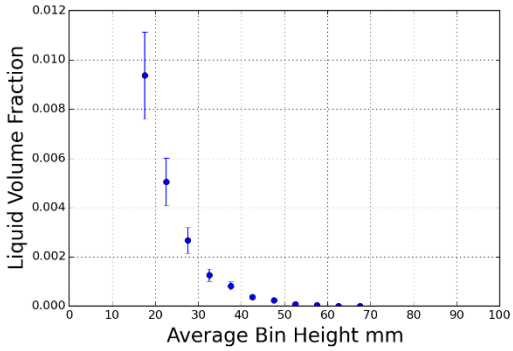

Figure A. 1505: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 All Droplets for .LB Image

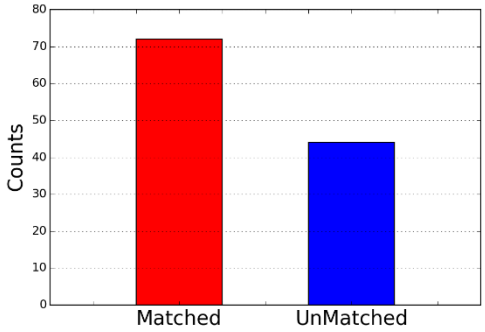

Figure A. 1506: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

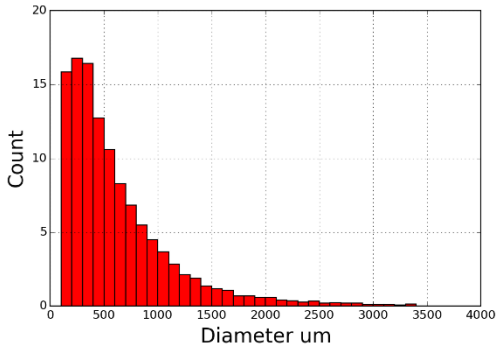

Figure A. 1507: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

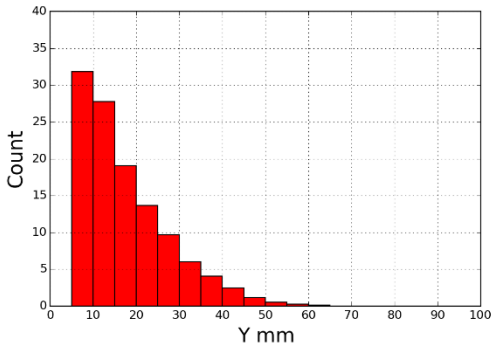

Figure A. 1508: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

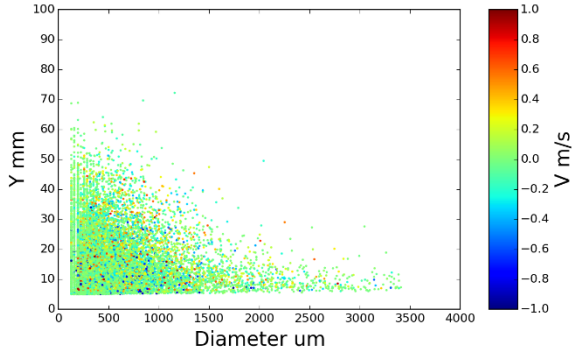

Figure A. 1509: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

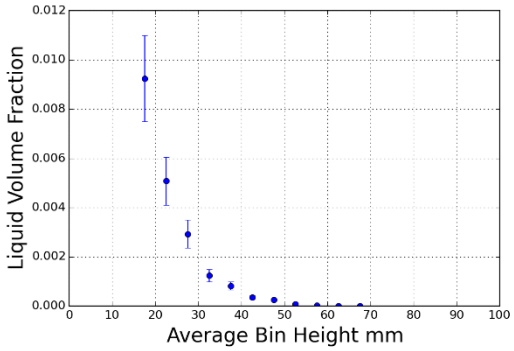

Figure A. 1510: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 Matched Only Droplets for .LA Image

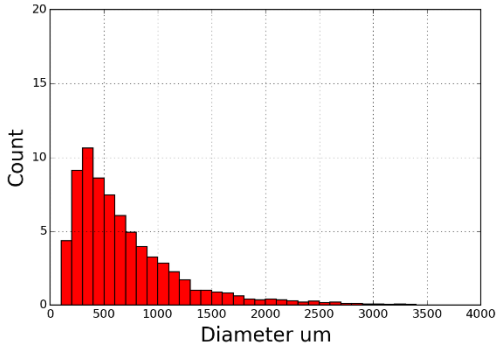

Figure A. 1511: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

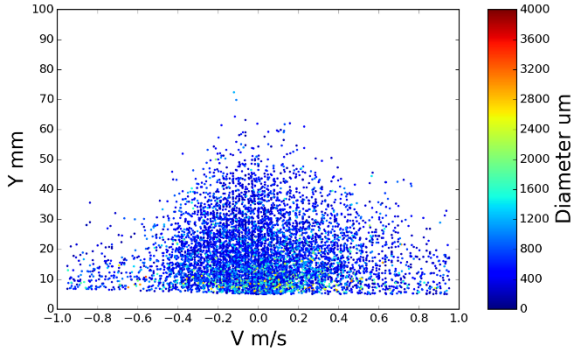

Figure A. 1514: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

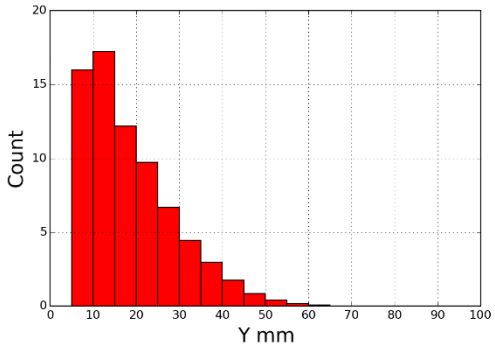

Figure A. 1512: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

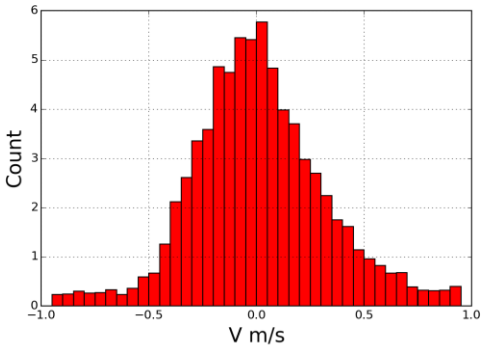

Figure A. 1515: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

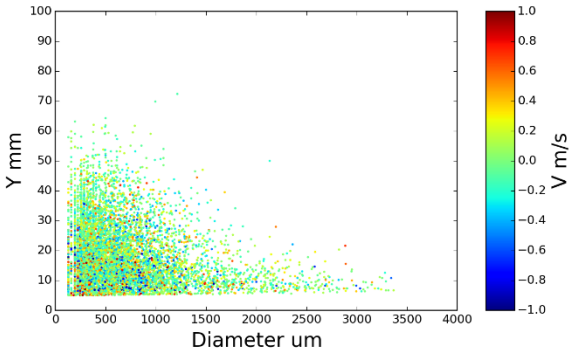

Figure A. 1513: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 Matched Only Droplets for .LB Image

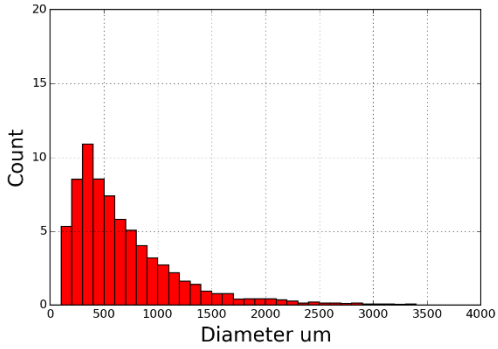

Figure A. 1516: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

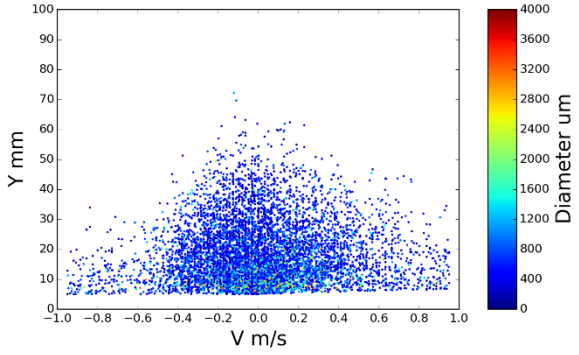

Figure A. 1519: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

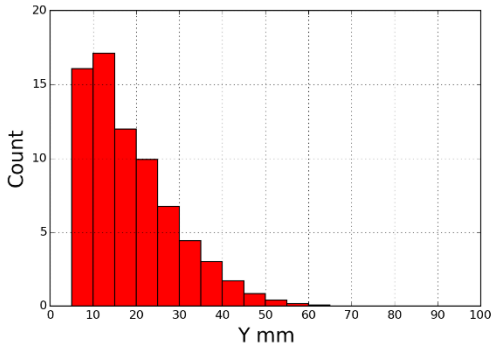

Figure A. 1517: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

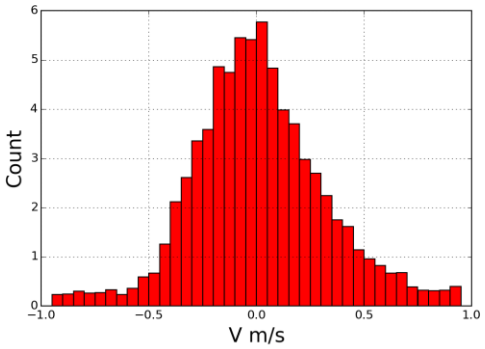

Figure A. 1520: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

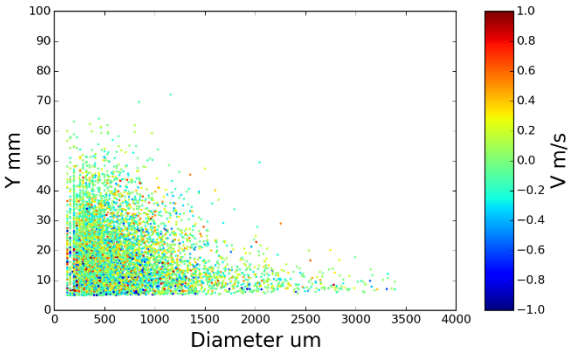

Figure A. 1518: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	88.11	88.21	128.6	3417	684.0	537.9	128.6	3410	692.1	542.6
20-40mm	37.53	37.68	128.6	2945	523.3	335.0	128.6	2841	523.9	335.6
40-60mm	4.63	4.73	128.6	1800	530.4	321.0	128.6	1823	518.1	318.1
60-80mm	0.08	0.1	301.6	987.7	633.5	236.7	222.7	913.8	493.8	252.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	130.35	130.72	128.6	3417	632.3	487.0	128.6	3410	637.2	491.0
			Height A (mm)				Height B (mm)			
Highest Particle			73.4018				73.6682			
Lowest Particle			5.0712				5.0712			

Table A. 161: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	49.13	128.6	3380	788.6	548.6	128.6	3410	773.2	539.2	-0.950	0.950	-0.070	0.270	-0.950	0.950	-0.010	0.330
20-40mm	26.62	128.6	2945	587.5	338.7	128.6	2841	583.3	335.5	-0.950	0.950	-0.070	0.160	-0.940	0.950	-0.020	0.270
40-60mm	3.54	128.6	1800	602.2	319.6	128.6	1823	592.1	314.2	-0.920	0.180	-0.070	0.110	-0.570	0.600	0.000	0.190
60-80mm	0.07	301.6	987.7	622.1	251.0	257.2	913.8	568.6	257.7	-0.260	0.000	-0.090	0.090	-0.170	0.370	0.070	0.180
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	79.36	128.6	3380	712.7	488.6	128.6	3410	701.7	480.6	-0.950	0.950	-0.070	0.230	-0.950	0.950	-0.010	0.310

Table A. 162: Matched Droplet Info

A.6.4.2 All Droplets for .LA Image

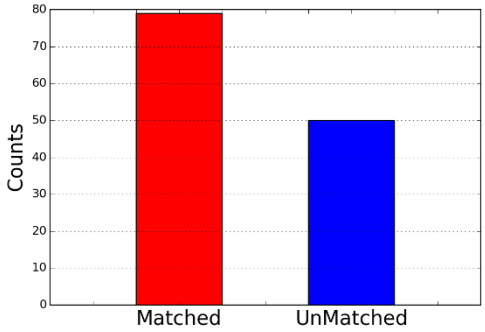

Figure A. 1521: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

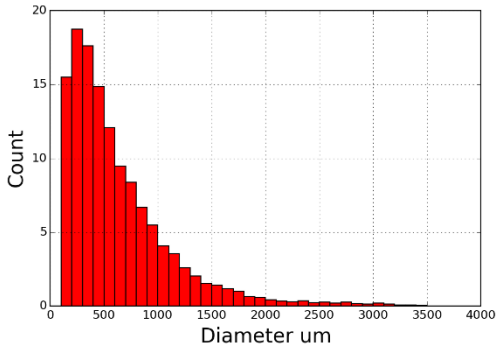

Figure A. 1522: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

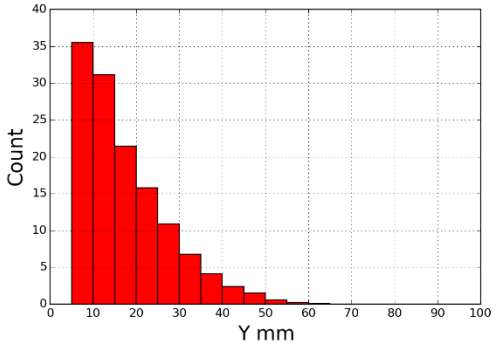

Figure A. 1523: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

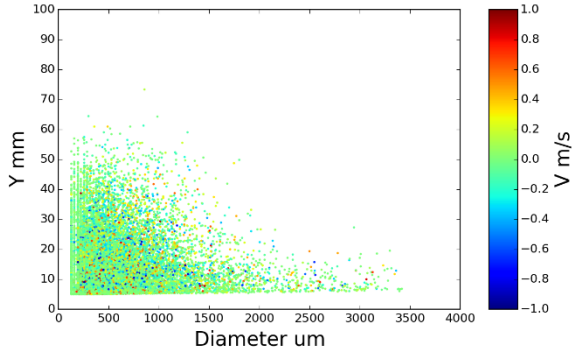

Figure A. 1524: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

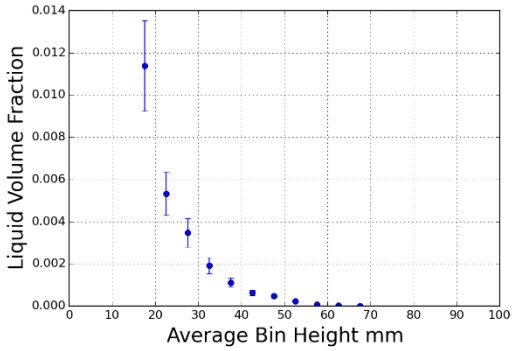

Figure A. 1525: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 All Droplets for .LB Image

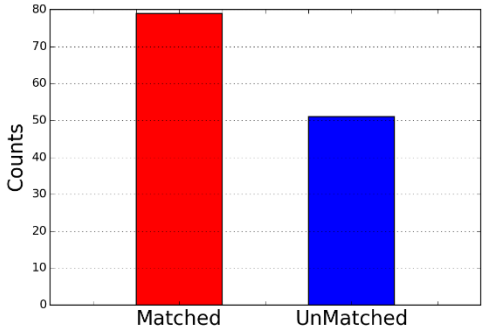

Figure A. 1526: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

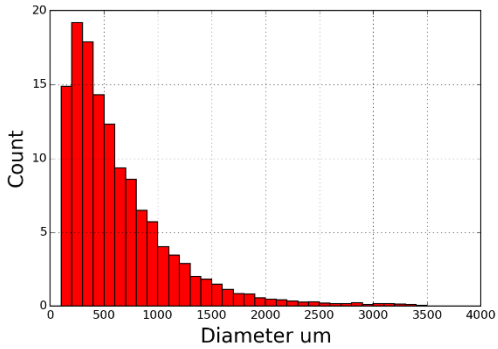

Figure A. 1527: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

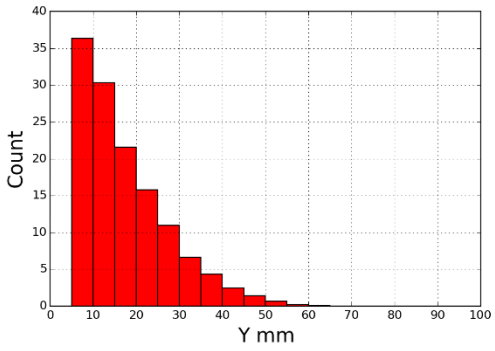

Figure A. 1528: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

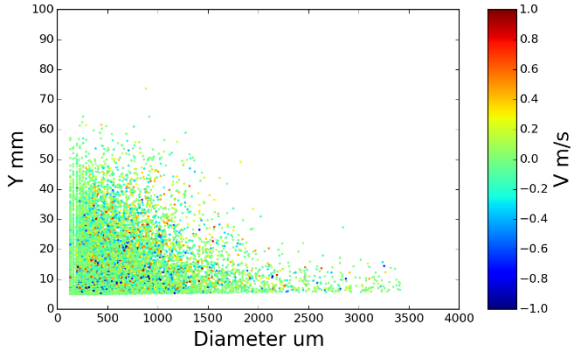

Figure A. 1529: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

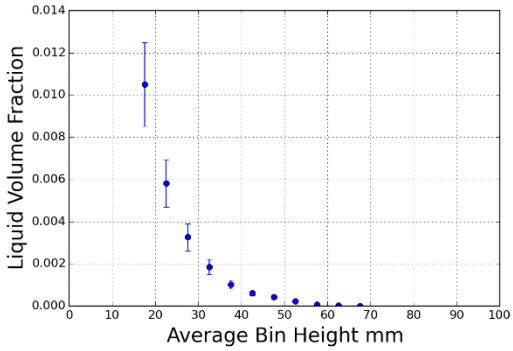

Figure A. 1530: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 Matched Only Droplets for .LA Image

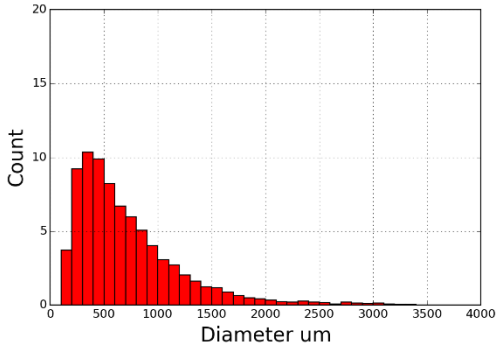

Figure A. 1531: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

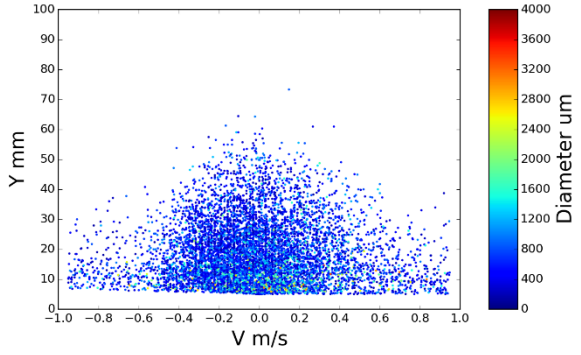

Figure A. 1534: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

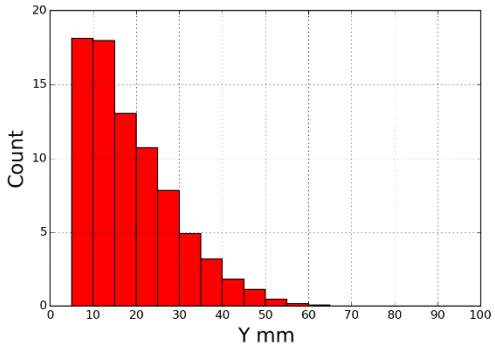

Figure A. 1532: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

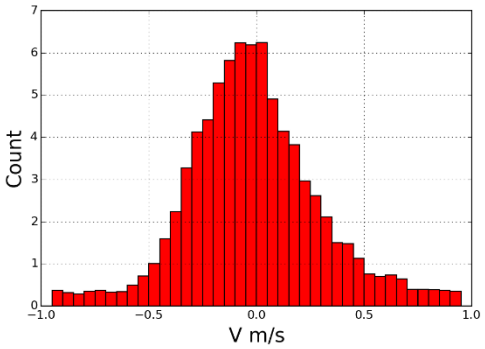

Figure A. 1535: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

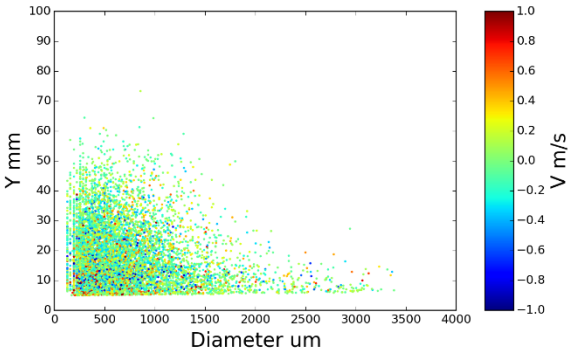

Figure A. 1533: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 Matched Only Droplets for .LB Image

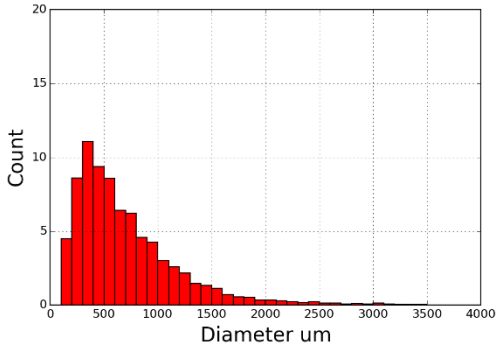

Figure A. 1536: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

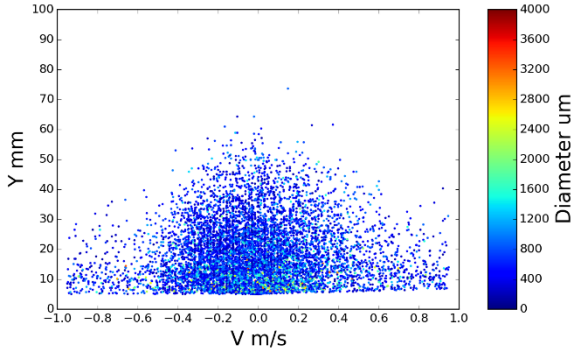

Figure A. 1539: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

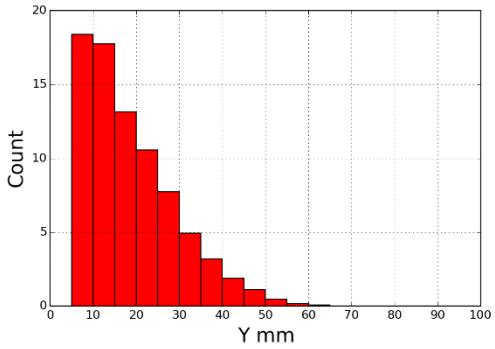

Figure A. 1537: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

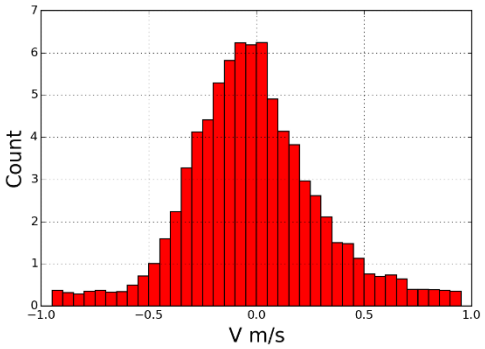

Figure A. 1540: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

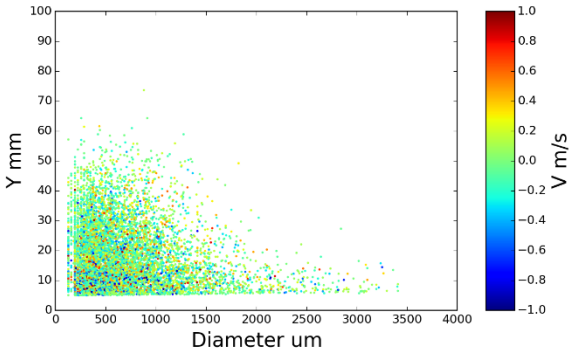

Figure A. 1538: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	84.85	84.5	128.6	3418	710.0	552.9	128.6	3395	707.3	554.3
20-40mm	35.3	35.48	128.6	2833	557.4	368.8	128.6	2652	555.1	367.1
40-60mm	3.65	3.79	128.6	2459	595.5	376.5	128.6	2198	585.8	381.0
60-80mm	0.09	0.11	334.1	1319	938.1	287.6	128.6	1335	777.3	439.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	123.89	123.88	128.6	3418	663.3	507.2	128.6	3395	660.0	507.6
			Height A (mm)				Height B (mm)			
Highest Particle			77.1050				76.9770			
Lowest Particle			5.0712				5.0712			

Table A. 163: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	45.41	128.6	3370	821.4	575.8	128.6	3356	804.5	569.0	-0.950	0.950	-0.080	0.280	-0.950	0.950	-0.020	0.340
20-40mm	23.89	128.6	2580	633.2	372.6	128.6	2652	627.6	371.8	-0.940	0.890	-0.070	0.170	-0.950	0.940	-0.030	0.280
40-60mm	2.81	128.6	2459	671.0	377.5	128.6	2198	669.8	385.5	-0.570	0.200	-0.080	0.100	-0.540	0.690	-0.010	0.210
60-80mm	0.07	840.8	1319	1062	169.0	904.7	1335	1094	160.1	-0.160	0.130	-0.020	0.110	-0.130	0.290	0.050	0.140
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	72.18	128.6	3370	753.5	517.8	128.6	3356	741.2	512.4	-0.950	0.950	-0.070	0.240	-0.950	0.950	-0.020	0.320

Table A. 164: Matched Droplet Info

A.6.4.2 All Droplets for .LA Image

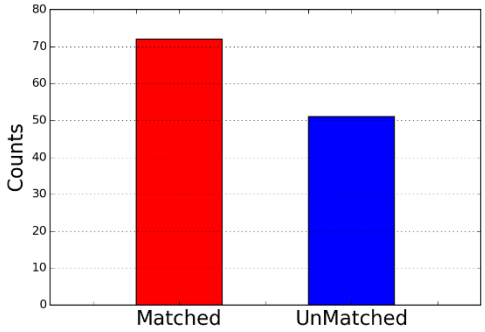

Figure A. 1541: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

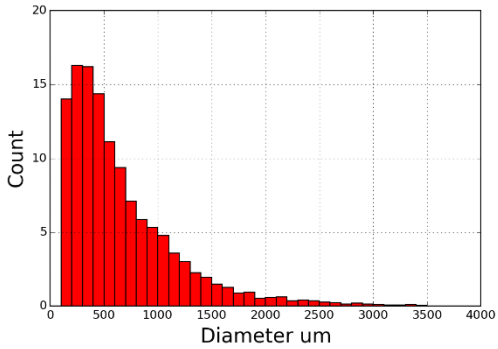

Figure A. 1542: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

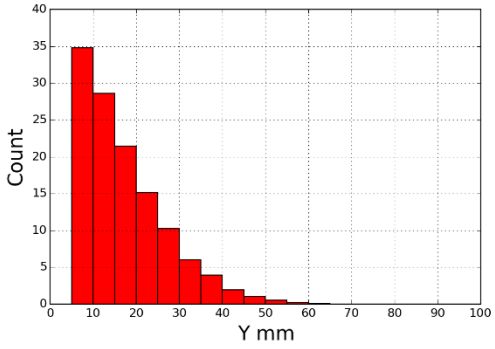

Figure A. 1543: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

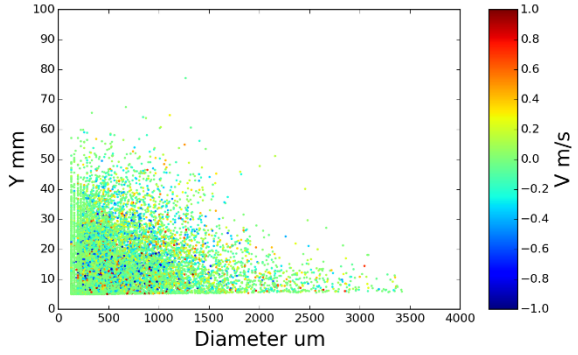

Figure A. 1544: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

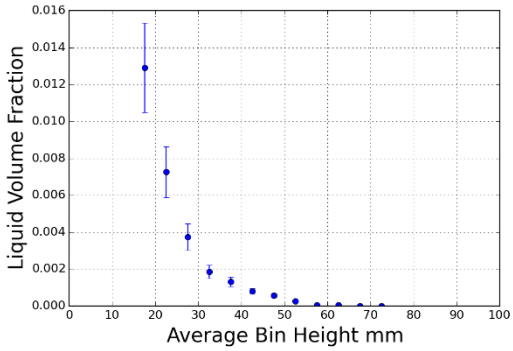

Figure A. 1545: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 All Droplets for .LB Image

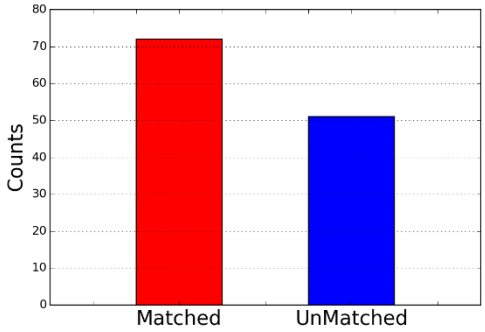

Figure A. 1546: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

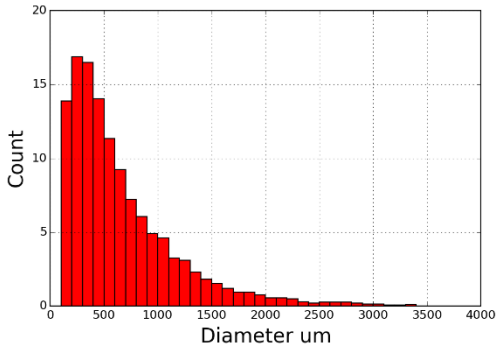

Figure A. 1547: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

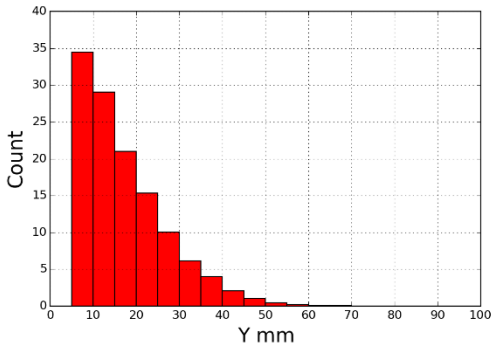

Figure A. 1548: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

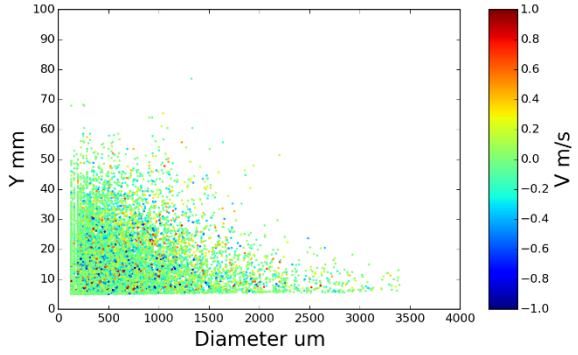

Figure A. 1549: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

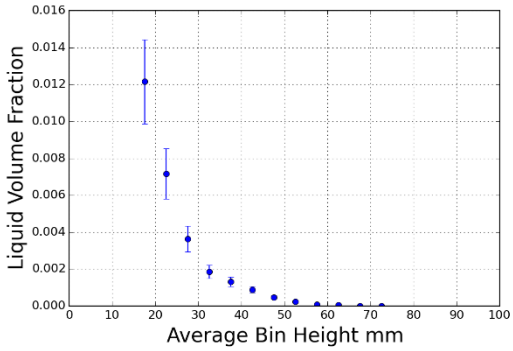

Figure A. 1550: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 Matched Only Droplets for .LA Image

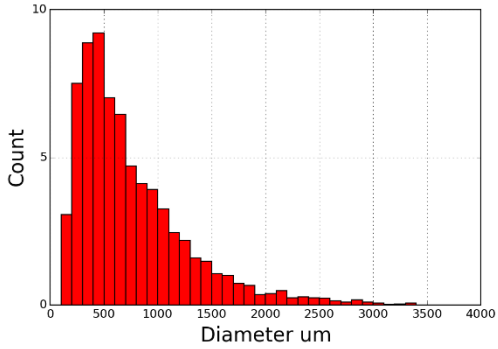

Figure A. 1551: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

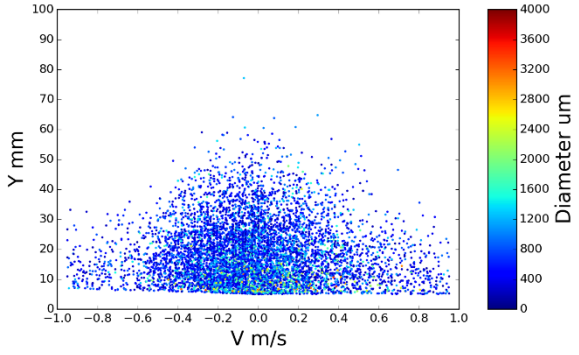

Figure A. 1554: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

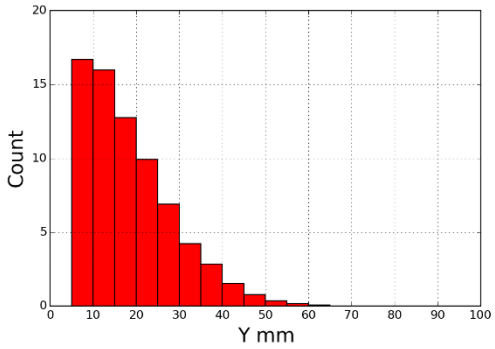

Figure A. 1552: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

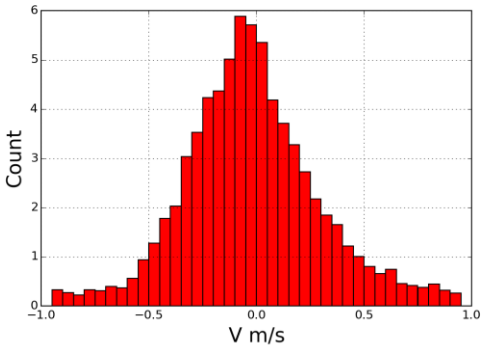

Figure A. 1555: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

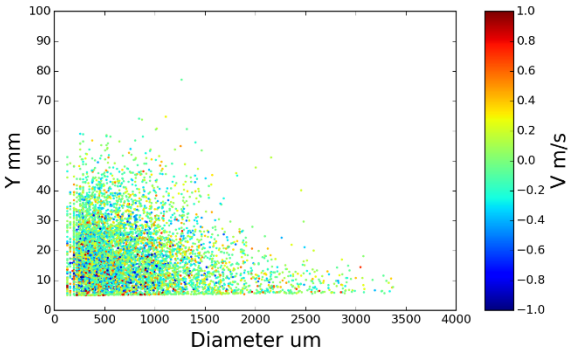

Figure A. 1553: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 Matched Only Droplets for .LB Image

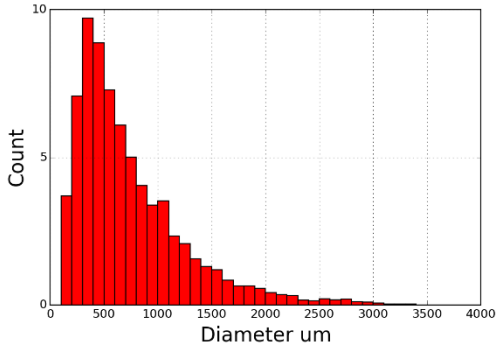

Figure A. 1556: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

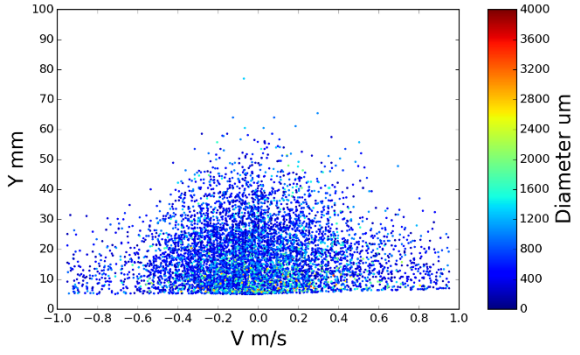

Figure A. 1559: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

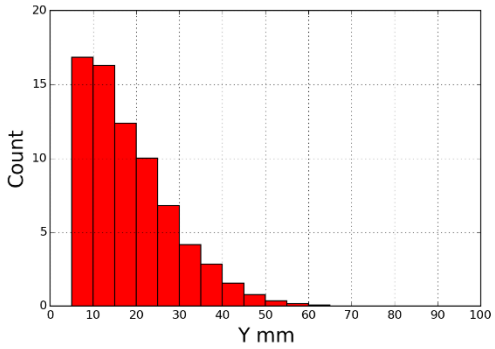

Figure A. 1557: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

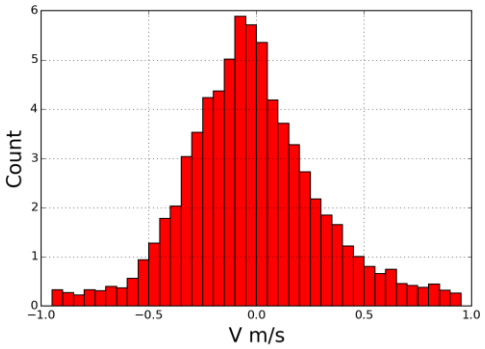

Figure A. 1560: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

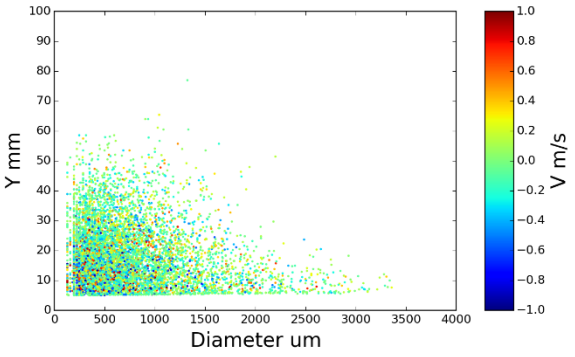

Figure A. 1558: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	79.07	79.06	128.6	3412	715.9	559.9	128.6	3414	714.4	557.6
20-40mm	35.59	35.43	128.6	3382	543.3	388.0	128.6	3332	546.1	391.4
40-60mm	4.97	4.93	128.6	2132	493.6	324.1	128.6	2122	488.2	324.7
60-80mm	0.1	0.09	192.9	808.2	399.3	197.5	128.6	771.5	389.0	209.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	119.74	119.51	128.6	3412	655.1	513.3	128.6	3414	654.9	512.4
			Height A (mm)				Height B (mm)			
Highest Particle			69.0309				69.5559			
Lowest Particle			5.0712				5.0712			

Table A. 165: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	41.47	128.6	3412	836.8	581.4	128.6	3411	817.8	570.3	-0.950	0.950	-0.080	0.300	-0.950	0.950	-0.030	0.350
20-40mm	22.95	128.6	3036	628.2	398.1	128.6	3012	620.6	393.8	-0.950	0.950	-0.090	0.190	-0.930	0.920	-0.030	0.280
40-60mm	3.9	128.6	2132	548.5	333.1	128.6	2122	544.4	330.4	-0.630	0.900	-0.100	0.140	-0.600	0.950	0.000	0.240
60-80mm	0.07	192.9	808.2	479.7	184.0	192.9	771.5	454.3	192.2	-0.320	0.090	-0.140	0.120	-0.460	0.290	-0.130	0.210
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	68.39	128.6	3412	750.0	525.8	128.6	3411	735.8	516.0	-0.950	0.950	-0.080	0.260	-0.950	0.950	-0.030	0.320

Table A. 166: Matched Droplet Info

A.6.4.2 All Droplets for .LA Image

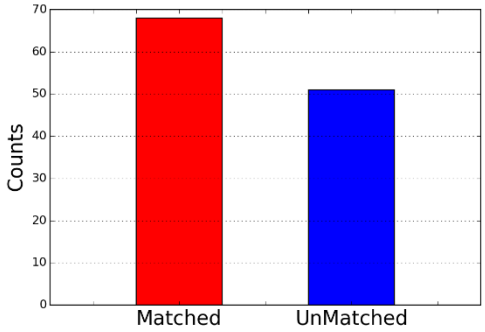

Figure A. 1561: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

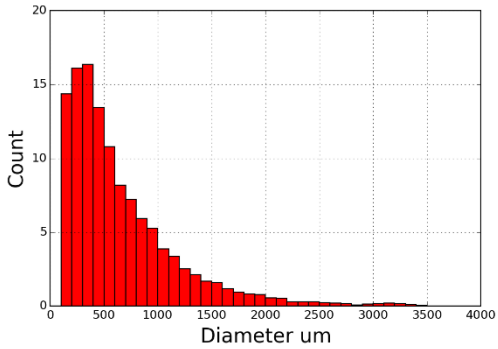

Figure A. 1562: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

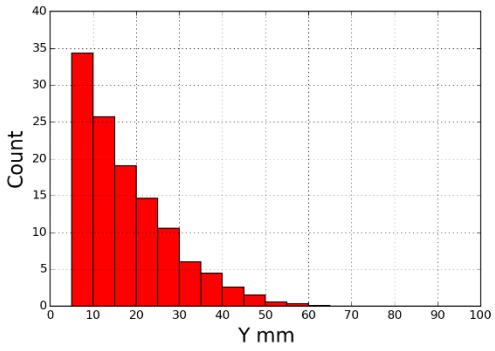

Figure A. 1563: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

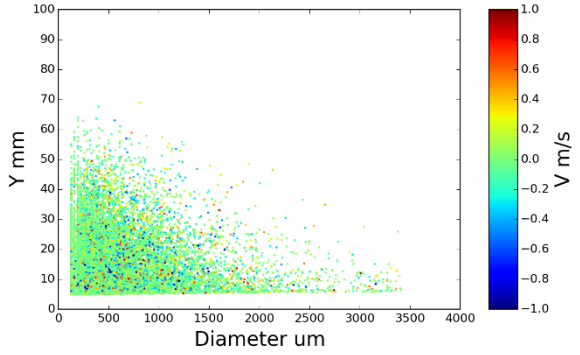

Figure A. 1564: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

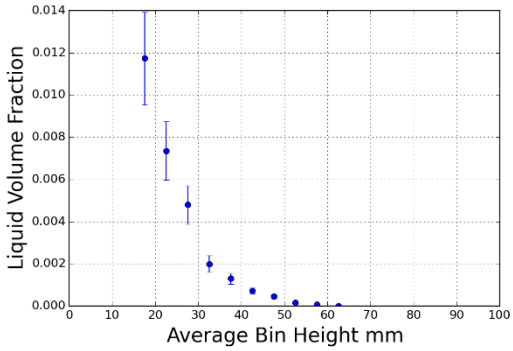

Figure A. 1565: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 All Droplets for .LB Image

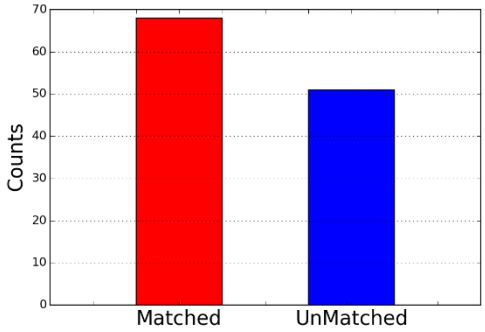

Figure A. 1566: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

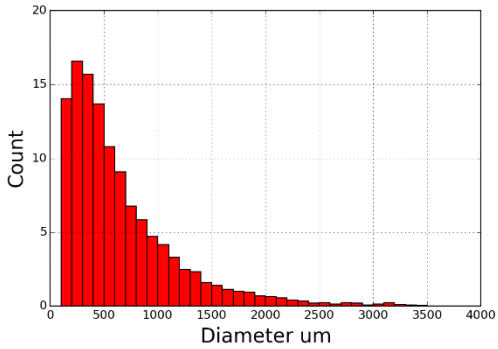

Figure A. 1567: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

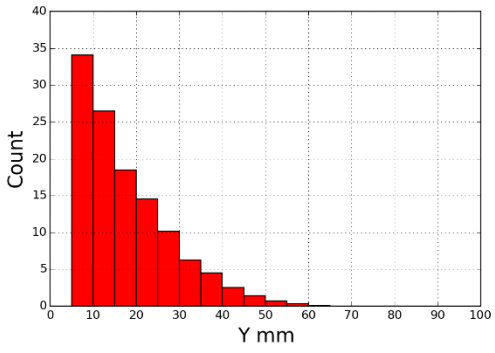

Figure A. 1568: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

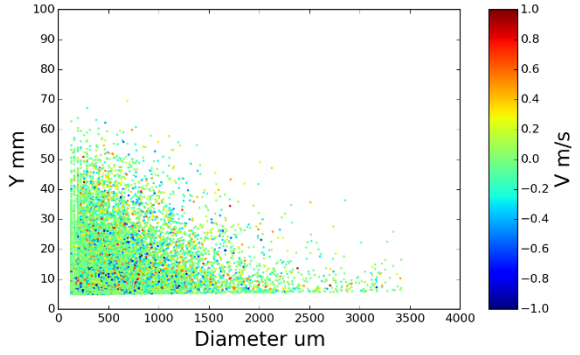

Figure A. 1569: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

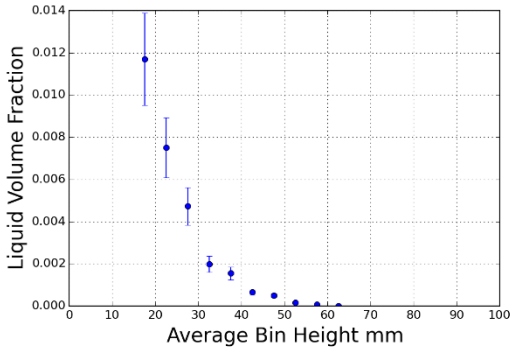

Figure A. 1570: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 Matched Only Droplets for .LA Image

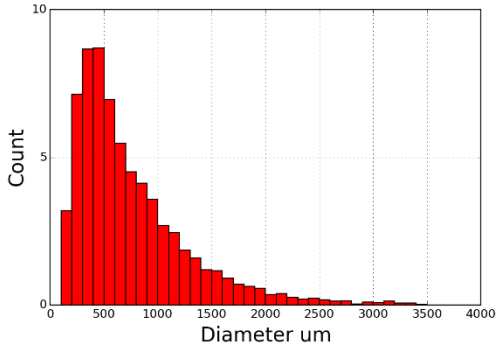

Figure A. 1571: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

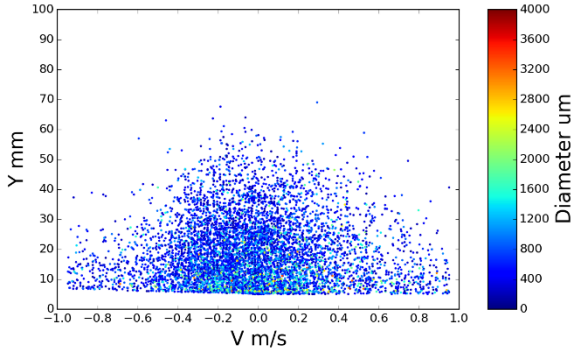

Figure A. 1574: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

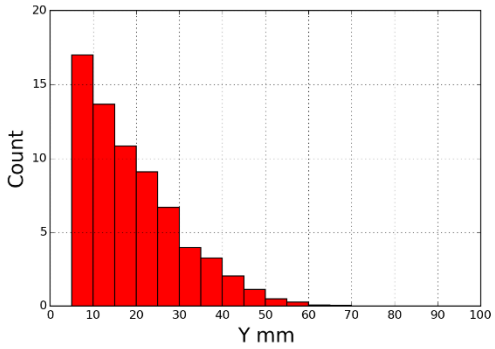

Figure A. 1572: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

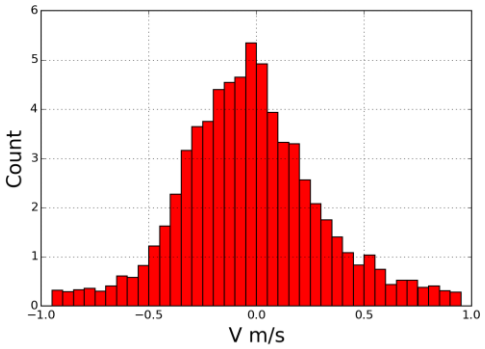

Figure A. 1575: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

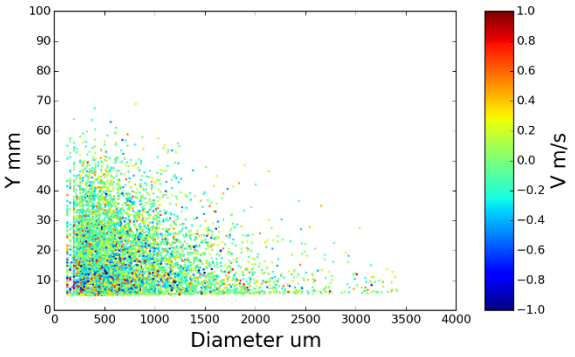

Figure A. 1573: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 Matched Only Droplets for .LB Image

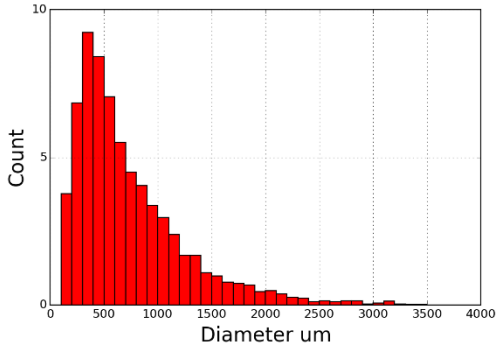

Figure A. 1576: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

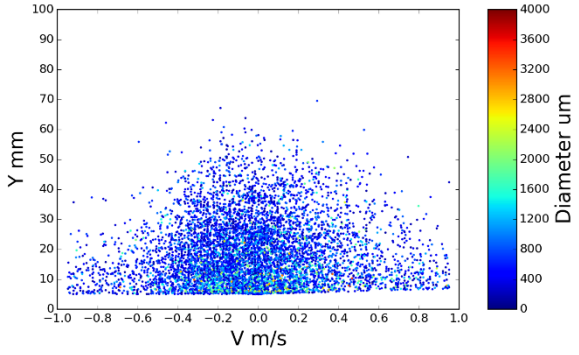

Figure A. 1579: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

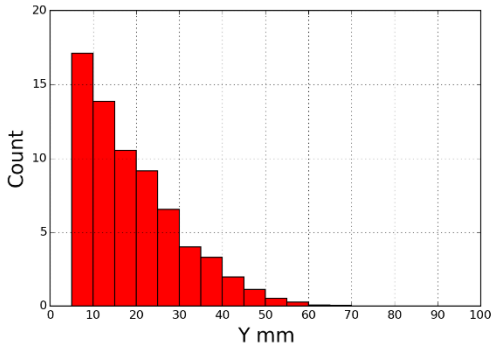

Figure A. 1577: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

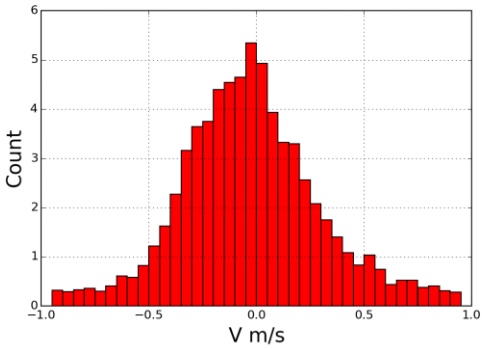

Figure A. 1580: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

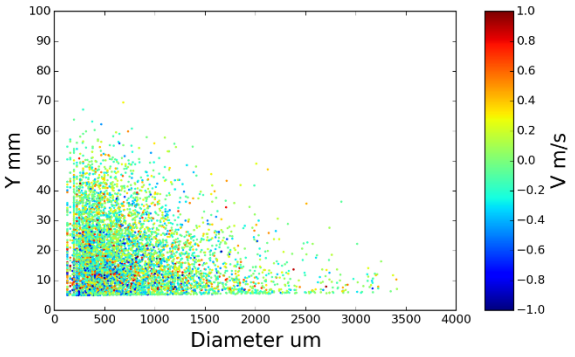

Figure A. 1578: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	66.14	66.46	128.6	3410	700.6	552.7	128.6	3418	696.8	549.4
20-40mm	28.57	29.36	128.6	3143	520.9	368.2	128.6	2924	516.6	361.9
40-60mm	4.22	4.15	128.6	2038	474.2	315.1	128.6	2039	480.2	329.3
60-80mm	0.09	0.07	128.6	893.2	353.2	213.7	128.6	828.4	382.3	207.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	99.02	100.04	128.6	3410	638.8	505.2	128.6	3418	634.7	501.2
			Height A (mm)				Height B (mm)			
Highest Particle			69.8290				70.1476			
Lowest Particle			5.0712				5.0712			

Table A. 167: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	32.21	128.6	3327	838.8	580.6	128.6	3380	816.2	571.3	-0.950	0.950	-0.090	0.300	-0.950	0.950	-0.000	0.350
20-40mm	18.56	128.6	3143	597.5	374.7	128.6	2924	591.6	366.6	-0.940	0.940	-0.110	0.180	-0.930	0.950	0.010	0.280
40-60mm	3.04	128.6	2038	558.5	320.1	128.6	2033	553.5	323.5	-0.490	0.160	-0.130	0.110	-0.510	0.920	0.030	0.230
60-80mm	0.06	257.2	893.2	444.1	207.9	213.2	828.4	424.6	193.6	-0.240	-0.100	-0.160	0.050	-0.050	0.350	0.170	0.120
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	53.87	128.6	3327	739.4	520.1	128.6	3380	723.3	509.9	-0.950	0.950	-0.100	0.260	-0.950	0.950	0.000	0.320

Table A. 168: Matched Droplet Info

A.6.4.2 All Droplets for .LA Image

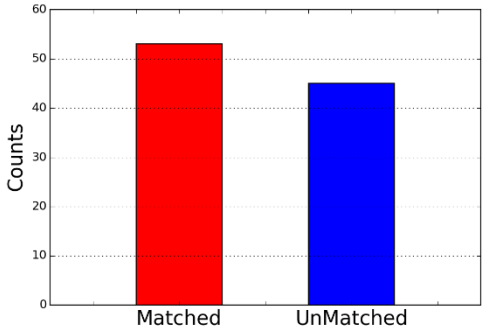

Figure A. 1581: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

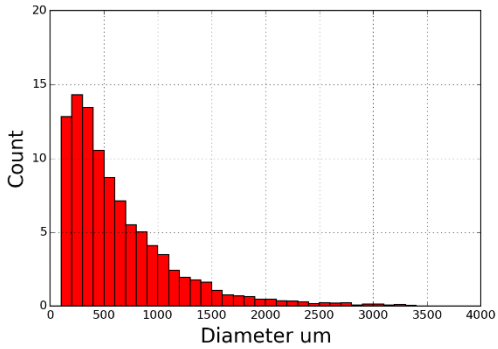

Figure A. 1582: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

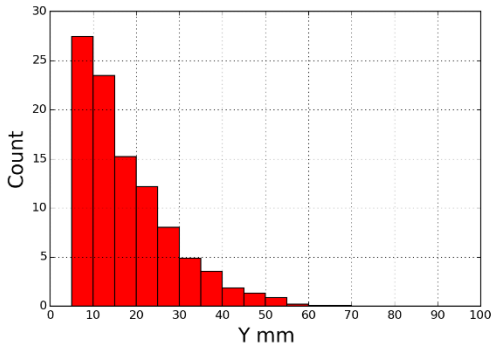

Figure A. 1583: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

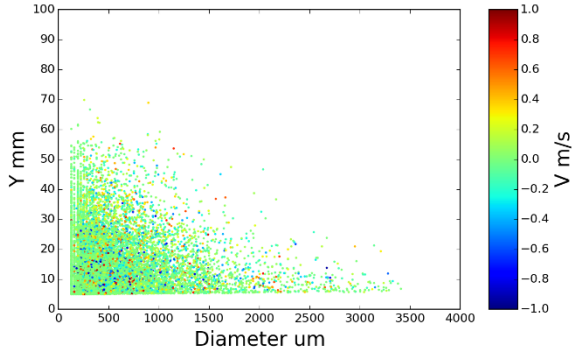

Figure A. 1584: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

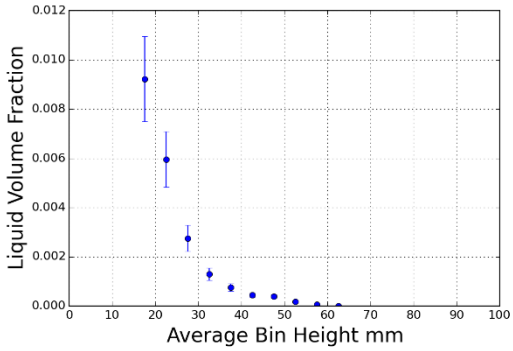

Figure A. 1585: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 All Droplets for .LB Image

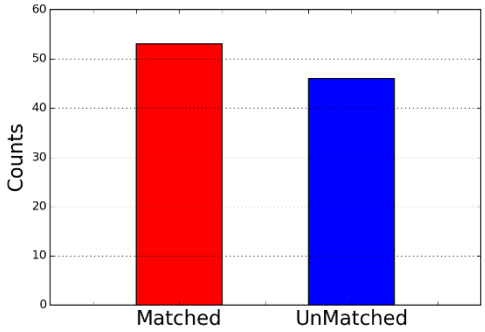

Figure A. 1586: CHC Count Comparison R-134a 55F 7500Btu 15000Lb Tri

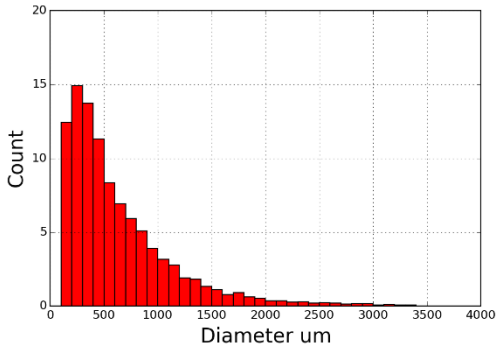

Figure A. 1587: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

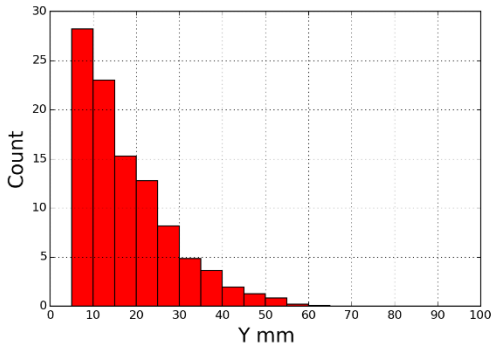

Figure A. 1588: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

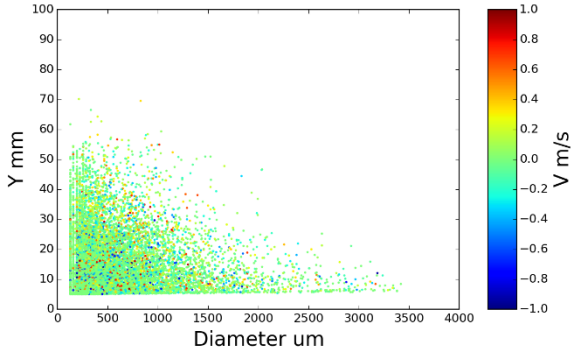

Figure A. 1589: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

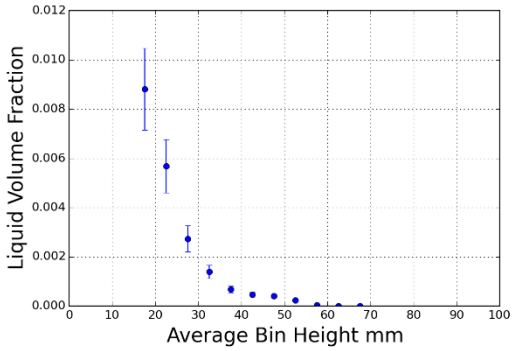

Figure A. 1590: Void Fraction R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 Matched Only Droplets for .LA Image

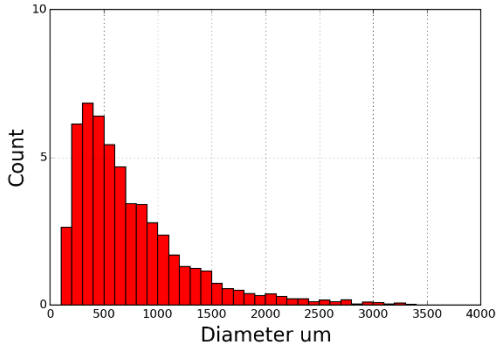

Figure A. 1591: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

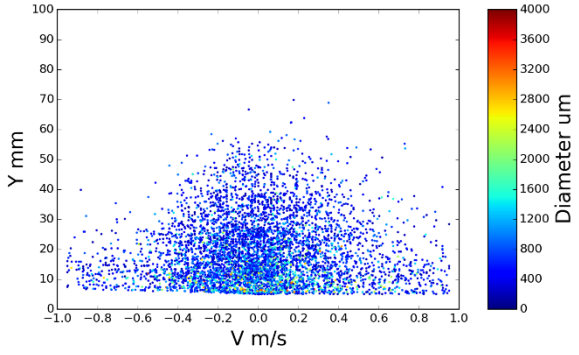

Figure A. 1594: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

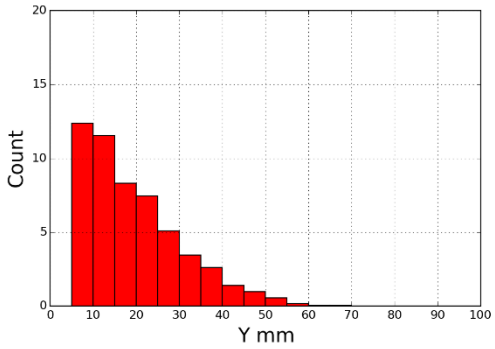

Figure A. 1592: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

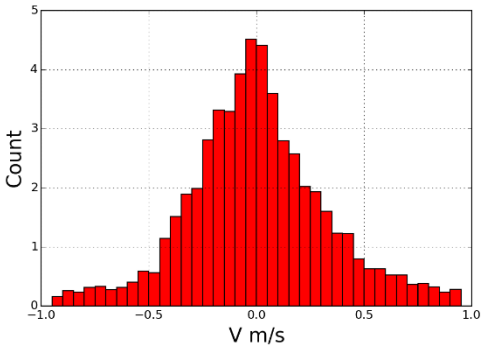

Figure A. 1595: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

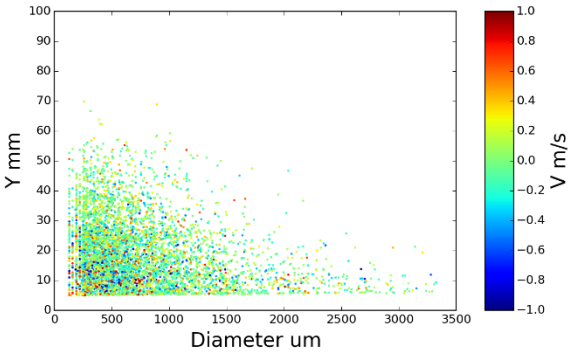

Figure A. 1593: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.6.4.2 Matched Only Droplets for .LB Image

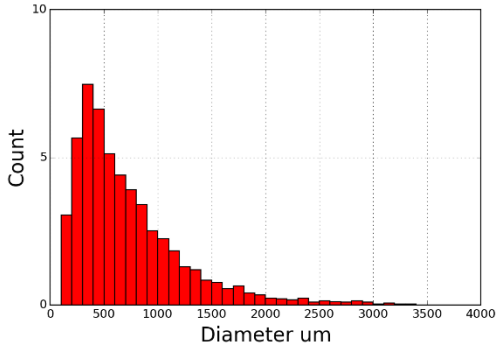

Figure A. 1596: Droplet Diameter Histogram R-134a 55F 7500Btu 15000Lb Tri

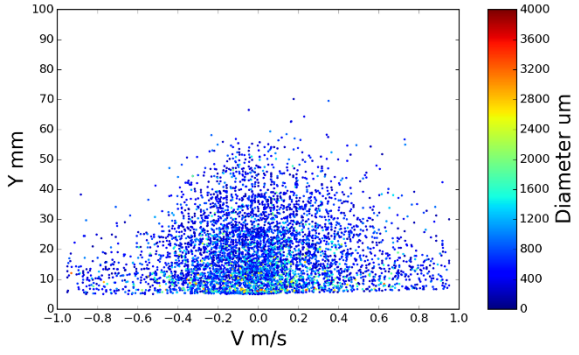

Figure A. 1599: Droplet Height vs Vertical Velocity R-134a 55F 7500Btu 15000Lb Tri

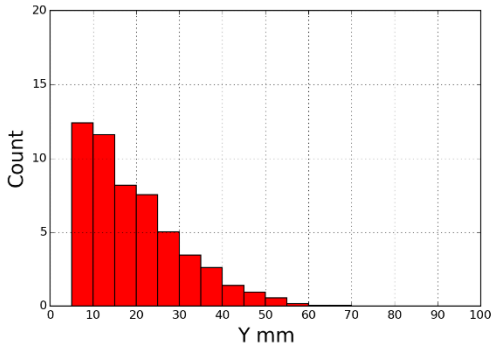

Figure A. 1597: Droplet Height Histogram R-134a 55F 7500Btu 15000Lb Tri

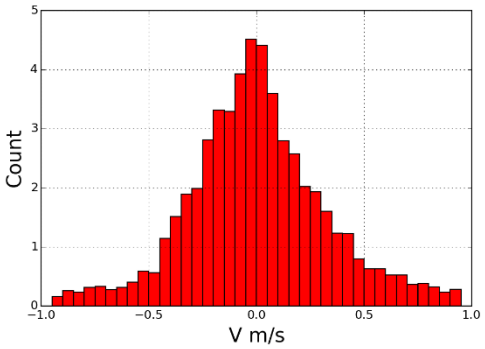

Figure A. 1600: Droplet Vertical Velocity Histogram R-134a 55F 7500Btu 15000Lb Tri

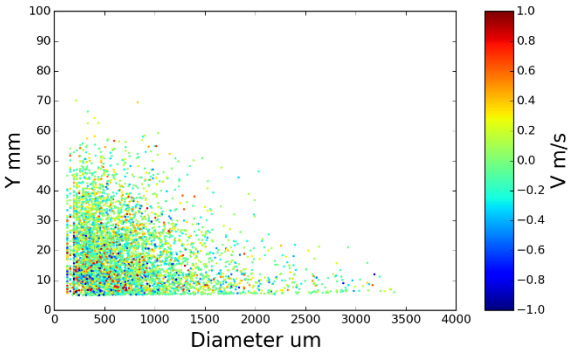

Figure A. 1598: Droplet Height vs Diameter R-134a 55F 7500Btu 15000Lb Tri

A.7 - 1556 R-134a 55F 5000Btu 30000Lb Tri

A.7.1 Liquid Level 1

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	10991 / 1.385
Ref Mass Flow (lb/hr) / (kg/s)	3206 / 0.404
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	29783 / 40.392
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	5138 / 16.21
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.1 / 12.84
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	55.3 / 12.92
Total Bundle Q (Btu/hr) / (kW)	151428 / 44.38
Total Bundle & Preboiler Q (Btu/hr) / (kW)	297878 / 87.30
Top Two Rows HTC Ratio	1.125
Bundle Inlet Quality	0.41
Bundle Exit Quality	1.00

Table A. 169: Thermal Conditions

A.7.1.1 Lens 100mm Mag 0_29x

A.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	161.29	165.01	57.2	3038	407.6	431.8	57.2	3038	405.2	422.3
40-60mm	298.34	303.96	57.2	3040	343.5	368.6	57.2	3036	343.1	366.4
60-80mm	162.89	159.48	57.2	3021	261.4	276.9	57.2	3026	260.3	272.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	626.47	632.54	57.2	3040	338.6	369.2	57.2	3038	338.4	365.1
			Height A (mm)				Height B (mm)			
Highest Particle			75.9740				75.9740			
Lowest Particle			28.0118				28.0118			

Table A. 170: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	86.78	57.2	3038	484.7	464.8	57.2	3038	481.3	462.9	-1.900	1.900	-0.030	0.400	-1.900	1.900	-0.010	0.490
40-60mm	197.09	57.2	3040	407.6	398.7	57.2	3036	404.4	394.6	-1.900	1.900	-0.040	0.330	-1.900	1.900	-0.010	0.400
60-80mm	112.21	57.2	3021	309.7	301.2	57.2	3026	306.4	297.0	-1.900	1.900	-0.050	0.280	-1.900	1.900	0.000	0.330
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	396.08	57.2	3040	396.8	395.0	57.2	3038	393.5	391.5	-1.900	1.900	-0.040	0.340	-1.900	1.900	-0.010	0.410

Table A. 171: Matched Droplet Info

A.7.1.1 All Droplets for .LA Image

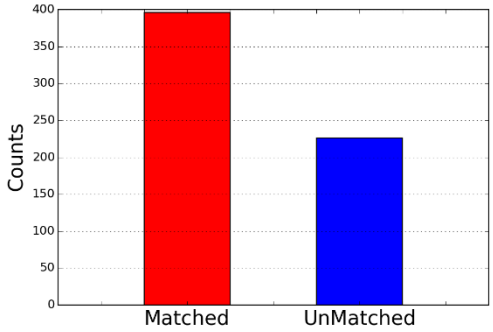

Figure A. 1601: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

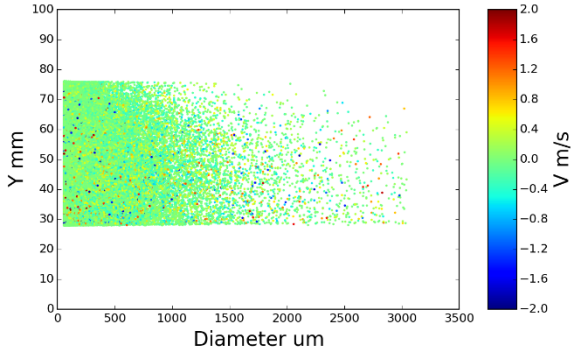

Figure A. 1604: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

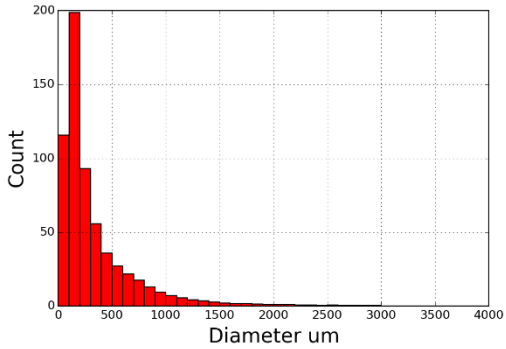

Figure A. 1602: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

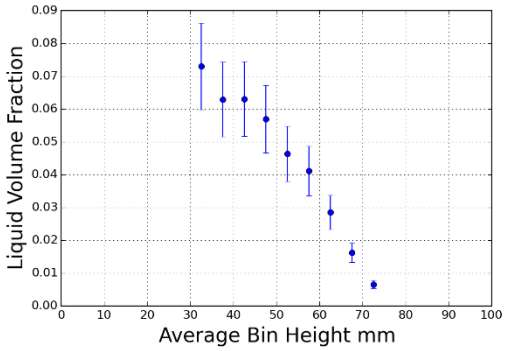

Figure A. 1605: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

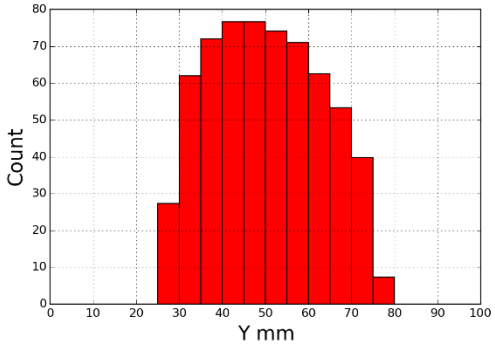

Figure A. 1603: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 All Droplets for .LB Image

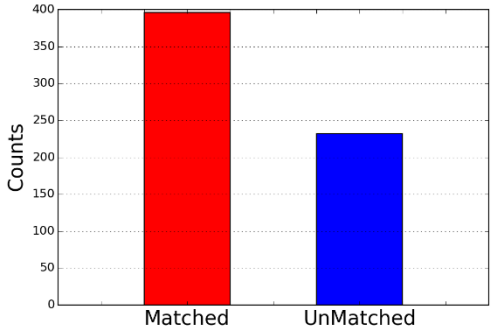

Figure A. 1606: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

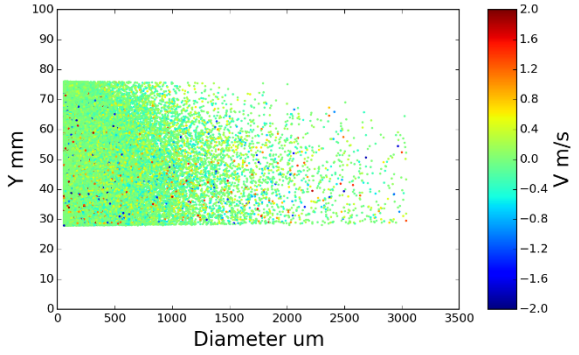

Figure A. 1609: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

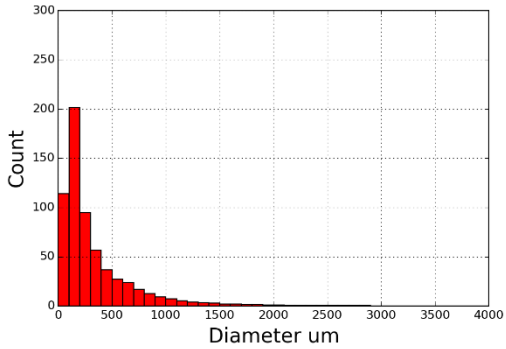

Figure A. 1607: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

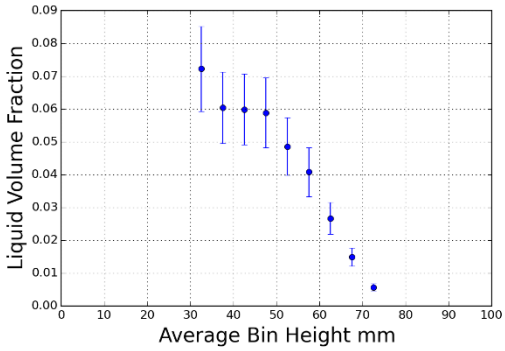

Figure A. 1610: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

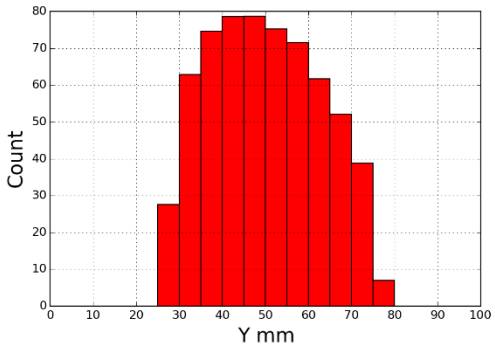

Figure A. 1608: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 Matched Only Droplets for .LA Image

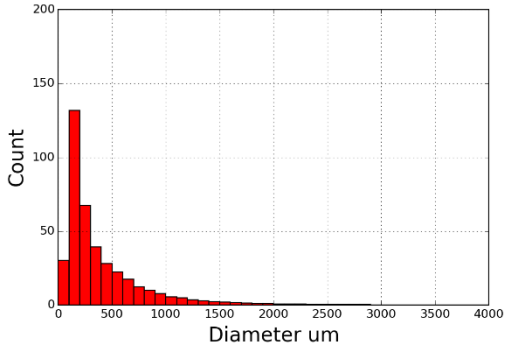

Figure A. 1611: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

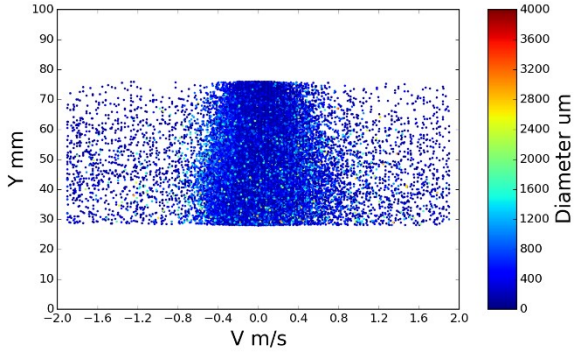

Figure A. 1614: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

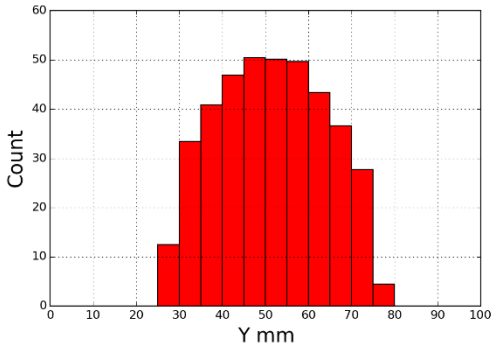

Figure A. 1612: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

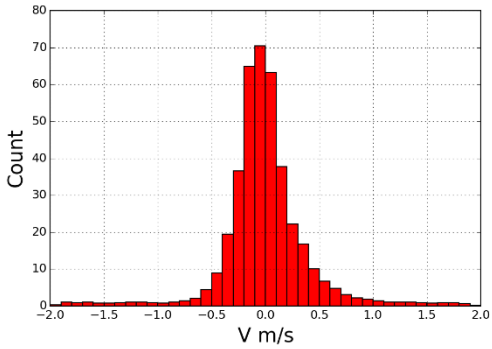

Figure A. 1615: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

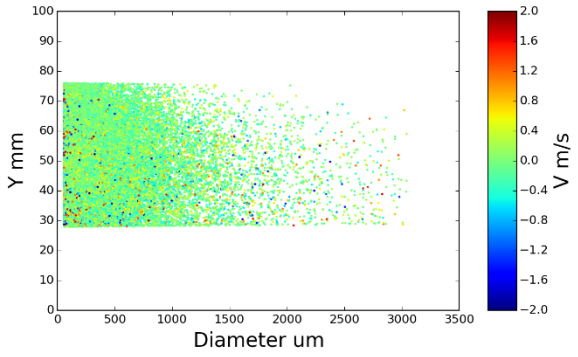

Figure A. 1613: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 Matched Only Droplets for .LB Image

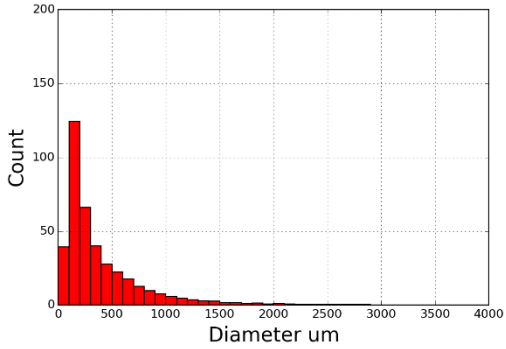

Figure A. 1616: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

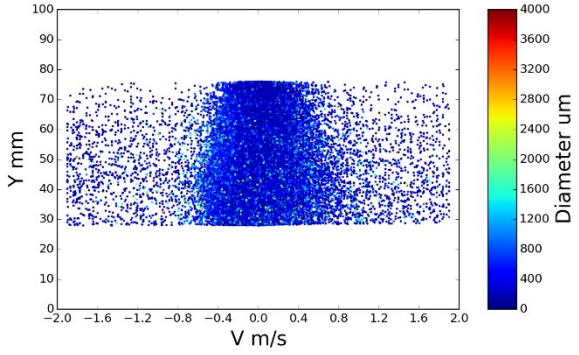

Figure A. 1619: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

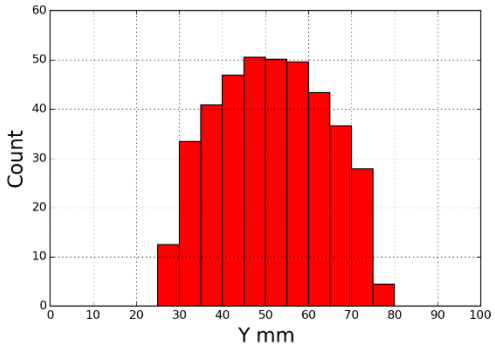

Figure A. 1617: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

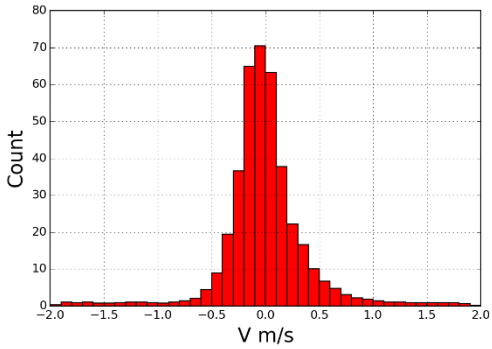

Figure A. 1620: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

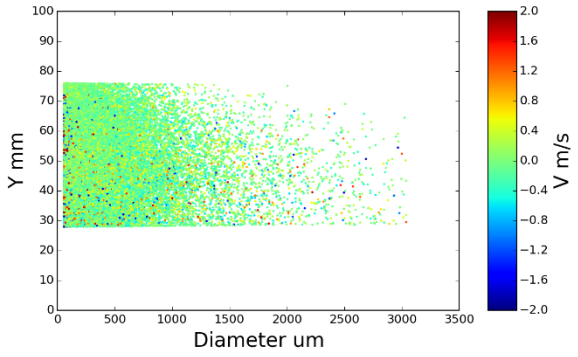

Figure A. 1618: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.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	128.34	128.06	57.2	3042	473.4	494.8	57.2	3031	469.4	485.4
40-60mm	282.93	282.31	57.2	3041	382.8	423.6	57.2	3036	386.3	421.4
60-80mm	157.33	152.6	57.2	3023	284.6	320.1	57.2	3026	290.1	323.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	571.52	566.34	57.2	3042	376.1	421.1	57.2	3036	379.1	418.3
			Height A (mm)				Height B (mm)			
Highest Particle			75.9740				75.9740			
Lowest Particle			28.0118				28.0118			

Table A. 172: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	62.72	57.2	3001	593.3	548.0	57.2	3028	590.4	550.2	-1.900	1.900	-0.030	0.390	-1.900	1.900	-0.030	0.470
40-60mm	177.82	57.2	3015	468.5	460.1	57.2	3036	465.4	458.3	-1.900	1.900	-0.040	0.330	-1.900	1.900	-0.030	0.400
60-80mm	105.58	57.2	3023	349.9	353.8	57.2	3013	347.1	351.9	-1.900	1.900	-0.050	0.300	-1.900	1.900	-0.030	0.340
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	346.12	57.2	3023	454.9	456.4	57.2	3036	452.0	455.5	-1.900	1.900	-0.040	0.340	-1.900	1.900	-0.030	0.400

Table A. 173: Matched Droplet Info

A.7.1.1 All Droplets for .LA Image

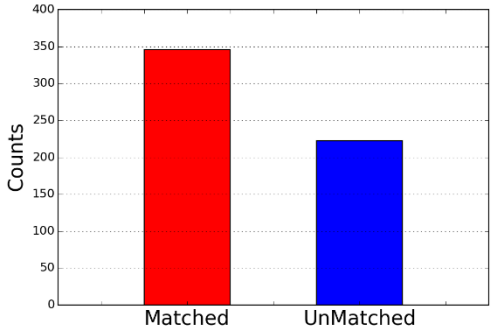

Figure A. 1621: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

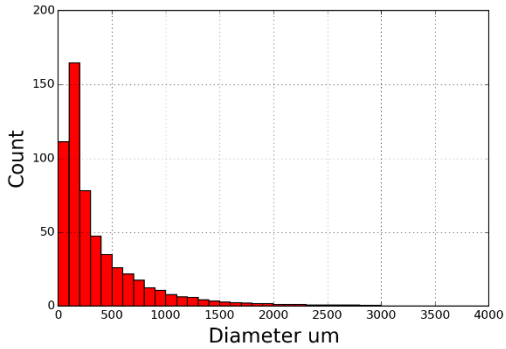

Figure A. 1622: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

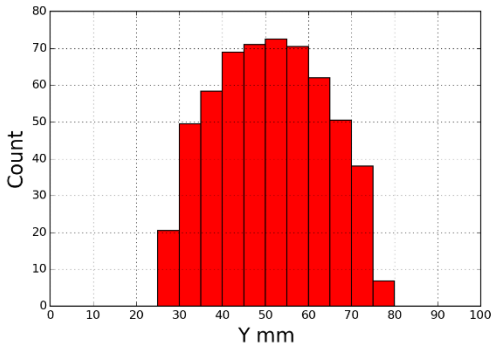

Figure A. 1623: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

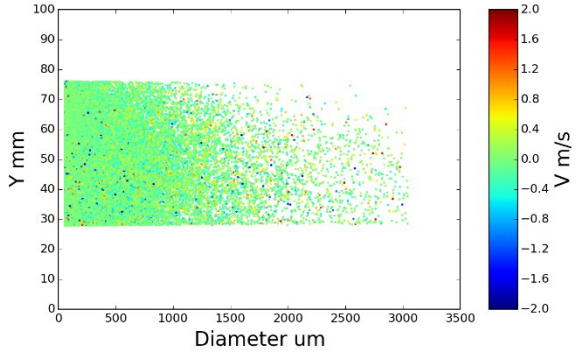

Figure A. 1624: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

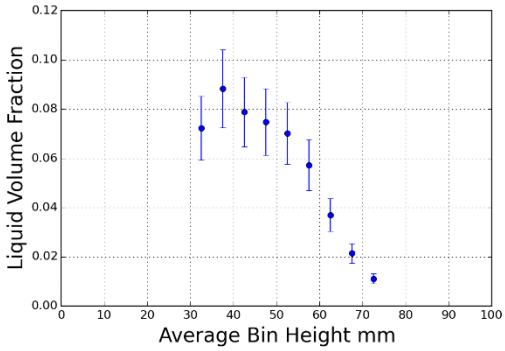

Figure A. 1625: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 All Droplets for .LB Image

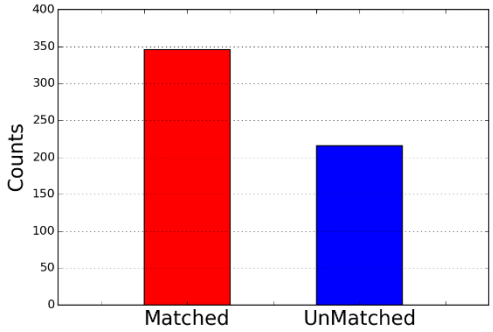

Figure A. 1626: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

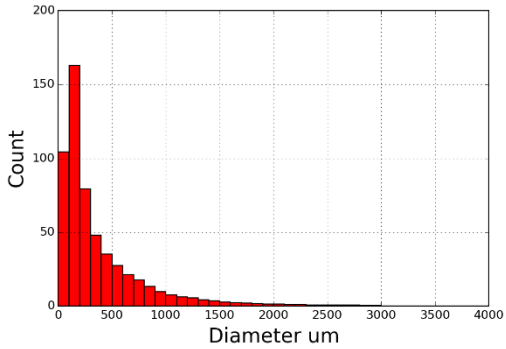

Figure A. 1627: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

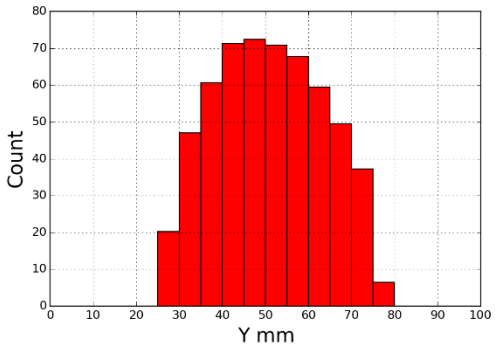

Figure A. 1628: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

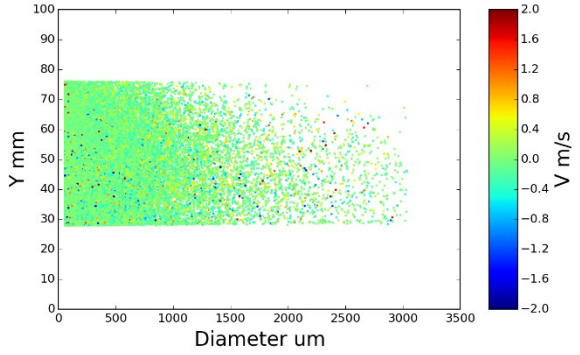

Figure A. 1629: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

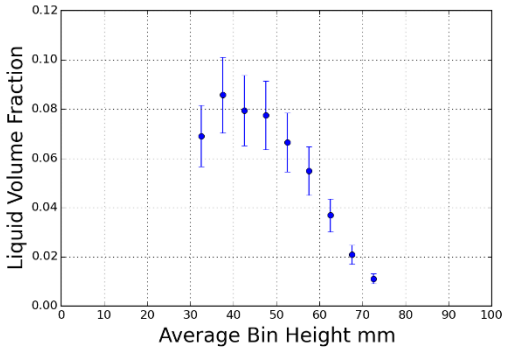

Figure A. 1630: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 Matched Only Droplets for .LA Image

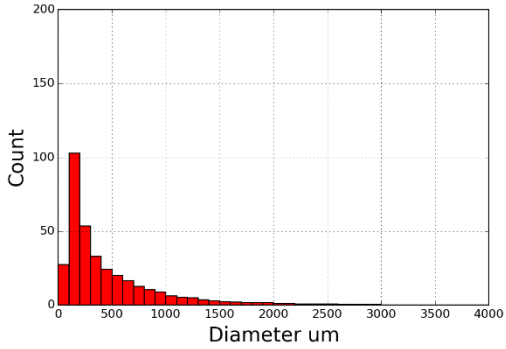

Figure A. 1631: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

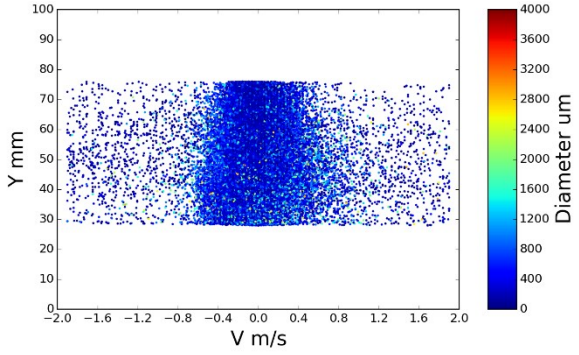

Figure A. 1634: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

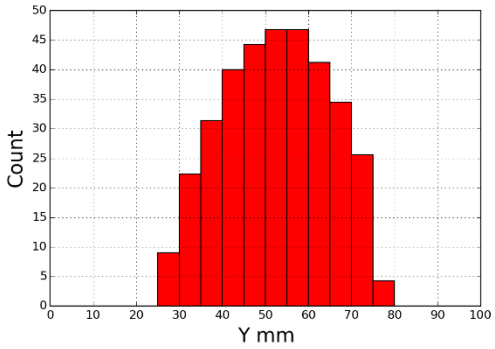

Figure A. 1632: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

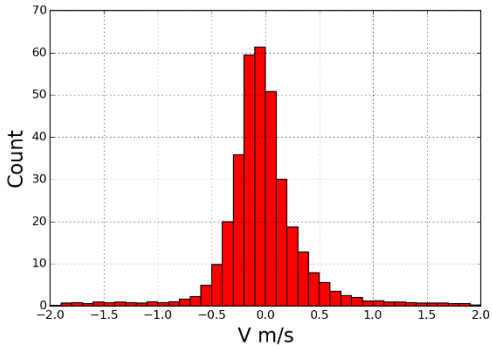

Figure A. 1635: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

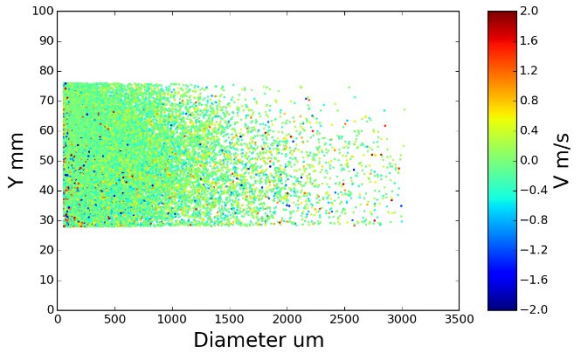

Figure A. 1633: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 Matched Only Droplets for .LB Image

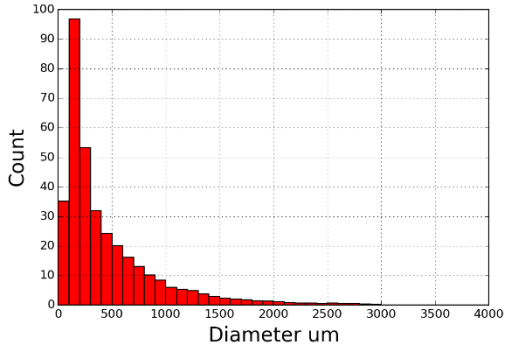

Figure A. 1636: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

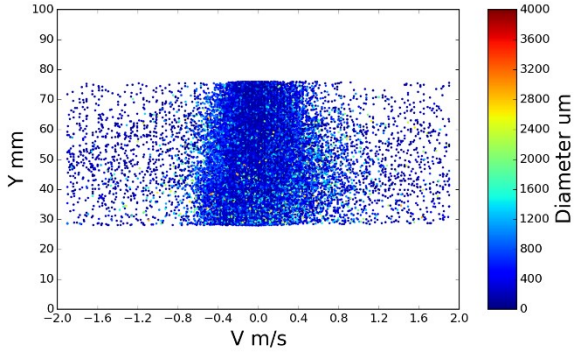

Figure A. 1639: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

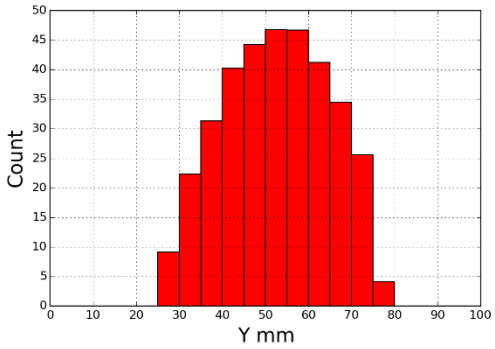

Figure A. 1637: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

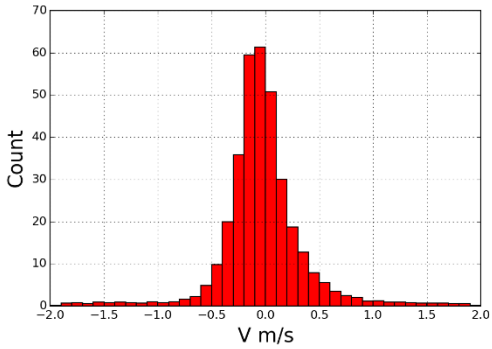

Figure A. 1640: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

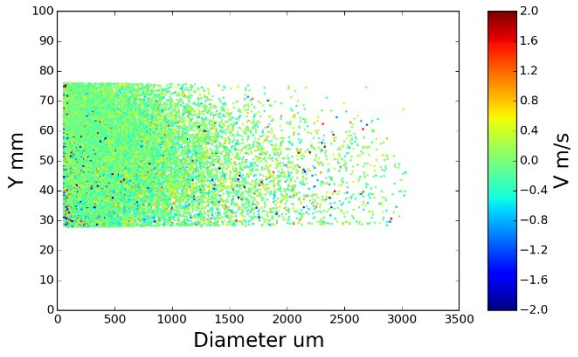

Figure A. 1638: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.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	108.09	103.64	57.2	3035	480.5	507.6	57.2	3020	499.8	514.2
40-60mm	254.97	249.03	57.2	3041	395.4	432.4	57.2	3037	404.6	440.1
60-80mm	149.37	143.23	57.2	2978	304.1	345.7	57.2	3017	311.6	344.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	515.19	498.94	57.2	3041	386.7	431.4	57.2	3037	397.6	437.3
			Height A (mm)				Height B (mm)			
Highest Particle			75.9740				75.9740			
Lowest Particle			28.0118				28.0118			

Table A. 174: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	48.75	57.2	3010	633.6	574.5	57.2	3020	629.9	573.1	-1.900	1.890	-0.030	0.420	-1.900	1.900	-0.040	0.490
40-60mm	151.65	57.2	3041	498.3	478.2	57.2	3010	494.4	474.4	-1.900	1.900	-0.040	0.350	-1.900	1.900	-0.020	0.430
60-80mm	96.94	57.2	2978	381.8	377.8	57.2	3017	376.9	372.5	-1.900	1.900	-0.050	0.300	-1.900	1.900	-0.020	0.370
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	297.34	57.2	3041	482.5	473.8	57.2	3020	478.4	470.3	-1.900	1.900	-0.040	0.350	-1.900	1.900	-0.020	0.420

Table A. 175: Matched Droplet Info

A.7.1.1 All Droplets for .LA Image

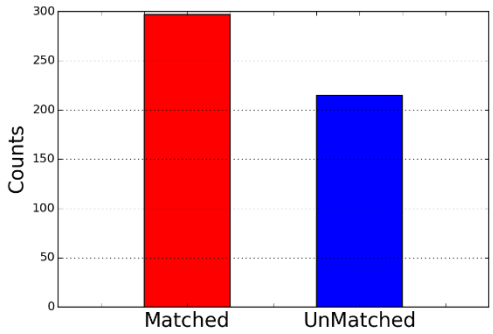

Figure A. 1641: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

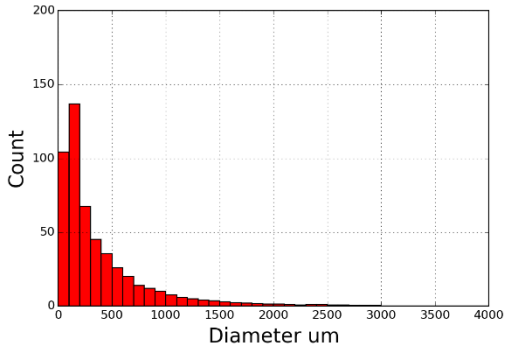

Figure A. 1642: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

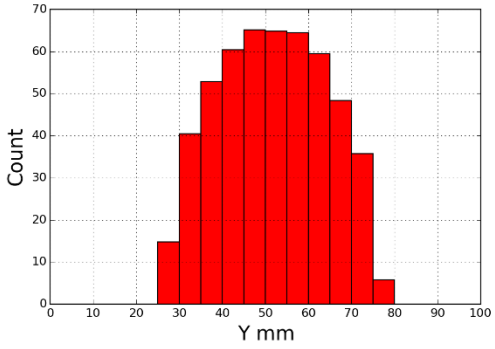

Figure A. 1643: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

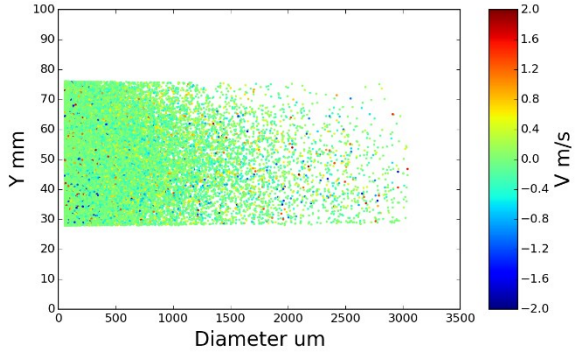

Figure A. 1644: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

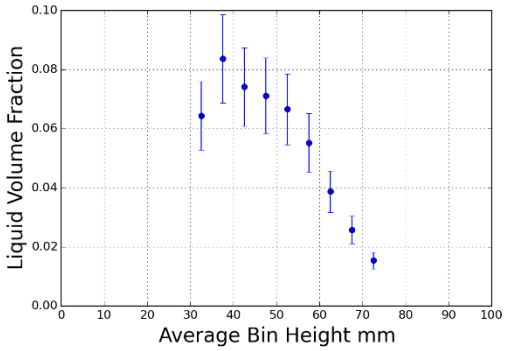

Figure A. 1645: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 All Droplets for .LB Image

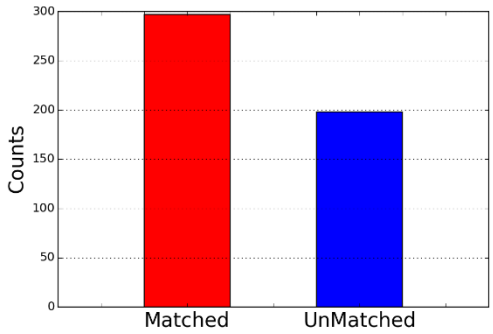

Figure A. 1646: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

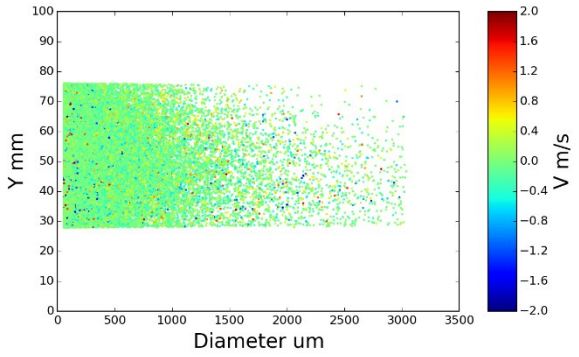

Figure A. 1649: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

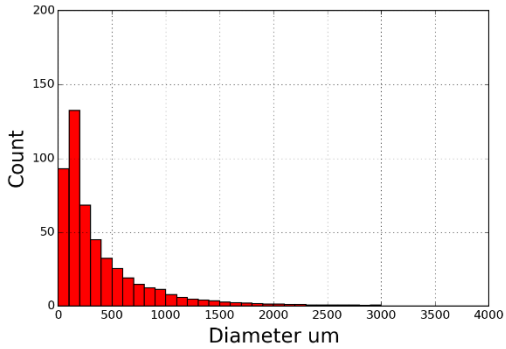

Figure A. 1647: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

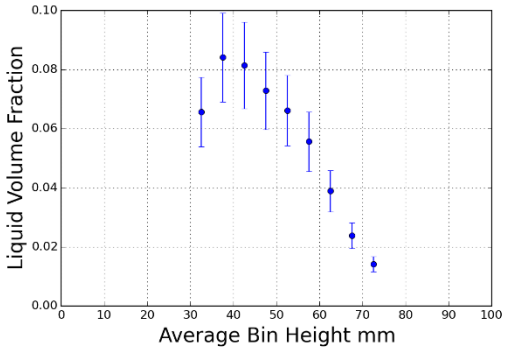

Figure A. 1650: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

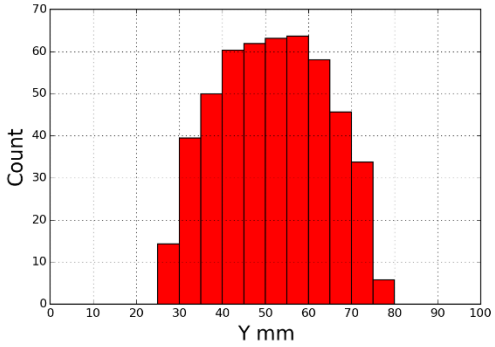

Figure A. 1648: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 Matched Only Droplets for .LA Image

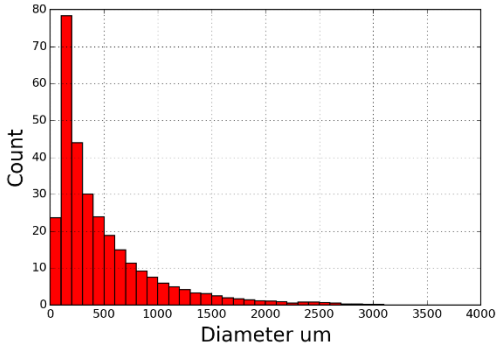

Figure A. 1651: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

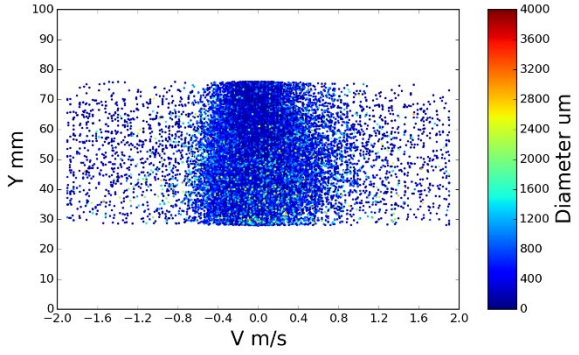

Figure A. 1654: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

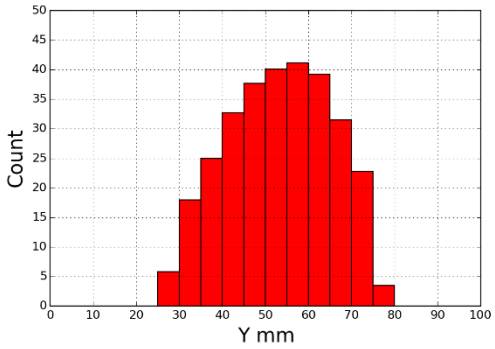

Figure A. 1652: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

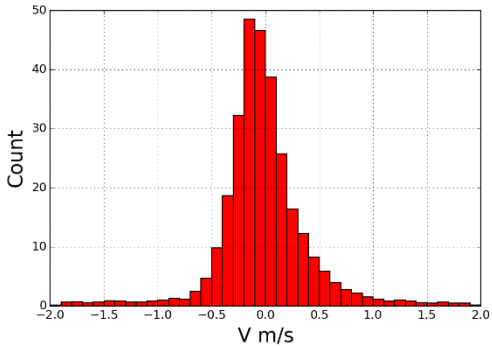

Figure A. 1655: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

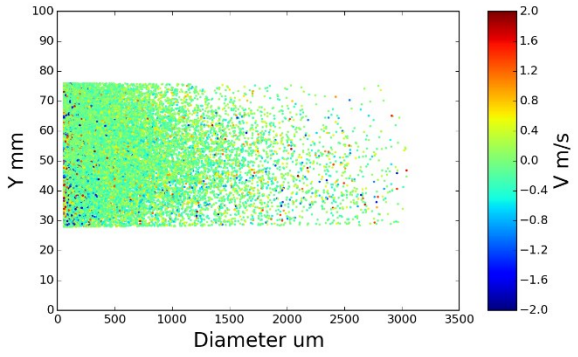

Figure A. 1653: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 Matched Only Droplets for .LB Image

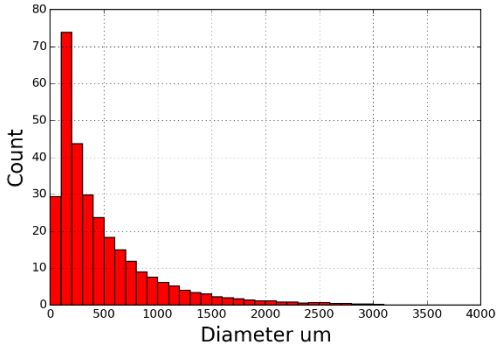

Figure A. 1656: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

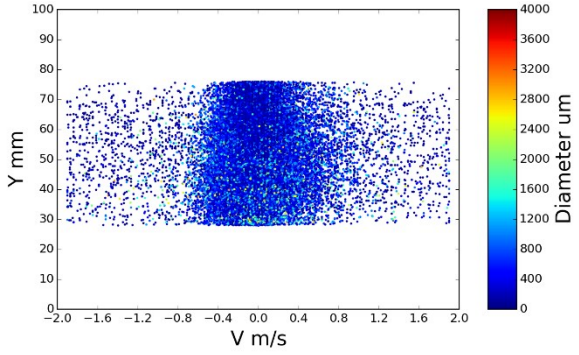

Figure A. 1659: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

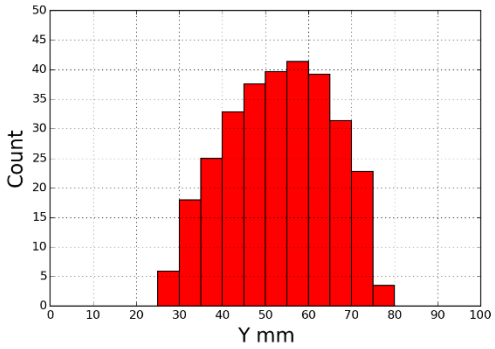

Figure A. 1657: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

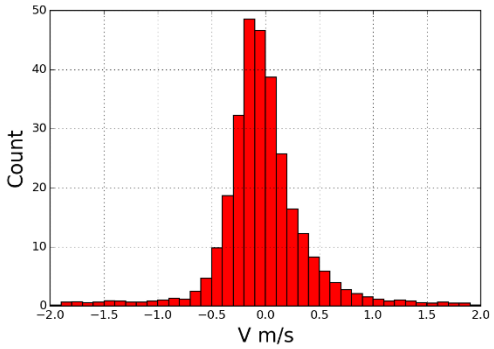

Figure A. 1660: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

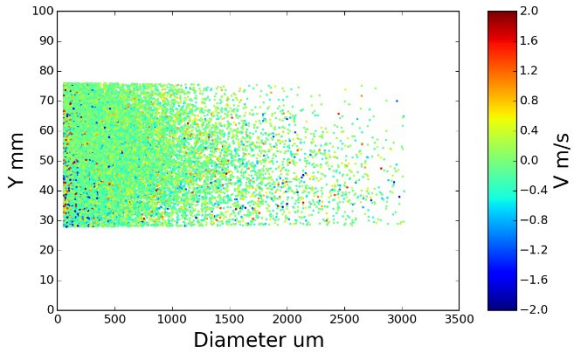

Figure A. 1658: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 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	89.98	85.03	57.2	3037	515.8	517.0	57.2	3022	520.0	519.5
40-60mm	223.14	220.87	57.2	3036	415.0	458.5	57.2	3041	425.5	461.6
60-80mm	140.45	136.84	57.2	3040	308.8	350.3	57.2	3000	318.5	359.7
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	457.33	446.11	57.2	3040	402.1	447.0	57.2	3041	410.6	450.7
			Height A (mm)				Height B (mm)			
Highest Particle			75.9740				75.9740			
Lowest Particle			28.0118				28.0118			

Table A. 176: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	32.01	57.2	3027	696.5	609.0	57.2	2994	687.3	607.5	-1.900	1.900	-0.010	0.480	-1.900	1.900	0.000	0.570
40-60mm	124.58	57.2	3036	541.7	510.3	57.2	3041	536.8	508.5	-1.900	1.900	-0.040	0.370	-1.900	1.900	0.000	0.450
60-80mm	85.17	57.2	3039	396.2	387.4	57.2	3000	391.1	383.6	-1.900	1.900	-0.040	0.340	-1.900	1.900	-0.000	0.390
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	241.76	57.2	3039	510.9	495.8	57.2	3041	505.3	493.3	-1.900	1.900	-0.030	0.380	-1.900	1.900	-0.000	0.450

Table A. 177: Matched Droplet Info

A.7.1.1 All Droplets for .LA Image

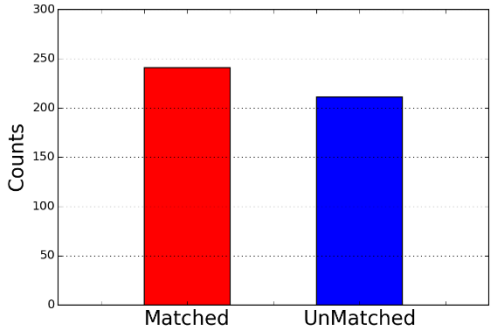

Figure A. 1661: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

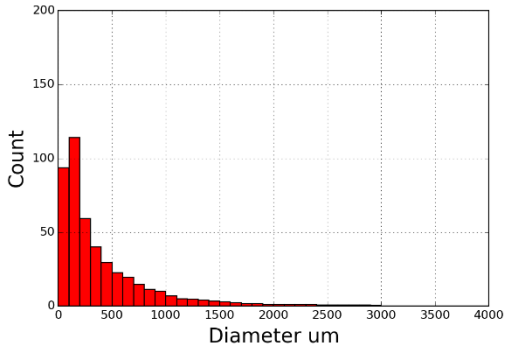

Figure A. 1662: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

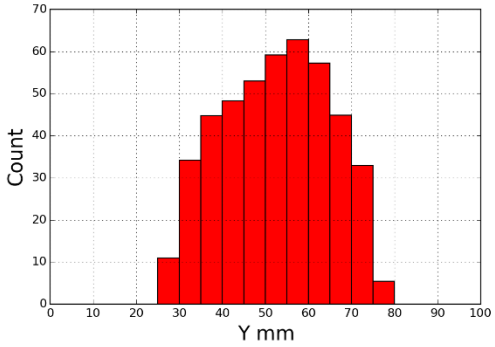

Figure A. 1663: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

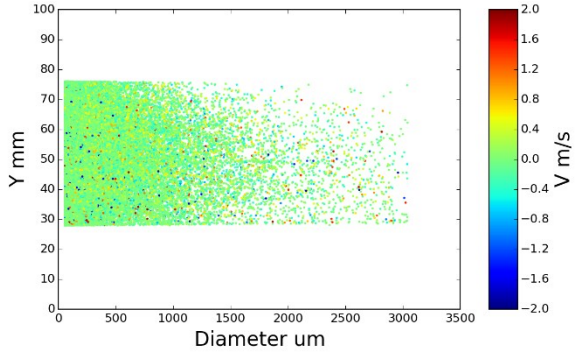

Figure A. 1664: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

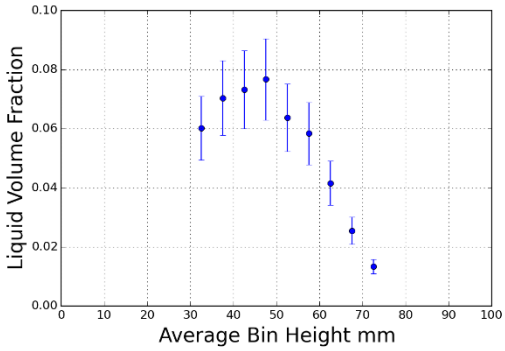

Figure A. 1665: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 All Droplets for .LB Image

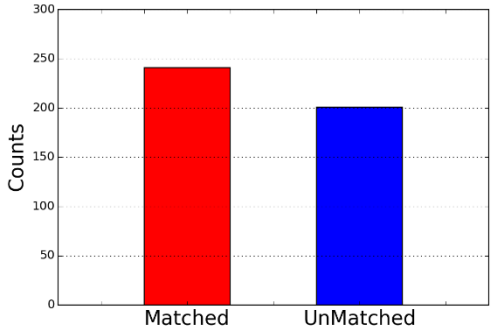

Figure A. 1666: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

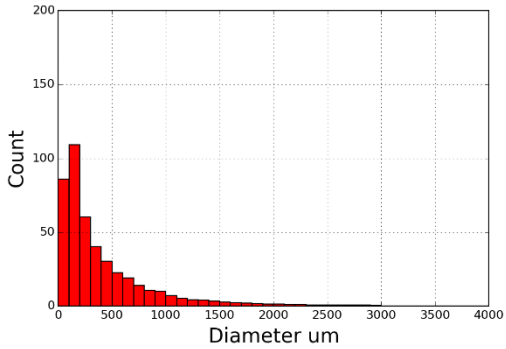

Figure A. 1667: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

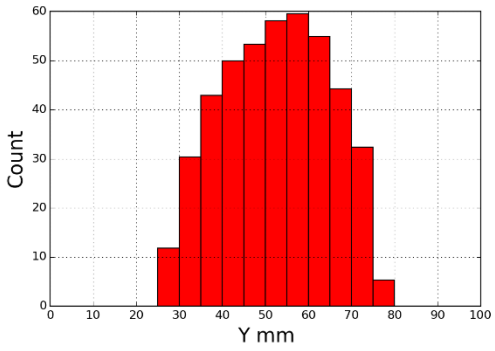

Figure A. 1668: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

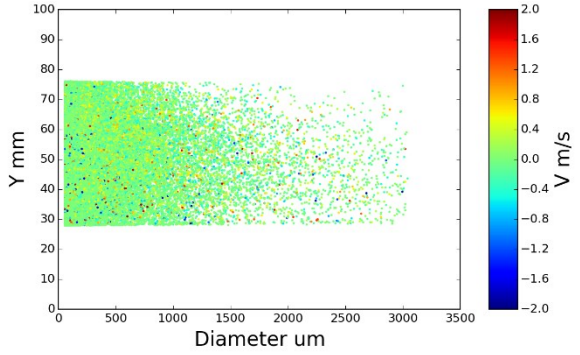

Figure A. 1669: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

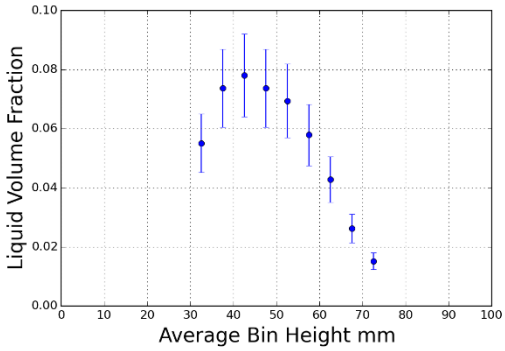

Figure A. 1670: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 Matched Only Droplets for .LA Image

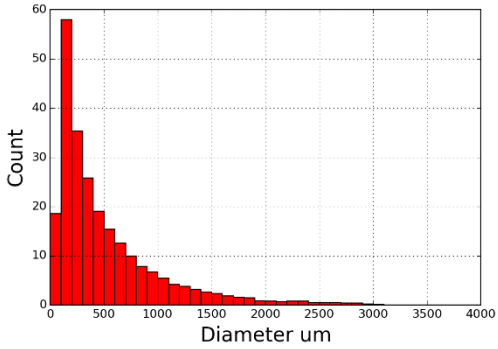

Figure A. 1671: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

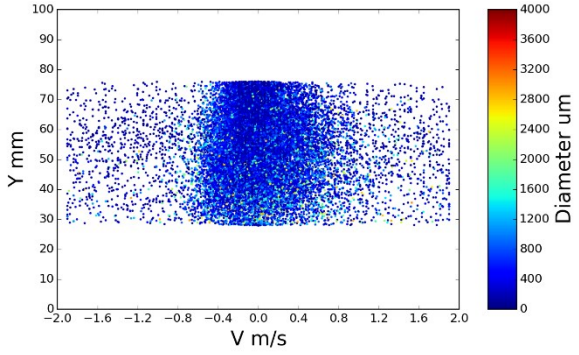

Figure A. 1674: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

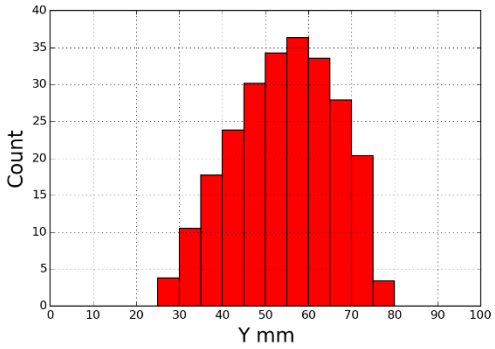

Figure A. 1672: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

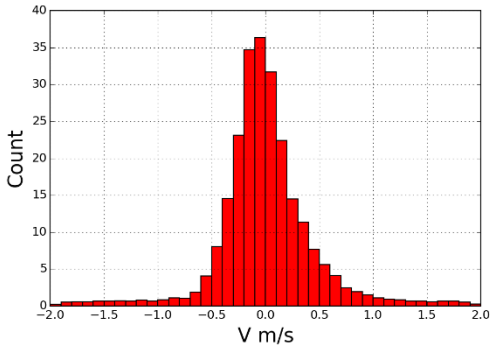

Figure A. 1675: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

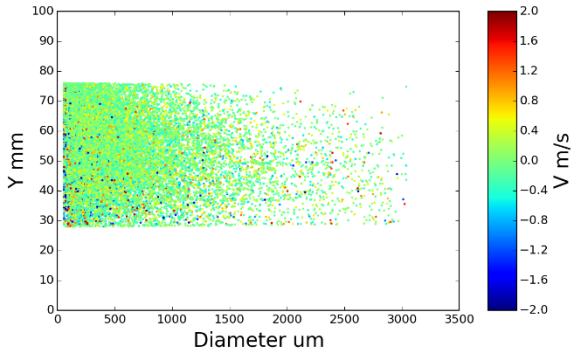

Figure A. 1673: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 Matched Only Droplets for .LB Image

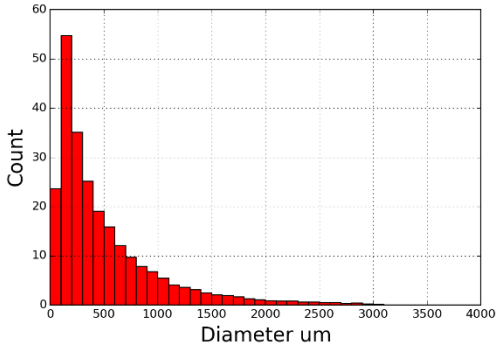

Figure A. 1676: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

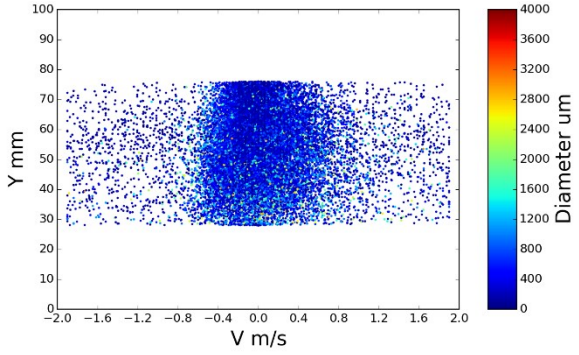

Figure A. 1679: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

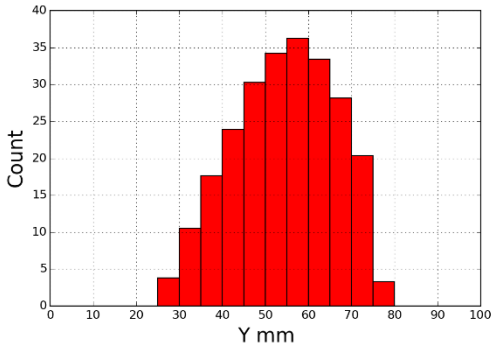

Figure A. 1677: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

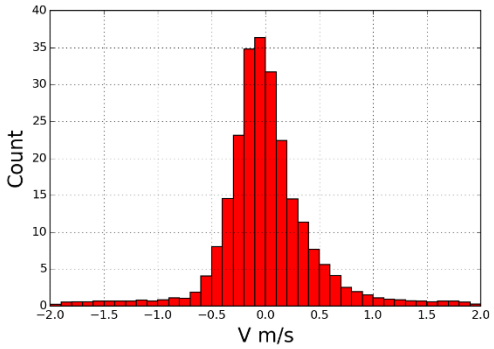

Figure A. 1680: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

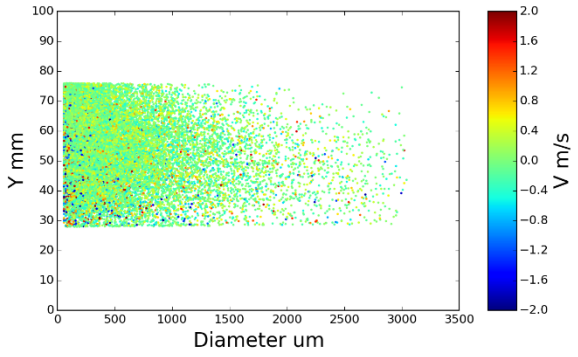

Figure A. 1678: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 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	80.4	76.13	57.2	3025	510.5	494.0	57.2	3040	520.1	506.1
40-60mm	187.85	178.4	57.2	3040	408.4	459.3	57.2	3031	424.8	464.7
60-80mm	126.76	120.68	57.2	3014	308.2	347.1	57.2	3008	316.8	350.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	398.59	377.89	57.2	3040	397.0	440.3	57.2	3040	409.4	446.6
			Height A (mm)				Height B (mm)			
Highest Particle			75.9740				75.9740			
Lowest Particle			28.0118				28.0118			

Table A. 178: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	23.57	57.2	3025	738.8	634.5	57.2	3031	728.8	632.6	-1.900	1.900	-0.030	0.560	-1.900	1.900	0.000	0.640
40-60mm	96.12	57.2	3032	546.2	522.8	57.2	3031	539.9	518.4	-1.900	1.900	-0.010	0.400	-1.900	1.900	0.010	0.480
60-80mm	74.22	57.2	3014	400.9	391.0	57.2	2986	396.0	386.8	-1.900	1.900	-0.020	0.340	-1.900	1.900	0.000	0.400
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	193.91	57.2	3032	514.0	504.4	57.2	3031	507.8	500.3	-1.900	1.900	-0.020	0.400	-1.900	1.900	0.010	0.470

Table A. 179: Matched Droplet Info

A.7.1.1 All Droplets for .LA Image

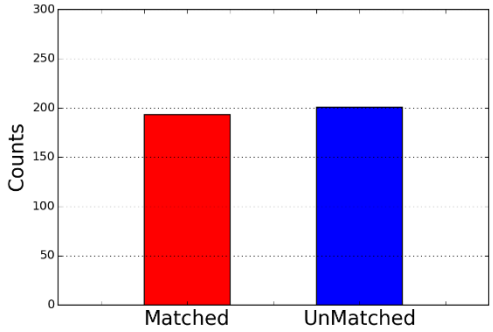

Figure A. 1681: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

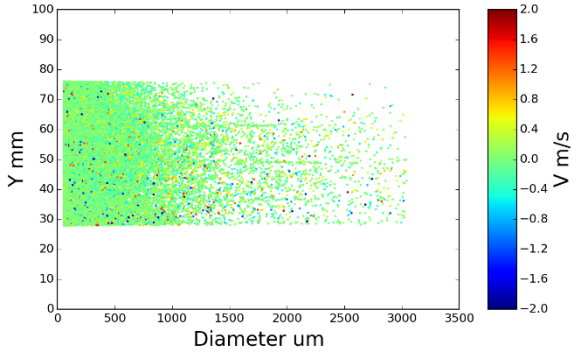

Figure A. 1684: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

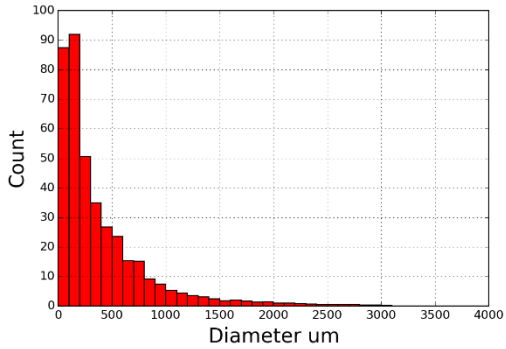

Figure A. 1682: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

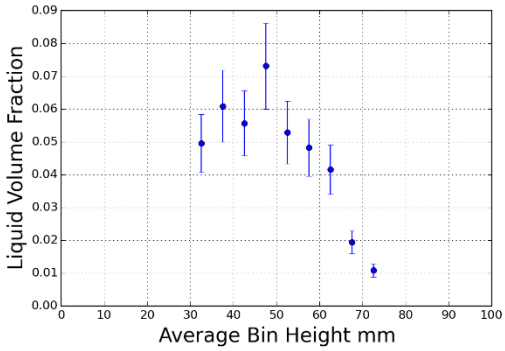

Figure A. 1685: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

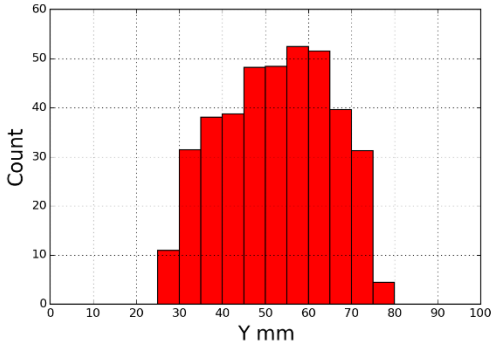

Figure A. 1683: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 All Droplets for .LB Image

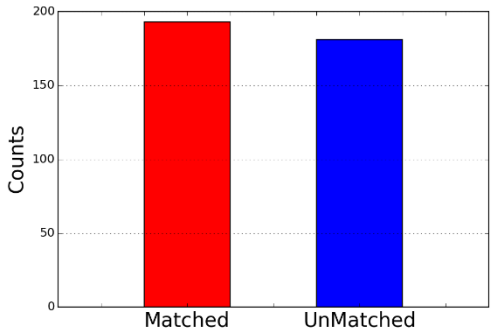

Figure A. 1686: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

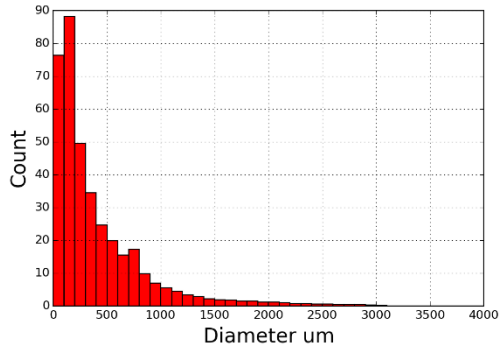

Figure A. 1687: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

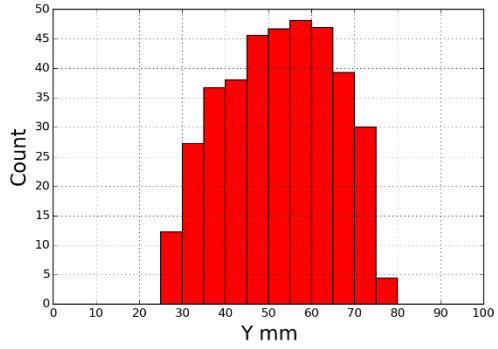

Figure A. 1688: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

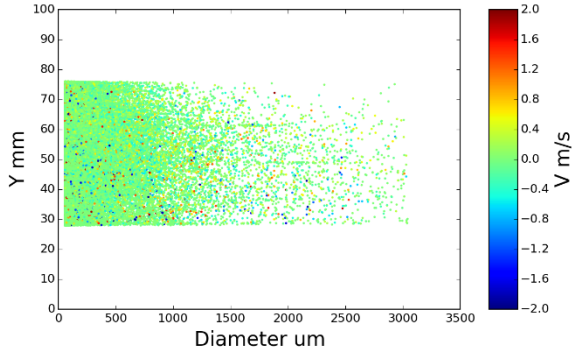

Figure A. 1689: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

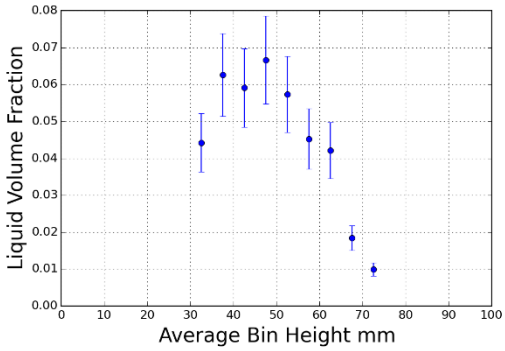

Figure A. 1690: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 Matched Only Droplets for .LA Image

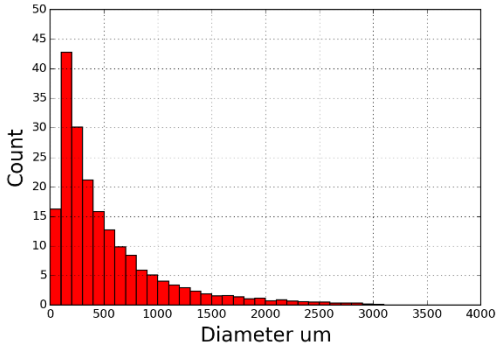

Figure A. 1691: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

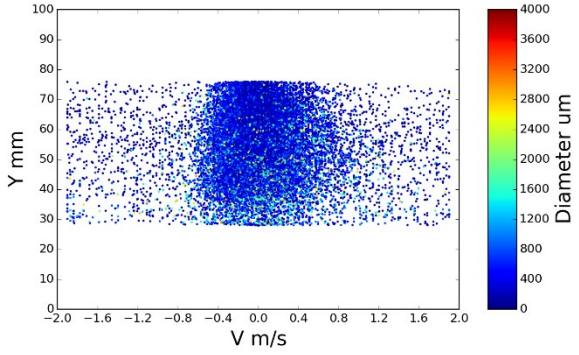

Figure A. 1694: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

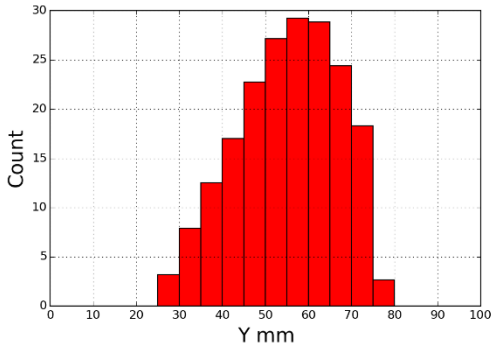

Figure A. 1692: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

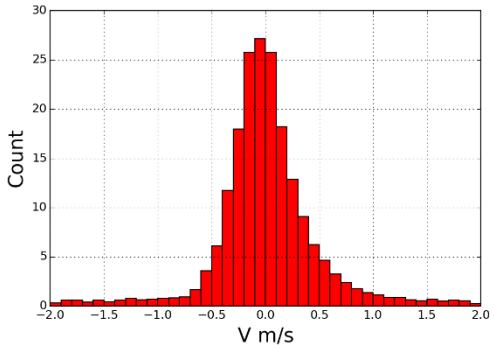

Figure A. 1695: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

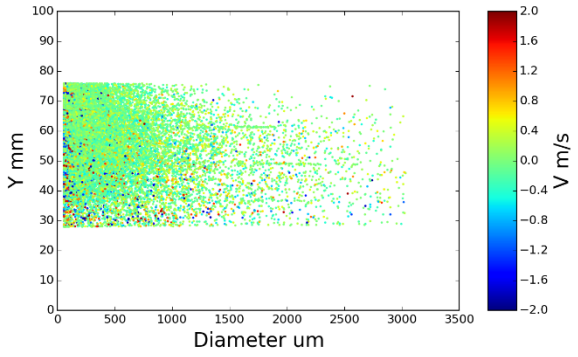

Figure A. 1693: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.1.1 Matched Only Droplets for .LB Image

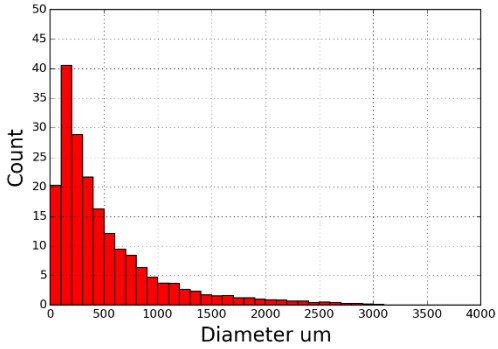

Figure A. 1696: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

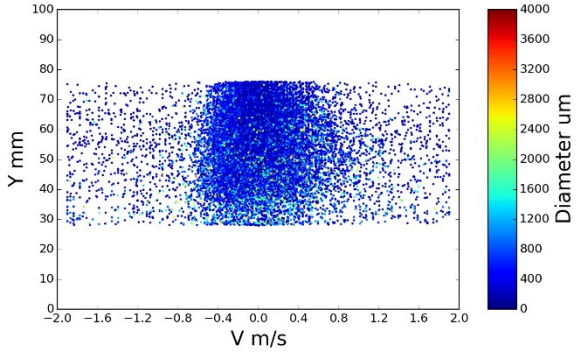

Figure A. 1699: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

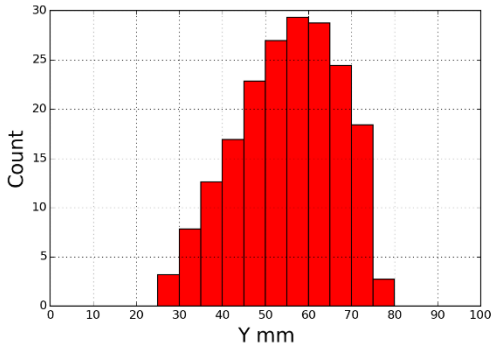

Figure A. 1697: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

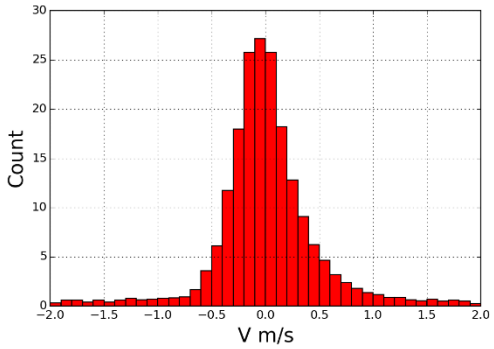

Figure A. 1700: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

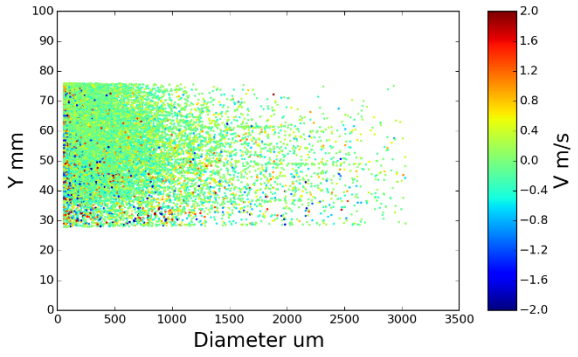

Figure A. 1698: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 Lens 50mm Mag 0_13x

A.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	75.18	73.53	128.5	3370	601.6	524.2	128.5	3410	596.7	517.3
40-60mm	180.06	178.82	128.5	3410	556.2	456.7	128.5	3414	557.8	455.7
60-80mm	100.41	98.97	128.5	3332	489.1	371.9	128.5	3367	488.7	370.1
80-100mm	22.01	21.62	128.5	1953	393.1	242.0	128.5	1813	398.7	240.2
All	377.66	373.15	128.5	3410	537.9	444.0	128.5	3414	537.9	441.2
			Height A (mm)				Height B (mm)			
Highest Particle			99.9900				100.0042			
Lowest Particle			30.0696				30.0696			

Table A. 180: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	38.96	128.5	3258	704.2	552.5	128.5	3402	688.7	548.0	-1.900	1.900	-0.070	0.630	-1.900	1.900	-0.030	0.670
40-60mm	102.87	128.5	3385	641.2	480.4	128.5	3414	629.7	473.0	-1.900	1.900	-0.050	0.580	-1.900	1.900	-0.050	0.630
60-80mm	61.32	128.5	3189	572.6	388.3	128.5	3367	566.5	390.1	-1.900	1.900	-0.060	0.510	-1.900	1.900	-0.030	0.560
80-100mm	14.2	128.5	1953	465.1	251.7	128.5	1813	461.6	251.3	-1.890	1.870	-0.060	0.370	-1.870	1.900	-0.010	0.420
All	217.35	128.5	3385	621.6	462.9	128.5	3414	611.5	458.4	-1.900	1.900	-0.060	0.560	-1.900	1.900	-0.040	0.610

Table A. 181: Matched Droplet Info

A.7.1.2 All Droplets for .LA Image

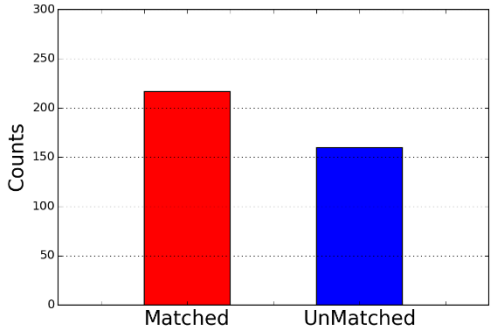

Figure A. 1701: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

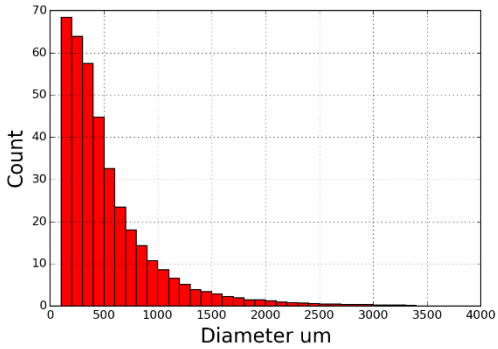

Figure A. 1702: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

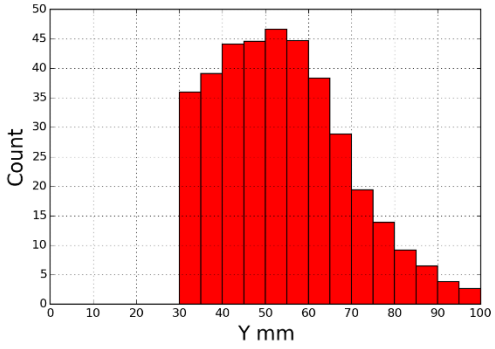

Figure A. 1703: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

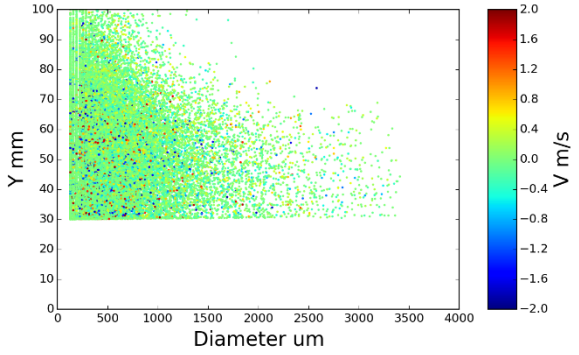

Figure A. 1704: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

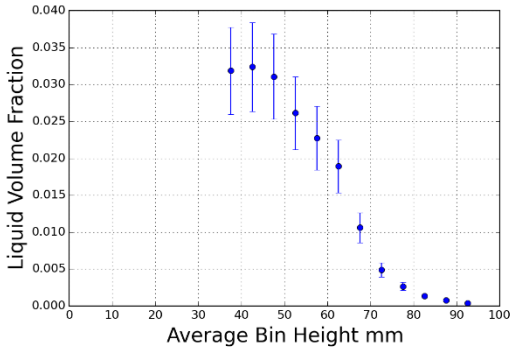

Figure A. 1705: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 All Droplets for .LB Image

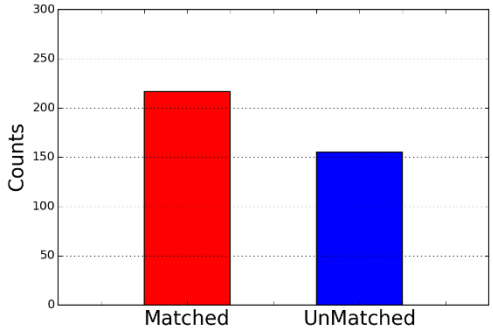

Figure A. 1706: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

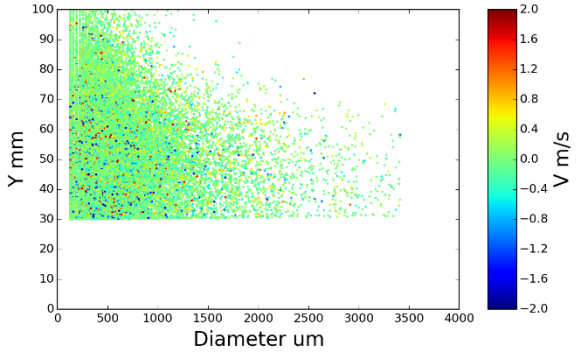

Figure A. 1709: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

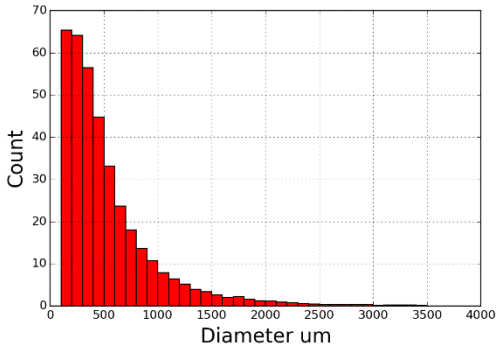

Figure A. 1707: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

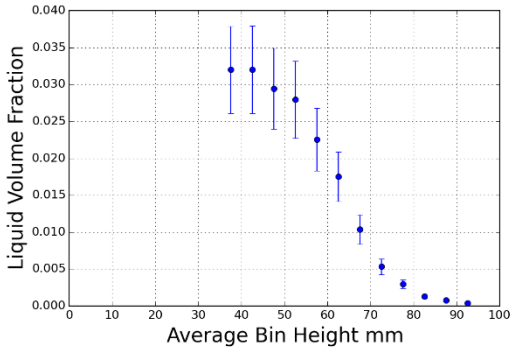

Figure A. 1710: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

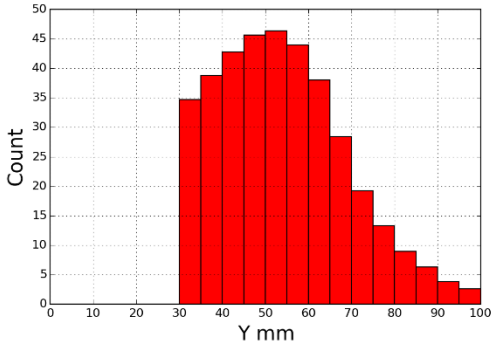

Figure A. 1708: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 Matched Only Droplets for .LA Image

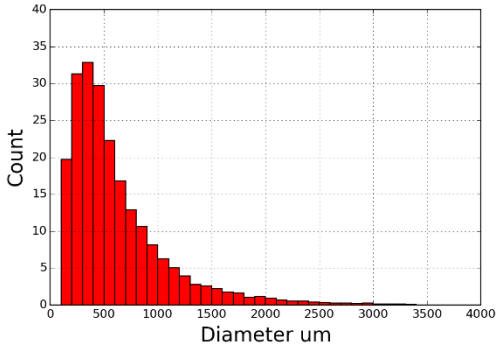

Figure A. 1711: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

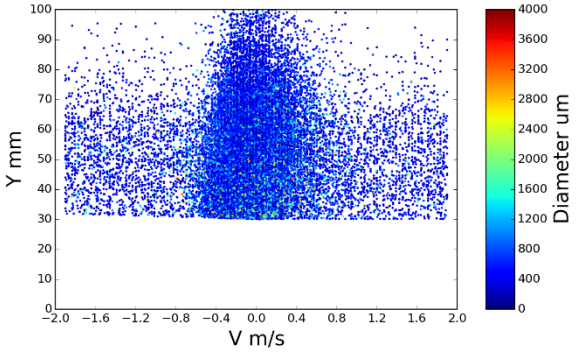

Figure A. 1714: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

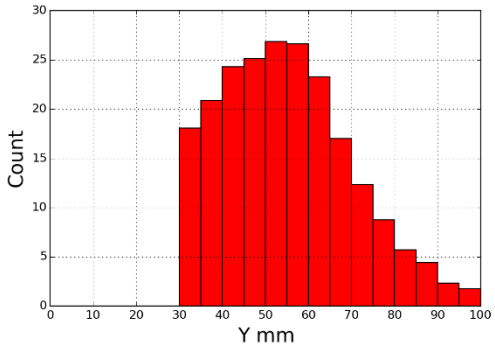

Figure A. 1712: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

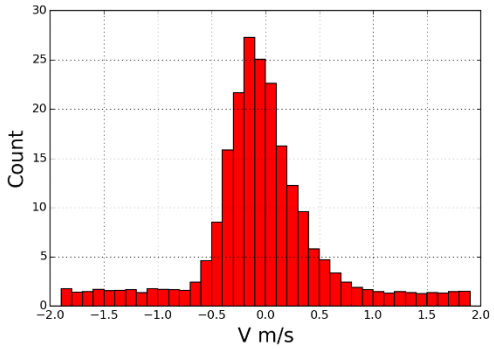

Figure A. 1715: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

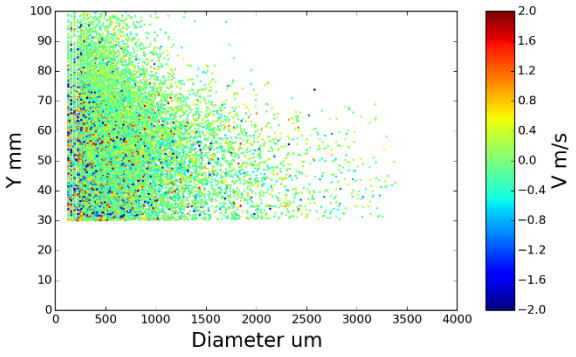

Figure A. 1713: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 Matched Only Droplets for .LB Image

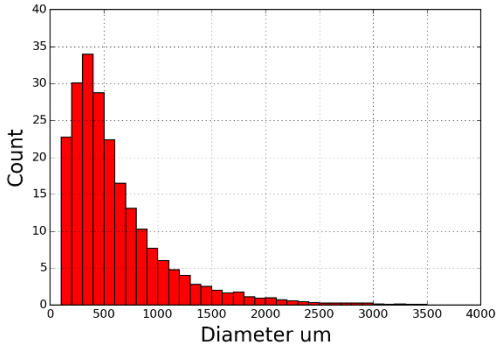

Figure A. 1716: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

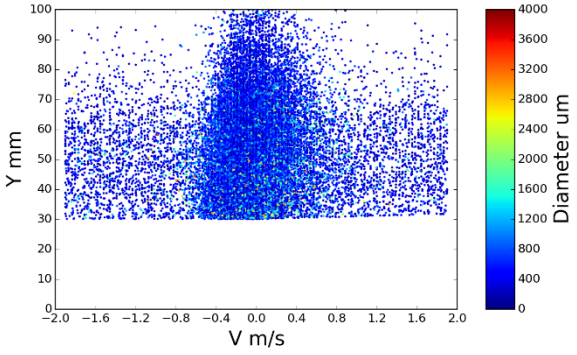

Figure A. 1719: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

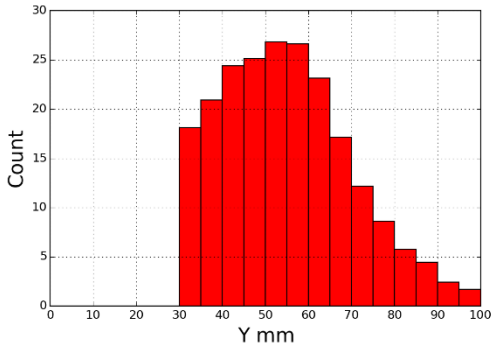

Figure A. 1717: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

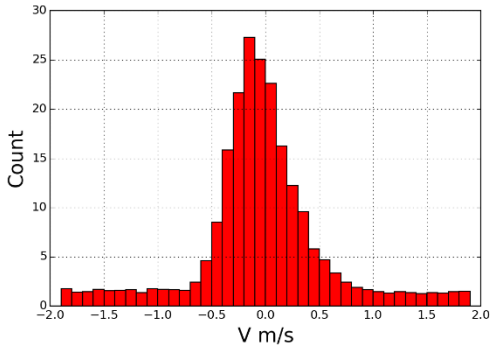

Figure A. 1720: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

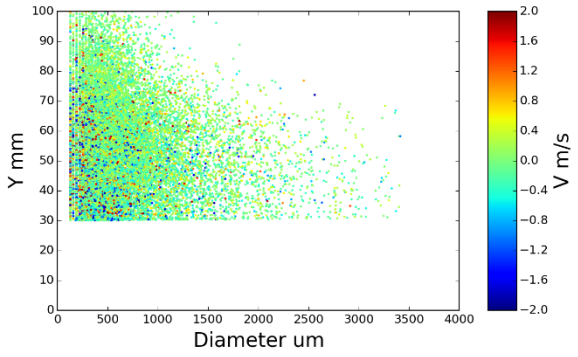

Figure A. 1718: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.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	70.2	71.04	128.5	3416	669.9	573.3	128.5	3416	664.2	569.2
40-60mm	165.39	165.97	128.5	3396	606.1	492.8	128.5	3416	604.5	491.3
60-80mm	80.55	79.02	128.5	3358	520.6	382.3	128.5	3290	522.3	376.4
80-100mm	13.73	13.29	128.5	1831	440.3	267.4	128.5	1942	439.3	265.0
All	329.88	329.32	128.5	3416	591.9	483.7	128.5	3416	591.0	481.3
			Height A (mm)				Height B (mm)			
Highest Particle			100.0042				99.9501			
Lowest Particle			30.0696				30.0696			

Table A. 182: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	37.91	128.5	3416	783.0	601.6	128.5	3416	767.7	591.8	-1.900	1.900	-0.050	0.640	-1.900	1.900	-0.030	0.670
40-60mm	97.0	128.5	3396	705.9	516.8	128.5	3416	695.3	510.2	-1.900	1.900	-0.040	0.550	-1.900	1.900	-0.050	0.600
60-80mm	52.42	128.5	3014	605.2	393.4	128.5	3290	596.0	389.4	-1.900	1.900	-0.040	0.430	-1.900	1.900	-0.060	0.490
80-100mm	9.47	128.5	1831	514.3	268.4	128.5	1942	505.1	268.4	-1.780	1.780	-0.060	0.290	-1.840	1.900	-0.080	0.350
All	196.8	128.5	3416	684.7	501.2	128.5	3416	673.8	494.7	-1.900	1.900	-0.050	0.530	-1.900	1.900	-0.050	0.580

Table A. 183: Matched Droplet Info

A.7.1.2 All Droplets for .LA Image

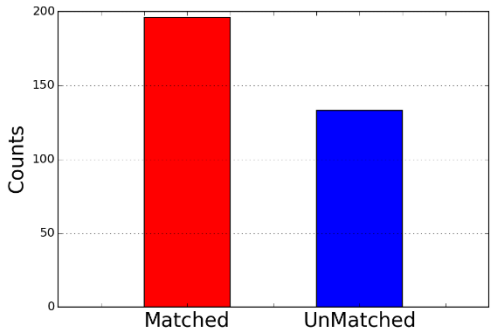

Figure A. 1721: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

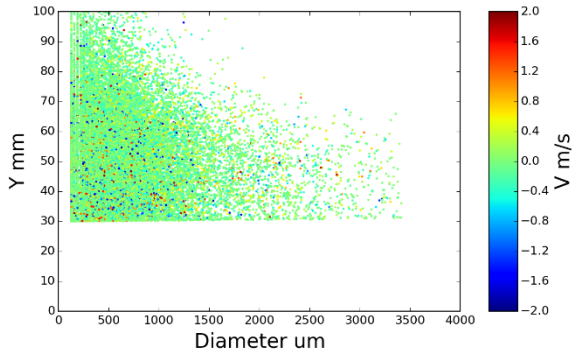

Figure A. 1724: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

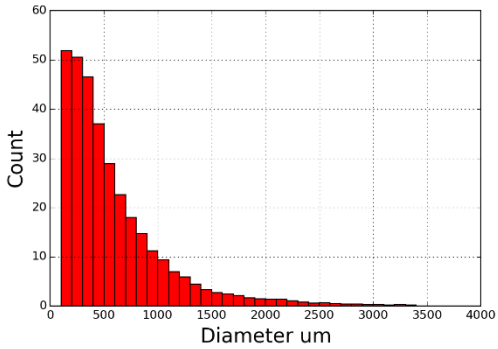

Figure A. 1722: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

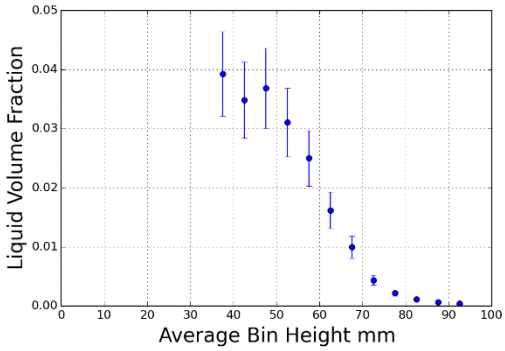

Figure A. 1725: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

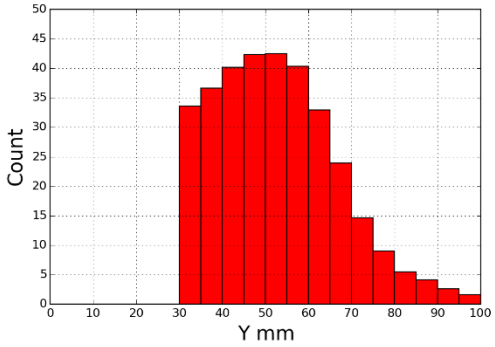

Figure A. 1723: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 All Droplets for .LB Image

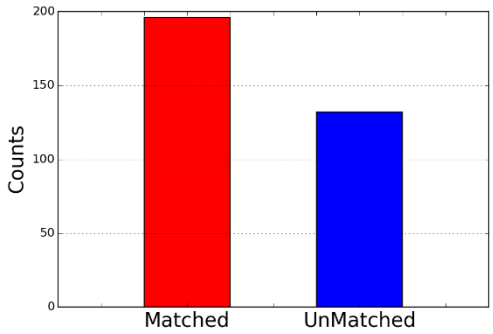

Figure A. 1726: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

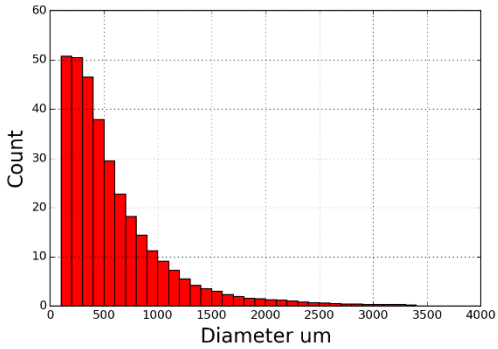

Figure A. 1727: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

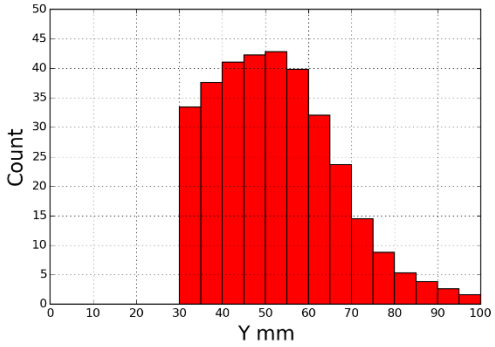

Figure A. 1728: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

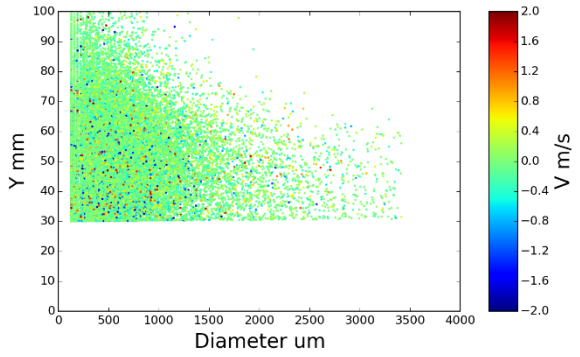

Figure A. 1729: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

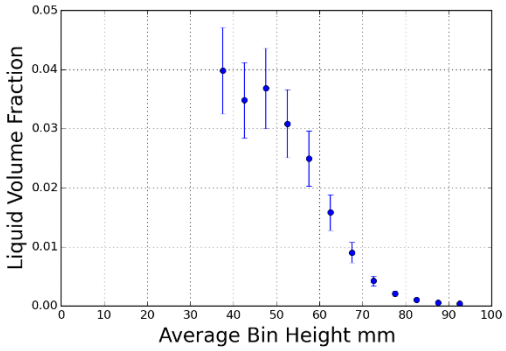

Figure A. 1730: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 Matched Only Droplets for .LA Image

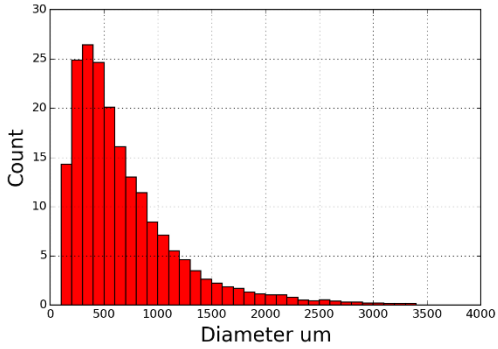

Figure A. 1731: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

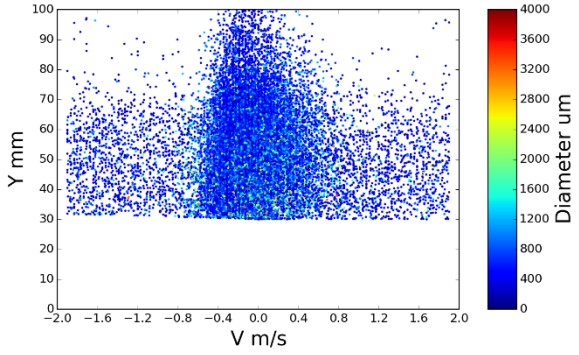

Figure A. 1734: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

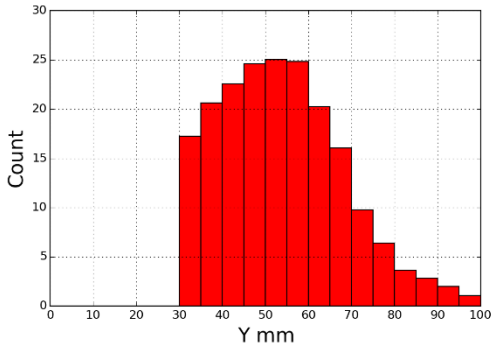

Figure A. 1732: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

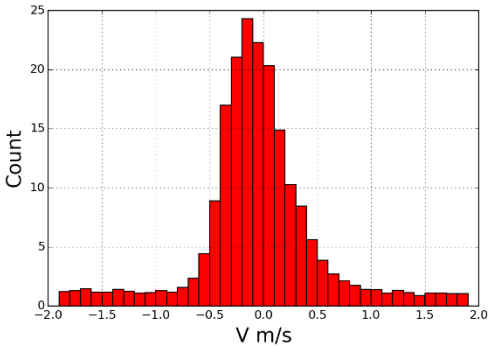

Figure A. 1735: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

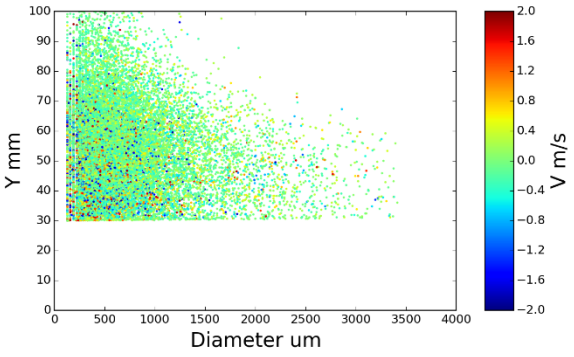

Figure A. 1733: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 Matched Only Droplets for .LB Image

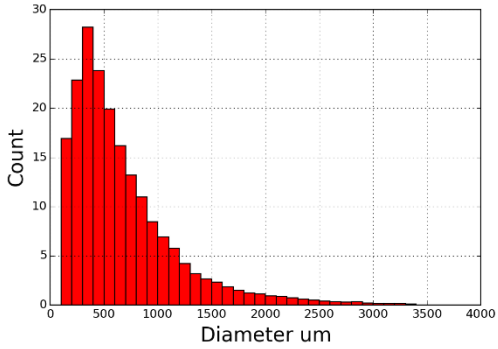

Figure A. 1736: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

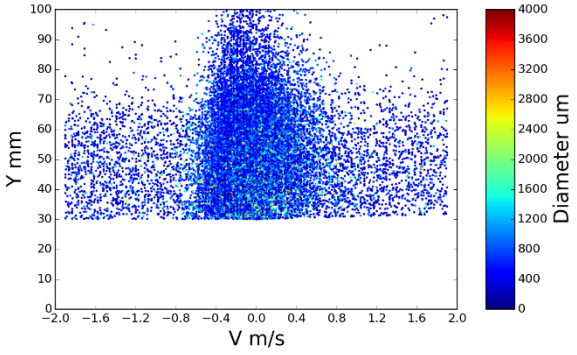

Figure A. 1739: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

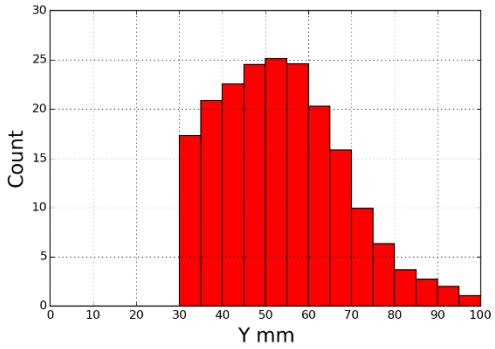

Figure A. 1737: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

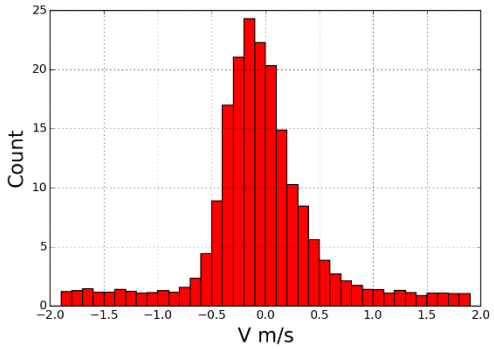

Figure A. 1740: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

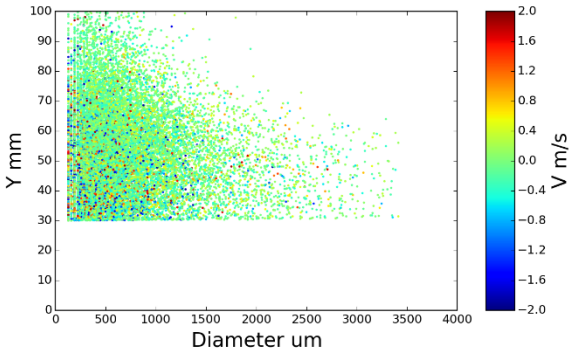

Figure A. 1738: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.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	57.48	57.76	128.5	3396	702.8	590.7	128.5	3416	702.3	589.4
40-60mm	144.52	145.12	128.5	3410	643.6	526.2	128.5	3413	649.1	529.4
60-80mm	73.9	72.86	128.5	3220	543.3	384.4	128.5	3044	541.5	383.1
80-100mm	11.64	11.57	128.5	1736	469.5	274.8	128.5	2053	462.1	273.7
All	287.58	287.39	128.5	3410	622.6	504.0	128.5	3416	625.0	505.9
			Height A (mm)				Height B (mm)			
Highest Particle			99.9798				99.9208			
Lowest Particle			30.0696				30.0696			

Table A. 184: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	29.09	128.5	3396	859.8	633.8	128.5	3378	843.4	622.9	-1.900	1.900	-0.070	0.640	-1.900	1.900	-0.030	0.670
40-60mm	84.86	128.5	3389	756.4	558.2	128.5	3385	746.5	553.5	-1.900	1.900	-0.050	0.530	-1.900	1.900	-0.030	0.580
60-80mm	47.33	128.5	3220	633.1	401.1	128.5	3044	624.8	396.8	-1.900	1.900	-0.050	0.440	-1.900	1.900	-0.030	0.490
80-100mm	8.37	128.5	1578	545.2	266.0	128.5	1821	534.8	267.1	-1.710	1.690	-0.050	0.200	-1.880	1.890	-0.050	0.290
All	169.65	128.5	3396	729.3	529.8	128.5	3385	718.8	523.9	-1.900	1.900	-0.050	0.520	-1.900	1.900	-0.030	0.560

Table A. 185: Matched Droplet Info

A.7.1.2 All Droplets for .LA Image

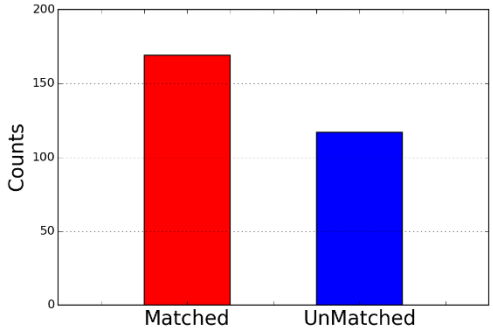

Figure A. 1741: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

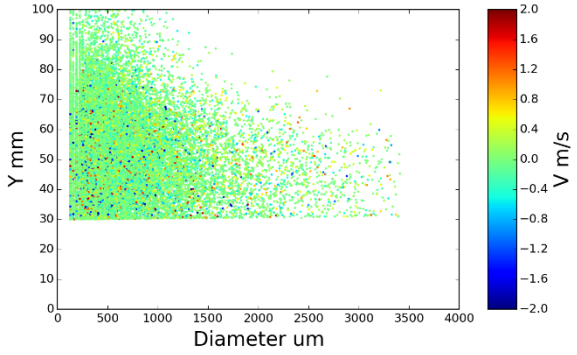

Figure A. 1744: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

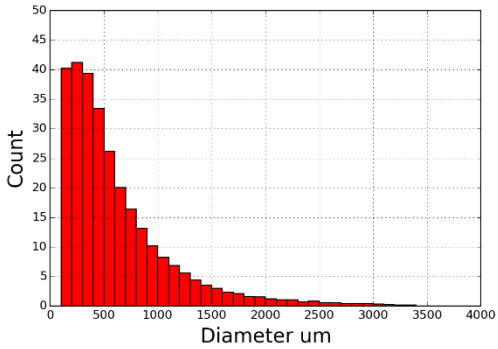

Figure A. 1742: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

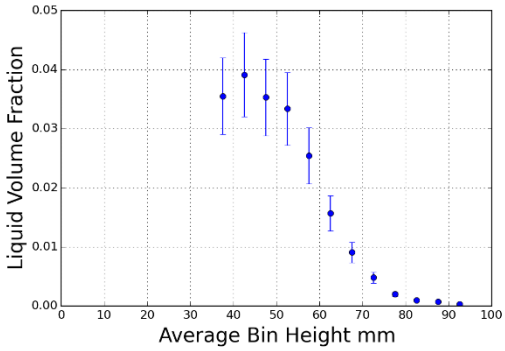

Figure A. 1745: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

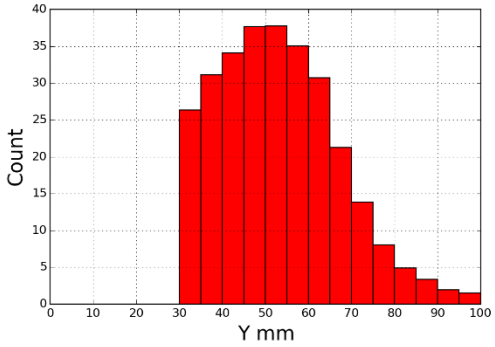

Figure A. 1743: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 All Droplets for .LB Image

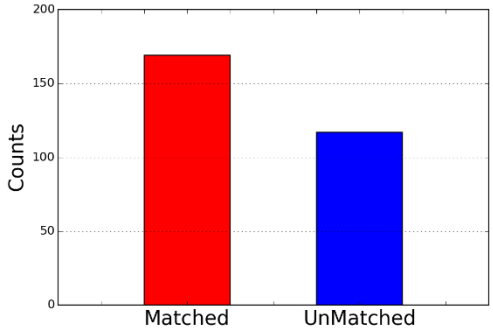

Figure A. 1746: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

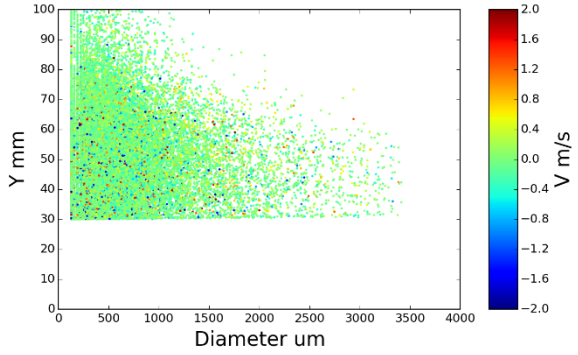

Figure A. 1749: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

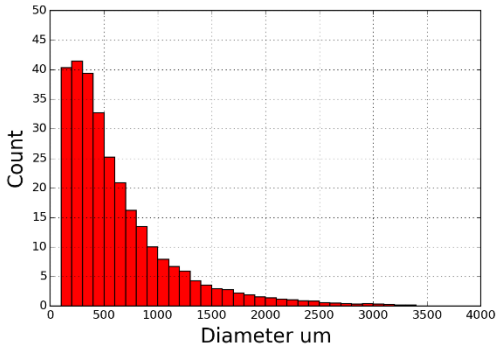

Figure A. 1747: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

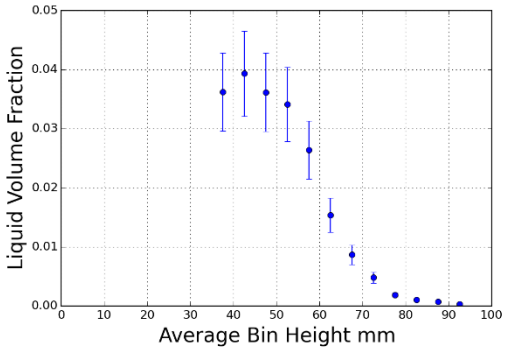

Figure A. 1750: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

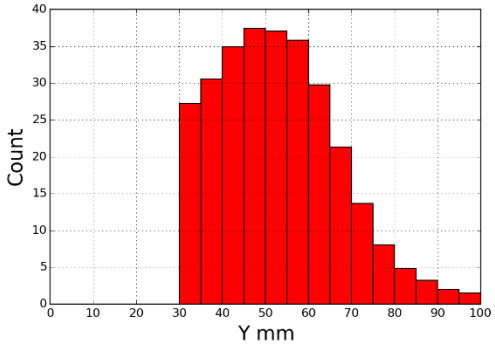

Figure A. 1748: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 Matched Only Droplets for .LA Image

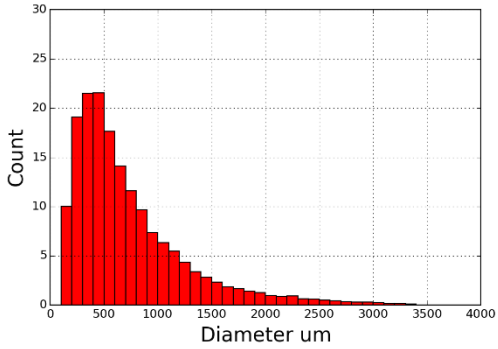

Figure A. 1751: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

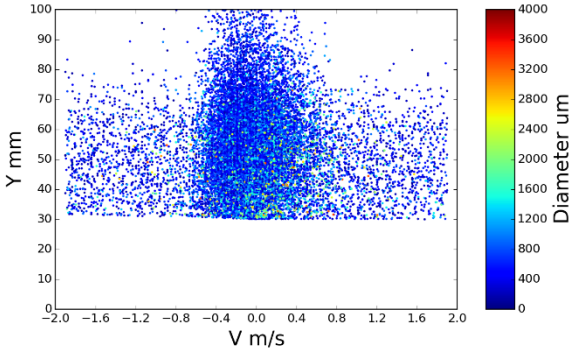

Figure A. 1754: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

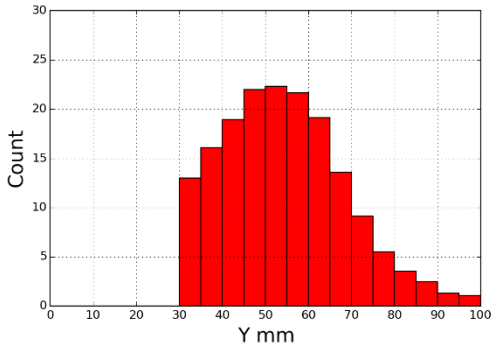

Figure A. 1752: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

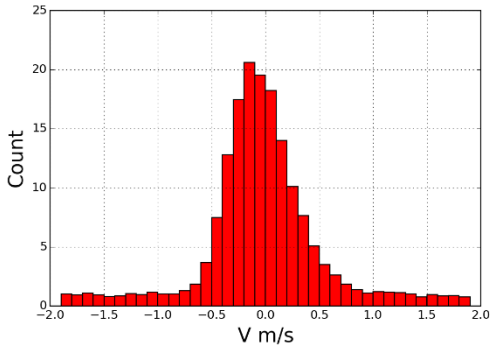

Figure A. 1755: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

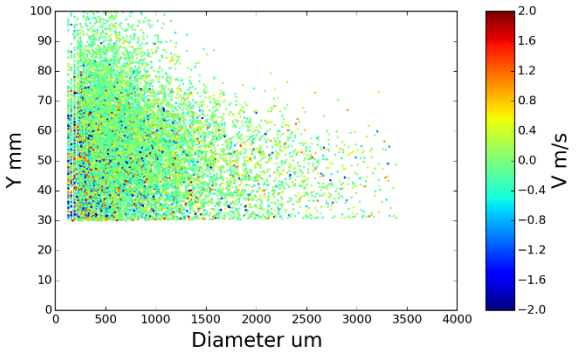

Figure A. 1753: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 Matched Only Droplets for .LB Image

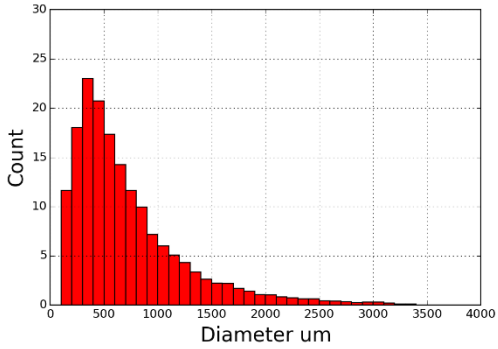

Figure A. 1756: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

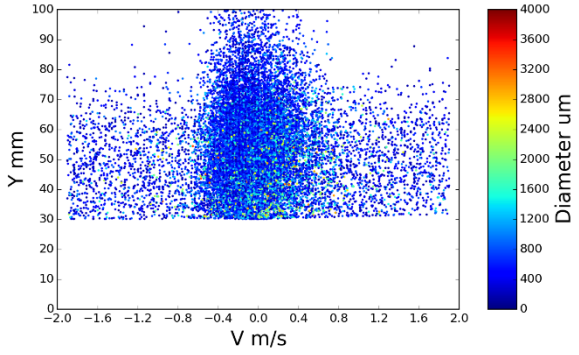

Figure A. 1759: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

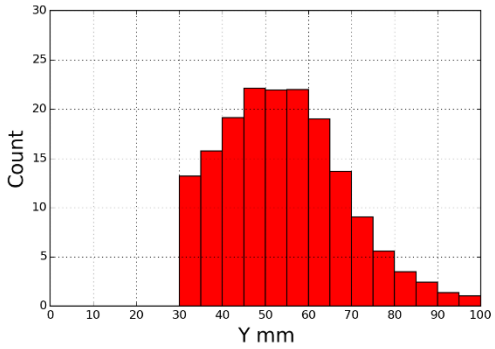

Figure A. 1757: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

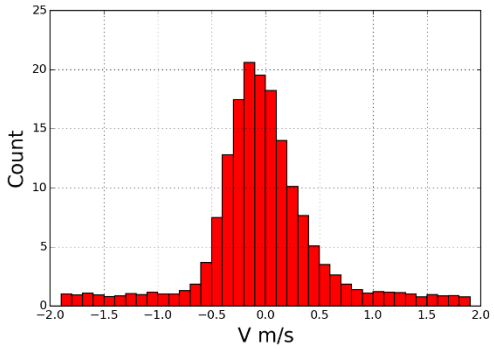

Figure A. 1760: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

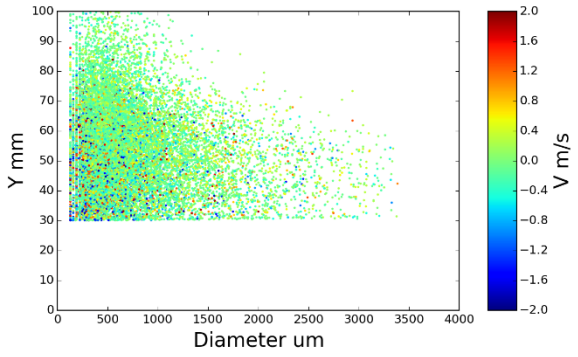

Figure A. 1758: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 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	48.81	49.48	128.5	3414	743.6	631.5	128.5	3417	734.5	621.5
40-60mm	139.2	139.56	128.5	3405	661.0	546.2	128.5	3415	656.9	540.8
60-80mm	77.73	76.34	128.5	3326	545.5	412.1	128.5	3232	542.6	402.8
80-100mm	16.63	16.06	128.5	2076	420.7	249.9	128.5	1988	424.6	252.9
All	282.38	281.45	128.5	3414	629.3	523.1	128.5	3417	626.3	517.0
			Height A (mm)				Height B (mm)			
Highest Particle			100.0042				99.9757			
Lowest Particle			30.0696				30.0696			

Table A. 186: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	23.28	128.5	3388	923.9	675.6	128.5	3417	903.4	666.8	-1.900	1.900	-0.050	0.600	-1.900	1.900	-0.010	0.650
40-60mm	81.08	128.5	3395	774.5	571.8	128.5	3402	761.7	560.5	-1.900	1.900	-0.050	0.550	-1.900	1.900	-0.000	0.610
60-80mm	48.56	128.5	3317	639.0	435.9	128.5	3232	625.4	423.1	-1.900	1.900	-0.030	0.450	-1.900	1.900	-0.020	0.530
80-100mm	10.89	128.5	2076	488.5	256.7	128.5	1988	482.2	255.5	-1.900	1.900	-0.040	0.300	-1.850	1.900	0.020	0.380
All	163.81	128.5	3395	736.5	547.8	128.5	3417	722.9	536.9	-1.900	1.900	-0.050	0.510	-1.900	1.900	-0.010	0.580

Table A. 187: Matched Droplet Info

A.7.1.2 All Droplets for .LA Image

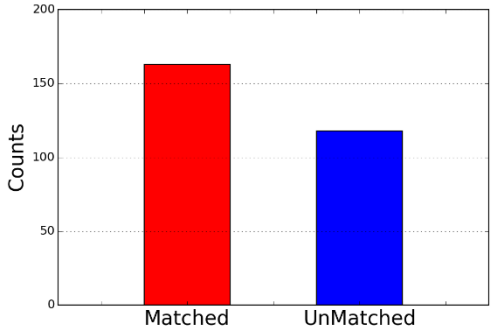

Figure A. 1761: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

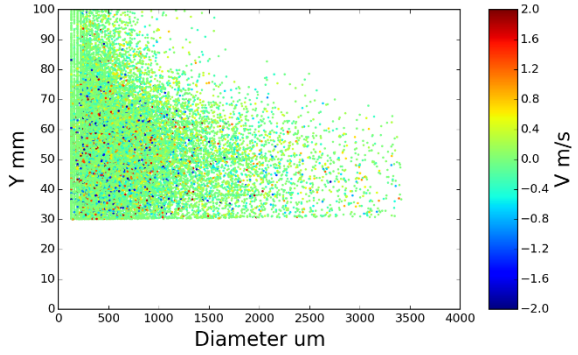

Figure A. 1764: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

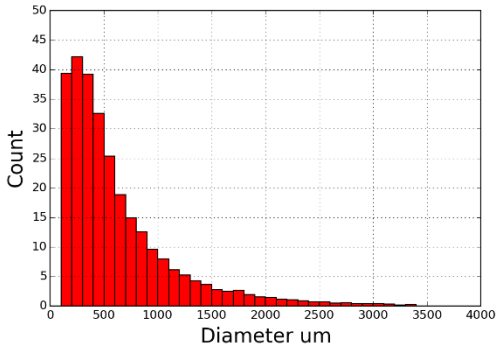

Figure A. 1762: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

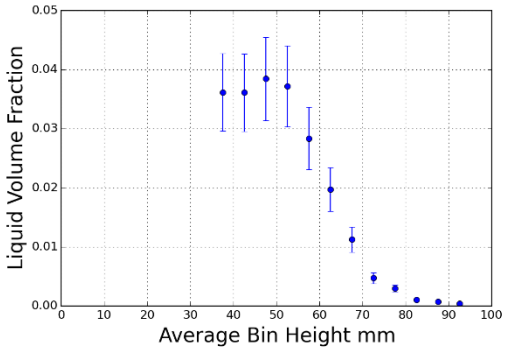

Figure A. 1765: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

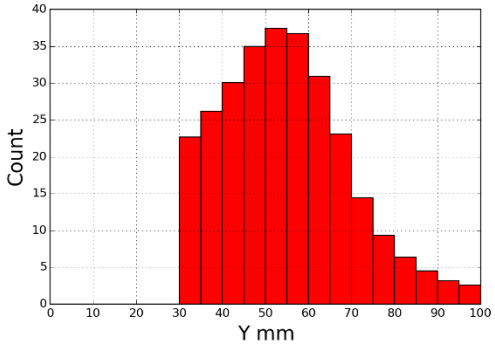

Figure A. 1763: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 All Droplets for .LB Image

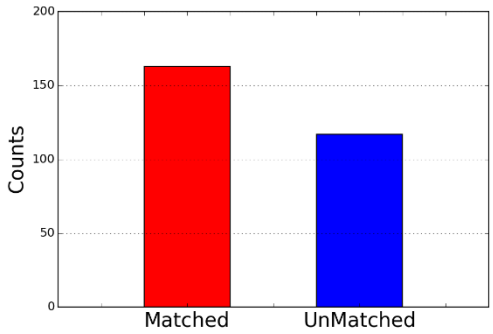

Figure A. 1766: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

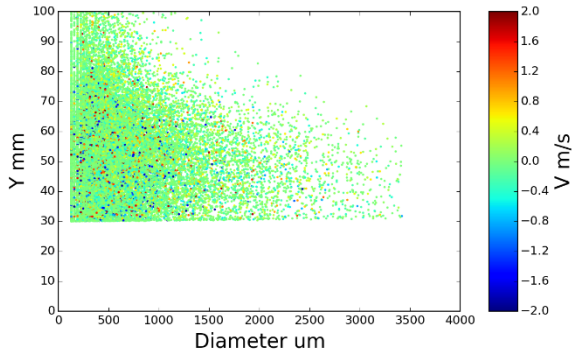

Figure A. 1769: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

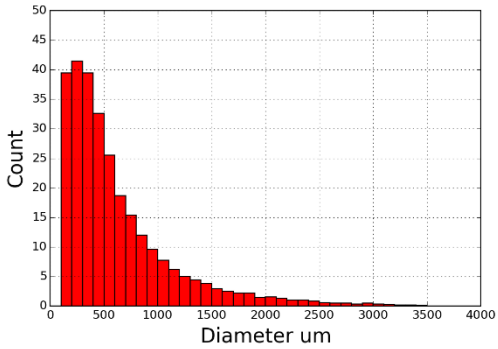

Figure A. 1767: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

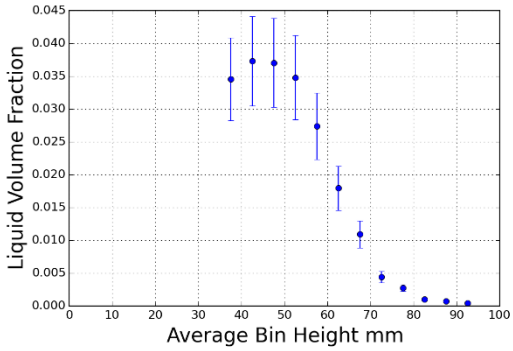

Figure A. 1770: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

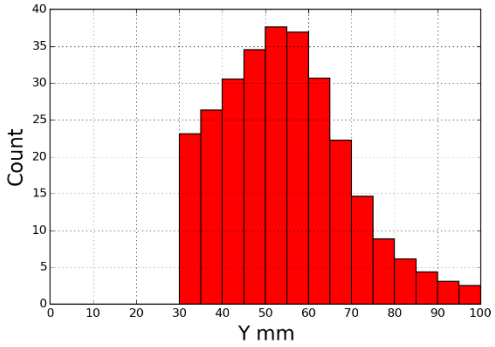

Figure A. 1768: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 Matched Only Droplets for .LA Image

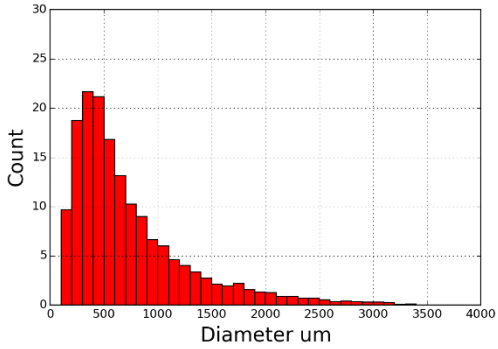

Figure A. 1771: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

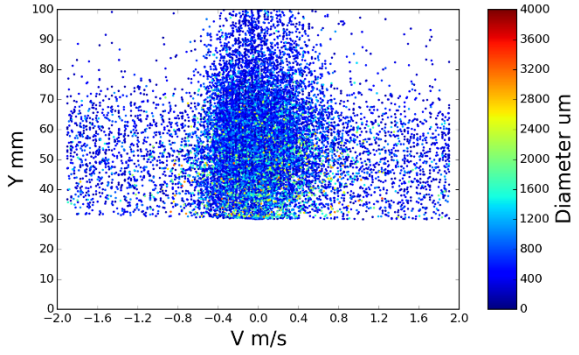

Figure A. 1774: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

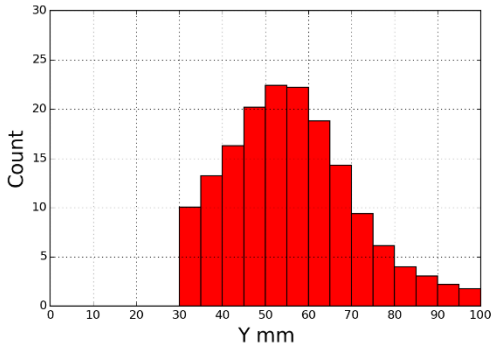

Figure A. 1772: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

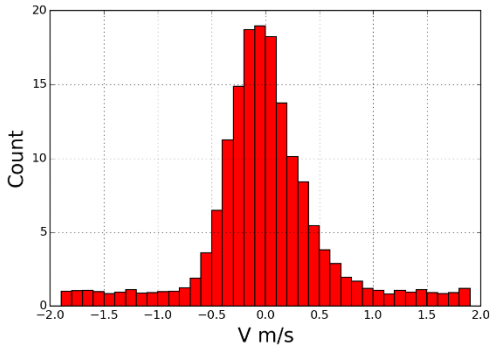

Figure A. 1775: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

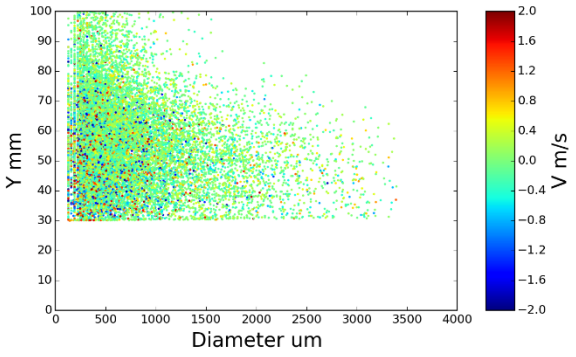

Figure A. 1773: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 Matched Only Droplets for .LB Image

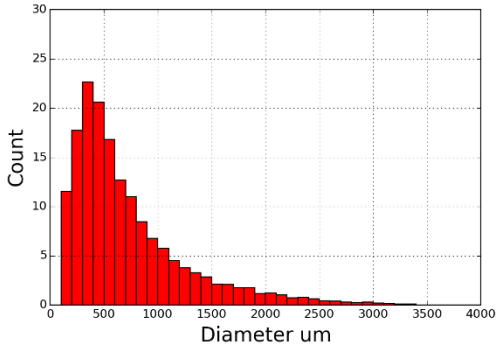

Figure A. 1776: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

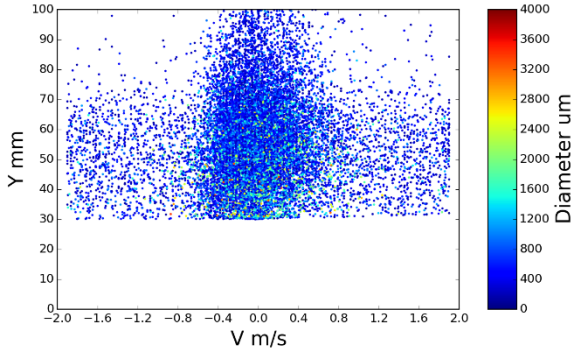

Figure A. 1779: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

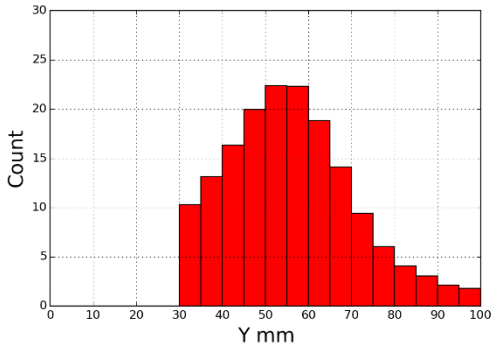

Figure A. 1777: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

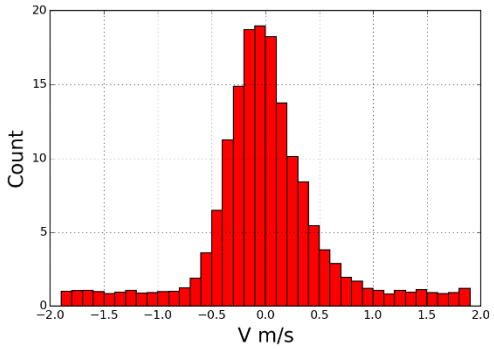

Figure A. 1780: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

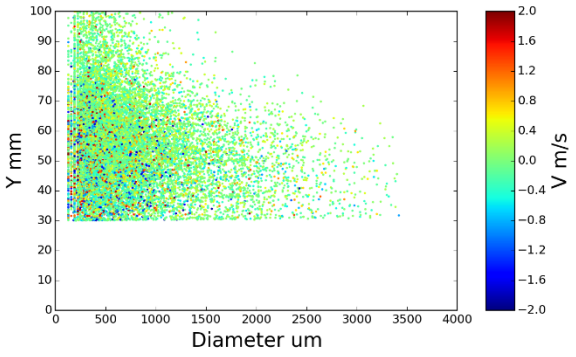

Figure A. 1778: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 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	39.48	38.59	128.5	3374	726.1	614.5	128.5	3408	725.6	615.7
40-60mm	121.03	120.53	128.5	3402	636.3	551.1	128.5	3412	636.0	541.5
60-80mm	73.9	74.04	128.5	3404	531.3	426.9	128.5	3322	529.9	424.6
80-100mm	16.38	16.6	128.5	2834	420.2	274.0	128.5	2812	415.2	270.9
All	250.81	249.76	128.5	3404	605.4	520.8	128.5	3412	603.7	515.0
			Height A (mm)				Height B (mm)			
Highest Particle			100.0042				99.9757			
Lowest Particle			30.0696				30.0696			

Table A. 188: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	16.68	128.5	3371	916.9	662.0	128.5	3349	898.7	657.0	-1.900	1.900	-0.040	0.620	-1.890	1.890	0.020	0.650
40-60mm	66.01	128.5	3374	760.4	581.0	128.5	3398	748.2	573.8	-1.900	1.900	-0.030	0.560	-1.900	1.900	-0.010	0.620
60-80mm	44.97	128.5	3404	629.4	457.4	128.5	3322	620.6	451.6	-1.900	1.900	-0.030	0.470	-1.900	1.900	-0.000	0.530
80-100mm	11.05	128.5	2834	488.0	284.3	128.5	2812	484.6	284.2	-1.890	1.840	-0.040	0.300	-1.850	1.880	-0.010	0.360
All	138.71	128.5	3404	715.0	547.7	128.5	3398	703.9	541.0	-1.900	1.900	-0.030	0.520	-1.900	1.900	-0.000	0.580

Table A. 189: Matched Droplet Info

A.7.1.2 All Droplets for .LA Image

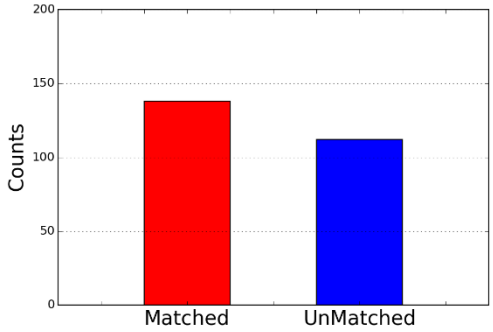

Figure A. 1781: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

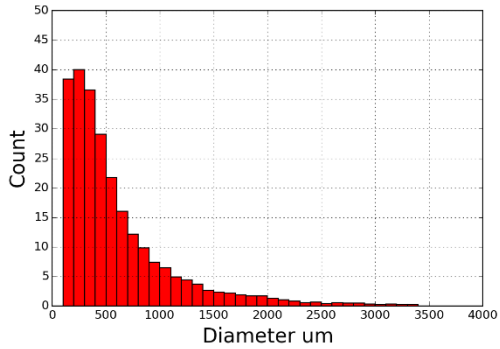

Figure A. 1782: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

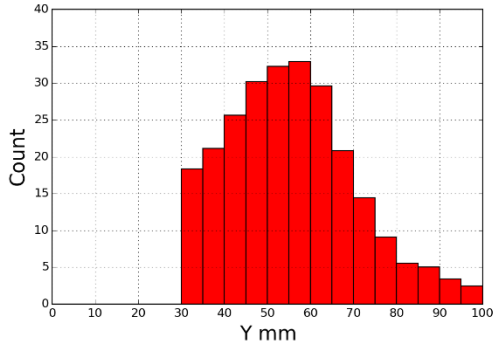

Figure A. 1783: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

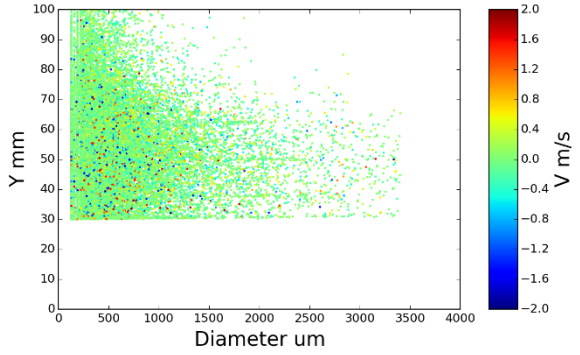

Figure A. 1784: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

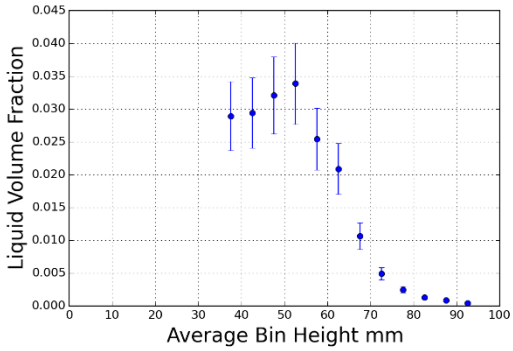

Figure A. 1785: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 All Droplets for .LB Image

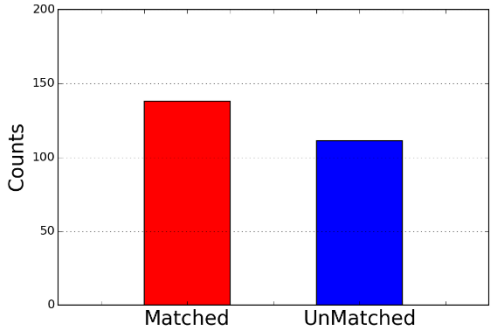

Figure A. 1786: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

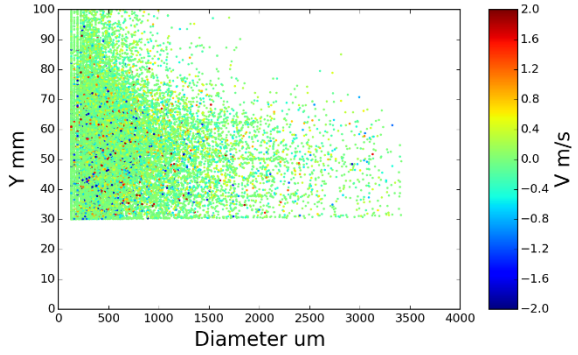

Figure A. 1789: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

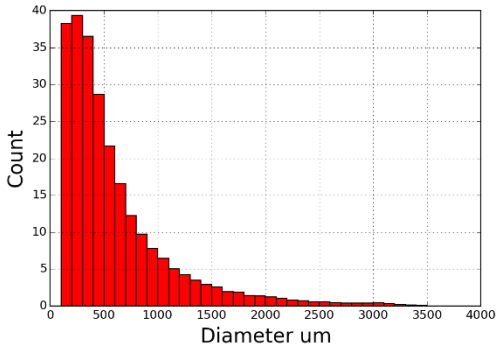

Figure A. 1787: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

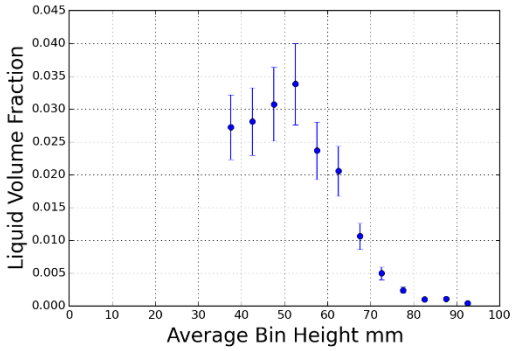

Figure A. 1790: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

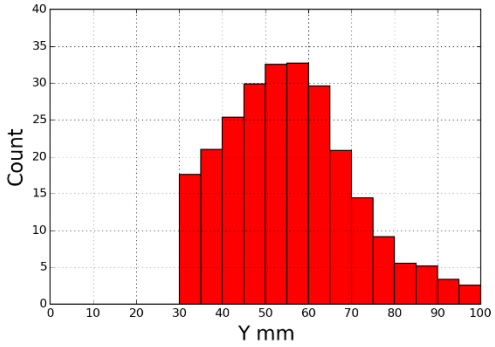

Figure A. 1788: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 Matched Only Droplets for .LA Image

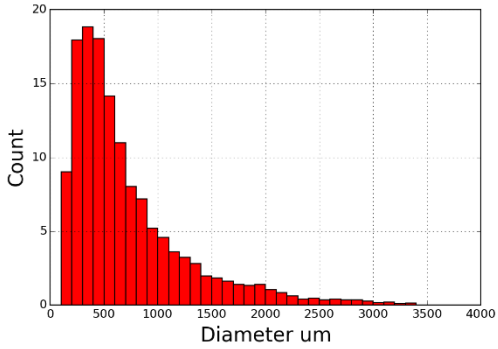

Figure A. 1791: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

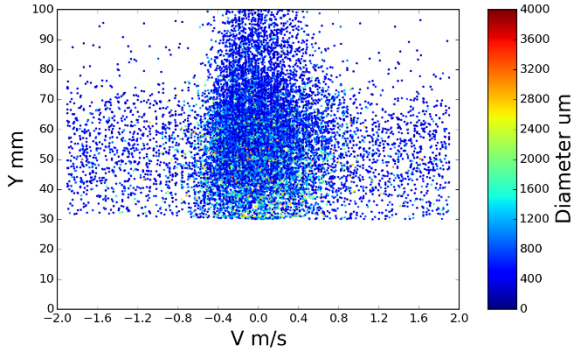

Figure A. 1794: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

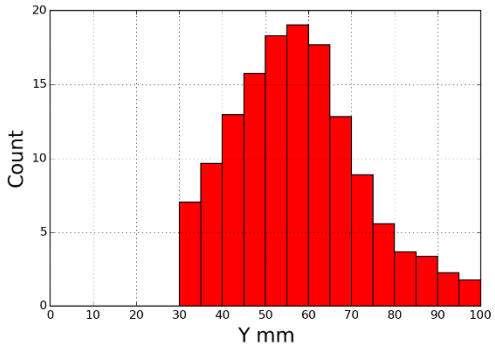

Figure A. 1792: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

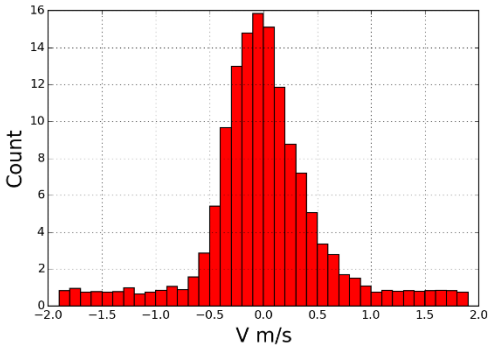

Figure A. 1795: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

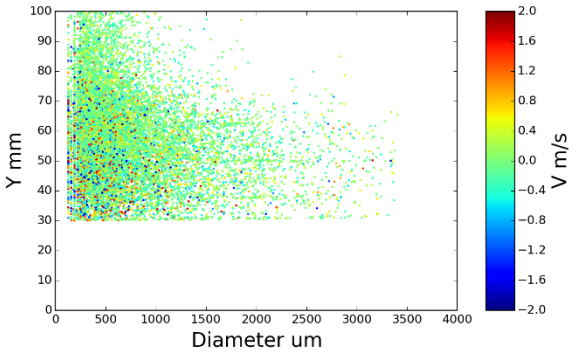

Figure A. 1793: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.1.2 Matched Only Droplets for .LB Image

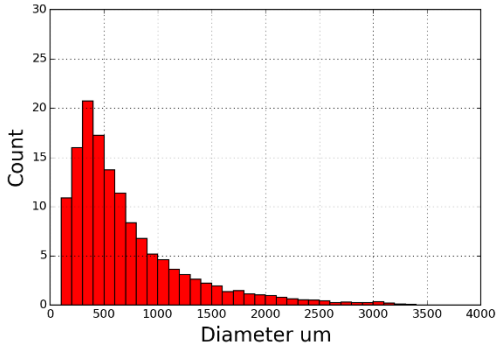

Figure A. 1796: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

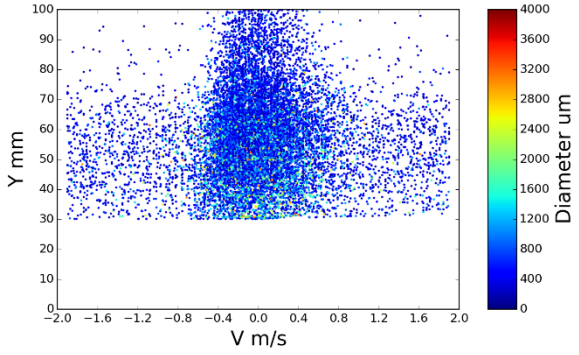

Figure A. 1799: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

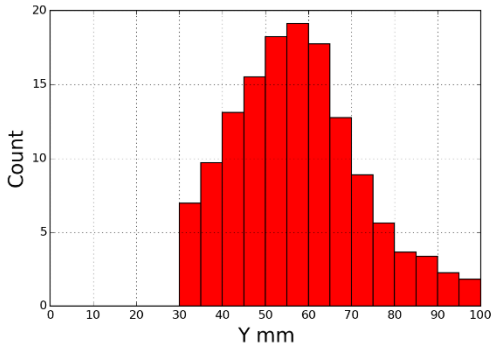

Figure A. 1797: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

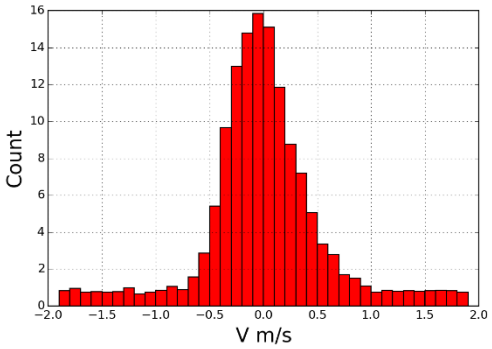

Figure A. 1800: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

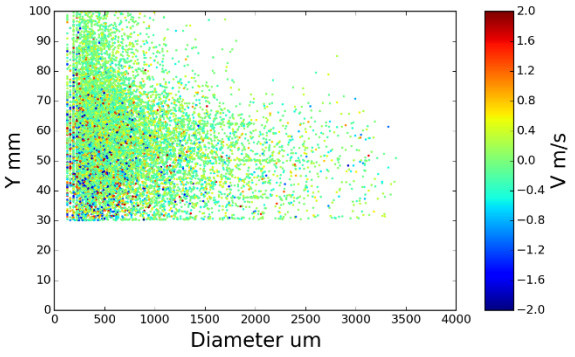

Figure A. 1798: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.2 Liquid Level 2

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	10867 / 1.369
Ref Mass Flow (lb/hr) / (kg/s)	3202 / 0.403
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	29741 / 40.336
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4965 / 15.66
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	54.5 / 12.51
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	54.7 / 12.60
Total Bundle Q (Btu/hr) / (kW)	149573 / 43.84
Total Bundle & Preboiler Q (Btu/hr) / (kW)	297493 / 87.19
Top Two Rows HTC Ratio	1.111
Bundle Inlet Quality	0.42
Bundle Exit Quality	1.00

Table A. 190: Thermal Conditions

A.7.2.1 Lens 100mm Mag 0_29x

A.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	172.48	168.91	57.2	3028	406.9	421.6	57.2	3031	412.3	426.6
40-60mm	295.55	266.14	57.2	3039	339.0	362.6	57.2	3025	349.0	365.5
60-80mm	150.64	130.57	57.2	2859	257.6	277.0	57.2	3019	262.6	267.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	621.94	566.75	57.2	3039	338.1	366.0	57.2	3031	348.0	369.6
			Height A (mm)				Height B (mm)			
Highest Particle			75.9740				75.9740			
Lowest Particle			28.0118				28.0118			

Table A. 191: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	88.35	57.2	3028	495.2	457.9	57.2	3031	489.3	452.8	-1.900	1.900	-0.030	0.430	-1.900	1.900	-0.020	0.500
40-60mm	151.97	57.2	3039	416.0	390.7	57.2	3025	407.7	381.9	-1.900	1.900	-0.050	0.410	-1.900	1.900	-0.020	0.450
60-80mm	78.72	57.2	2642	320.0	296.6	57.2	2661	309.2	282.6	-1.900	1.900	-0.050	0.340	-1.900	1.900	-0.010	0.390
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	319.04	57.2	3039	414.3	395.6	57.2	3031	406.1	387.6	-1.900	1.900	-0.050	0.400	-1.900	1.900	-0.020	0.450

Table A. 192: Matched Droplet Info

A.7.2.1 All Droplets for .LA Image

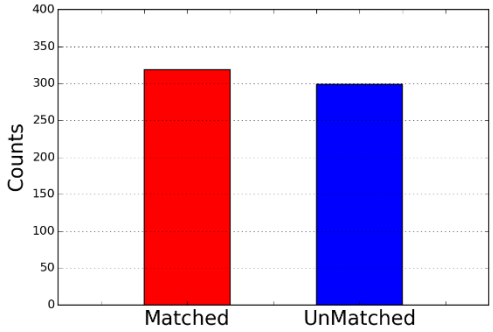

Figure A. 1801: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

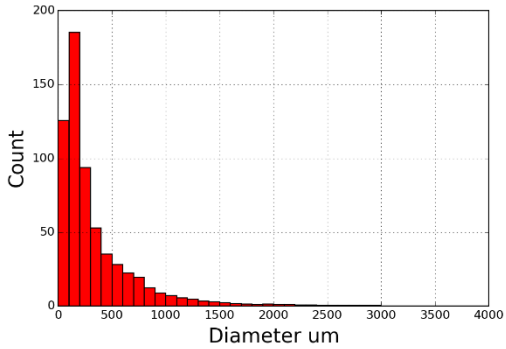

Figure A. 1802: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

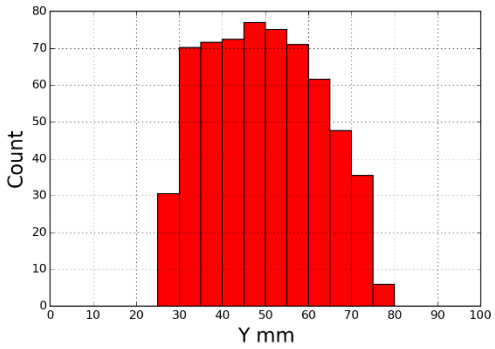

Figure A. 1803: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

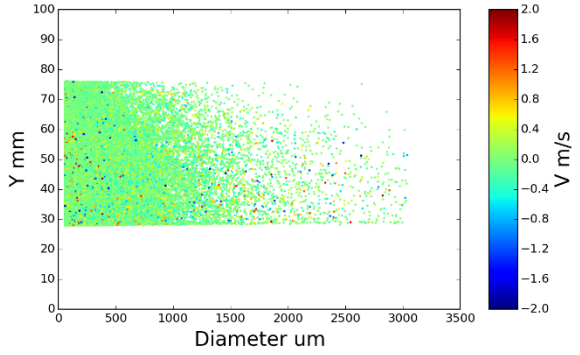

Figure A. 1804: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

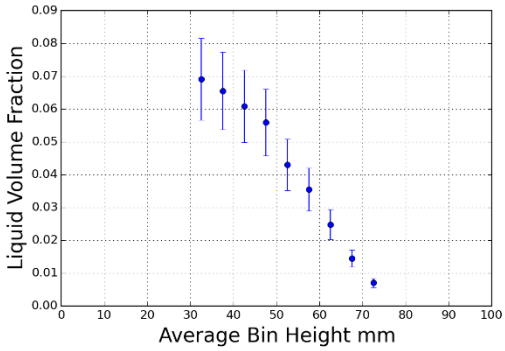

Figure A. 1805: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 All Droplets for .LB Image

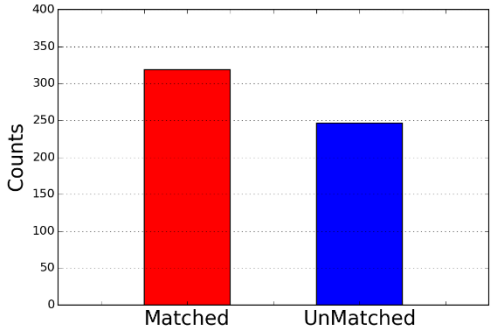

Figure A. 1806: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

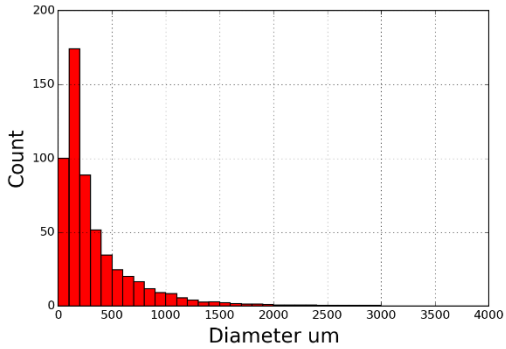

Figure A. 1807: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

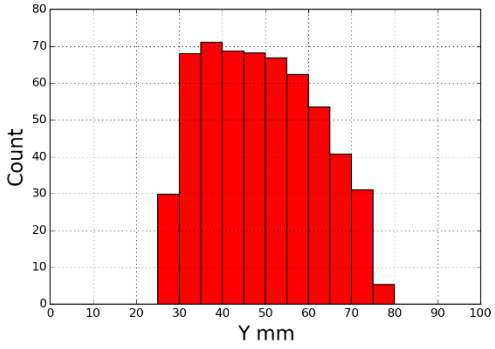

Figure A. 1808: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

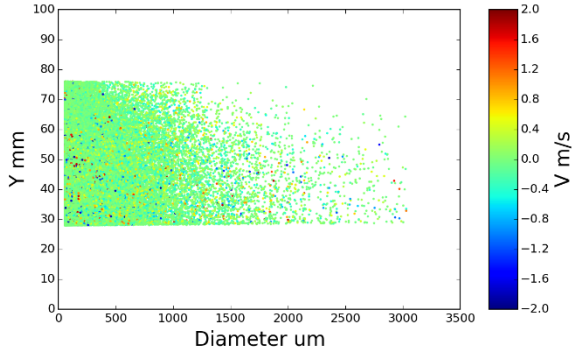

Figure A. 1809: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

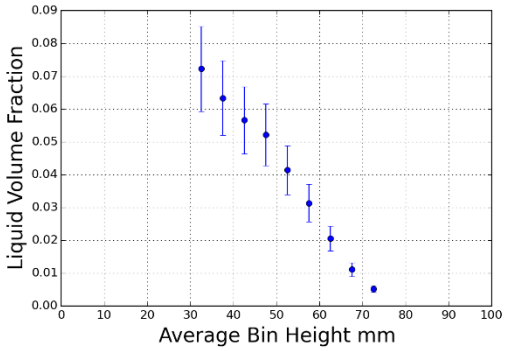

Figure A. 1810: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 Matched Only Droplets for .LA Image

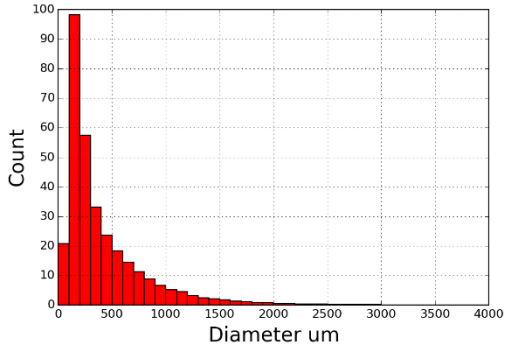

Figure A. 1811: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

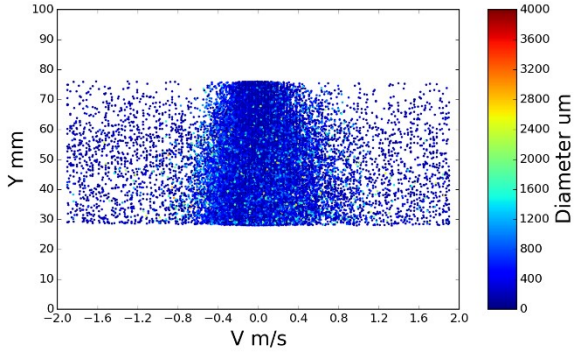

Figure A. 1814: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

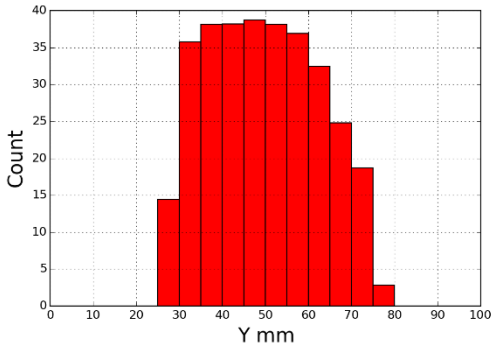

Figure A. 1812: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

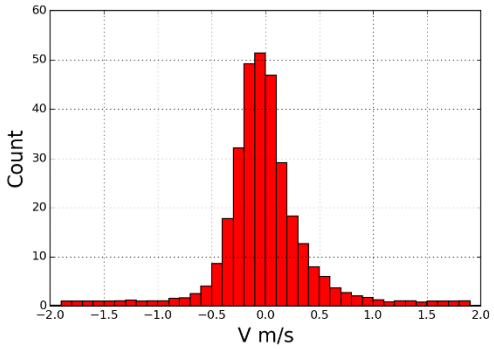

Figure A. 1815: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

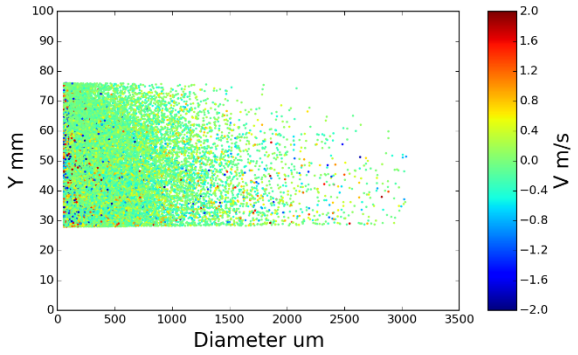

Figure A. 1813: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 Matched Only Droplets for .LB Image

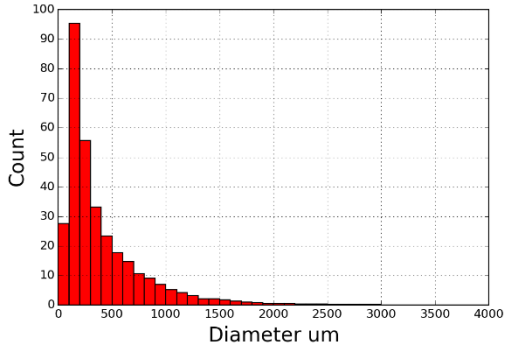

Figure A. 1816: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

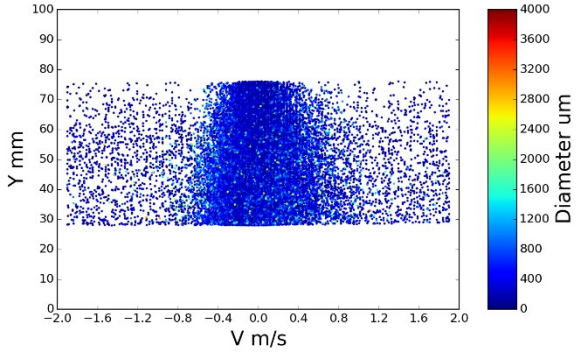

Figure A. 1819: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

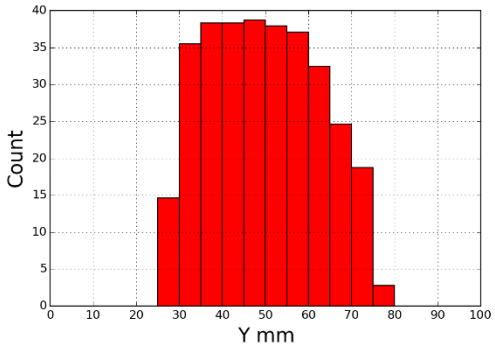

Figure A. 1817: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

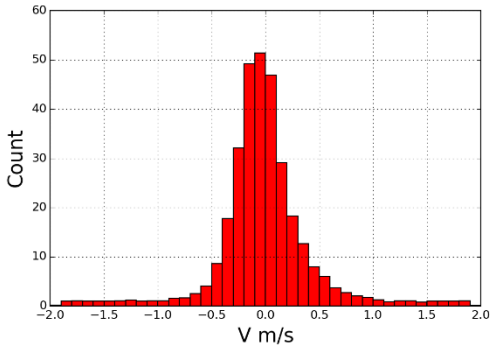

Figure A. 1820: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

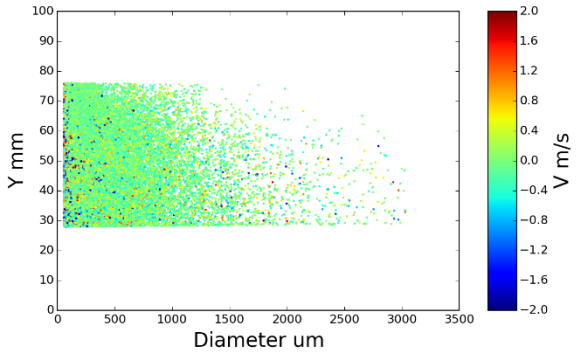

Figure A. 1818: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.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	139.75	139.45	57.2	3037	438.2	459.0	57.2	3014	444.5	466.4
40-60mm	255.76	238.85	57.2	3036	356.1	410.3	57.2	3016	372.9	414.6
60-80mm	139.32	116.72	57.2	2957	248.1	296.1	57.2	2837	253.5	291.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	537.1	495.92	57.2	3037	349.4	403.9	57.2	3016	364.9	411.1
			Height A (mm)				Height B (mm)			
Highest Particle			75.9740				75.9740			
Lowest Particle			28.0118				28.0118			

Table A. 193: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	66.6	57.2	3006	557.5	503.4	57.2	3014	545.3	493.9	-1.900	1.890	-0.040	0.410	-1.900	1.900	-0.030	0.480
40-60mm	130.11	57.2	3036	458.8	450.0	57.2	2919	443.2	433.6	-1.900	1.900	-0.050	0.400	-1.900	1.900	-0.050	0.440
60-80mm	63.92	57.2	2652	322.8	341.1	57.2	2633	308.2	324.8	-1.900	1.900	-0.070	0.390	-1.900	1.890	-0.070	0.400
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	260.63	57.2	3036	450.6	448.7	57.2	3014	436.3	435.0	-1.900	1.900	-0.050	0.400	-1.900	1.900	-0.050	0.440

Table A. 194: Matched Droplet Info

A.7.2.1 All Droplets for .LA Image

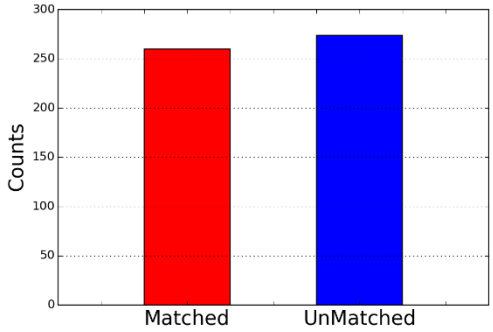

Figure A. 1821: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

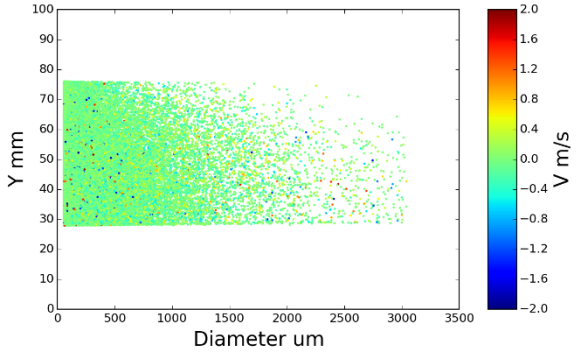

Figure A. 1824: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

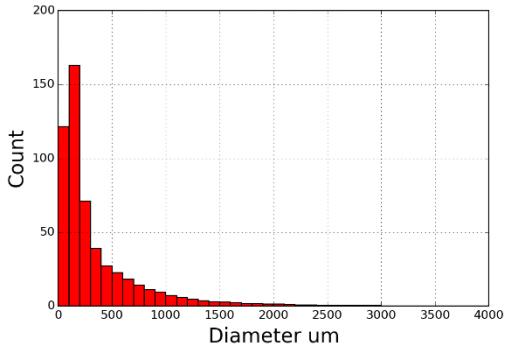

Figure A. 1822: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

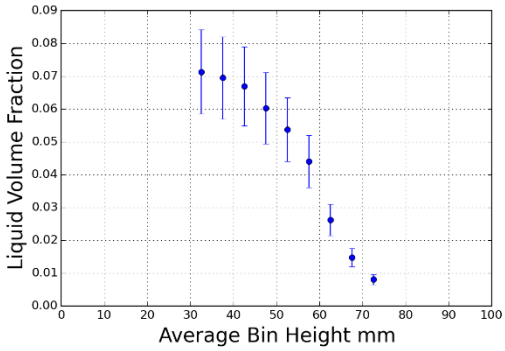

Figure A. 1825: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

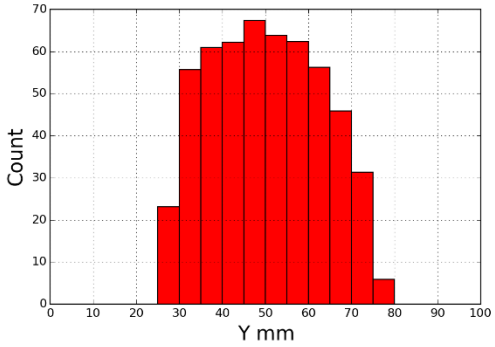

Figure A. 1823: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 All Droplets for .LB Image

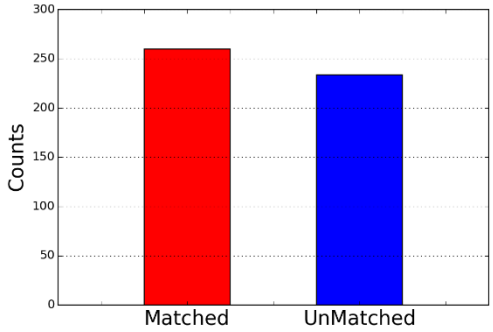

Figure A. 1826: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

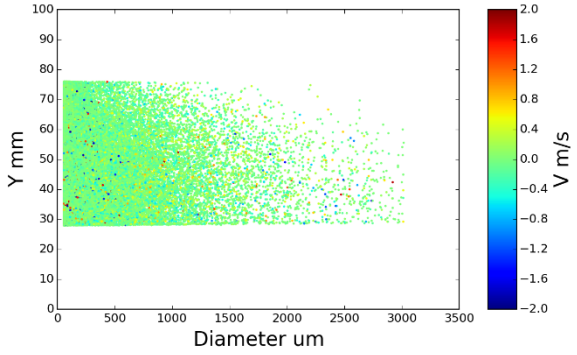

Figure A. 1829: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

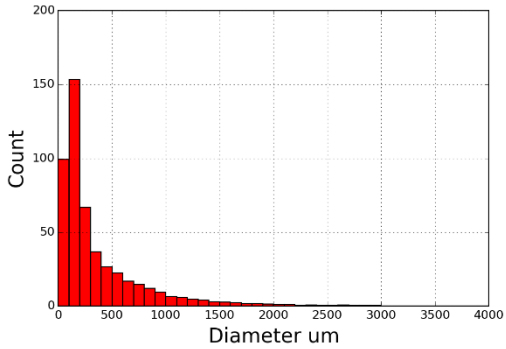

Figure A. 1827: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

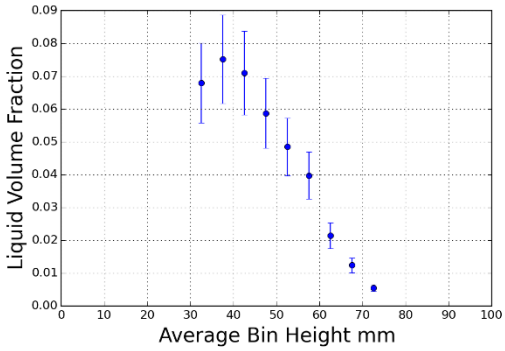

Figure A. 1830: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

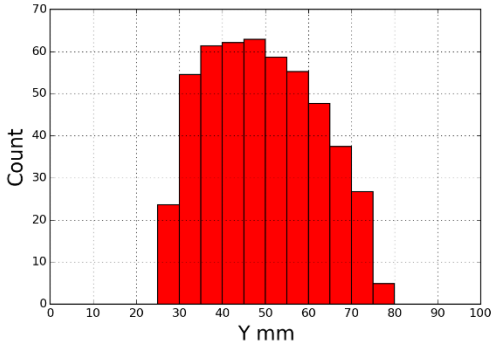

Figure A. 1828: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 Matched Only Droplets for .LA Image

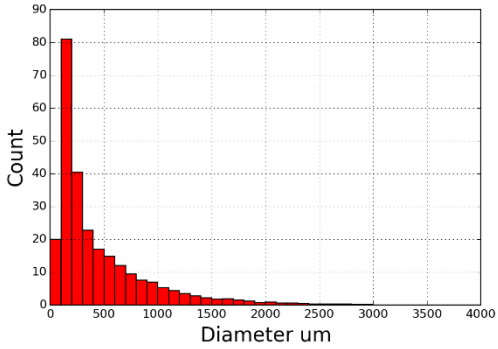

Figure A. 1831: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

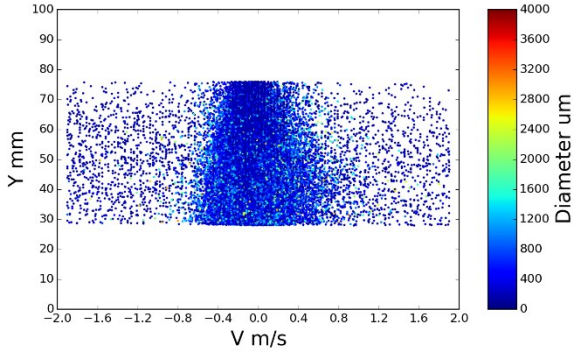

Figure A. 1834: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

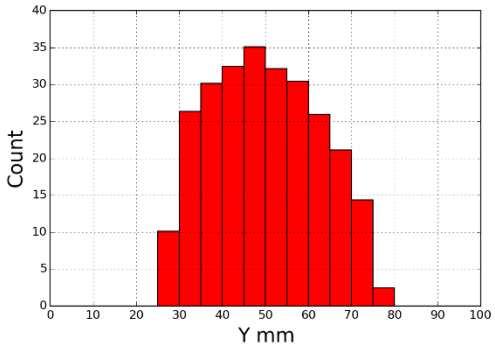

Figure A. 1832: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

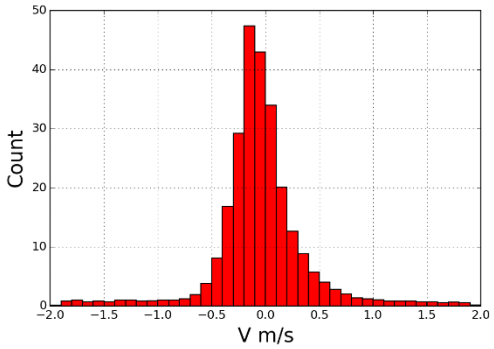

Figure A. 1835: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

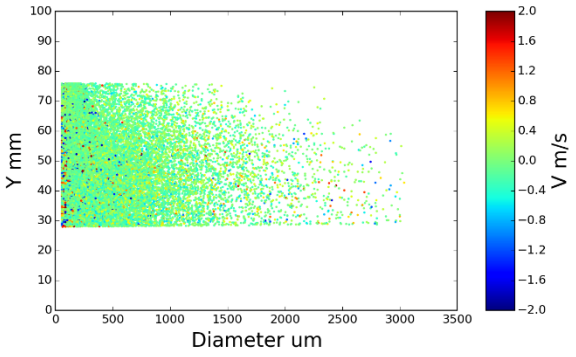

Figure A. 1833: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 Matched Only Droplets for .LB Image

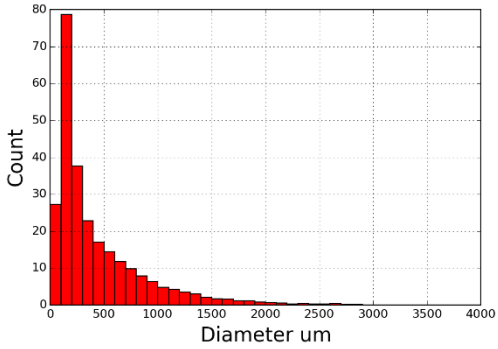

Figure A. 1836: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

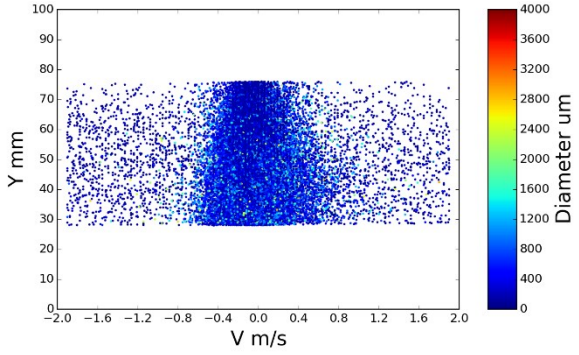

Figure A. 1839: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

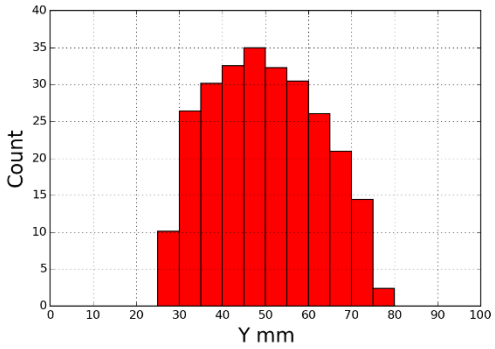

Figure A. 1837: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

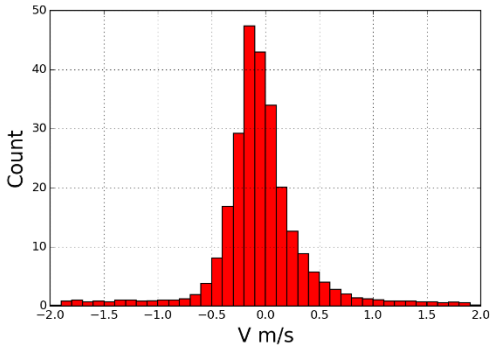

Figure A. 1840: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

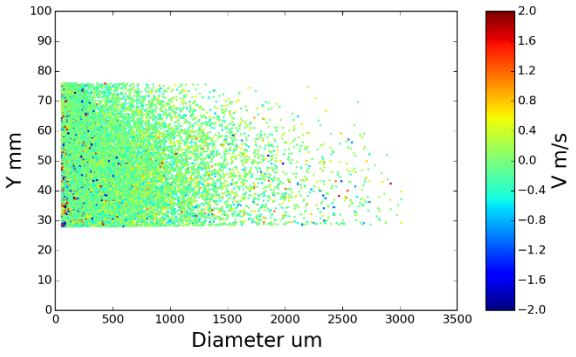

Figure A. 1838: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.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	122.45	115.66	57.2	3038	455.5	481.4	57.2	3038	464.6	493.6
40-60mm	248.63	226.37	57.2	3041	353.8	417.5	57.2	3032	374.4	426.1
60-80mm	134.76	106.13	57.2	3028	250.2	304.0	57.2	2970	268.1	306.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	507.09	449.08	57.2	3041	350.8	414.4	57.2	3038	372.5	426.1
			Height A (mm)				Height B (mm)			
Highest Particle			75.9740				75.9613			
Lowest Particle			28.0118				28.0118			

Table A. 195: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	50.96	57.2	3034	597.5	533.2	57.2	3032	591.5	533.1	-1.900	1.900	-0.020	0.460	-1.900	1.900	-0.040	0.510
40-60mm	113.5	57.2	3041	464.4	459.1	57.2	3032	456.2	454.6	-1.900	1.900	-0.040	0.430	-1.900	1.900	-0.050	0.480
60-80mm	53.52	57.2	2997	333.9	344.1	57.2	2900	325.8	337.2	-1.900	1.900	-0.050	0.400	-1.900	1.900	-0.080	0.450
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	217.98	57.2	3041	463.4	462.2	57.2	3032	456.0	458.9	-1.900	1.900	-0.040	0.430	-1.900	1.900	-0.050	0.480

Table A. 196: Matched Droplet Info

A.7.2.1 All Droplets for .LA Image

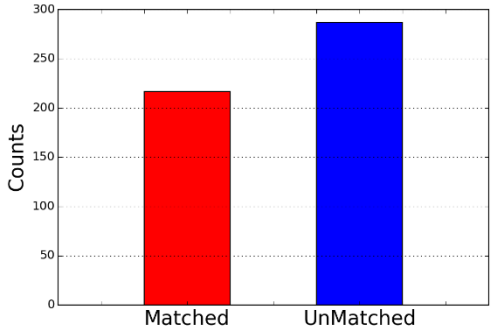

Figure A. 1841: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

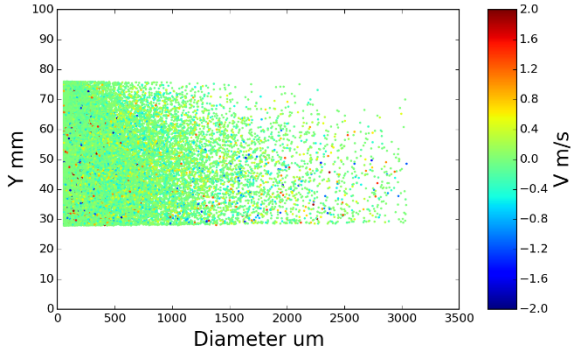

Figure A. 1844: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

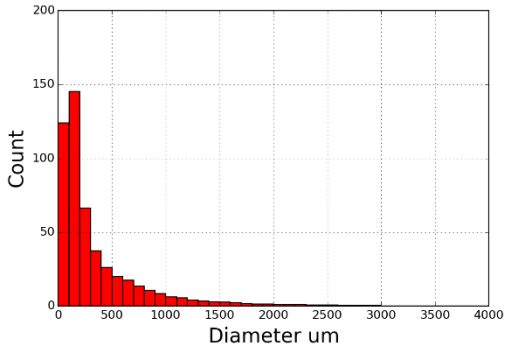

Figure A. 1842: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

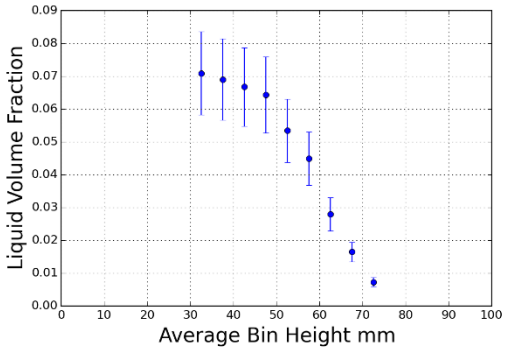

Figure A. 1845: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

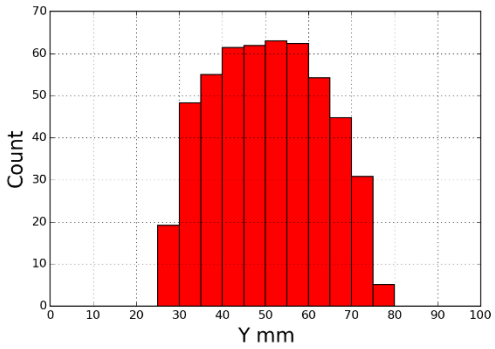

Figure A. 1843: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 All Droplets for .LB Image

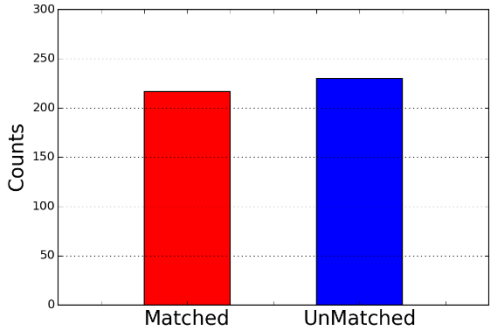

Figure A. 1846: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

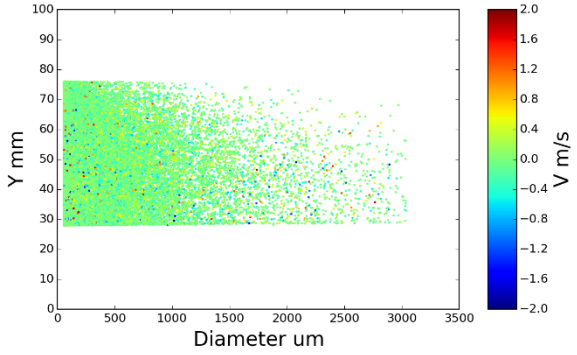

Figure A. 1849: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

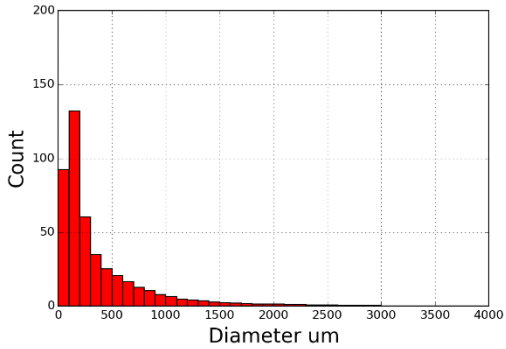

Figure A. 1847: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

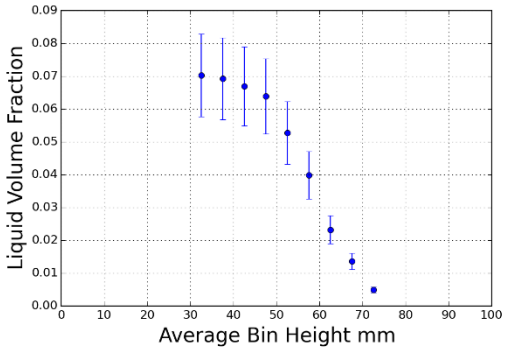

Figure A. 1850: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

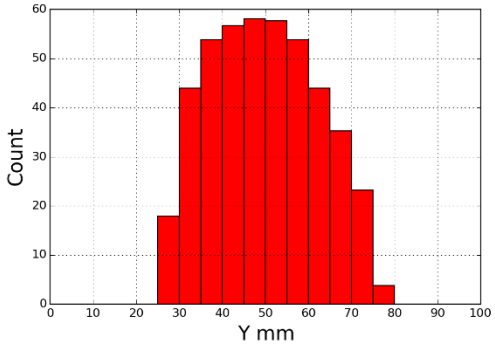

Figure A. 1848: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 Matched Only Droplets for .LA Image

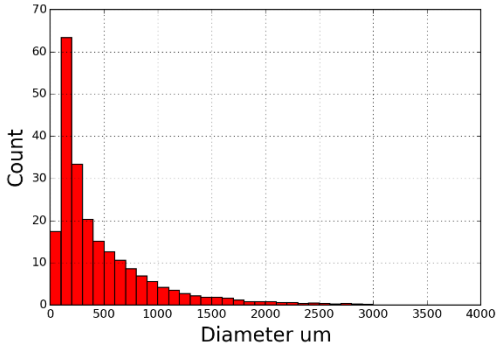

Figure A. 1851: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

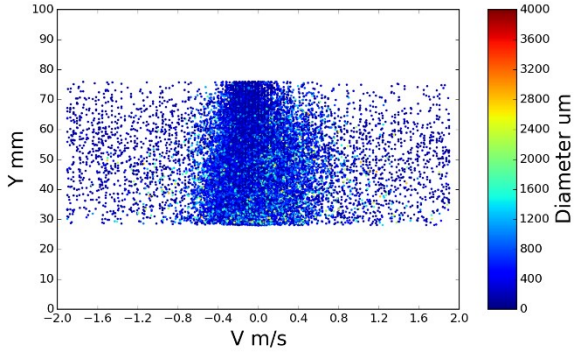

Figure A. 1854: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

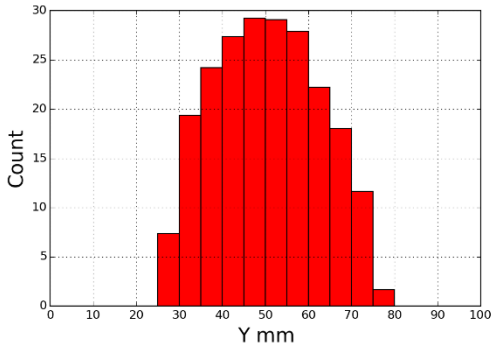

Figure A. 1852: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

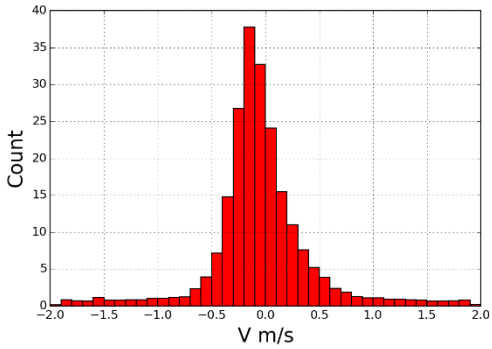

Figure A. 1855: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

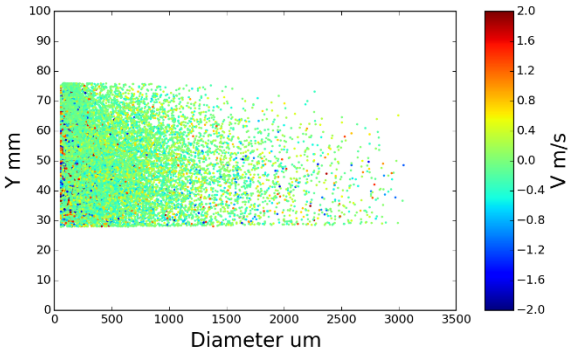

Figure A. 1853: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 Matched Only Droplets for .LB Image

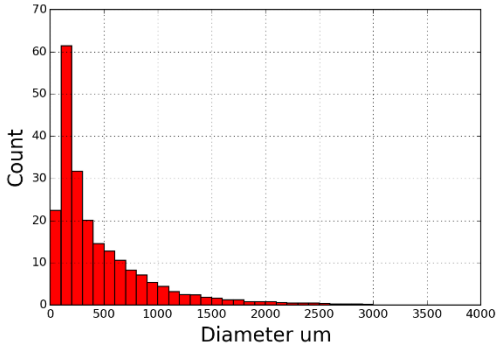

Figure A. 1856: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

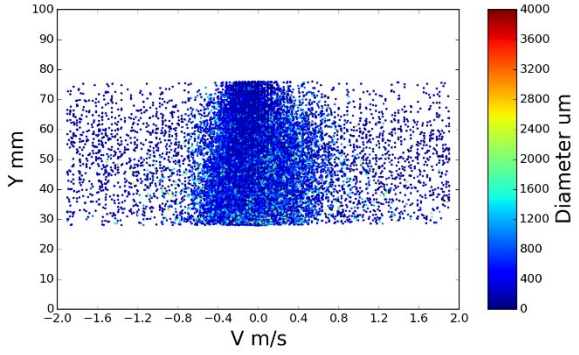

Figure A. 1859: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

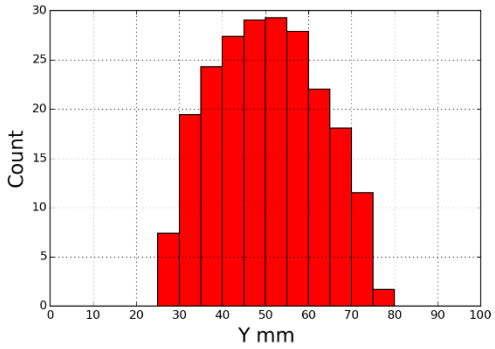

Figure A. 1857: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

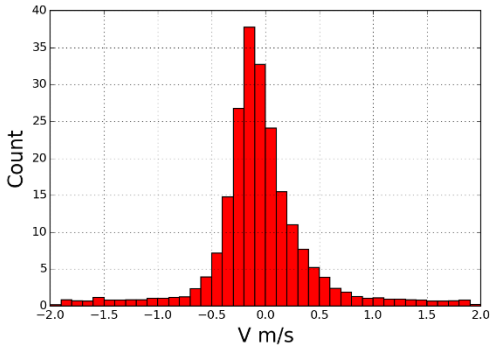

Figure A. 1860: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

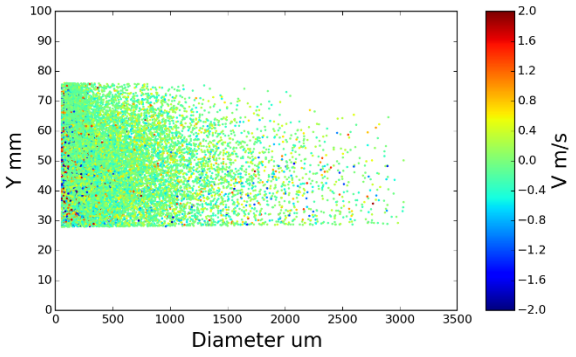

Figure A. 1858: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 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	112.67	107.82	57.2	3032	457.8	486.6	57.2	3036	482.1	499.6
40-60mm	260.17	235.78	57.2	3037	372.5	404.9	57.2	3033	393.8	410.1
60-80mm	182.45	123.6	57.2	3037	246.9	293.8	57.2	2967	279.6	293.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	558.38	468.41	57.2	3037	348.5	399.1	57.2	3036	384.0	412.9
			Height A (mm)				Height B (mm)			
Highest Particle			75.9740				75.9740			
Lowest Particle			28.0118				28.0118			

Table A. 197: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	44.17	57.2	3025	639.7	541.8	57.2	3011	629.6	540.0	-1.900	1.900	-0.010	0.460	-1.900	1.900	-0.000	0.520
40-60mm	112.07	57.2	3033	490.8	436.1	57.2	3033	482.0	429.9	-1.900	1.900	-0.010	0.440	-1.900	1.900	-0.010	0.500
60-80mm	59.93	57.2	2849	348.4	332.1	57.2	2967	338.3	319.3	-1.900	1.900	-0.040	0.450	-1.900	1.900	-0.020	0.490
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	216.17	57.2	3033	481.7	446.4	57.2	3033	472.2	440.1	-1.900	1.900	-0.020	0.450	-1.900	1.900	-0.010	0.500

Table A. 198: Matched Droplet Info

A.7.2.1 All Droplets for .LA Image

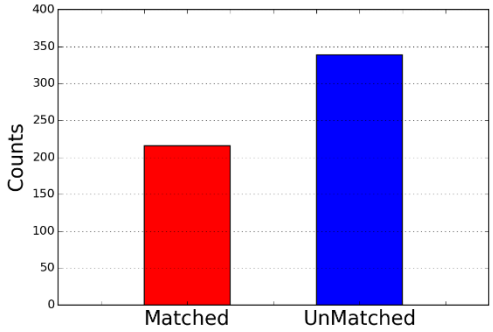

Figure A. 1861: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

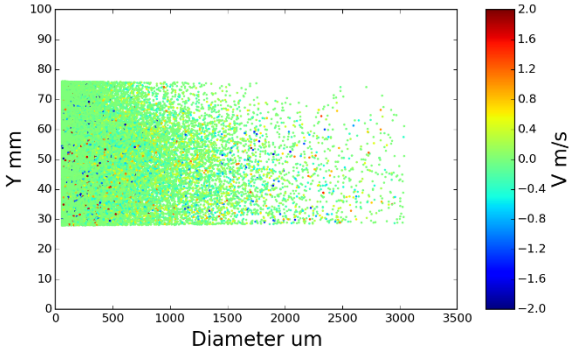

Figure A. 1864: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

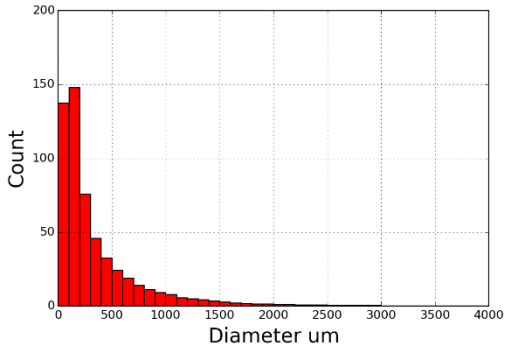

Figure A. 1862: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

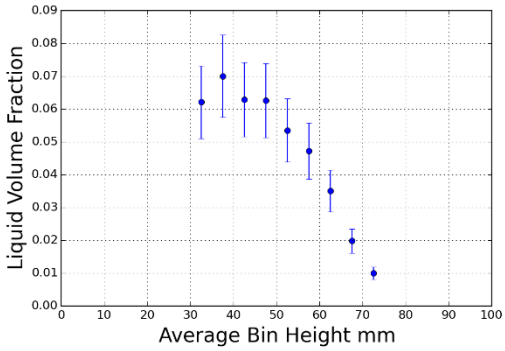

Figure A. 1865: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

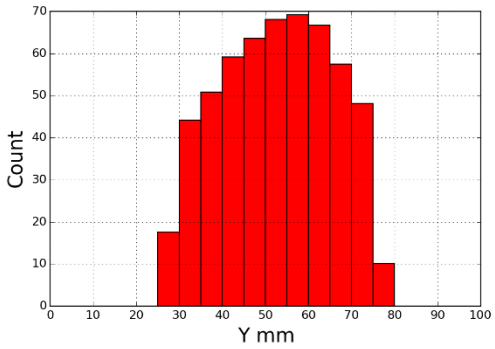

Figure A. 1863: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 All Droplets for .LB Image

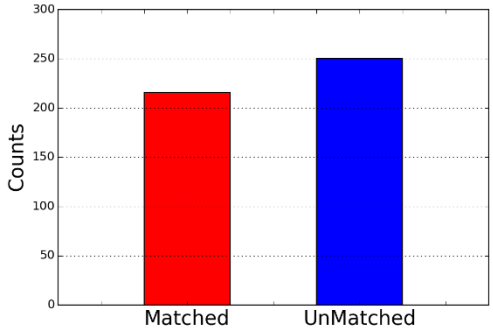

Figure A. 1866: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

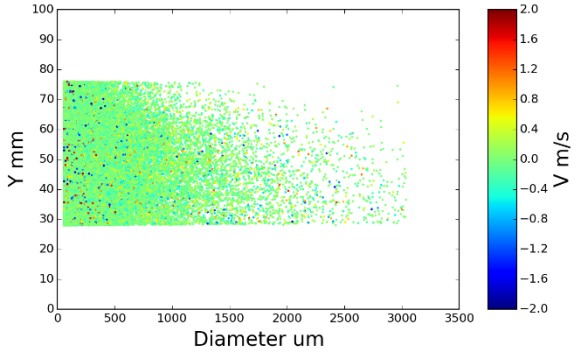

Figure A. 1869: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

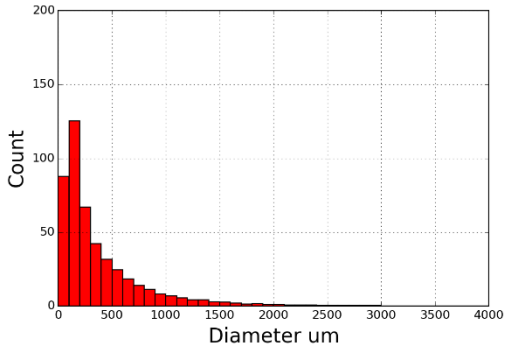

Figure A. 1867: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

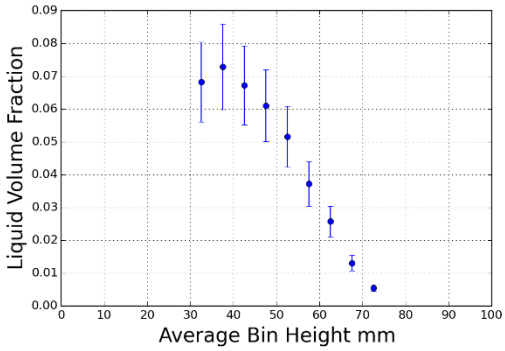

Figure A. 1870: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

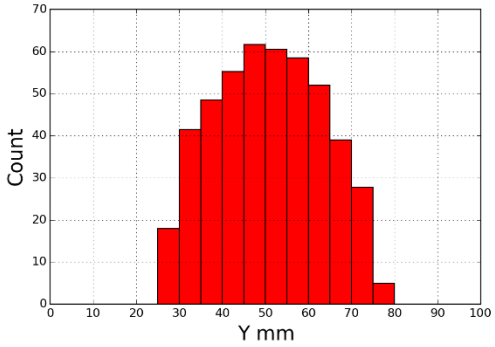

Figure A. 1868: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 Matched Only Droplets for .LA Image

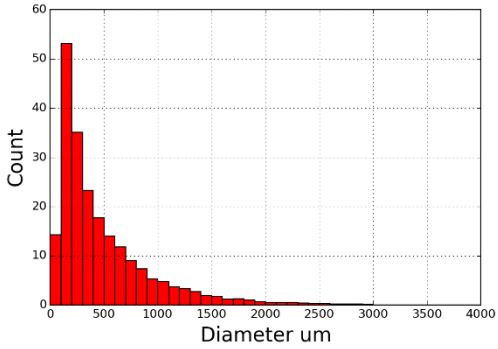

Figure A. 1871: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

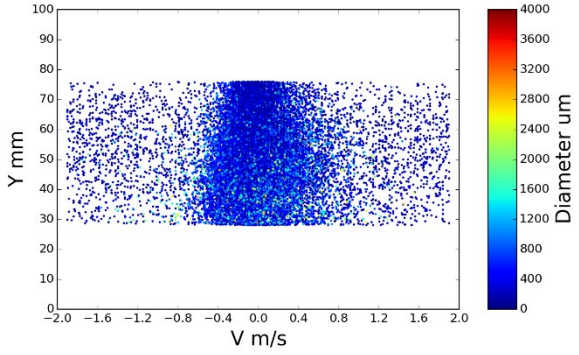

Figure A. 1874: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

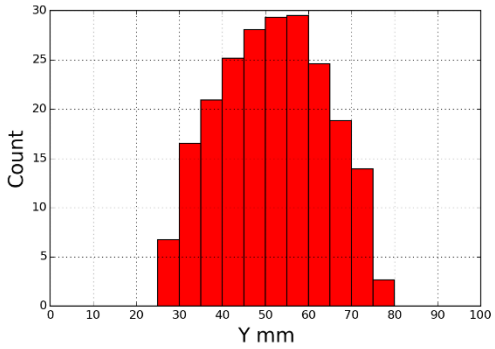

Figure A. 1872: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

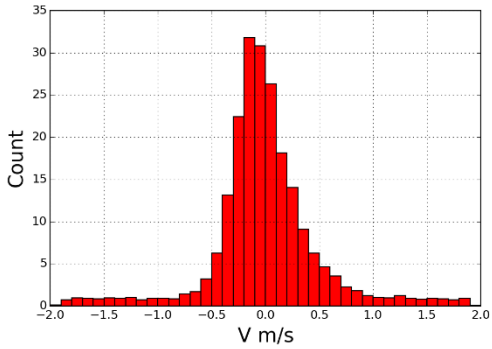

Figure A. 1875: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

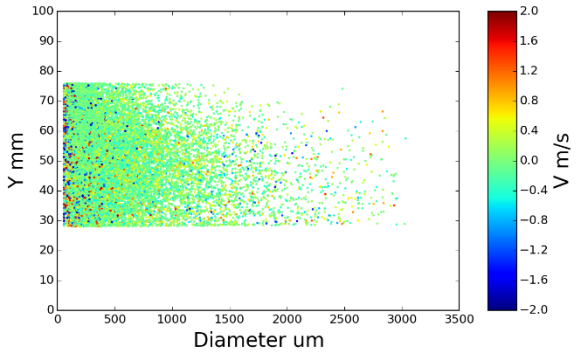

Figure A. 1873: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 Matched Only Droplets for .LB Image

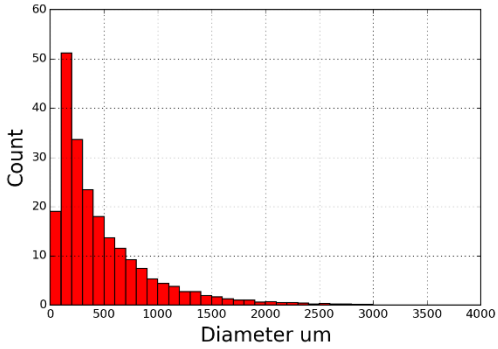

Figure A. 1876: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

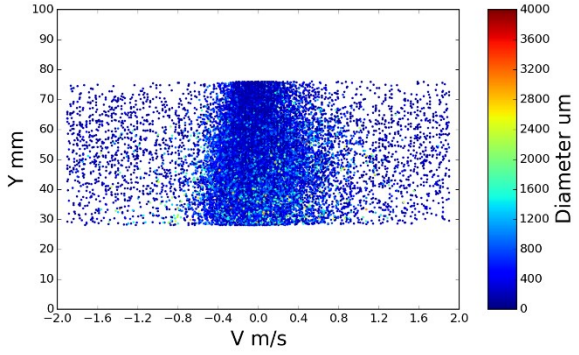

Figure A. 1879: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

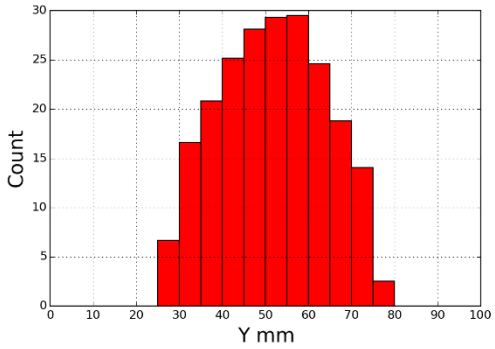

Figure A. 1877: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

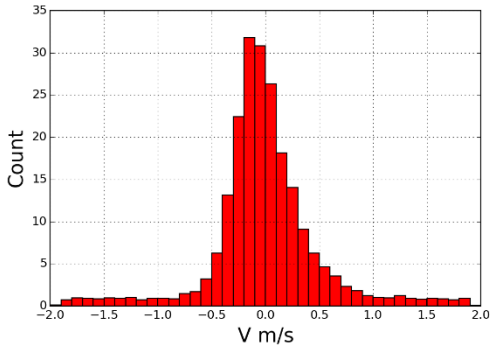

Figure A. 1880: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

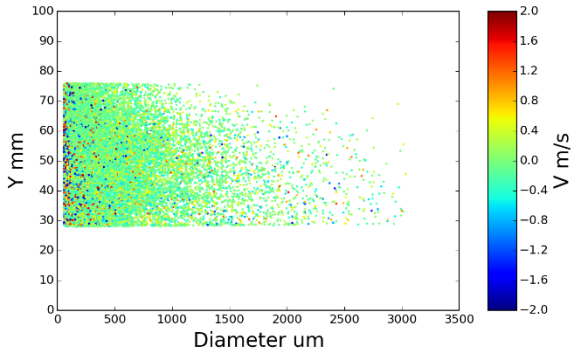

Figure A. 1878: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 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	101.03	101.2	57.2	3041	463.3	488.5	57.2	3022	486.7	495.5
40-60mm	241.2	222.41	57.2	3039	377.3	398.5	57.2	3040	394.1	404.2
60-80mm	140.28	119.51	57.2	2980	266.5	278.3	57.2	3002	282.1	287.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	484.36	444.0	57.2	3041	363.1	396.0	57.2	3040	385.1	407.1
			Height A (mm)				Height B (mm)			
Highest Particle			75.9740				75.9740			
Lowest Particle			28.0118				28.0118			

Table A. 199: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	38.84	57.2	3041	665.4	560.8	57.2	3016	652.0	556.0	-1.900	1.900	-0.010	0.490	-1.900	1.890	0.050	0.550
40-60mm	110.23	57.2	3033	507.1	438.5	57.2	3006	495.1	432.2	-1.900	1.900	-0.020	0.420	-1.900	1.900	0.030	0.480
60-80mm	63.59	57.2	2933	356.1	311.3	57.2	2924	345.7	307.1	-1.900	1.900	-0.010	0.390	-1.900	1.900	0.020	0.430
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	212.66	57.2	3041	490.9	444.1	57.2	3016	479.0	438.6	-1.900	1.900	-0.010	0.420	-1.900	1.900	0.030	0.480

Table A. 200: Matched Droplet Info

A.7.2.1 All Droplets for .LA Image

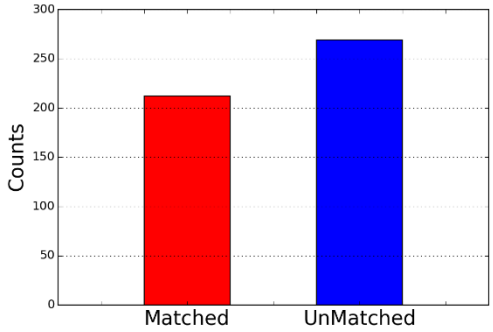

Figure A. 1881: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

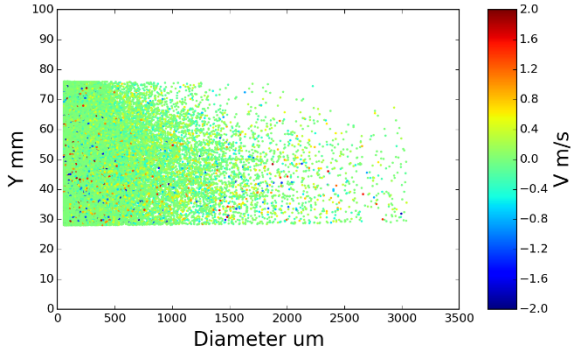

Figure A. 1884: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

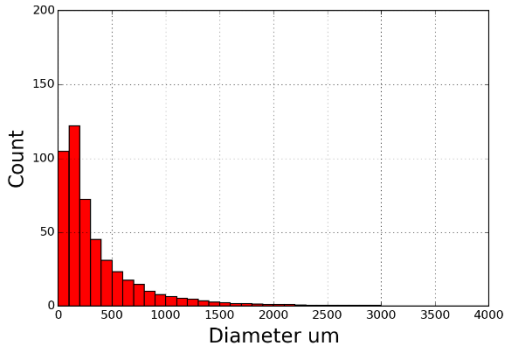

Figure A. 1882: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

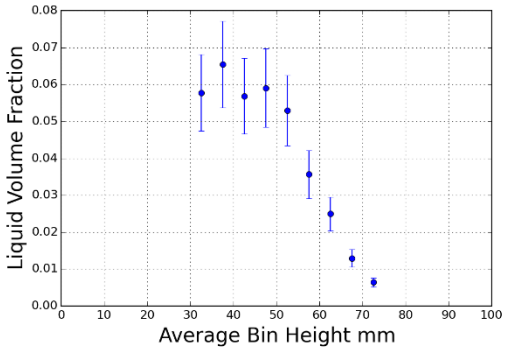

Figure A. 1885: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

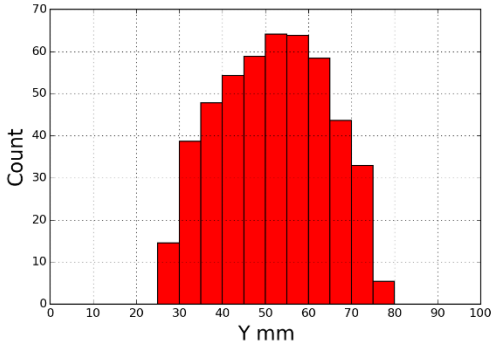

Figure A. 1883: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 All Droplets for .LB Image

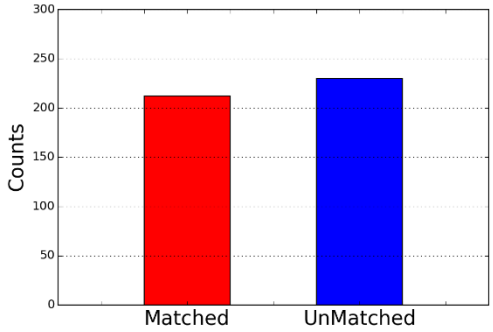

Figure A. 1886: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

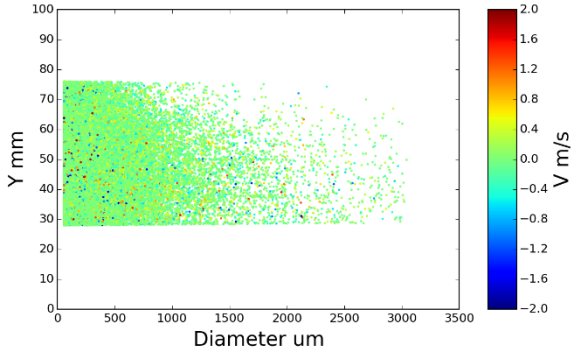

Figure A. 1889: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

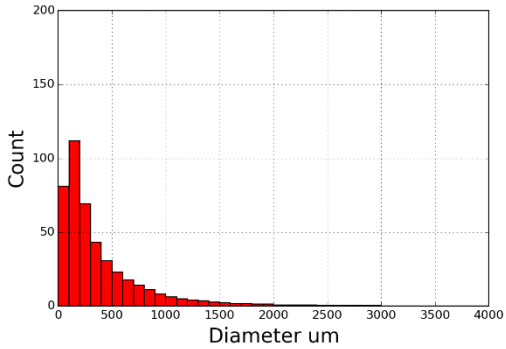

Figure A. 1887: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

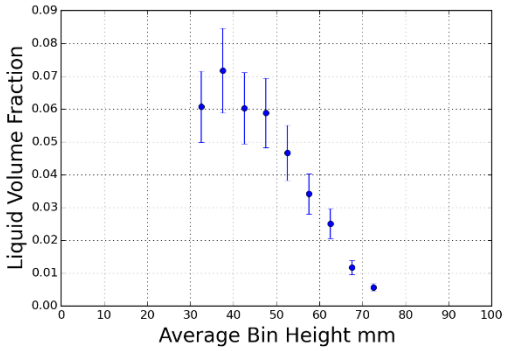

Figure A. 1890: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

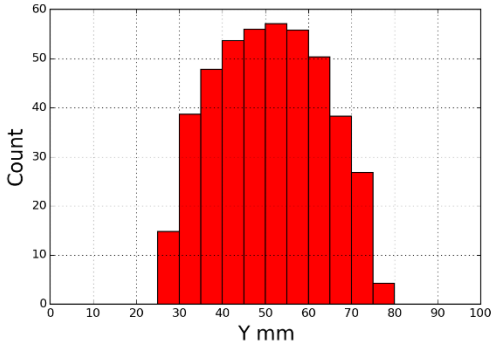

Figure A. 1888: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 Matched Only Droplets for .LA Image

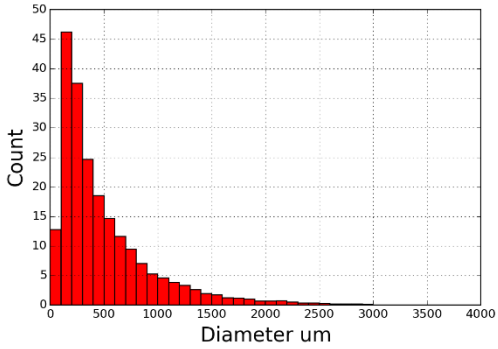

Figure A. 1891: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

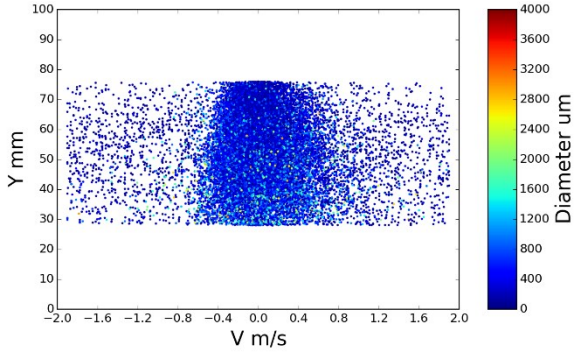

Figure A. 1894: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

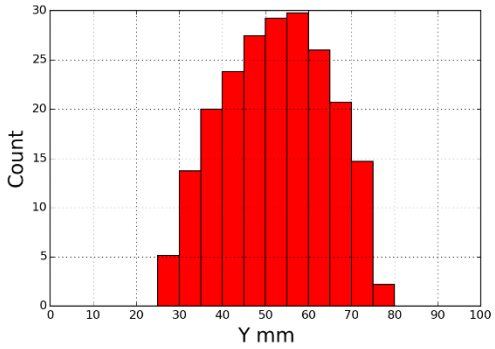

Figure A. 1892: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

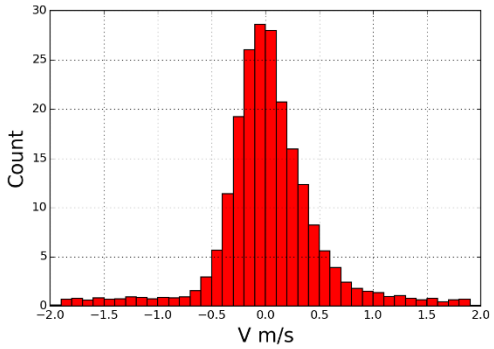

Figure A. 1895: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

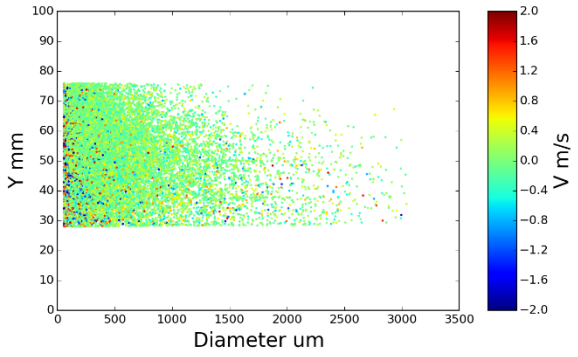

Figure A. 1893: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.2.1 Matched Only Droplets for .LB Image

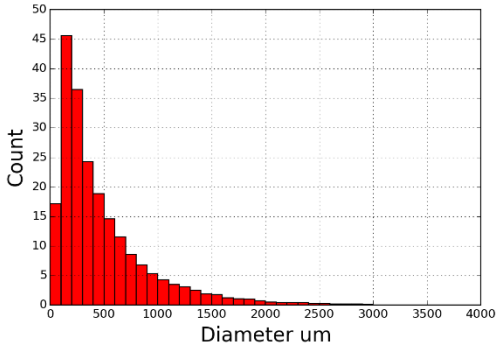

Figure A. 1896: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

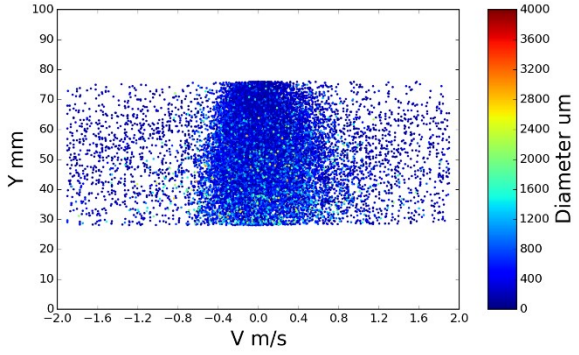

Figure A. 1899: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

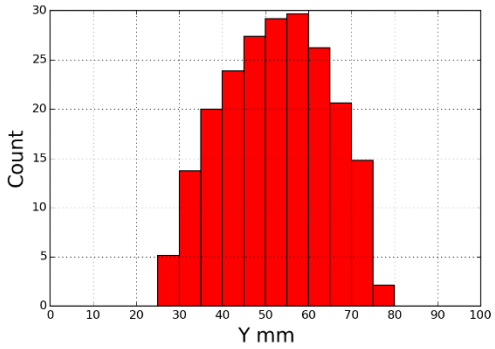

Figure A. 1897: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

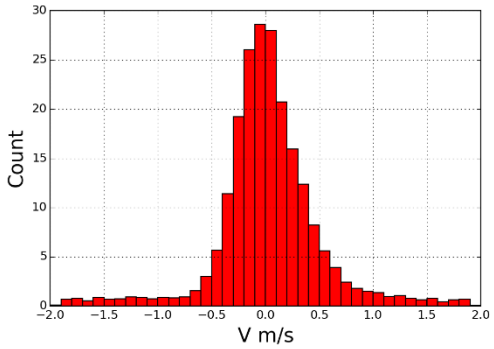

Figure A. 1900: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

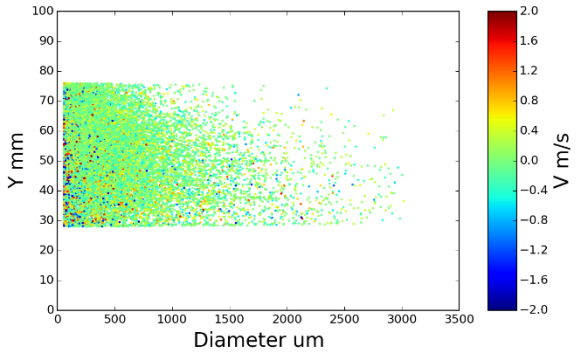

Figure A. 1898: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 Lens 50mm Mag 0_13x

A.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	156.32	160.73	128.5	3408	617.3	518.8	128.5	3416	615.9	520.9
40-60mm	151.27	154.68	128.5	3415	544.7	447.9	128.5	3400	547.2	437.9
60-80mm	69.08	53.9	128.5	3365	428.7	341.6	128.5	3354	446.9	319.7
80-100mm	13.76	7.15	128.5	3082	337.3	241.8	128.5	1360	373.9	225.9
All	390.55	376.47	128.5	3415	545.9	462.8	128.5	3416	558.9	462.7
			Height A (mm)				Height B (mm)			
Highest Particle			100.0042				100.0042			
Lowest Particle			20.1033				20.1033			

Table A. 201: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	78.84	128.5	3399	710.0	537.0	128.5	3416	702.1	536.6	-1.900	1.900	-0.060	0.680	-1.900	1.900	-0.010	0.710
40-60mm	78.54	128.5	3413	638.4	462.2	128.5	3378	628.5	450.0	-1.900	1.900	-0.060	0.640	-1.900	1.900	-0.030	0.680
60-80mm	27.41	128.5	2925	531.9	340.1	128.5	3354	528.2	335.7	-1.900	1.900	-0.050	0.570	-1.900	1.900	-0.040	0.610
80-100mm	3.6	128.5	1446	462.4	227.4	128.5	1204	462.9	232.6	-1.800	1.460	-0.100	0.360	-1.870	1.810	-0.040	0.430
All	188.39	128.5	3413	649.5	481.5	128.5	3416	641.6	475.8	-1.900	1.900	-0.060	0.640	-1.900	1.900	-0.020	0.680

Table A. 202: Matched Droplet Info

A.7.2.2 All Droplets for .LA Image

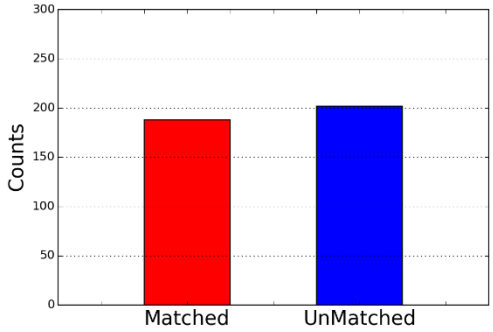

Figure A. 1901: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

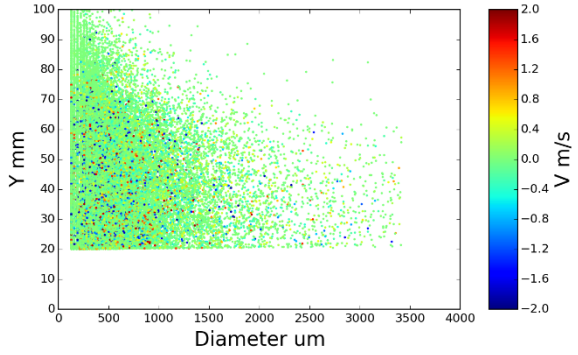

Figure A. 1904: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

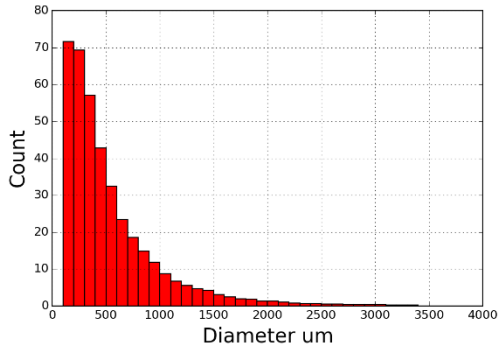

Figure A. 1902: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

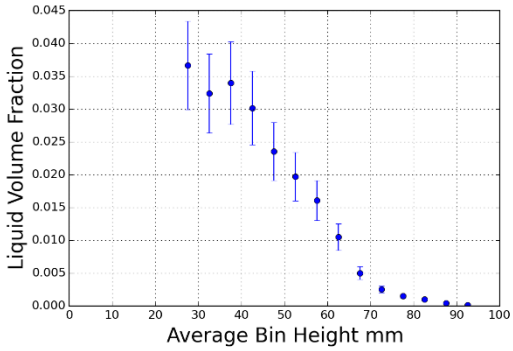

Figure A. 1905: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

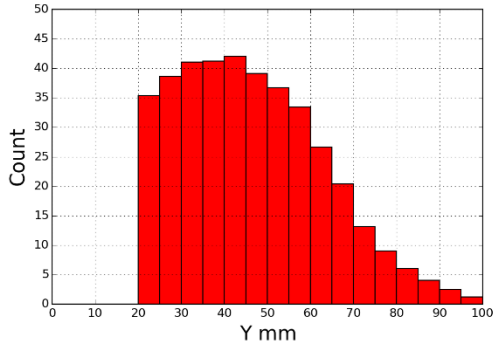

Figure A. 1903: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 All Droplets for .LB Image

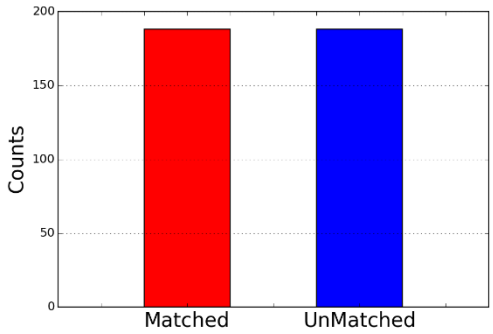

Figure A. 1906: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

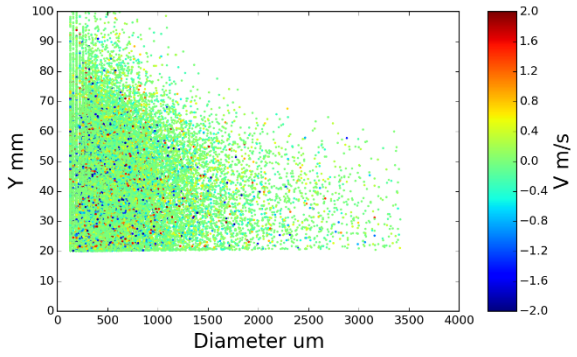

Figure A. 1909: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

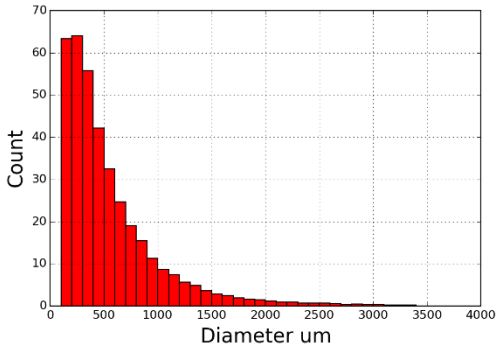

Figure A. 1907: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

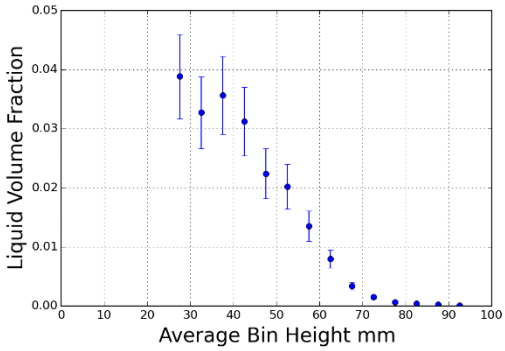

Figure A. 1910: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

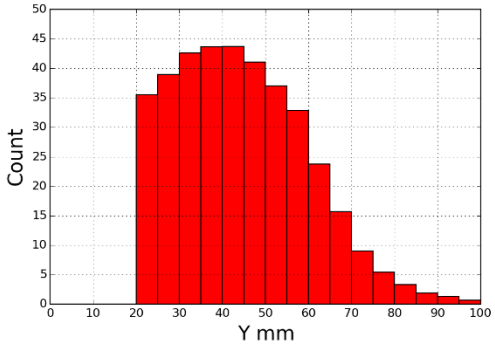

Figure A. 1908: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 Matched Only Droplets for .LA Image

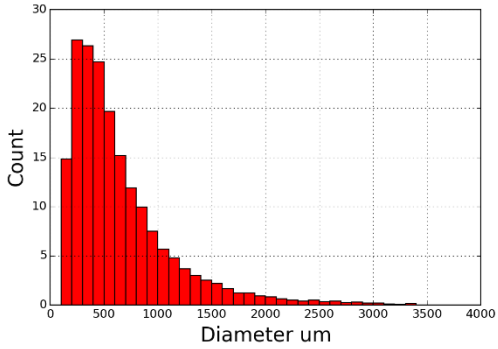

Figure A. 1911: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

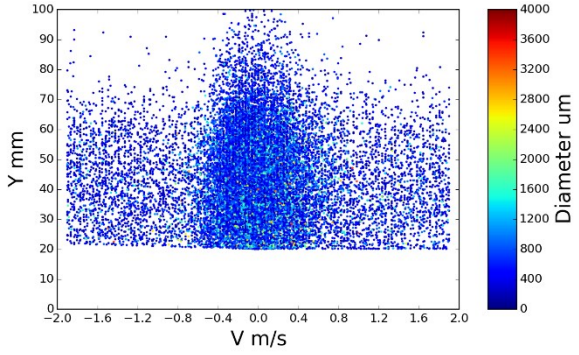

Figure A. 1914: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

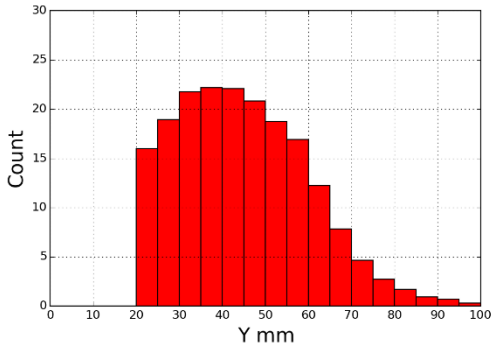

Figure A. 1912: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

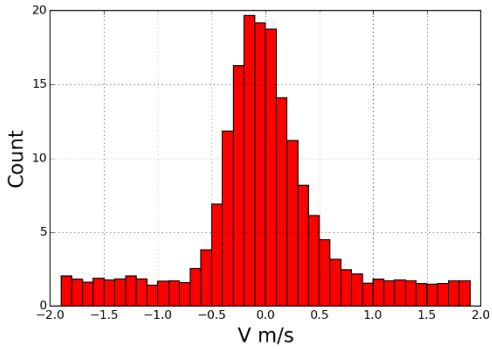

Figure A. 1915: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

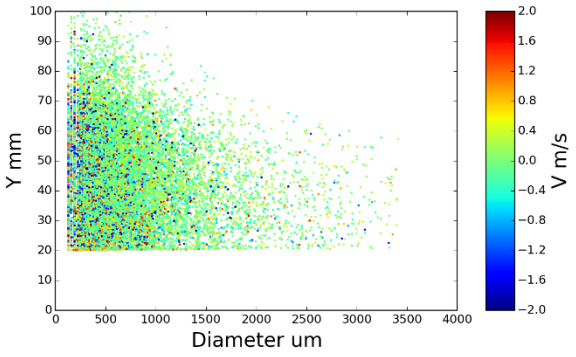

Figure A. 1913: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 Matched Only Droplets for .LB Image

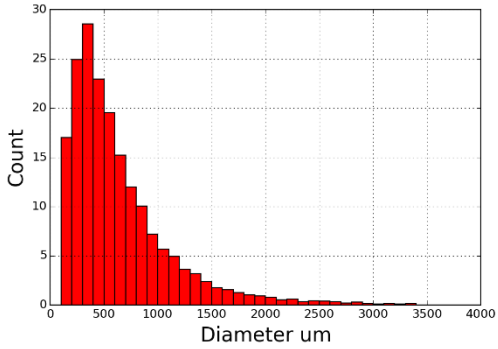

Figure A. 1916: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

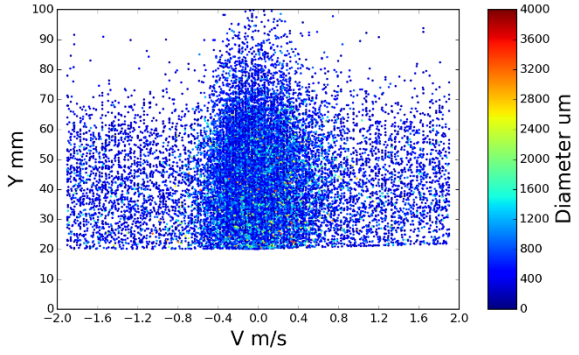

Figure A. 1919: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

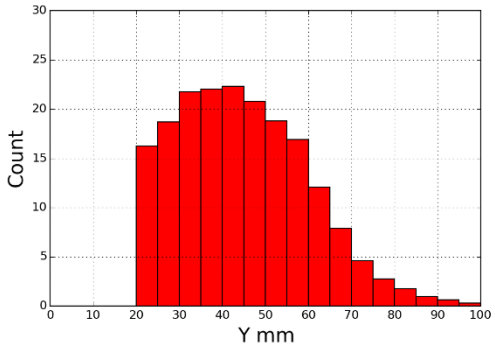

Figure A. 1917: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

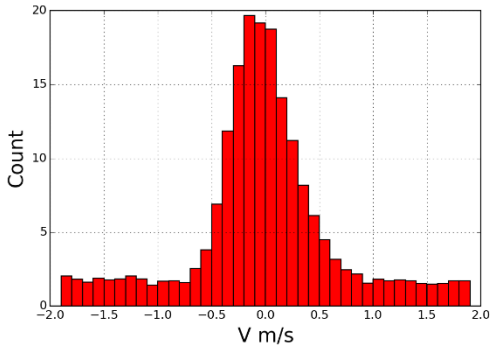

Figure A. 1920: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

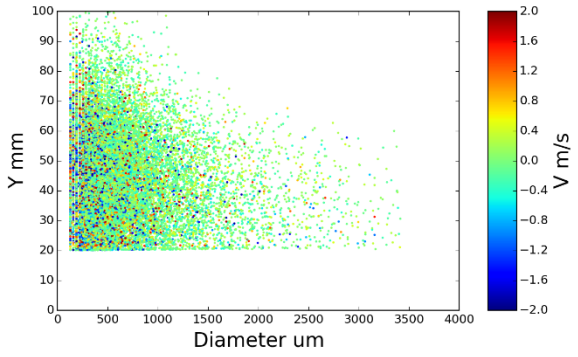

Figure A. 1918: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.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	131.74	132.97	128.5	3410	673.1	567.1	128.5	3417	669.9	561.4
40-60mm	146.81	144.07	128.5	3391	594.1	488.4	128.5	3415	595.0	469.2
60-80mm	68.96	54.08	128.5	3392	481.2	377.4	128.5	3398	498.9	348.0
80-100mm	14.62	8.94	128.5	2360	376.4	260.2	128.5	2689	429.1	267.8
All	362.39	340.14	128.5	3410	592.6	500.2	128.5	3417	604.6	491.9
			Height A (mm)				Height B (mm)			
Highest Particle			100.0042				100.0042			
Lowest Particle			20.1033				20.1033			

Table A. 203: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	63.49	128.5	3410	784.8	585.2	128.5	3417	764.7	571.2	-1.900	1.900	-0.070	0.670	-1.900	1.900	-0.040	0.710
40-60mm	72.41	128.5	3391	692.1	488.6	128.5	3362	678.0	479.9	-1.900	1.900	-0.080	0.650	-1.900	1.900	-0.050	0.690
60-80mm	26.69	128.5	3392	592.7	360.1	128.5	3398	587.3	360.7	-1.900	1.900	-0.090	0.590	-1.900	1.900	-0.100	0.610
80-100mm	4.36	128.5	2360	528.7	274.5	128.5	2689	532.4	283.5	-1.870	1.900	-0.060	0.380	-1.870	1.900	-0.070	0.440
All	166.96	128.5	3410	707.2	511.7	128.5	3417	692.7	501.5	-1.900	1.900	-0.080	0.640	-1.900	1.900	-0.060	0.680

Table A. 204: Matched Droplet Info

A.7.2.2 All Droplets for .LA Image

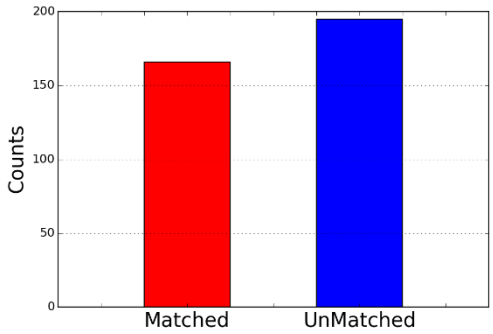

Figure A. 1921: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

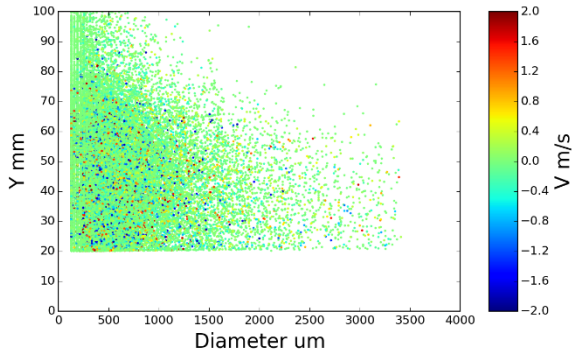

Figure A. 1924: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

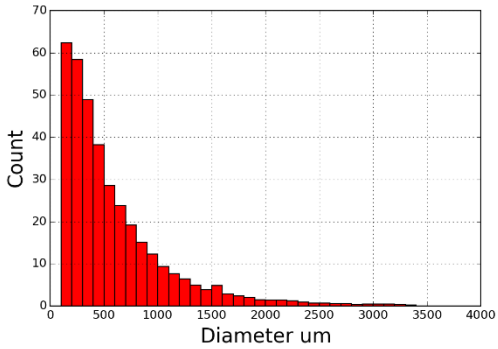

Figure A. 1922: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

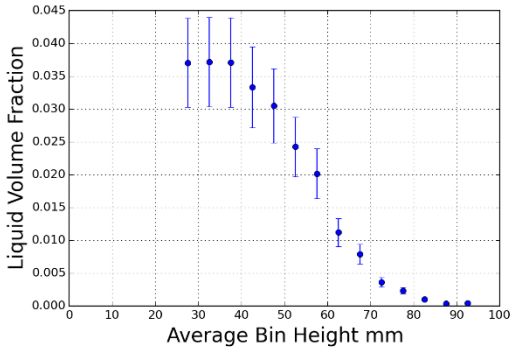

Figure A. 1925: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

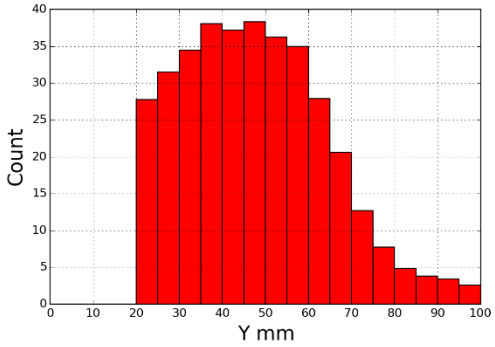

Figure A. 1923: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 All Droplets for .LB Image

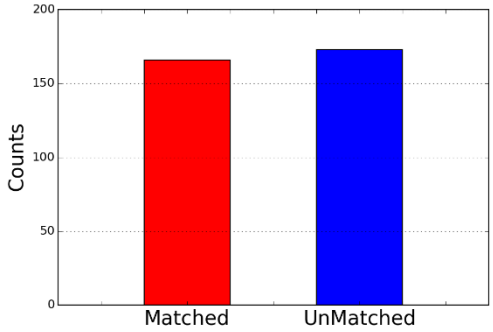

Figure A. 1926: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

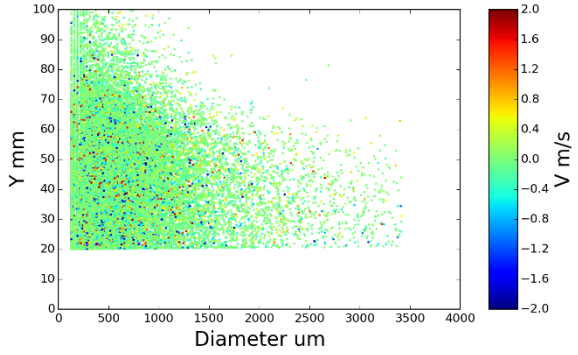

Figure A. 1929: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

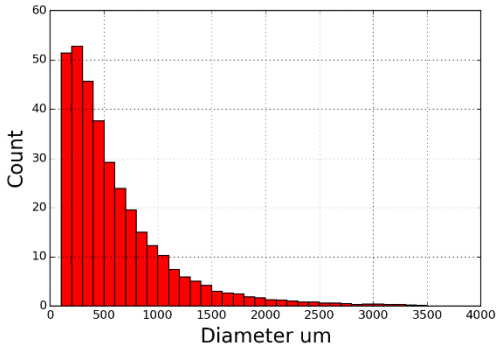

Figure A. 1927: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

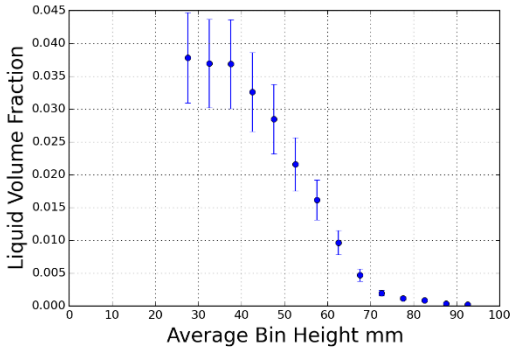

Figure A. 1930: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

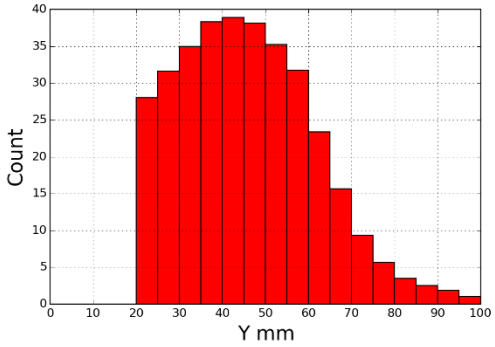

Figure A. 1928: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 Matched Only Droplets for .LA Image

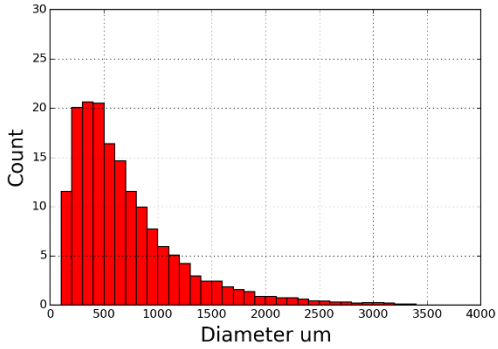

Figure A. 1931: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

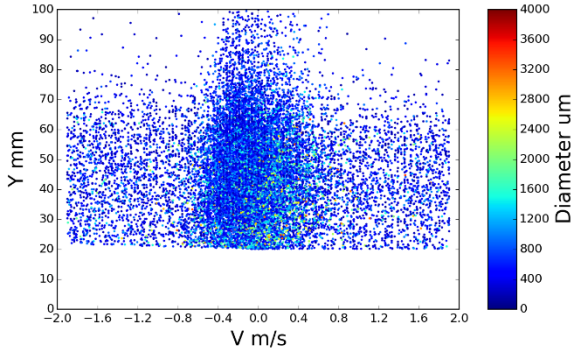

Figure A. 1934: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

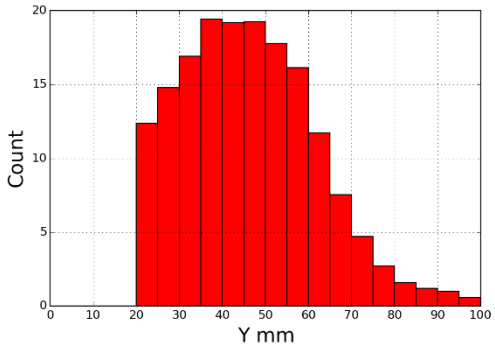

Figure A. 1932: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

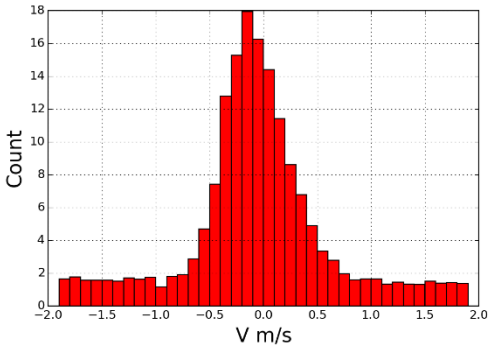

Figure A. 1935: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

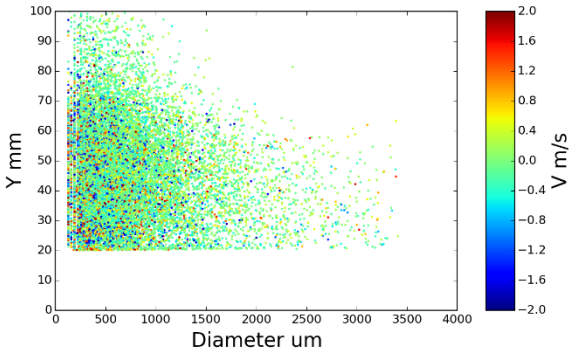

Figure A. 1933: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 Matched Only Droplets for .LB Image

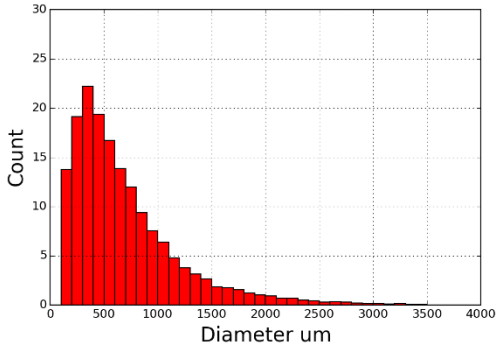

Figure A. 1936: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

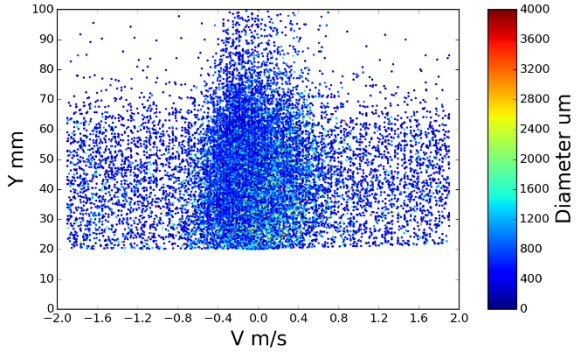

Figure A. 1939: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

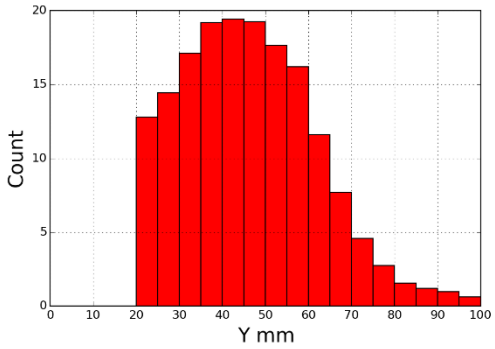

Figure A. 1937: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

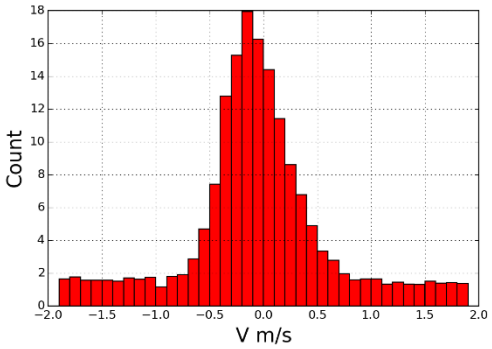

Figure A. 1940: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

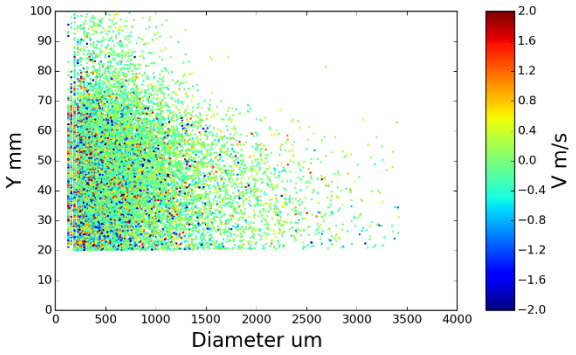

Figure A. 1938: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.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	113.24	118.55	128.5	3411	704.6	601.2	128.5	3409	713.8	601.3
40-60mm	140.67	135.36	128.5	3406	611.6	506.7	128.5	3414	620.1	500.4
60-80mm	70.11	50.43	128.5	3354	484.7	393.6	128.5	2737	519.4	374.1
80-100mm	11.35	7.92	128.5	2110	370.8	257.2	128.5	2096	494.1	372.1
All	335.38	312.51	128.5	3411	608.4	522.1	128.5	3414	636.2	526.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.9757				99.9757			
Lowest Particle			20.1033				20.1033			

Table A. 205: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	51.14	128.5	3399	846.4	638.2	128.5	3400	823.7	626.7	-1.900	1.900	-0.060	0.680	-1.900	1.900	-0.030	0.730
40-60mm	67.83	128.5	3406	722.2	519.4	128.5	3398	702.3	498.8	-1.900	1.900	-0.070	0.650	-1.900	1.900	-0.050	0.680
60-80mm	25.8	128.5	3060	613.4	392.4	128.5	2737	590.8	370.8	-1.900	1.900	-0.050	0.570	-1.900	1.900	-0.060	0.630
80-100mm	3.75	128.5	1663	496.0	248.9	128.5	1457	483.8	240.3	-1.870	1.840	-0.080	0.400	-1.900	1.830	-0.090	0.420
All	148.52	128.5	3406	740.4	547.8	128.5	3400	719.4	531.6	-1.900	1.900	-0.060	0.640	-1.900	1.900	-0.050	0.690

Table A. 206: Matched Droplet Info

A.7.2.2 All Droplets for .LA Image

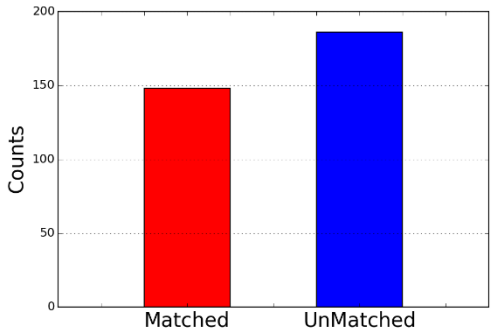

Figure A. 1941: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

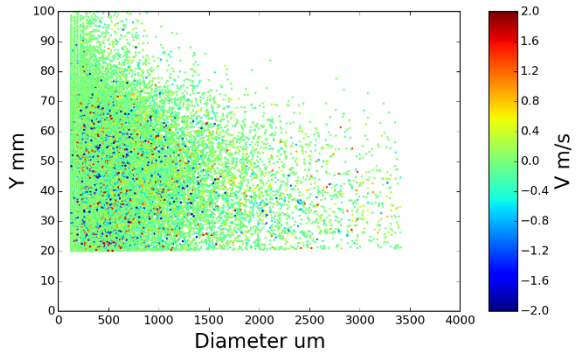

Figure A. 1944: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

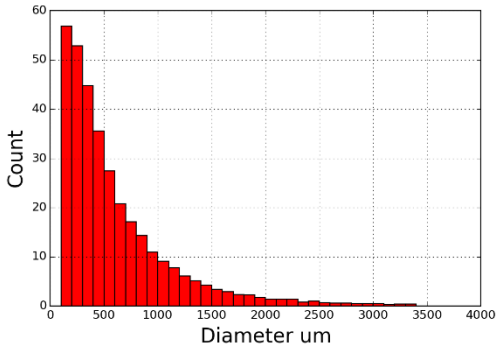

Figure A. 1942: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

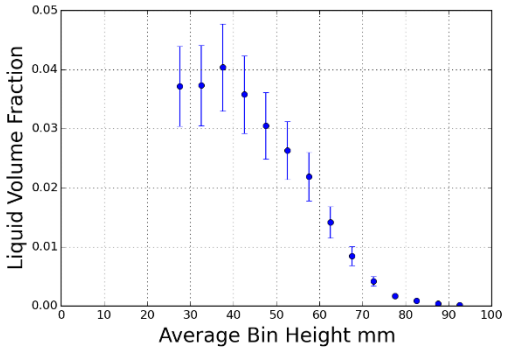

Figure A. 1945: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

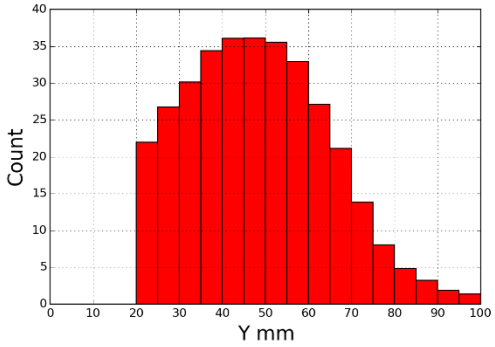

Figure A. 1943: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 All Droplets for .LB Image

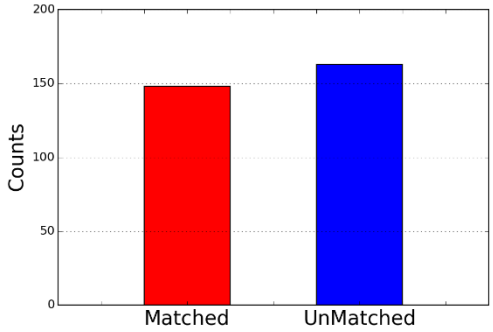

Figure A. 1946: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

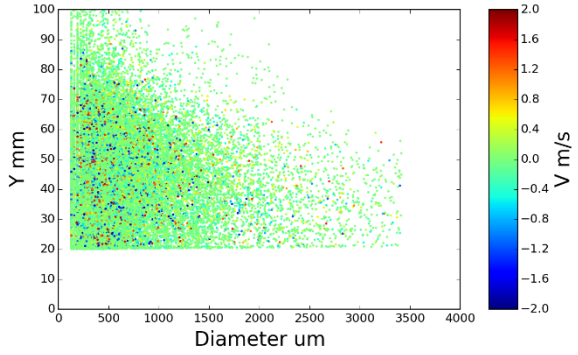

Figure A. 1949: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

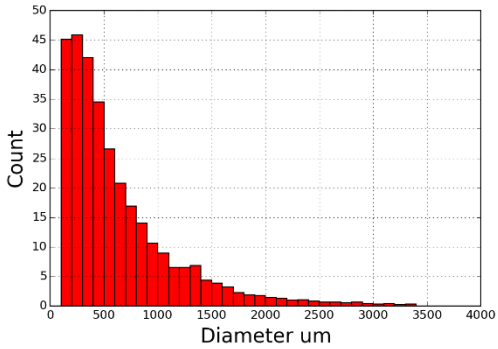

Figure A. 1947: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

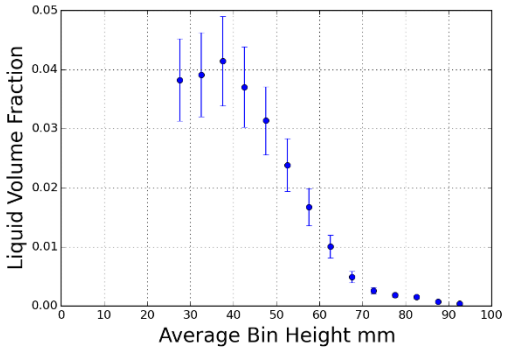

Figure A. 1950: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

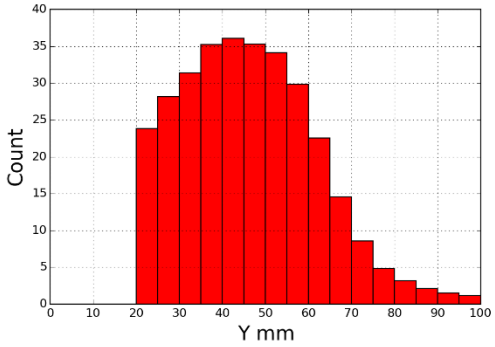

Figure A. 1948: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 Matched Only Droplets for .LA Image

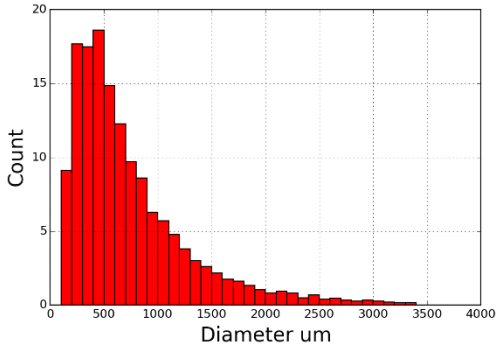

Figure A. 1951: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

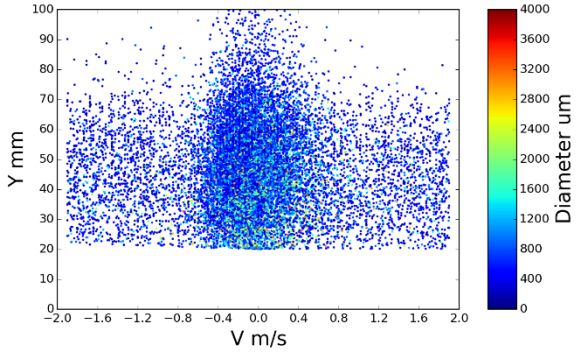

Figure A. 1954: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

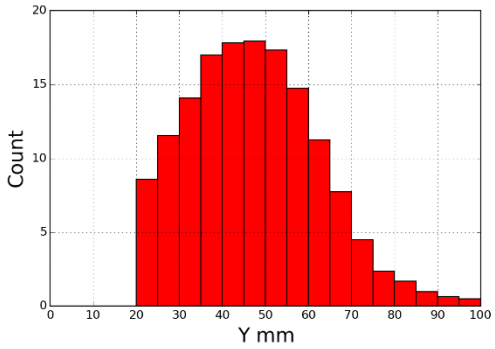

Figure A. 1952: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

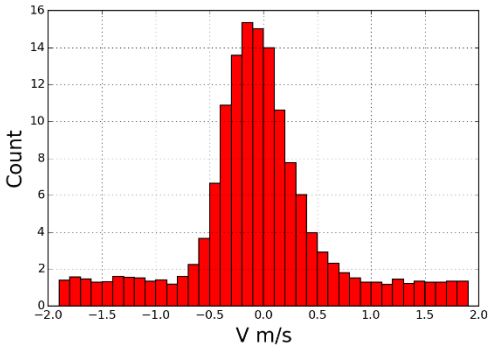

Figure A. 1955: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

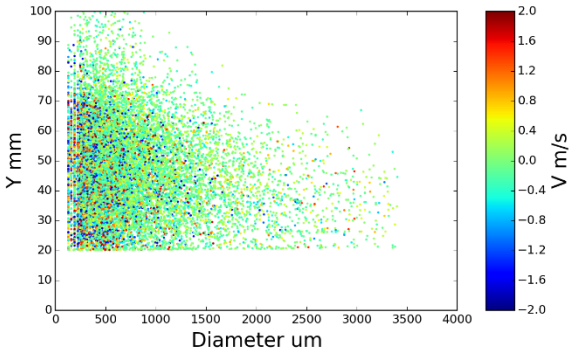

Figure A. 1953: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 Matched Only Droplets for .LB Image

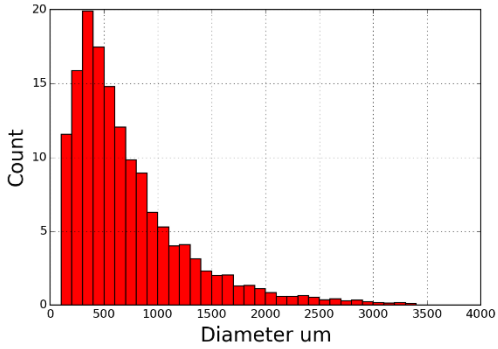

Figure A. 1956: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

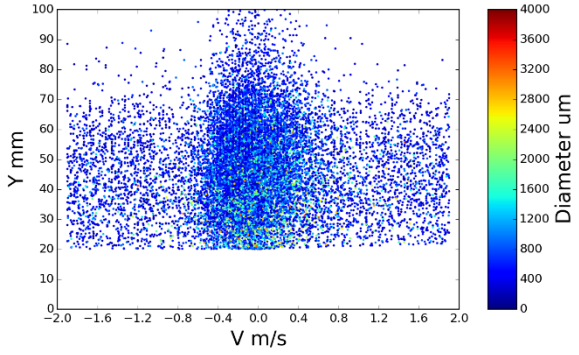

Figure A. 1959: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

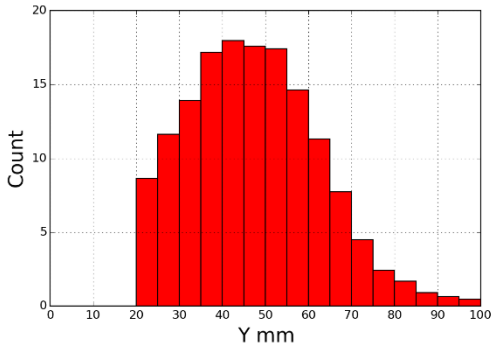

Figure A. 1957: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

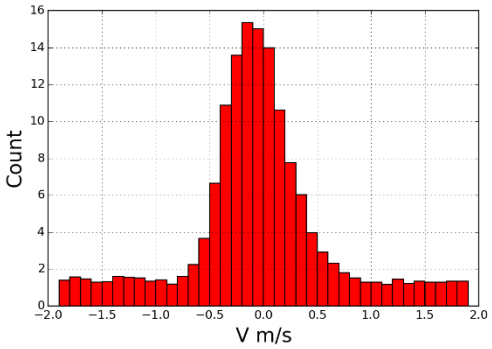

Figure A. 1960: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

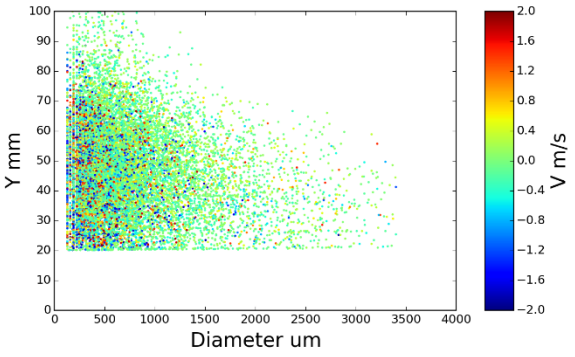

Figure A. 1958: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 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	100.67	104.32	128.5	3403	709.8	608.0	128.5	3413	718.1	615.5
40-60mm	145.08	143.75	128.5	3415	592.3	492.9	128.5	3416	599.8	487.6
60-80mm	81.23	62.55	128.5	3138	471.9	383.4	128.5	3301	494.2	361.1
80-100mm	19.62	11.6	128.5	2453	370.4	258.4	128.5	1712	401.9	241.9
All	346.81	322.23	128.5	3415	585.6	507.4	128.5	3416	610.5	514.0
			Height A (mm)				Height B (mm)			
Highest Particle			100.0042				99.9757			
Lowest Particle			20.1033				20.1033			

Table A. 207: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	42.16	128.5	3403	869.6	659.1	128.5	3401	850.5	649.6	-1.900	1.900	-0.050	0.710	-1.900	1.900	-0.010	0.750
40-60mm	70.04	128.5	3415	700.2	513.0	128.5	3364	689.8	506.9	-1.900	1.900	-0.080	0.680	-1.900	1.900	-0.030	0.710
60-80mm	31.54	128.5	3129	591.3	401.8	128.5	3265	575.7	390.3	-1.900	1.900	-0.070	0.620	-1.900	1.900	-0.080	0.650
80-100mm	6.17	128.5	1791	478.4	249.2	128.5	1712	476.3	250.7	-1.900	1.900	-0.070	0.410	-1.860	1.840	0.010	0.480
All	149.91	128.5	3415	715.8	542.2	128.5	3401	702.4	534.0	-1.900	1.900	-0.070	0.670	-1.900	1.900	-0.030	0.700

Table A. 208: Matched Droplet Info

A.7.2.2 All Droplets for .LA Image

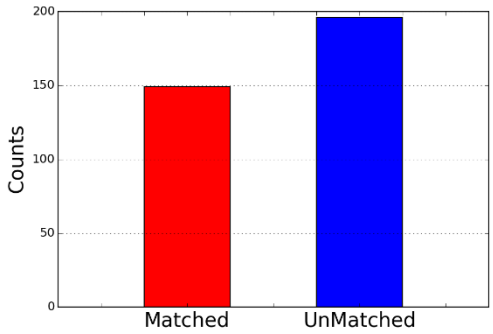

Figure A. 1961: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

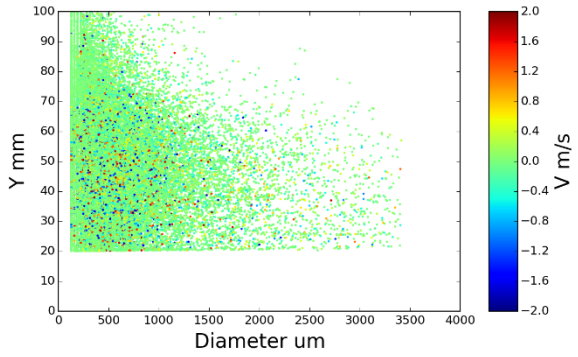

Figure A. 1964: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

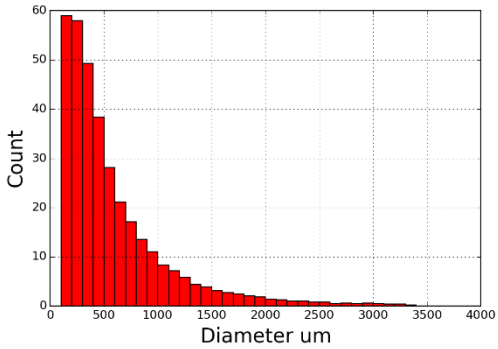

Figure A. 1962: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

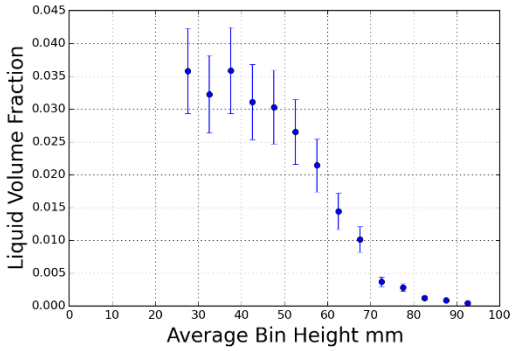

Figure A. 1965: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

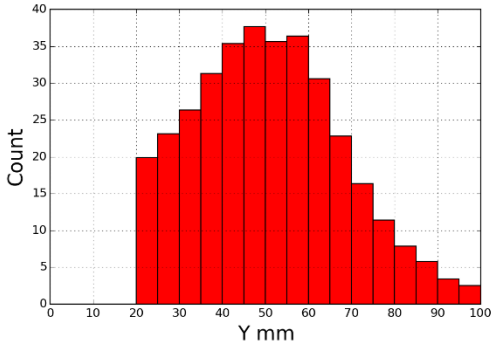

Figure A. 1963: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 All Droplets for .LB Image

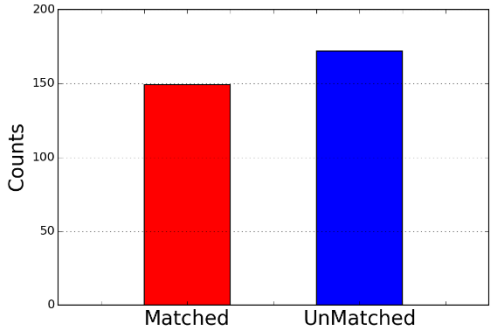

Figure A. 1966: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

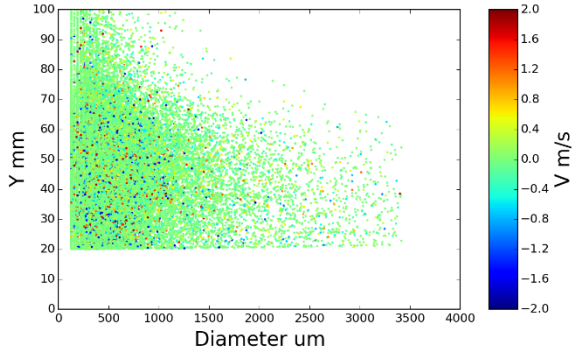

Figure A. 1969: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

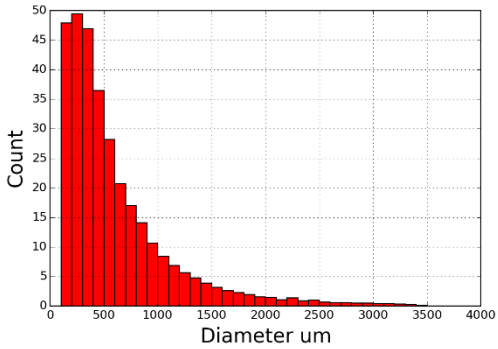

Figure A. 1967: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

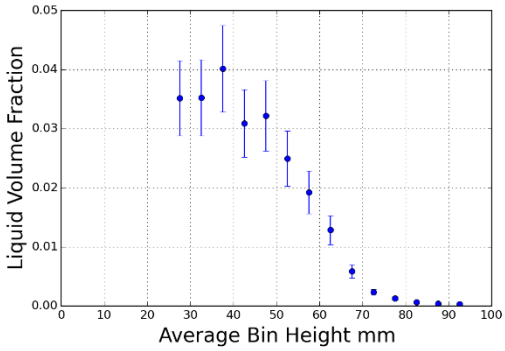

Figure A. 1970: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

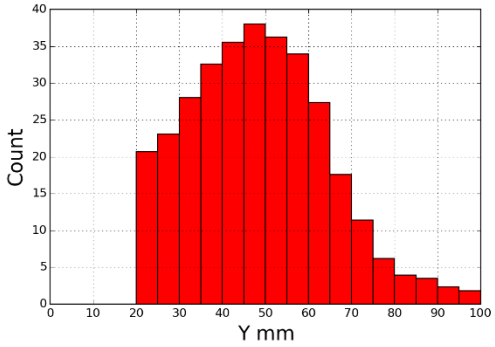

Figure A. 1968: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 Matched Only Droplets for .LA Image

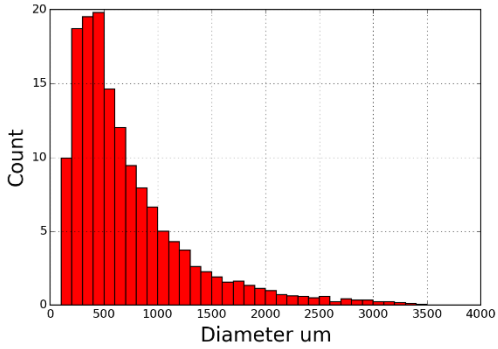

Figure A. 1971: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

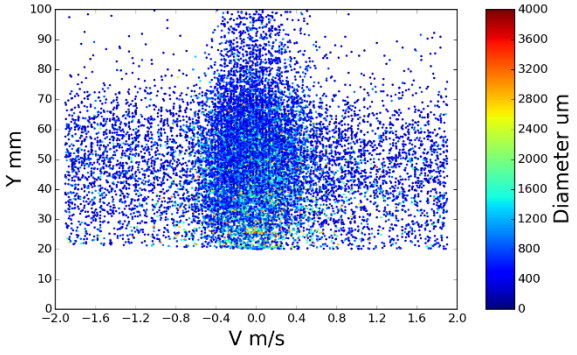

Figure A. 1974: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

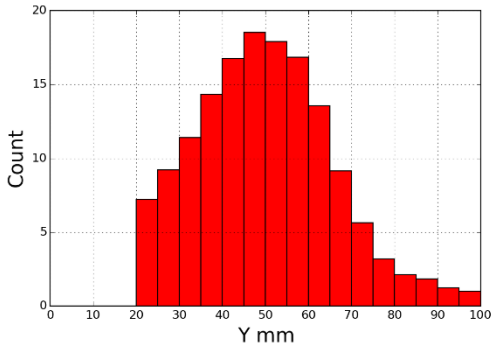

Figure A. 1972: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

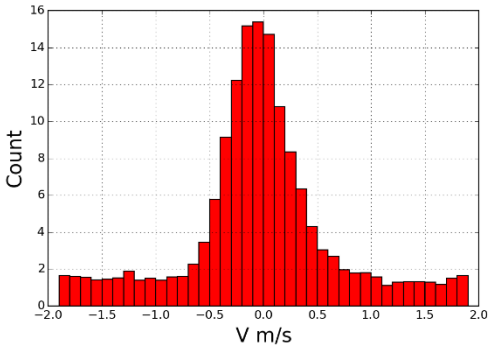

Figure A. 1975: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

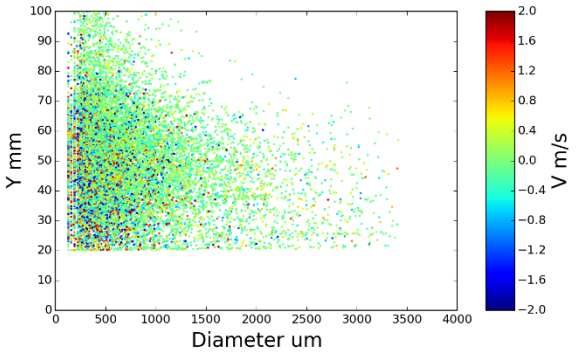

Figure A. 1973: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 Matched Only Droplets for .LB Image

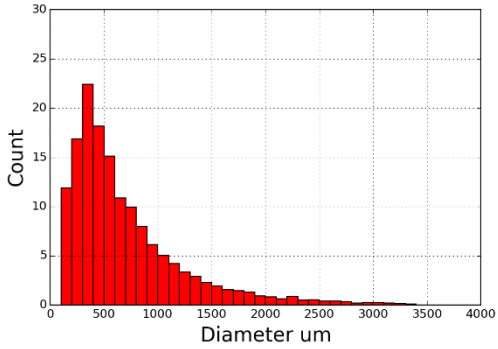

Figure A. 1976: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

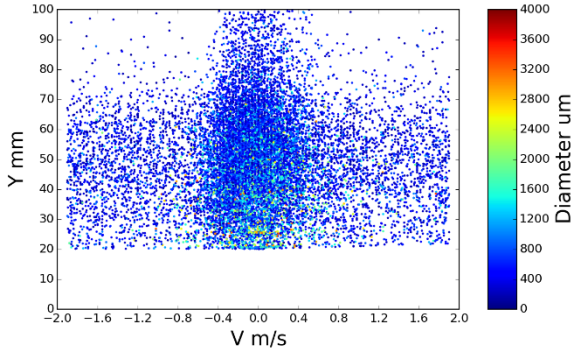

Figure A. 1979: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

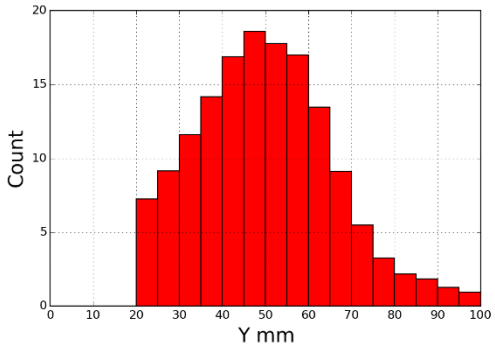

Figure A. 1977: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

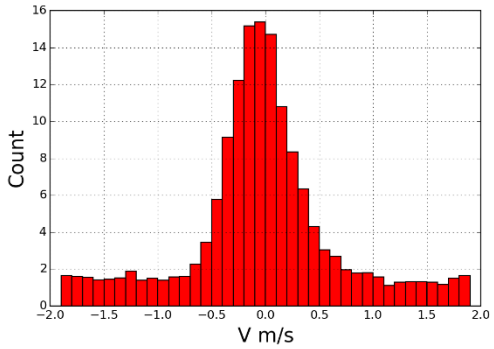

Figure A. 1980: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

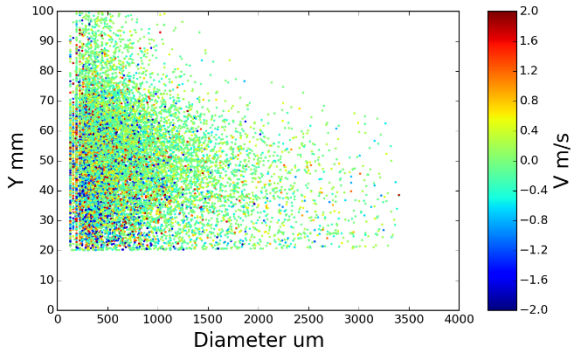

Figure A. 1978: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 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	85.54	86.53	128.5	3414	719.8	613.7	128.5	3416	716.1	612.1
40-60mm	135.37	134.07	128.5	3414	589.2	500.6	128.5	3416	587.4	495.7
60-80mm	70.95	63.49	128.5	3263	475.4	370.1	128.5	3116	482.8	359.1
80-100mm	12.82	11.5	128.5	1561	373.9	224.8	128.5	1694	369.3	212.5
All	304.78	295.67	128.5	3414	590.3	510.7	128.5	3416	594.1	509.5
			Height A (mm)				Height B (mm)			
Highest Particle			99.9501				100.0042			
Lowest Particle			20.1033				20.1033			

Table A. 209: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	34.79	128.5	3409	883.9	668.7	128.5	3411	860.2	659.7	-1.890	1.900	-0.070	0.700	-1.900	1.900	0.020	0.750
40-60mm	67.05	128.5	3414	704.2	532.0	128.5	3400	683.0	516.5	-1.900	1.900	-0.050	0.670	-1.900	1.900	-0.010	0.710
60-80mm	32.22	128.5	3245	583.8	393.0	128.5	3116	565.3	379.5	-1.900	1.900	-0.070	0.610	-1.900	1.870	-0.010	0.680
80-100mm	6.39	128.5	1561	460.8	238.3	128.5	1694	436.1	224.0	-1.860	1.900	-0.030	0.350	-1.890	1.790	-0.020	0.420
All	140.45	128.5	3414	710.0	545.8	128.5	3411	688.5	532.9	-1.900	1.900	-0.060	0.650	-1.900	1.900	-0.000	0.700

Table A. 210: Matched Droplet Info

A.7.2.2 All Droplets for .LA Image

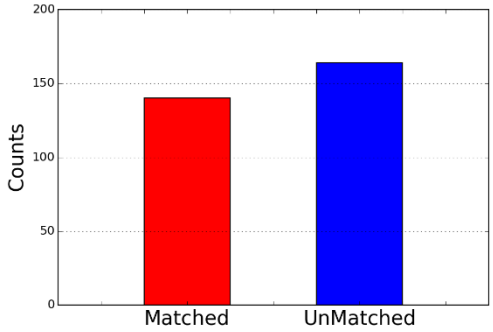

Figure A. 1981: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

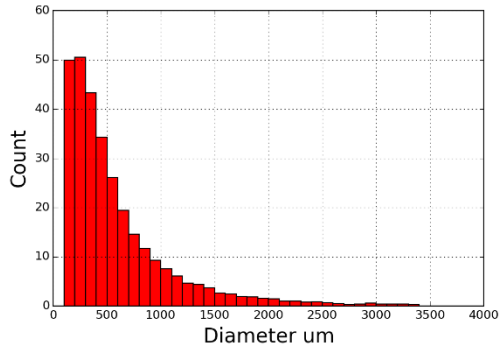

Figure A. 1982: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

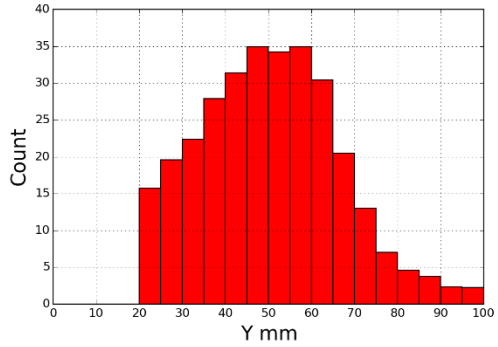

Figure A. 1983: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

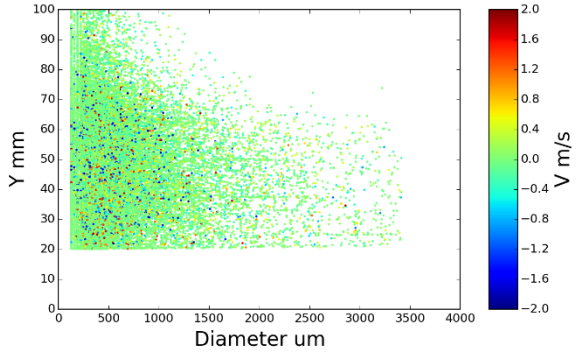

Figure A. 1984: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

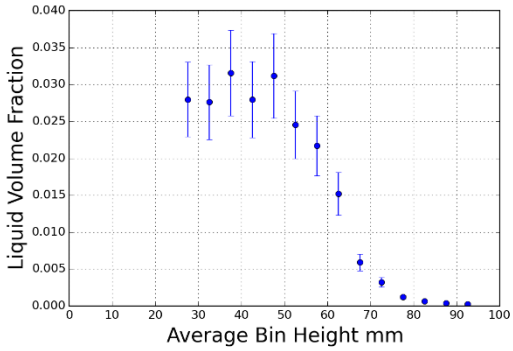

Figure A. 1985: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 All Droplets for .LB Image

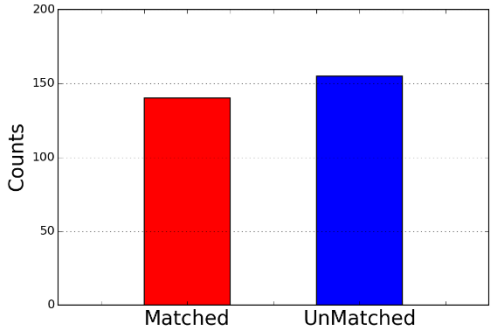

Figure A. 1986: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

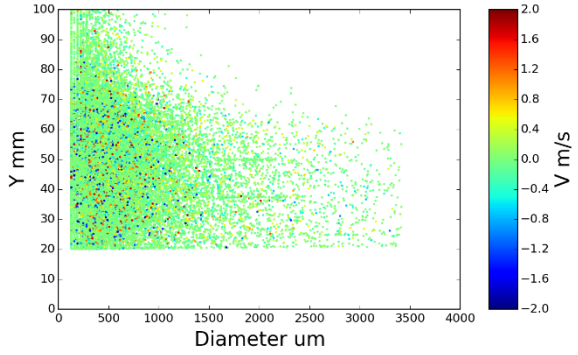

Figure A. 1989: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

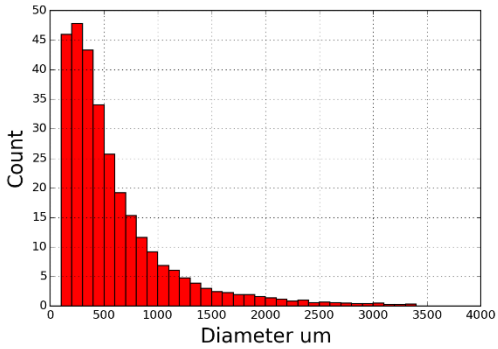

Figure A. 1987: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

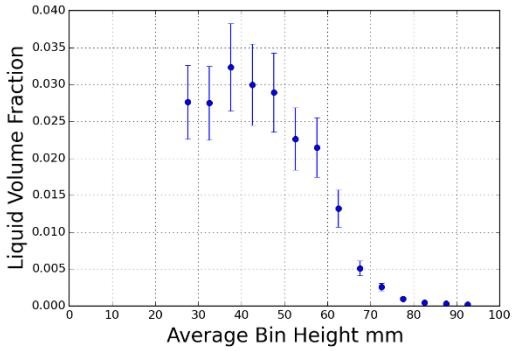

Figure A. 1990: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

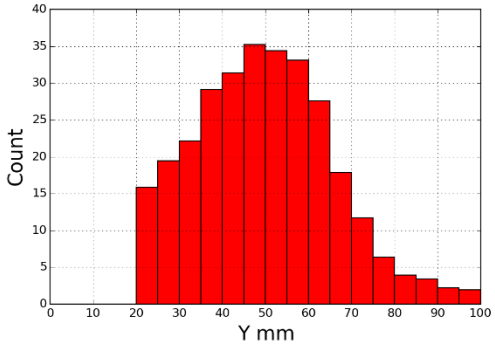

Figure A. 1988: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 Matched Only Droplets for .LA Image

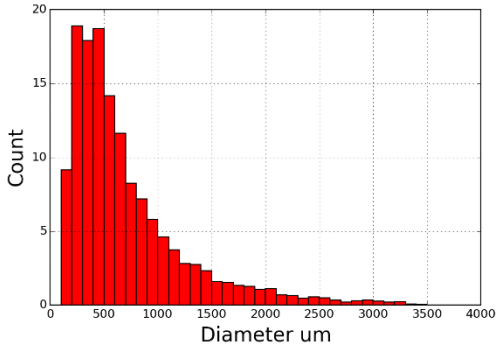

Figure A. 1991: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

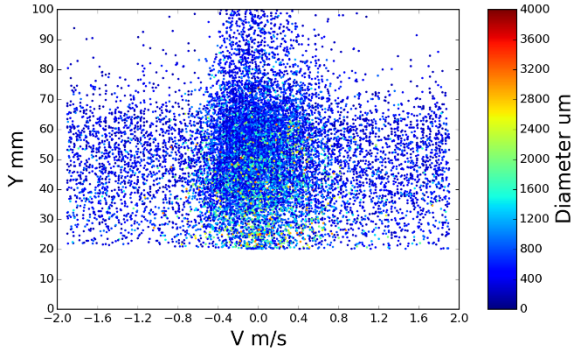

Figure A. 1994: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

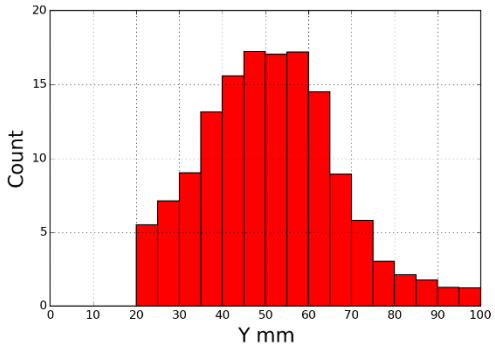

Figure A. 1992: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

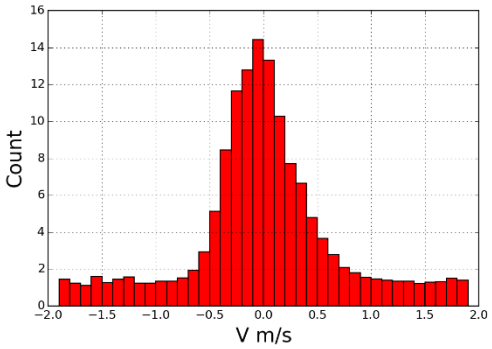

Figure A. 1995: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

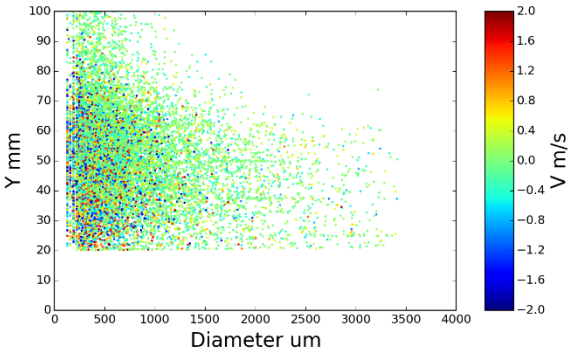

Figure A. 1993: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.2.2 Matched Only Droplets for .LB Image

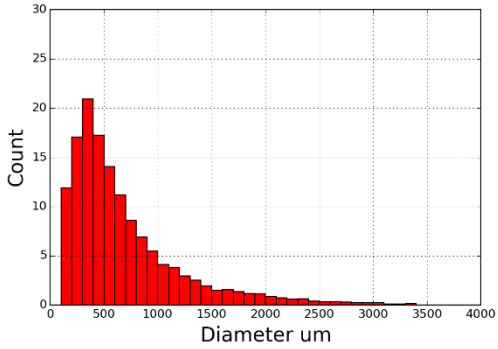

Figure A. 1996: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

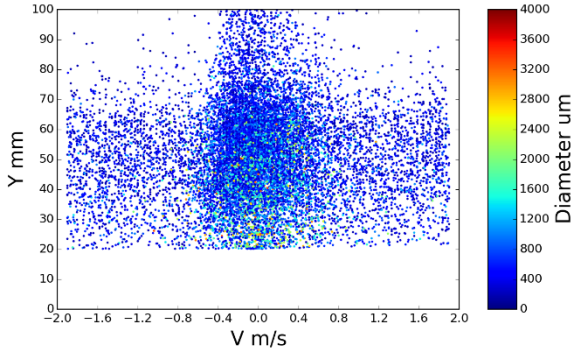

Figure A. 1999: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

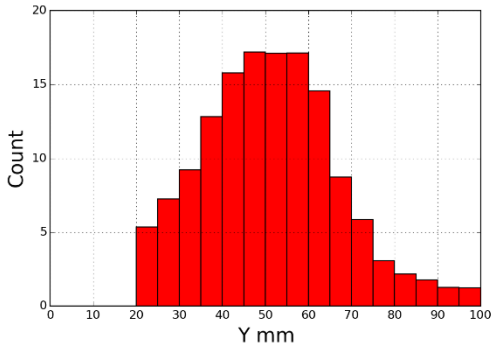

Figure A. 1997: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

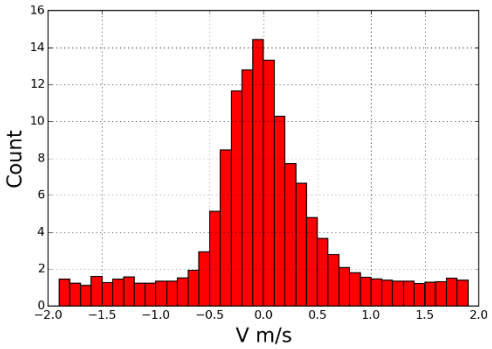

Figure A. 2000: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

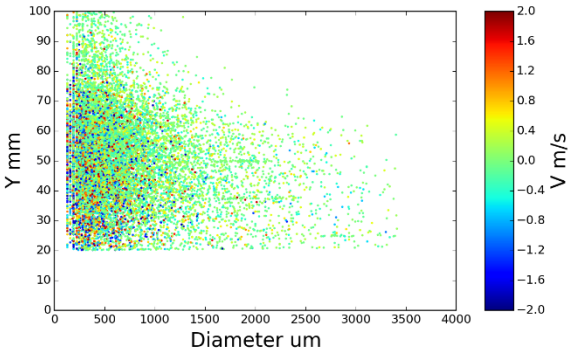

Figure A. 1998: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.3 Liquid Level 3

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	11355 / 1.431
Ref Mass Flow (lb/hr) / (kg/s)	3247 / 0.409
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	30160 / 40.905
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	4934 / 15.57
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	54.9 / 12.73
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	55.0 / 12.80
Total Bundle Q (Btu/hr) / (kW)	152861 / 44.80
Total Bundle & Preboiler Q (Btu/hr) / (kW)	300730 / 88.14
Top Two Rows HTC Ratio	1.074
Bundle Inlet Quality	0.42
Bundle Exit Quality	1.00

Table A. 211: Thermal Conditions

A.7.3.1 Lens 100mm Mag 0_29x

A.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	63.27	61.53	57.2	3033	394.2	403.8	57.2	2943	392.0	392.0
40-60mm	118.93	78.83	57.2	2865	266.1	295.7	57.2	2678	289.6	297.9
60-80mm	83.33	66.14	57.2	2637	201.9	228.3	57.2	2709	199.0	228.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	266.29	208.39	57.2	3033	276.5	315.4	57.2	2943	291.1	319.7
			Height A (mm)				Height B (mm)			
Highest Particle			75.9740				75.9740			
Lowest Particle			28.0118				28.0118			

Table A. 212: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	32.86	57.2	2995	517.0	420.6	57.2	2943	507.1	409.8	-1.900	1.900	-0.020	0.290	-1.900	1.900	0.050	0.380
40-60mm	36.91	57.2	2811	372.5	312.0	57.2	2216	361.6	300.0	-1.900	1.860	-0.050	0.300	-1.900	1.900	0.030	0.350
60-80mm	17.2	57.2	1851	256.3	193.3	57.2	1408	246.2	183.9	-1.900	1.830	-0.050	0.280	-1.870	1.900	0.060	0.340
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	86.97	57.2	2995	404.1	353.7	57.2	2943	393.8	343.4	-1.900	1.900	-0.040	0.290	-1.900	1.900	0.040	0.360

Table A. 213: Matched Droplet Info

A.7.3.1 All Droplets for .LA Image

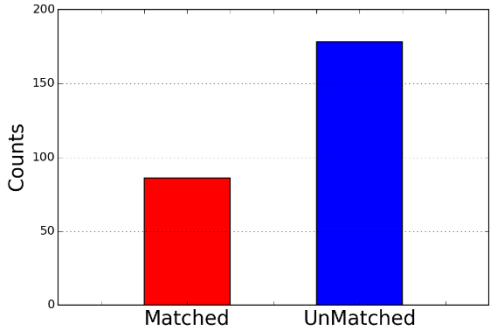

Figure A. 2001: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

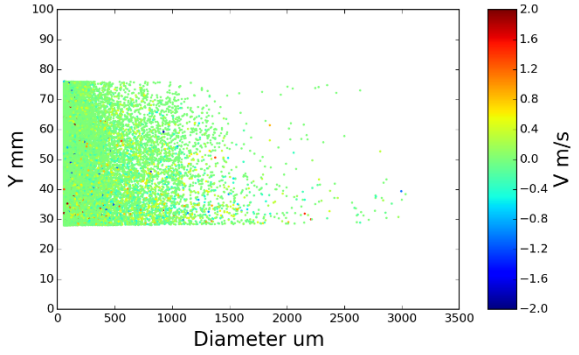

Figure A. 2004: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

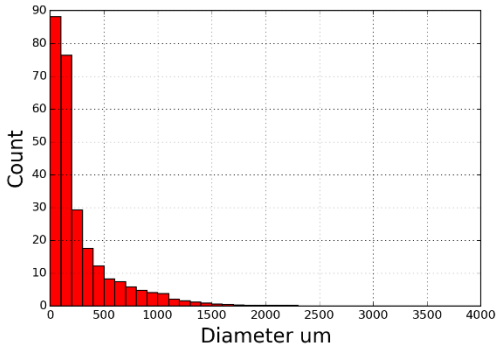

Figure A. 2002: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

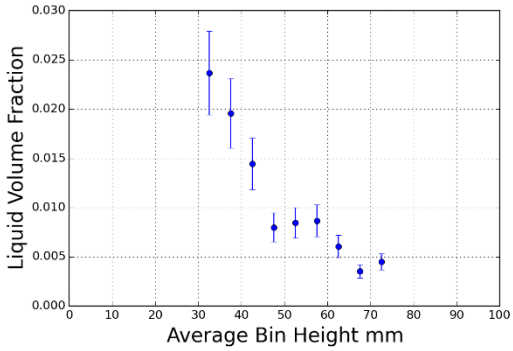

Figure A. 2005: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

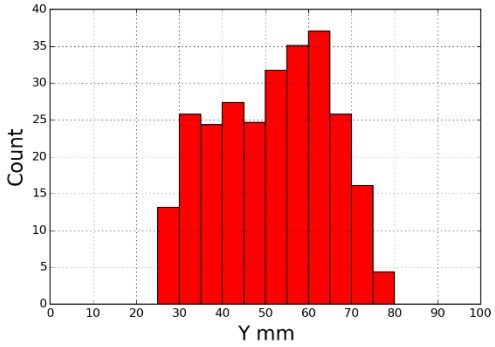

Figure A. 2003: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 All Droplets for .LB Image

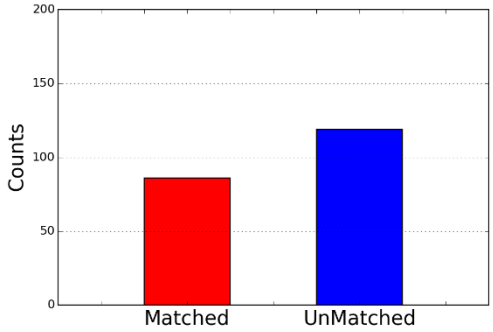

Figure A. 2006: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

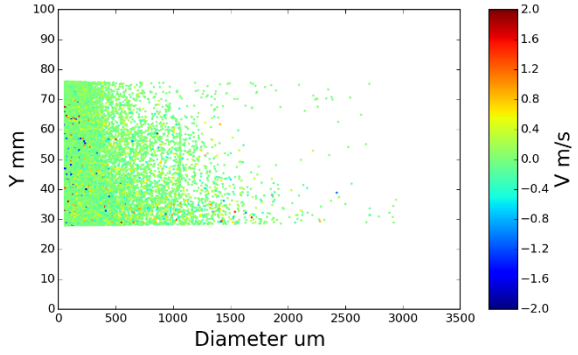

Figure A. 2009: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

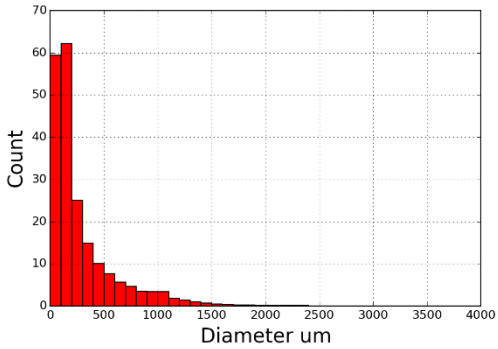

Figure A. 2007: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

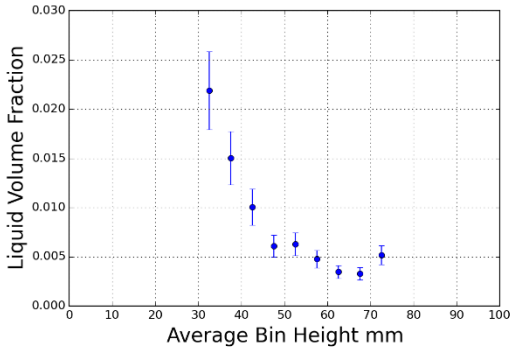

Figure A. 2010: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

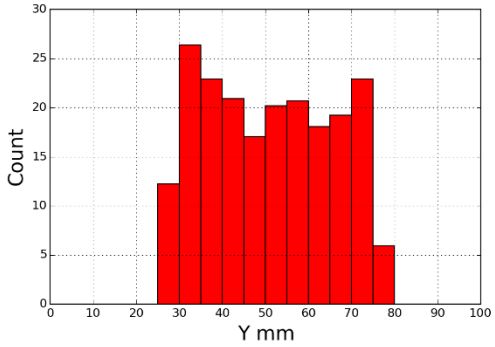

Figure A. 2008: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 Matched Only Droplets for .LA Image

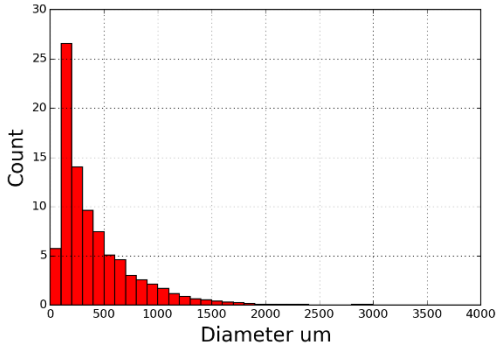

Figure A. 2011: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

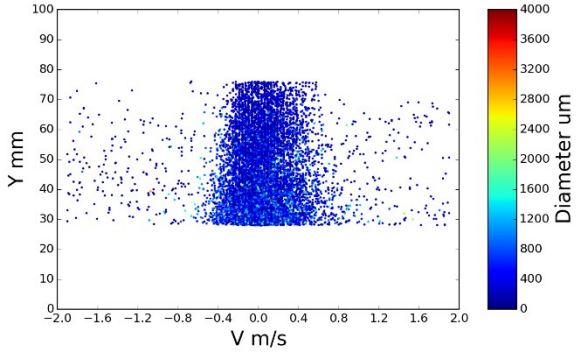

Figure A. 2014: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

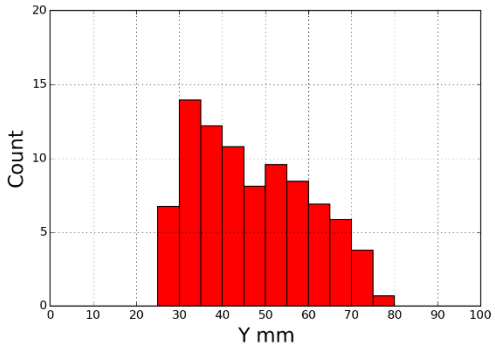

Figure A. 2012: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

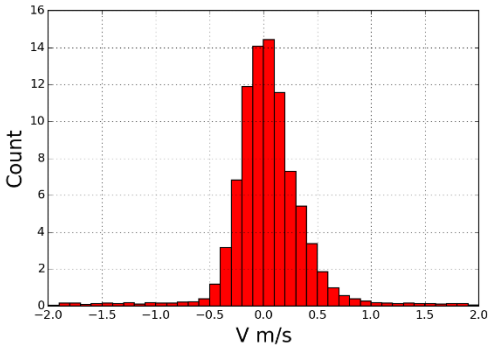

Figure A. 2015: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

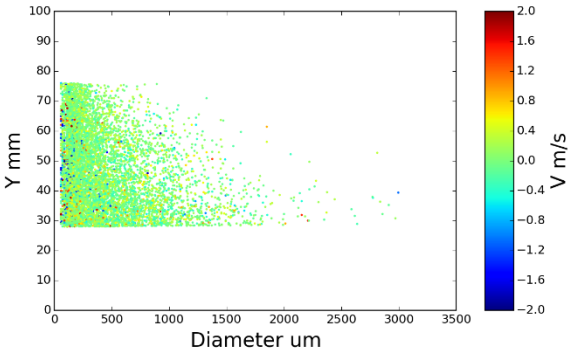

Figure A. 2013: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 Matched Only Droplets for .LB Image

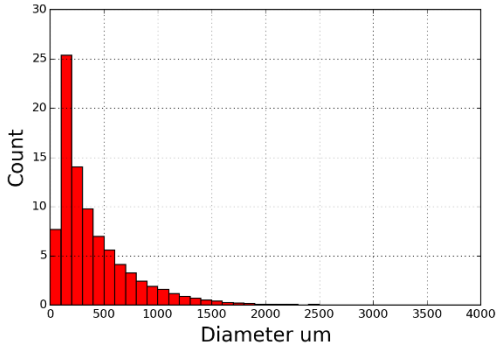

Figure A. 2016: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

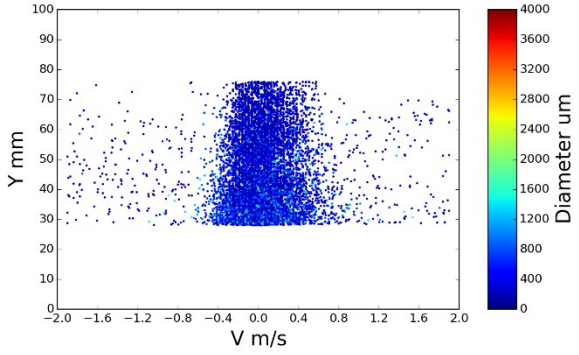

Figure A. 2019: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

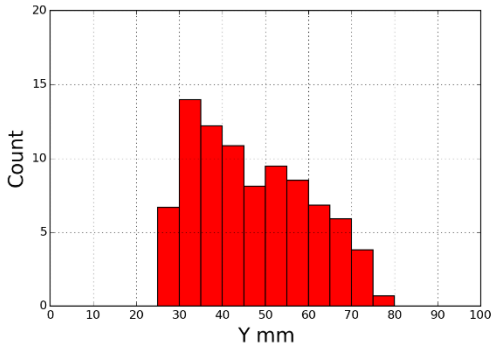

Figure A. 2017: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

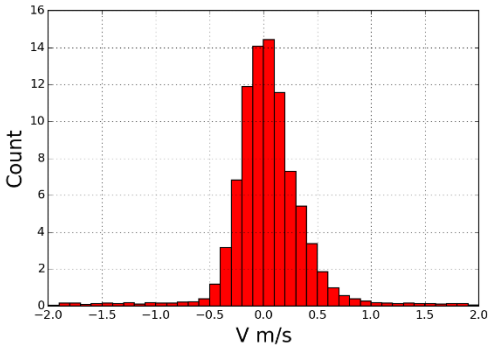

Figure A. 2020: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

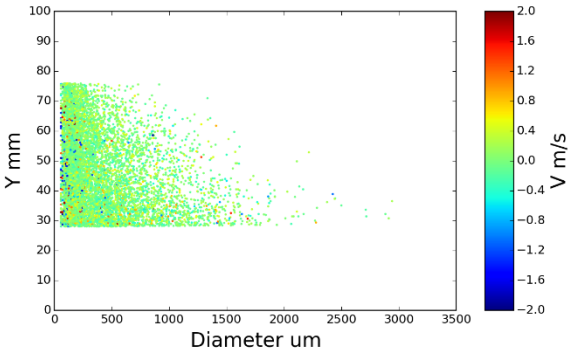

Figure A. 2018: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.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	64.34	69.13	57.2	2998	394.2	441.4	57.2	2866	384.5	435.0
40-60mm	95.99	109.6	57.2	2927	242.6	318.5	57.2	2838	240.7	313.3
60-80mm	46.14	79.56	57.2	2978	173.2	201.2	57.2	2971	179.2	231.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	206.48	259.82	57.2	2998	274.3	352.3	57.2	2971	260.2	339.3
			Height A (mm)				Height B (mm)			
Highest Particle			75.9613				75.9740			
Lowest Particle			28.0118				28.0118			

Table A. 214: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	28.68	57.2	2810	547.1	493.2	57.2	2851	530.5	477.5	-1.900	1.900	-0.030	0.350	-1.900	1.900	-0.070	0.410
40-60mm	33.01	57.2	2612	333.0	374.8	57.2	2631	320.3	357.4	-1.900	1.900	-0.050	0.350	-1.870	1.900	-0.130	0.390
60-80mm	15.28	57.2	2296	205.9	219.2	57.2	1850	195.9	208.6	-1.900	1.900	-0.090	0.340	-1.900	1.880	-0.130	0.340
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	76.97	57.2	2810	387.6	421.6	57.2	2851	374.3	406.5	-1.900	1.900	-0.050	0.350	-1.900	1.900	-0.110	0.390

Table A. 215: Matched Droplet Info

A.7.3.1 All Droplets for .LA Image

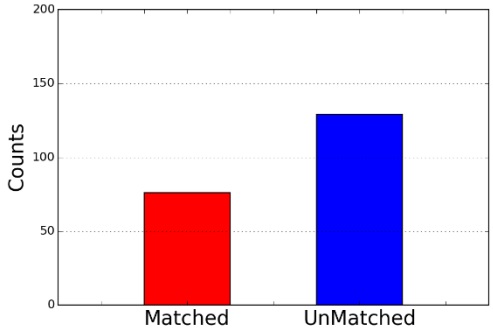

Figure A. 2021: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

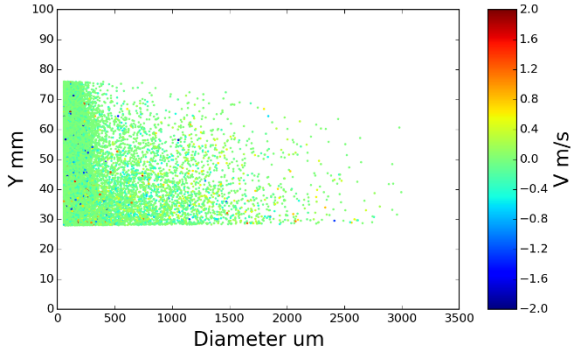

Figure A. 2024: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

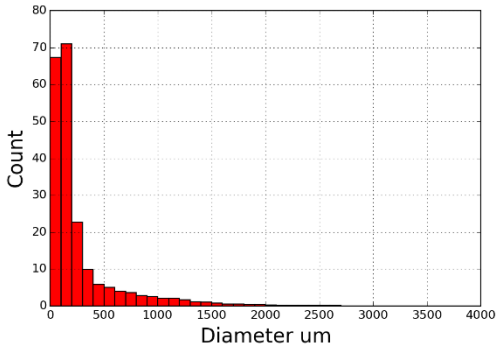

Figure A. 2022: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

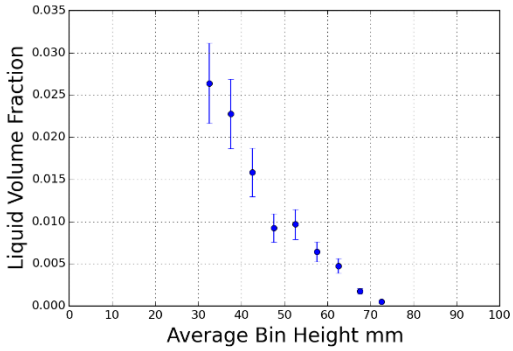

Figure A. 2025: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

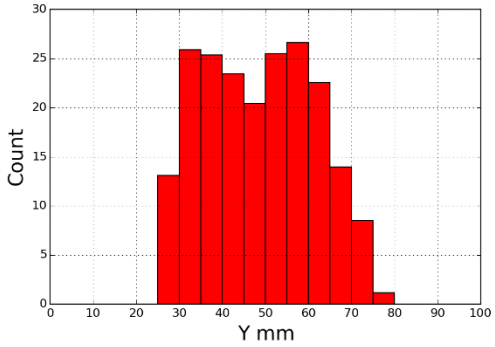

Figure A. 2023: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 All Droplets for .LB Image

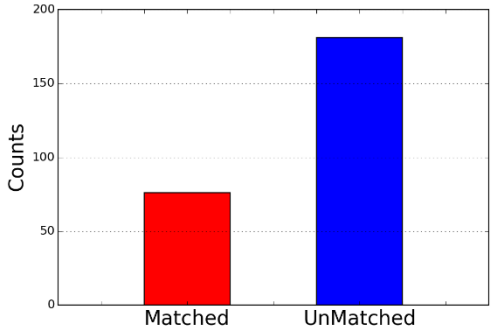

Figure A. 2026: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

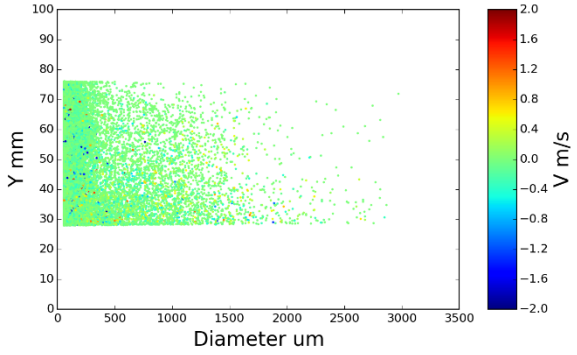

Figure A. 2029: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

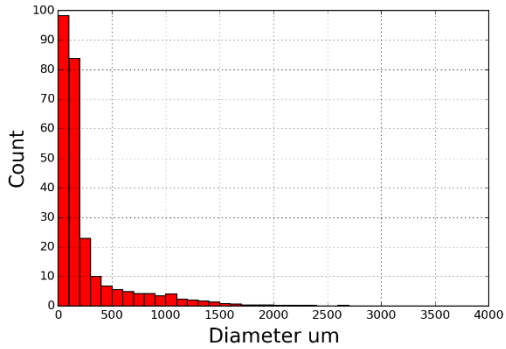

Figure A. 2027: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

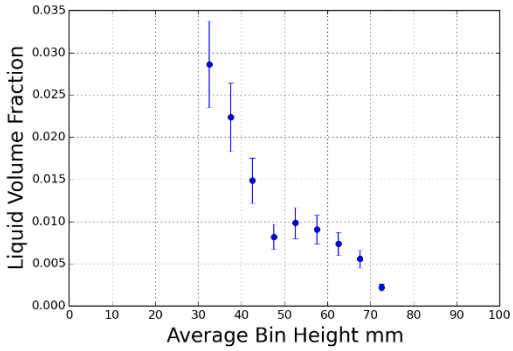

Figure A. 2030: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

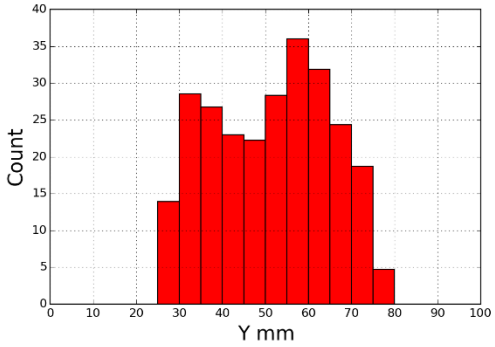

Figure A. 2028: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 Matched Only Droplets for .LA Image

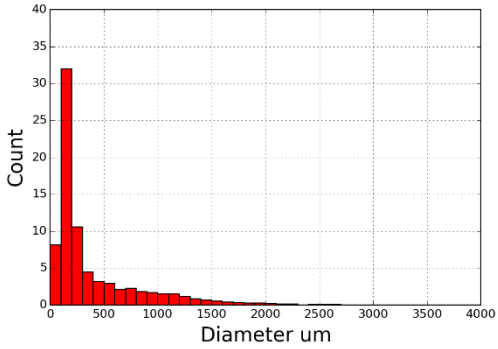

Figure A. 2031: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

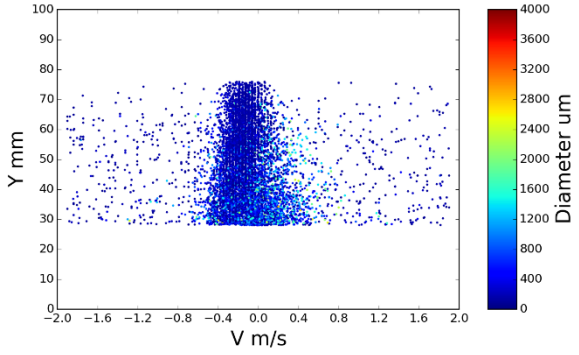

Figure A. 2034: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

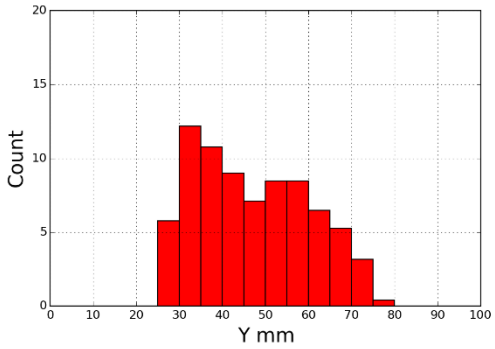

Figure A. 2032: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

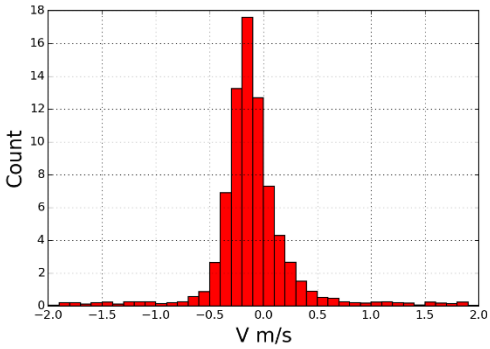

Figure A. 2035: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

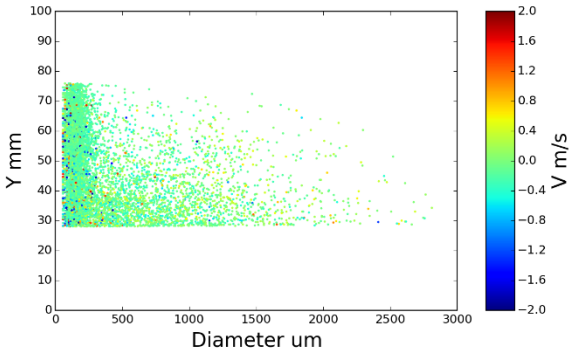

Figure A. 2033: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 Matched Only Droplets for .LB Image

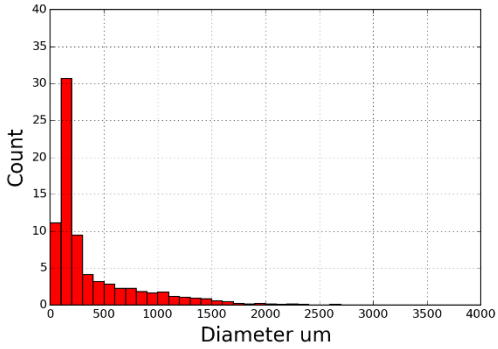

Figure A. 2036: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

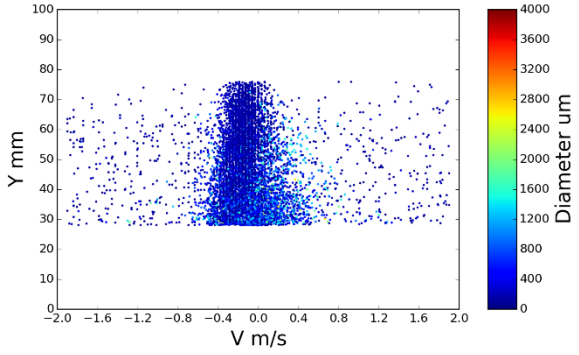

Figure A. 2039: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

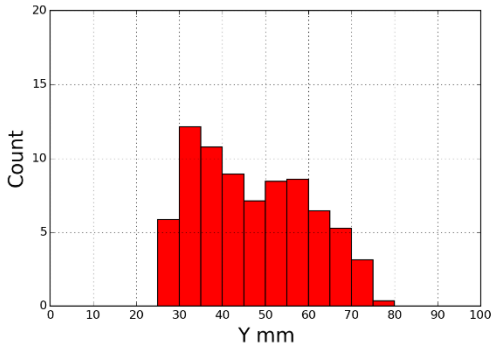

Figure A. 2037: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

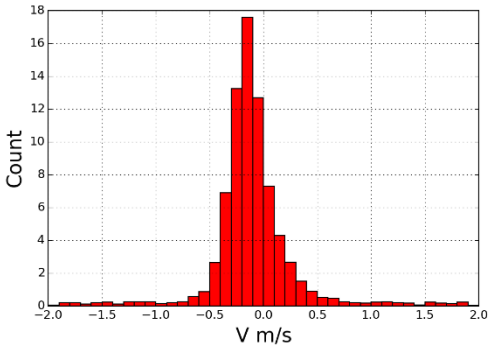

Figure A. 2040: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

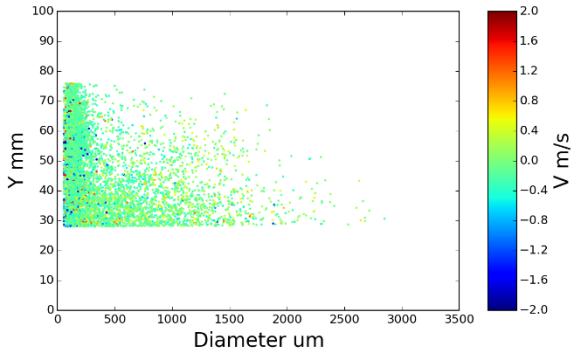

Figure A. 2038: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.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	69.94	80.11	57.2	2973	372.4	425.6	57.2	3018	356.0	421.7
40-60mm	118.02	164.14	57.2	2874	217.1	285.0	57.2	2854	208.4	279.8
60-80mm	75.96	145.37	57.2	2796	150.5	165.0	57.2	2972	165.1	211.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	263.95	391.22	57.2	2973	239.1	315.2	57.2	3018	222.6	302.1
			Height A (mm)				Height B (mm)			
Highest Particle			75.9740				75.9740			
Lowest Particle			28.0118				28.0118			

Table A. 216: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	28.27	57.2	2973	510.7	466.1	57.2	3018	504.4	464.5	-1.900	1.840	-0.020	0.410	-1.900	1.900	-0.060	0.460
40-60mm	33.55	57.2	2847	316.3	337.0	57.2	2784	311.6	335.4	-1.900	1.900	-0.050	0.390	-1.900	1.900	-0.110	0.420
60-80mm	14.38	57.2	1537	191.0	166.9	57.2	1674	186.2	170.3	-1.900	1.860	-0.080	0.470	-1.870	1.900	-0.110	0.470
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	76.2	57.2	2973	364.8	387.9	57.2	3018	359.6	386.7	-1.900	1.900	-0.040	0.410	-1.900	1.900	-0.090	0.440

Table A. 217: Matched Droplet Info

A.7.3.1 All Droplets for .LA Image

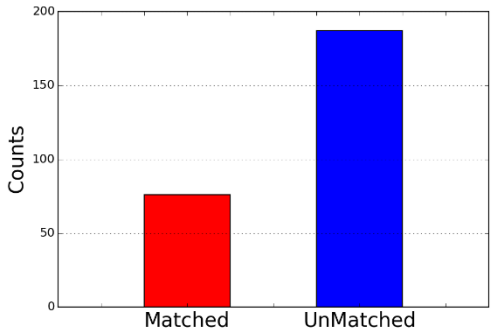

Figure A. 2041: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

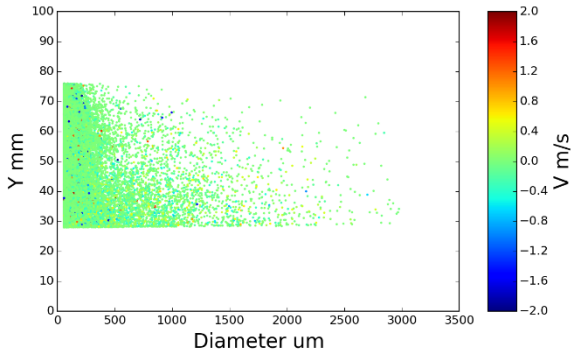

Figure A. 2044: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

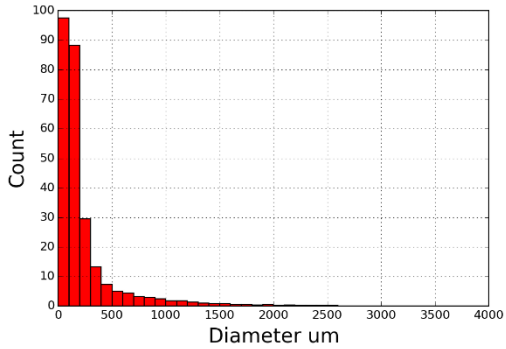

Figure A. 2042: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

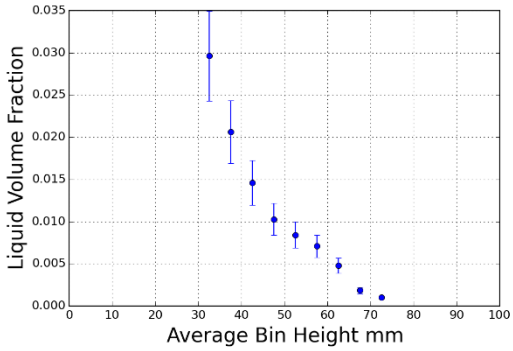

Figure A. 2045: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

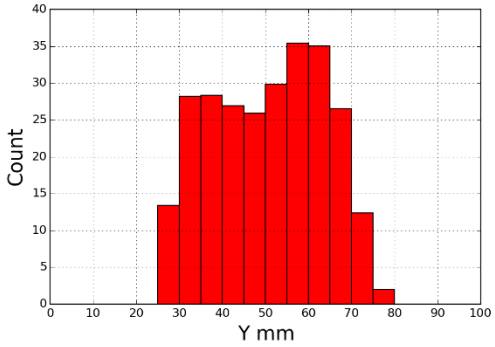

Figure A. 2043: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 All Droplets for .LB Image

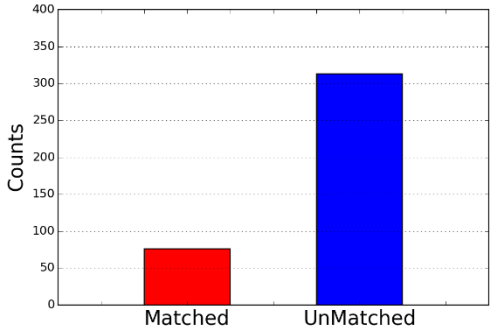

Figure A. 2046: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

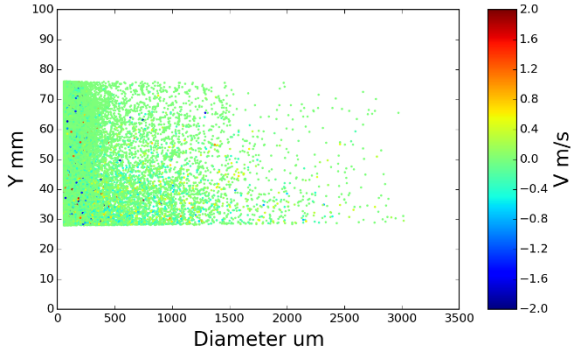

Figure A. 2049: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

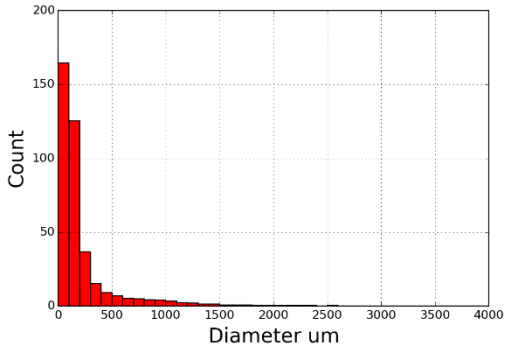

Figure A. 2047: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

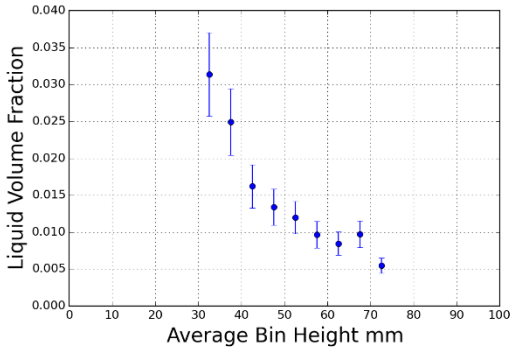

Figure A. 2050: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

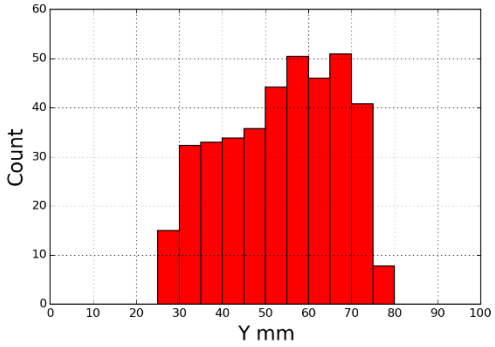

Figure A. 2048: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 Matched Only Droplets for .LA Image

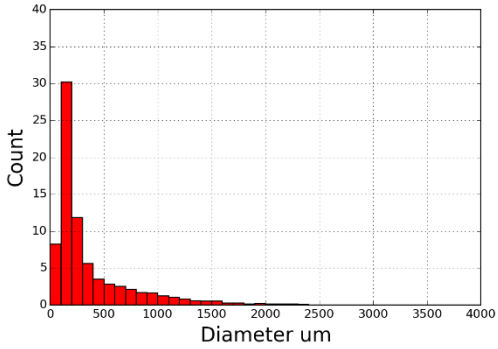

Figure A. 2051: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

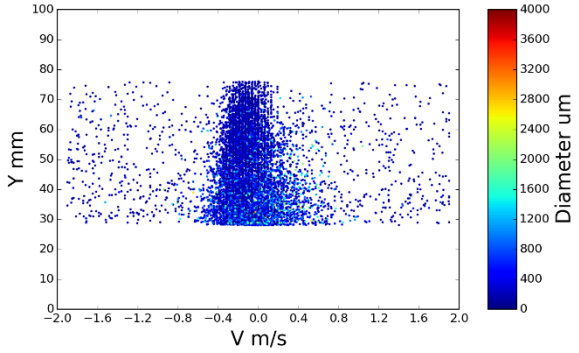

Figure A. 2054: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

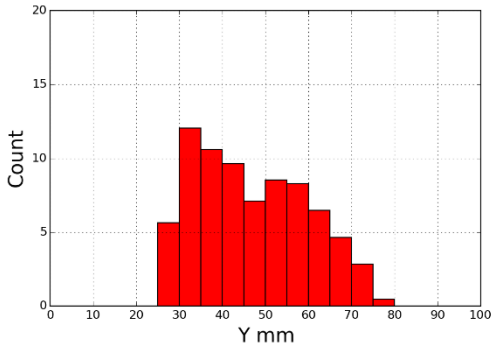

Figure A. 2052: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

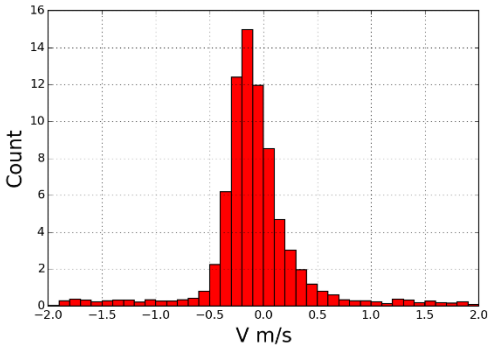

Figure A. 2055: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

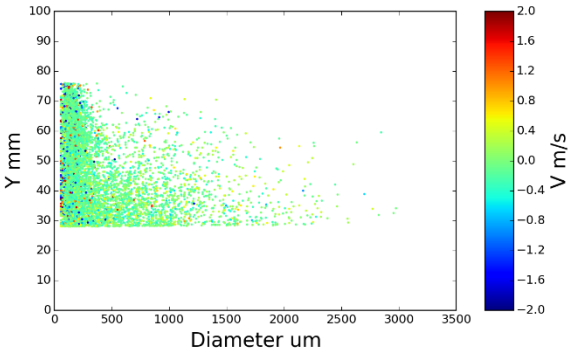

Figure A. 2053: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 Matched Only Droplets for .LB Image

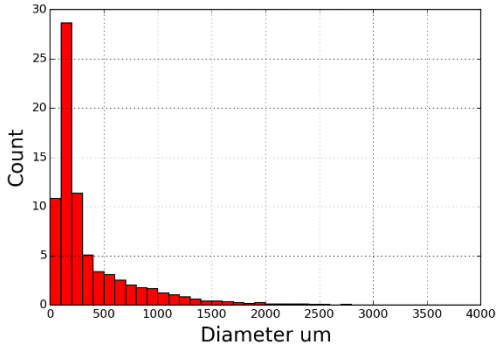

Figure A. 2056: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

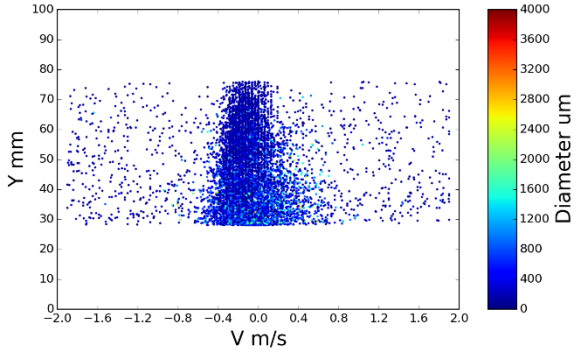

Figure A. 2059: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

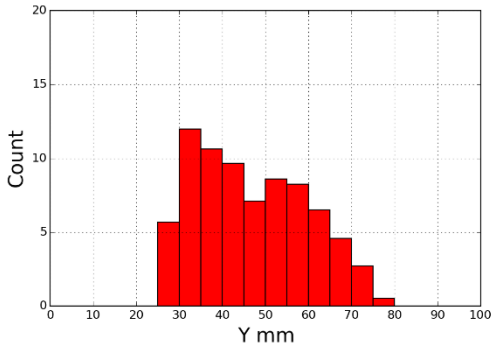

Figure A. 2057: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

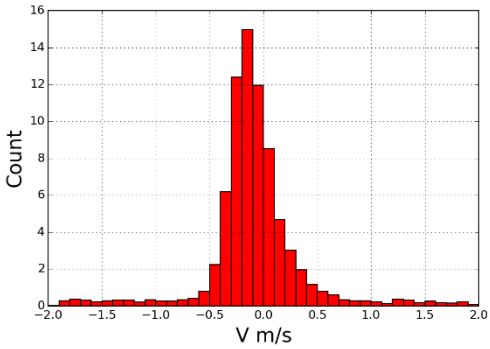

Figure A. 2060: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

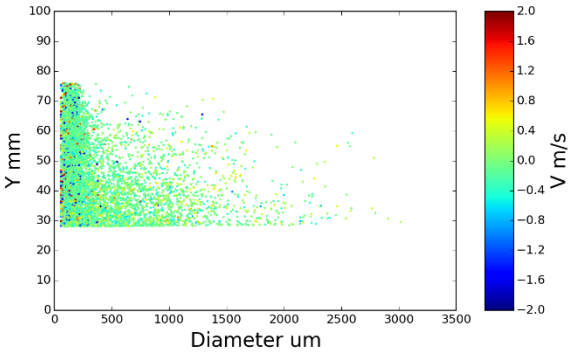

Figure A. 2058: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	71.91	74.64	57.2	3041	386.2	391.3	57.2	2759	377.8	381.1
40-60mm	105.73	117.8	57.2	3030	250.5	277.3	57.2	3017	248.3	277.4
60-80mm	44.85	76.13	57.2	1713	171.5	153.7	57.2	2796	171.1	183.3
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	222.52	269.48	57.2	3041	278.4	311.8	57.2	3017	262.4	299.7
			Height A (mm)				Height B (mm)			
Highest Particle			75.9613				75.9740			
Lowest Particle			28.0118				28.0118			

Table A. 218: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	35.33	57.2	2796	515.4	414.1	57.2	2759	506.0	414.0	-1.900	1.900	-0.020	0.340	-1.900	1.900	0.010	0.400
40-60mm	46.64	57.2	3030	328.9	309.5	57.2	2608	318.3	298.5	-1.900	1.870	-0.030	0.350	-1.900	1.900	0.020	0.400
60-80mm	18.05	57.2	1713	213.9	185.7	57.2	1862	204.4	179.4	-1.900	1.870	-0.030	0.320	-1.900	1.740	-0.010	0.330
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	100.02	57.2	3030	374.0	352.3	57.2	2759	364.1	347.3	-1.900	1.900	-0.030	0.340	-1.900	1.900	0.010	0.390

Table A. 219: Matched Droplet Info

A.7.3.1 All Droplets for .LA Image

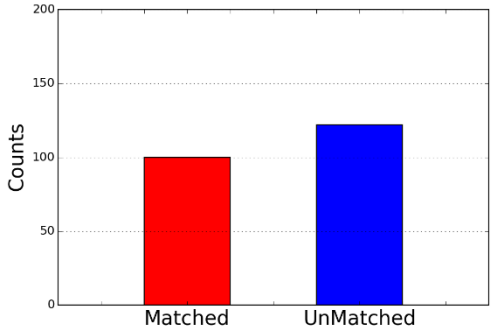

Figure A. 2061: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

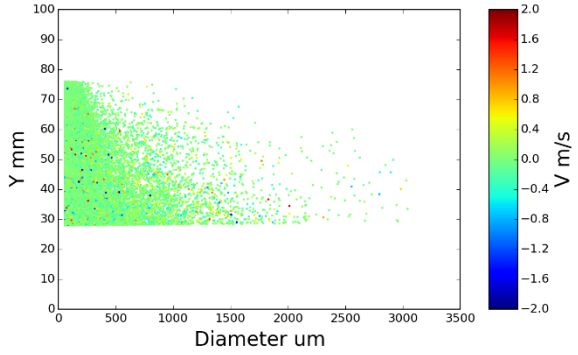

Figure A. 2064: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

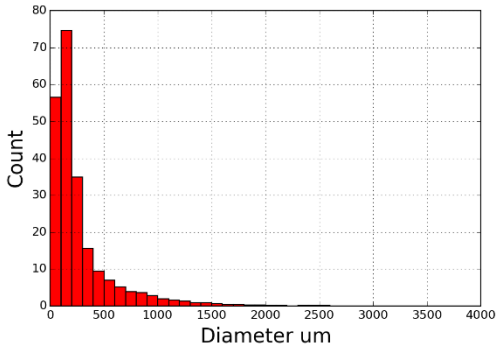

Figure A. 2062: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

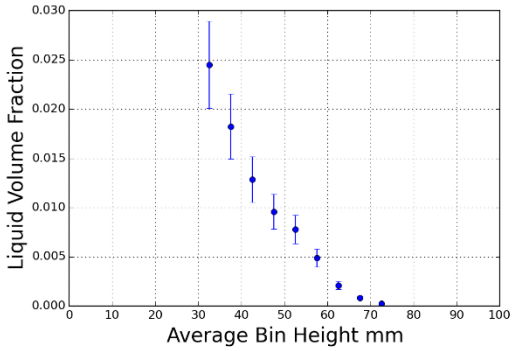

Figure A. 2065: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

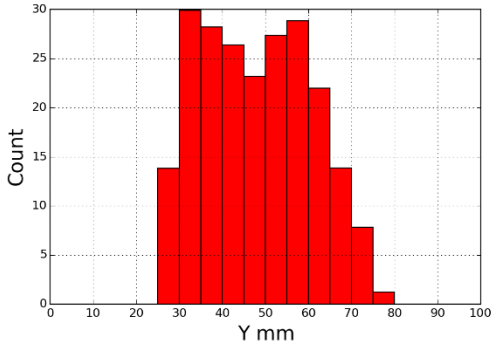

Figure A. 2063: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 All Droplets for .LB Image

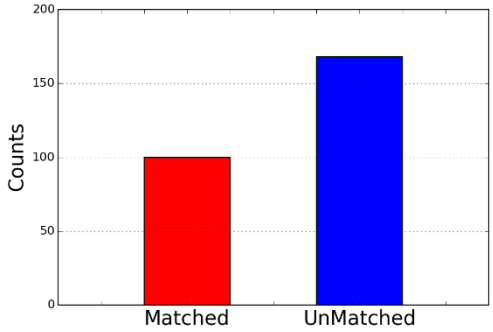

Figure A. 2066: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

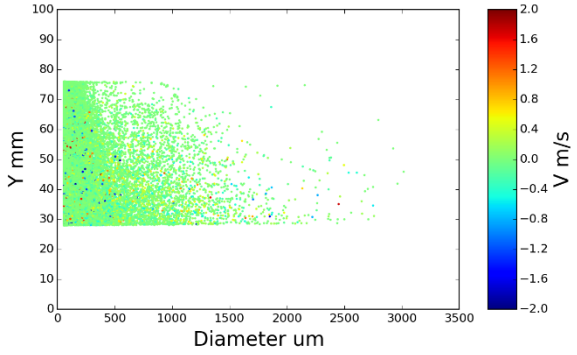

Figure A. 2069: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

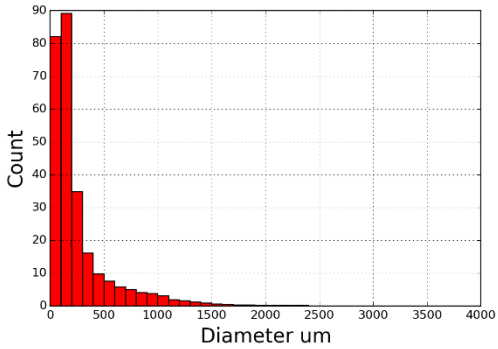

Figure A. 2067: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

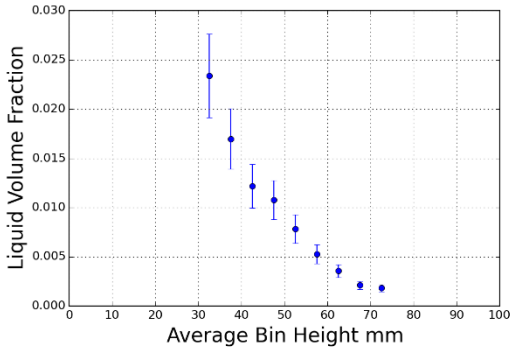

Figure A. 2070: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

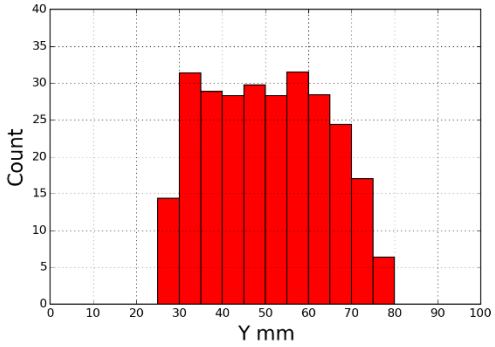

Figure A. 2068: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 Matched Only Droplets for .LA Image

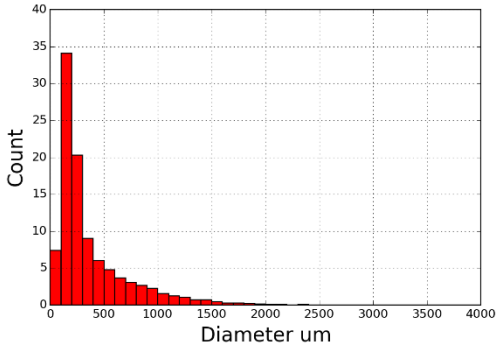

Figure A. 2071: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

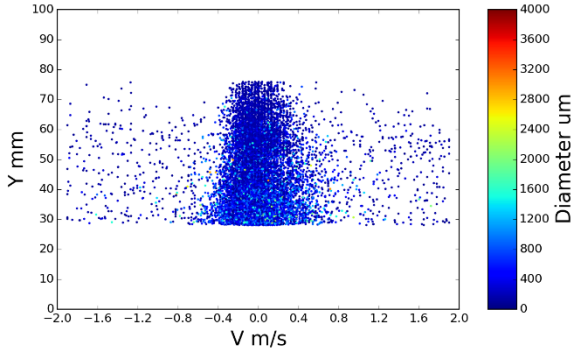

Figure A. 2074: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

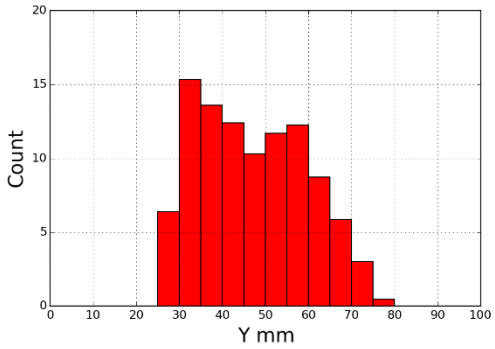

Figure A. 2072: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

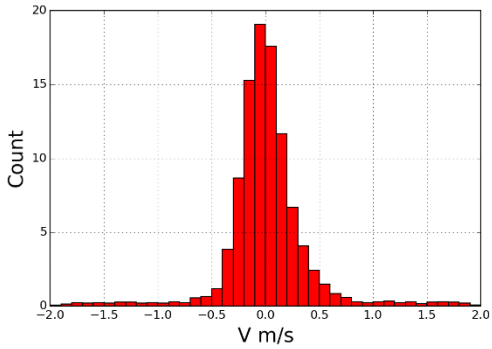

Figure A. 2075: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

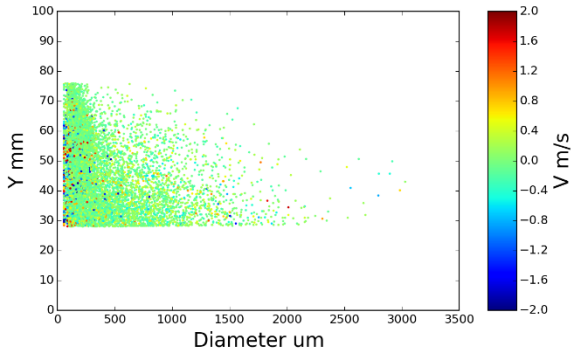

Figure A. 2073: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 Matched Only Droplets for .LB Image

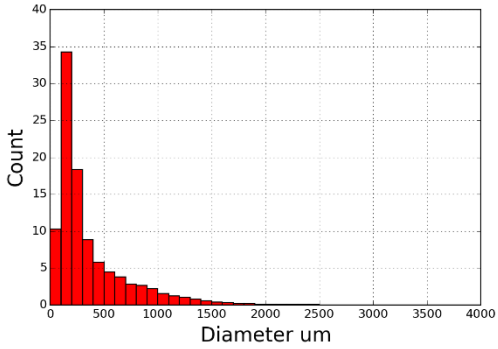

Figure A. 2076: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

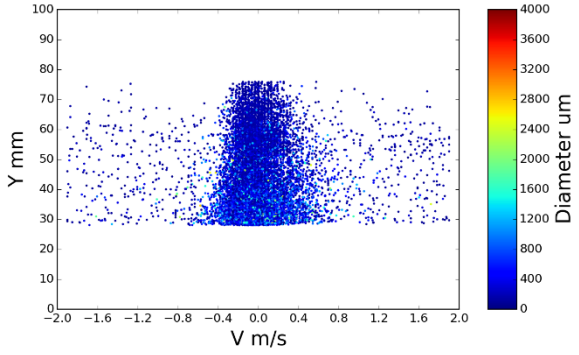

Figure A. 2079: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

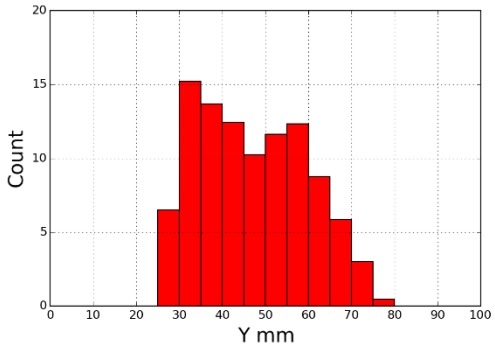

Figure A. 2077: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

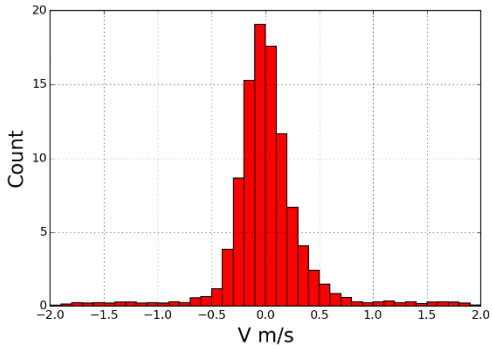

Figure A. 2080: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

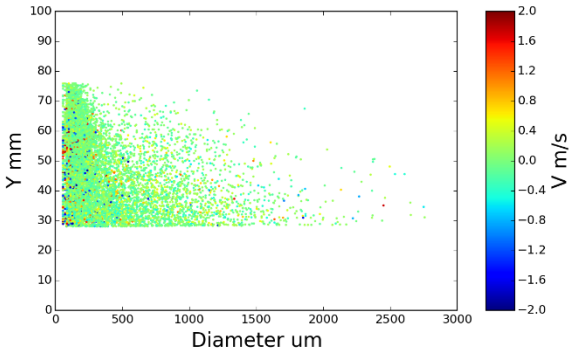

Figure A. 2078: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 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	74.21	76.78	57.2	2978	381.6	384.2	57.2	3002	382.4	380.5
40-60mm	143.68	135.92	57.2	3040	240.2	264.6	57.2	3026	253.9	276.8
60-80mm	83.65	89.05	57.2	2492	171.4	162.5	57.2	2977	193.7	214.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	301.7	302.62	57.2	3040	255.9	288.1	57.2	3026	268.9	299.9
			Height A (mm)				Height B (mm)			
Highest Particle			75.9740				75.9613			
Lowest Particle			28.0118				28.0118			

Table A. 220: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	31.48	57.2	2822	538.2	417.6	57.2	3002	529.2	411.2	-1.900	1.900	-0.020	0.370	-1.900	1.900	0.070	0.440
40-60mm	44.65	57.2	2662	361.4	312.5	57.2	2448	351.3	301.1	-1.900	1.900	-0.020	0.410	-1.900	1.900	0.050	0.460
60-80mm	19.34	57.2	1713	246.9	199.9	57.2	1751	238.4	196.2	-1.900	1.900	-0.030	0.380	-1.880	1.900	0.040	0.380
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	95.47	57.2	2822	396.5	350.7	57.2	3002	386.8	342.9	-1.900	1.900	-0.020	0.390	-1.900	1.900	0.060	0.440

Table A. 221: Matched Droplet Info

A.7.3.1 All Droplets for .LA Image

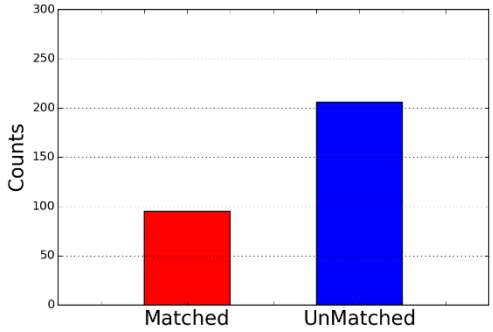

Figure A. 2081: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

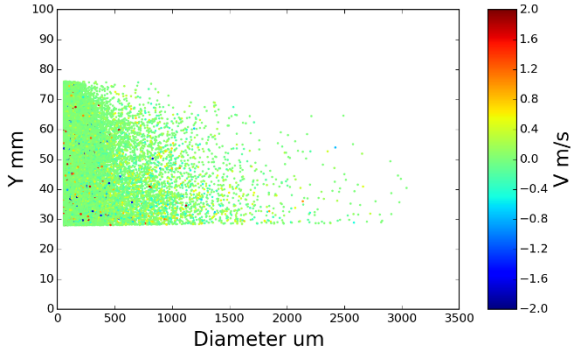

Figure A. 2084: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

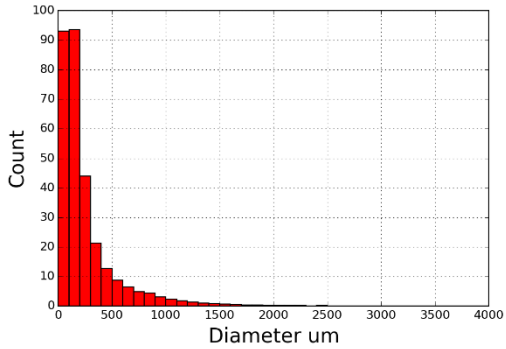

Figure A. 2082: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

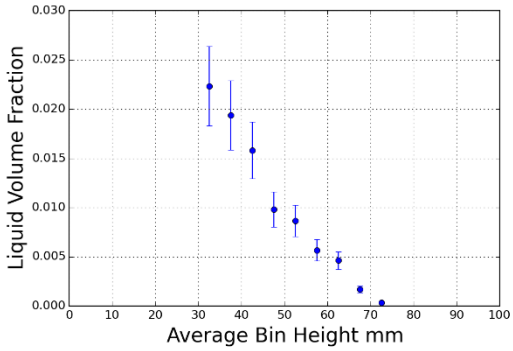

Figure A. 2085: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

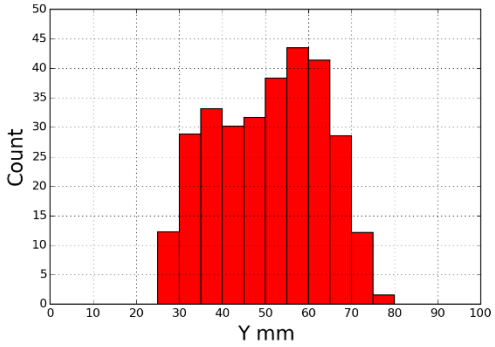

Figure A. 2083: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 All Droplets for .LB Image

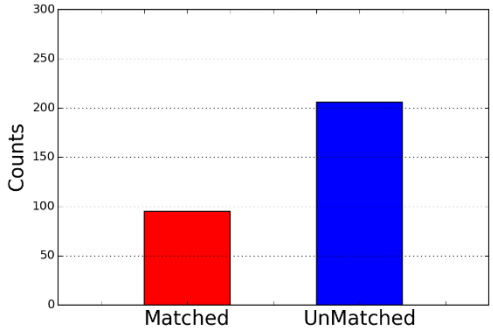

Figure A. 2086: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

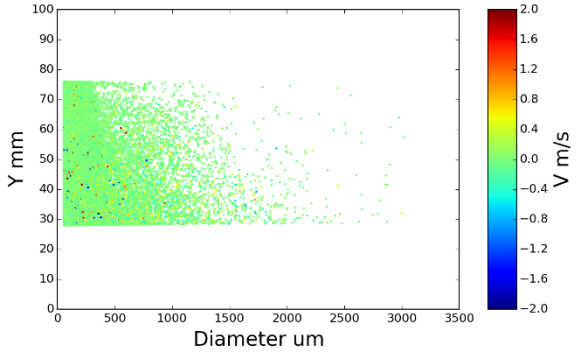

Figure A. 2089: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

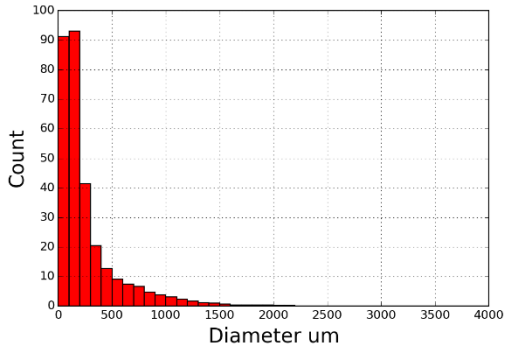

Figure A. 2087: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

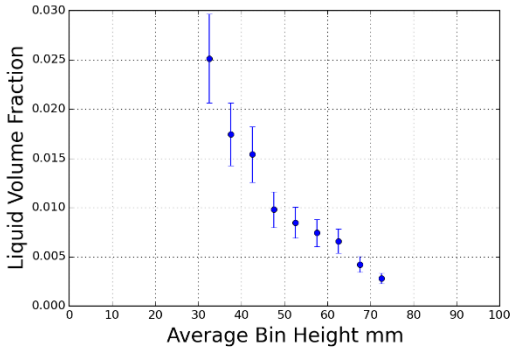

Figure A. 2090: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

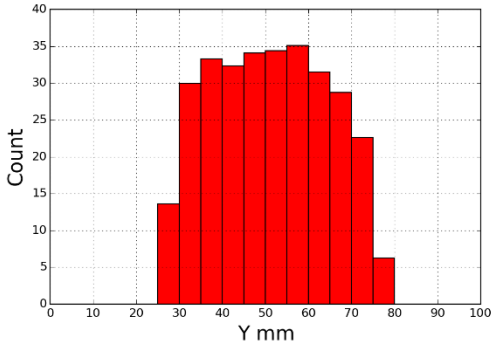

Figure A. 2088: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 Matched Only Droplets for .LA Image

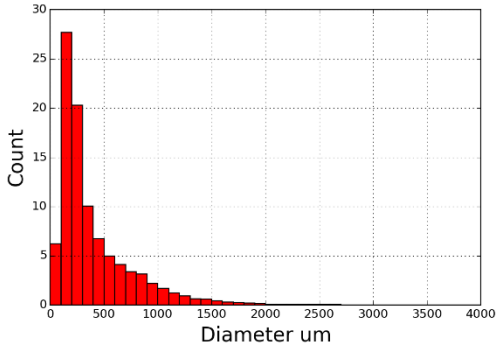

Figure A. 2091: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

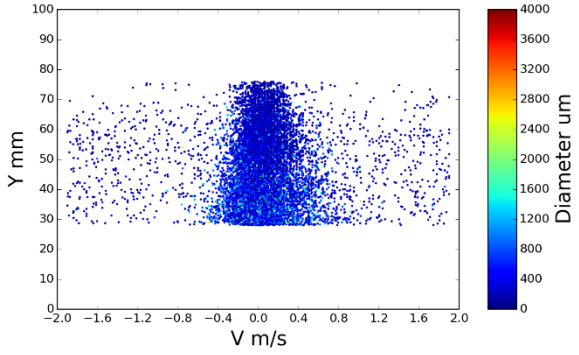

Figure A. 2094: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

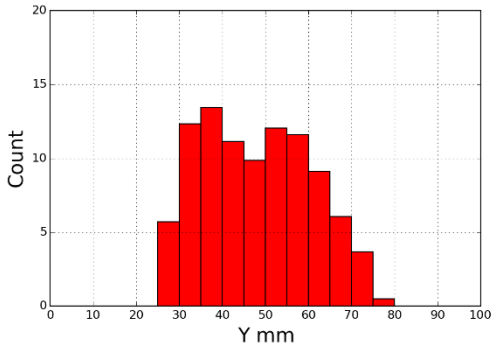

Figure A. 2092: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

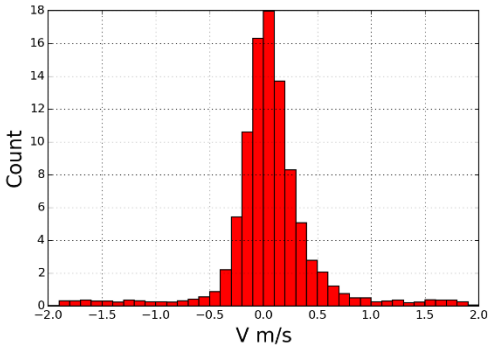

Figure A. 2095: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

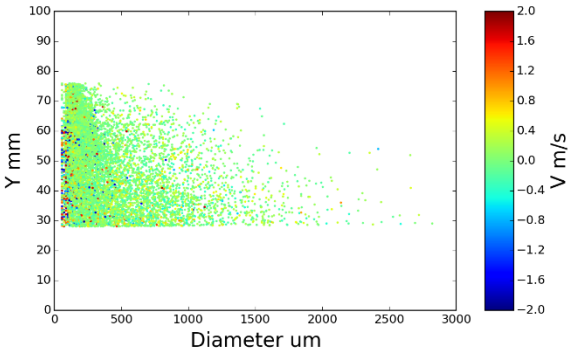

Figure A. 2093: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.3.1 Matched Only Droplets for .LB Image

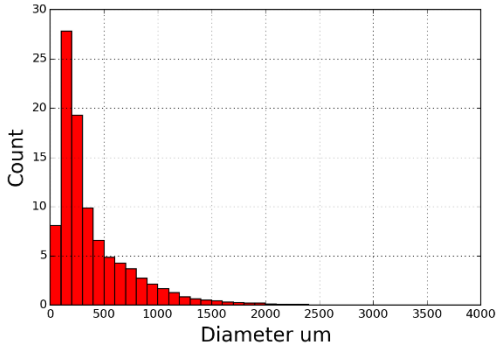

Figure A. 2096: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

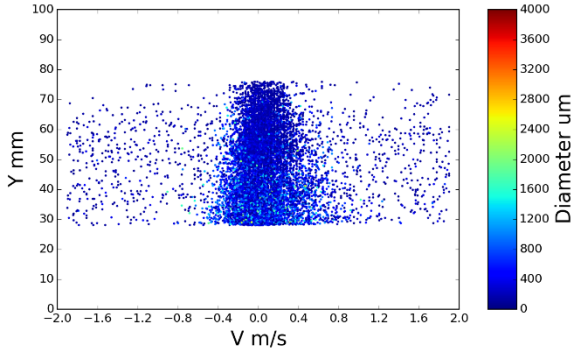

Figure A. 2099: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

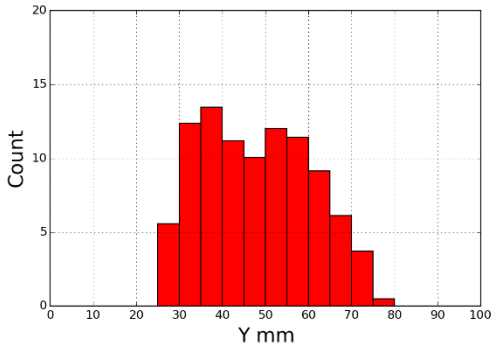

Figure A. 2097: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

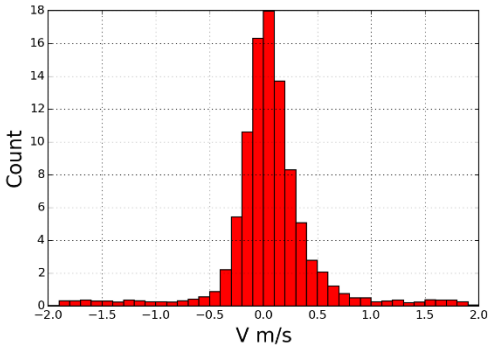

Figure A. 2100: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

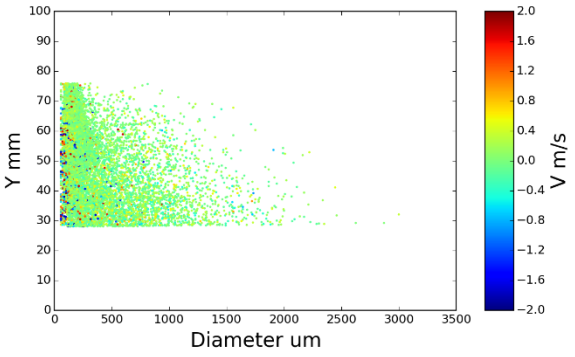

Figure A. 2098: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.3.2 Lens 50mm Mag 0_13x

A.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	67.9	68.97	128.5	3416	733.3	616.5	128.5	3408	740.4	620.4
20-40mm	95.63	98.09	128.5	3386	623.0	472.5	128.5	3389	613.0	460.5
40-60mm	49.5	47.14	128.5	3250	461.4	324.9	128.5	2536	455.7	308.7
60-80mm	16.83	15.73	128.5	2085	358.2	215.8	128.5	1500	354.4	211.1
80-100mm	2.01	1.84	128.5	850.1	322.7	156.2	128.5	832.9	309.2	156.1
All	231.87	231.78	128.5	3416	599.0	493.9	128.5	3408	599.0	491.7
			Height A (mm)				Height B (mm)			
Highest Particle			99.6664				99.7195			
Lowest Particle			10.0801				10.0801			

Table A. 222: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	35.12	128.5	3416	891.5	649.2	128.5	3403	874.5	636.6	-1.900	1.890	-0.060	0.600	-1.900	1.880	0.050	0.620
20-40mm	57.47	128.5	3383	710.8	473.4	128.5	3389	700.7	464.0	-1.900	1.900	-0.050	0.470	-1.900	1.900	0.050	0.520
40-60mm	29.06	128.5	2658	544.1	326.3	128.5	2426	529.9	314.9	-1.900	1.900	-0.050	0.380	-1.900	1.870	0.050	0.450
60-80mm	8.84	128.5	1561	440.8	221.5	128.5	1500	426.7	222.2	-1.680	1.740	-0.050	0.310	-1.880	1.840	0.030	0.370
80-100mm	0.95	157.4	850.1	405.4	162.9	128.5	832.9	381.7	163.8	-1.010	1.870	-0.020	0.260	-1.820	0.820	0.010	0.360
All	131.44	128.5	3416	701.9	508.0	128.5	3403	688.1	497.6	-1.900	1.900	-0.050	0.480	-1.900	1.900	0.050	0.530

Table A. 223: Matched Droplet Info

A.7.3.2 All Droplets for .LA Image

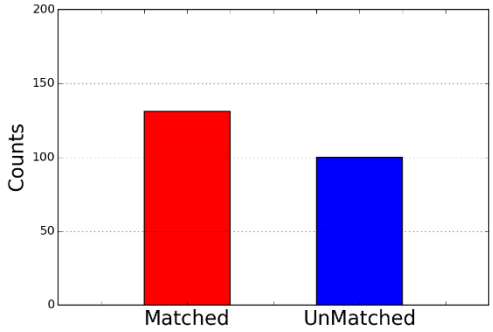

Figure A. 2101: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

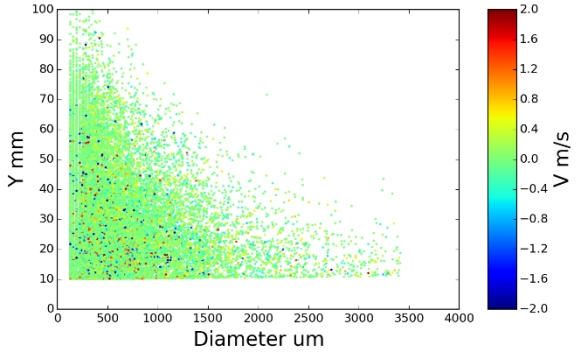

Figure A. 2104: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

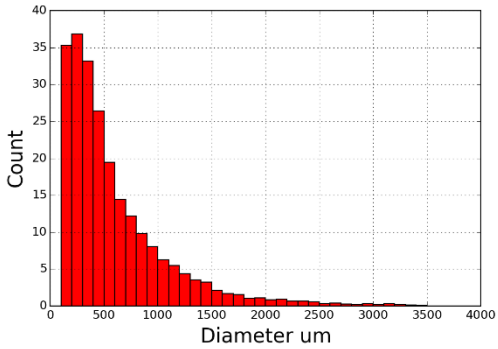

Figure A. 2102: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

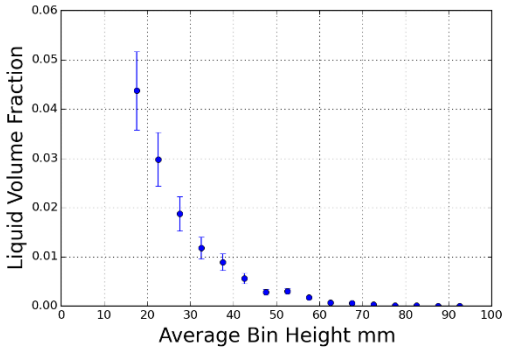

Figure A. 2105: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

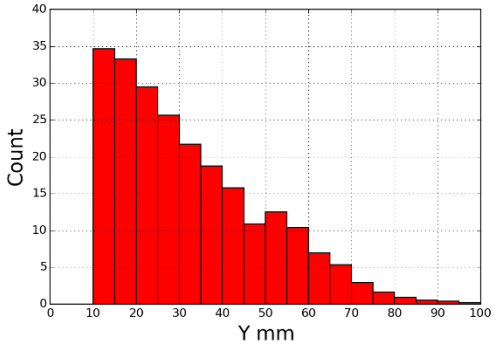

Figure A. 2103: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.2 All Droplets for .LB Image

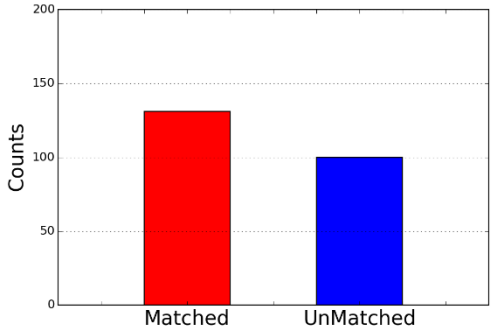

Figure A. 2106: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

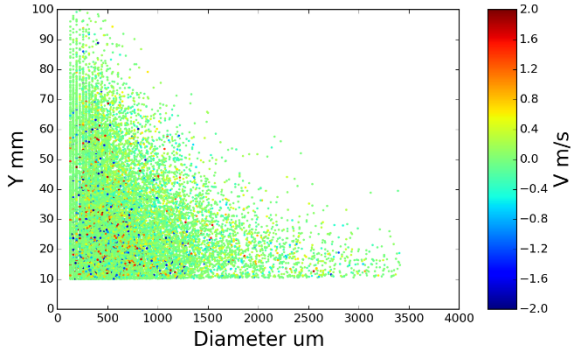

Figure A. 2109: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

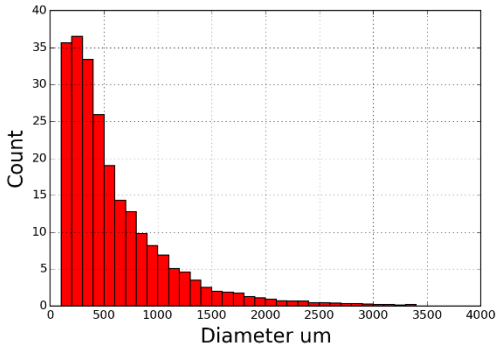

Figure A. 2107: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

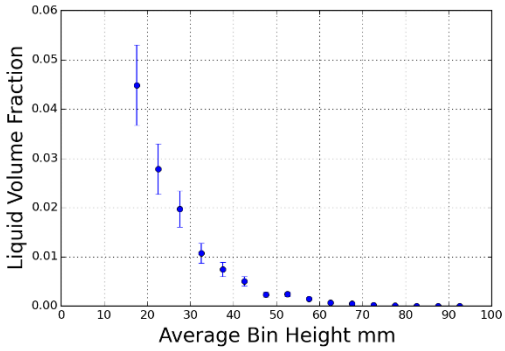

Figure A. 2110: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

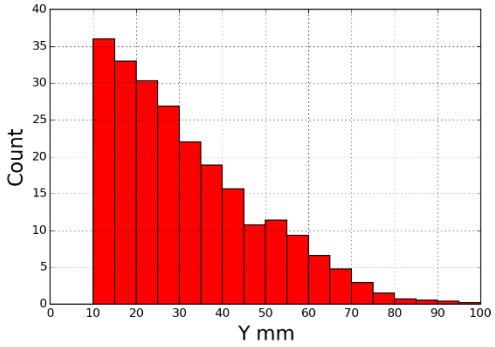

Figure A. 2108: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.2 Matched Only Droplets for .LA Image

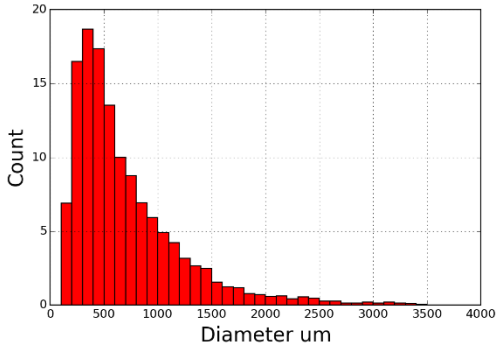

Figure A. 2111: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

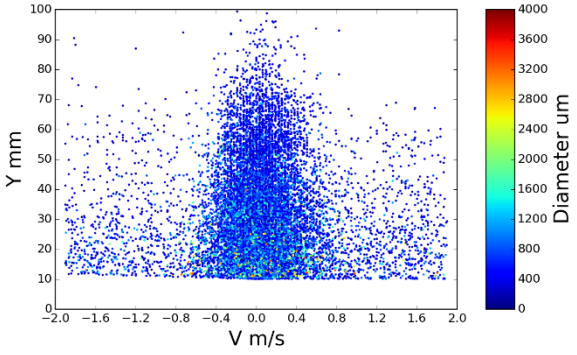

Figure A. 2114: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

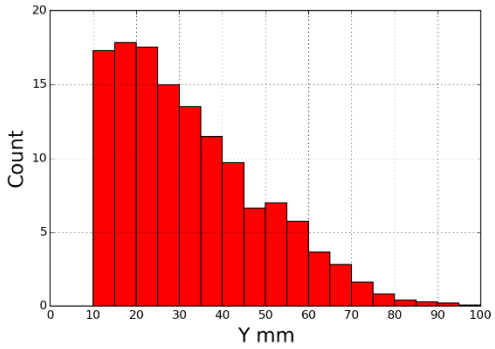

Figure A. 2112: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

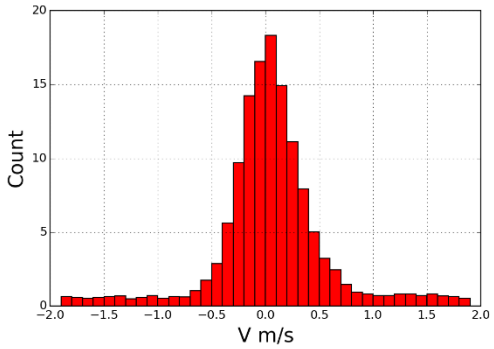

Figure A. 2115: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

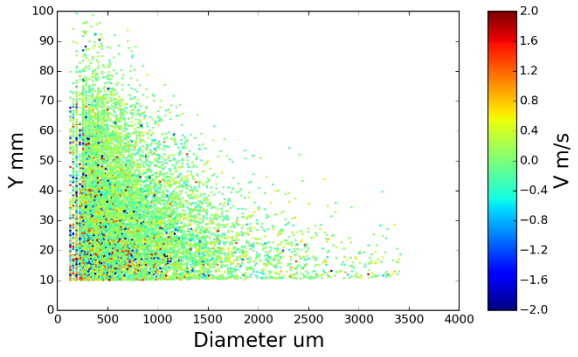

Figure A. 2113: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.3.2 Matched Only Droplets for .LB Image

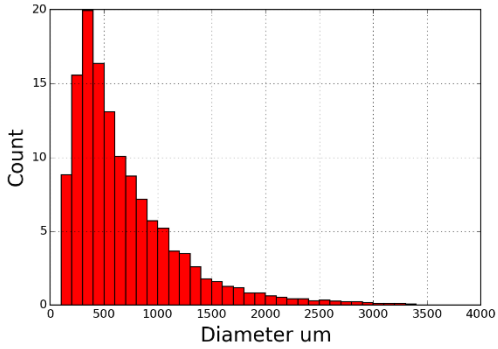

Figure A. 2116: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

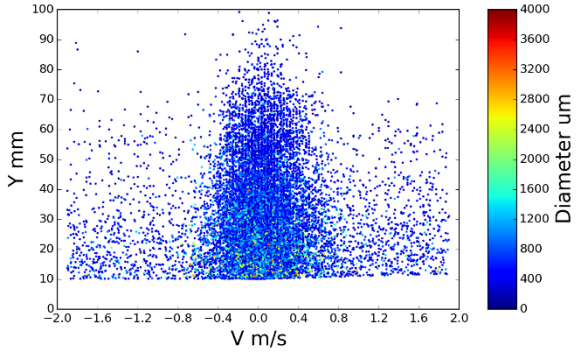

Figure A. 2119: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

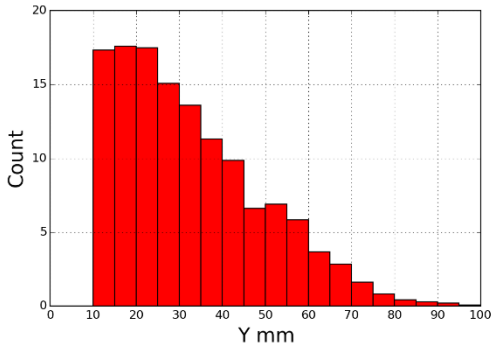

Figure A. 2117: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

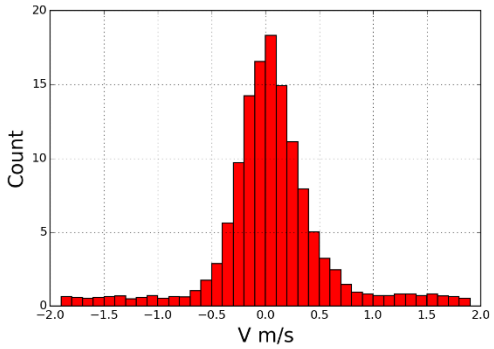

Figure A. 2120: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

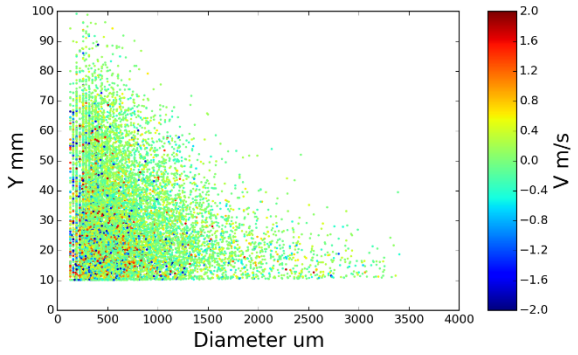

Figure A. 2118: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.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	62.84	63.26	128.5	3404	777.6	626.6	128.5	3412	791.2	639.3
20-40mm	93.55	93.29	128.5	3416	692.5	531.5	128.5	3396	687.4	515.6
40-60mm	49.81	40.36	128.5	3341	528.6	423.0	128.5	2892	538.7	392.4
60-80mm	19.32	11.94	128.5	3185	457.1	421.4	128.5	1981	401.1	287.1
80-100mm	2.48	0.82	128.5	1845	467.9	417.4	128.5	1089	344.3	207.4
All	228.28	209.67	128.5	3416	657.8	540.4	128.5	3412	672.4	537.1
			Height A (mm)				Height B (mm)			
Highest Particle			99.9757				98.4892			
Lowest Particle			10.0801				10.0801			

Table A. 224: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	30.33	128.5	3374	953.3	657.7	128.5	3412	941.1	655.8	-1.900	1.890	-0.060	0.640	-1.890	1.900	0.000	0.630
20-40mm	50.09	128.5	3402	809.7	545.0	128.5	3342	790.3	525.2	-1.900	1.890	-0.070	0.520	-1.880	1.900	-0.020	0.570
40-60mm	20.57	128.5	3099	674.6	424.6	128.5	2892	658.5	413.5	-1.900	1.900	-0.050	0.500	-1.900	1.900	-0.060	0.530
60-80mm	5.57	128.5	1895	543.4	336.4	128.5	1981	522.2	324.1	-1.830	1.900	-0.060	0.460	-1.870	1.880	-0.080	0.490
80-100mm	0.31	157.4	989.3	446.7	223.9	128.5	1089	439.8	240.1	-0.320	0.160	-0.080	0.090	-0.330	0.410	0.010	0.160
All	106.87	128.5	3402	809.5	562.3	128.5	3412	792.9	551.2	-1.900	1.900	-0.060	0.550	-1.900	1.900	-0.020	0.580

Table A. 225: Matched Droplet Info

A.7.3.2 All Droplets for .LA Image

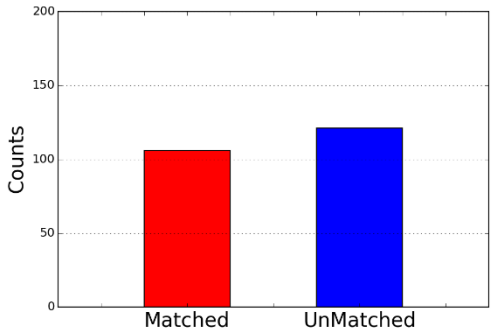

Figure A. 2121: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

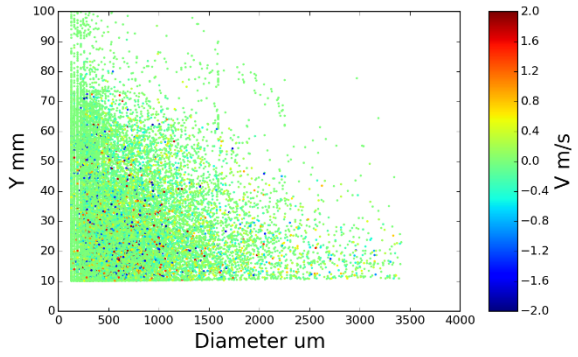

Figure A. 2124: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

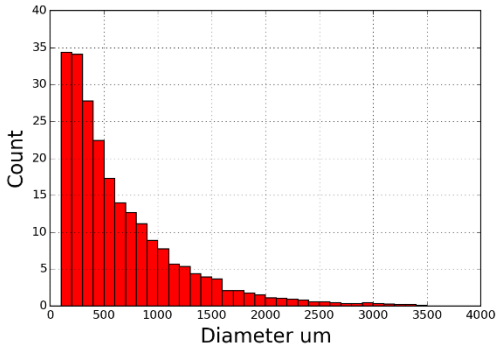

Figure A. 2122: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

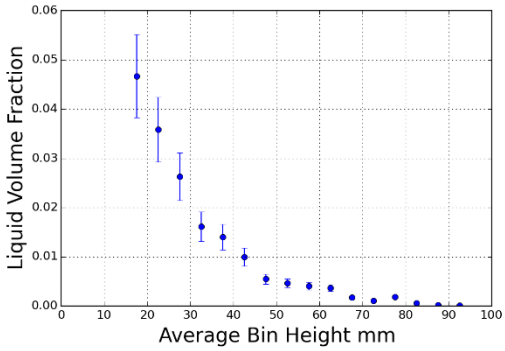

Figure A. 2125: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

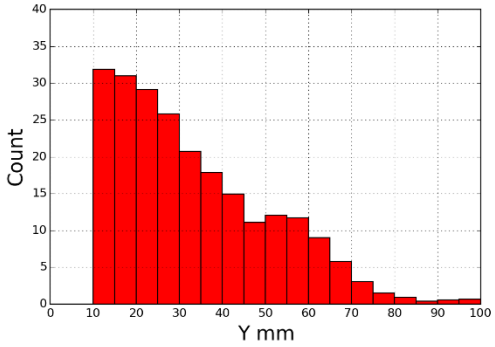

Figure A. 2123: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.2 All Droplets for .LB Image

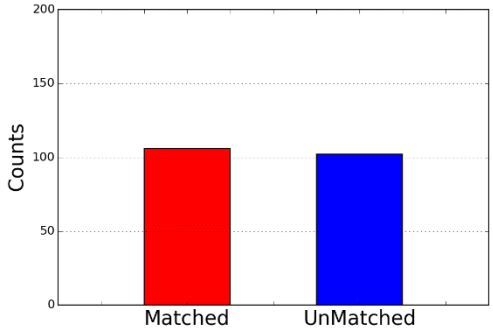

Figure A. 2126: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

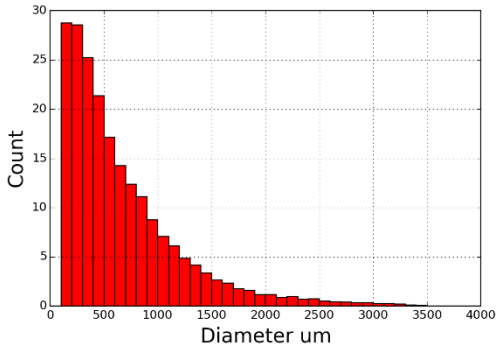

Figure A. 2127: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

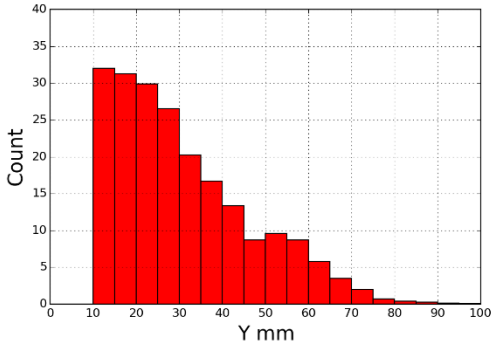

Figure A. 2128: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

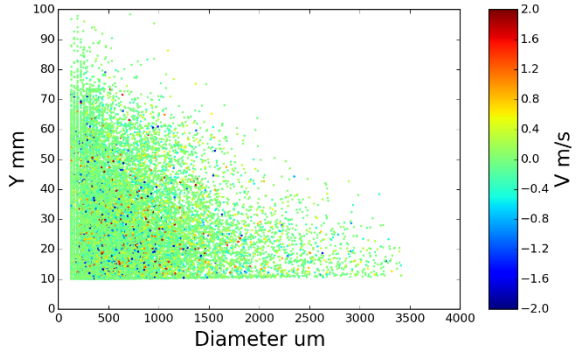

Figure A. 2129: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

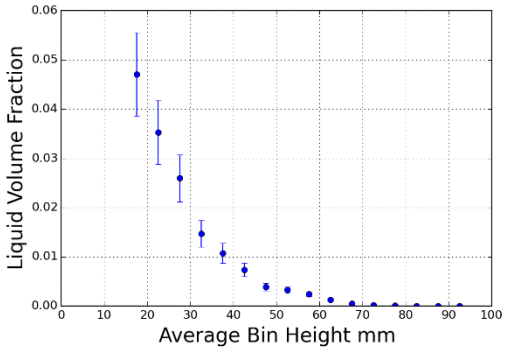

Figure A. 2130: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

A.7.3.2 Matched Only Droplets for .LA Image

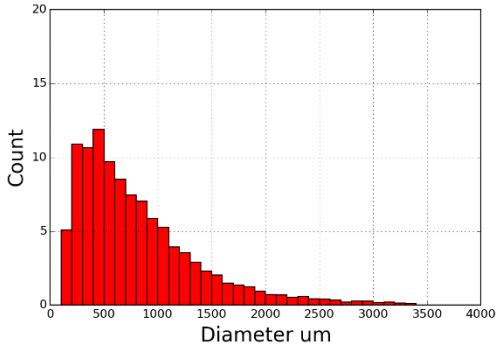

Figure A. 2131: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

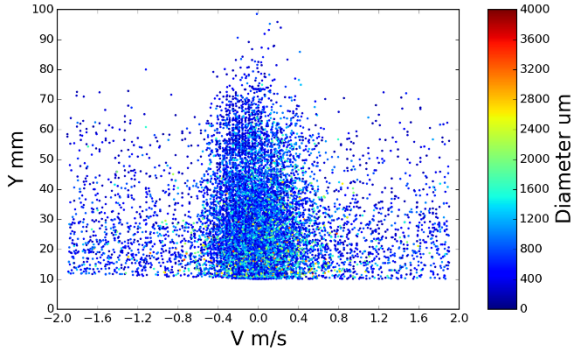

Figure A. 2134: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

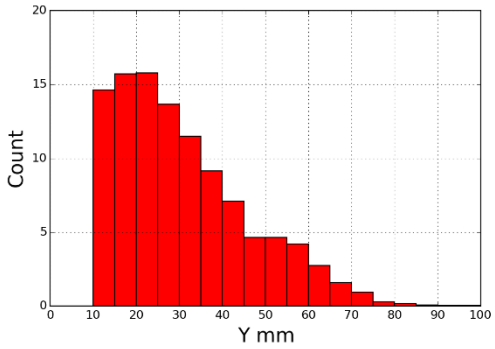

Figure A. 2132: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

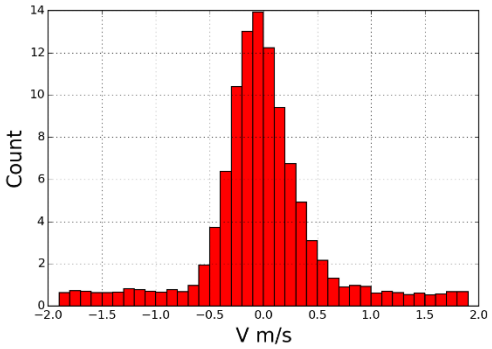

Figure A. 2135: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

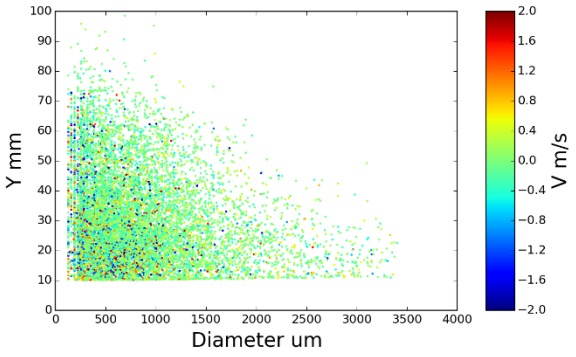

Figure A. 2133: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.3.2 Matched Only Droplets for .LB Image

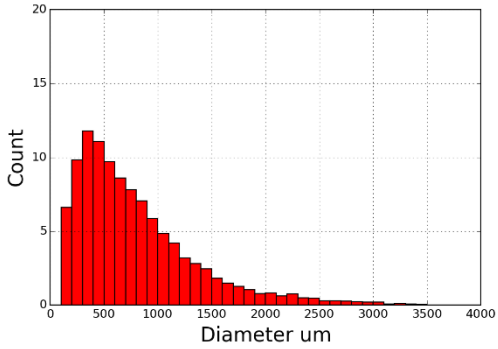

Figure A. 2136: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

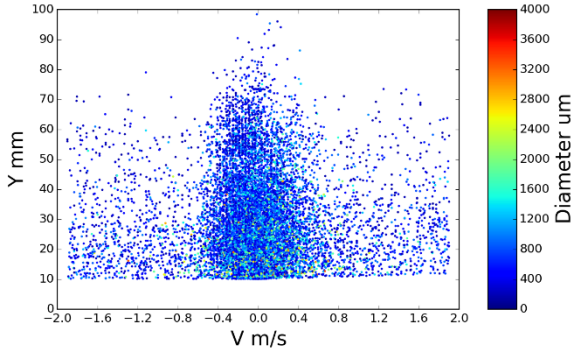

Figure A. 2139: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

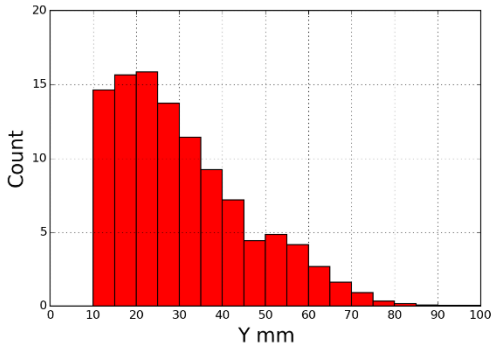

Figure A. 2137: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

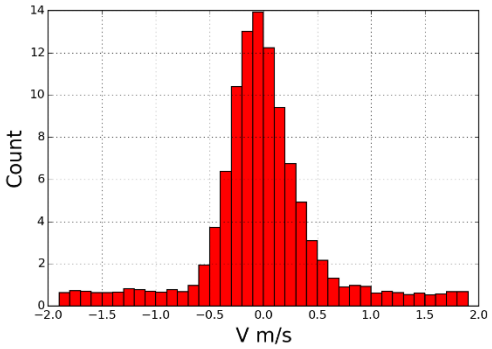

Figure A. 2140: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

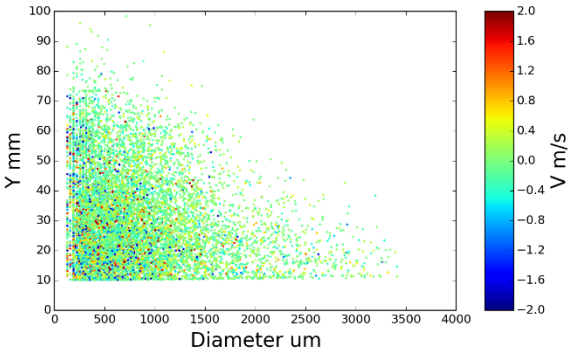

Figure A. 2138: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.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	53.33	54.4	128.5	3390	812.3	653.6	128.5	3413	824.9	663.9
20-40mm	82.56	83.75	128.5	3407	688.4	542.3	128.5	3403	688.6	528.0
40-60mm	46.99	35.33	128.5	3396	494.3	427.0	128.5	3391	509.2	408.1
60-80mm	17.61	8.27	128.5	2656	362.6	319.0	128.5	2304	392.0	317.3
80-100mm	0.38	0.2	128.5	1113	387.6	271.6	128.5	1066	434.0	280.4
All	200.87	181.96	128.5	3407	646.8	553.7	128.5	3413	680.8	559.4
			Height A (mm)				Height B (mm)			
Highest Particle			97.7391				97.6572			
Lowest Particle			10.0801				10.0801			

Table A. 226: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	23.43	128.5	3390	1027	688.6	128.5	3412	1005	680.0	-1.900	1.900	-0.040	0.660	-1.890	1.900	0.010	0.660
20-40mm	39.96	128.5	3328	837.8	556.6	128.5	3378	818.3	543.1	-1.900	1.890	-0.050	0.540	-1.900	1.900	-0.050	0.600
40-60mm	15.78	128.5	2974	665.6	461.4	128.5	2775	644.9	435.1	-1.900	1.900	-0.050	0.510	-1.900	1.900	-0.070	0.540
60-80mm	2.89	128.5	2656	577.9	452.4	128.5	2304	550.2	400.4	-1.710	1.460	-0.060	0.400	-1.900	1.680	-0.140	0.530
80-100mm	0.1	192.8	1113	649.8	298.3	192.8	1066	615.5	291.5	-0.700	0.140	-0.070	0.220	-0.240	0.890	0.030	0.300
All	82.16	128.5	3390	849.2	593.5	128.5	3412	829.2	579.6	-1.900	1.900	-0.050	0.570	-1.900	1.900	-0.040	0.610

Table A. 227: Matched Droplet Info

A.7.3.2 All Droplets for .LA Image

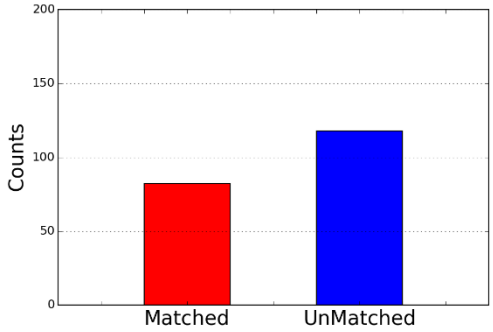

Figure A. 2141: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

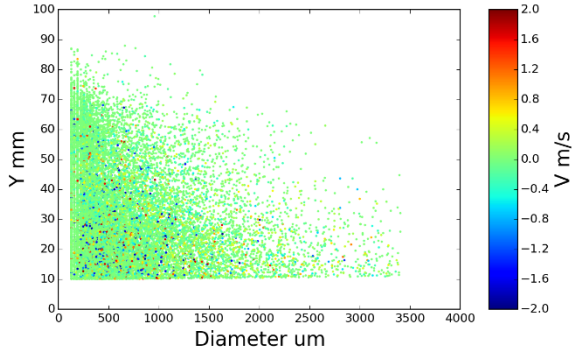

Figure A. 2144: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

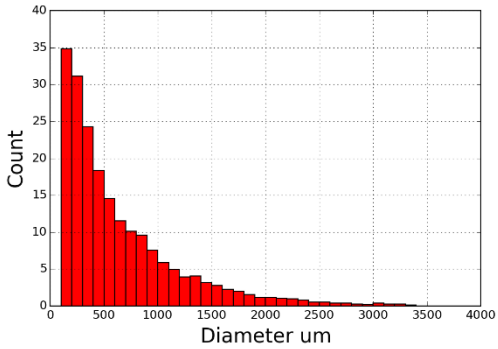

Figure A. 2142: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

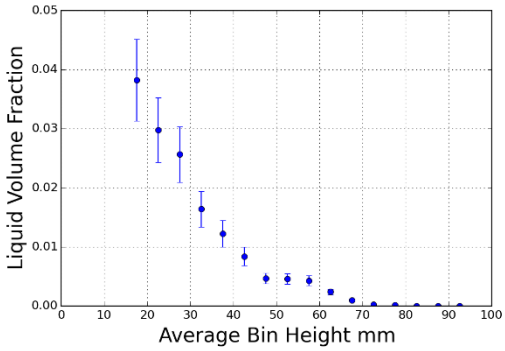

Figure A. 2145: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

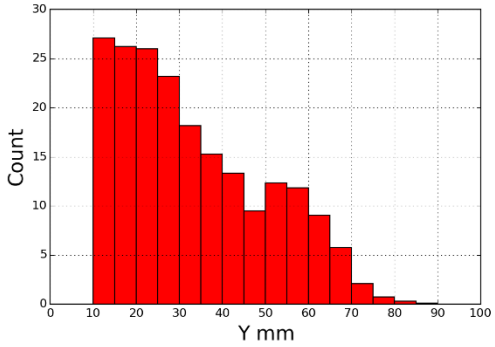

Figure A. 2143: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.2 All Droplets for .LB Image

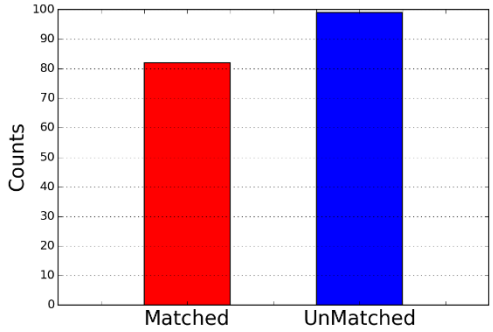

Figure A. 2146: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

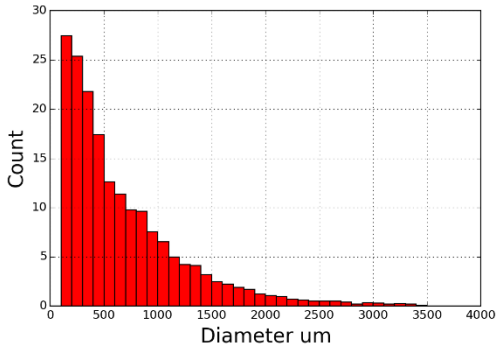

Figure A. 2147: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

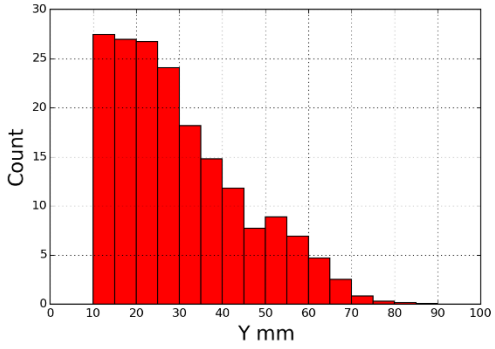

Figure A. 2148: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

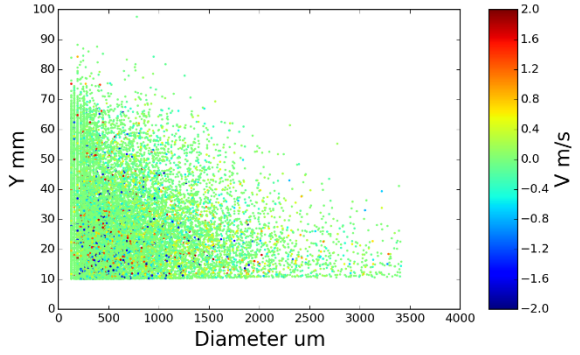

Figure A. 2149: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

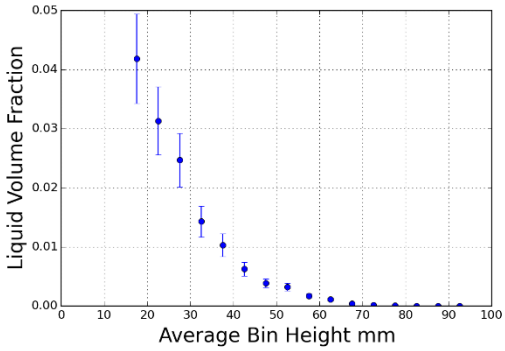

Figure A. 2150: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

A.7.3.2 Matched Only Droplets for .LA Image

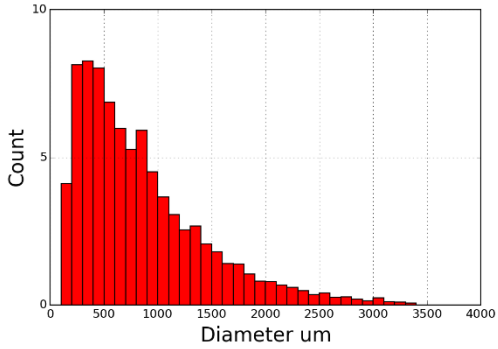

Figure A. 2151: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

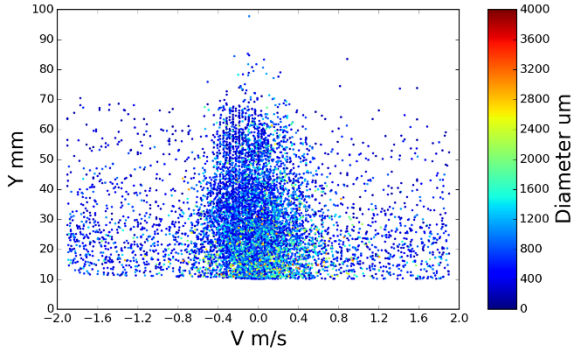

Figure A. 2154: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

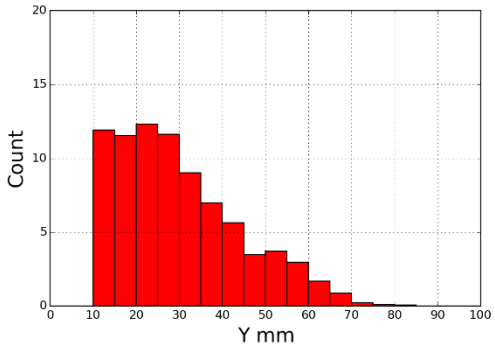

Figure A. 2152: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

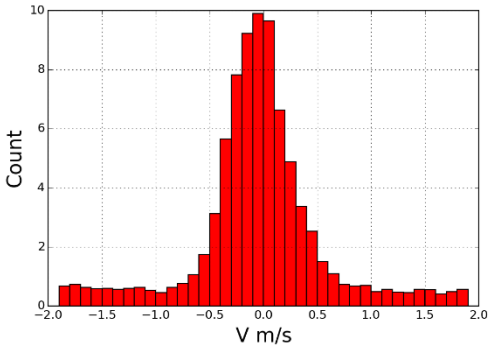

Figure A. 2155: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

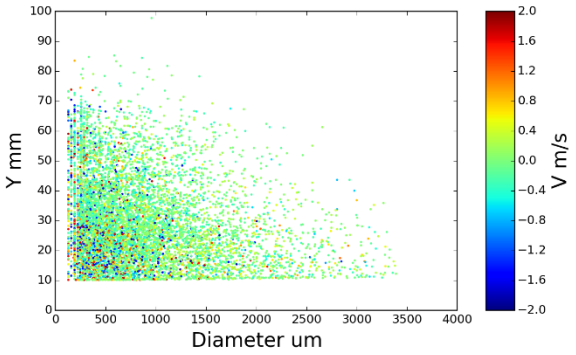

Figure A. 2153: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.3.2 Matched Only Droplets for .LB Image

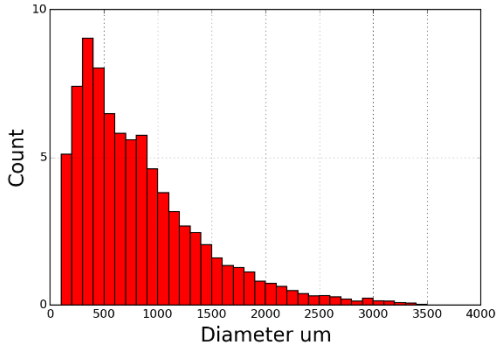

Figure A. 2156: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

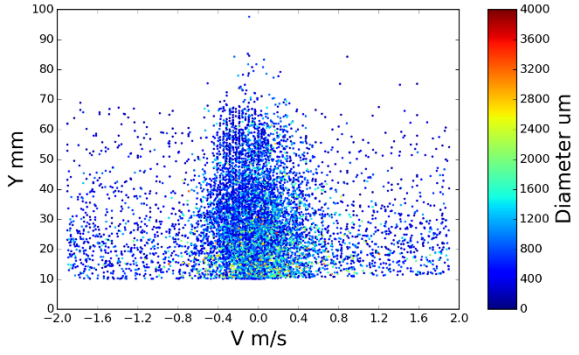

Figure A. 2159: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

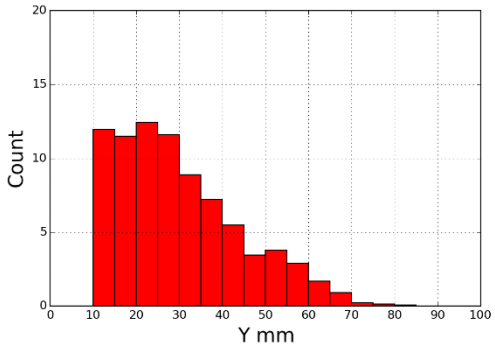

Figure A. 2157: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

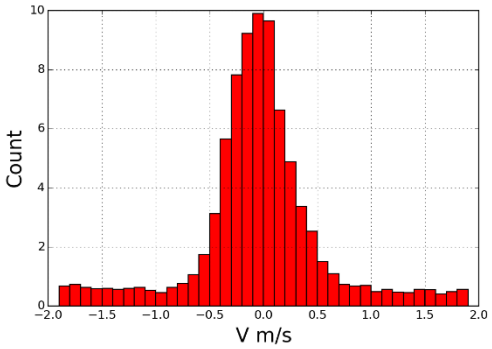

Figure A. 2160: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

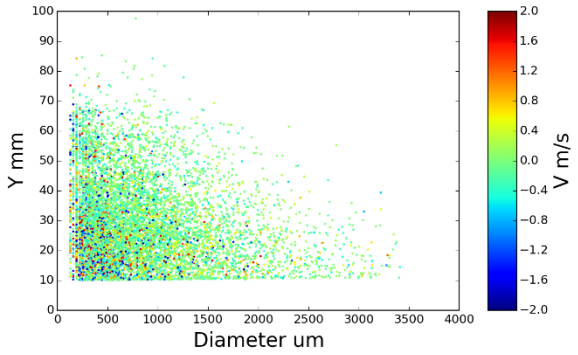

Figure A. 2158: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.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	44.98	47.03	128.5	3410	798.1	655.4	128.5	3407	812.6	675.7
20-40mm	81.65	81.2	128.5	3414	650.2	517.5	128.5	3385	655.5	514.8
40-60mm	49.56	36.19	128.5	3223	430.8	374.5	128.5	2926	442.4	352.1
60-80mm	17.26	6.95	128.5	2800	329.5	266.4	128.5	1704	362.5	266.3
80-100mm	0.18	0.08	128.5	677.0	261.1	134.5	192.8	852.5	411.4	218.1
All	193.63	171.45	128.5	3414	599.5	528.3	128.5	3407	641.6	547.2
			Height A (mm)				Height B (mm)			
Highest Particle			98.4950				99.8030			
Lowest Particle			10.0801				10.0801			

Table A. 228: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	18.6	128.5	3410	1030	703.1	128.5	3407	1006	704.8	-1.900	1.900	-0.060	0.630	-1.890	1.900	-0.000	0.660
20-40mm	39.45	128.5	3414	789.2	543.6	128.5	3375	774.1	536.0	-1.900	1.900	-0.060	0.560	-1.900	1.900	-0.030	0.610
40-60mm	17.07	128.5	3148	556.5	398.1	128.5	2926	535.7	380.5	-1.900	1.900	-0.060	0.540	-1.900	1.900	-0.010	0.570
60-80mm	2.75	128.5	1681	471.0	311.4	128.5	1601	453.2	296.6	-1.880	1.870	-0.100	0.550	-1.880	1.860	-0.120	0.650
80-100mm	0.02	363.5	677.0	520.3	156.8	363.5	852.5	608.0	244.5	-0.020	0.150	0.070	0.090	-0.260	0.020	-0.120	0.140
All	77.89	128.5	3414	784.4	579.0	128.5	3407	766.2	572.9	-1.900	1.900	-0.060	0.570	-1.900	1.900	-0.020	0.620

Table A. 229: Matched Droplet Info

A.7.3.2 All Droplets for .LA Image

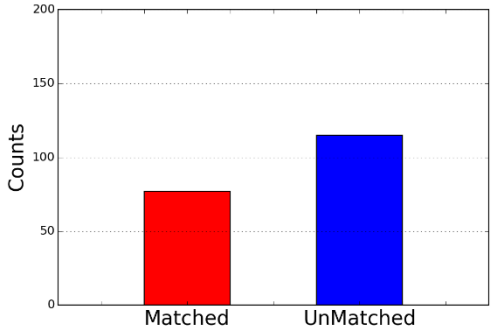

Figure A. 2161: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

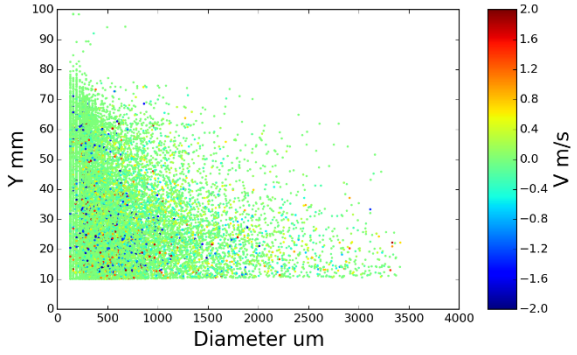

Figure A. 2164: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

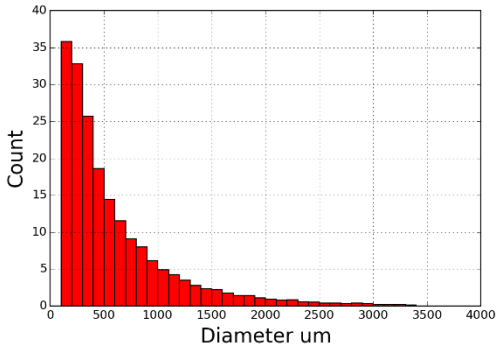

Figure A. 2162: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

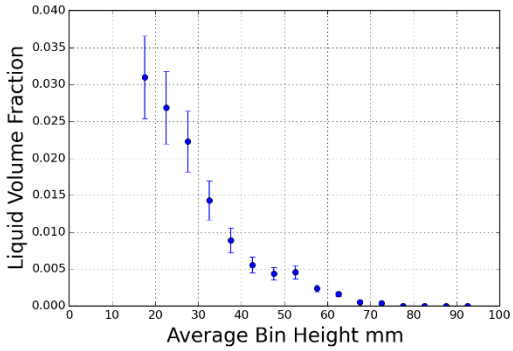

Figure A. 2165: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

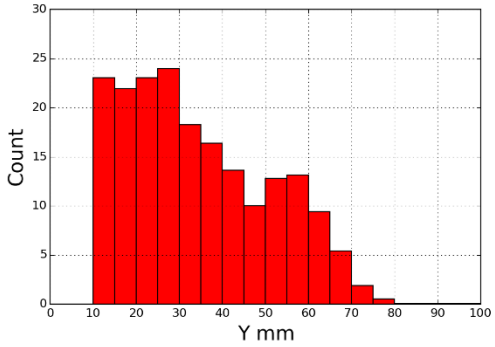

Figure A. 2163: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.2 All Droplets for .LB Image

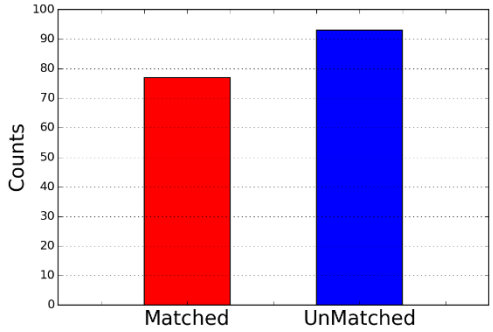

Figure A. 2166: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

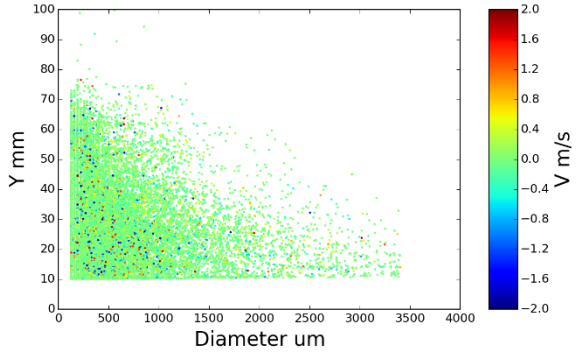

Figure A. 2169: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

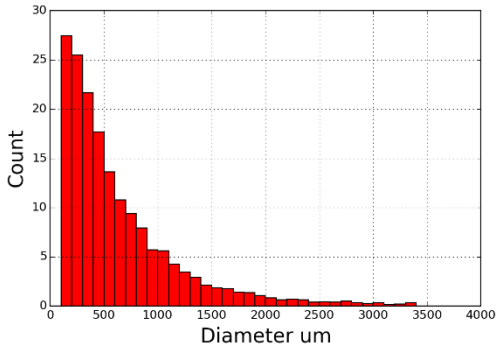

Figure A. 2167: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

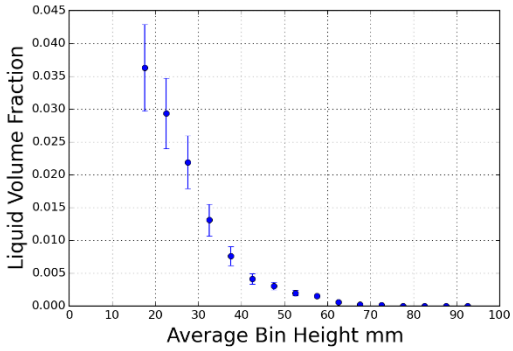

Figure A. 2170: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

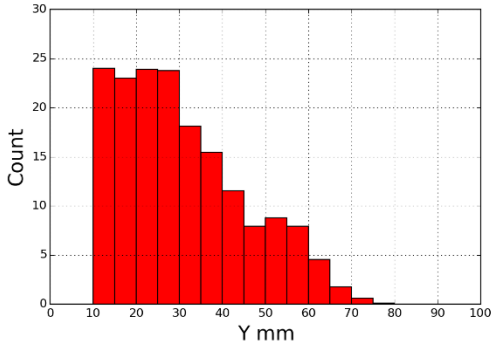

Figure A. 2168: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.2 Matched Only Droplets for .LA Image

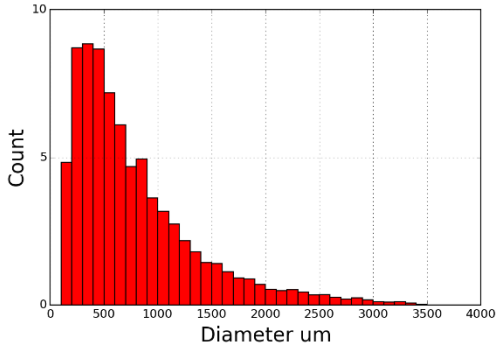

Figure A. 2171: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

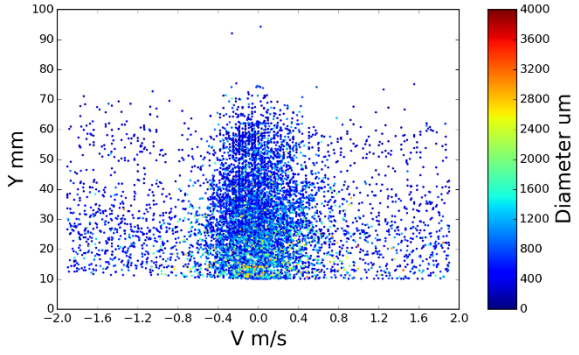

Figure A. 2174: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

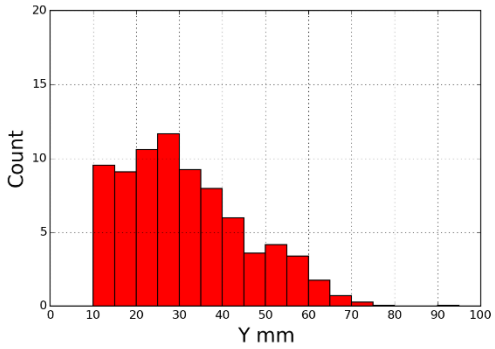

Figure A. 2172: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

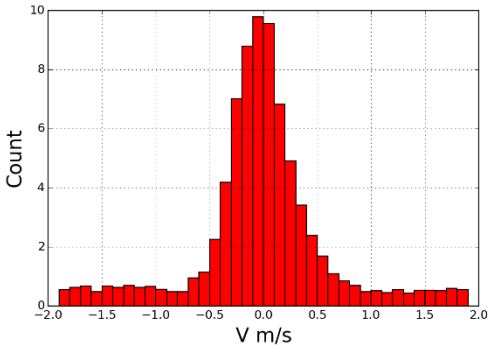

Figure A. 2175: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

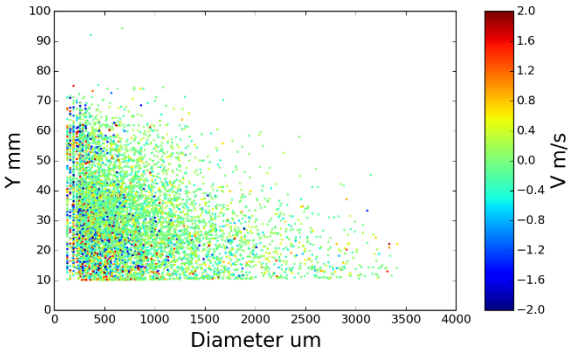

Figure A. 2173: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.3.2 Matched Only Droplets for .LB Image

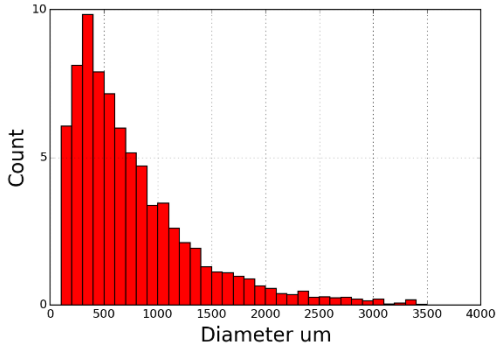

Figure A. 2176: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

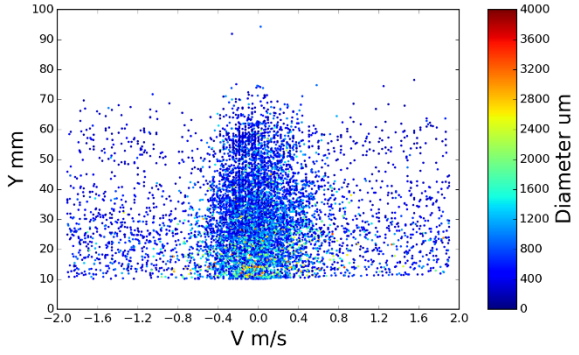

Figure A. 2179: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

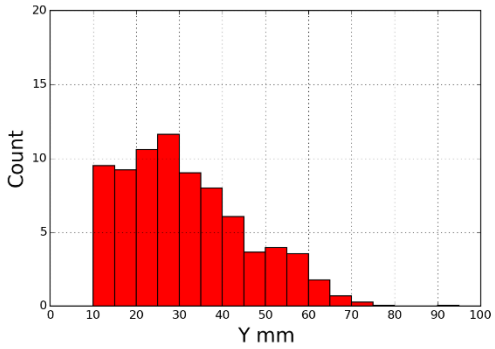

Figure A. 2177: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

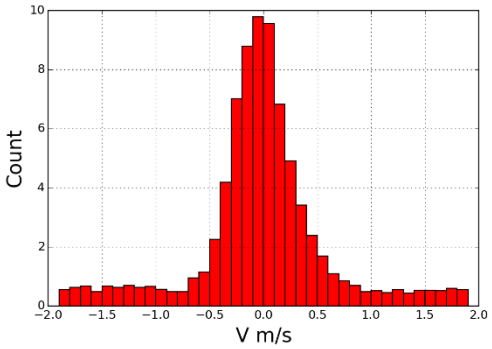

Figure A. 2180: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

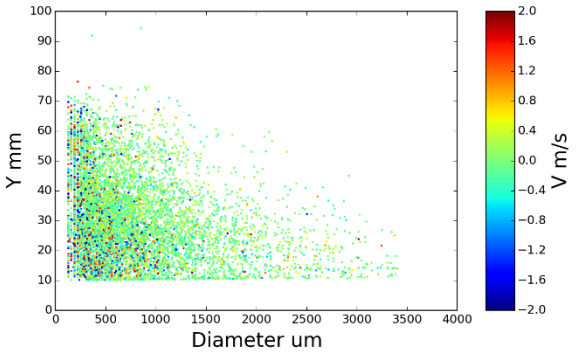

Figure A. 2178: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.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	41.46	42.4	128.5	3408	776.6	647.1	128.5	3410	790.2	661.0
20-40mm	80.42	79.73	128.5	3406	624.2	487.5	128.5	3410	631.6	493.4
40-60mm	48.24	40.35	128.5	3271	419.8	342.5	128.5	3290	429.4	336.6
60-80mm	13.02	7.06	128.5	3005	319.1	229.0	128.5	2792	336.5	260.1
80-100mm	0.11	0.04	128.5	698.1	321.5	179.3	128.5	649.0	325.6	216.4
All	183.25	169.58	128.5	3408	583.0	504.9	128.5	3410	610.8	522.2
			Height A (mm)				Height B (mm)			
Highest Particle			96.0024				89.2691			
Lowest Particle			10.0801				10.0801			

Table A. 230: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	16.49	128.5	3408	998.2	700.4	128.5	3410	985.2	713.9	-1.900	1.900	-0.060	0.660	-1.900	1.900	0.060	0.690
20-40mm	38.72	128.5	3406	769.2	518.4	128.5	3410	752.5	507.9	-1.900	1.900	-0.070	0.560	-1.900	1.890	0.020	0.600
40-60mm	19.69	128.5	3099	550.1	381.7	128.5	3290	534.6	373.6	-1.900	1.890	-0.060	0.470	-1.900	1.900	0.030	0.510
60-80mm	2.82	128.5	3005	478.0	330.5	128.5	2792	461.7	311.8	-1.770	1.870	-0.040	0.390	-1.840	1.420	0.010	0.420
80-100mm	0.01	571.2	571.2	571.2	0.0	649.0	649.0	649.0	0.0	-0.120	-0.120	-0.120	0.000	-0.100	-0.100	-0.100	0.000
All	77.73	128.5	3408	751.7	552.2	128.5	3410	735.8	549.3	-1.900	1.900	-0.070	0.560	-1.900	1.900	0.030	0.590

Table A. 231: Matched Droplet Info

A.7.3.2 All Droplets for .LA Image

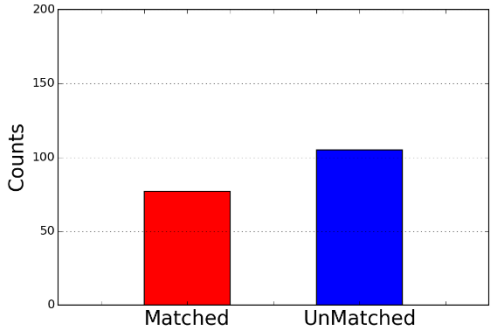

Figure A. 2181: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

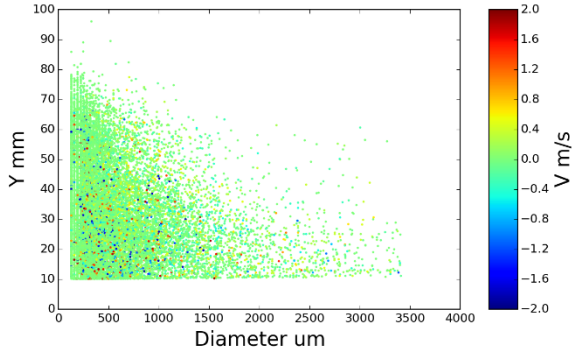

Figure A. 2184: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

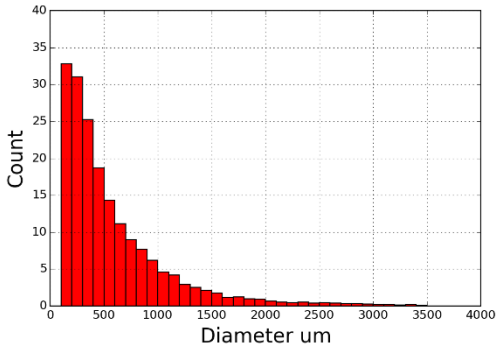

Figure A. 2182: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

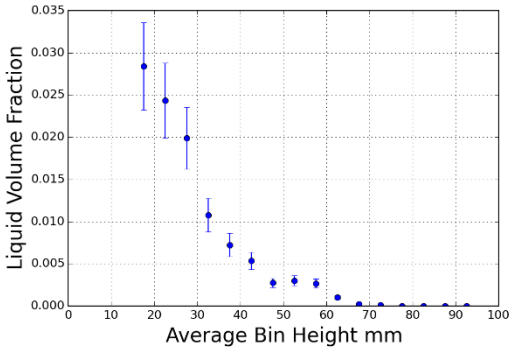

Figure A. 2185: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

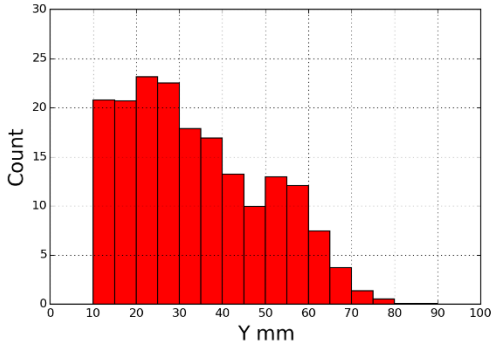

Figure A. 2183: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

A.7.3.2 All Droplets for .LB Image

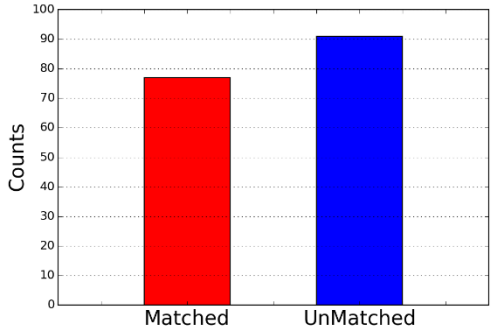

Figure A. 2186: CHC Count Comparison R-134a 55F 5000Btu 30000Lb Tri

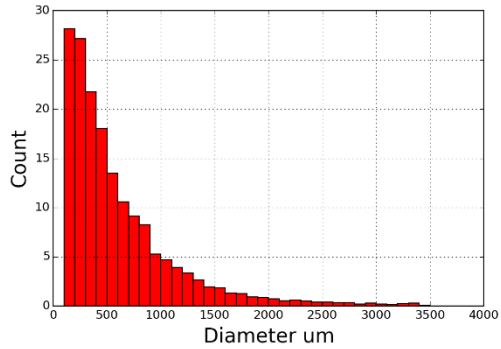

Figure A. 2187: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

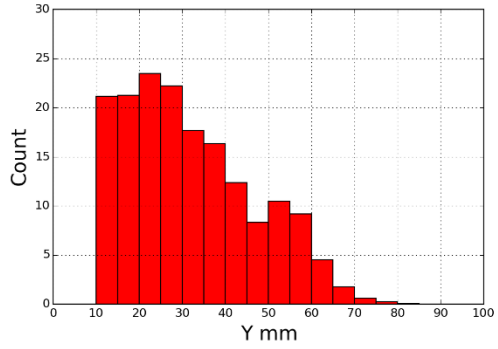

Figure A. 2188: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

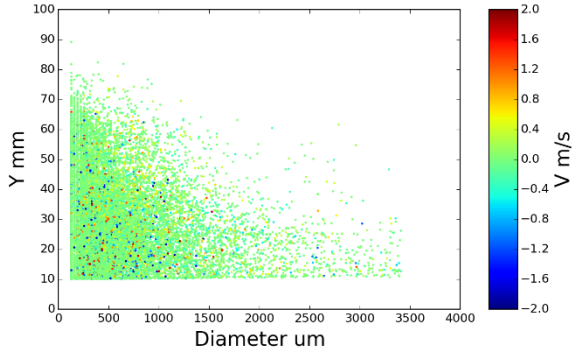

Figure A. 2189: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

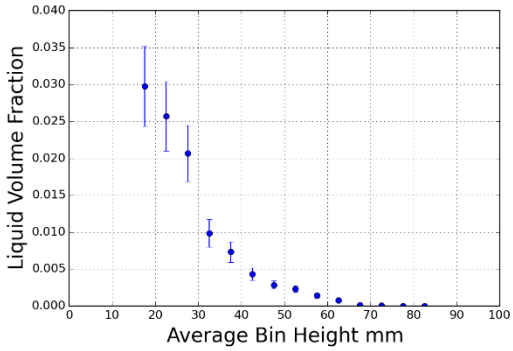

Figure A. 2190: Void Fraction R-134a 55F 5000Btu 30000Lb Tri

A.7.3.2 Matched Only Droplets for .LA Image

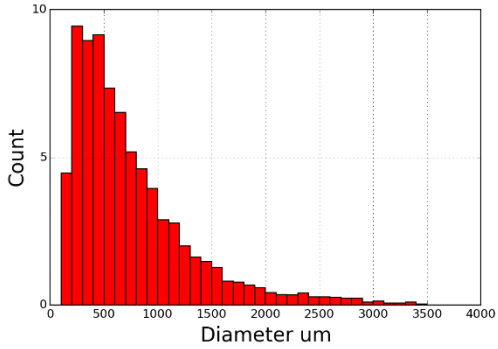

Figure A. 2191: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

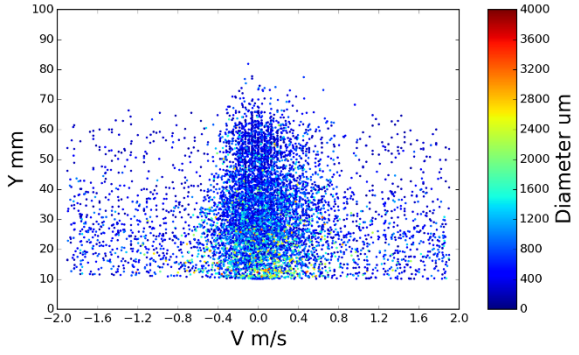

Figure A. 2194: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

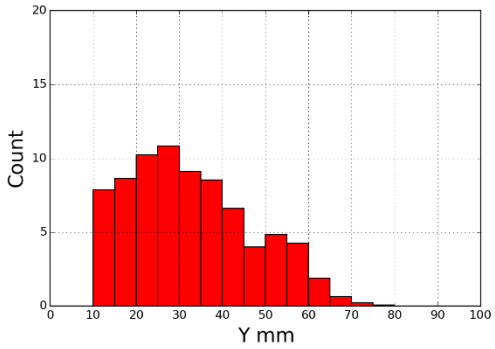

Figure A. 2192: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

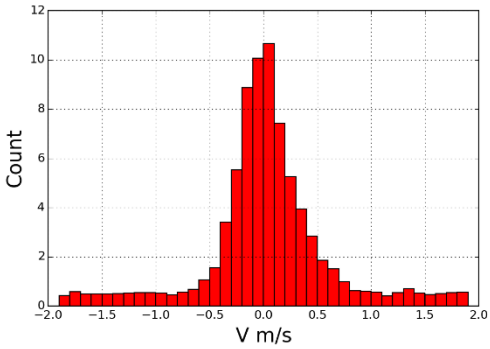

Figure A. 2195: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

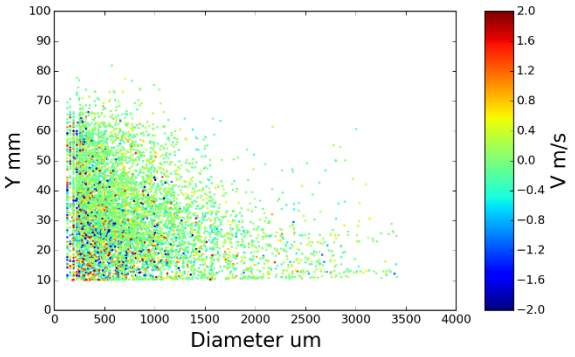

Figure A. 2193: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.7.3.2 Matched Only Droplets for .LB Image

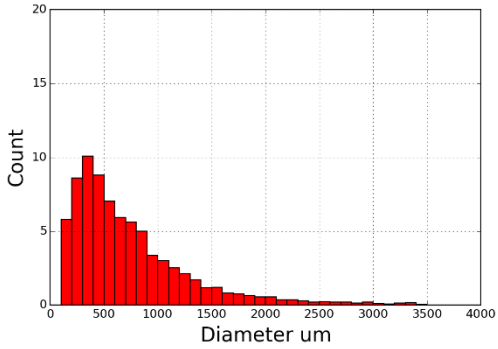

Figure A. 2196: Droplet Diameter Histogram R-134a 55F 5000Btu 30000Lb Tri

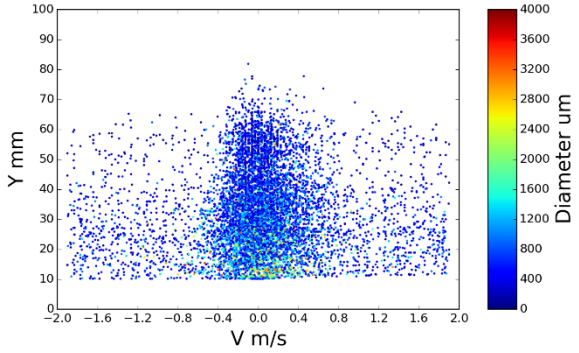

Figure A. 2199: Droplet Height vs Vertical Velocity R-134a 55F 5000Btu 30000Lb Tri

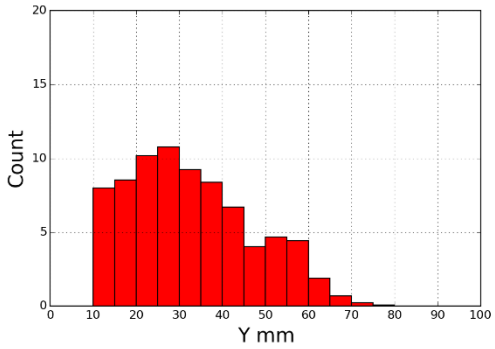

Figure A. 2197: Droplet Height Histogram R-134a 55F 5000Btu 30000Lb Tri

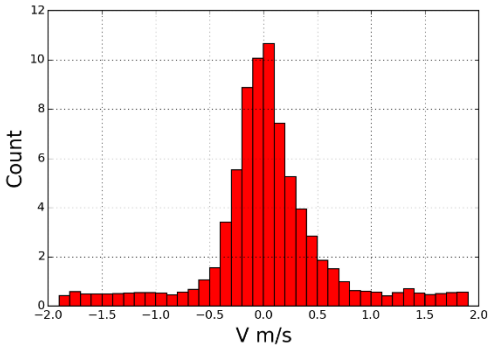

Figure A. 2200: Droplet Vertical Velocity Histogram R-134a 55F 5000Btu 30000Lb Tri

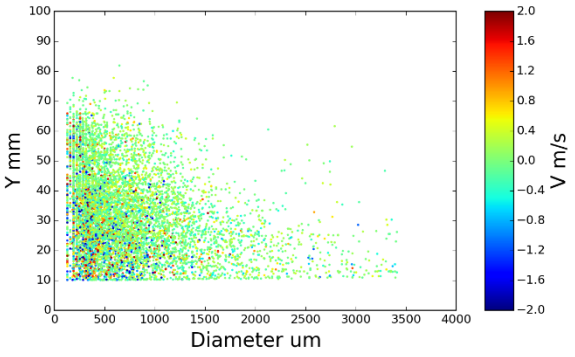

Figure A. 2198: Droplet Height vs Diameter R-134a 55F 5000Btu 30000Lb Tri

A.8 - 1556 R-134a 55F 10000Btu 30000Lb Tri

A.8.1 Liquid Level 1

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	13251 / 1.670
Ref Mass Flow (lb/hr) / (kg/s)	3266 / 0.412
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	30341 / 41.149
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	10223 / 32.25
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	54.7 / 12.60
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	54.9 / 12.70
Total Bundle Q (Btu/hr) / (kW)	296729 / 86.96
Total Bundle & Preboiler Q (Btu/hr) / (kW)	296729 / 86.96
Top Two Rows HTC Ratio	1.110
Bundle Inlet Quality	-0.12
Bundle Exit Quality	1.00

Table A. 232: Thermal Conditions

A.8.1.1 Lens 100mm Mag 0_29x

A.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	158.83	162.45	57.1	3031	401.3	430.3	57.1	3032	402.9	429.1
40-60mm	306.13	311.01	57.1	3024	364.6	387.9	57.1	3031	358.9	384.0
60-80mm	170.27	171.81	57.1	3021	281.2	275.4	57.1	3008	278.3	275.7
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	636.51	646.89	57.1	3031	351.4	375.7	57.1	3032	348.5	373.9
			Height A (mm)				Height B (mm)			
Highest Particle			75.9600				75.9600			
Lowest Particle			27.9786				27.9786			

Table A. 233: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	89.57	57.1	2965	495.5	470.6	57.1	2984	488.7	466.2	-1.900	1.900	-0.040	0.410	-1.900	1.900	-0.040	0.480
40-60mm	208.92	57.1	3024	428.5	412.4	57.1	3029	425.0	408.8	-1.900	1.900	-0.060	0.320	-1.900	1.900	-0.010	0.400
60-80mm	124.86	57.1	3021	325.3	293.9	57.1	3008	322.4	292.4	-1.900	1.900	-0.060	0.260	-1.900	1.890	0.020	0.310
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	423.35	57.1	3024	412.2	400.1	57.1	3029	408.2	396.7	-1.900	1.900	-0.060	0.330	-1.900	1.900	-0.010	0.390

Table A. 234: Matched Droplet Info

A.8.1.1 All Droplets for .LA Image

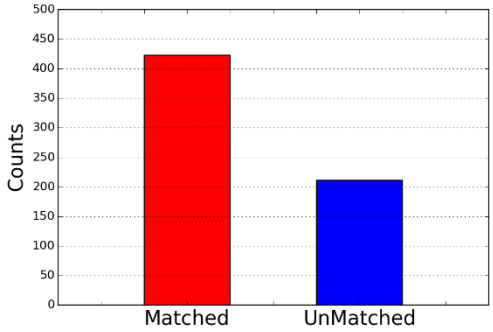

Figure A. 2201: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

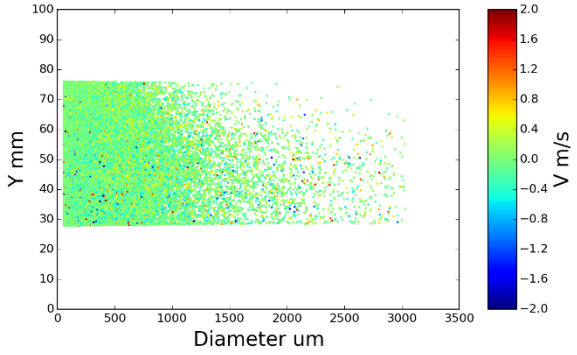

Figure A. 2204: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

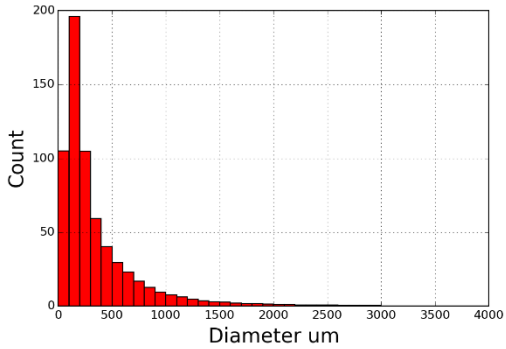

Figure A. 2202: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

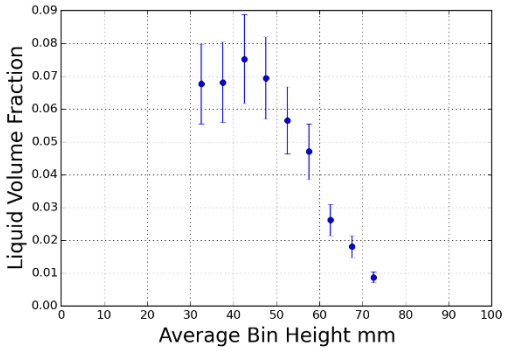

Figure A. 2205: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

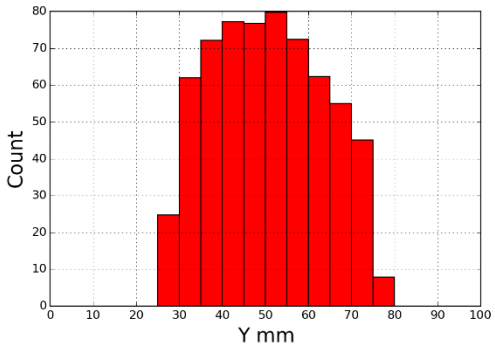

Figure A. 2203: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 All Droplets for .LB Image

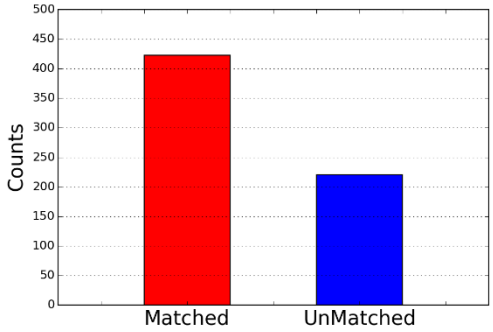

Figure A. 2206: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

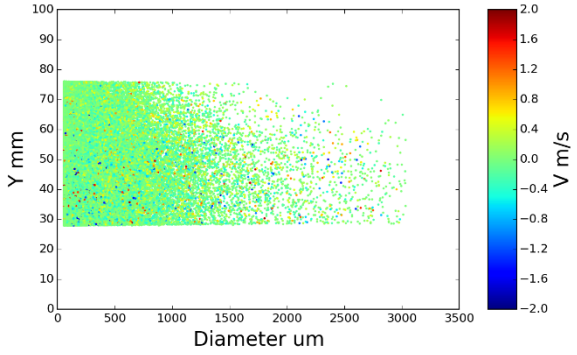

Figure A. 2209: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

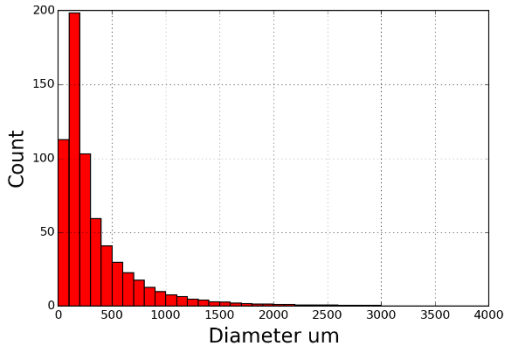

Figure A. 2207: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

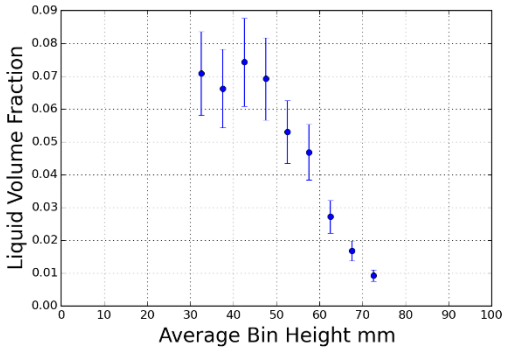

Figure A. 2210: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

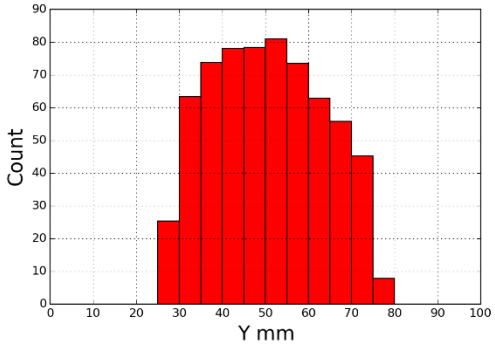

Figure A. 2208: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 Matched Only Droplets for .LA Image

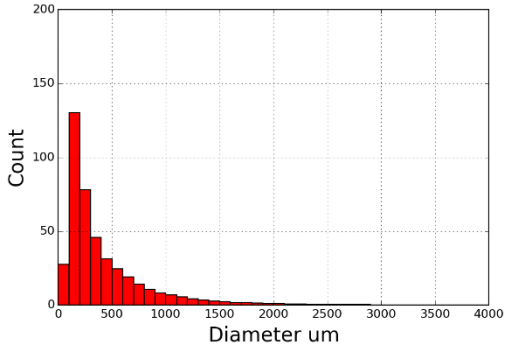

Figure A. 2211: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

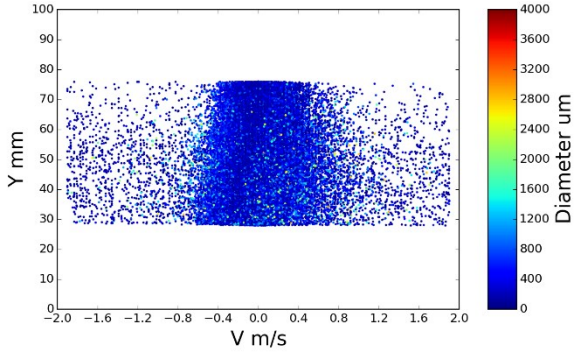

Figure A. 2214: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

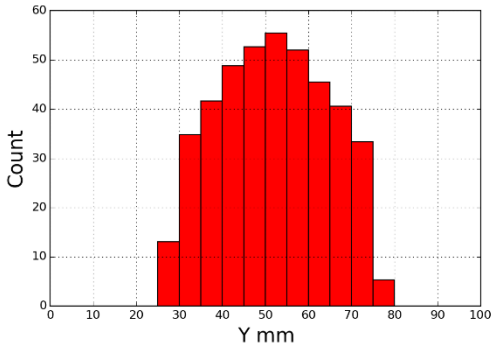

Figure A. 2212: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

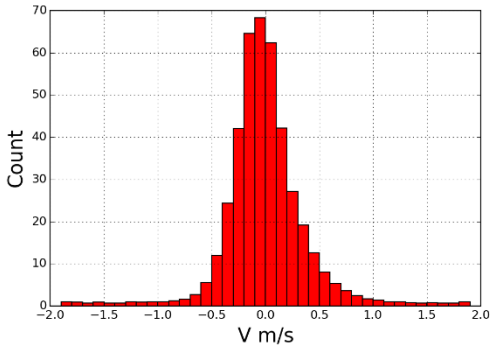

Figure A. 2215: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

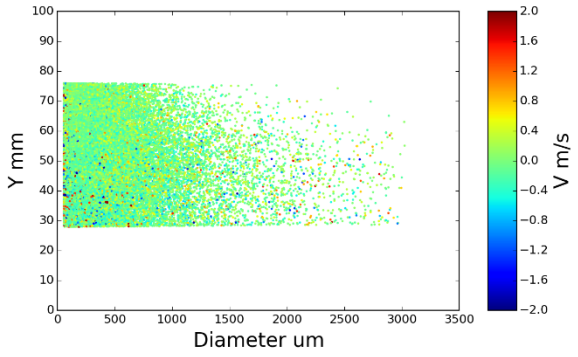

Figure A. 2213: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 Matched Only Droplets for .LB Image

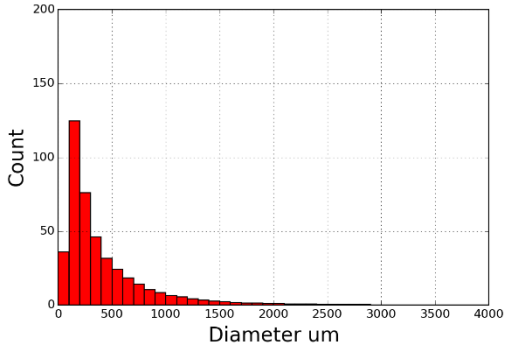

Figure A. 2216: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

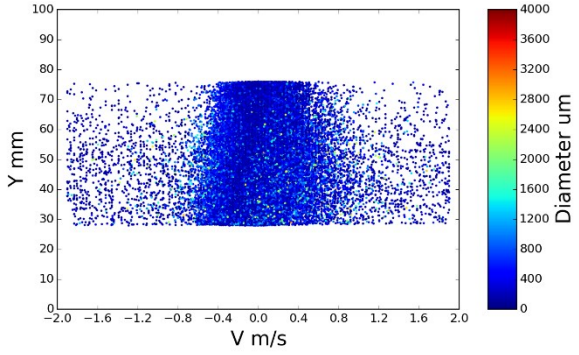

Figure A. 2219: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

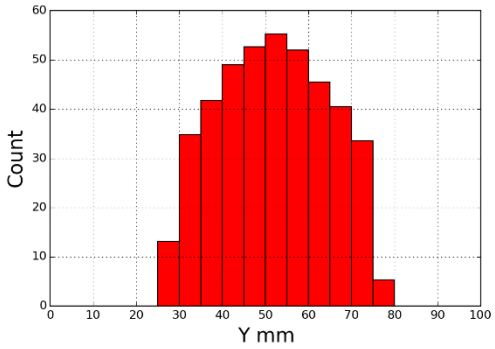

Figure A. 2217: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

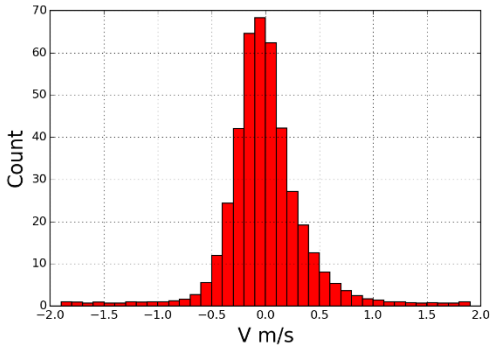

Figure A. 2220: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

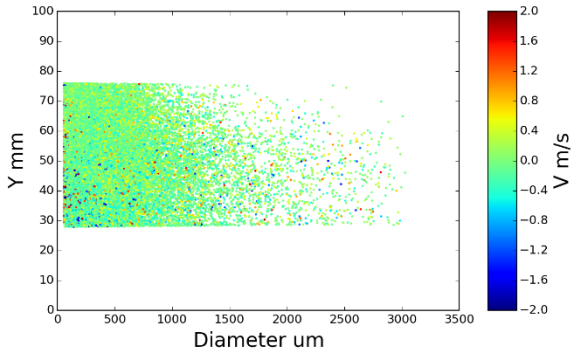

Figure A. 2218: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.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	129.79	131.68	57.1	3038	470.2	487.9	57.1	3031	450.1	478.4
40-60mm	283.36	288.41	57.1	3032	388.6	418.3	57.1	3028	383.0	421.2
60-80mm	160.45	163.79	57.1	2920	286.2	306.0	57.1	2964	283.2	302.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	574.99	585.55	57.1	3038	378.4	413.3	57.1	3031	370.1	410.7
			Height A (mm)				Height B (mm)			
Highest Particle			75.9600				75.9600			
Lowest Particle			27.9786				27.9786			

Table A. 235: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	66.92	57.1	3017	592.1	537.9	57.1	3031	584.9	534.0	-1.900	1.900	-0.050	0.380	-1.900	1.890	-0.030	0.480
40-60mm	184.58	57.1	3032	466.1	449.2	57.1	3027	461.5	447.2	-1.900	1.900	-0.060	0.320	-1.900	1.900	-0.030	0.400
60-80mm	111.65	57.1	2842	344.2	332.4	57.1	2964	340.8	330.1	-1.900	1.900	-0.080	0.270	-1.900	1.900	-0.040	0.330
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	363.15	57.1	3032	451.8	444.0	57.1	3031	447.2	441.3	-1.900	1.900	-0.060	0.320	-1.900	1.900	-0.030	0.400

Table A. 236: Matched Droplet Info

A.8.1.1 All Droplets for .LA Image

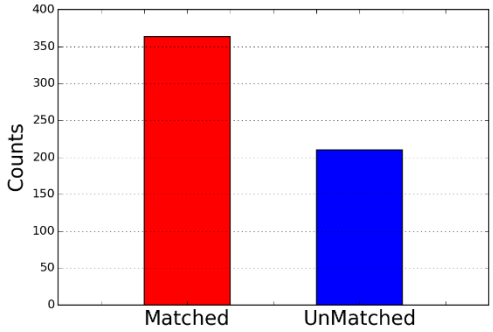

Figure A. 2221: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

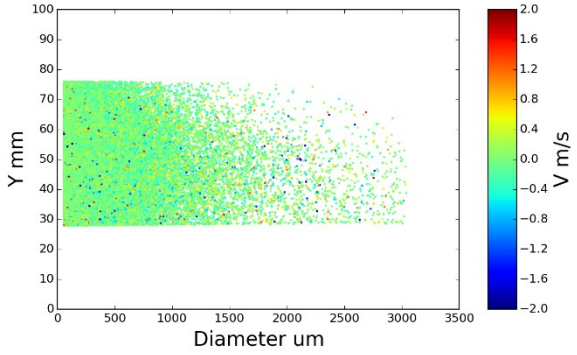

Figure A. 2224: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

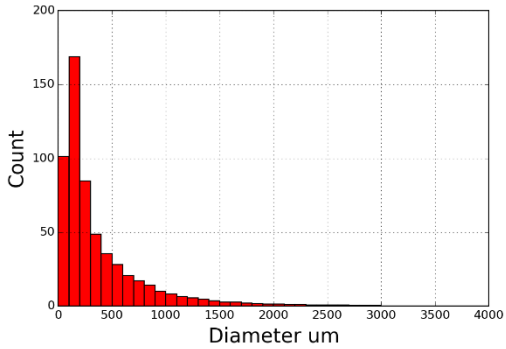

Figure A. 2222: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

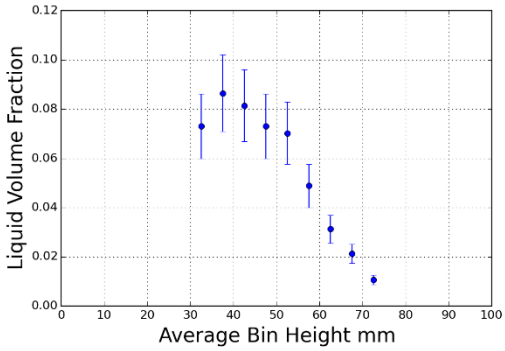

Figure A. 2225: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

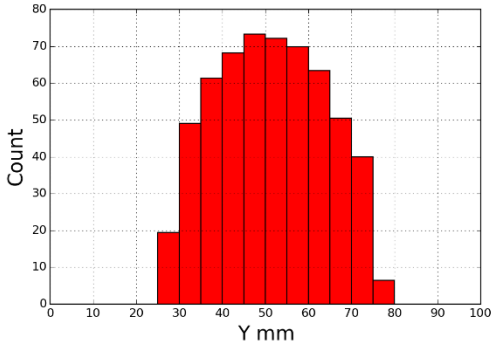

Figure A. 2223: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 All Droplets for .LB Image

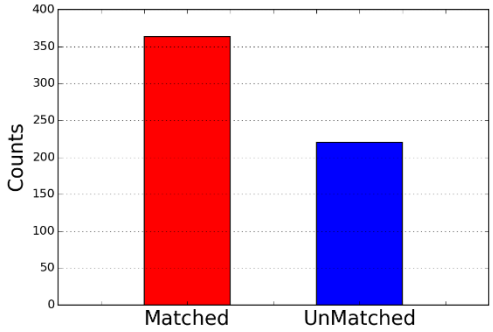

Figure A. 2226: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

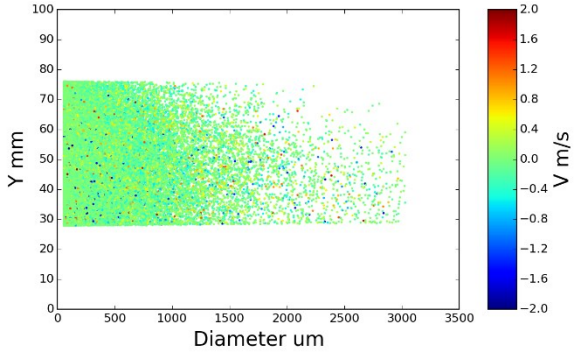

Figure A. 2229: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

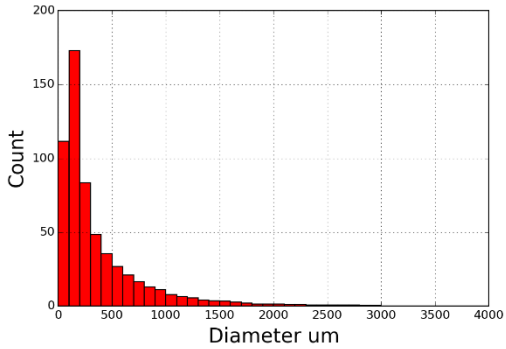

Figure A. 2227: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

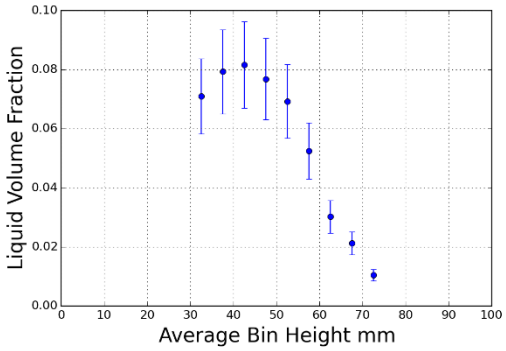

Figure A. 2230: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

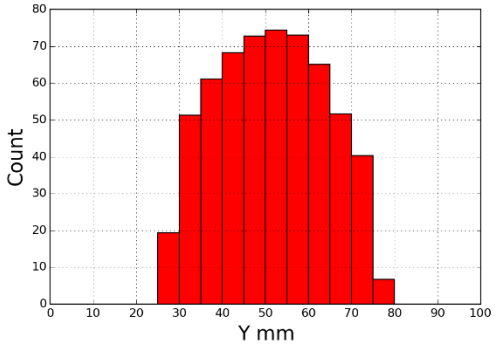

Figure A. 2228: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 Matched Only Droplets for .LA Image

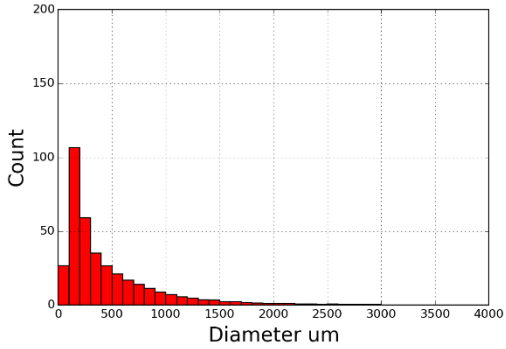

Figure A. 2231: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

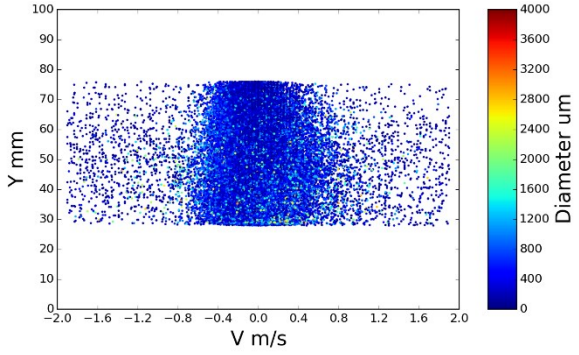

Figure A. 2234: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

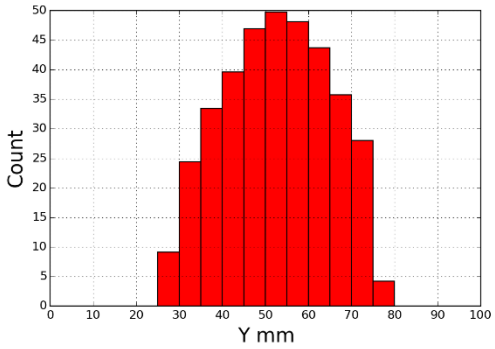

Figure A. 2232: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

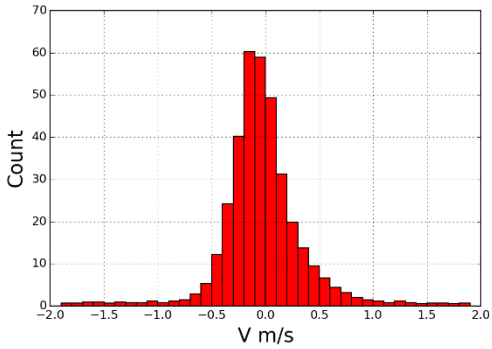

Figure A. 2235: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

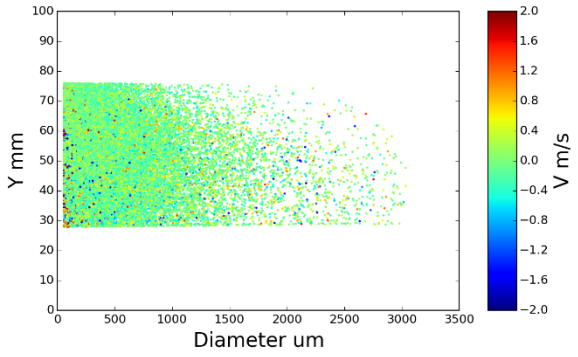

Figure A. 2233: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 Matched Only Droplets for .LB Image

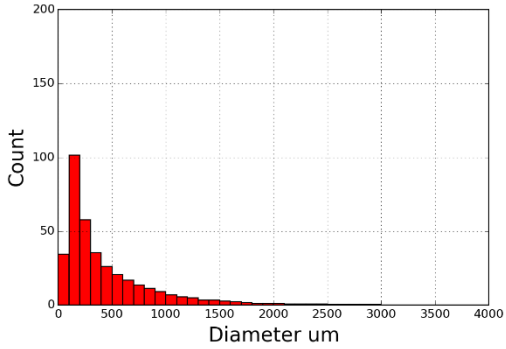

Figure A. 2236: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

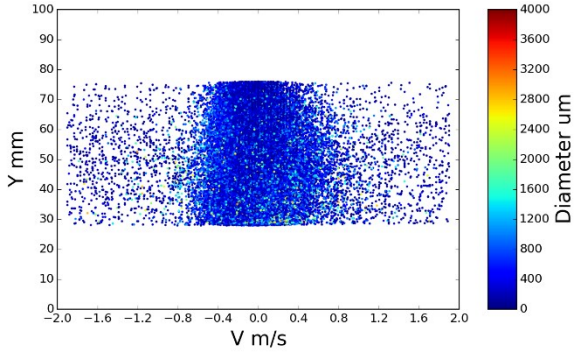

Figure A. 2239: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

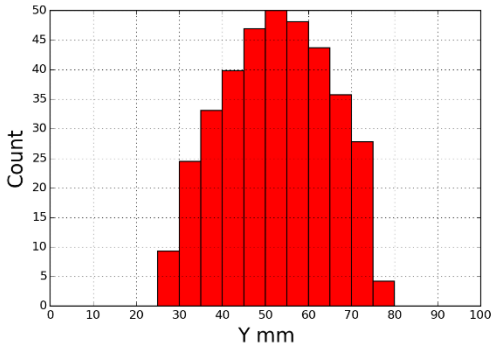

Figure A. 2237: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

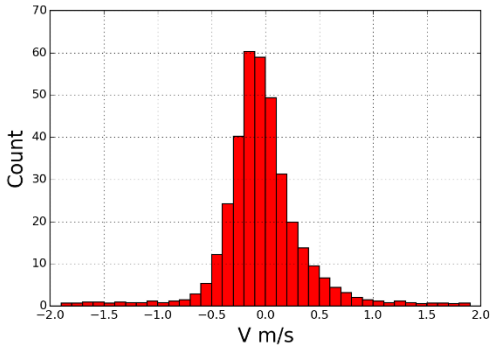

Figure A. 2240: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

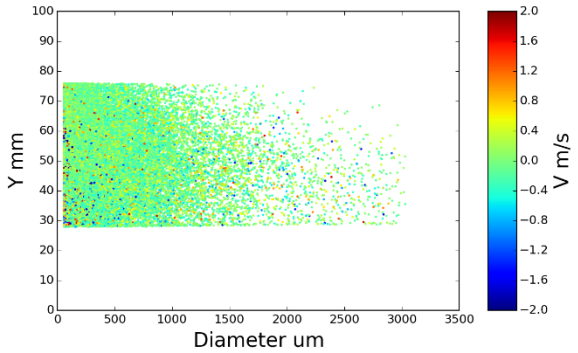

Figure A. 2238: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.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	102.53	107.35	57.1	3022	500.6	506.3	57.1	3037	473.2	498.3
40-60mm	243.6	251.54	57.1	3037	398.4	437.2	57.1	3037	394.2	439.6
60-80mm	145.03	150.35	57.1	2825	297.6	323.8	57.1	3038	292.2	321.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	493.43	511.29	57.1	3037	390.0	429.4	57.1	3038	380.8	427.1
			Height A (mm)				Height B (mm)			
Highest Particle			75.9600				75.9600			
Lowest Particle			27.9786				27.9786			

Table A. 237: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	47.16	57.1	3022	641.5	571.2	57.1	3037	633.1	568.9	-1.900	1.900	-0.040	0.410	-1.900	1.900	-0.030	0.490
40-60mm	150.09	57.1	3036	496.4	477.3	57.1	2982	492.0	472.7	-1.900	1.900	-0.060	0.340	-1.900	1.900	-0.030	0.420
60-80mm	97.9	57.1	2805	362.0	355.2	57.1	2871	359.0	353.3	-1.900	1.900	-0.070	0.310	-1.900	1.900	-0.050	0.350
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	295.15	57.1	3036	475.0	467.7	57.1	3037	470.5	464.1	-1.900	1.900	-0.060	0.350	-1.900	1.900	-0.040	0.410

Table A. 238: Matched Droplet Info

A.8.1.1 All Droplets for .LA Image

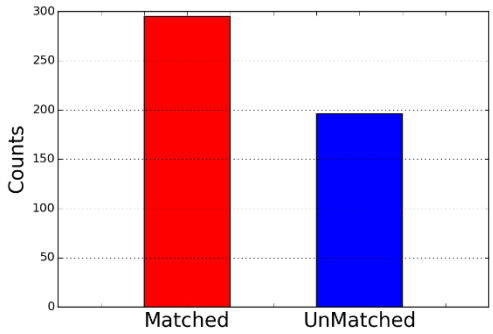

Figure A. 2241: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

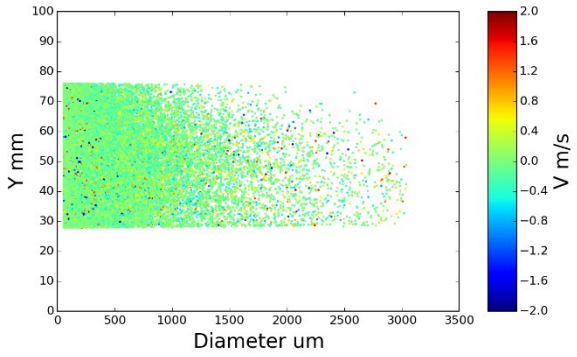

Figure A. 2244: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

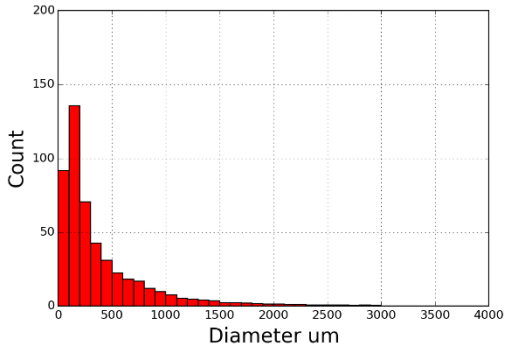

Figure A. 2242: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

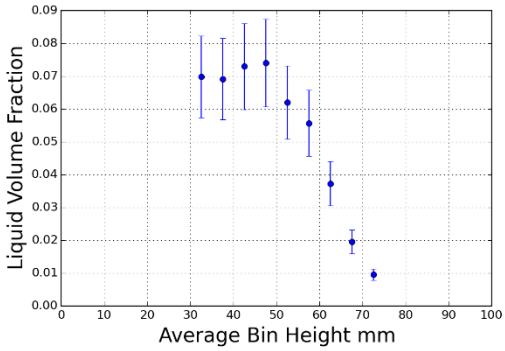

Figure A. 2245: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

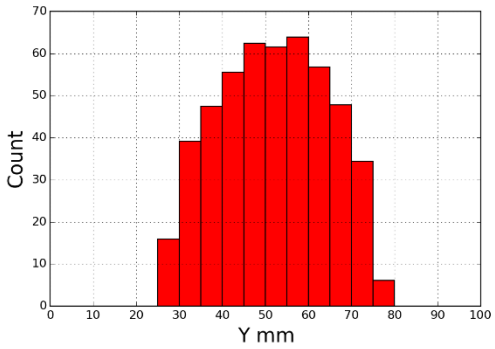

Figure A. 2243: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 All Droplets for .LB Image

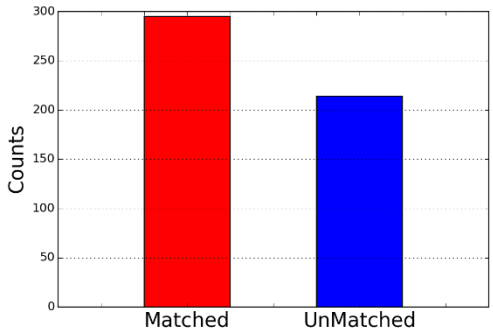

Figure A. 2246: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

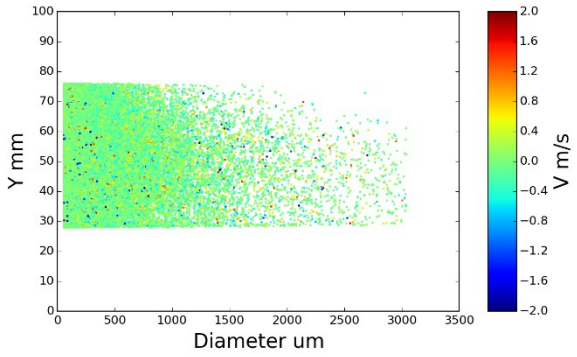

Figure A. 2249: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

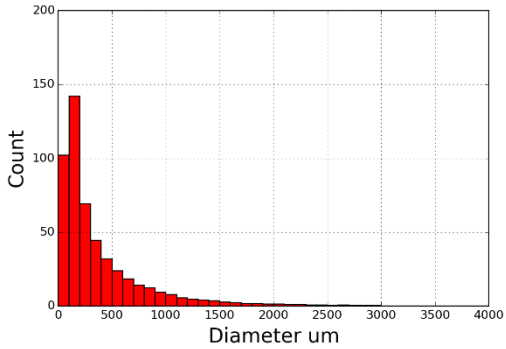

Figure A. 2247: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

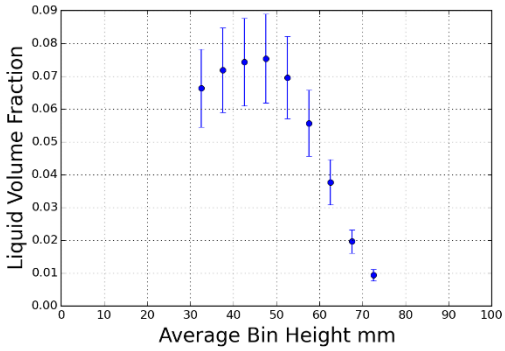

Figure A. 2250: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

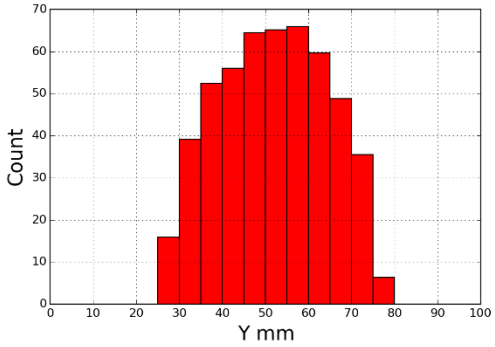

Figure A. 2248: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 Matched Only Droplets for .LA Image

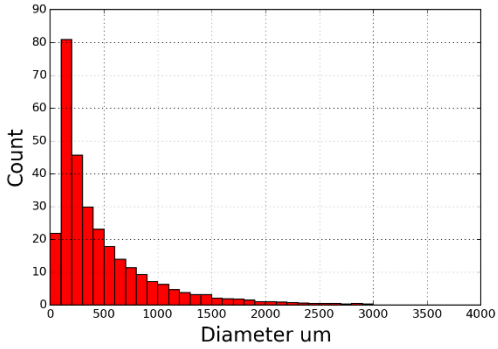

Figure A. 2251: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

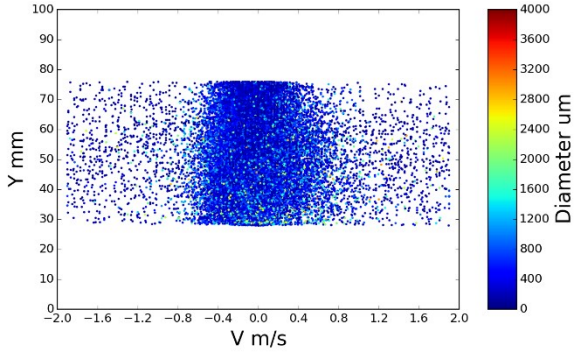

Figure A. 2254: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

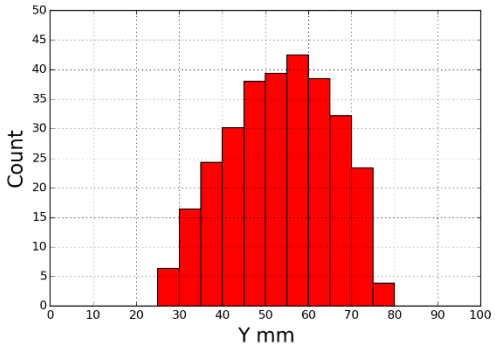

Figure A. 2252: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

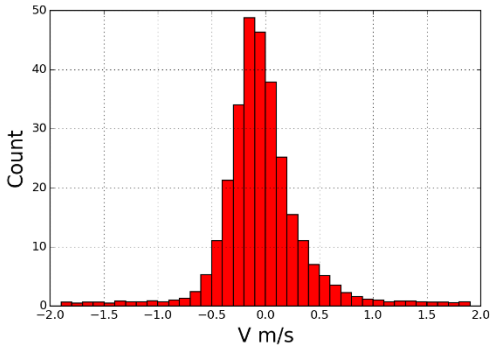

Figure A. 2255: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

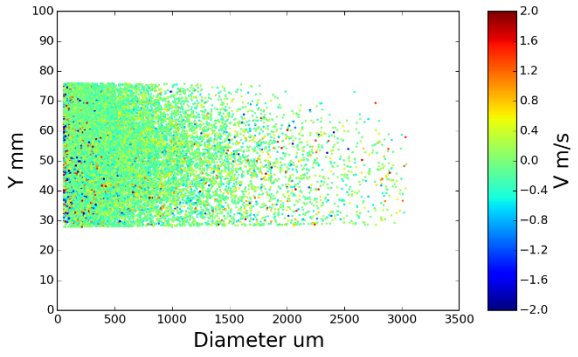

Figure A. 2253: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 Matched Only Droplets for .LB Image

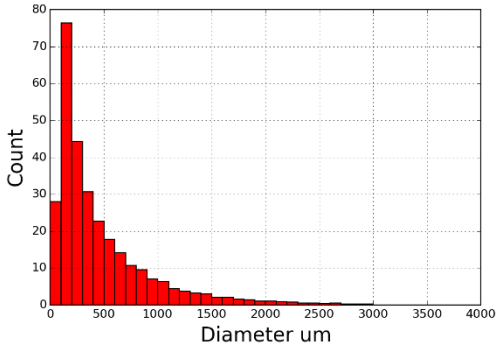

Figure A. 2256: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

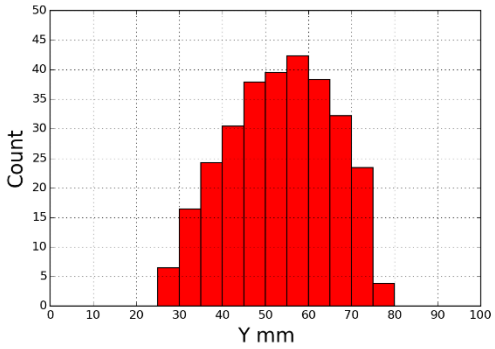

Figure A. 2257: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

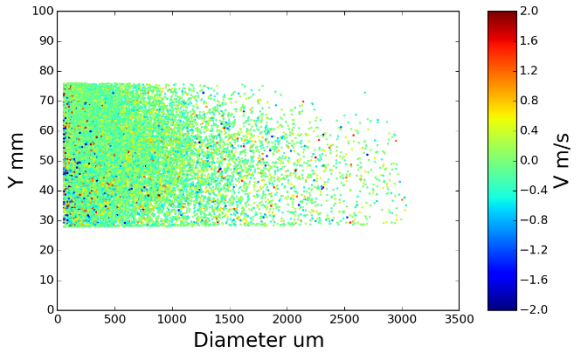

Figure A. 2258: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

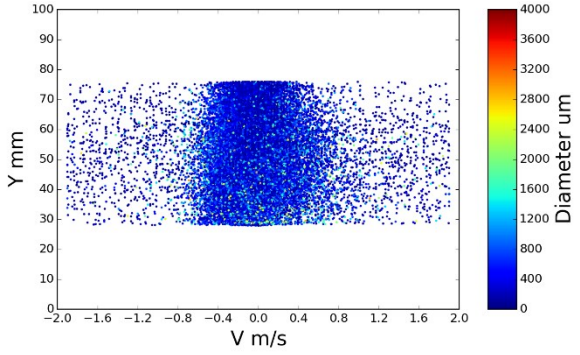

Figure A. 2259: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

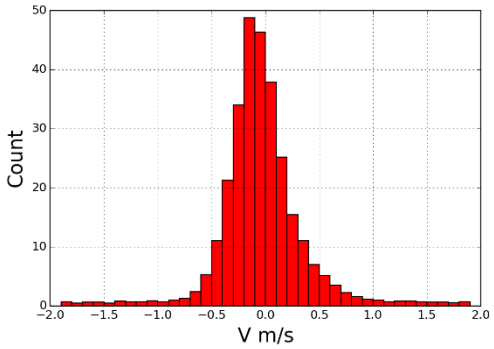

Figure A. 2260: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 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	88.19	88.99	57.1	3030	526.5	514.9	57.1	3037	483.5	501.7
40-60mm	224.2	230.38	57.1	3035	409.8	440.4	57.1	3035	397.4	438.6
60-80mm	126.98	134.1	57.1	3023	302.3	328.2	57.1	3032	293.8	325.6
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	442.13	456.13	57.1	3035	402.2	435.1	57.1	3037	383.6	427.7
			Height A (mm)				Height B (mm)			
Highest Particle			75.9600				75.9600			
Lowest Particle			27.9786				27.9786			

Table A. 239: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	33.96	57.1	3030	687.6	599.8	57.1	3034	675.4	591.1	-1.900	1.900	-0.030	0.460	-1.900	1.900	-0.010	0.540
40-60mm	129.35	57.1	3024	518.9	486.6	57.1	3035	512.3	481.4	-1.900	1.900	-0.040	0.370	-1.900	1.900	0.010	0.440
60-80mm	81.73	57.1	3023	374.2	360.5	57.1	3032	370.0	359.2	-1.900	1.900	-0.070	0.310	-1.900	1.900	-0.020	0.370
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	245.04	57.1	3030	494.0	478.0	57.1	3035	487.4	472.8	-1.900	1.900	-0.050	0.370	-1.900	1.900	-0.010	0.440

Table A. 240: Matched Droplet Info

A.8.1.1 All Droplets for .LA Image

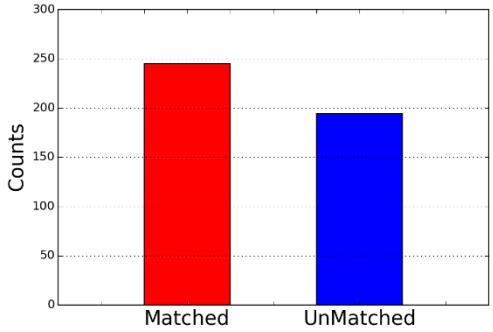

Figure A. 2261: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

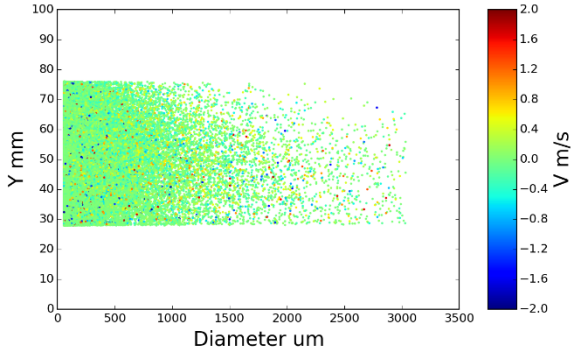

Figure A. 2264: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

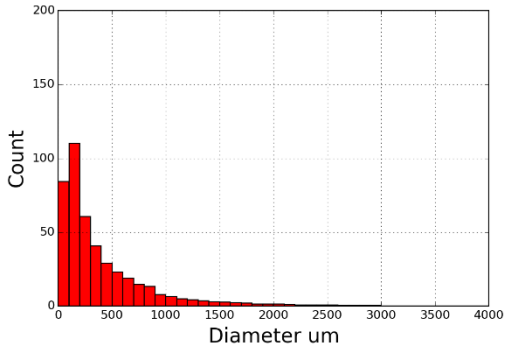

Figure A. 2262: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

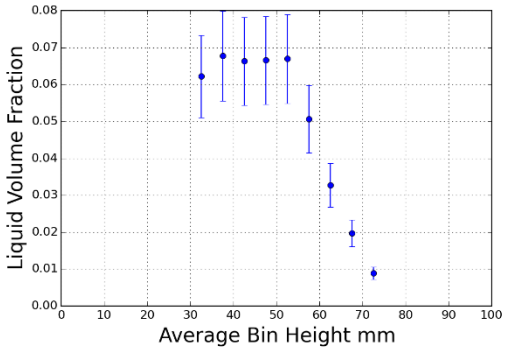

Figure A. 2265: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

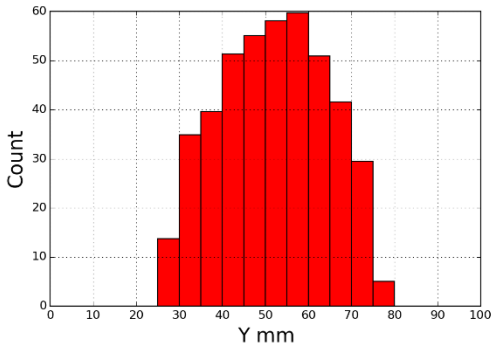

Figure A. 2263: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 All Droplets for .LB Image

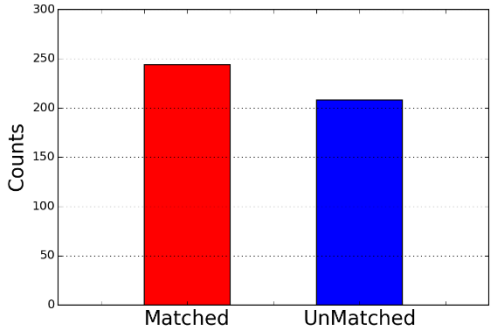

Figure A. 2266: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

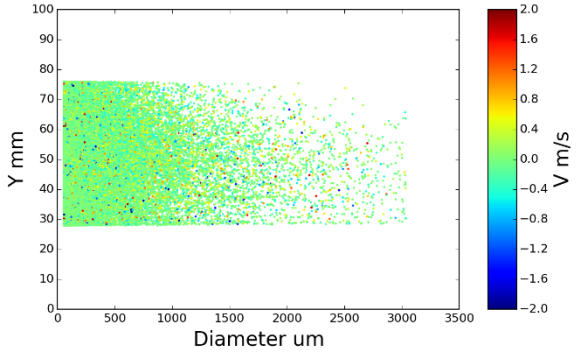

Figure A. 2269: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

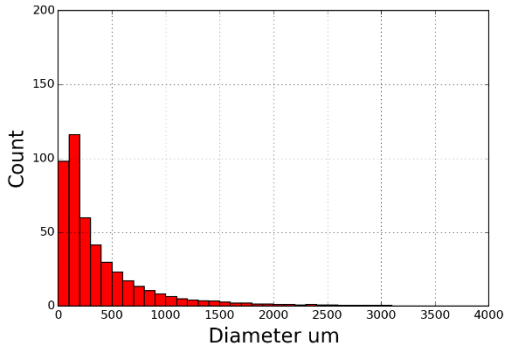

Figure A. 2267: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

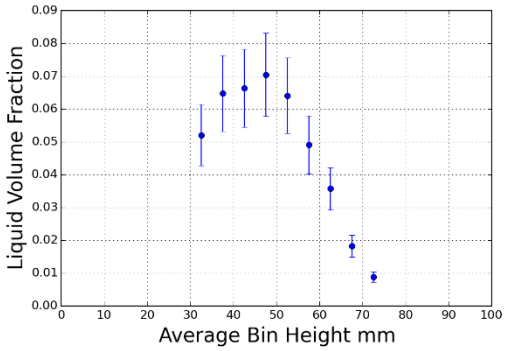

Figure A. 2270: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

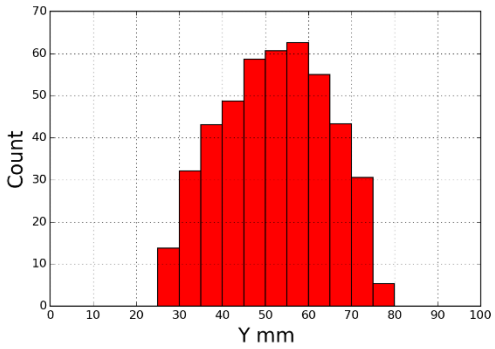

Figure A. 2268: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 Matched Only Droplets for .LA Image

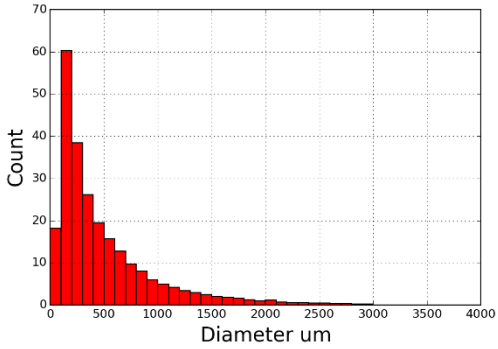

Figure A. 2271: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

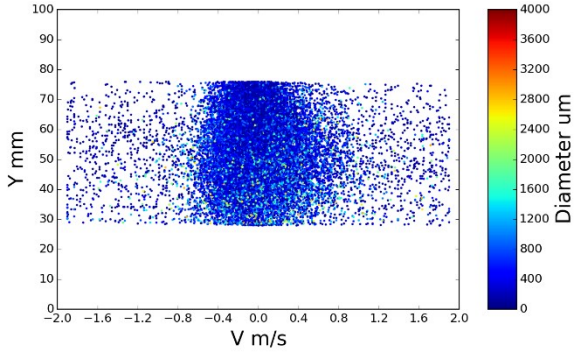

Figure A. 2274: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

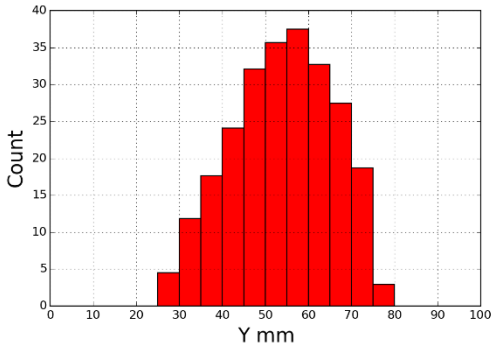

Figure A. 2272: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

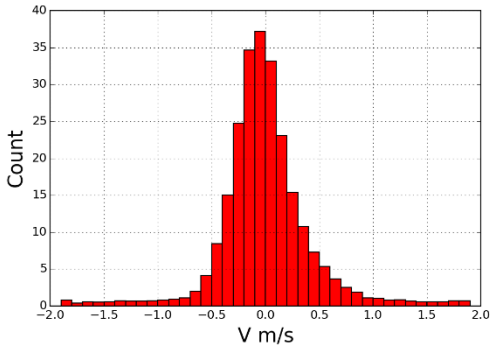

Figure A. 2275: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

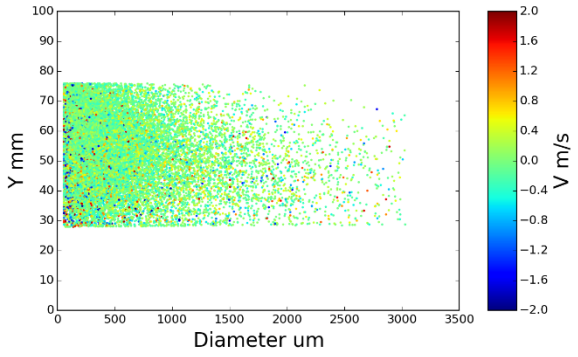

Figure A. 2273: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 Matched Only Droplets for .LB Image

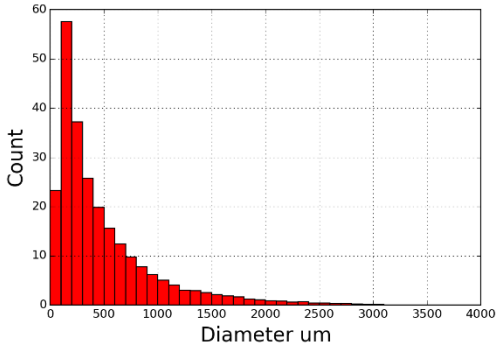

Figure A. 2276: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

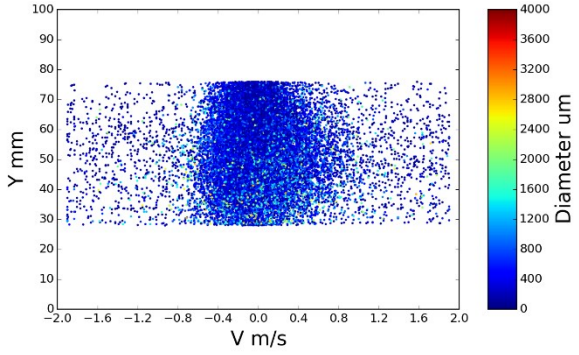

Figure A. 2279: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

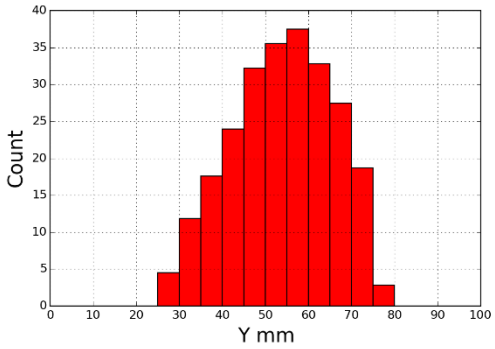

Figure A. 2277: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

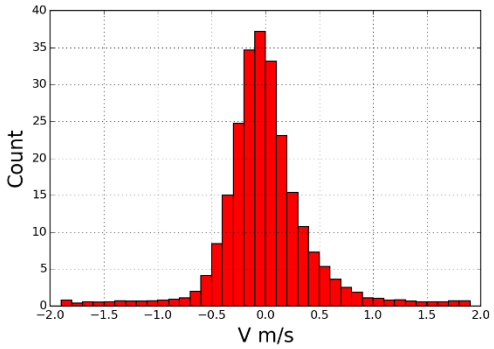

Figure A. 2280: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

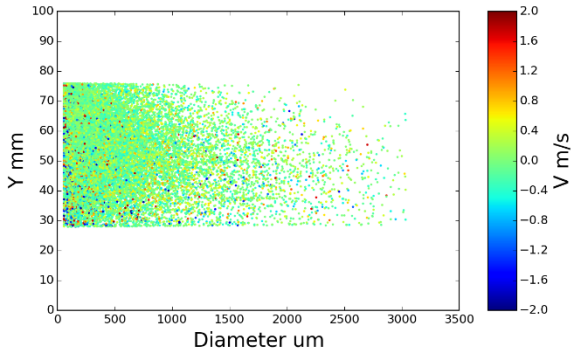

Figure A. 2278: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 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	72.96	70.2	57.1	3037	488.4	531.1	57.1	3035	476.8	539.7
40-60mm	188.67	198.2	57.1	3038	409.4	449.2	57.1	3035	389.9	447.6
60-80mm	115.49	120.86	57.1	2962	306.2	329.8	57.1	2987	296.8	325.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	379.16	390.22	57.1	3038	393.1	439.3	57.1	3035	376.7	437.3
			Height A (mm)				Height B (mm)			
Highest Particle			75.9600				75.9473			
Lowest Particle			27.9786				27.9786			

Table A. 241: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	25.79	57.1	3034	736.9	654.4	57.1	3028	725.6	656.3	-1.900	1.900	-0.040	0.510	-1.900	1.900	0.010	0.570
40-60mm	104.56	57.1	3038	530.7	500.1	57.1	3034	522.5	494.6	-1.900	1.900	-0.050	0.380	-1.900	1.900	0.010	0.470
60-80mm	72.57	57.1	2919	381.9	362.8	57.1	2945	375.9	357.6	-1.900	1.900	-0.070	0.340	-1.900	1.890	-0.010	0.400
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	202.92	57.1	3038	503.7	492.9	57.1	3034	495.9	488.6	-1.900	1.900	-0.060	0.390	-1.900	1.900	0.000	0.460

Table A. 242: Matched Droplet Info

A.8.1.1 All Droplets for .LA Image

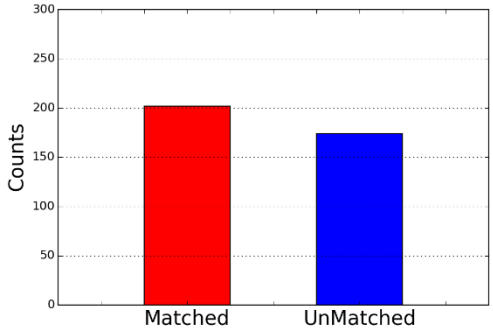

Figure A. 2281: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

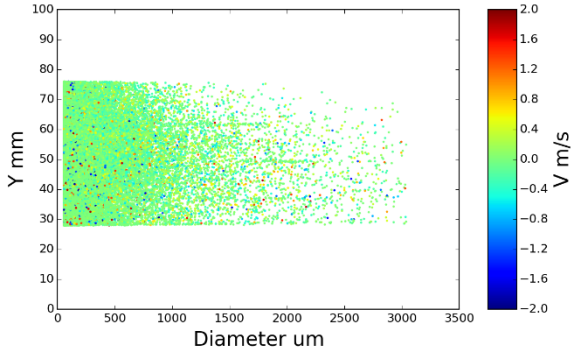

Figure A. 2284: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

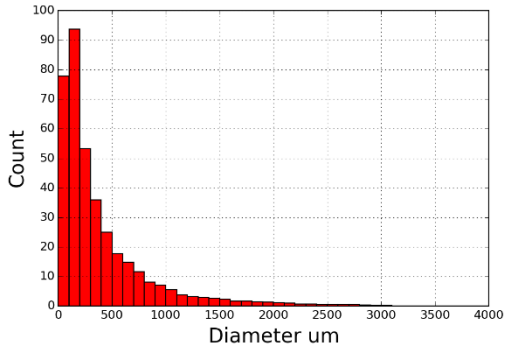

Figure A. 2282: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

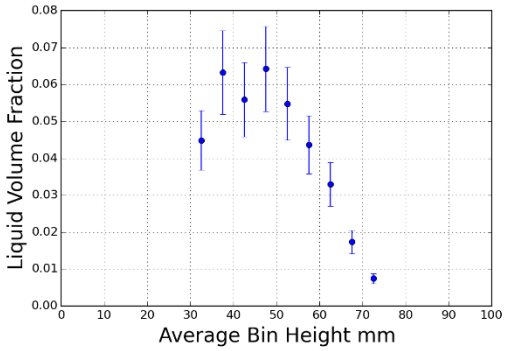

Figure A. 2285: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

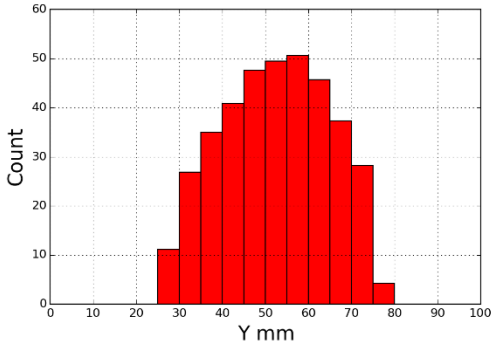

Figure A. 2283: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 All Droplets for .LB Image

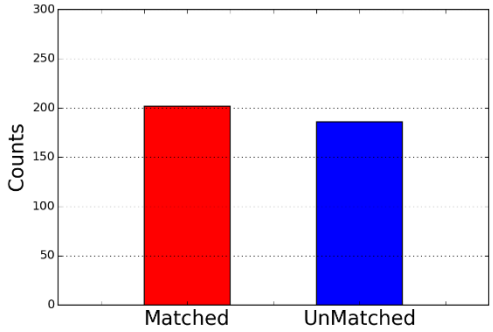

Figure A. 2286: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

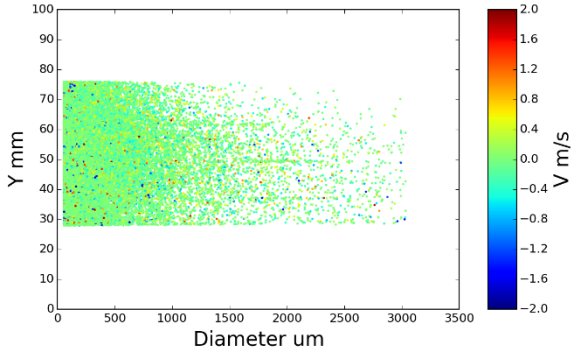

Figure A. 2289: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

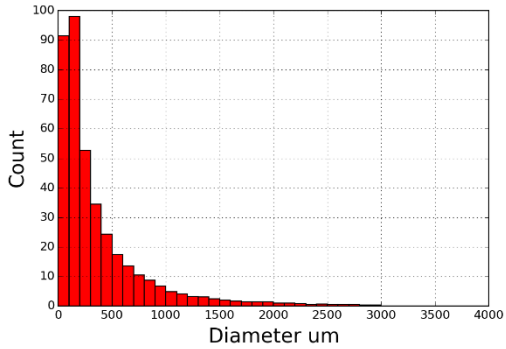

Figure A. 2287: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

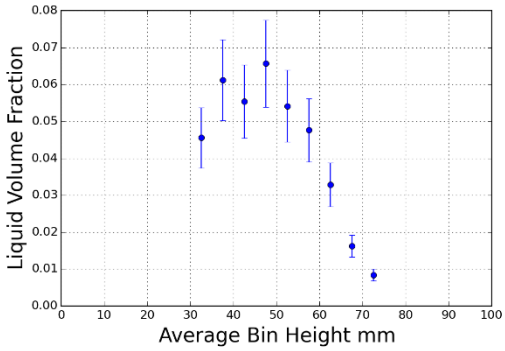

Figure A. 2290: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

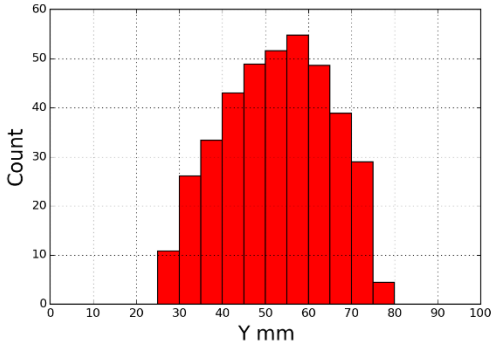

Figure A. 2288: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 Matched Only Droplets for .LA Image

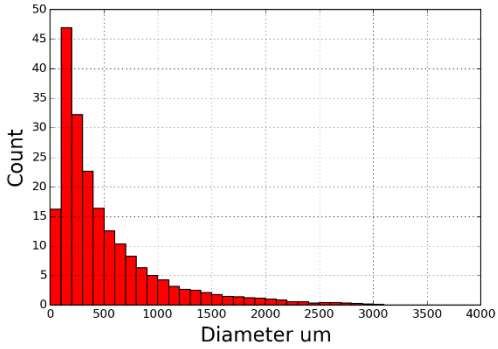

Figure A. 2291: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

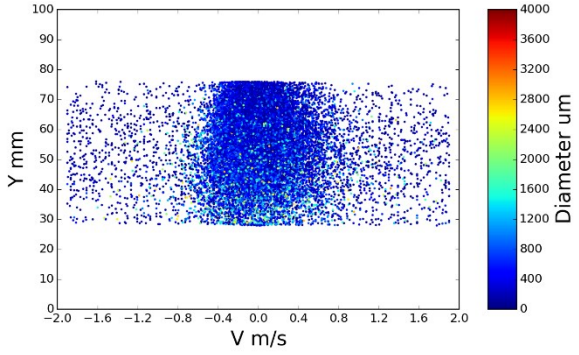

Figure A. 2294: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

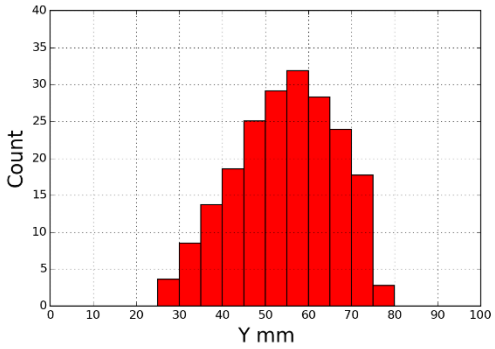

Figure A. 2292: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

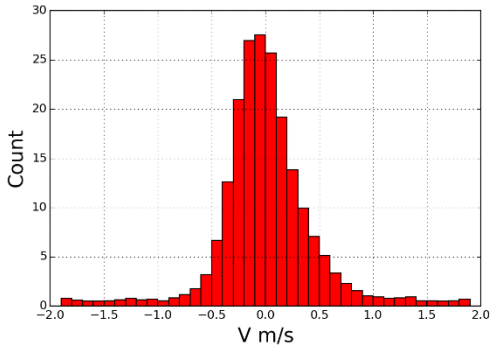

Figure A. 2295: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

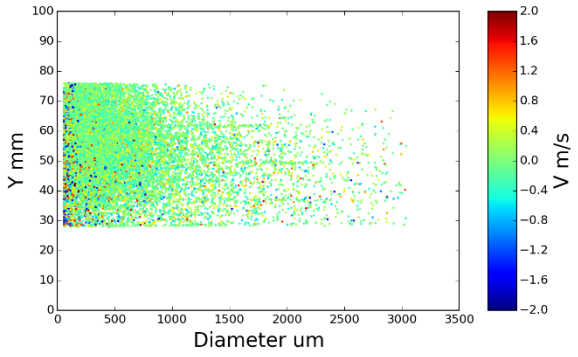

Figure A. 2293: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.1.1 Matched Only Droplets for .LB Image

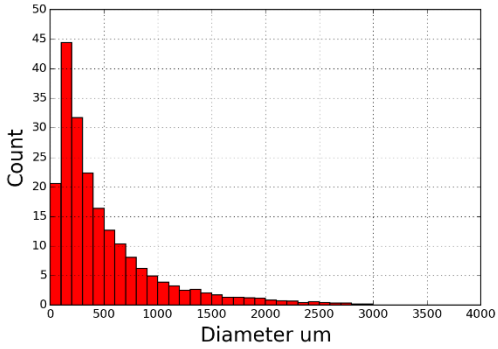

Figure A. 2296: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

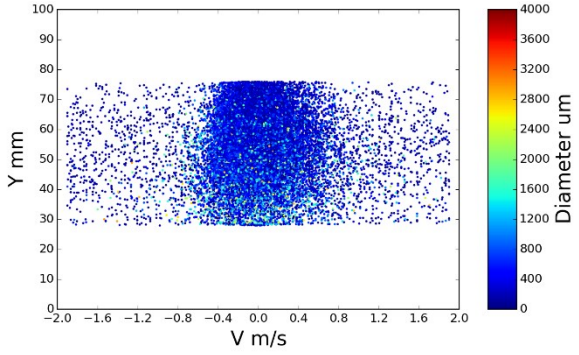

Figure A. 2299: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

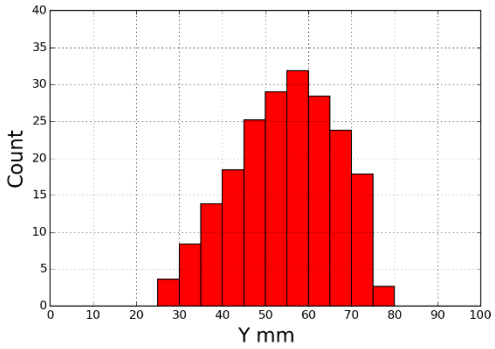

Figure A. 2297: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

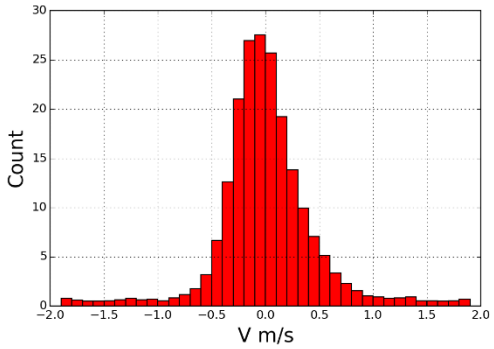

Figure A. 2300: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

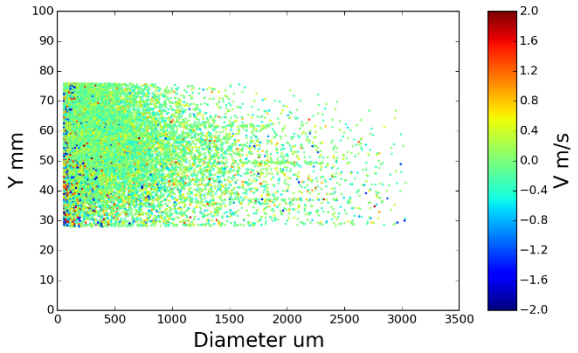

Figure A. 2298: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 Lens 50mm Mag 0_13x

A.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	76.82	77.07	128.6	3402	603.7	526.1	128.6	3401	609.5	538.6
40-60mm	177.81	178.1	128.6	3400	552.0	460.5	128.6	3410	547.0	458.2
60-80mm	92.98	92.68	128.6	2978	443.5	327.9	128.6	3234	444.3	332.7
80-100mm	21.98	21.98	128.6	1942	362.6	236.3	128.6	2089	363.6	237.2
All	369.59	369.83	128.6	3402	524.2	441.3	128.6	3410	523.4	444.4
			Height A (mm)				Height B (mm)			
Highest Particle			99.9714				99.9714			
Lowest Particle			30.0854				30.0854			

Table A. 243: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	40.5	128.6	3402	714.8	574.0	128.6	3401	698.6	561.8	-1.900	1.900	-0.070	0.620	-1.900	1.900	-0.010	0.670
40-60mm	104.31	128.6	3368	639.2	487.8	128.6	3410	629.7	480.9	-1.900	1.900	-0.090	0.570	-1.900	1.900	-0.050	0.620
60-80mm	58.18	128.6	2978	520.9	349.6	128.6	3223	515.1	349.6	-1.900	1.900	-0.070	0.470	-1.900	1.900	-0.050	0.520
80-100mm	14.88	128.6	1942	422.0	250.6	128.6	1872	419.5	249.7	-1.900	1.900	-0.100	0.330	-1.900	1.900	-0.060	0.380
All	217.87	128.6	3402	606.9	468.1	128.6	3410	597.7	461.3	-1.900	1.900	-0.080	0.540	-1.900	1.900	-0.050	0.590

Table A. 244: Matched Droplet Info

A.8.1.2 All Droplets for .LA Image

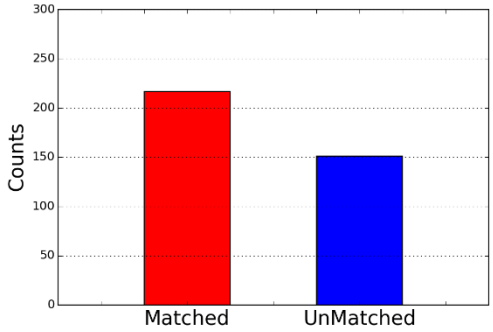

Figure A. 2301: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

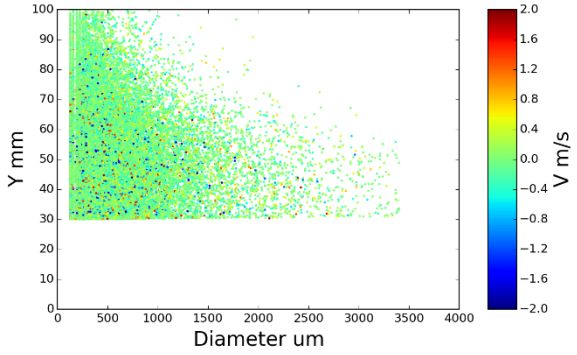

Figure A. 2304: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

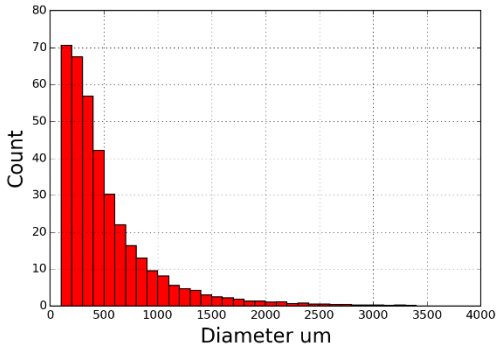

Figure A. 2302: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

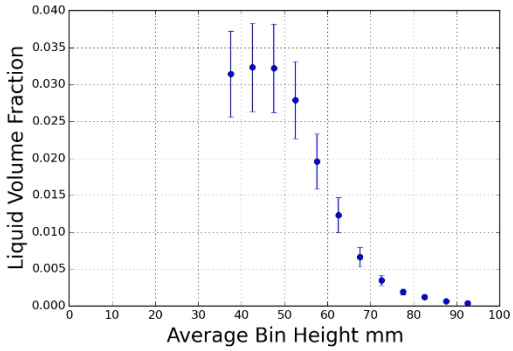

Figure A. 2305: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

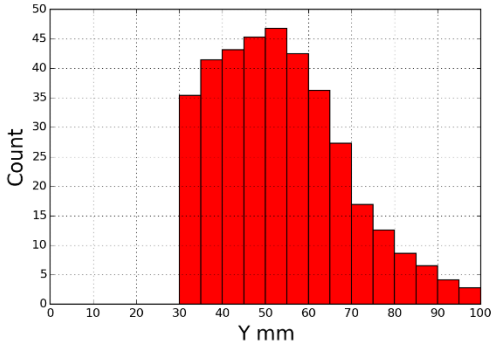

Figure A. 2303: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 All Droplets for .LB Image

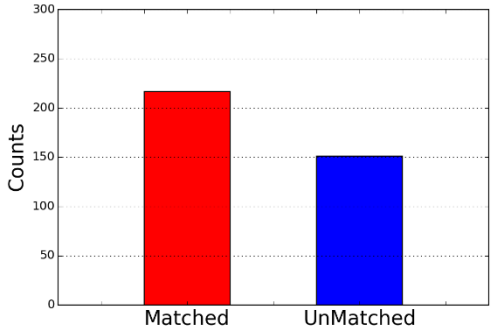

Figure A. 2306: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

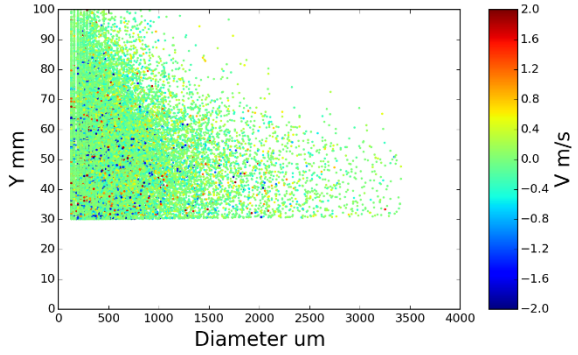

Figure A. 2309: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

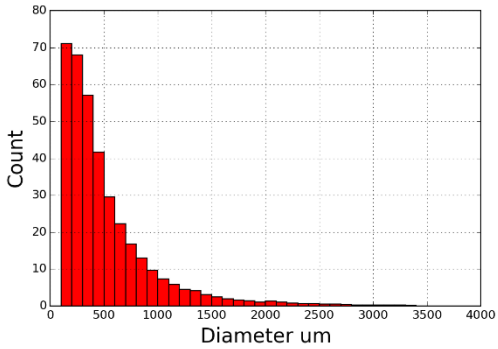

Figure A. 2307: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

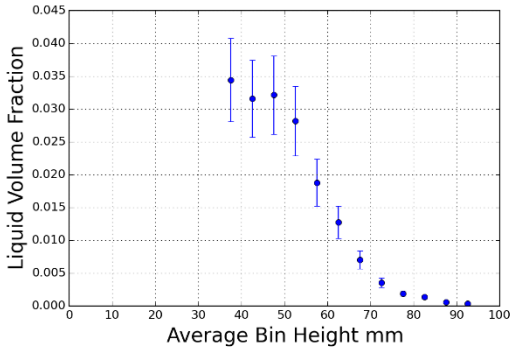

Figure A. 2310: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

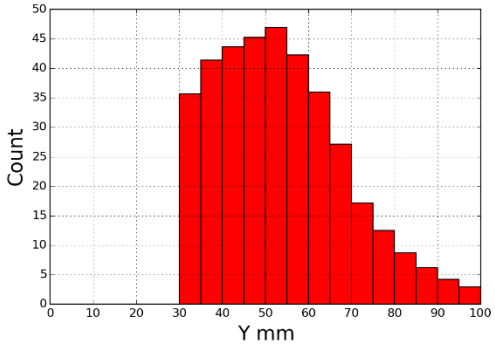

Figure A. 2308: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 Matched Only Droplets for .LA Image

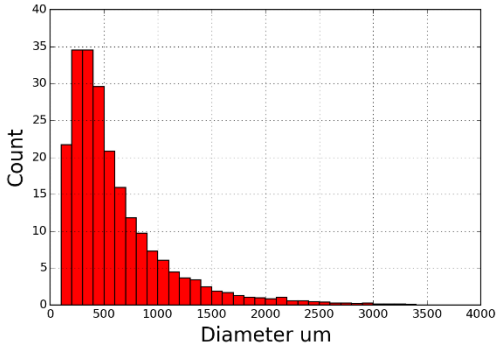

Figure A. 2311: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

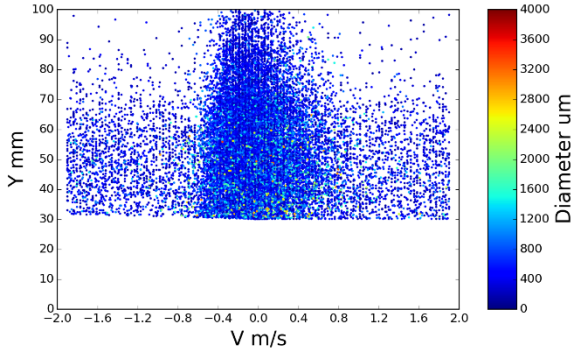

Figure A. 2314: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

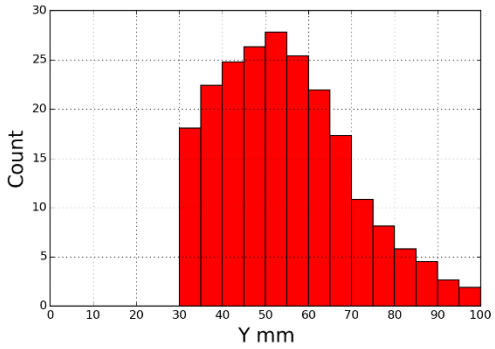

Figure A. 2312: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

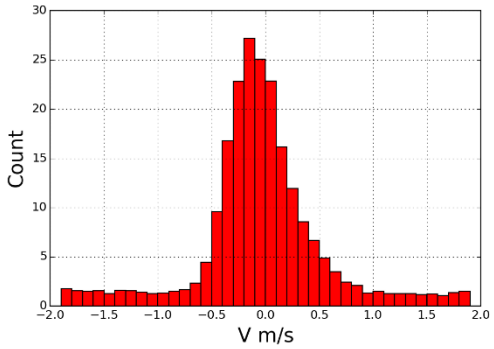

Figure A. 2315: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

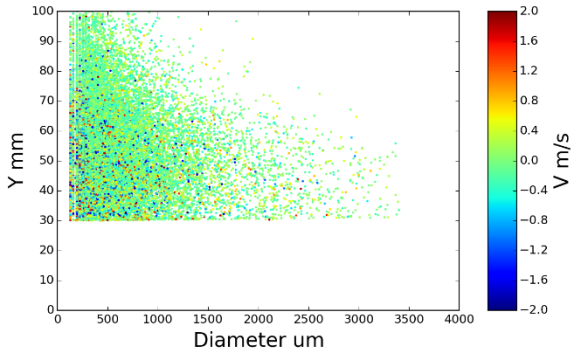

Figure A. 2313: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 Matched Only Droplets for .LB Image

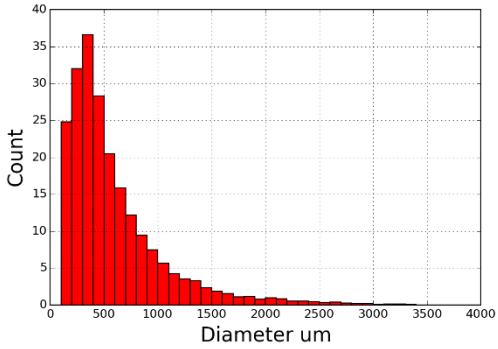

Figure A. 2316: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

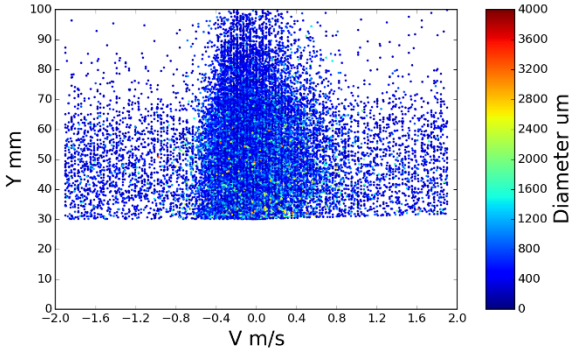

Figure A. 2319: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

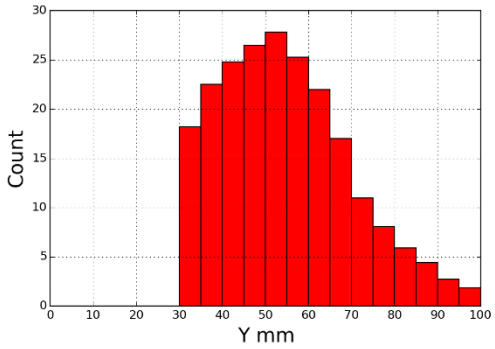

Figure A. 2317: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

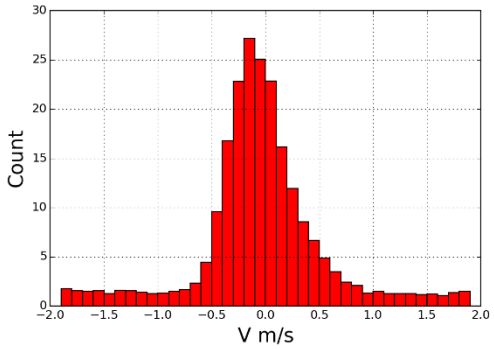

Figure A. 2320: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

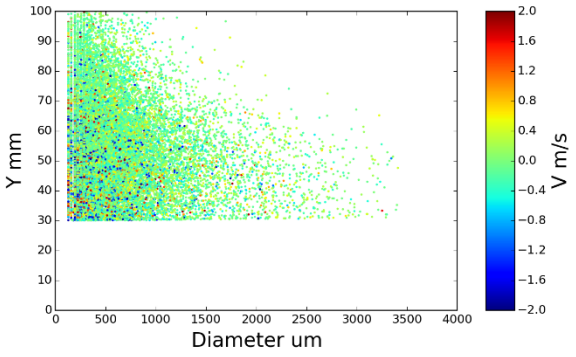

Figure A. 2318: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.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	70.09	71.66	128.6	3412	665.8	555.5	128.6	3406	660.6	557.1
40-60mm	170.41	169.63	128.6	3412	594.6	480.4	128.6	3416	591.6	477.3
60-80mm	77.33	76.06	128.6	3418	484.1	348.3	128.6	3406	487.5	347.1
80-100mm	15.64	15.31	128.6	2199	386.4	246.2	128.6	1893	388.2	242.7
All	333.47	332.66	128.6	3418	574.2	468.3	128.6	3416	573.3	467.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.9714				99.9429			
Lowest Particle			30.0854				30.0854			

Table A. 245: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	37.32	128.6	3383	795.6	601.1	128.6	3406	778.9	590.4	-1.900	1.900	-0.090	0.600	-1.890	1.900	-0.010	0.640
40-60mm	101.14	128.6	3404	693.6	503.6	128.6	3328	681.4	496.4	-1.900	1.900	-0.080	0.560	-1.900	1.900	-0.060	0.610
60-80mm	49.54	128.6	3418	567.5	362.8	128.6	3280	562.2	361.7	-1.900	1.900	-0.070	0.420	-1.900	1.900	-0.070	0.490
80-100mm	10.22	128.6	2199	462.9	260.4	128.6	1893	454.2	257.1	-1.870	1.860	-0.100	0.250	-1.800	1.830	-0.100	0.340
All	198.22	128.6	3418	669.4	491.9	128.6	3406	658.6	485.0	-1.900	1.900	-0.080	0.520	-1.900	1.900	-0.060	0.570

Table A. 246: Matched Droplet Info

A.8.1.2 All Droplets for .LA Image

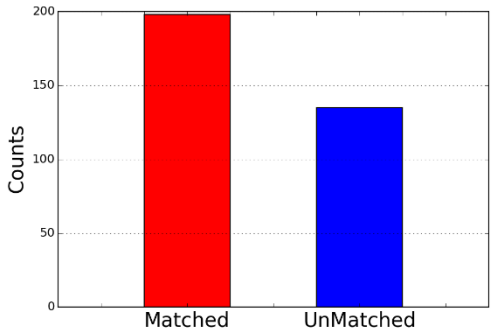

Figure A. 2321: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

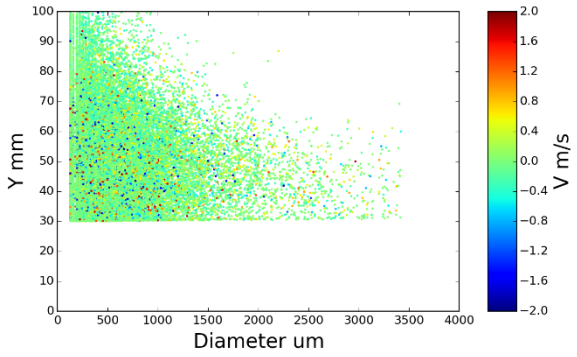

Figure A. 2324: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

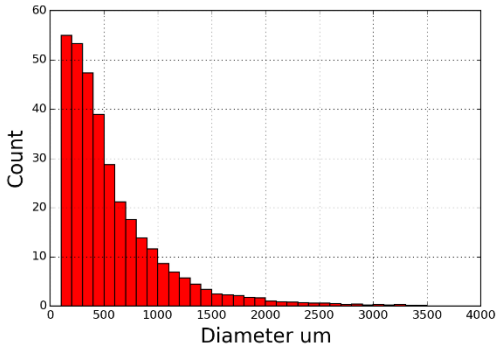

Figure A. 2322: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

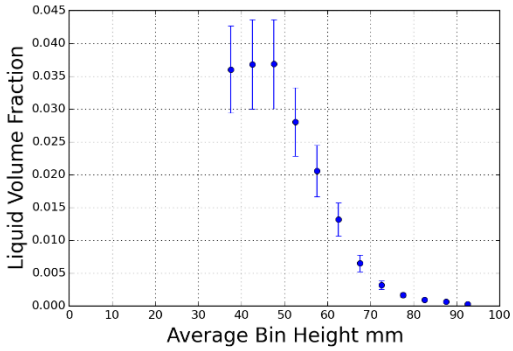

Figure A. 2325: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

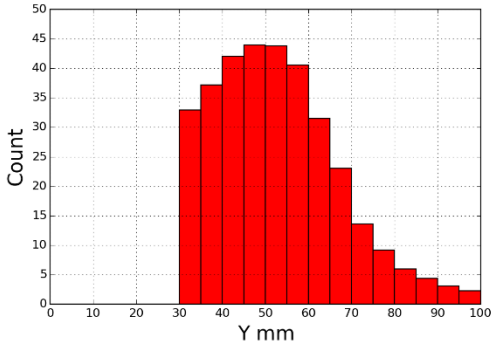

Figure A. 2323: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 All Droplets for .LB Image

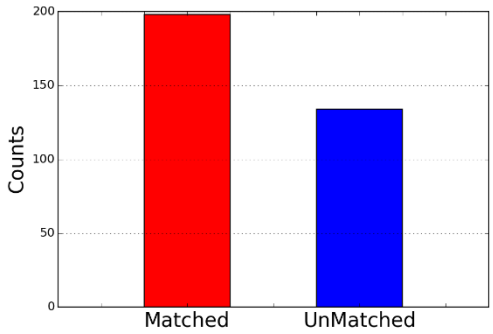

Figure A. 2326: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

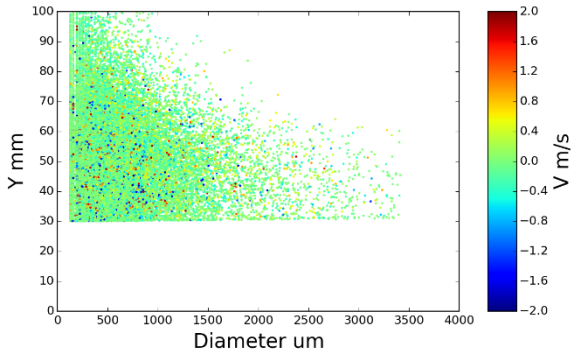

Figure A. 2329: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

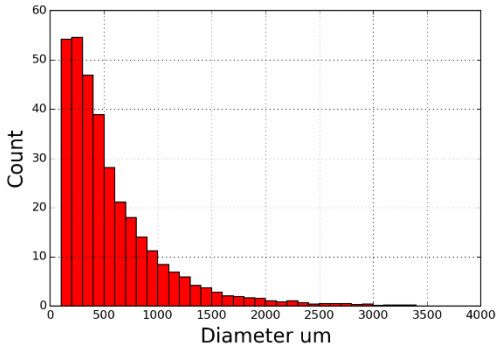

Figure A. 2327: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

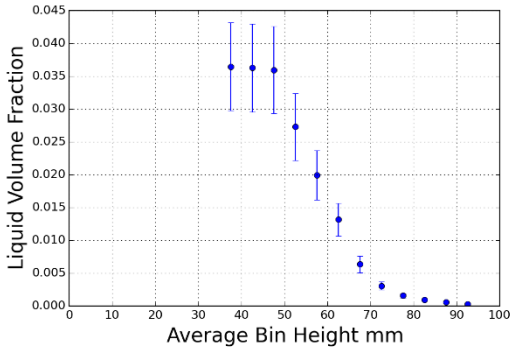

Figure A. 2330: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

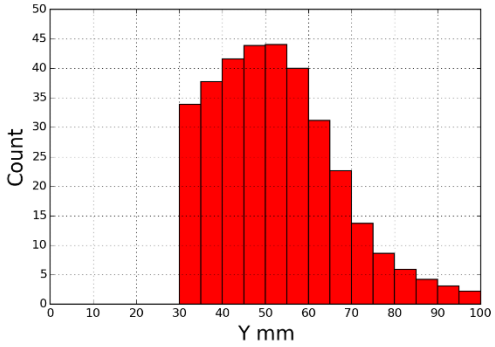

Figure A. 2328: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 Matched Only Droplets for .LA Image

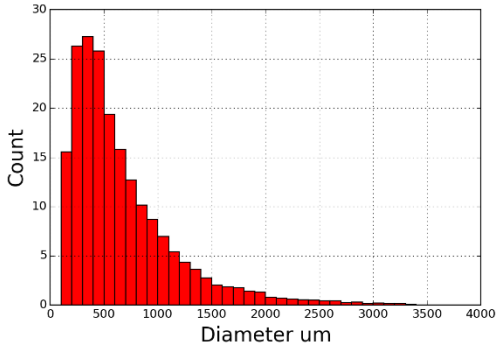

Figure A. 2331: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

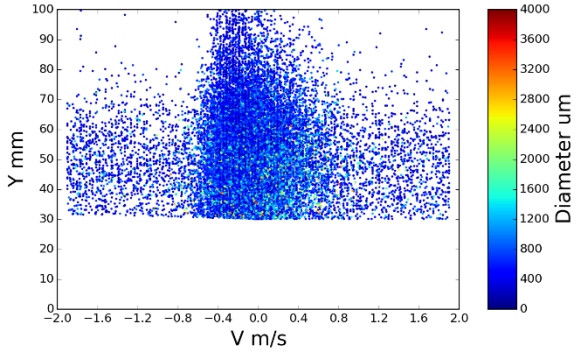

Figure A. 2334: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

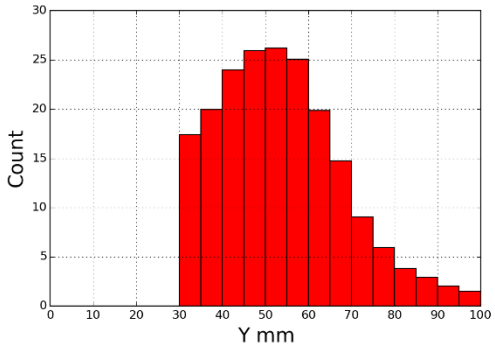

Figure A. 2332: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

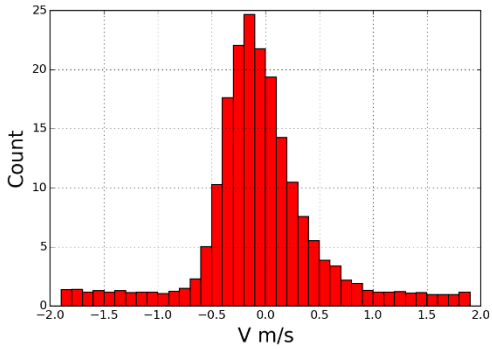

Figure A. 2335: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

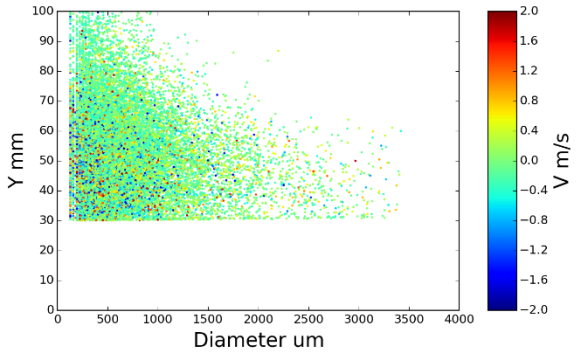

Figure A. 2333: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 Matched Only Droplets for .LB Image

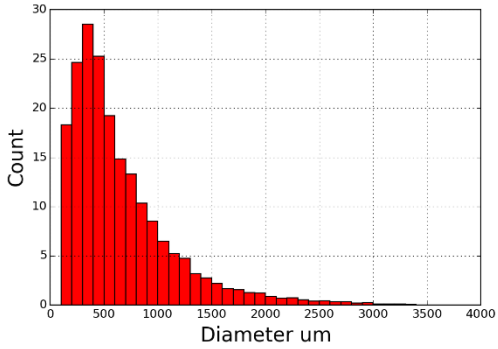

Figure A. 2336: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

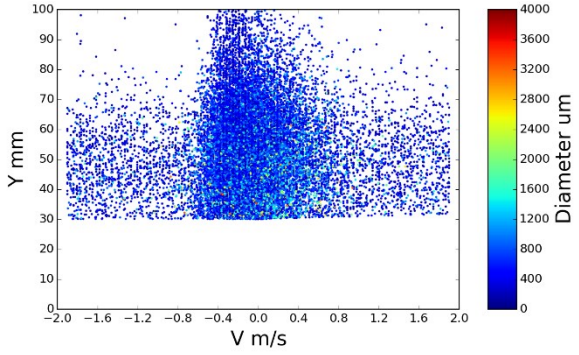

Figure A. 2339: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

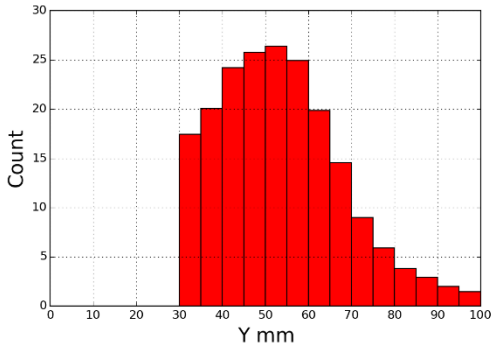

Figure A. 2337: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

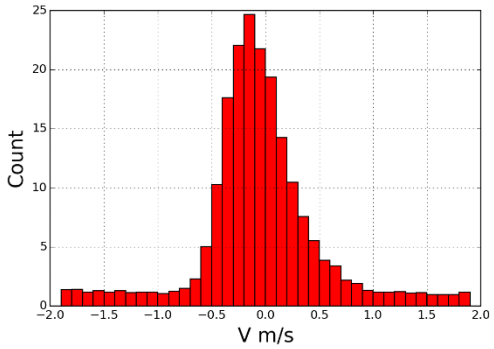

Figure A. 2340: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

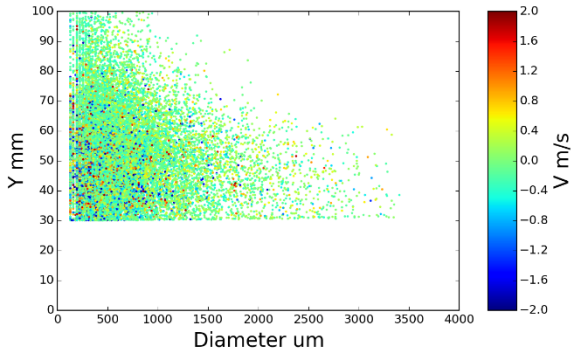

Figure A. 2338: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.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	59.83	59.31	128.6	3406	728.4	617.3	128.6	3409	723.4	618.6
40-60mm	151.3	152.64	128.6	3398	632.5	523.1	128.6	3416	629.6	518.3
60-80mm	75.42	76.26	128.6	3362	529.1	389.6	128.6	3345	530.1	393.9
80-100mm	18.22	17.95	128.6	2274	436.4	288.7	128.6	2281	437.1	290.3
All	304.77	306.17	128.6	3406	614.0	509.5	128.6	3416	611.7	507.6
			Height A (mm)				Height B (mm)			
Highest Particle			99.9714				99.9999			
Lowest Particle			30.0854				30.0854			

Table A. 247: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	30.34	128.6	3406	880.6	664.6	128.6	3399	862.4	650.2	-1.900	1.900	-0.070	0.630	-1.900	1.900	-0.000	0.660
40-60mm	88.86	128.6	3364	741.9	551.7	128.6	3416	728.1	543.8	-1.900	1.900	-0.080	0.550	-1.900	1.900	-0.040	0.620
60-80mm	48.69	128.6	3362	620.8	414.0	128.6	3345	617.3	413.6	-1.900	1.900	-0.090	0.410	-1.900	1.900	-0.070	0.480
80-100mm	12.37	128.6	2274	512.2	302.7	128.6	2281	507.3	305.5	-1.840	1.900	-0.110	0.250	-1.900	1.870	-0.100	0.310
All	180.26	128.6	3406	716.8	535.9	128.6	3416	705.9	528.2	-1.900	1.900	-0.080	0.520	-1.900	1.900	-0.050	0.580

Table A. 248: Matched Droplet Info

A.8.1.2 All Droplets for .LA Image

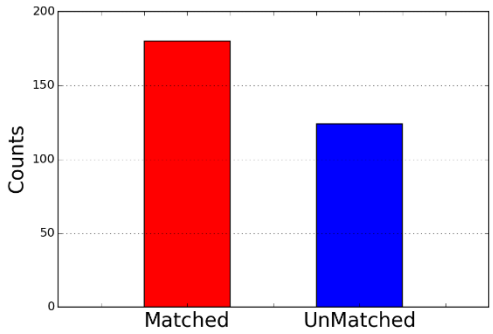

Figure A. 2341: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

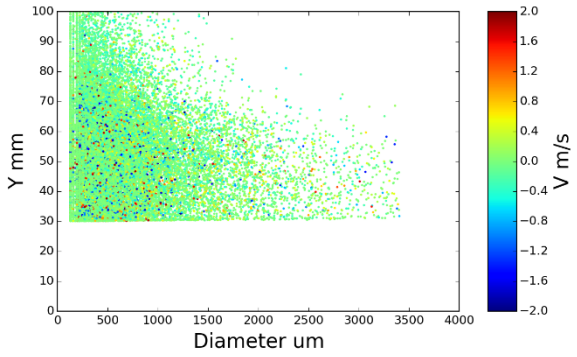

Figure A. 2344: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

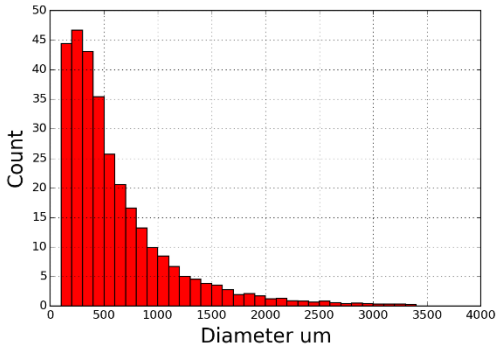

Figure A. 2342: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

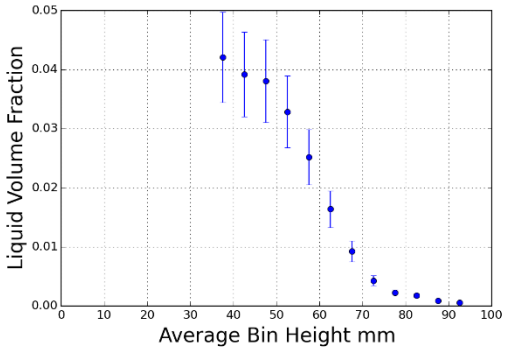

Figure A. 2345: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

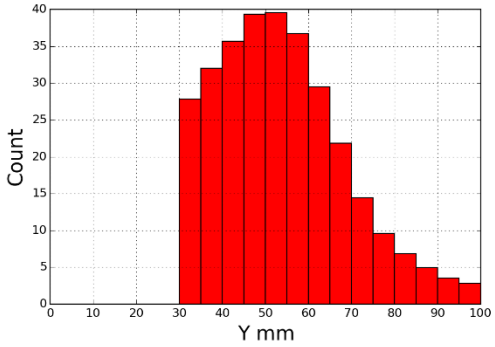

Figure A. 2343: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 All Droplets for .LB Image

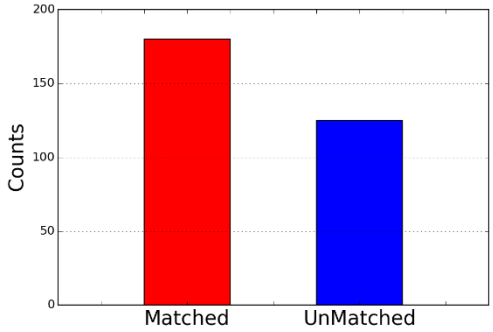

Figure A. 2346: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

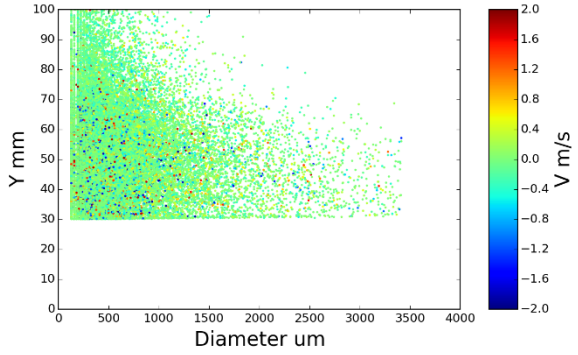

Figure A. 2349: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

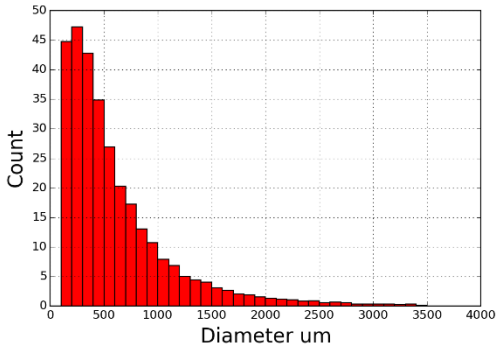

Figure A. 2347: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

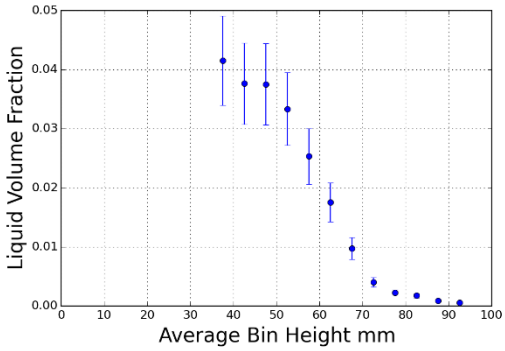

Figure A. 2350: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

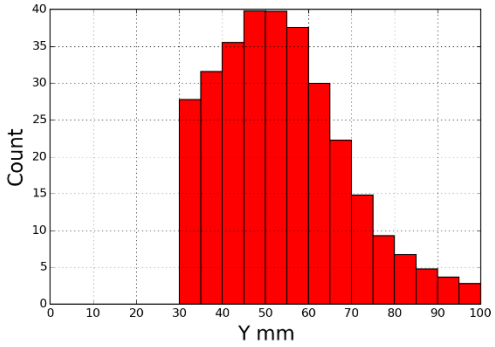

Figure A. 2348: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 Matched Only Droplets for .LA Image

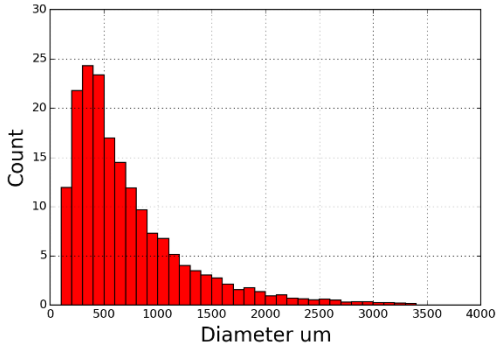

Figure A. 2351: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

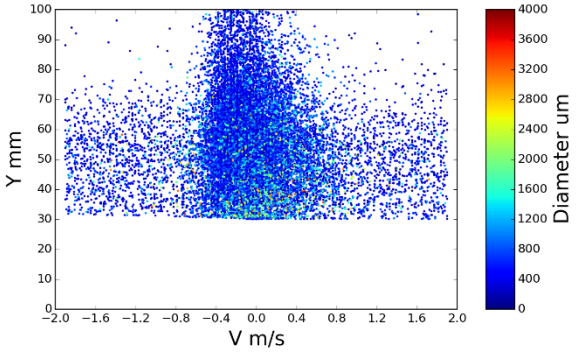

Figure A. 2354: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

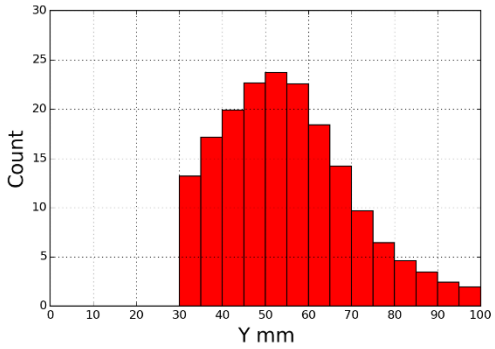

Figure A. 2352: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

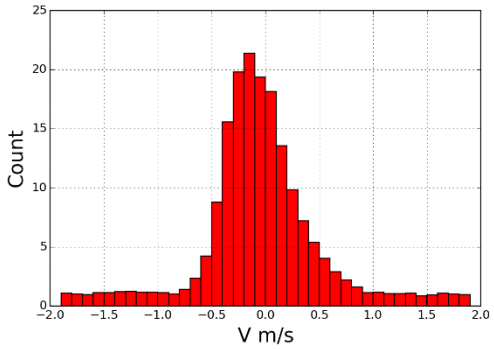

Figure A. 2355: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

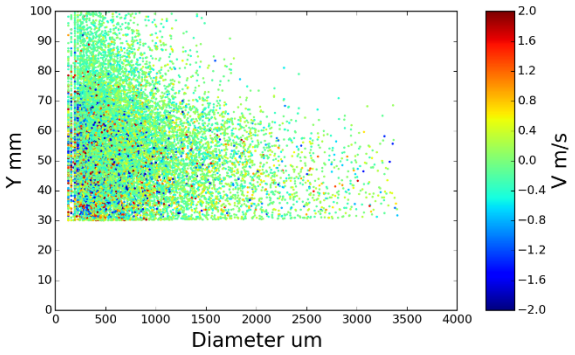

Figure A. 2353: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 Matched Only Droplets for .LB Image

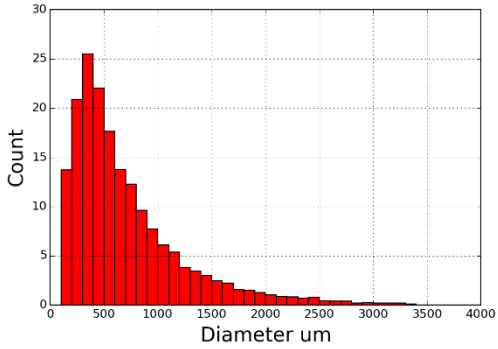

Figure A. 2356: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

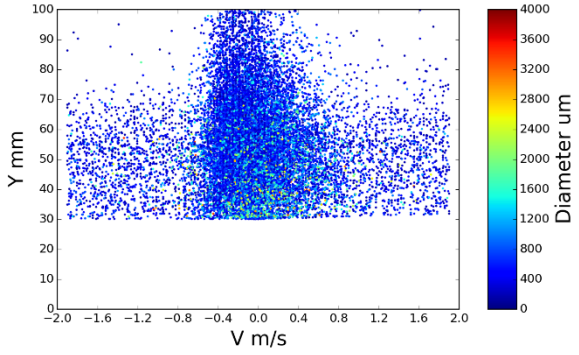

Figure A. 2359: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

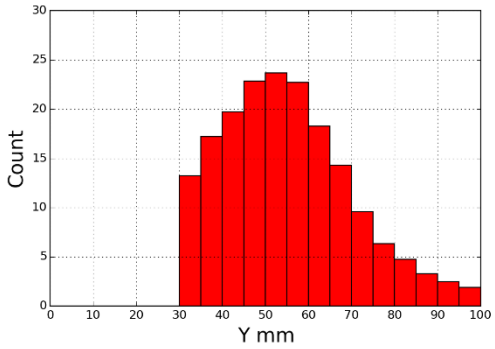

Figure A. 2357: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

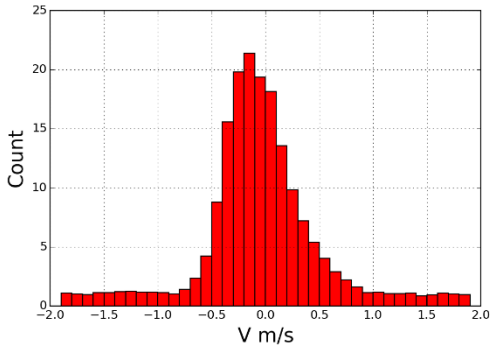

Figure A. 2360: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

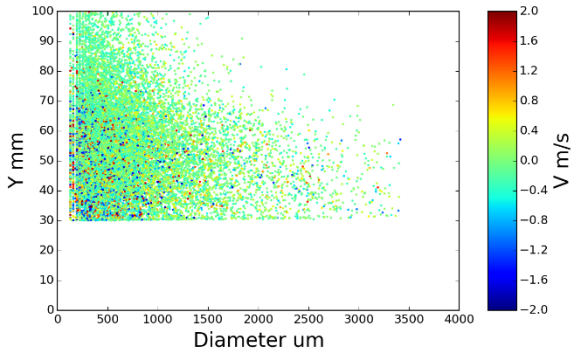

Figure A. 2358: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 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	49.31	48.68	128.6	3418	748.7	635.5	128.6	3412	741.1	632.3
40-60mm	135.61	135.29	128.6	3413	644.5	532.1	128.6	3411	644.9	533.5
60-80mm	62.47	63.59	128.6	3396	526.6	381.9	128.6	3370	525.6	381.2
80-100mm	12.67	12.65	128.6	2060	431.4	277.3	128.6	2878	435.1	288.0
All	260.06	260.21	128.6	3418	625.5	519.9	128.6	3412	623.5	518.8
			Height A (mm)				Height B (mm)			
Highest Particle			99.9458				99.9714			
Lowest Particle			30.0854				30.0854			

Table A. 249: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	23.57	128.6	3415	924.7	673.3	128.6	3400	902.3	660.9	-1.900	1.880	-0.050	0.600	-1.900	1.900	0.000	0.630
40-60mm	79.28	128.6	3406	768.7	564.6	128.6	3411	758.1	559.8	-1.900	1.900	-0.070	0.530	-1.900	1.900	-0.020	0.580
60-80mm	39.59	128.6	3082	620.5	396.8	128.6	3327	614.0	396.9	-1.900	1.900	-0.070	0.410	-1.900	1.900	-0.030	0.480
80-100mm	8.47	128.6	2060	513.2	285.7	128.6	2073	504.4	285.0	-1.790	1.770	-0.090	0.280	-1.890	1.900	-0.100	0.340
All	150.91	128.6	3415	739.9	544.6	128.6	3411	728.9	539.0	-1.900	1.900	-0.070	0.500	-1.900	1.900	-0.020	0.550

Table A. 250: Matched Droplet Info

A.8.1.2 All Droplets for .LA Image

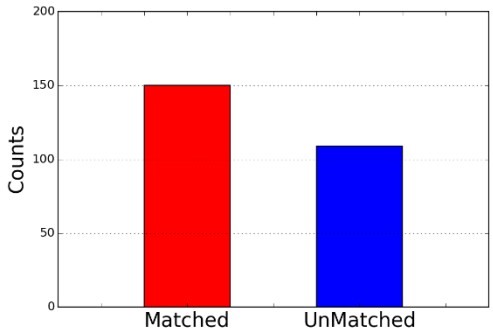

Figure A. 2361: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

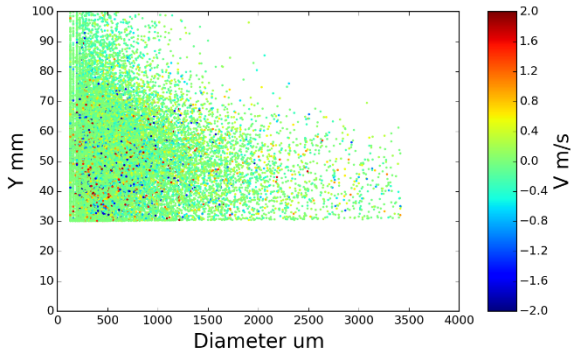

Figure A. 2364: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

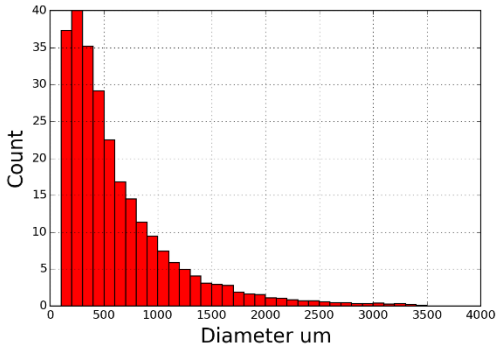

Figure A. 2362: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

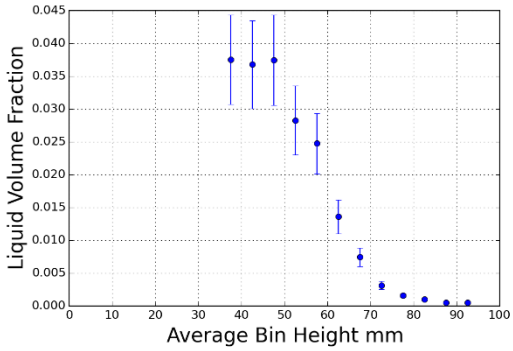

Figure A. 2365: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

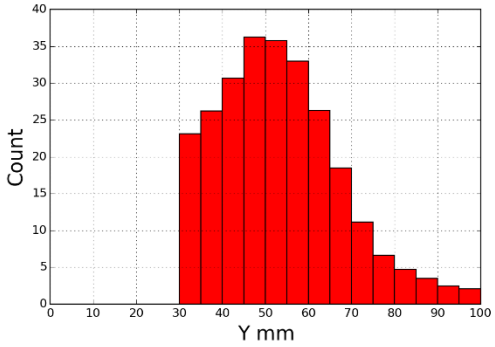

Figure A. 2363: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 All Droplets for .LB Image

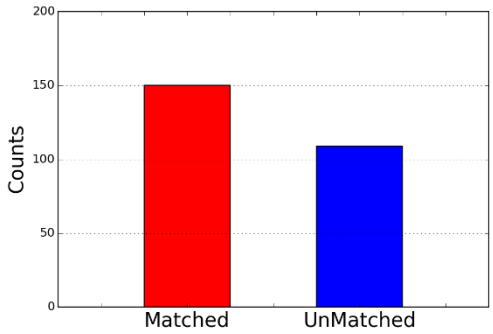

Figure A. 2366: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

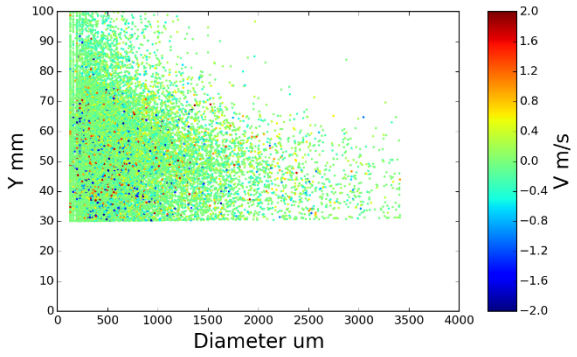

Figure A. 2369: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

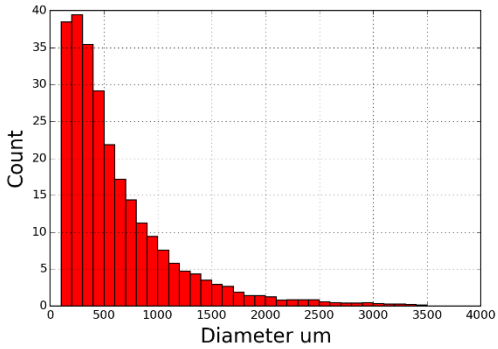

Figure A. 2367: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

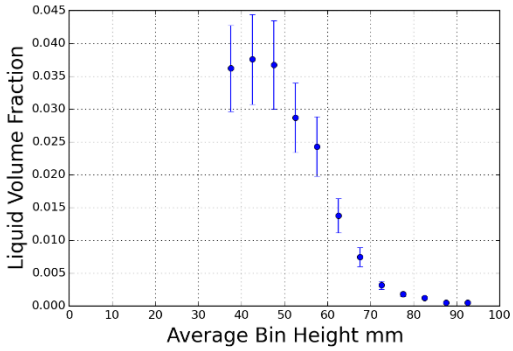

Figure A. 2370: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

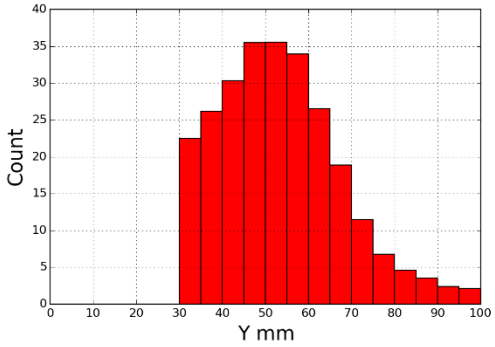

Figure A. 2368: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 Matched Only Droplets for .LA Image

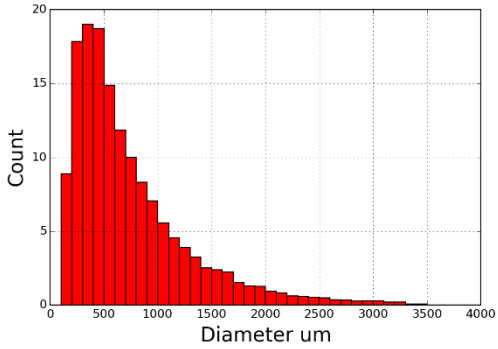

Figure A. 2371: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

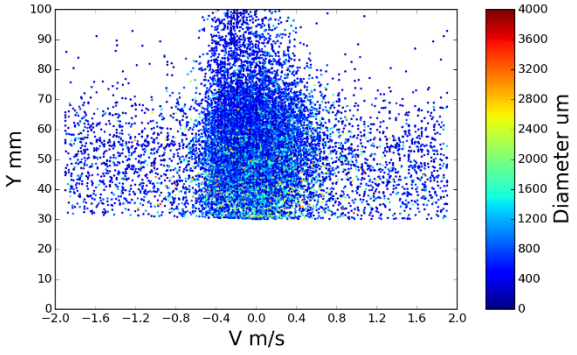

Figure A. 2374: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

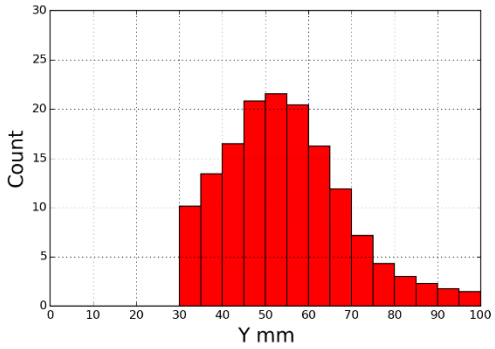

Figure A. 2372: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

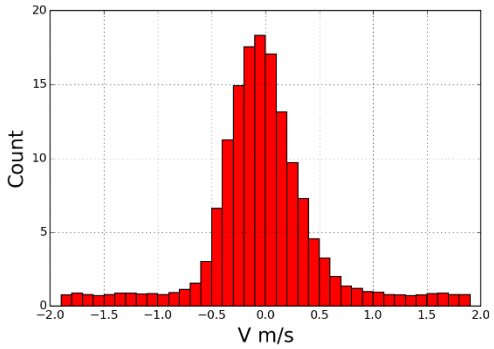

Figure A. 2375: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

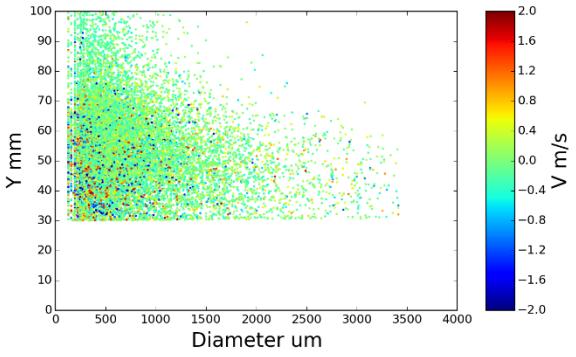

Figure A. 2373: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 Matched Only Droplets for .LB Image

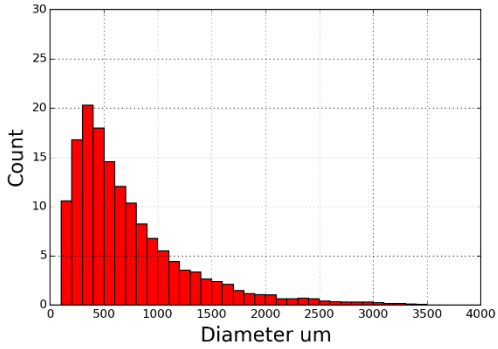

Figure A. 2376: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

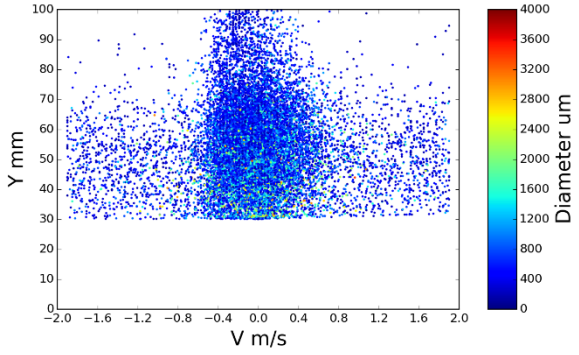

Figure A. 2379: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

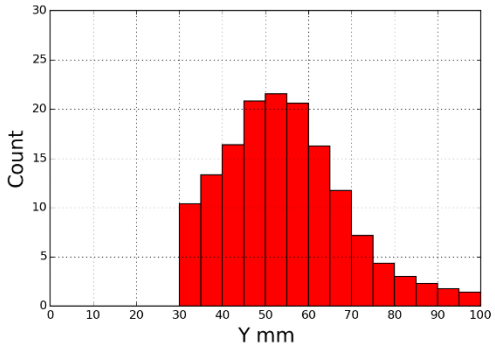

Figure A. 2377: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

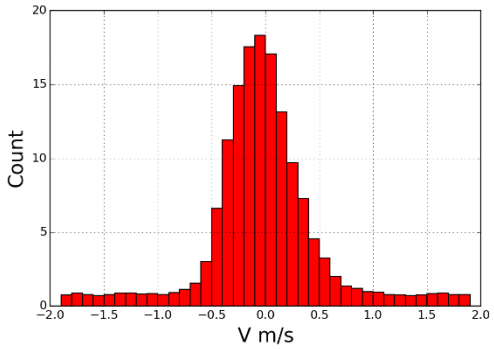

Figure A. 2380: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

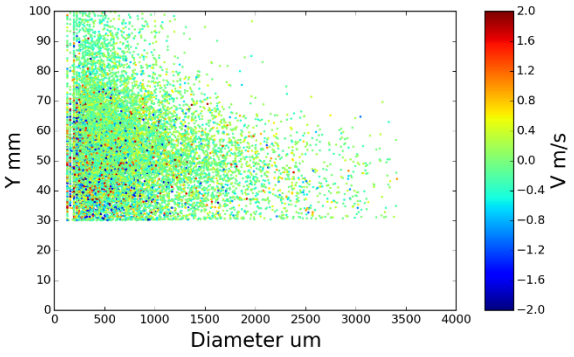

Figure A. 2378: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	38.65	38.52	128.6	3413	731.5	631.9	128.6	3358	747.4	632.6
40-60mm	110.73	110.6	128.6	3397	630.3	540.3	128.6	3416	624.7	542.7
60-80mm	53.52	54.87	128.6	3235	518.4	388.3	128.6	3382	513.6	387.7
80-100mm	11.65	11.87	128.6	2100	410.1	247.6	128.6	2050	407.9	249.9
All	214.55	215.86	128.6	3413	608.6	520.2	128.6	3416	606.4	521.6
			Height A (mm)				Height B (mm)			
Highest Particle			99.9999				99.9999			
Lowest Particle			30.0854				30.0854			

Table A. 251: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	17.47	128.6	3402	945.1	693.8	128.6	3317	918.2	680.1	-1.900	1.890	-0.030	0.630	-1.900	1.870	0.010	0.650
40-60mm	61.31	128.6	3390	761.6	579.2	128.6	3395	749.7	575.2	-1.900	1.900	-0.060	0.540	-1.900	1.900	-0.010	0.610
60-80mm	32.19	128.6	3235	619.5	412.6	128.6	3382	609.0	407.1	-1.900	1.900	-0.060	0.470	-1.900	1.900	-0.030	0.500
80-100mm	7.46	128.6	1958	480.1	246.8	128.6	2050	475.7	253.0	-1.850	1.820	-0.080	0.270	-1.790	1.870	-0.060	0.350
All	118.43	128.6	3402	732.3	556.2	128.6	3395	719.2	549.6	-1.900	1.900	-0.060	0.520	-1.900	1.900	-0.020	0.580

Table A. 252: Matched Droplet Info

A.8.1.2 All Droplets for .LA Image

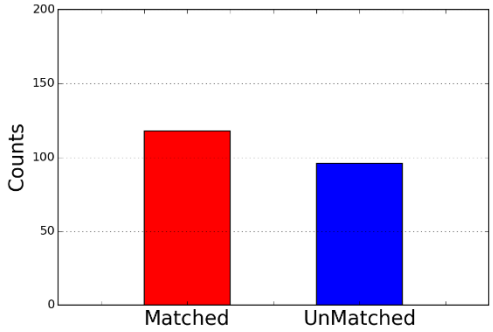

Figure A. 2381: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

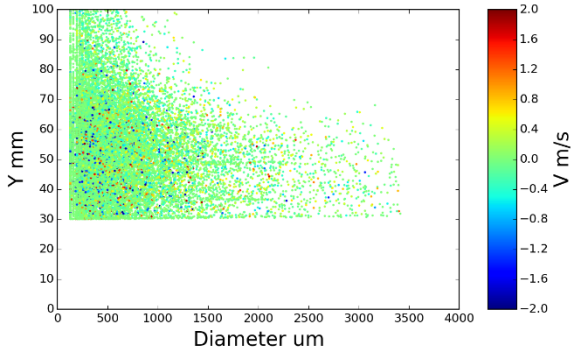

Figure A. 2384: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

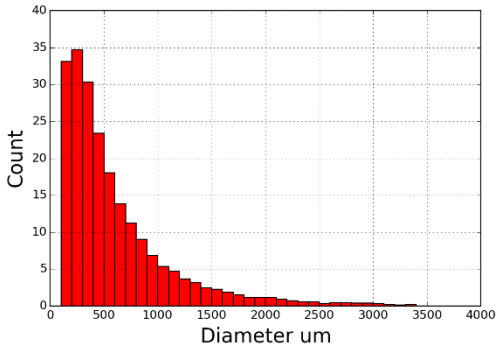

Figure A. 2382: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

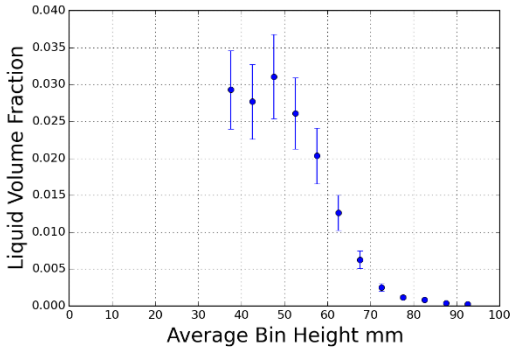

Figure A. 2385: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

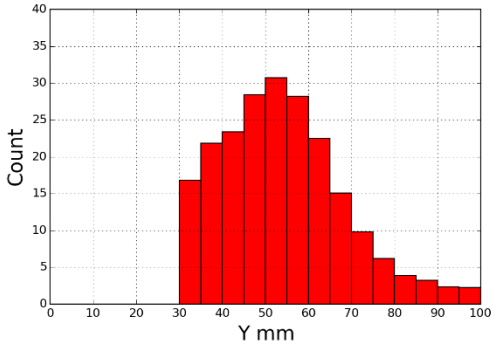

Figure A. 2383: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 All Droplets for .LB Image

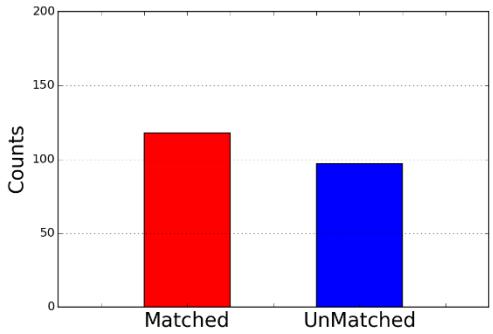

Figure A. 2386: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

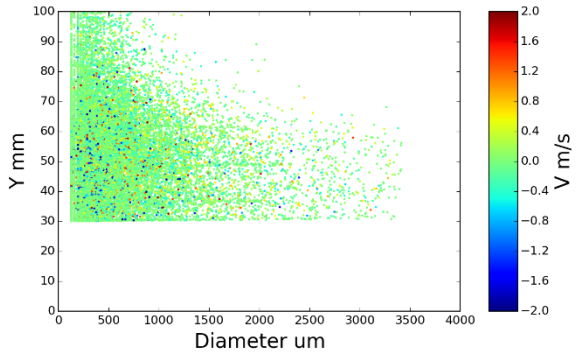

Figure A. 2389: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

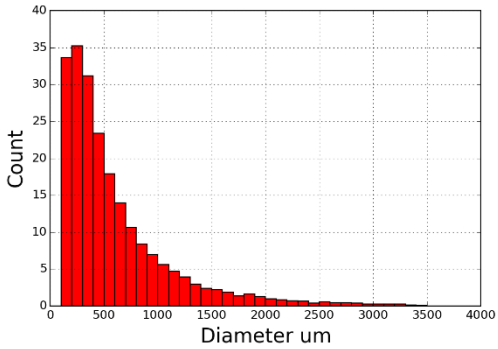

Figure A. 2387: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

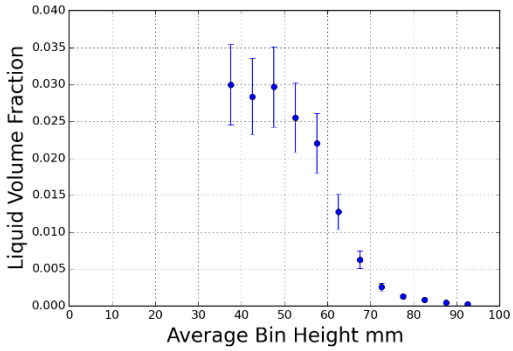

Figure A. 2390: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

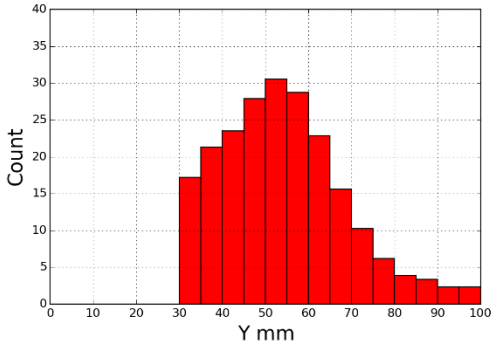

Figure A. 2388: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 Matched Only Droplets for .LA Image

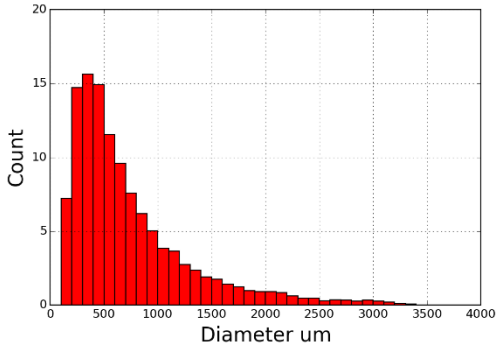

Figure A. 2391: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

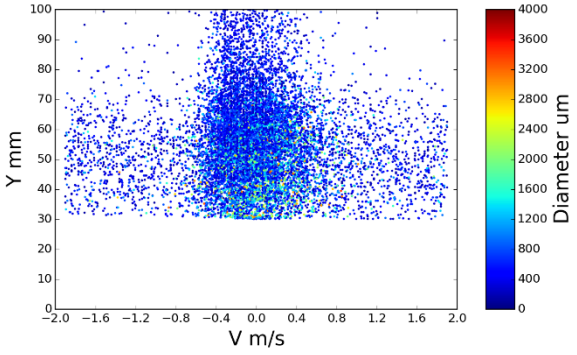

Figure A. 2394: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

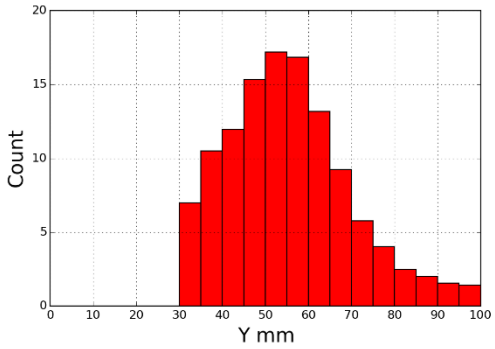

Figure A. 2392: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

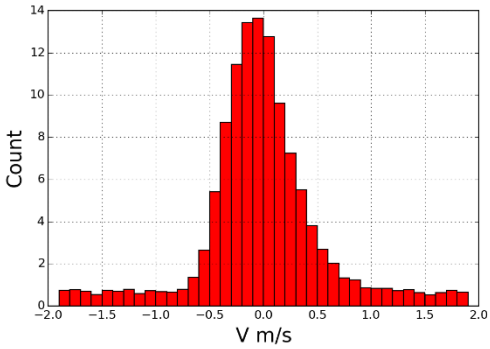

Figure A. 2395: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

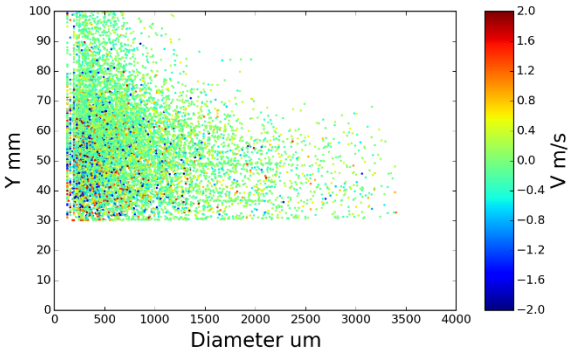

Figure A. 2393: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.1.2 Matched Only Droplets for .LB Image

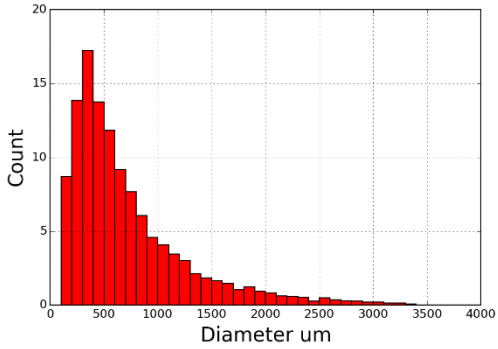

Figure A. 2396: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

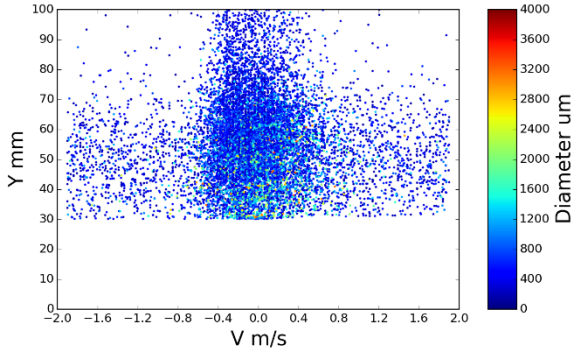

Figure A. 2399: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

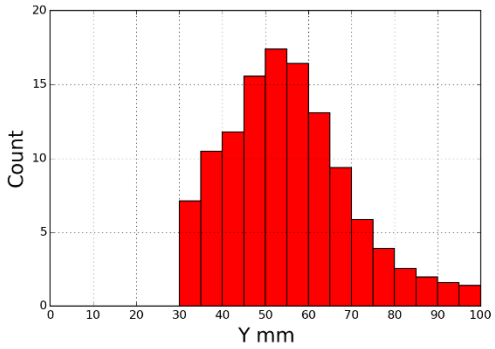

Figure A. 2397: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

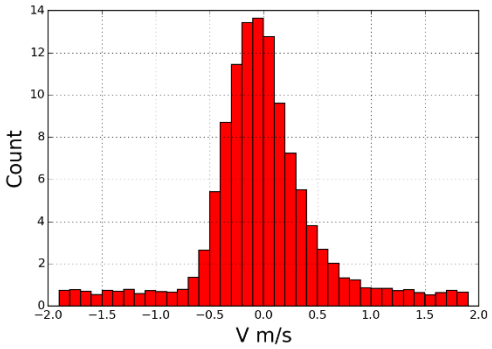

Figure A. 2400: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

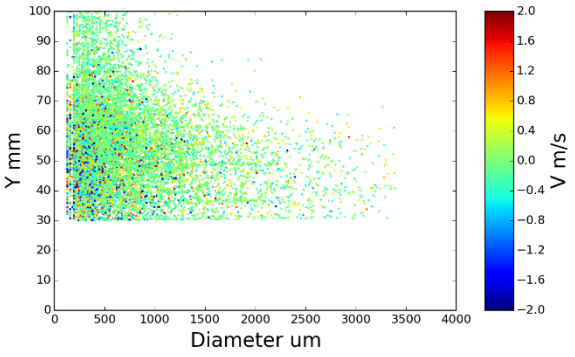

Figure A. 2398: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.2 Liquid Level 2

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	13246 / 1.669
Ref Mass Flow (lb/hr) / (kg/s)	3267 / 0.412
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	30348 / 41.159
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	9797 / 30.90
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	54.6 / 12.54
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	54.7 / 12.63
Total Bundle Q (Btu/hr) / (kW)	296902 / 87.01
Total Bundle & Preboiler Q (Btu/hr) / (kW)	296902 / 87.01
Top Two Rows HTC Ratio	1.078
Bundle Inlet Quality	-0.12
Bundle Exit Quality	1.00

Table A. 253: Thermal Conditions

A.8.2.1 Lens 100mm Mag 0_29x

A.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	148.8	153.16	57.1	3030	444.6	433.1	57.1	3019	434.4	429.4
40-60mm	191.5	197.45	57.1	2989	329.4	304.9	57.1	2958	322.0	304.0
60-80mm	88.19	90.17	57.1	1875	226.6	189.0	57.1	2171	223.1	191.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	428.51	440.8	57.1	3030	348.2	347.1	57.1	3019	340.8	344.9
			Height A (mm)				Height B (mm)			
Highest Particle			75.9600				75.9600			
Lowest Particle			27.9786				27.9786			

Table A. 254: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	105.5	57.1	2986	526.2	449.9	57.1	3019	522.9	448.1	-1.900	1.890	-0.040	0.300	-1.900	1.900	0.070	0.380
40-60mm	148.19	57.1	2989	376.3	319.2	57.1	2958	374.1	319.0	-1.890	1.900	-0.050	0.220	-1.900	1.900	0.060	0.290
60-80mm	67.27	57.1	1875	257.0	201.0	57.1	2171	255.4	203.2	-1.900	1.900	-0.070	0.180	-1.900	1.850	0.050	0.230
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	320.96	57.1	2989	400.6	363.1	57.1	3019	398.0	362.2	-1.900	1.900	-0.050	0.240	-1.900	1.900	0.060	0.310

Table A. 255: Matched Droplet Info

A.8.2.1 All Droplets for .LA Image

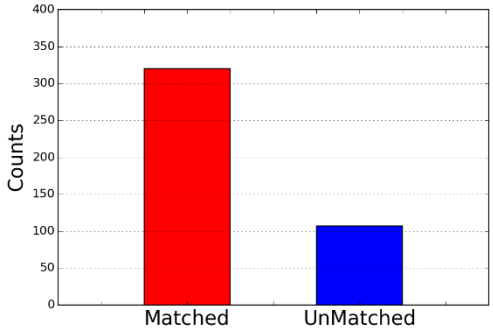

Figure A. 2401: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

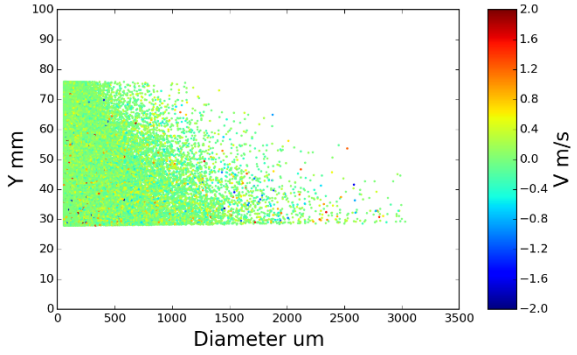

Figure A. 2404: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

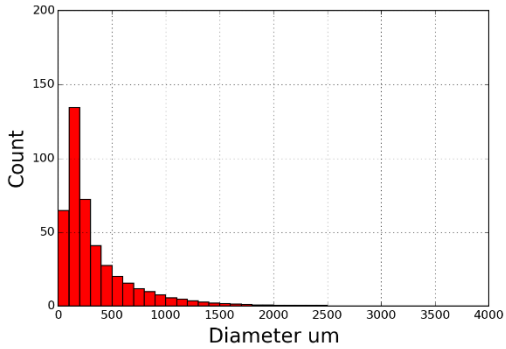

Figure A. 2402: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

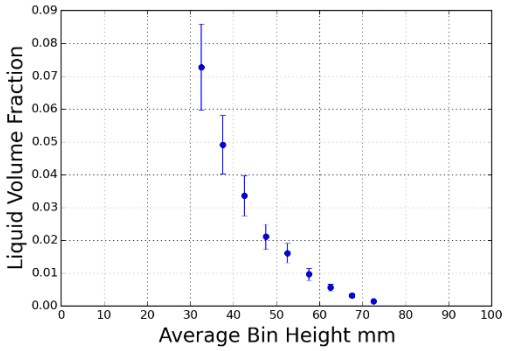

Figure A. 2405: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

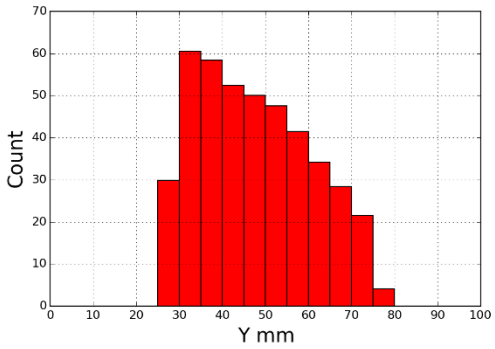

Figure A. 2403: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 All Droplets for .LB Image

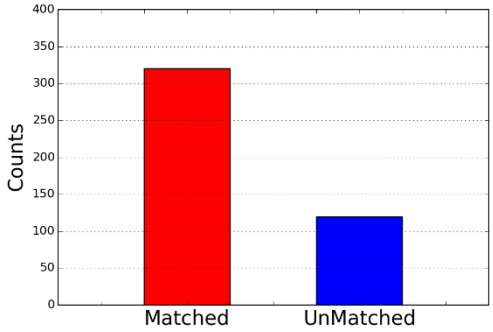

Figure A. 2406: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

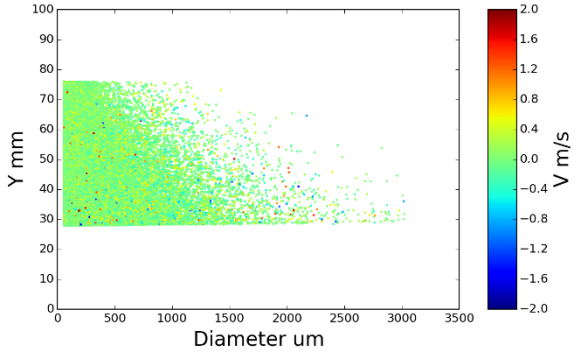

Figure A. 2409: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

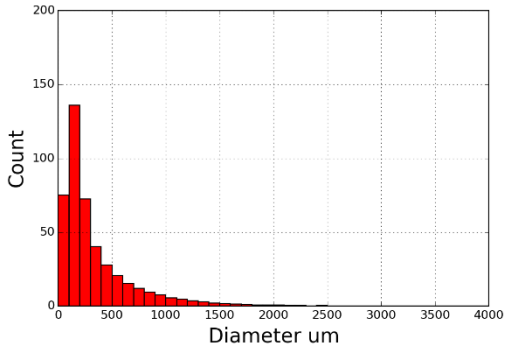

Figure A. 2407: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

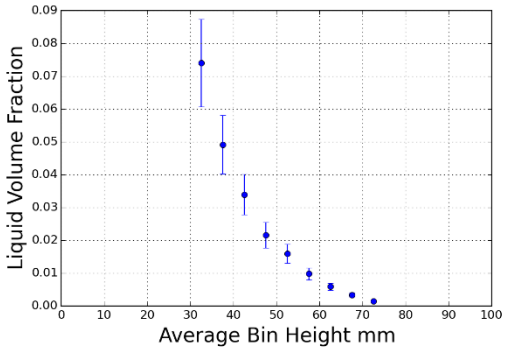

Figure A. 2410: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

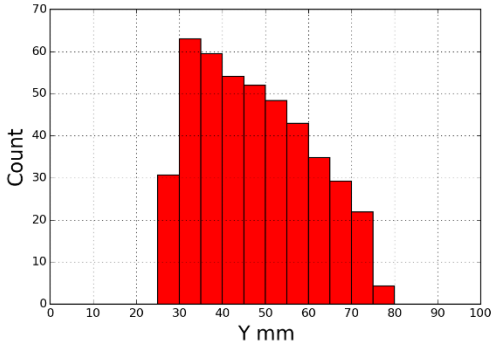

Figure A. 2408: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 Matched Only Droplets for .LA Image

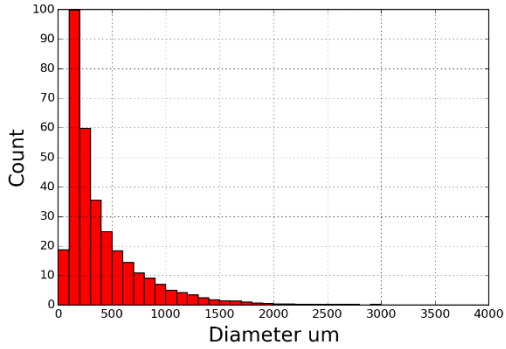

Figure A. 2411: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

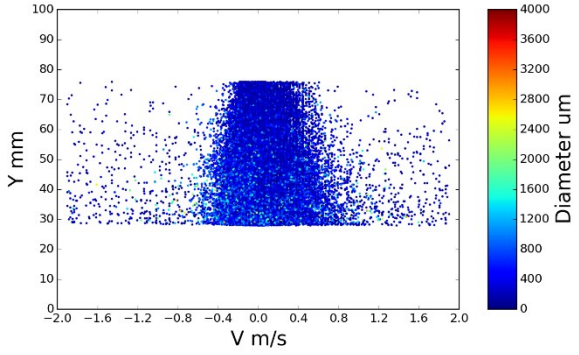

Figure A. 2414: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

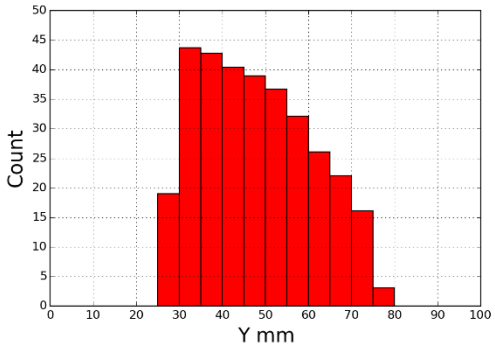

Figure A. 2412: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

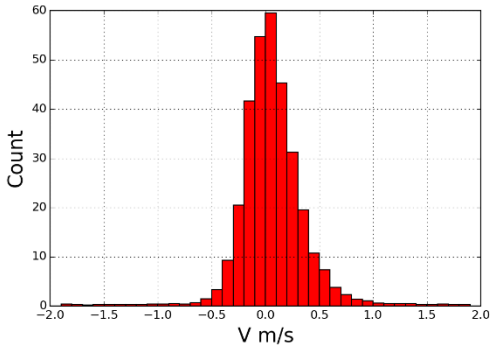

Figure A. 2415: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

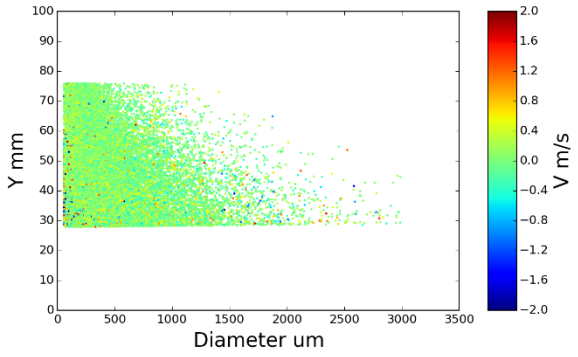

Figure A. 2413: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 Matched Only Droplets for .LB Image

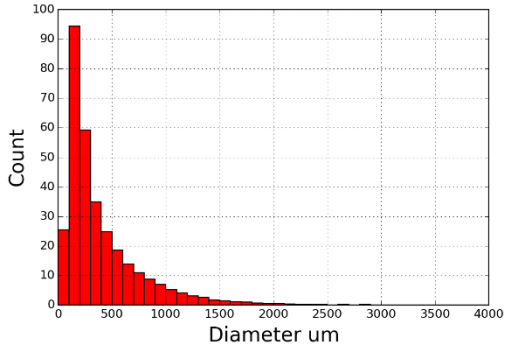

Figure A. 2416: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

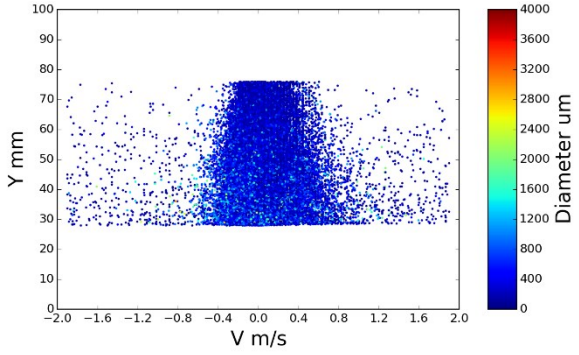

Figure A. 2419: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

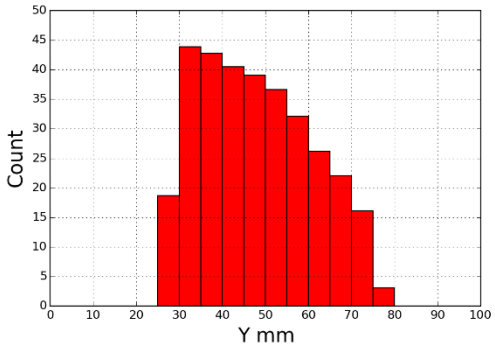

Figure A. 2417: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

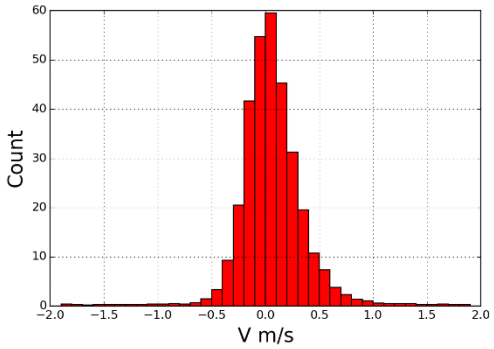

Figure A. 2420: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

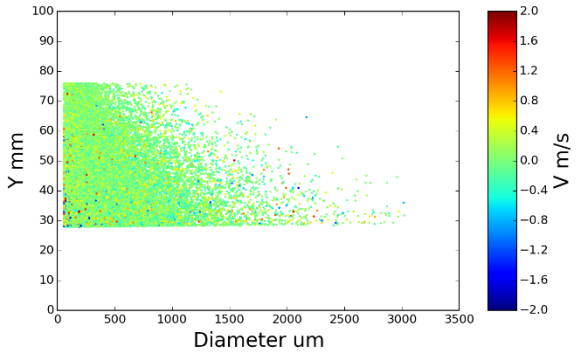

Figure A. 2418: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.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	121.48	128.4	57.1	3032	468.8	495.7	57.1	3026	450.9	486.1
40-60mm	171.68	182.89	57.1	2965	326.1	380.9	57.1	3036	313.3	373.5
60-80mm	72.58	75.37	57.1	2521	203.0	223.6	57.1	2452	201.6	225.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	365.77	386.67	57.1	3032	349.1	411.0	57.1	3036	337.2	403.1
			Height A (mm)				Height B (mm)			
Highest Particle			75.9473				75.9600			
Lowest Particle			27.9786				27.9786			

Table A. 256: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	78.49	57.1	3032	588.3	532.9	57.1	3026	582.9	530.0	-1.900	1.900	-0.050	0.320	-1.900	1.900	-0.030	0.390
40-60mm	118.62	57.1	2965	396.6	417.4	57.1	3036	393.9	416.9	-1.900	1.900	-0.070	0.270	-1.900	1.900	-0.060	0.340
60-80mm	50.52	57.1	2521	238.8	252.3	57.1	2452	237.6	254.7	-1.900	1.900	-0.100	0.230	-1.870	1.900	-0.090	0.270
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	247.63	57.1	3032	425.2	449.8	57.1	3036	422.0	448.4	-1.900	1.900	-0.070	0.280	-1.900	1.900	-0.060	0.350

Table A. 257: Matched Droplet Info

A.8.2.1 All Droplets for .LA Image

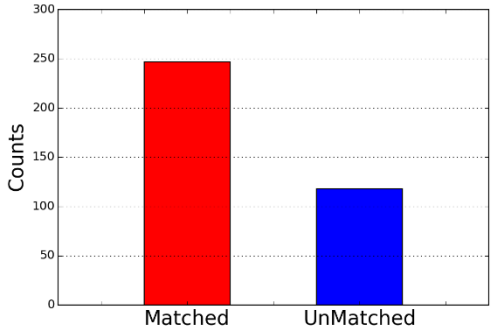

Figure A. 2421: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

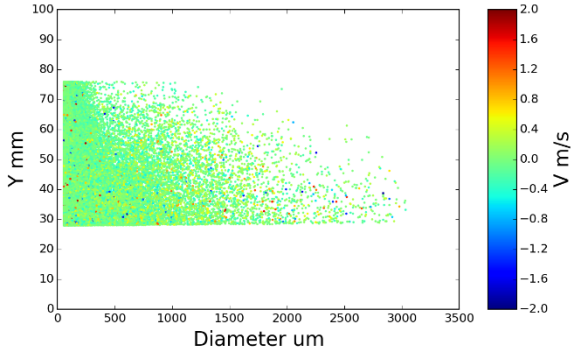

Figure A. 2424: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

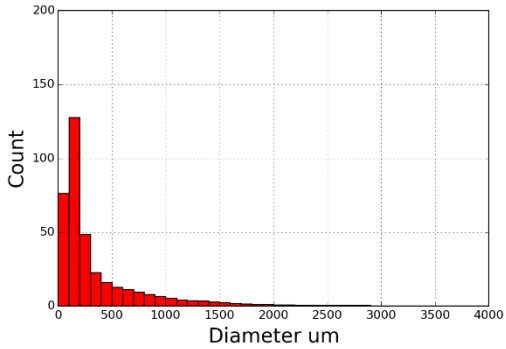

Figure A. 2422: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

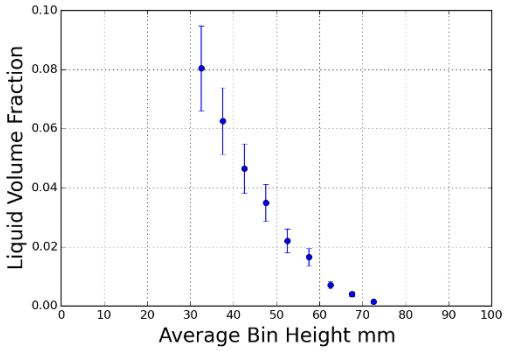

Figure A. 2425: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

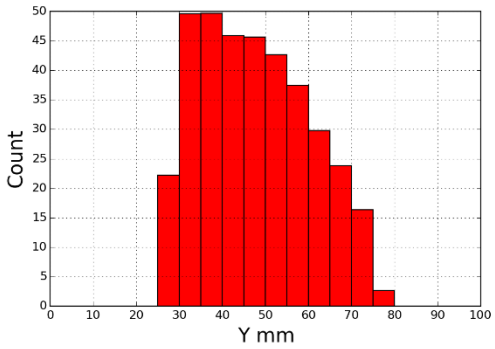

Figure A. 2423: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 All Droplets for .LB Image

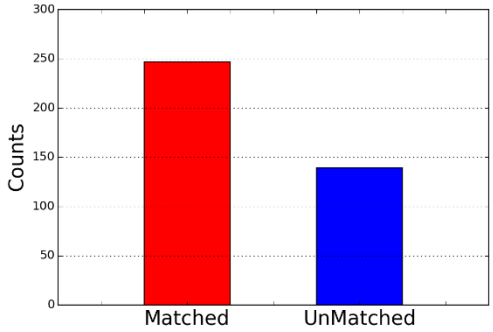

Figure A. 2426: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

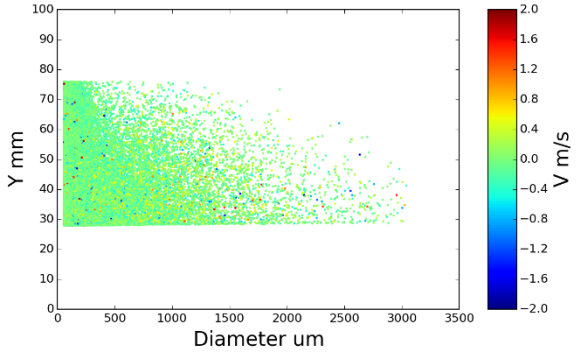

Figure A. 2429: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

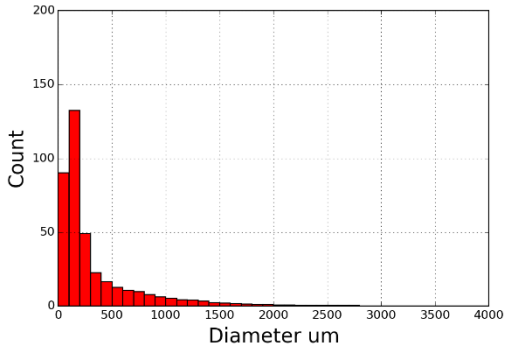

Figure A. 2427: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

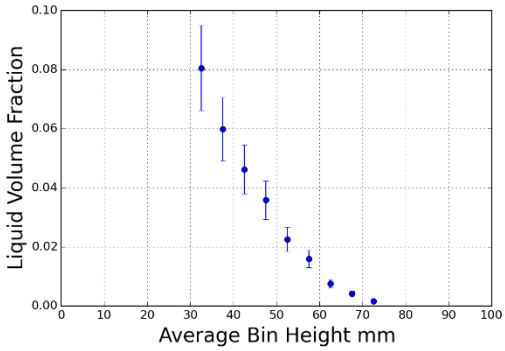

Figure A. 2430: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

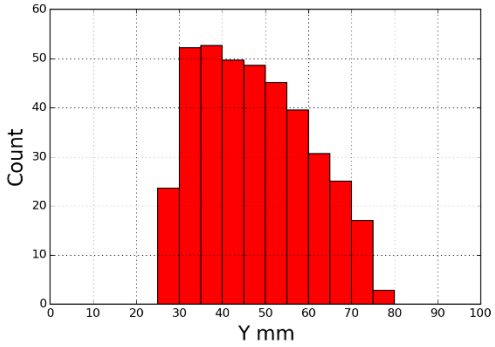

Figure A. 2428: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 Matched Only Droplets for .LA Image

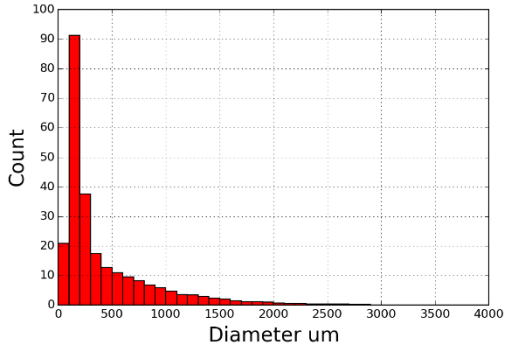

Figure A. 2431: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

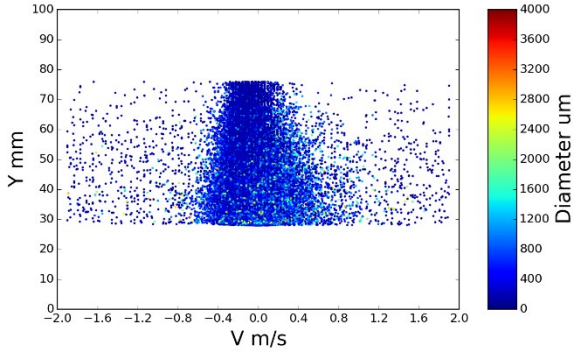

Figure A. 2434: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

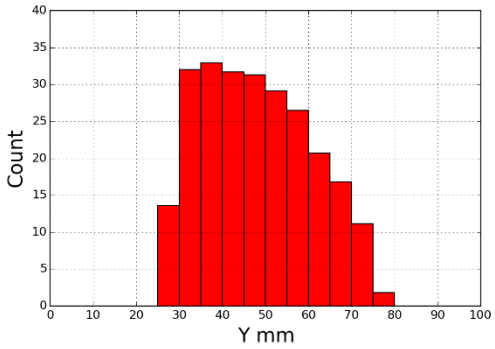

Figure A. 2432: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

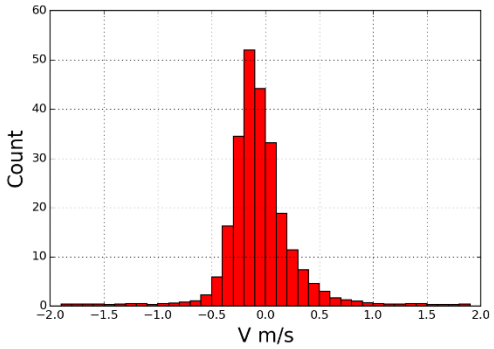

Figure A. 2435: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

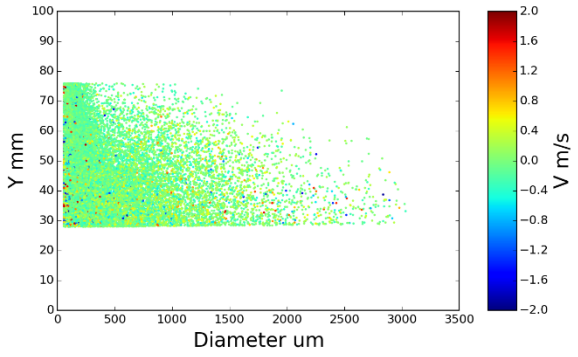

Figure A. 2433: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 Matched Only Droplets for .LB Image

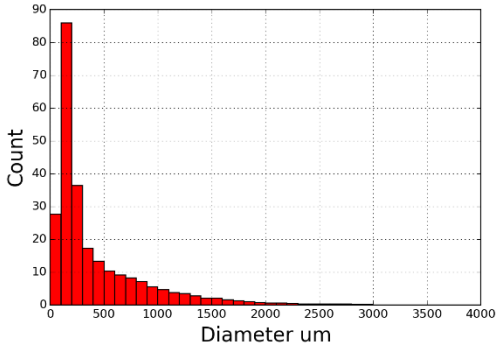

Figure A. 2436: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

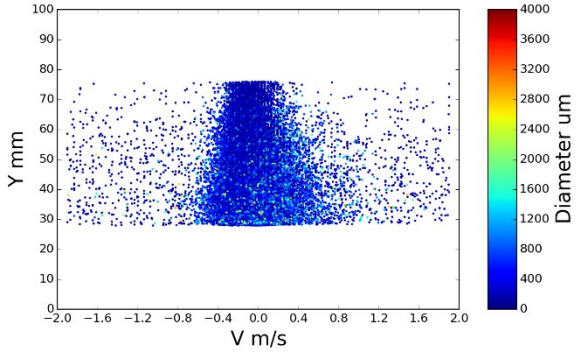

Figure A. 2439: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

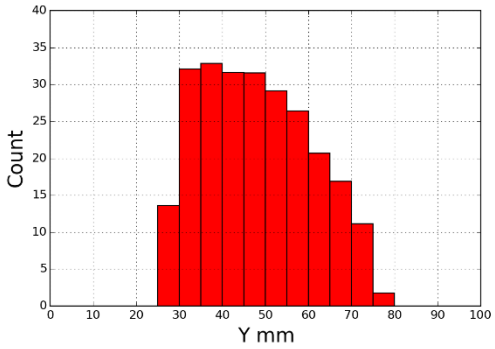

Figure A. 2437: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

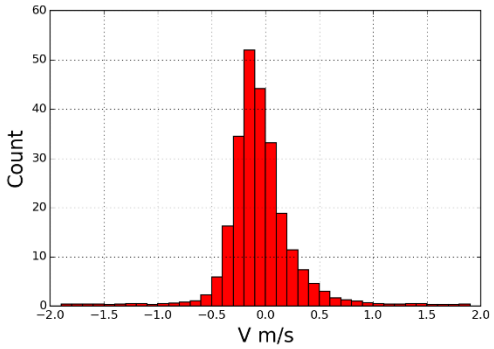

Figure A. 2440: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

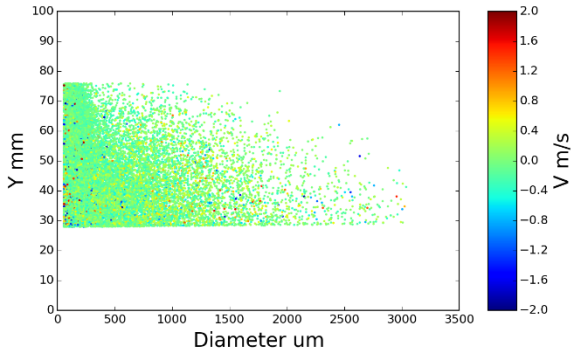

Figure A. 2438: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.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	106.62	116.35	57.1	3024	455.0	498.1	57.1	3032	428.7	491.1
40-60mm	152.55	165.79	57.1	2995	310.3	369.1	57.1	3034	295.5	360.4
60-80mm	60.91	64.5	57.1	2524	184.2	201.5	57.1	2639	181.5	203.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	320.1	346.73	57.1	3024	334.5	405.9	57.1	3034	319.0	398.2
			Height A (mm)				Height B (mm)			
Highest Particle			75.9600				75.9487			
Lowest Particle			27.9786				27.9786			

Table A. 258: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	62.72	57.1	3020	591.3	542.5	57.1	3032	587.4	543.3	-1.900	1.900	-0.040	0.360	-1.900	1.900	-0.040	0.440
40-60mm	101.06	57.1	2995	385.1	409.5	57.1	3002	380.9	405.6	-1.880	1.900	-0.050	0.310	-1.890	1.900	-0.070	0.360
60-80mm	40.61	57.1	2524	217.5	230.0	57.1	2639	216.0	231.6	-1.900	1.780	-0.080	0.240	-1.900	1.810	-0.090	0.260
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	204.39	57.1	3020	415.1	448.8	57.1	3032	411.9	447.6	-1.900	1.900	-0.050	0.320	-1.900	1.900	-0.070	0.370

Table A. 259: Matched Droplet Info

A.8.2.1 All Droplets for .LA Image

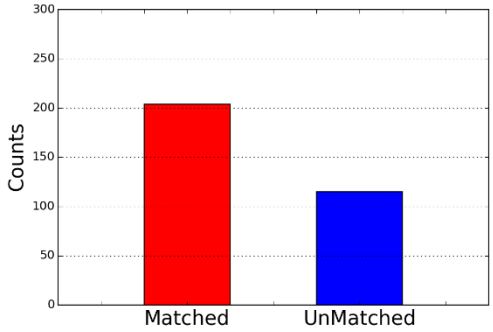

Figure A. 2441: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

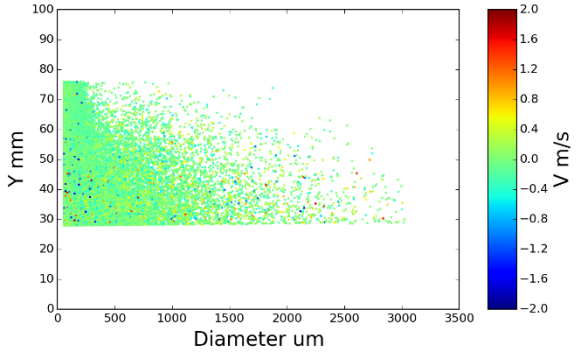

Figure A. 2444: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

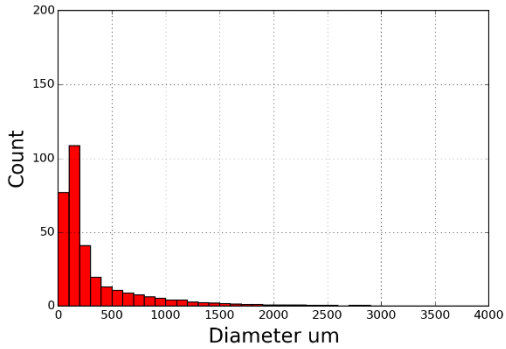

Figure A. 2442: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

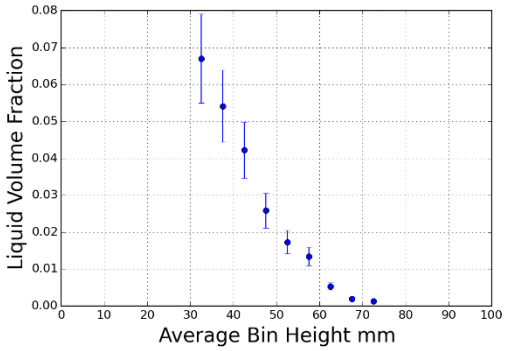

Figure A. 2445: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

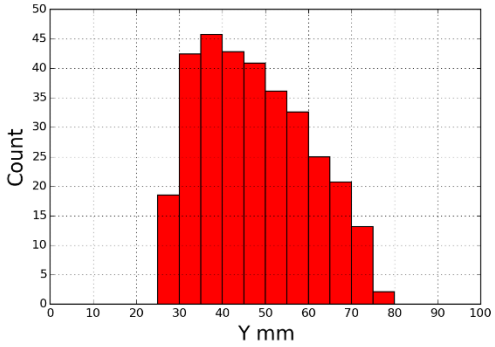

Figure A. 2443: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 All Droplets for .LB Image

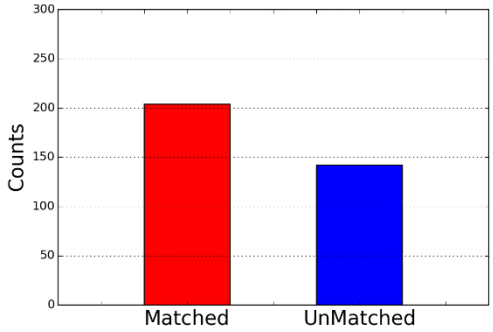

Figure A. 2446: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

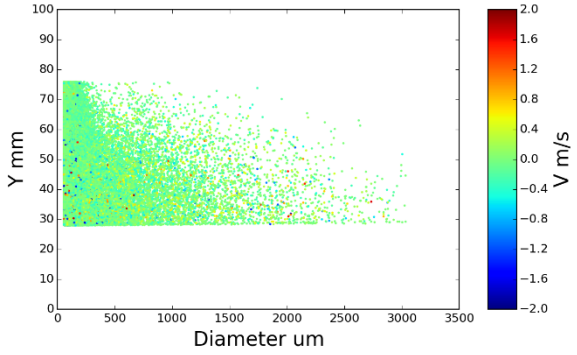

Figure A. 2449: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

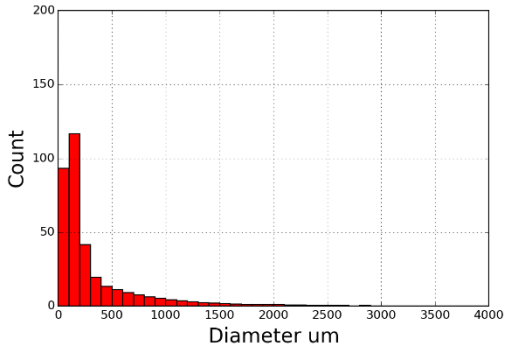

Figure A. 2447: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

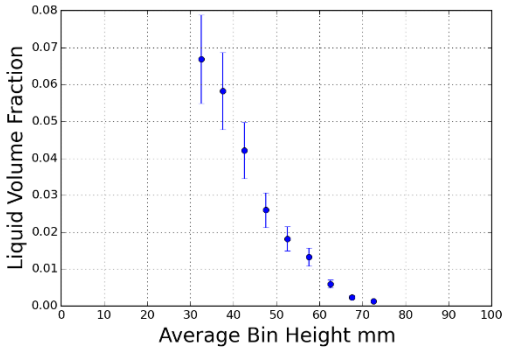

Figure A. 2450: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

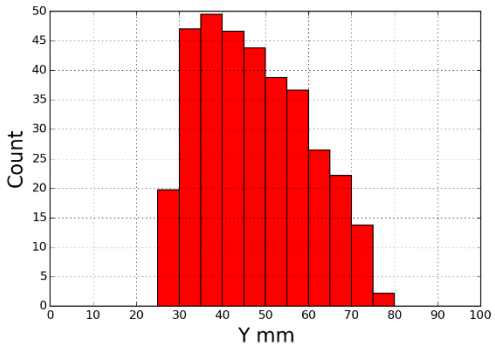

Figure A. 2448: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 Matched Only Droplets for .LA Image

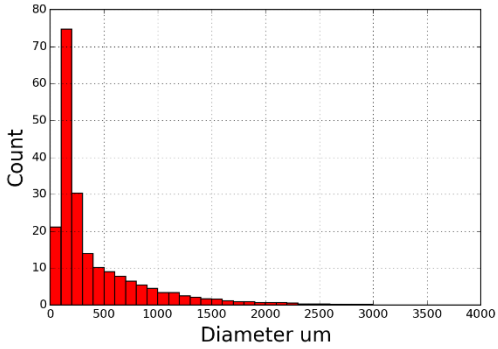

Figure A. 2451: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

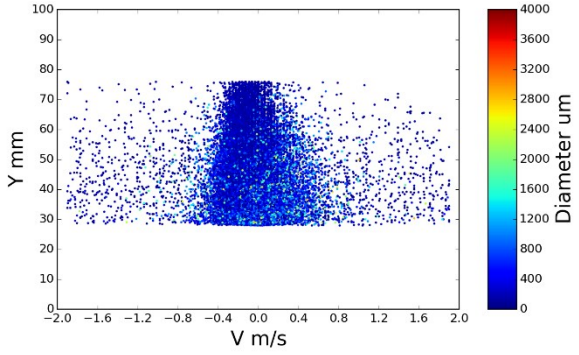

Figure A. 2454: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

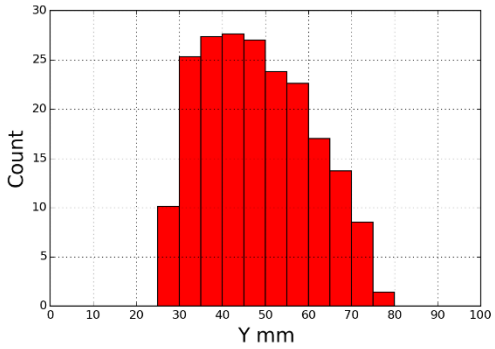

Figure A. 2452: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

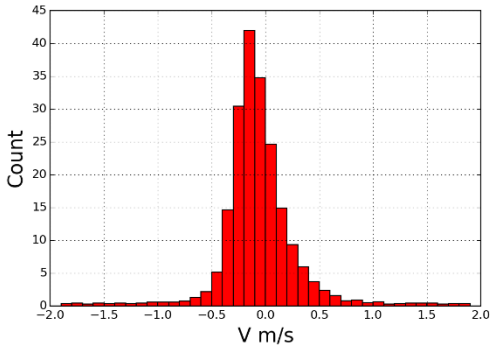

Figure A. 2455: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

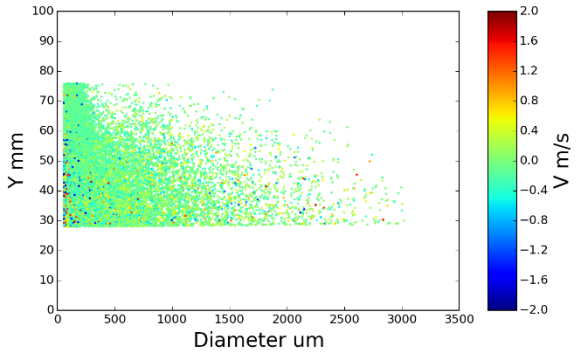

Figure A. 2453: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 Matched Only Droplets for .LB Image

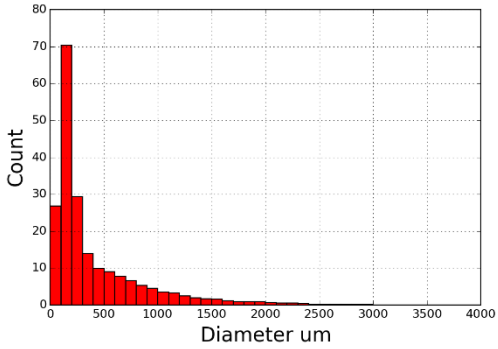

Figure A. 2456: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

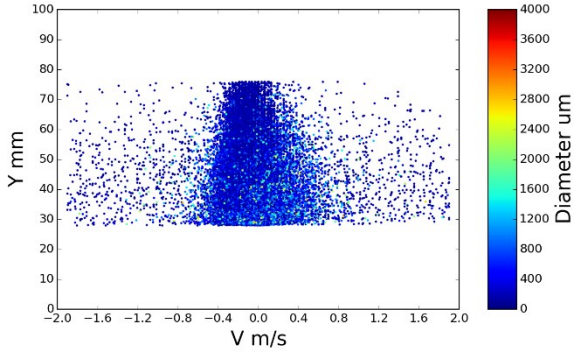

Figure A. 2459: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

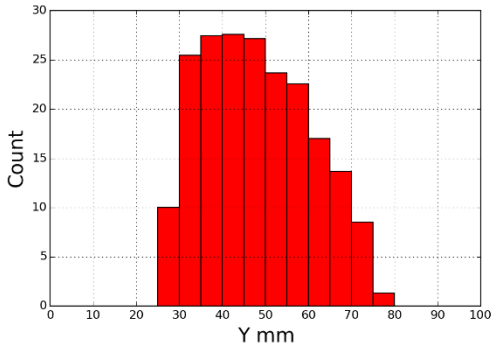

Figure A. 2457: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

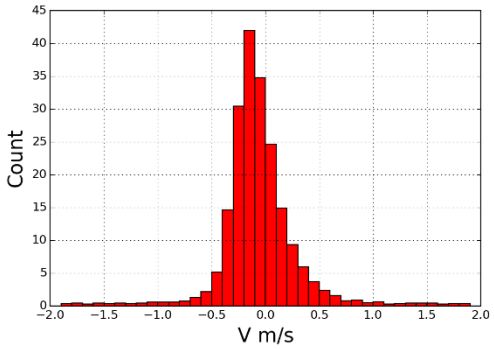

Figure A. 2460: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

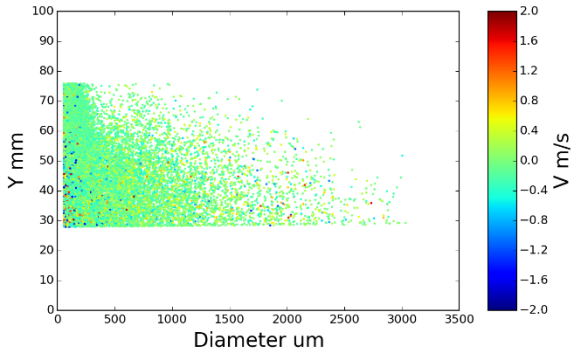

Figure A. 2458: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 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	106.09	113.43	57.1	3024	453.9	487.1	57.1	3031	430.5	479.8
40-60mm	173.56	185.53	57.1	3017	308.9	343.1	57.1	3035	296.0	335.9
60-80mm	68.23	71.38	57.1	2487	194.5	189.7	57.1	2677	192.1	189.7
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	347.92	370.43	57.1	3024	330.7	382.9	57.1	3035	317.2	375.7
			Height A (mm)				Height B (mm)			
Highest Particle			75.9600				75.9600			
Lowest Particle			27.9786				27.9786			

Table A. 260: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	59.45	57.1	3024	600.3	526.0	57.1	2998	595.5	525.4	-1.900	1.890	-0.040	0.390	-1.900	1.870	-0.030	0.440
40-60mm	113.05	57.1	3017	380.0	374.1	57.1	3022	377.4	374.0	-1.900	1.900	-0.050	0.330	-1.900	1.900	-0.040	0.380
60-80mm	45.44	57.1	2487	230.4	214.5	57.1	2677	228.8	215.8	-1.890	1.830	-0.070	0.230	-1.900	1.900	-0.050	0.270
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	217.94	57.1	3024	408.9	418.0	57.1	3022	406.1	417.6	-1.900	1.900	-0.050	0.330	-1.900	1.900	-0.040	0.380

Table A. 261: Matched Droplet Info

A.8.2.1 All Droplets for .LA Image

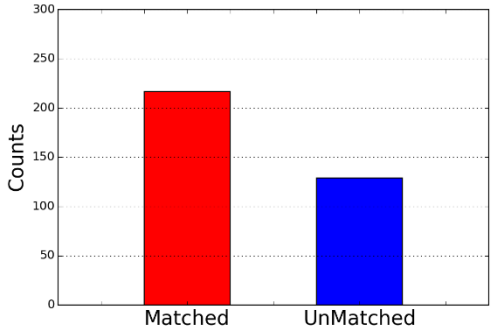

Figure A. 2461: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

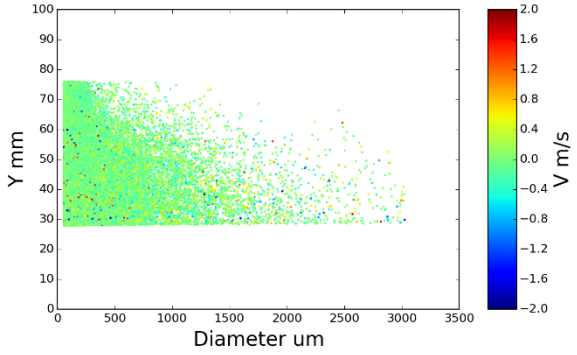

Figure A. 2464: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

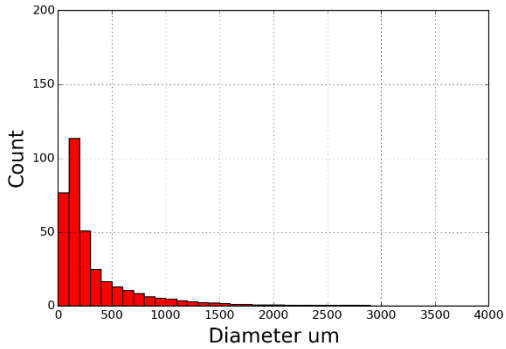

Figure A. 2462: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

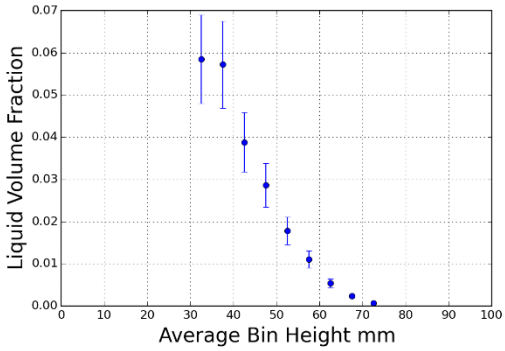

Figure A. 2465: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

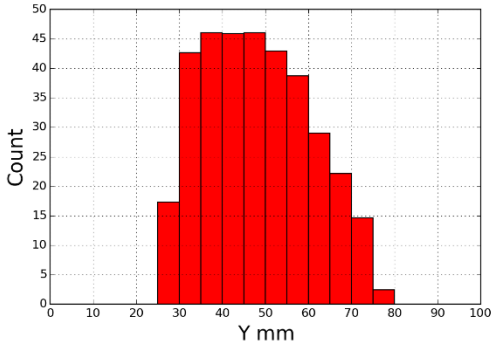

Figure A. 2463: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 All Droplets for .LB Image

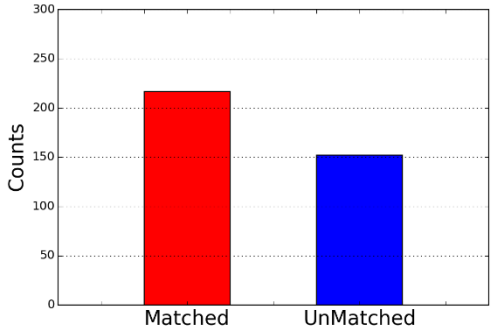

Figure A. 2466: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

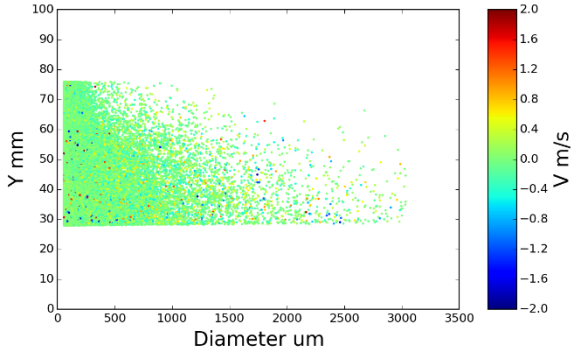

Figure A. 2469: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

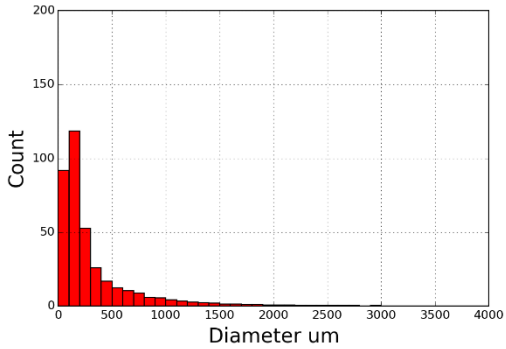

Figure A. 2467: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

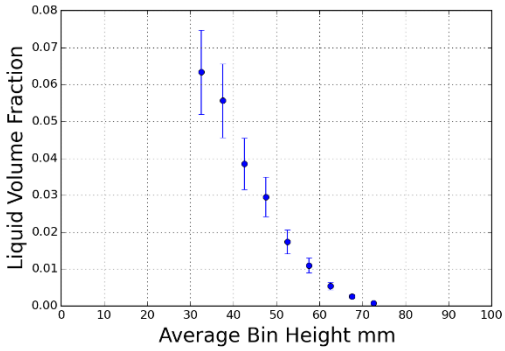

Figure A. 2470: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

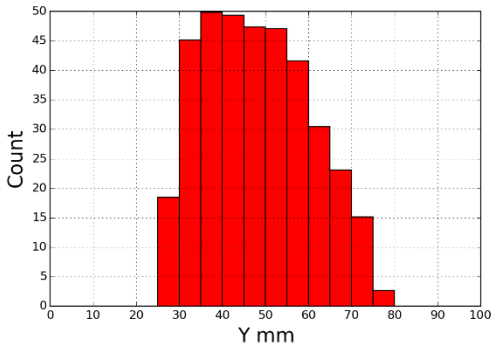

Figure A. 2468: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 Matched Only Droplets for .LA Image

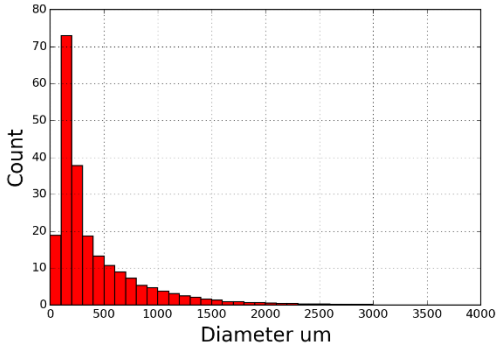

Figure A. 2471: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

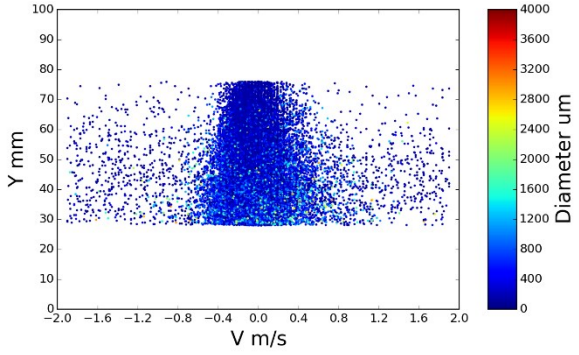

Figure A. 2474: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

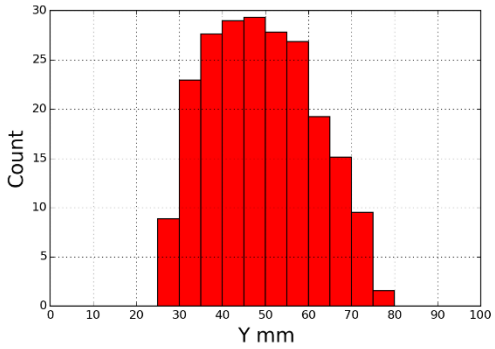

Figure A. 2472: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

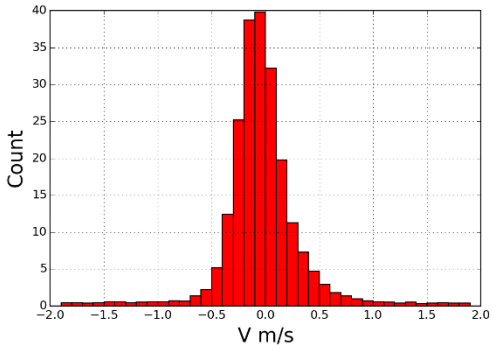

Figure A. 2475: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

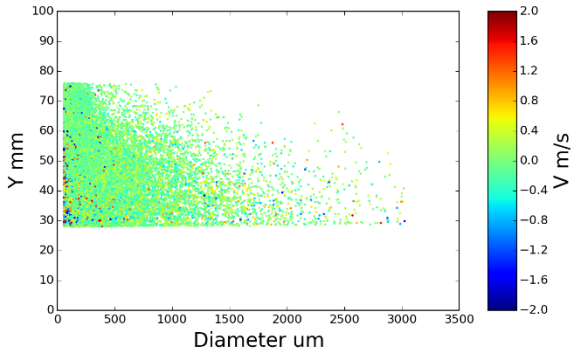

Figure A. 2473: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 Matched Only Droplets for .LB Image

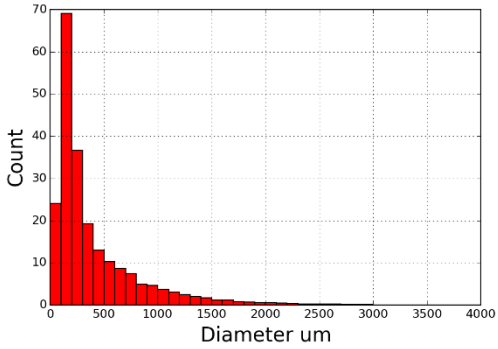

Figure A. 2476: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

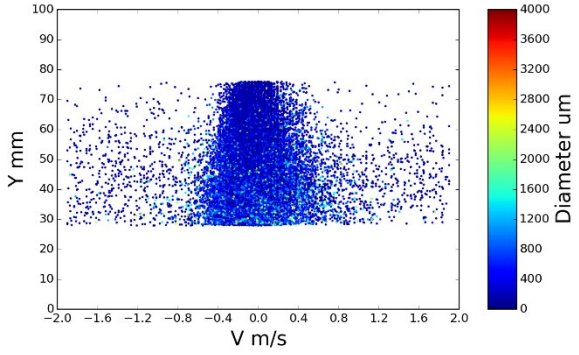

Figure A. 2479: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

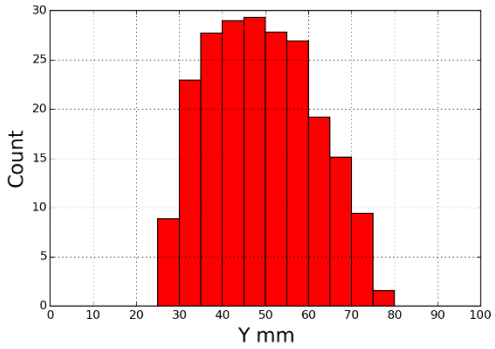

Figure A. 2477: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

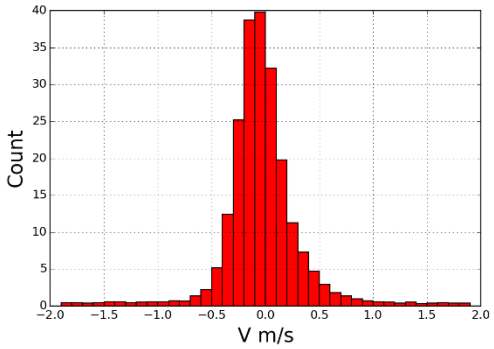

Figure A. 2480: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

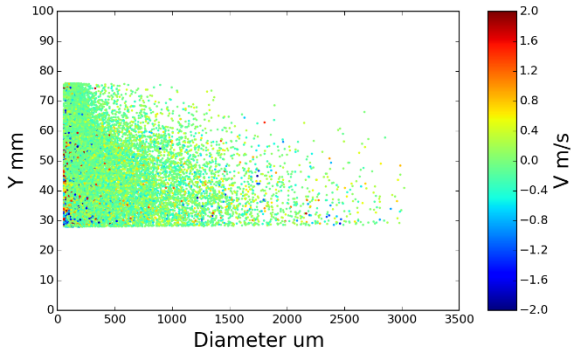

Figure A. 2478: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 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	96.36	105.25	57.1	2994	438.0	463.2	57.1	3024	410.2	452.8
40-60mm	165.81	178.16	57.1	3033	315.0	328.3	57.1	2948	297.6	316.5
60-80mm	71.49	74.45	57.1	2857	207.5	192.6	57.1	2758	204.6	187.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	333.75	357.91	57.1	3033	327.5	360.8	57.1	3024	311.4	350.5
			Height A (mm)				Height B (mm)			
Highest Particle			75.9600				75.9600			
Lowest Particle			27.9786				27.9786			

Table A. 262: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	52.26	57.1	2983	592.3	509.1	57.1	3024	587.2	509.1	-1.900	1.900	-0.040	0.400	-1.880	1.900	0.030	0.450
40-60mm	109.74	57.1	3033	384.8	350.3	57.1	2777	381.5	348.4	-1.900	1.900	-0.040	0.320	-1.900	1.900	0.020	0.380
60-80mm	48.22	57.1	2611	244.6	204.1	57.1	2758	244.0	206.0	-1.870	1.900	-0.050	0.240	-1.890	1.900	0.010	0.290
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	210.22	57.1	3033	404.2	391.0	57.1	3024	400.9	389.7	-1.900	1.900	-0.040	0.330	-1.900	1.900	0.020	0.380

Table A. 263: Matched Droplet Info

A.8.2.1 All Droplets for .LA Image

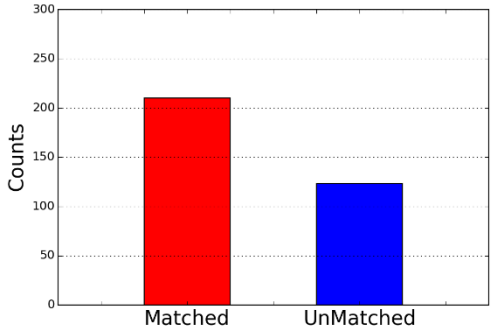

Figure A. 2481: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

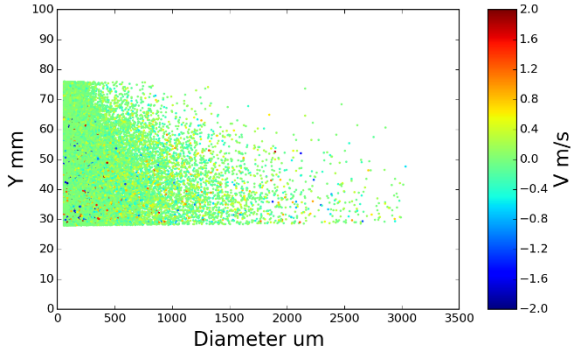

Figure A. 2484: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

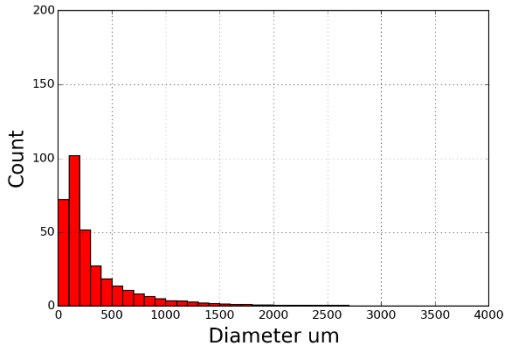

Figure A. 2482: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

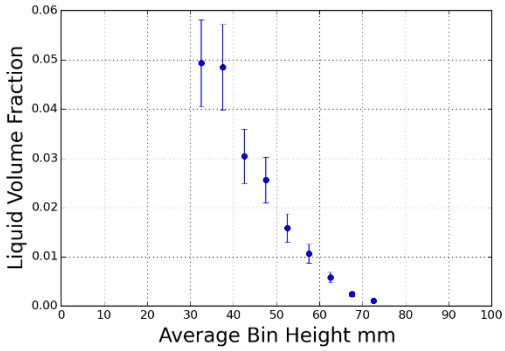

Figure A. 2485: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

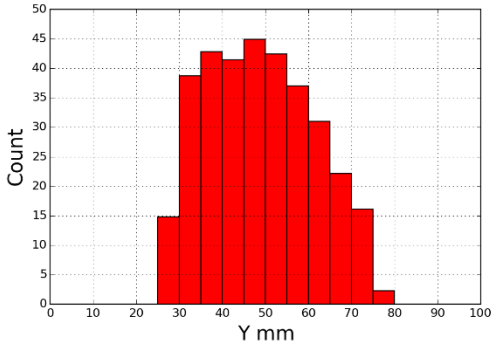

Figure A. 2483: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 All Droplets for .LB Image

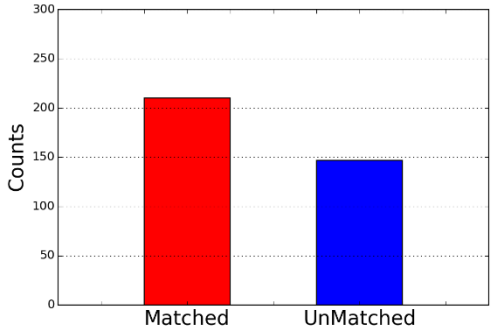

Figure A. 2486: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

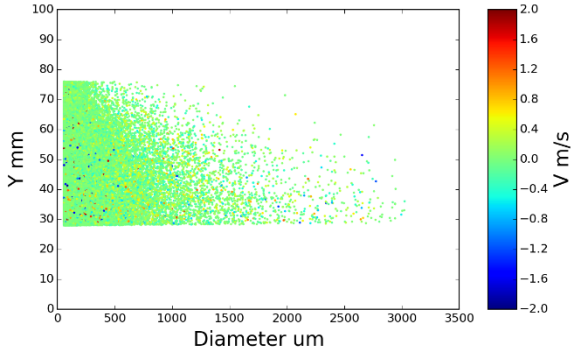

Figure A. 2489: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

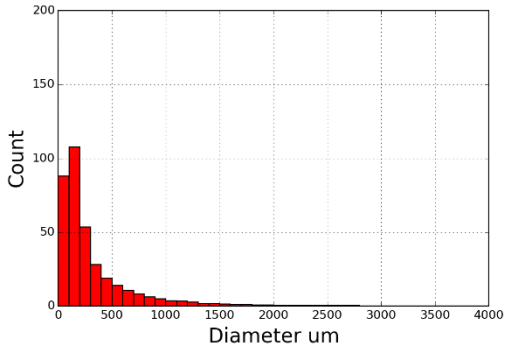

Figure A. 2487: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

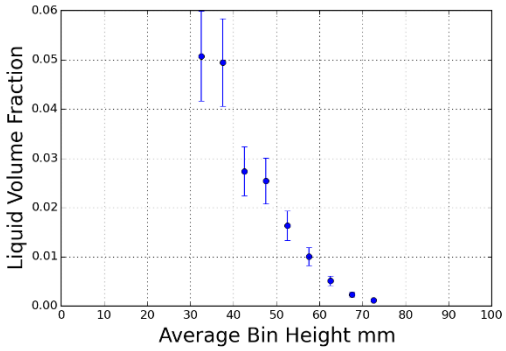

Figure A. 2490: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

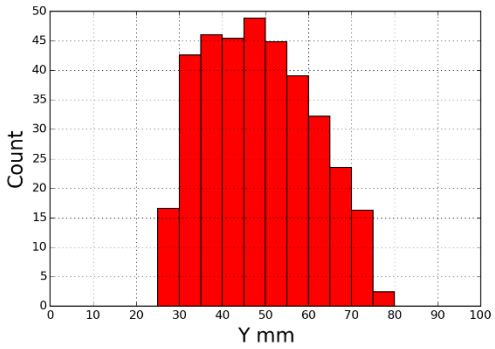

Figure A. 2488: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 Matched Only Droplets for .LA Image

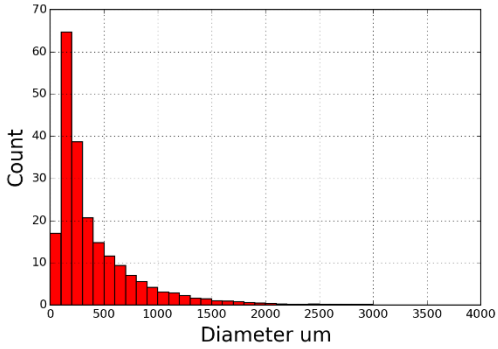

Figure A. 2491: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

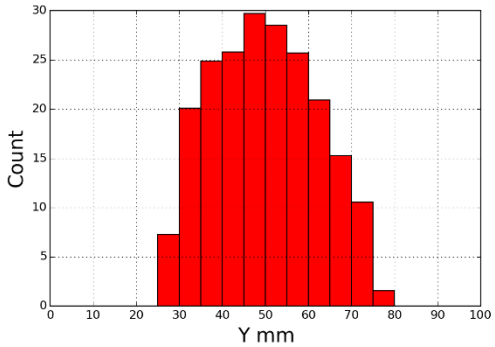

Figure A. 2492: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

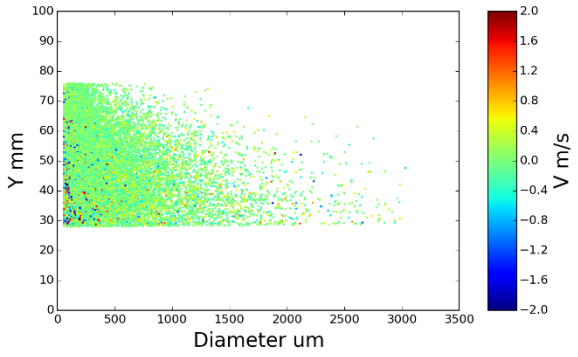

Figure A. 2493: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

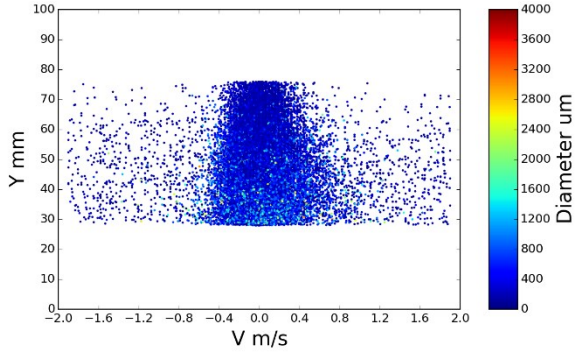

Figure A. 2494: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

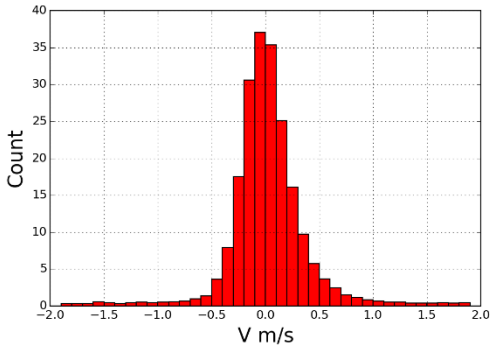

Figure A. 2495: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.1 Matched Only Droplets for .LB Image

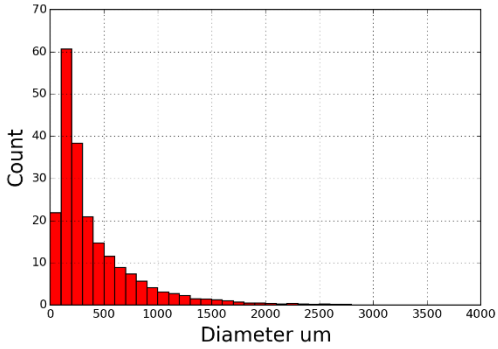

Figure A. 2496: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

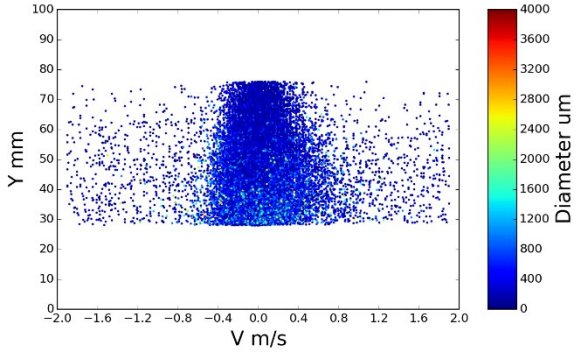

Figure A. 2499: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

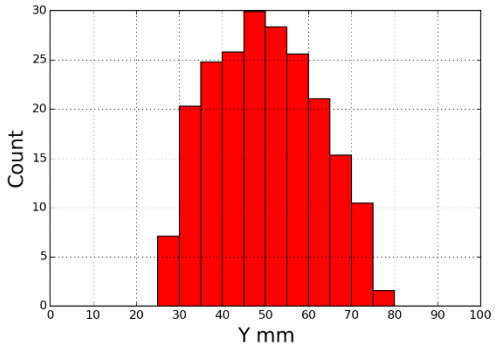

Figure A. 2497: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

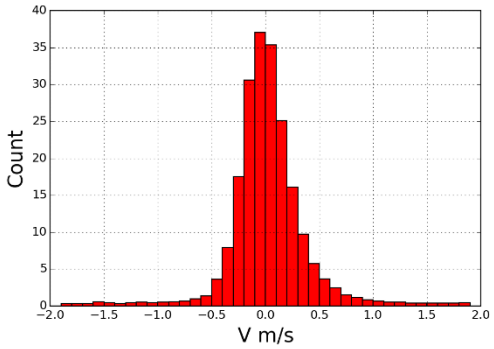

Figure A. 2500: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

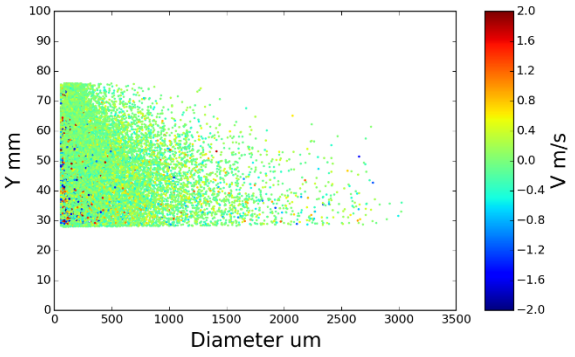

Figure A. 2498: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 Lens 50mm Mag 0_13x

A.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	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	138.19	137.96	128.6	3396	633.3	489.5	128.6	3412	633.6	493.1
40-60mm	83.88	83.81	128.6	3054	441.4	292.7	128.6	2589	439.7	289.0
60-80mm	28.56	28.71	128.6	2187	333.7	193.4	128.6	2222	332.1	191.2
80-100mm	4.89	4.73	128.6	1134	263.5	142.1	128.6	1180	270.0	149.2
All	255.53	255.21	128.6	3396	529.7	419.9	128.6	3412	529.3	421.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.9714				99.7720			
Lowest Particle			20.0570				20.0570			

Table A. 264: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	87.34	128.6	3375	731.4	511.1	128.6	3346	722.9	505.9	-1.900	1.900	-0.060	0.460	-1.900	1.900	0.070	0.510
40-60mm	58.88	128.6	2730	500.2	303.4	128.6	2589	495.3	301.1	-1.900	1.900	-0.070	0.340	-1.900	1.900	0.070	0.400
60-80mm	19.62	128.6	2187	384.1	204.2	128.6	2222	379.2	203.3	-1.900	1.900	-0.070	0.270	-1.900	1.900	0.070	0.320
80-100mm	2.91	128.6	1134	312.8	156.2	128.6	1180	308.6	160.7	-1.460	0.160	-0.080	0.130	-0.330	1.080	0.080	0.170
All	168.75	128.6	3375	603.1	438.0	128.6	3346	596.0	433.4	-1.900	1.900	-0.070	0.400	-1.900	1.900	0.070	0.450

Table A. 265: Matched Droplet Info

A.8.2.2 All Droplets for .LA Image

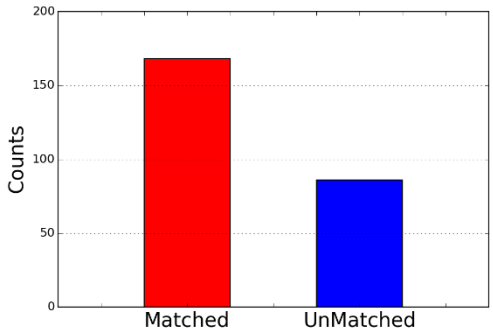

Figure A. 2501: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

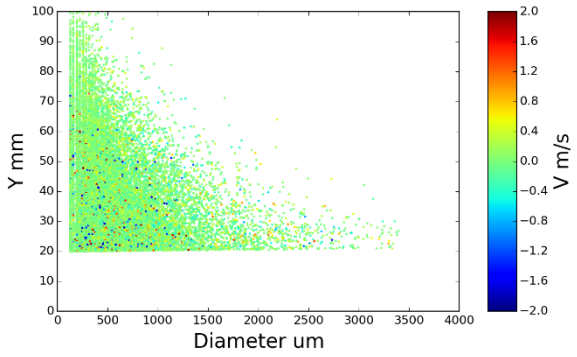

Figure A. 2504: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

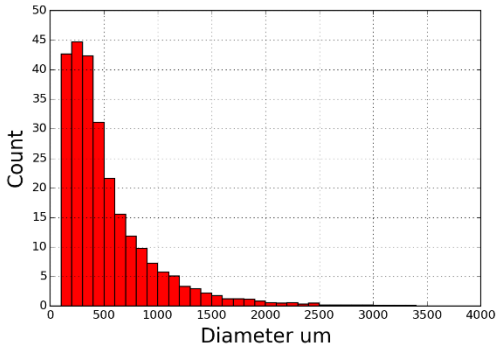

Figure A. 2502: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

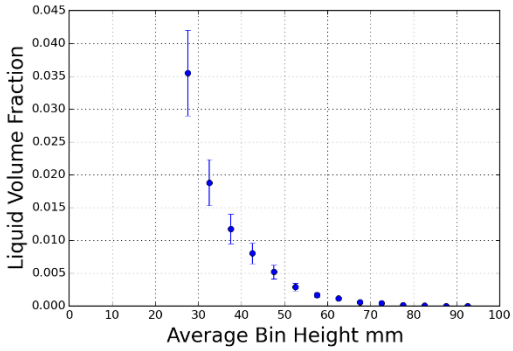

Figure A. 2505: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

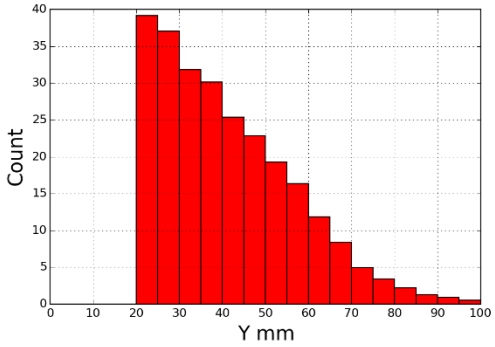

Figure A. 2503: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 All Droplets for .LB Image

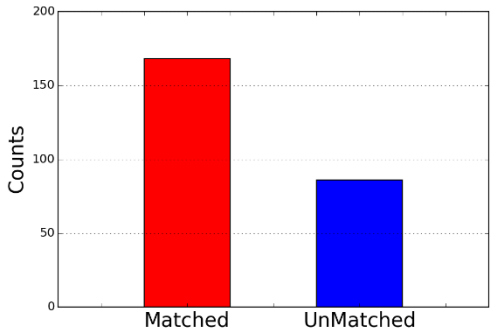

Figure A. 2506: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

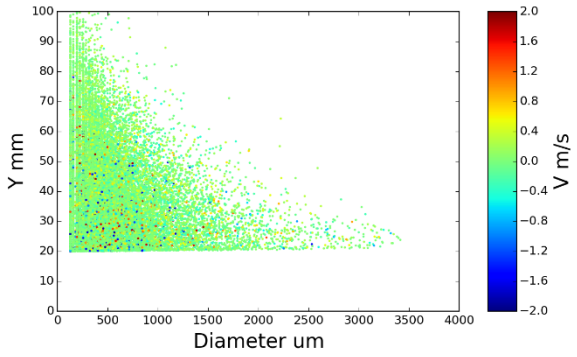

Figure A. 2509: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

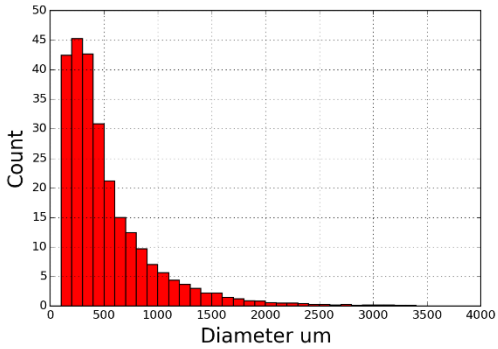

Figure A. 2507: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

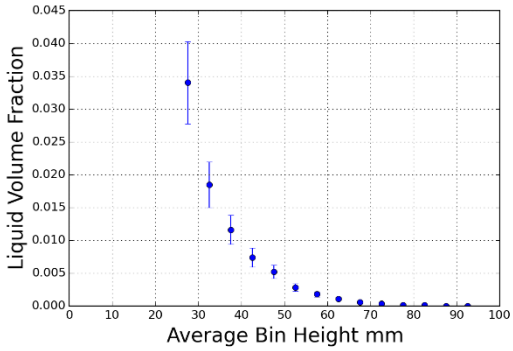

Figure A. 2510: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

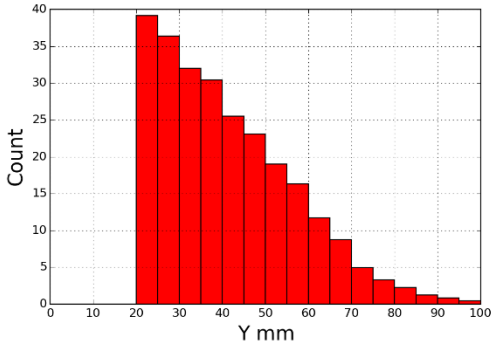

Figure A. 2508: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 Matched Only Droplets for .LA Image

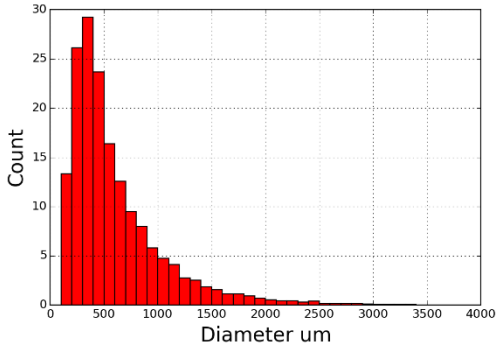

Figure A. 2511: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

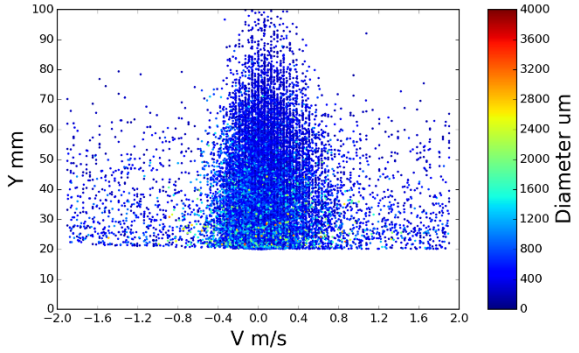

Figure A. 2514: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

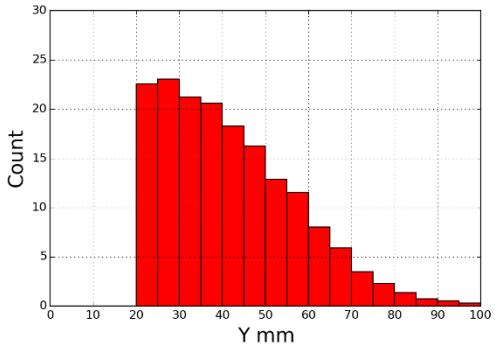

Figure A. 2512: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

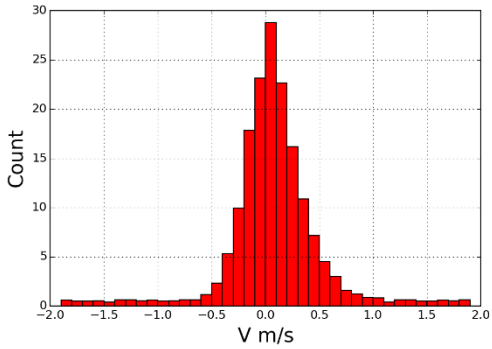

Figure A. 2515: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

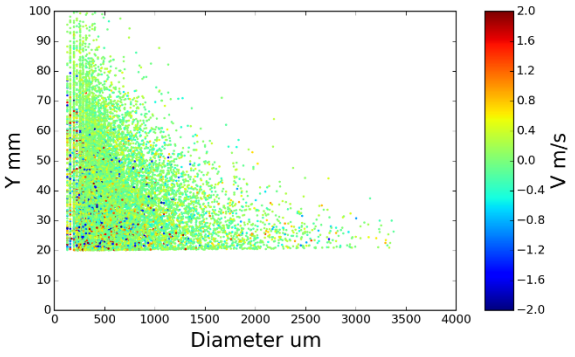

Figure A. 2513: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 Matched Only Droplets for .LB Image

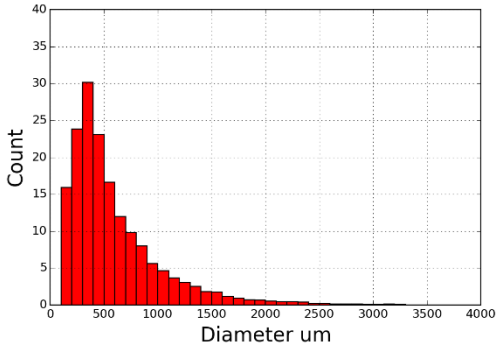

Figure A. 2516: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

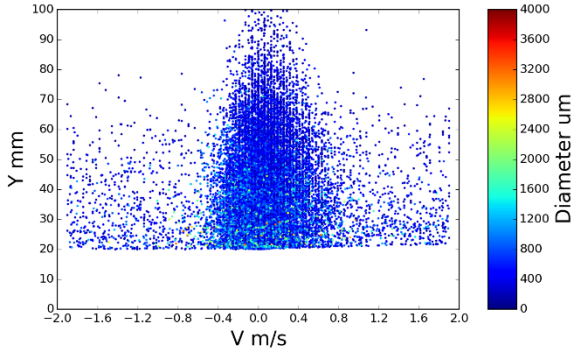

Figure A. 2519: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

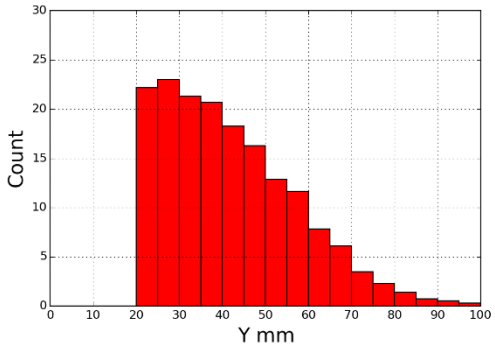

Figure A. 2517: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

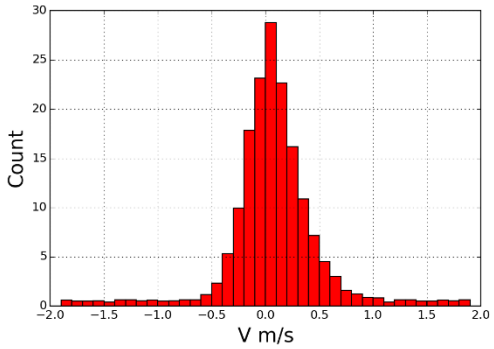

Figure A. 2520: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

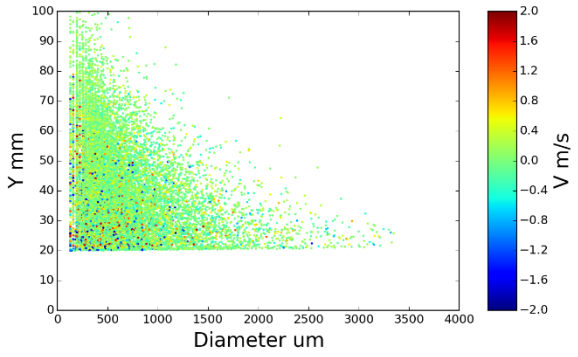

Figure A. 2518: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.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	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	122.15	122.16	128.6	3418	707.9	545.1	128.6	3414	710.1	542.6
40-60mm	64.53	65.15	128.6	2703	523.0	375.8	128.6	2718	516.8	377.2
60-80mm	16.32	16.67	128.6	2225	392.4	267.7	128.6	2234	384.8	266.2
80-100mm	1.44	1.38	128.6	1192	340.4	216.5	128.6	1177	347.1	215.7
All	204.44	205.36	128.6	3418	621.8	490.4	128.6	3414	620.0	489.4
			Height A (mm)				Height B (mm)			
Highest Particle			99.8817				99.9429			
Lowest Particle			20.0570				20.0570			

Table A. 266: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	74.59	128.6	3410	832.5	563.8	128.6	3414	817.8	553.7	-1.900	1.900	-0.070	0.480	-1.900	1.900	-0.000	0.520
40-60mm	43.16	128.6	2703	622.0	391.9	128.6	2662	614.5	393.1	-1.900	1.900	-0.070	0.320	-1.900	1.840	-0.010	0.390
60-80mm	10.63	128.6	2225	478.8	286.4	128.6	2234	471.9	287.0	-1.780	1.900	-0.070	0.260	-1.900	1.770	-0.010	0.300
80-100mm	0.93	128.6	1192	415.3	231.9	128.6	1177	414.7	229.8	-1.450	1.300	-0.080	0.230	-1.110	1.040	-0.050	0.240
All	129.31	128.6	3410	730.1	507.5	128.6	3414	718.9	500.7	-1.900	1.900	-0.070	0.420	-1.900	1.900	-0.010	0.460

Table A. 267: Matched Droplet Info

A.8.2.2 All Droplets for .LA Image

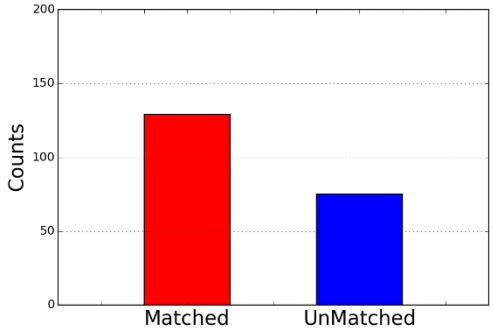

Figure A. 2521: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

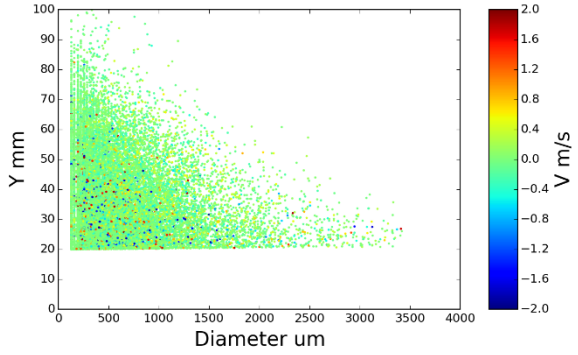

Figure A. 2524: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

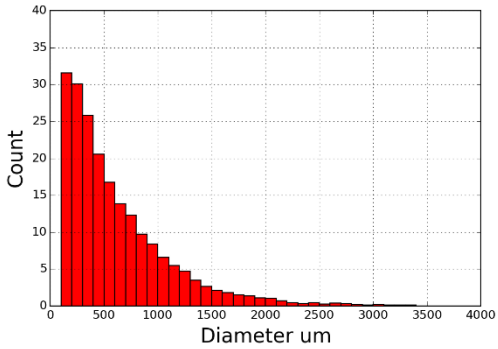

Figure A. 2522: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

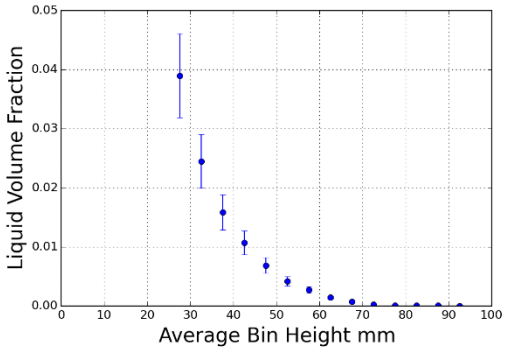

Figure A. 2525: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

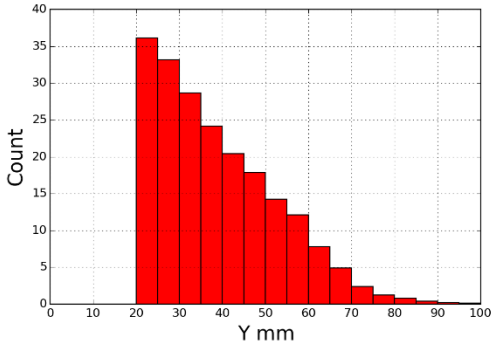

Figure A. 2523: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 All Droplets for .LB Image

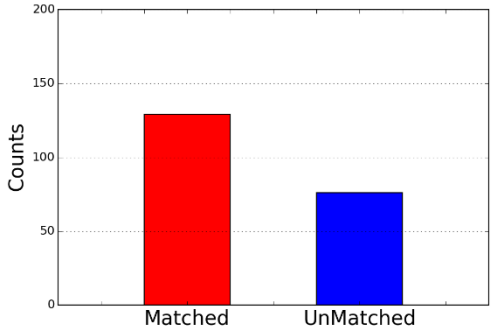

Figure A. 2526: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

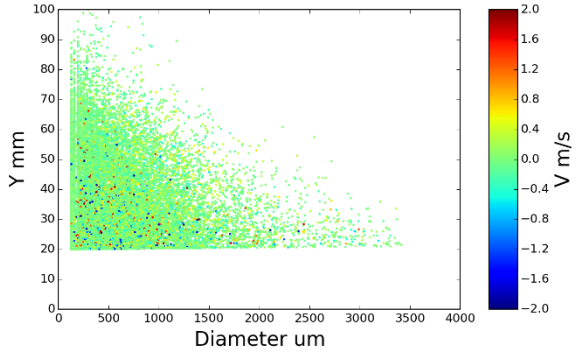

Figure A. 2529: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

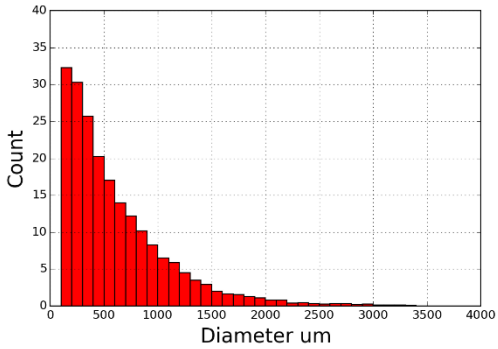

Figure A. 2527: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

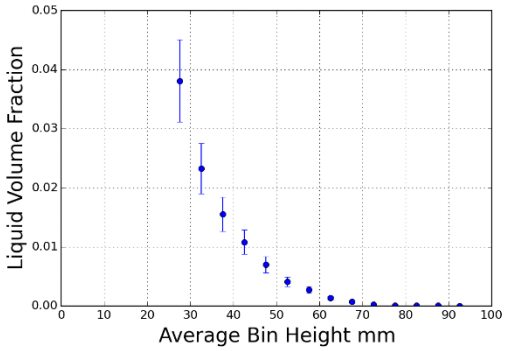

Figure A. 2530: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

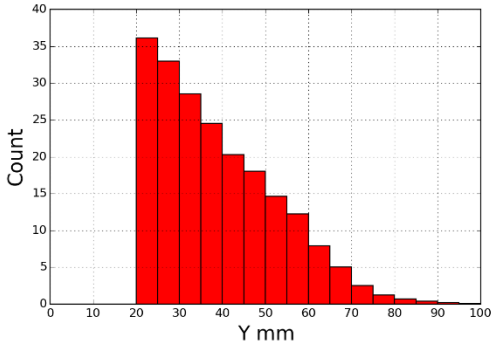

Figure A. 2528: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 Matched Only Droplets for .LA Image

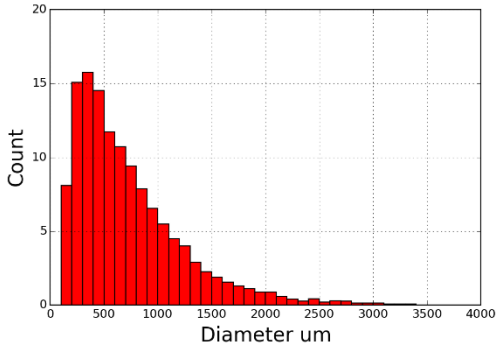

Figure A. 2531: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

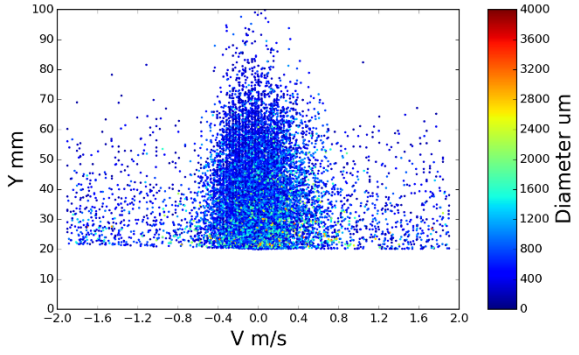

Figure A. 2534: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

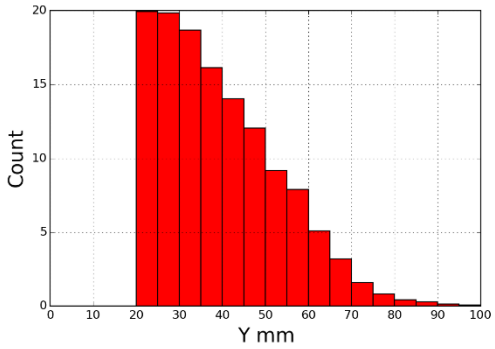

Figure A. 2532: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

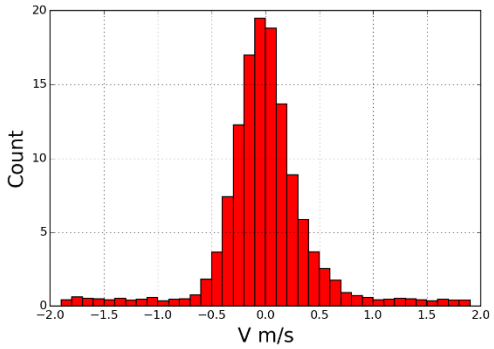

Figure A. 2535: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

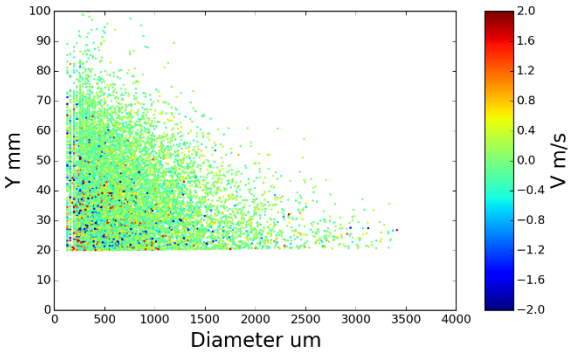

Figure A. 2533: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 Matched Only Droplets for .LB Image

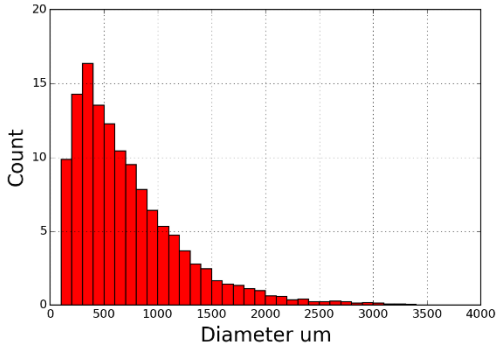

Figure A. 2536: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

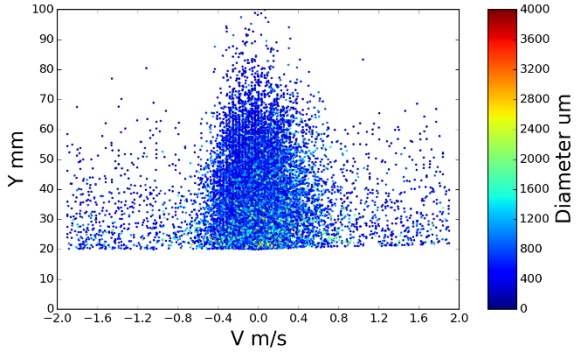

Figure A. 2539: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

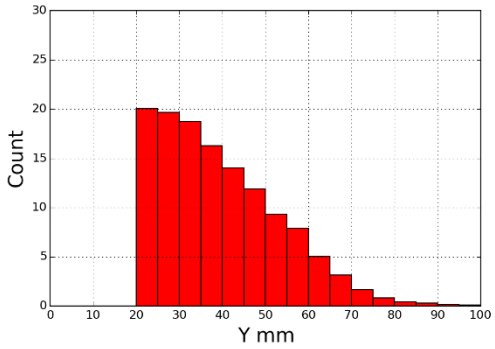

Figure A. 2537: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

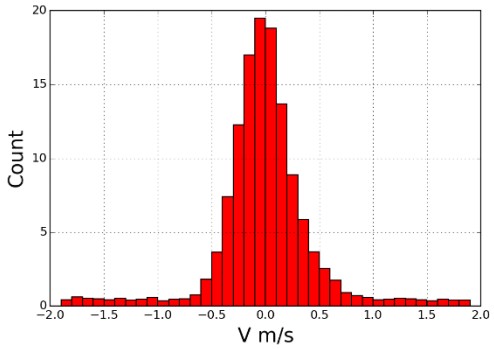

Figure A. 2540: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

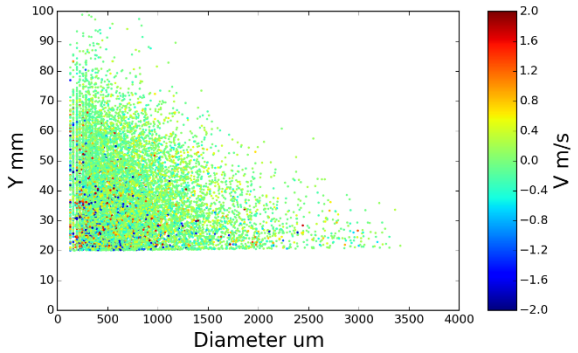

Figure A. 2538: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.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	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	105.76	107.64	128.6	3414	741.4	587.5	128.6	3403	738.8	588.5
40-60mm	49.89	50.4	128.6	3371	570.5	443.3	128.6	3381	567.6	443.4
60-80mm	8.04	8.43	128.6	3156	453.8	353.9	128.6	3158	442.3	349.5
80-100mm	0.51	0.53	128.6	1392	535.6	302.7	128.6	1367	537.7	300.5
All	164.2	167.0	128.6	3414	674.7	545.0	128.6	3403	671.5	545.8
			Height A (mm)				Height B (mm)			
Highest Particle			98.4360				98.7057			
Lowest Particle			20.0570				20.0570			

Table A. 268: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	61.83	128.6	3369	892.4	617.5	128.6	3403	877.3	613.2	-1.900	1.900	-0.060	0.490	-1.900	1.900	-0.030	0.530
40-60mm	32.78	128.6	3371	687.3	464.0	128.6	3381	678.2	460.7	-1.900	1.900	-0.050	0.330	-1.900	1.850	-0.050	0.390
60-80mm	5.1	128.6	3156	564.2	384.5	128.6	3158	557.3	379.5	-1.840	1.740	-0.050	0.250	-1.840	1.520	-0.080	0.290
80-100mm	0.37	157.5	1392	657.8	262.9	128.6	1367	664.3	264.6	-0.200	0.110	-0.050	0.090	-0.220	0.560	0.060	0.190
All	100.08	128.6	3371	807.6	571.1	128.6	3403	795.2	566.7	-1.900	1.900	-0.060	0.430	-1.900	1.900	-0.040	0.480

Table A. 269: Matched Droplet Info

A.8.2.2 All Droplets for .LA Image

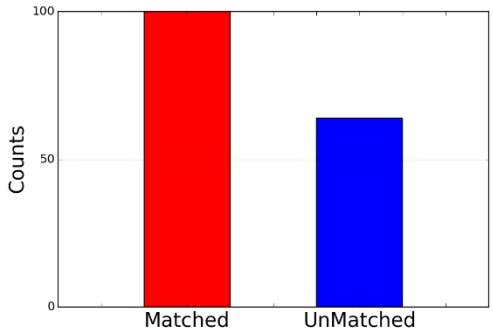

Figure A. 2541: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

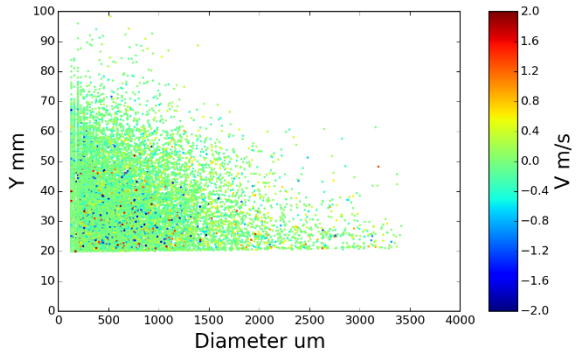

Figure A. 2544: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

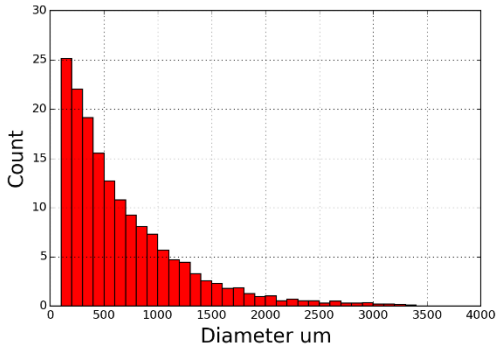

Figure A. 2542: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

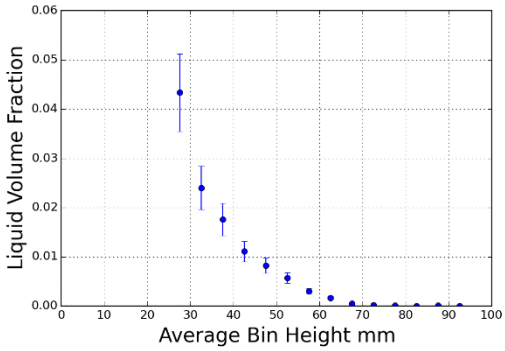

Figure A. 2545: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

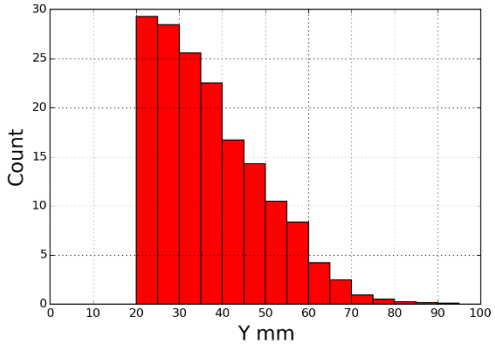

Figure A. 2543: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 All Droplets for .LB Image

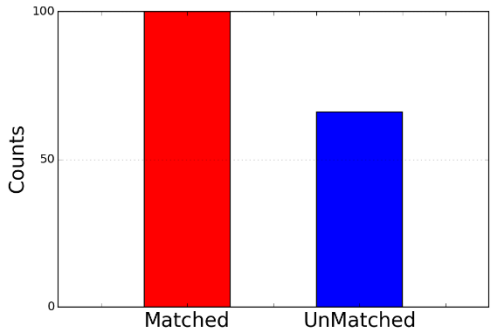

Figure A. 2546: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

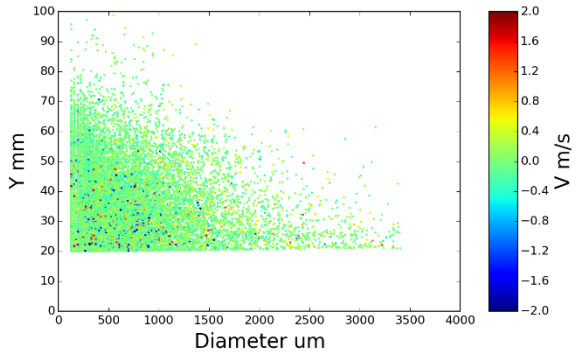

Figure A. 2549: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

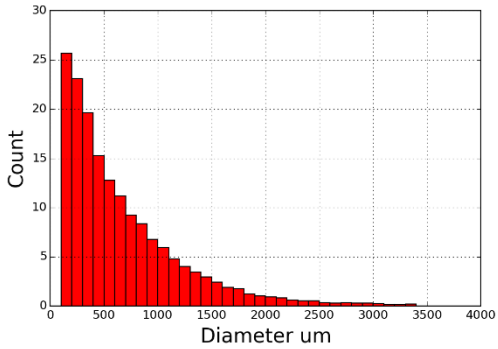

Figure A. 2547: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

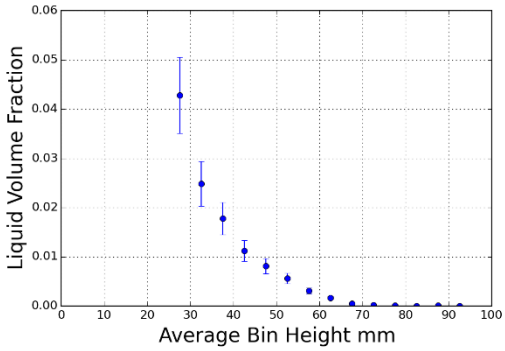

Figure A. 2550: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

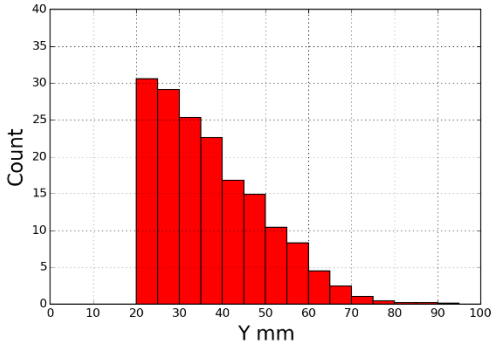

Figure A. 2548: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 Matched Only Droplets for .LA Image

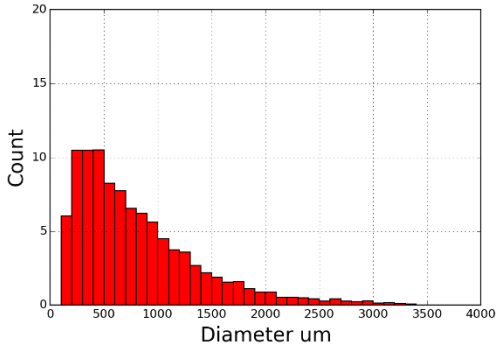

Figure A. 2551: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

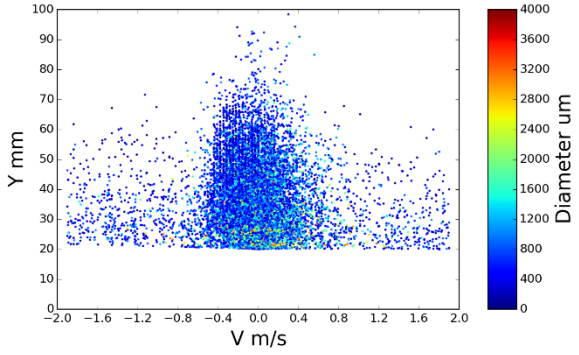

Figure A. 2554: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

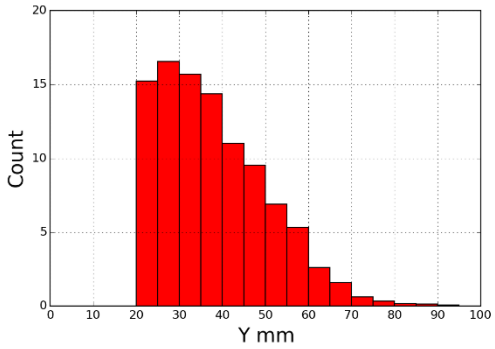

Figure A. 2552: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

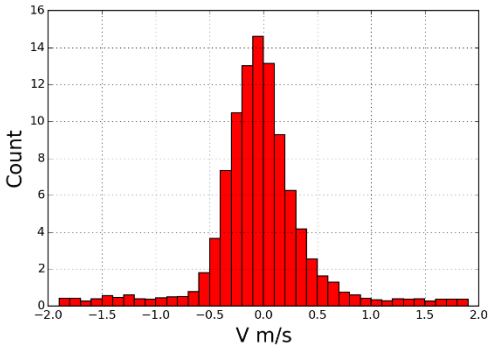

Figure A. 2555: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

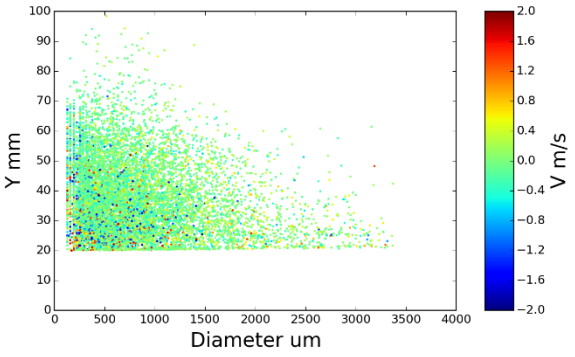

Figure A. 2553: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 Matched Only Droplets for .LB Image

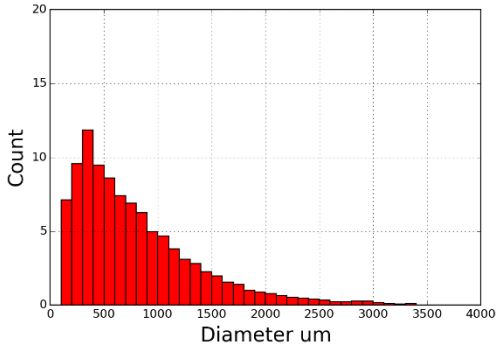

Figure A. 2556: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

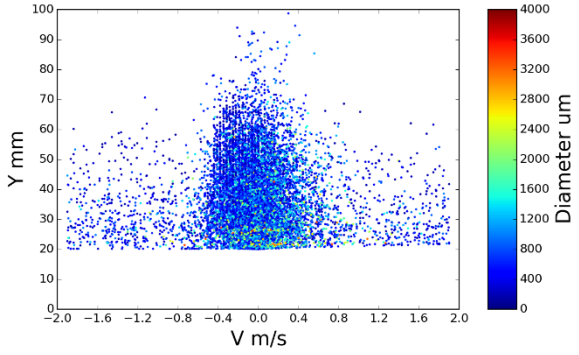

Figure A. 2559: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

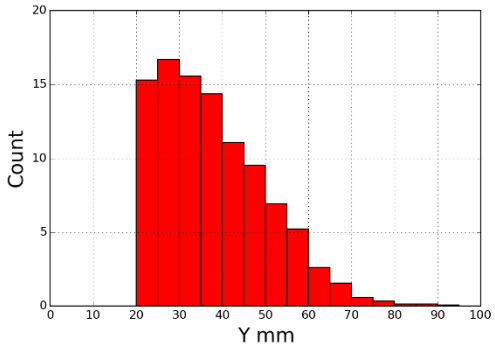

Figure A. 2557: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

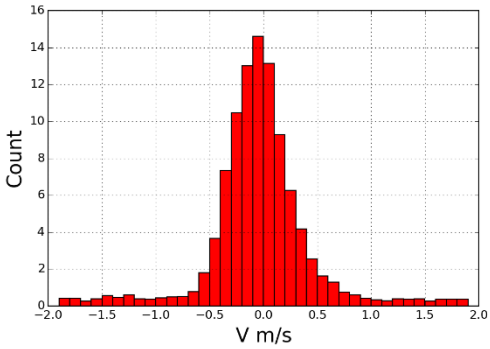

Figure A. 2560: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

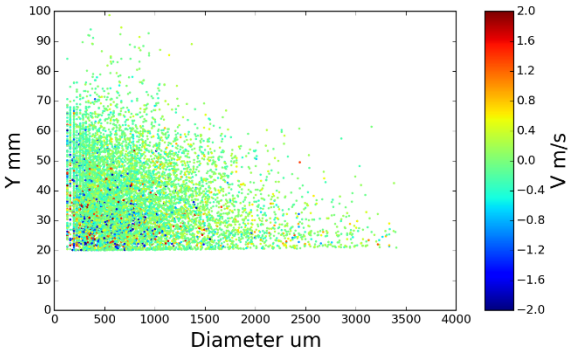

Figure A. 2558: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 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	95.44	95.72	128.6	3415	738.1	604.1	128.6	3415	738.8	601.5
40-60mm	55.26	55.45	128.6	3401	514.4	426.3	128.6	3135	505.2	418.6
60-80mm	9.08	9.43	128.6	2786	397.0	314.6	128.6	2166	396.7	298.2
80-100mm	0.45	0.43	128.6	2226	504.4	399.4	128.6	2066	522.0	420.1
All	160.23	161.03	128.6	3415	641.0	548.4	128.6	3415	637.8	544.7
			Height A (mm)				Height B (mm)			
Highest Particle			99.7150				99.6580			
Lowest Particle			20.0570				20.0570			

Table A. 270: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	52.33	128.6	3396	909.2	646.4	128.6	3389	894.6	640.4	-1.900	1.900	-0.050	0.510	-1.900	1.900	-0.010	0.550
40-60mm	34.3	128.6	3295	626.5	459.5	128.6	3135	614.6	451.8	-1.900	1.900	-0.060	0.350	-1.900	1.900	-0.020	0.420
60-80mm	5.19	128.6	2206	516.2	329.7	128.6	2166	513.8	330.8	-1.770	1.770	-0.050	0.260	-1.770	1.850	-0.030	0.330
80-100mm	0.27	157.5	2226	678.9	422.9	128.6	2066	665.4	415.9	-0.190	0.170	-0.020	0.080	-0.520	0.260	-0.080	0.180
All	92.09	128.6	3396	781.1	587.3	128.6	3389	768.1	580.7	-1.900	1.900	-0.050	0.440	-1.900	1.900	-0.010	0.490

Table A. 271: Matched Droplet Info

A.8.2.2 All Droplets for .LA Image

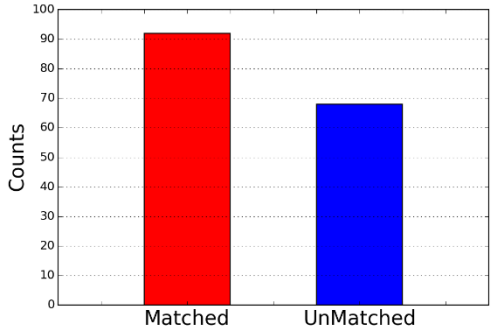

Figure A. 2561: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

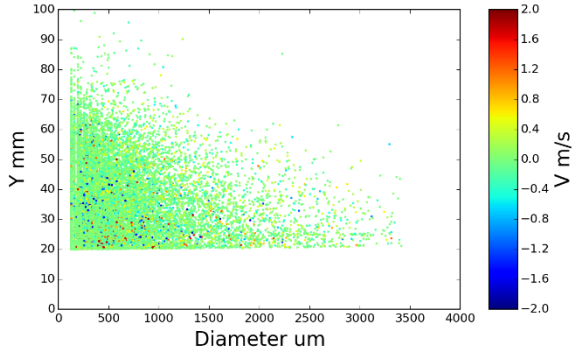

Figure A. 2564: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

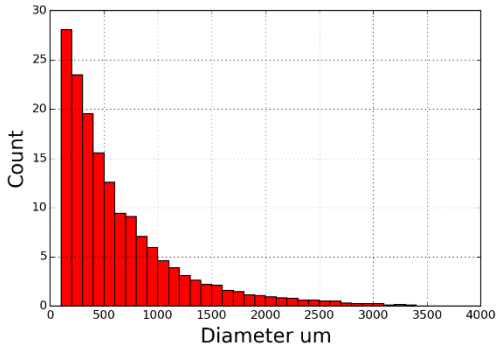

Figure A. 2562: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

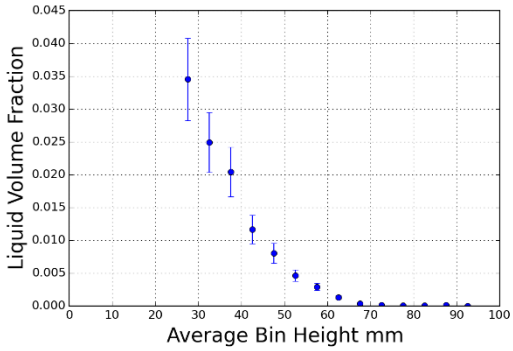

Figure A. 2565: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

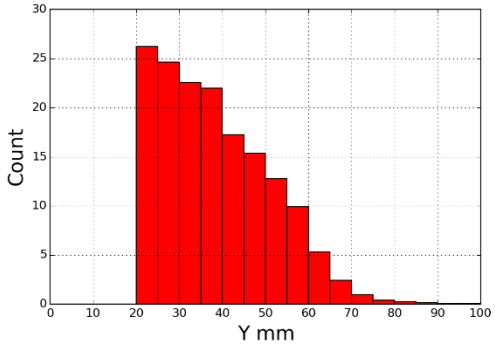

Figure A. 2563: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 All Droplets for .LB Image

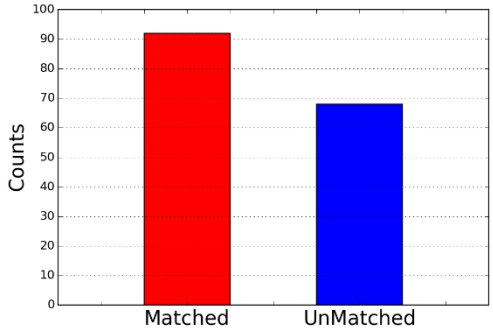

Figure A. 2566: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

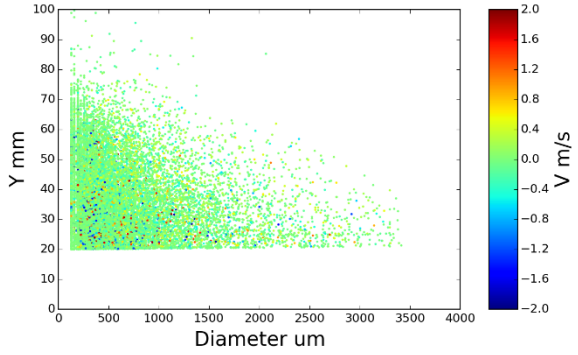

Figure A. 2569: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

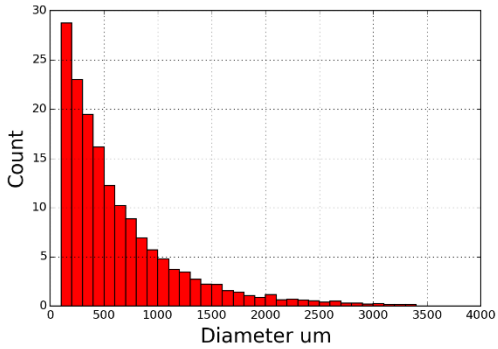

Figure A. 2567: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

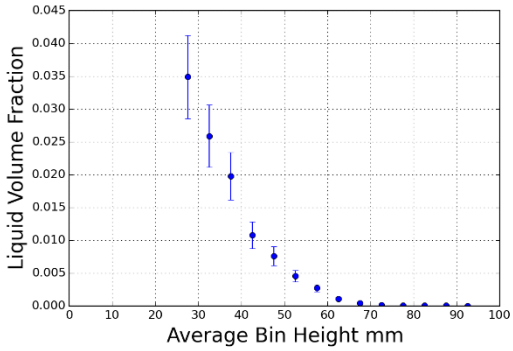

Figure A. 2570: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

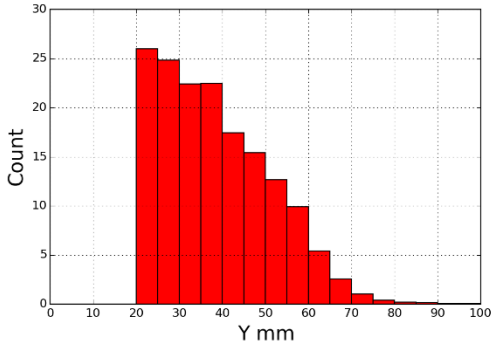

Figure A. 2568: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 Matched Only Droplets for .LA Image

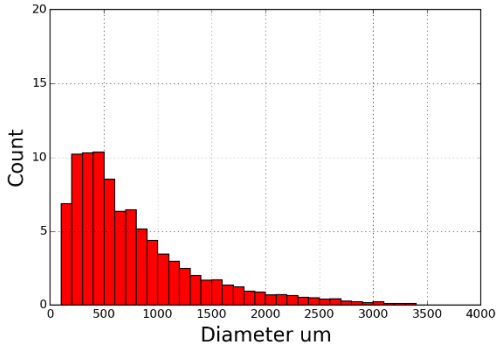

Figure A. 2571: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

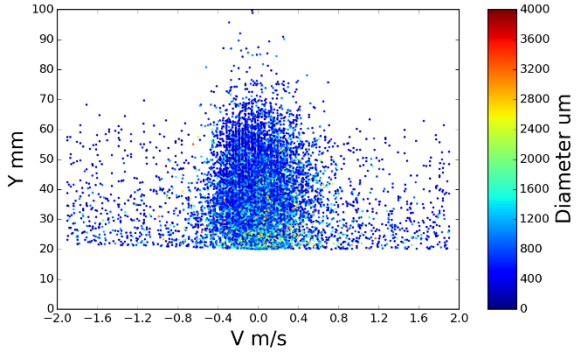

Figure A. 2574: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

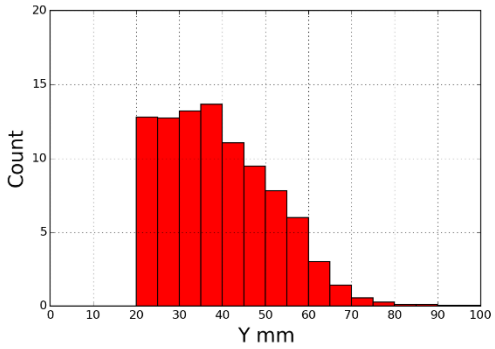

Figure A. 2572: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

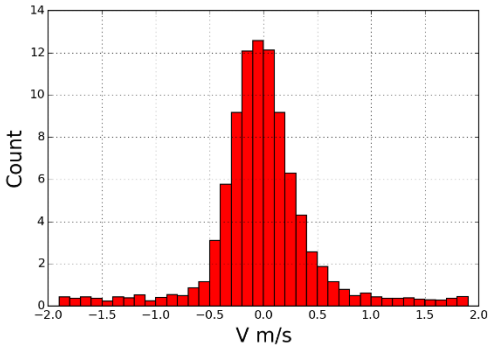

Figure A. 2575: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

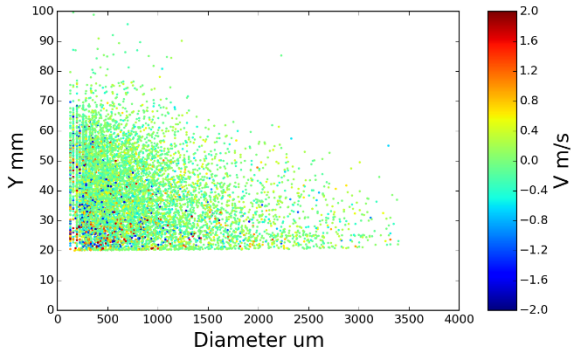

Figure A. 2573: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 Matched Only Droplets for .LB Image

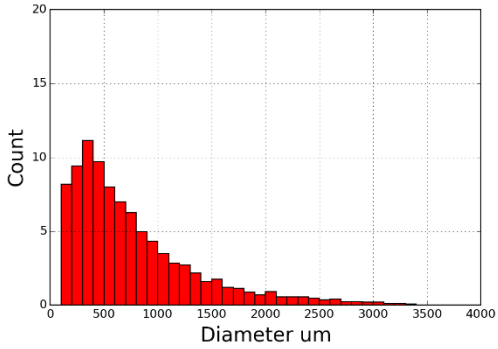

Figure A. 2576: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

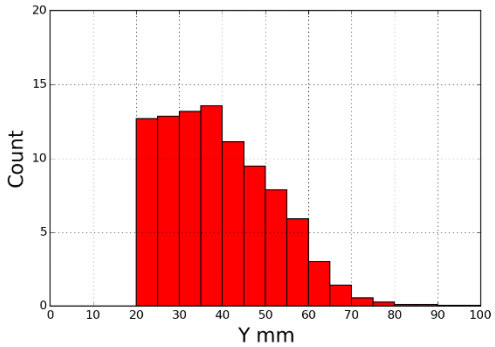

Figure A. 2577: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

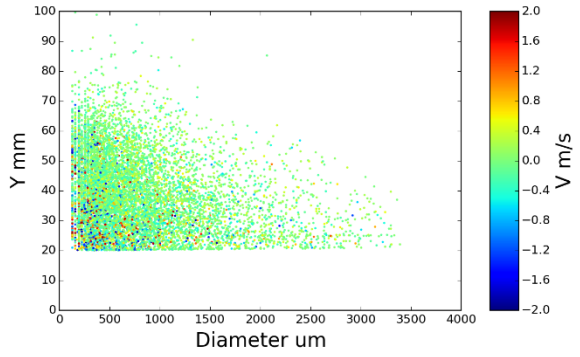

Figure A. 2578: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

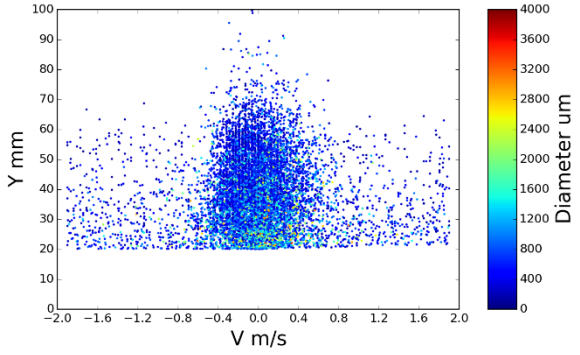

Figure A. 2579: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

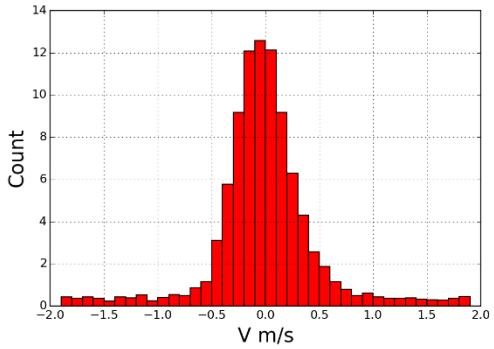

Figure A. 2580: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 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	93.74	93.72	128.6	3415	724.4	598.1	128.6	3397	718.6	597.2
40-60mm	65.92	66.38	128.6	3215	469.7	369.6	128.6	3403	468.4	371.0
60-80mm	11.48	11.39	128.6	3400	394.8	308.1	128.6	3260	384.7	299.4
80-100mm	0.43	0.38	128.6	1175	371.0	247.9	128.6	981.4	381.3	232.7
All	171.57	171.87	128.6	3415	603.6	521.9	128.6	3403	599.1	520.8
			Height A (mm)				Height B (mm)			
Highest Particle			99.7678				99.9113			
Lowest Particle			20.0570				20.0570			

Table A. 272: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	48.54	128.6	3415	888.6	644.0	128.6	3397	874.4	638.9	-1.900	1.900	-0.050	0.540	-1.900	1.900	0.010	0.600
40-60mm	39.97	128.6	3215	569.5	398.4	128.6	3403	562.5	395.3	-1.900	1.900	-0.060	0.410	-1.900	1.900	0.010	0.470
60-80mm	6.67	128.6	3400	485.7	338.4	128.6	3260	479.1	331.0	-1.810	1.710	-0.050	0.290	-1.890	1.840	-0.030	0.350
80-100mm	0.24	128.6	1175	497.8	262.5	128.6	981.4	455.1	232.3	-0.250	0.130	-0.040	0.090	-0.320	0.320	0.060	0.170
All	95.42	128.6	3415	725.8	559.9	128.6	3403	714.6	554.3	-1.900	1.900	-0.060	0.470	-1.900	1.900	0.010	0.530

Table A. 273: Matched Droplet Info

A.8.2.2 All Droplets for .LA Image

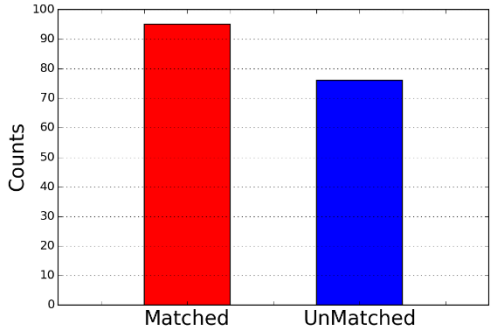

Figure A. 2581: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

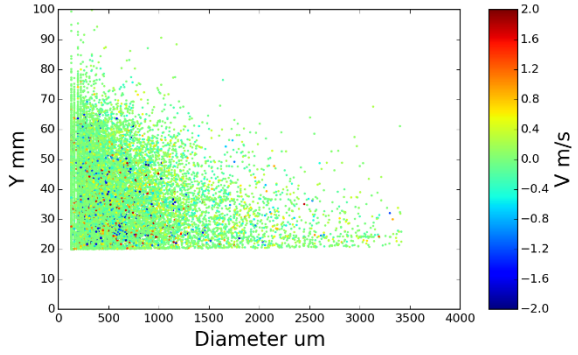

Figure A. 2584: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

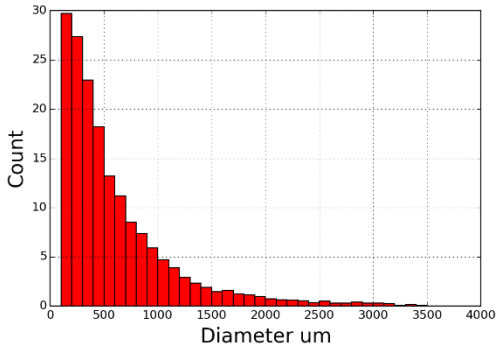

Figure A. 2582: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

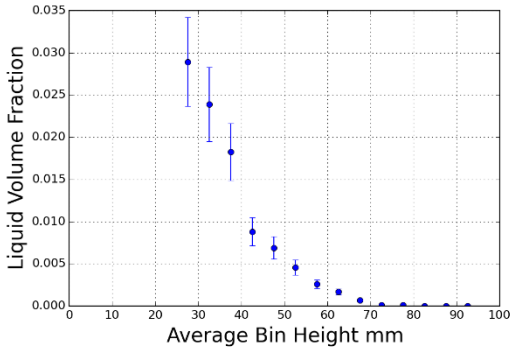

Figure A. 2585: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

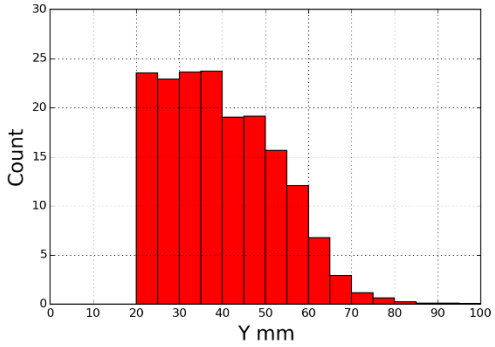

Figure A. 2583: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 All Droplets for .LB Image

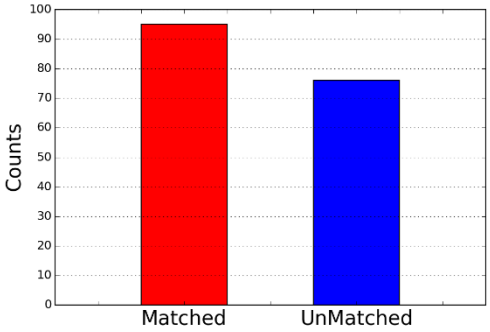

Figure A. 2586: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

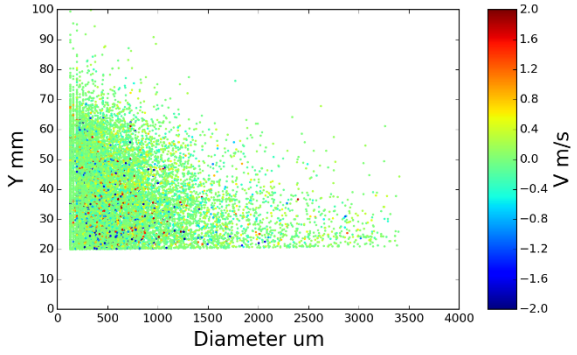

Figure A. 2589: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

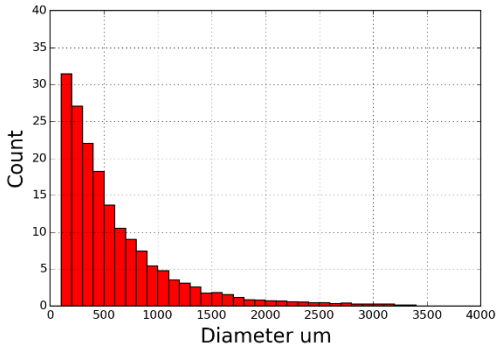

Figure A. 2587: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

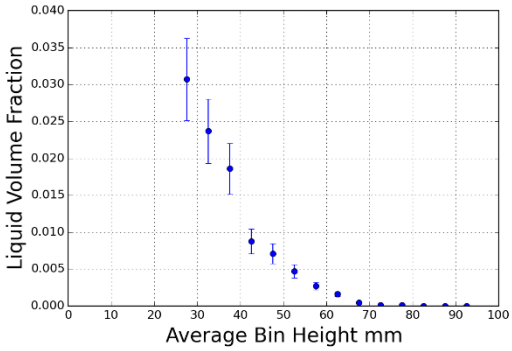

Figure A. 2590: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

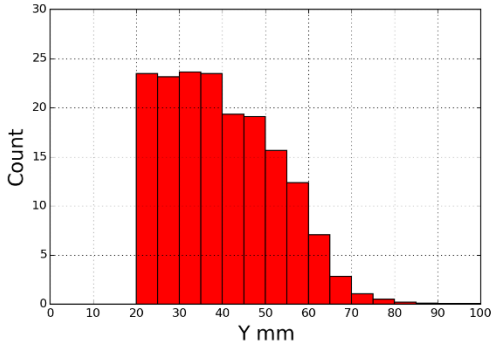

Figure A. 2588: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 Matched Only Droplets for .LA Image

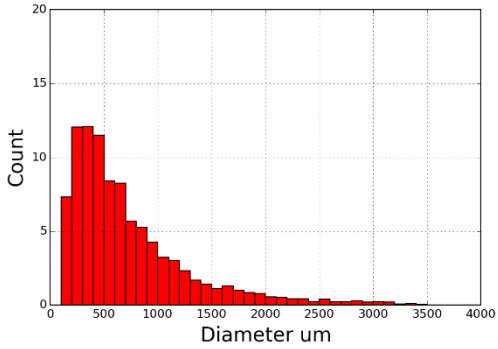

Figure A. 2591: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

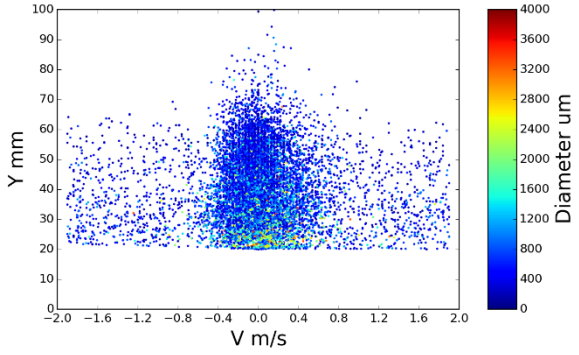

Figure A. 2594: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

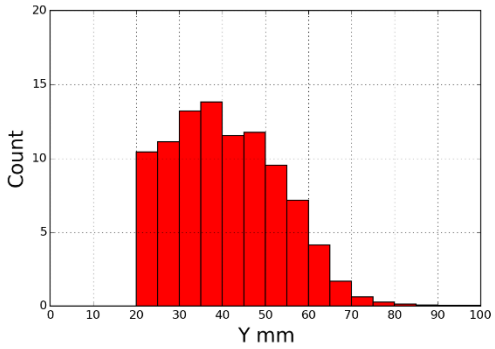

Figure A. 2592: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

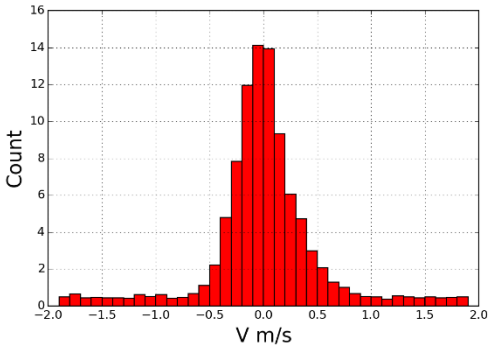

Figure A. 2595: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

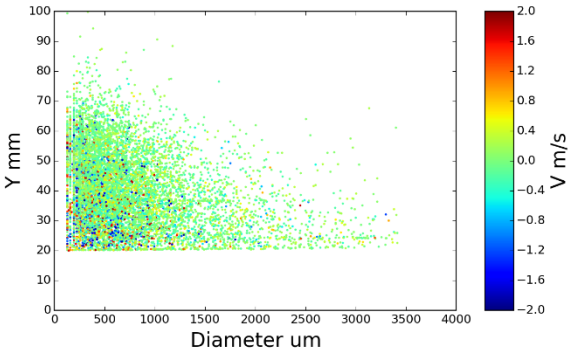

Figure A. 2593: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.2.2 Matched Only Droplets for .LB Image

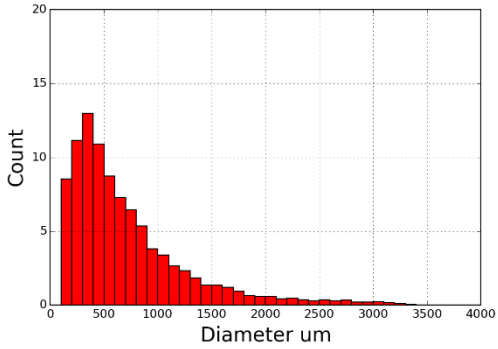

Figure A. 2596: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

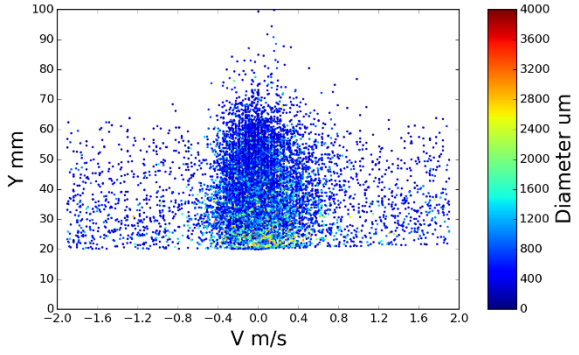

Figure A. 2599: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

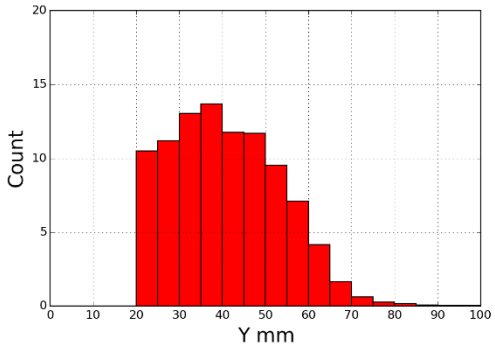

Figure A. 2597: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

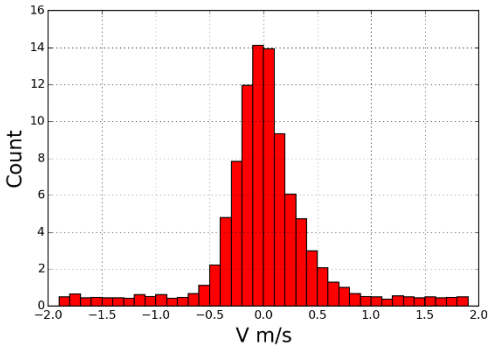

Figure A. 2600: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

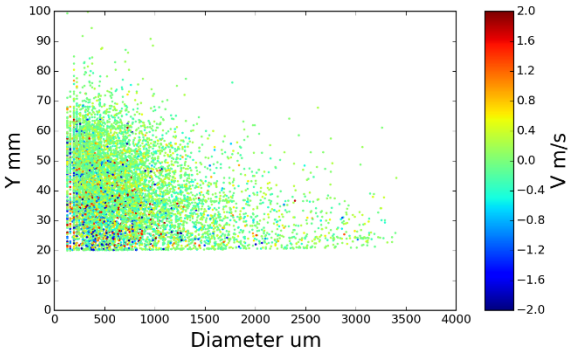

Figure A. 2598: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3 Liquid Level 3

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	13469 / 1.697
Ref Mass Flow (lb/hr) / (kg/s)	3257 / 0.410
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	30250 / 41.026
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	9740 / 30.73
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.1 / 12.83
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	55.2 / 12.91
Total Bundle Q (Btu/hr) / (kW)	300058 / 87.94
Total Bundle & Preboiler Q (Btu/hr) / (kW)	300058 / 87.94
Top Two Rows HTC Ratio	1.011
Bundle Inlet Quality	-0.13
Bundle Exit Quality	1.00

Table A. 274: Thermal Conditions

A.8.3.1 Lens 100mm Mag 0_29x

A.8.3.1 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	107.89	106.83	57.1	2996	432.5	405.6	57.1	2926	437.6	405.0
40-60mm	132.91	130.74	57.1	2844	317.9	282.2	57.1	2823	323.1	285.8
60-80mm	69.54	68.77	57.1	1875	224.4	171.1	57.1	2075	225.8	170.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	310.34	306.36	57.1	2996	336.8	322.5	57.1	2926	341.2	323.9
			Height A (mm)				Height B (mm)			
Highest Particle			75.9600				75.9600			
Lowest Particle			27.9786				27.9786			

Table A. 275: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	78.12	57.1	2967	514.9	416.4	57.1	2926	515.5	418.2	-1.900	1.880	-0.050	0.270	-1.900	1.900	0.090	0.360
40-60mm	103.9	57.1	2844	364.9	293.5	57.1	2823	364.5	294.9	-1.900	1.900	-0.060	0.210	-1.900	1.900	0.100	0.290
60-80mm	53.16	57.1	1875	256.4	179.2	57.1	2075	254.2	178.3	-1.800	1.820	-0.070	0.170	-1.900	1.900	0.100	0.250
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	235.18	57.1	2967	390.2	335.2	57.1	2926	389.5	336.6	-1.900	1.900	-0.060	0.220	-1.900	1.900	0.100	0.310

Table A. 276: Matched Droplet Info

A.8.3.1 All Droplets for .LA Image

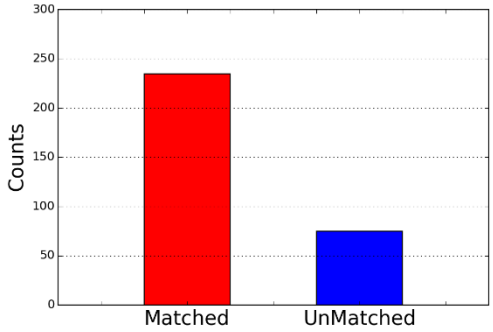

Figure A. 2601: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

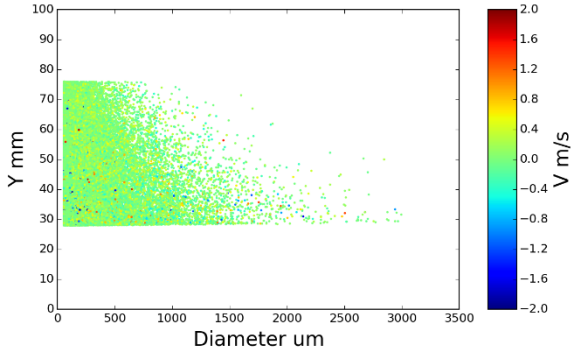

Figure A. 2604: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

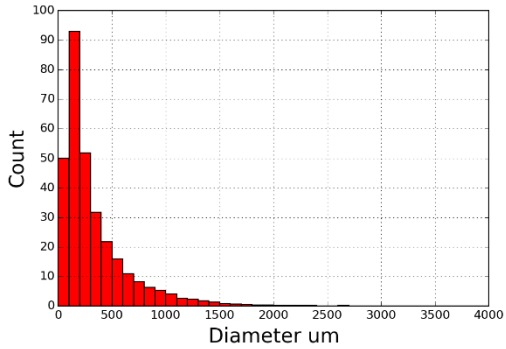

Figure A. 2602: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

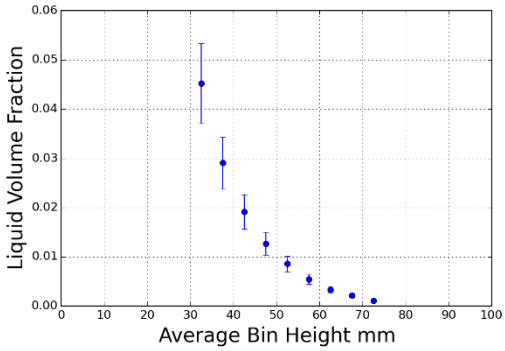

Figure A. 2605: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

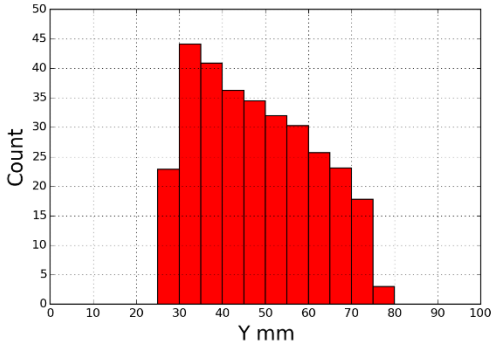

Figure A. 2603: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 All Droplets for .LB Image

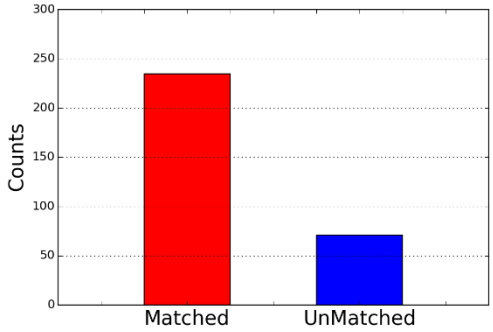

Figure A. 2606: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

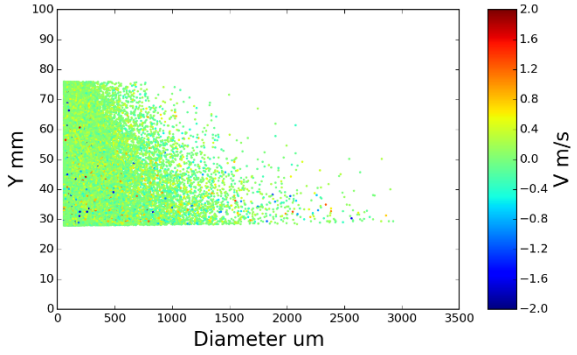

Figure A. 2609: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

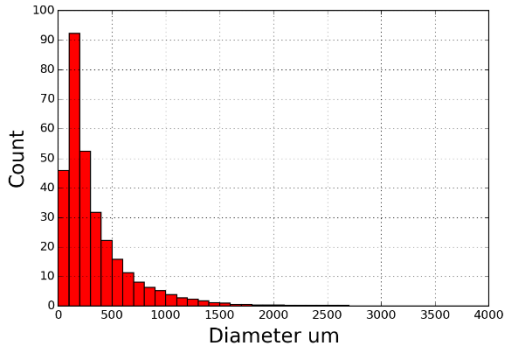

Figure A. 2607: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

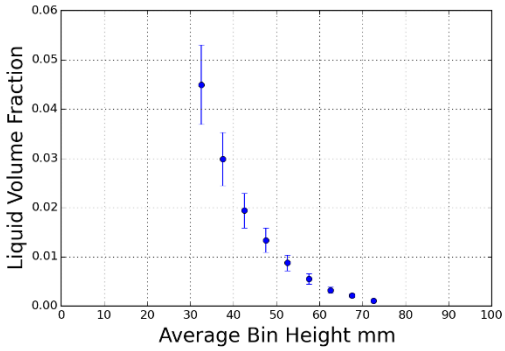

Figure A. 2610: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

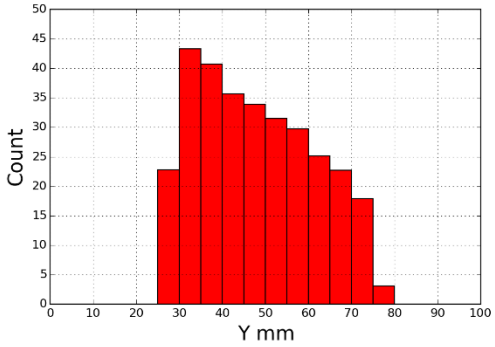

Figure A. 2608: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 Matched Only Droplets for .LA Image

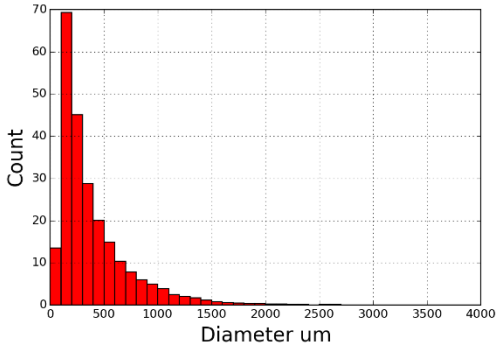

Figure A. 2611: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

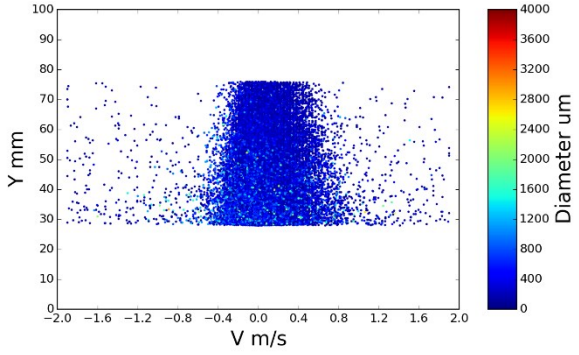

Figure A. 2614: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

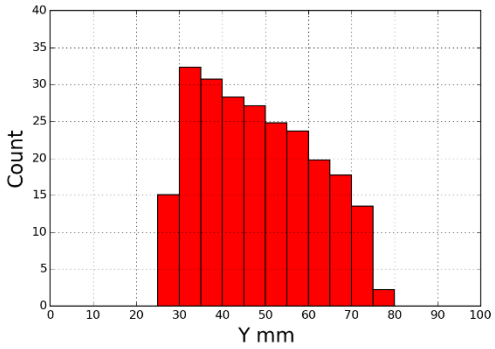

Figure A. 2612: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

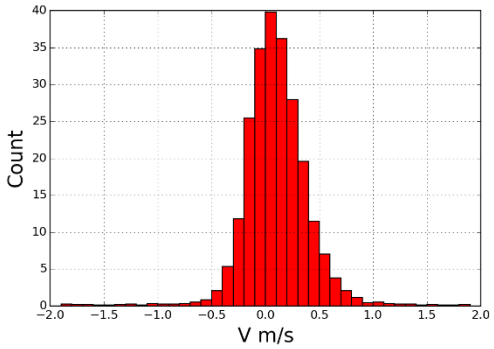

Figure A. 2615: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

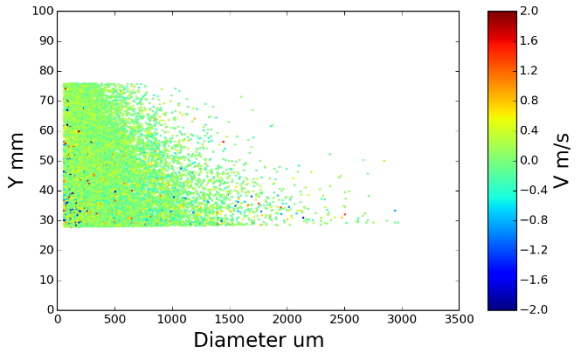

Figure A. 2613: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 Matched Only Droplets for .LB Image

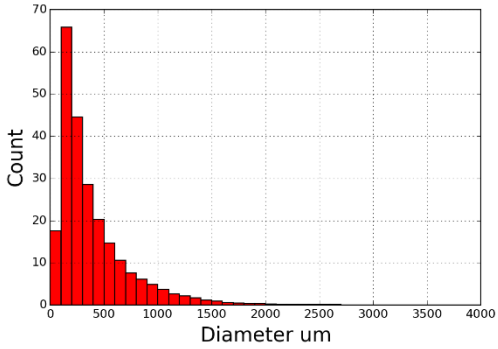

Figure A. 2616: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

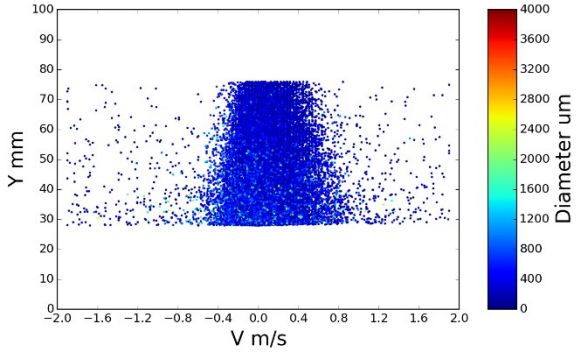

Figure A. 2619: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

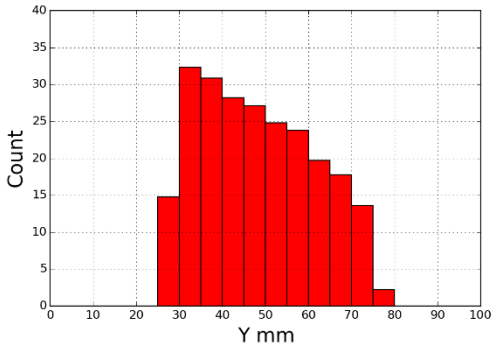

Figure A. 2617: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

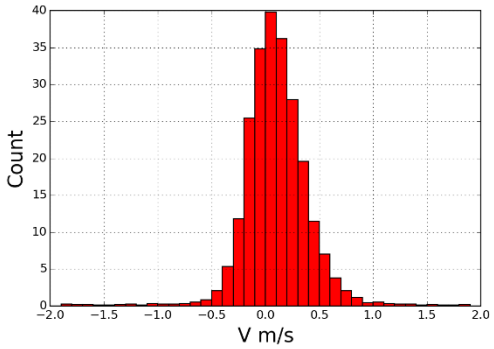

Figure A. 2620: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

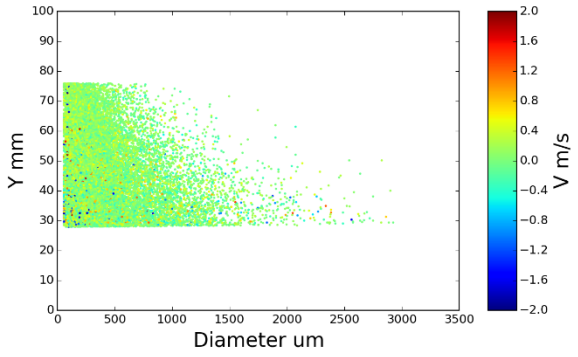

Figure A. 2618: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 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	90.32	87.2	57.1	3007	405.2	443.3	57.1	3018	421.5	452.1
40-60mm	116.7	109.71	57.1	3007	274.9	332.6	57.1	2995	286.0	336.8
60-80mm	52.45	49.59	57.1	2000	179.4	186.3	57.1	2069	183.6	189.0
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	259.5	246.51	57.1	3007	301.0	363.7	57.1	3018	313.3	371.3
			Height A (mm)				Height B (mm)			
Highest Particle			75.9494				75.9473			
Lowest Particle			27.9786				27.9786			

Table A. 277: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	56.99	57.1	3007	530.3	487.6	57.1	3018	529.7	490.4	-1.900	1.870	-0.050	0.290	-1.900	1.900	-0.060	0.370
40-60mm	77.27	57.1	3007	346.6	374.8	57.1	2995	344.5	373.5	-1.900	1.900	-0.080	0.240	-1.900	1.900	-0.080	0.300
60-80mm	36.08	57.1	2000	212.3	210.6	57.1	2069	209.4	208.4	-1.900	1.580	-0.110	0.190	-1.870	1.900	-0.100	0.220
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	170.34	57.1	3007	379.6	408.3	57.1	3018	378.1	409.0	-1.900	1.900	-0.080	0.250	-1.900	1.900	-0.080	0.310

Table A. 278: Matched Droplet Info

A.8.3.1 All Droplets for .LA Image

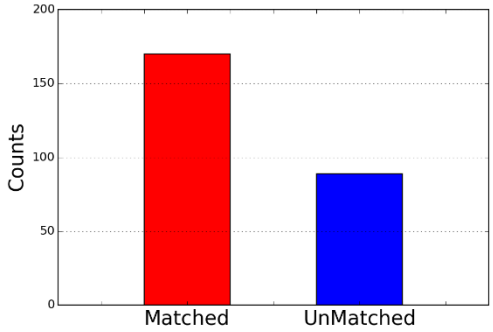

Figure A. 2621: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

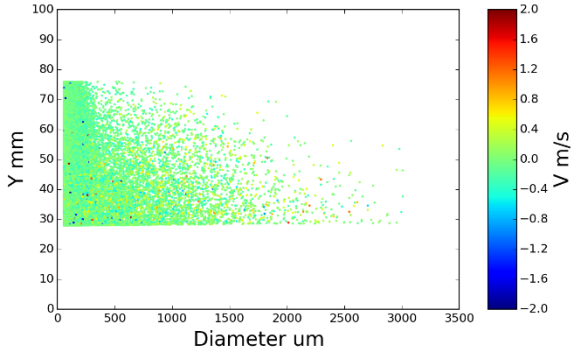

Figure A. 2624: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

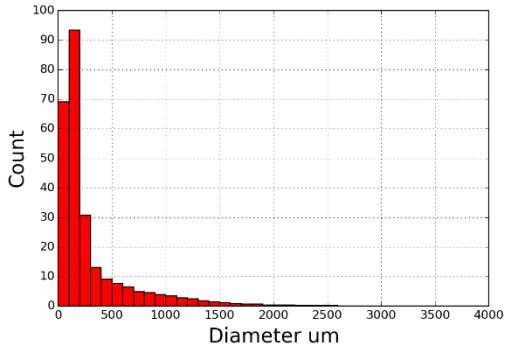

Figure A. 2622: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

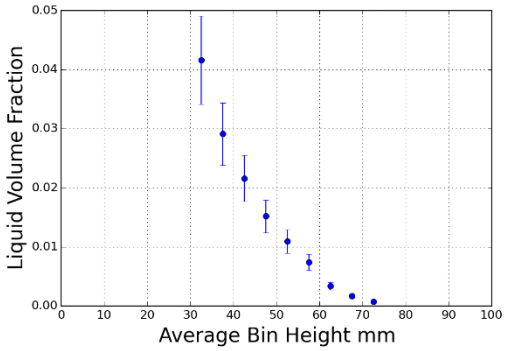

Figure A. 2625: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

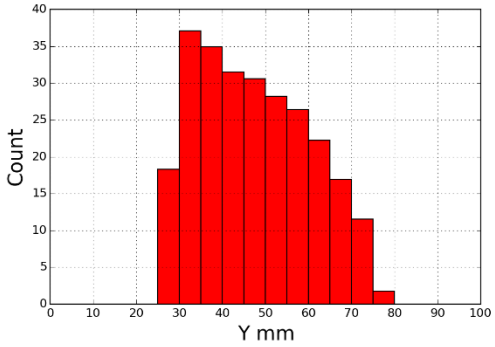

Figure A. 2623: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 All Droplets for .LB Image

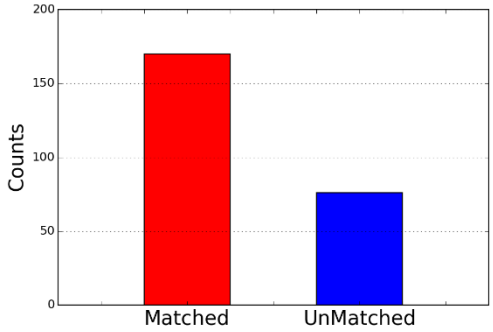

Figure A. 2626: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

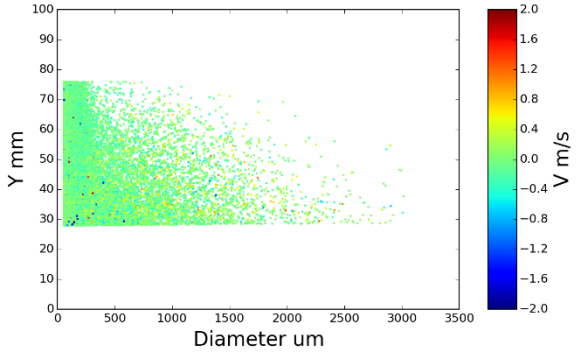

Figure A. 2629: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

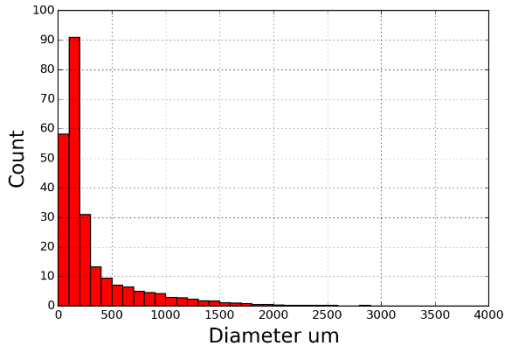

Figure A. 2627: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

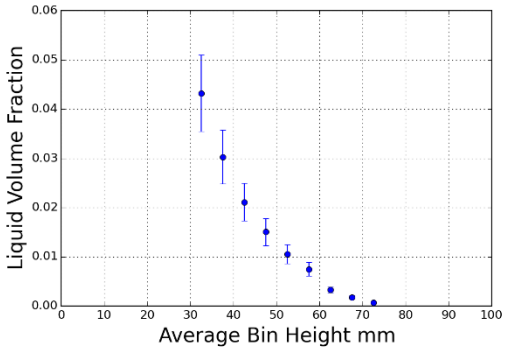

Figure A. 2630: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

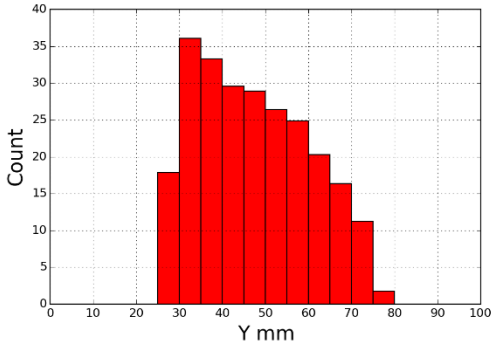

Figure A. 2628: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 Matched Only Droplets for .LA Image

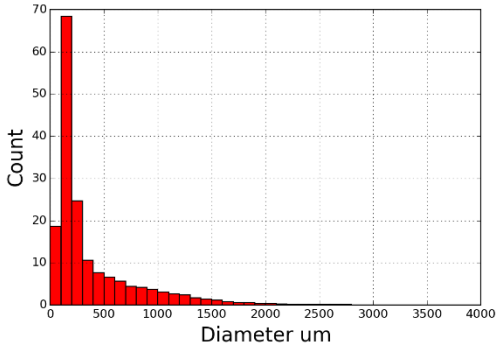

Figure A. 2631: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

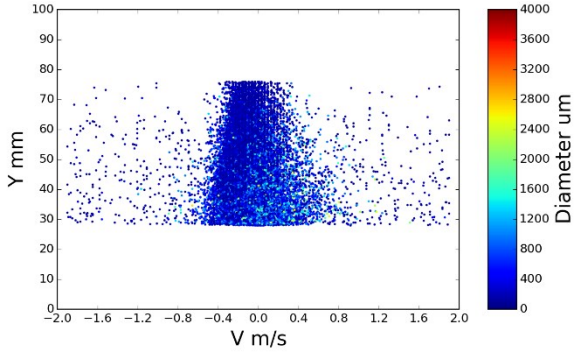

Figure A. 2634: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

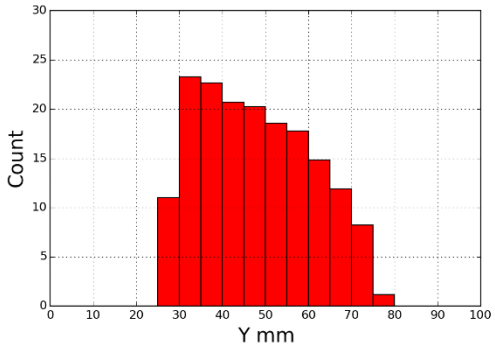

Figure A. 2632: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

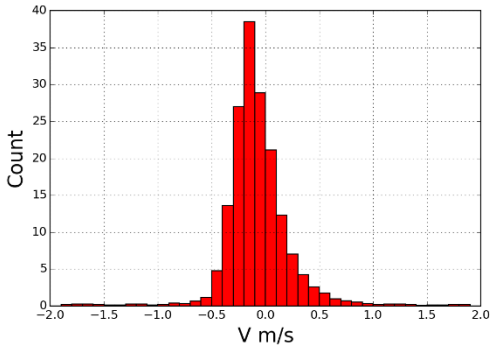

Figure A. 2635: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

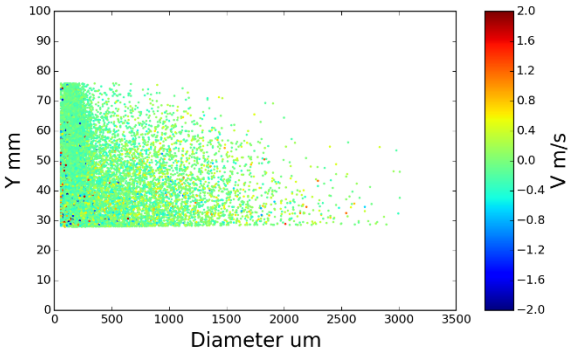

Figure A. 2633: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 Matched Only Droplets for .LB Image

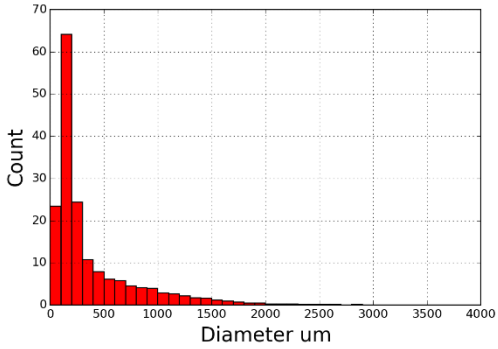

Figure A. 2636: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

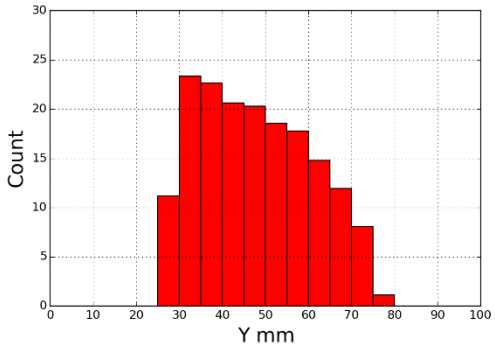

Figure A. 2637: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

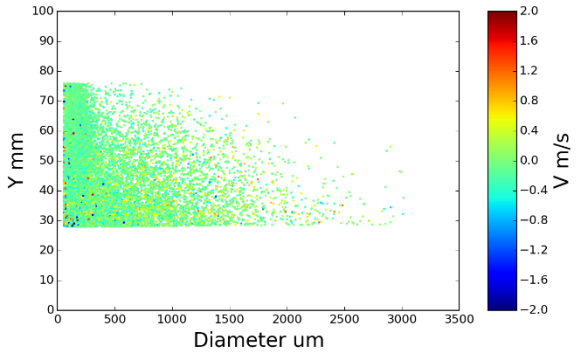

Figure A. 2638: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

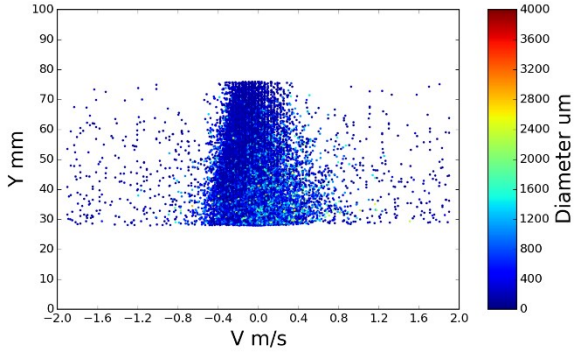

Figure A. 2639: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

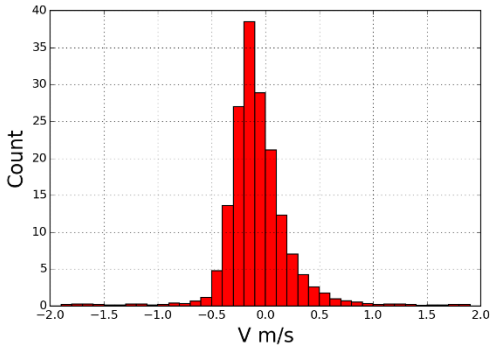

Figure A. 2640: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	78.97	75.86	57.1	3025	377.3	441.1	57.1	2950	396.5	446.4
40-60mm	96.21	91.03	57.1	2968	241.6	305.4	57.1	3027	250.2	310.4
60-80mm	39.68	38.46	57.1	2138	155.7	157.5	57.1	2182	156.4	152.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	214.92	205.36	57.1	3025	275.6	353.3	57.1	3027	286.7	359.0
			Height A (mm)				Height B (mm)			
Highest Particle			75.9373				75.9473			
Lowest Particle			27.9786				27.9786			

Table A. 279: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	44.36	57.1	2933	518.6	496.3	57.1	2950	517.4	497.1	-1.900	1.900	-0.040	0.330	-1.900	1.900	-0.060	0.400
40-60mm	58.72	57.1	2948	309.3	355.1	57.1	3027	307.8	355.0	-1.890	1.880	-0.060	0.290	-1.900	1.900	-0.110	0.330
60-80mm	25.42	57.1	2138	179.4	170.3	57.1	2182	177.4	169.2	-1.870	1.900	-0.100	0.200	-1.900	1.900	-0.130	0.210
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	128.5	57.1	2948	355.9	405.9	57.1	3027	354.7	406.4	-1.900	1.900	-0.060	0.290	-1.900	1.900	-0.100	0.340

Table A. 280: Matched Droplet Info

A.8.3.1 All Droplets for .LA Image

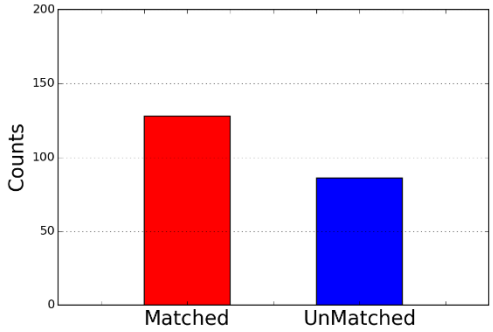

Figure A. 2641: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

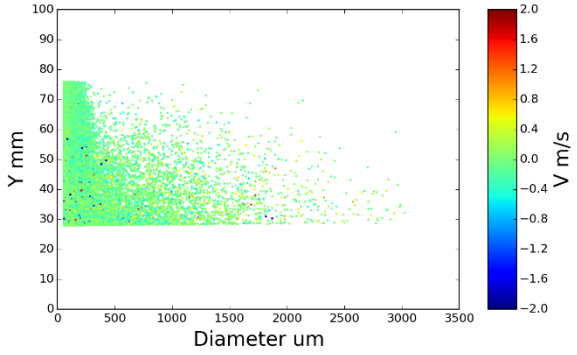

Figure A. 2644: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

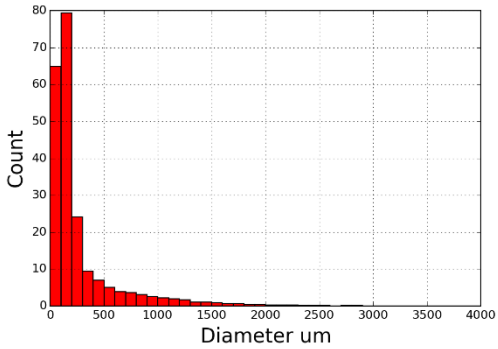

Figure A. 2642: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

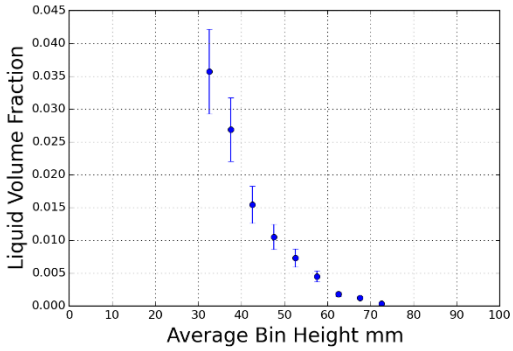

Figure A. 2645: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

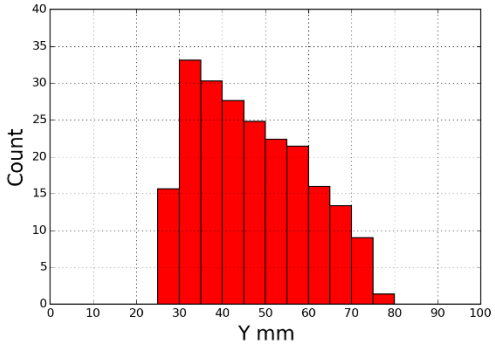

Figure A. 2643: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 All Droplets for .LB Image

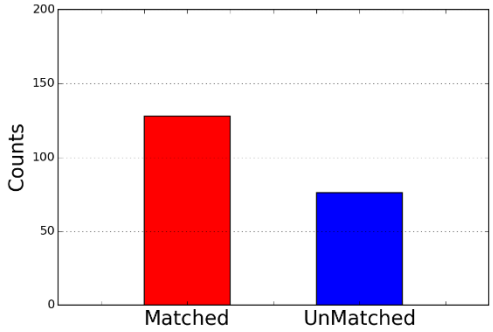

Figure A. 2646: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

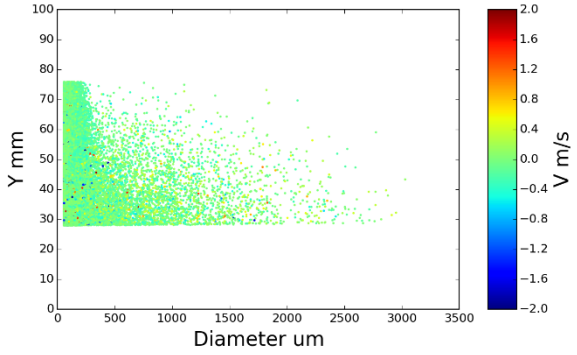

Figure A. 2649: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

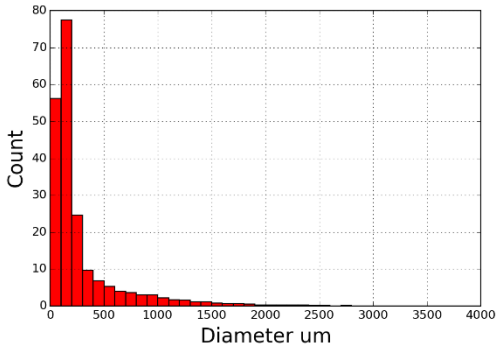

Figure A. 2647: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

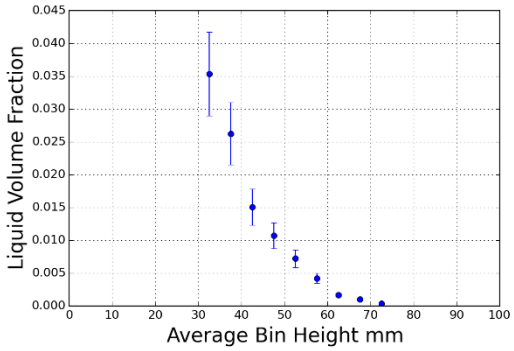

Figure A. 2650: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

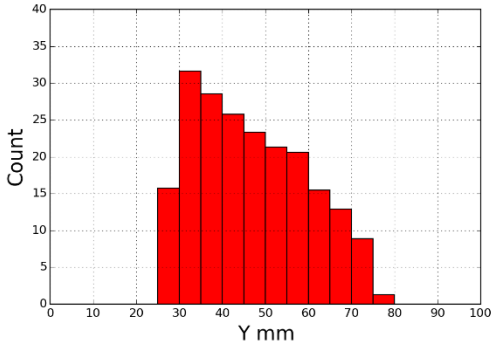

Figure A. 2648: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 Matched Only Droplets for .LA Image

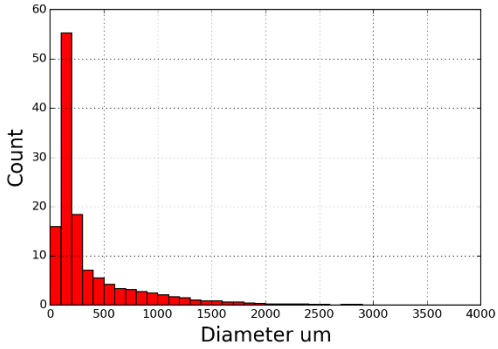

Figure A. 2651: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

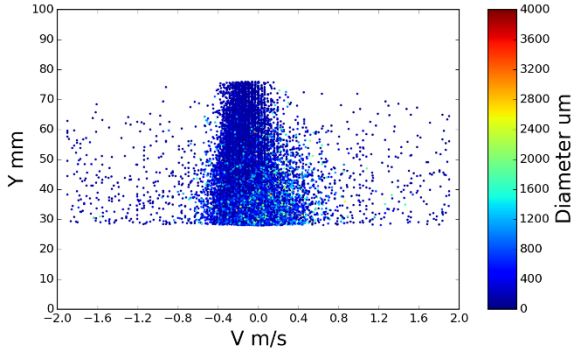

Figure A. 2654: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

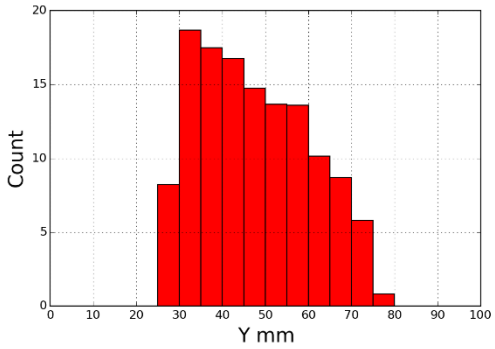

Figure A. 2652: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

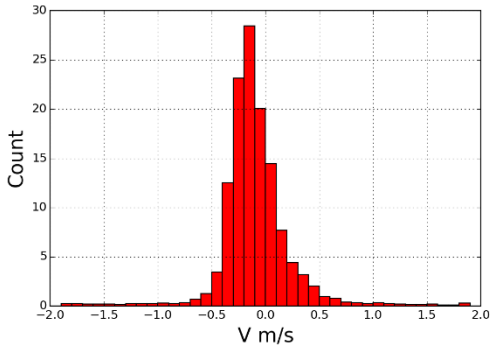

Figure A. 2655: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

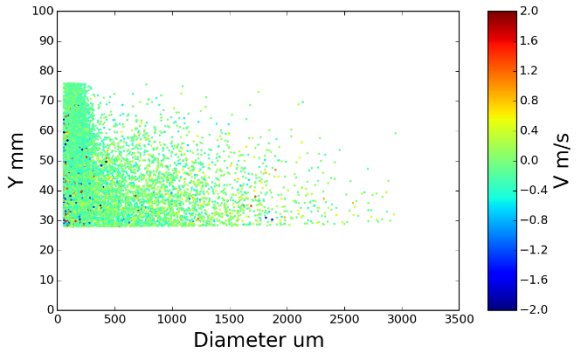

Figure A. 2653: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 Matched Only Droplets for .LB Image

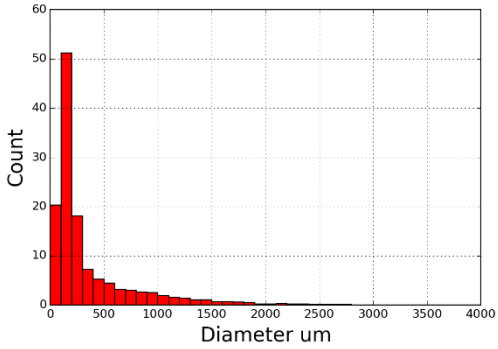

Figure A. 2656: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

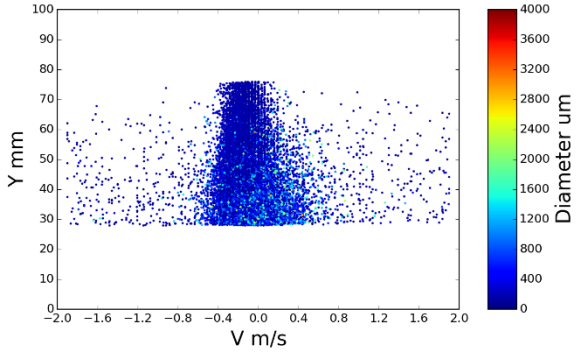

Figure A. 2659: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

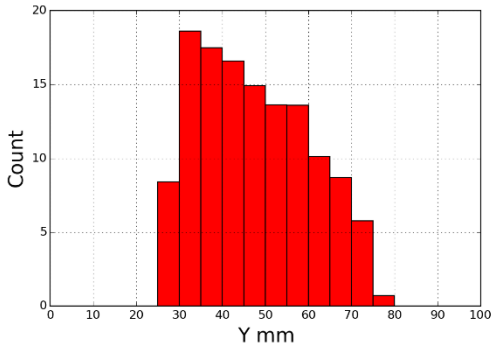

Figure A. 2657: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

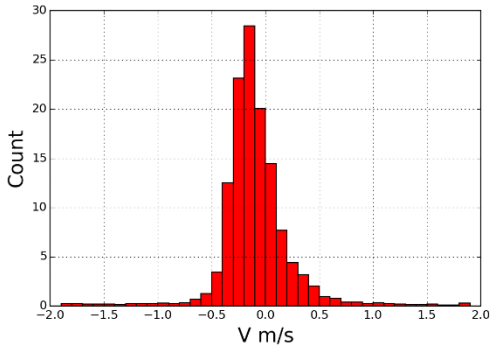

Figure A. 2660: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

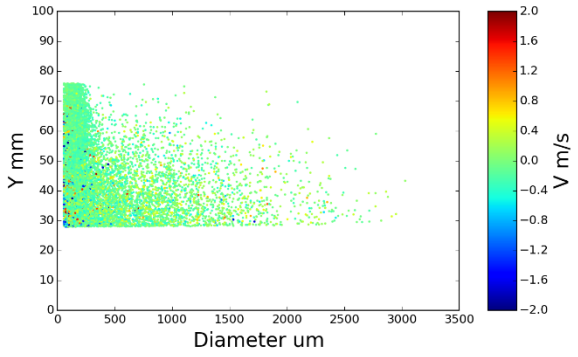

Figure A. 2658: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 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	86.65	82.8	57.1	3037	381.0	410.7	57.1	3008	402.7	423.2
40-60mm	103.22	98.07	57.1	2760	250.9	277.4	57.1	2800	259.7	285.3
60-80mm	42.23	40.61	57.1	2378	161.5	154.4	57.1	2293	163.2	152.4
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	232.1	221.5	57.1	3037	283.2	329.0	57.1	3008	295.5	339.6
			Height A (mm)				Height B (mm)			
Highest Particle			75.9600				75.9473			
Lowest Particle			27.9786				27.9786			

Table A. 281: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	49.21	57.1	2795	519.5	451.0	57.1	2914	518.8	454.2	-1.900	1.840	-0.050	0.340	-1.900	1.900	-0.000	0.390
40-60mm	65.34	57.1	2760	315.6	313.4	57.1	2701	313.7	313.9	-1.900	1.900	-0.040	0.280	-1.900	1.900	-0.020	0.340
60-80mm	27.29	57.1	2049	190.5	168.2	57.1	2293	188.3	171.0	-1.860	1.880	-0.060	0.220	-1.900	1.850	-0.060	0.260
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	141.84	57.1	2795	362.2	369.5	57.1	2914	360.9	371.6	-1.900	1.900	-0.050	0.290	-1.900	1.900	-0.020	0.350

Table A. 282: Matched Droplet Info

A.8.3.1 All Droplets for .LA Image

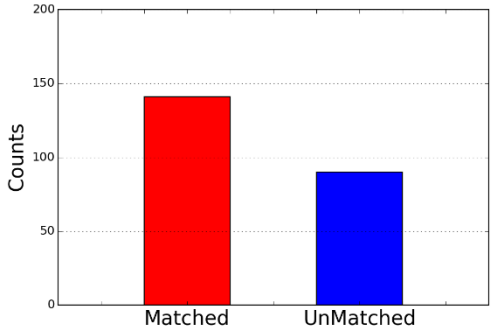

Figure A. 2661: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

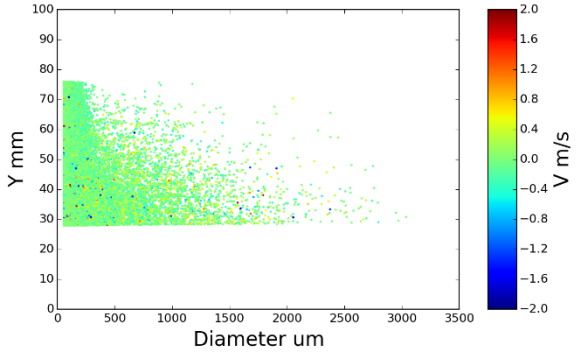

Figure A. 2664: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

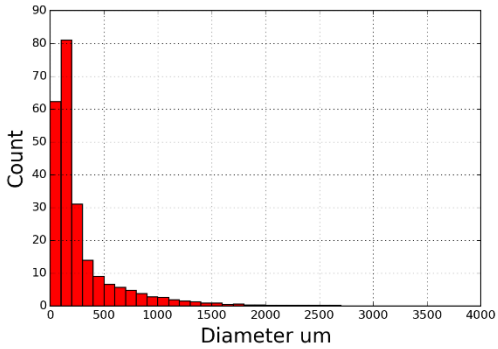

Figure A. 2662: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

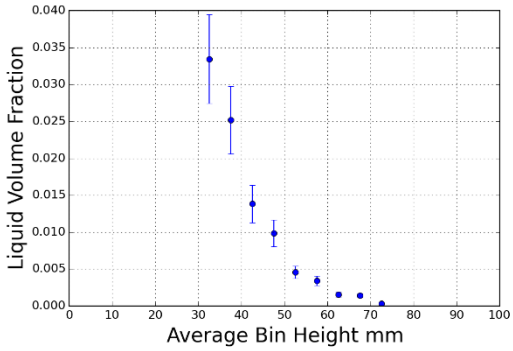

Figure A. 2665: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

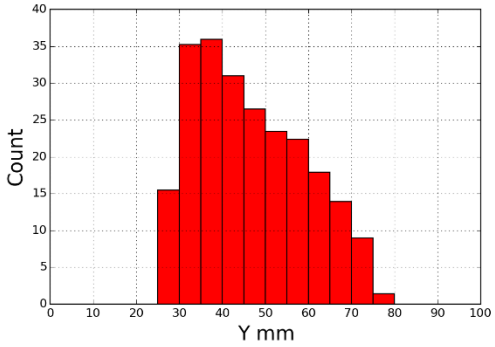

Figure A. 2663: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 All Droplets for .LB Image

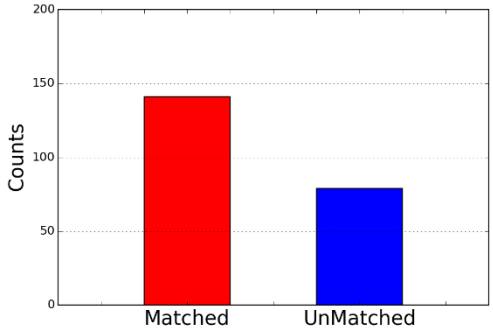

Figure A. 2666: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

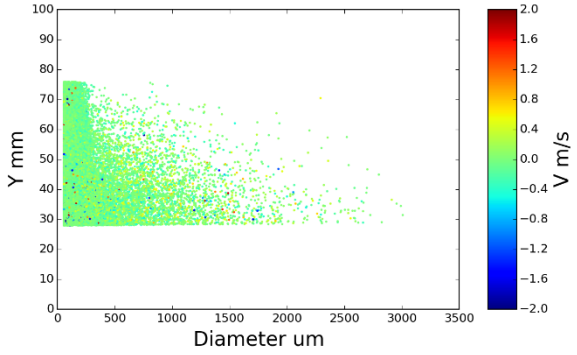

Figure A. 2669: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

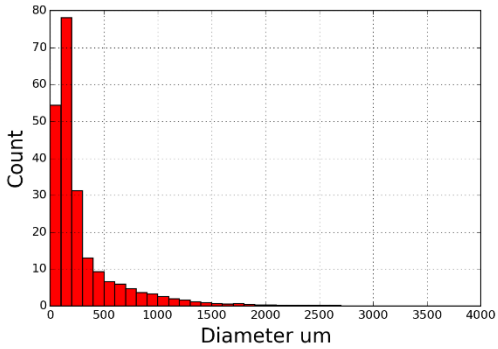

Figure A. 2667: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

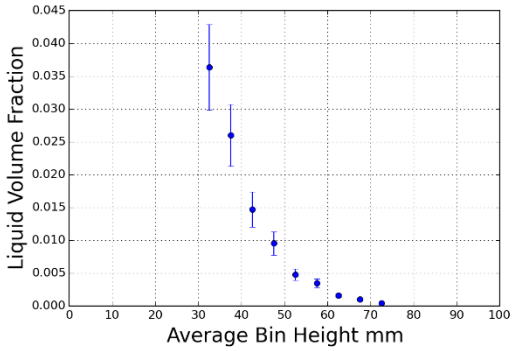

Figure A. 2670: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

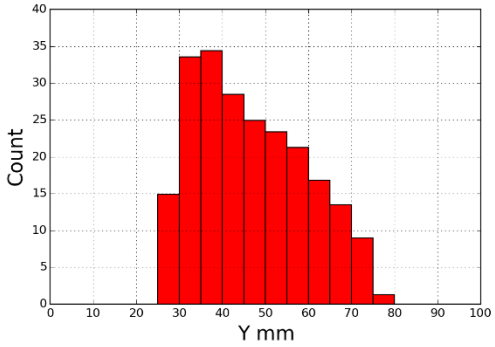

Figure A. 2668: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 Matched Only Droplets for .LA Image

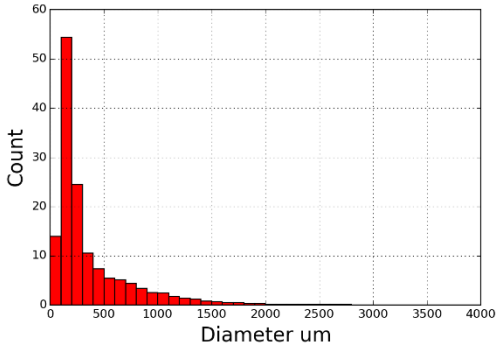

Figure A. 2671: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

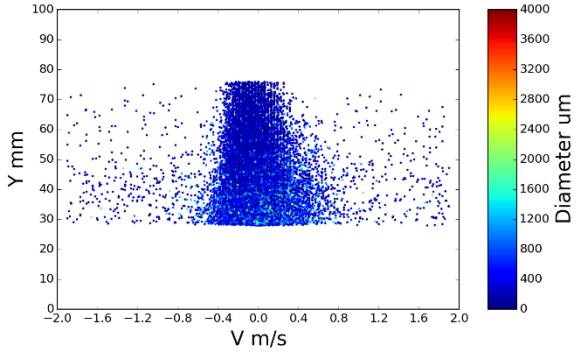

Figure A. 2674: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

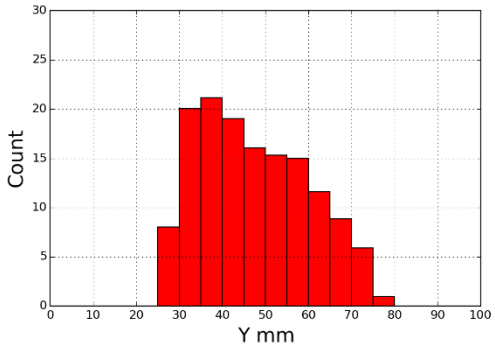

Figure A. 2672: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

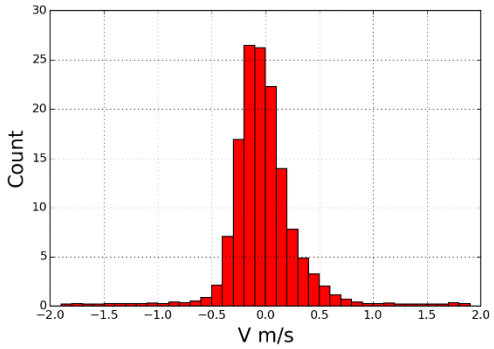

Figure A. 2675: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

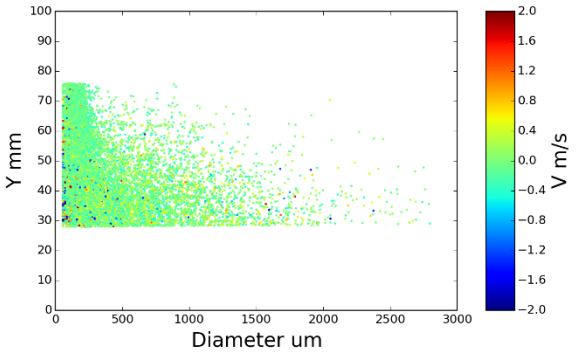

Figure A. 2673: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 Matched Only Droplets for .LB Image

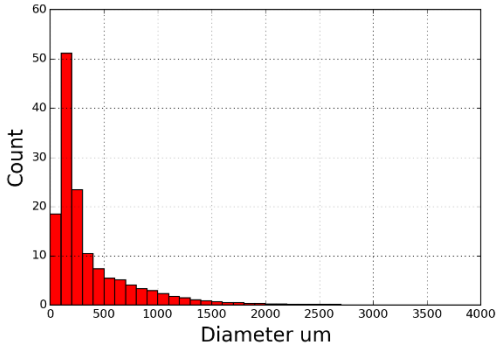

Figure A. 2676: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

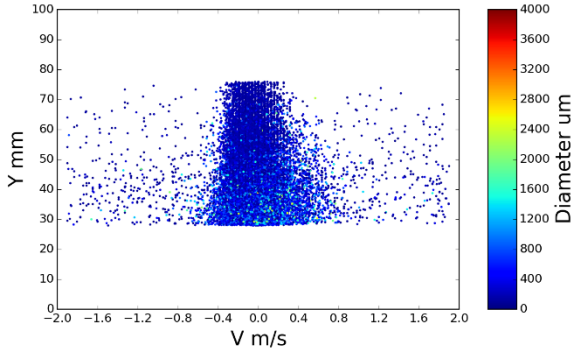

Figure A. 2679: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

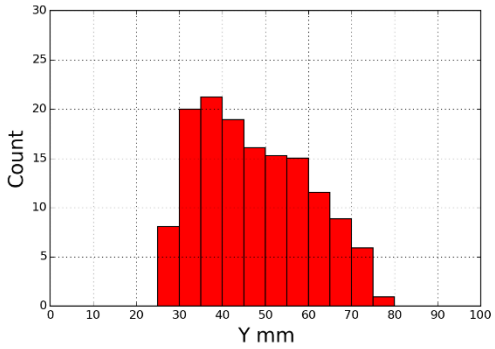

Figure A. 2677: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

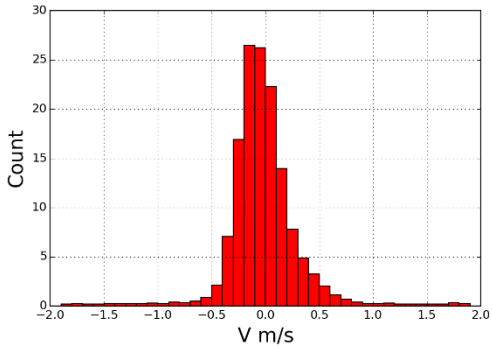

Figure A. 2680: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

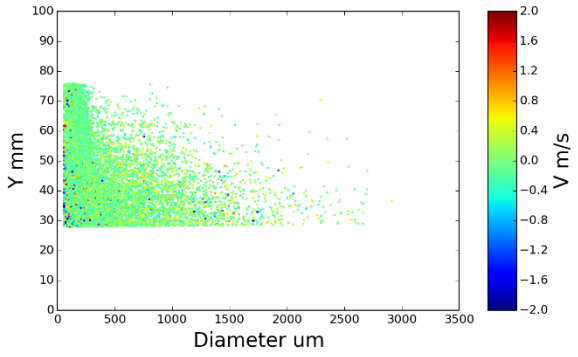

Figure A. 2678: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 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	74.77	72.69	57.1	2681	400.9	389.1	57.1	3026	418.7	398.9
40-60mm	106.82	100.75	57.1	2894	262.8	271.3	57.1	2818	269.8	267.8
60-80mm	45.23	44.56	57.1	1713	171.4	140.2	57.1	1545	171.7	139.2
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	226.82	218.02	57.1	2894	290.1	309.4	57.1	3026	299.4	314.1
			Height A (mm)				Height B (mm)			
Highest Particle			75.9473				75.9600			
Lowest Particle			27.9786				27.9786			

Table A. 283: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	45.81	57.1	2681	523.7	416.9	57.1	2898	524.8	419.8	-1.870	1.870	-0.050	0.310	-1.900	1.900	0.040	0.380
40-60mm	71.13	57.1	2776	324.1	292.3	57.1	2818	321.2	289.4	-1.900	1.900	-0.050	0.240	-1.900	1.900	0.040	0.320
60-80mm	30.79	57.1	1713	199.7	156.5	57.1	1545	198.1	155.4	-1.870	1.790	-0.050	0.180	-1.900	1.890	0.020	0.230
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	147.73	57.1	2776	360.1	338.2	57.1	2898	358.5	338.4	-1.900	1.900	-0.050	0.250	-1.900	1.900	0.040	0.320

Table A. 284: Matched Droplet Info

A.8.3.1 All Droplets for .LA Image

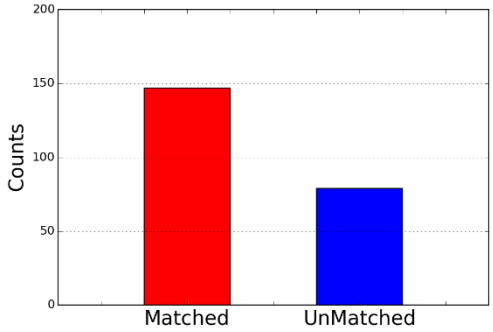

Figure A. 2681: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

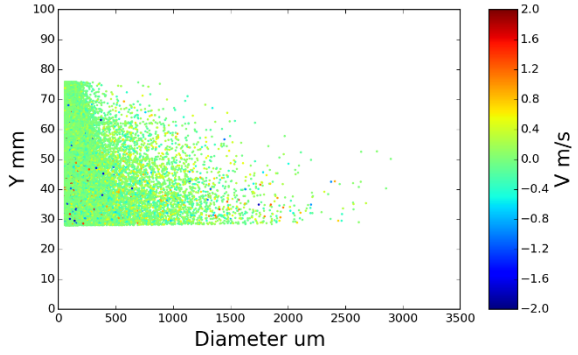

Figure A. 2684: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

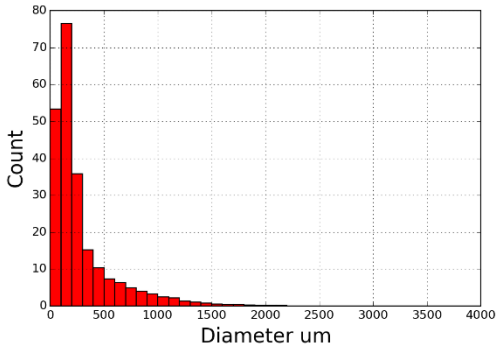

Figure A. 2682: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

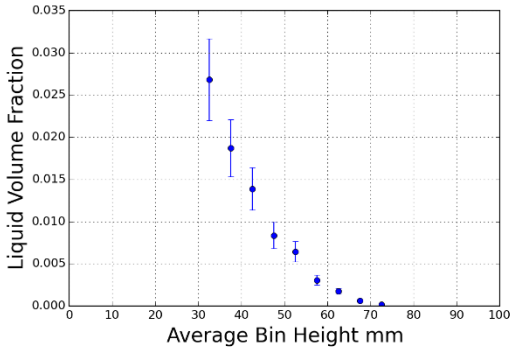

Figure A. 2685: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

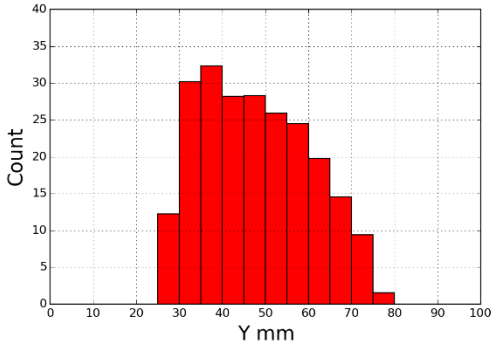

Figure A. 2683: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 All Droplets for .LB Image

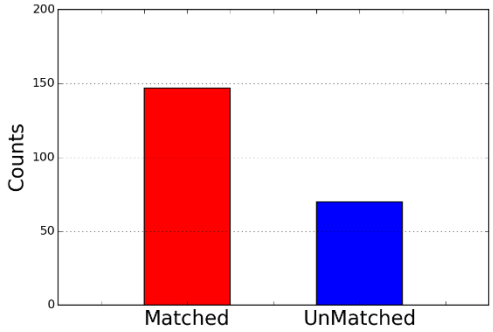

Figure A. 2686: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

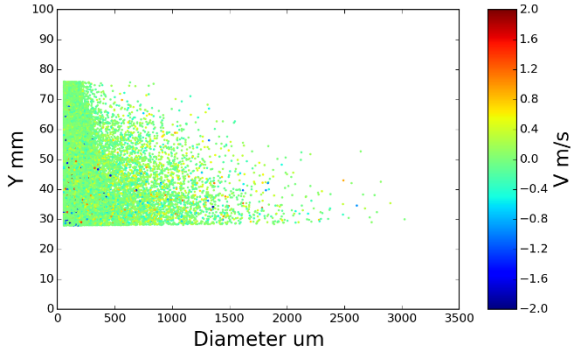

Figure A. 2689: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

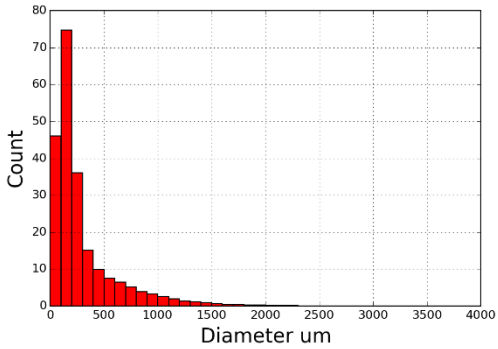

Figure A. 2687: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

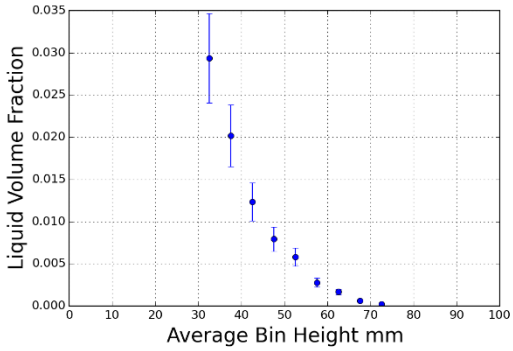

Figure A. 2690: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

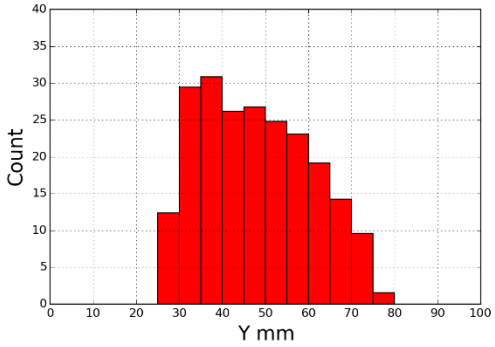

Figure A. 2688: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 Matched Only Droplets for .LA Image

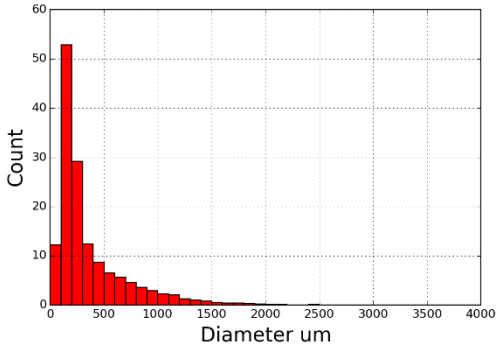

Figure A. 2691: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

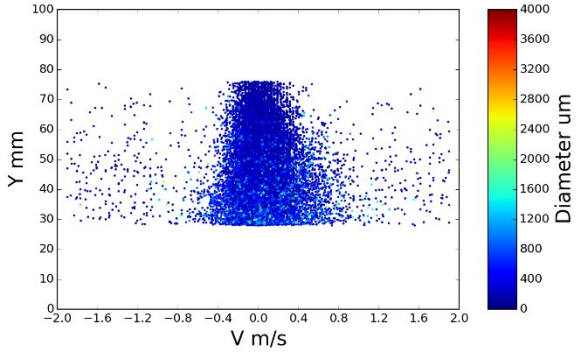

Figure A. 2694: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

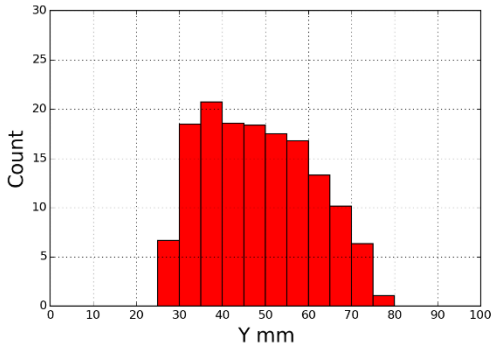

Figure A. 2692: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

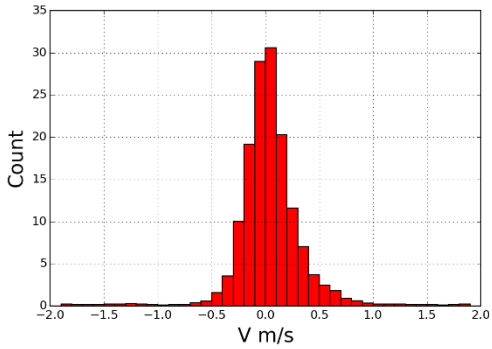

Figure A. 2695: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

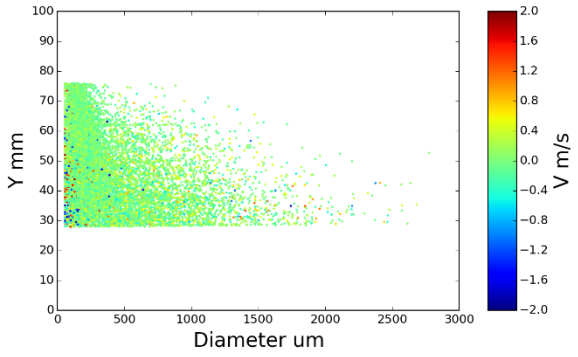

Figure A. 2693: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.1 Matched Only Droplets for .LB Image

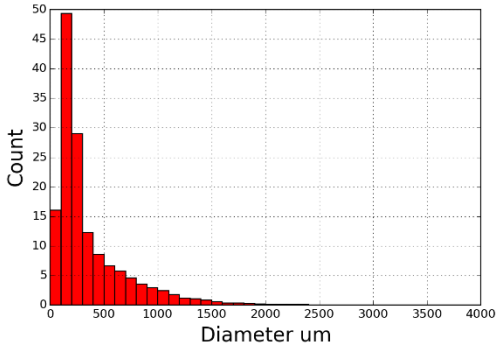

Figure A. 2696: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

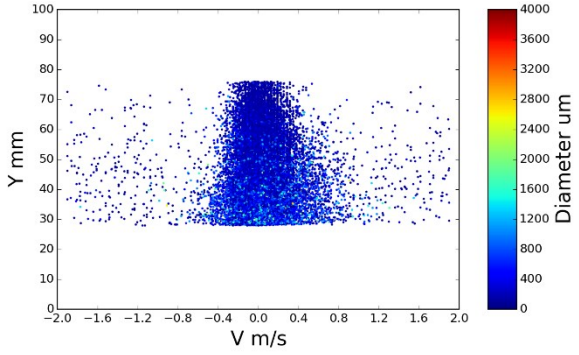

Figure A. 2699: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

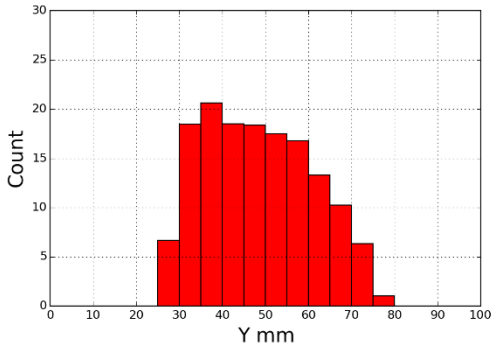

Figure A. 2697: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

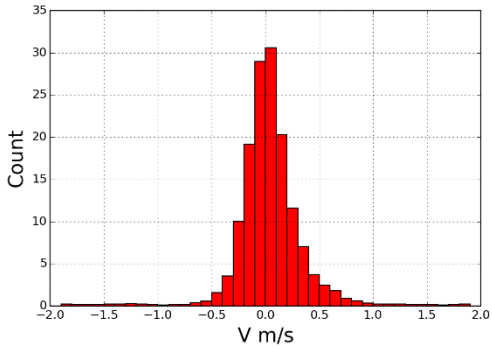

Figure A. 2700: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

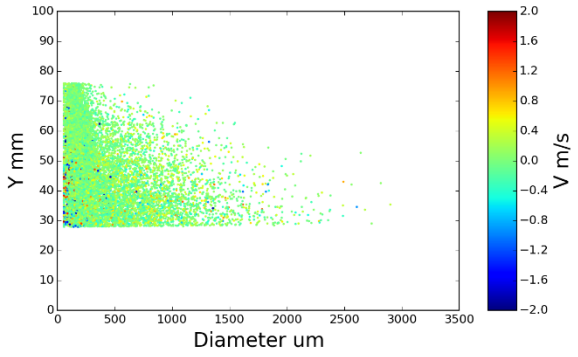

Figure A. 2698: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 Lens 50mm Mag 0_13x

A.8.3.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	68.63	68.67	128.6	3410	762.7	632.9	128.6	3417	761.1	642.3
20-40mm	111.47	111.01	128.6	3386	648.0	486.0	128.6	3402	650.4	484.4
40-60mm	62.18	62.52	128.6	2844	468.7	311.3	128.6	2766	464.5	308.9
60-80mm	22.01	21.83	128.6	1659	337.1	193.9	128.6	1638	335.4	192.7
80-100mm	3.03	3.01	128.6	1110	282.8	156.3	128.6	1093	278.0	154.1
All	267.32	267.04	128.6	3410	606.0	495.8	128.6	3417	605.4	498.1
			Height A (mm)				Height B (mm)			
Highest Particle			99.6010				99.6010			
Lowest Particle			10.0855				10.0855			

Table A. 285: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	35.43	128.6	3358	923.6	663.1	128.6	3384	910.6	665.8	-1.900	1.900	-0.090	0.610	-1.900	1.900	0.060	0.640
20-40mm	73.16	128.6	3386	738.3	495.1	128.6	3383	730.4	491.2	-1.900	1.900	-0.080	0.420	-1.900	1.890	0.040	0.490
40-60mm	44.28	128.6	2844	537.7	320.4	128.6	2766	533.2	320.8	-1.900	1.840	-0.070	0.280	-1.900	1.890	0.040	0.350
60-80mm	14.77	128.6	1659	392.7	204.9	128.6	1638	386.5	205.7	-1.680	1.740	-0.070	0.220	-1.870	1.840	0.050	0.310
80-100mm	1.86	128.6	1110	338.4	170.8	128.6	1093	326.6	171.6	-1.870	1.010	-0.090	0.230	-1.710	1.770	0.030	0.290
All	169.5	128.6	3386	690.1	506.0	128.6	3384	681.9	504.1	-1.900	1.900	-0.080	0.420	-1.900	1.900	0.050	0.480

Table A. 286: Matched Droplet Info

A.8.3.2 All Droplets for .LA Image

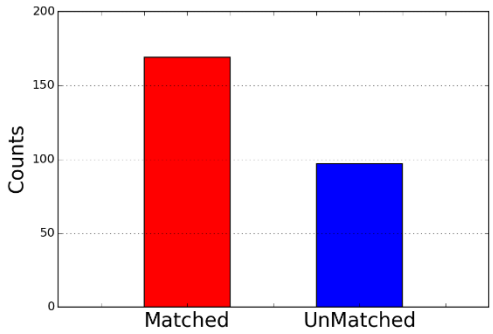

Figure A. 2701: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

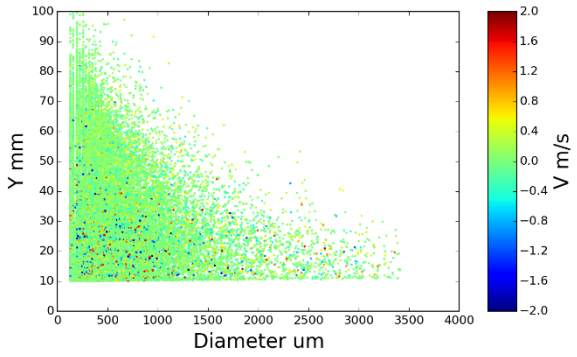

Figure A. 2704: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

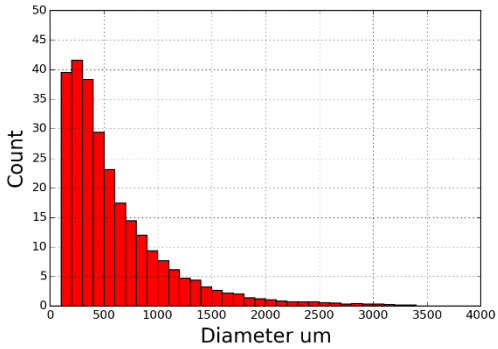

Figure A. 2702: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

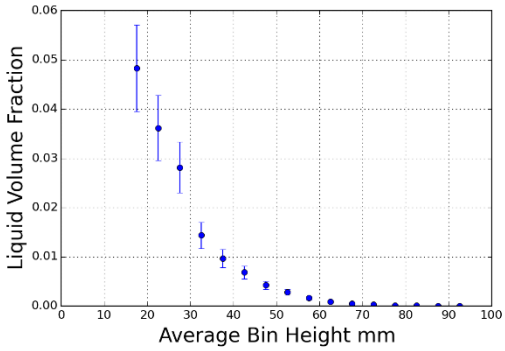

Figure A. 2705: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

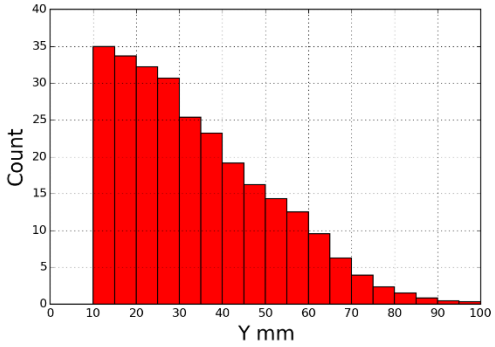

Figure A. 2703: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 All Droplets for .LB Image

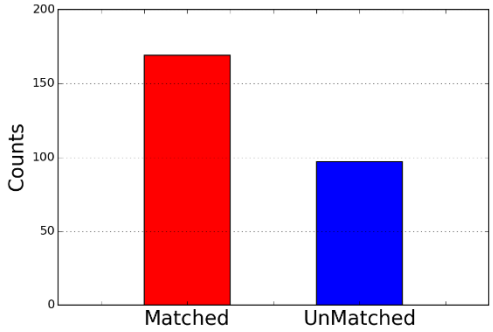

Figure A. 2706: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

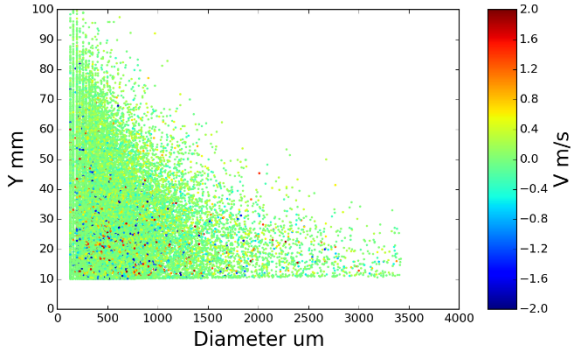

Figure A. 2709: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

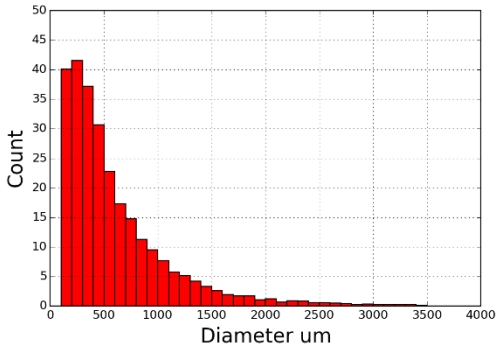

Figure A. 2707: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

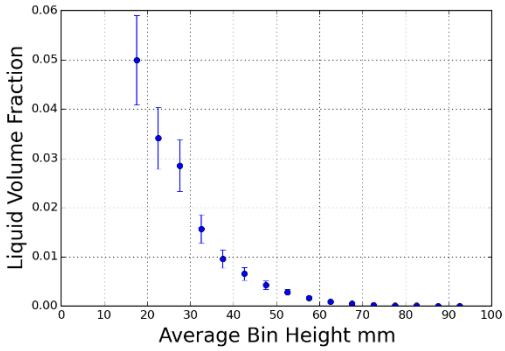

Figure A. 2710: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

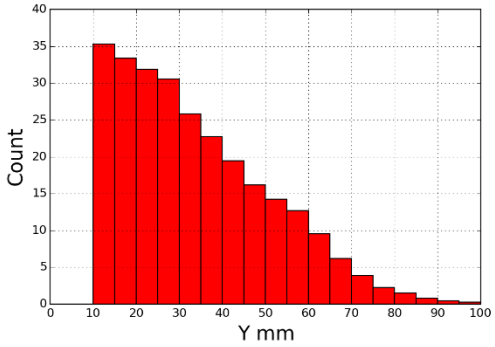

Figure A. 2708: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 Matched Only Droplets for .LA Image

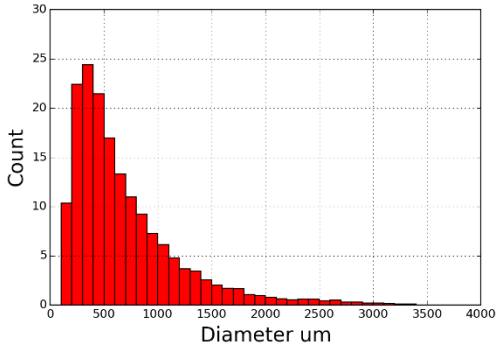

Figure A. 2711: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

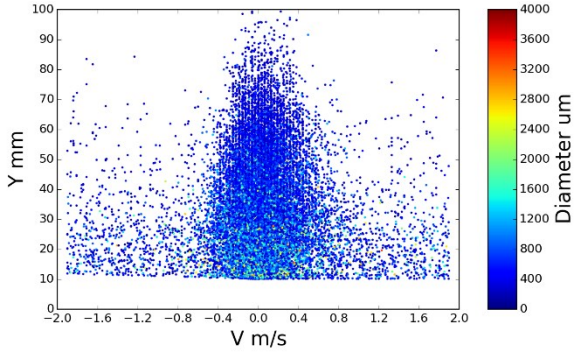

Figure A. 2714: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

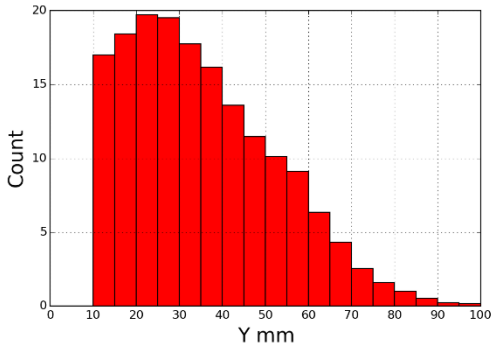

Figure A. 2712: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

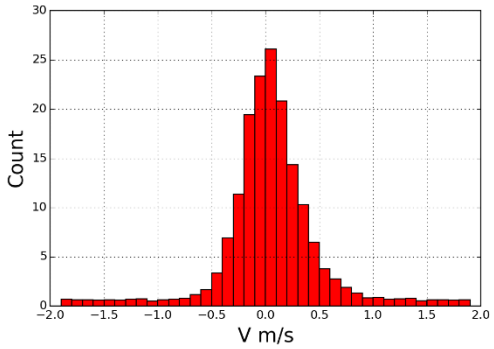

Figure A. 2715: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

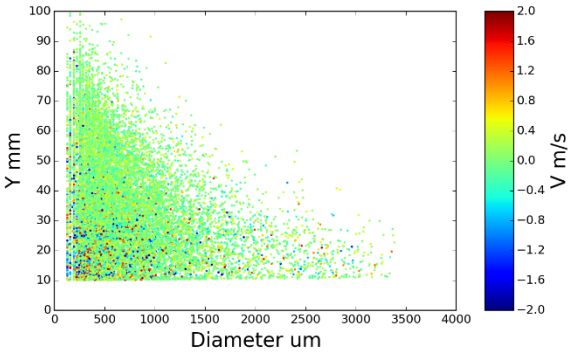

Figure A. 2713: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 Matched Only Droplets for .LB Image

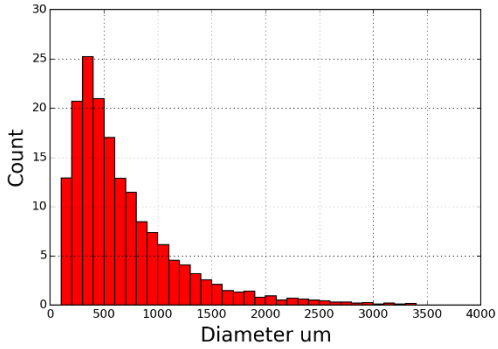

Figure A. 2716: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

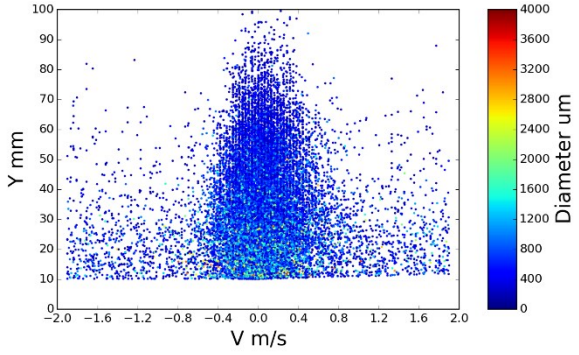

Figure A. 2719: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

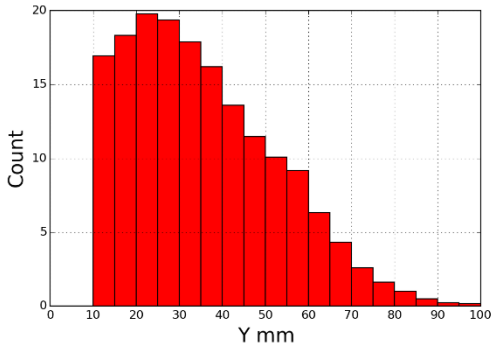

Figure A. 2717: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

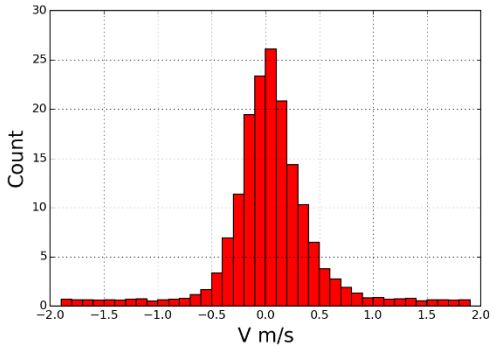

Figure A. 2720: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

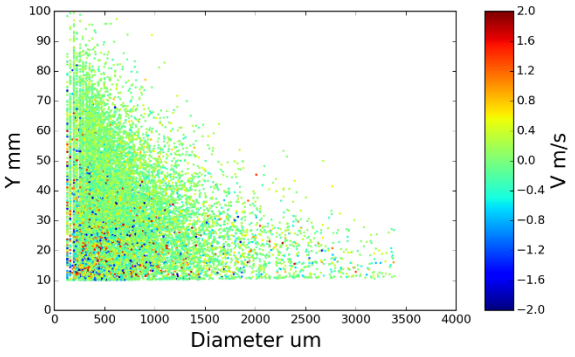

Figure A. 2718: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 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	60.29	59.55	128.6	3418	807.2	645.8	128.6	3417	802.9	648.7
20-40mm	99.68	99.27	128.6	3409	723.6	552.0	128.6	3417	728.5	556.6
40-60mm	48.22	48.73	128.6	3285	537.1	401.1	128.6	3150	528.7	395.6
60-80mm	10.87	10.76	128.6	2118	399.8	280.5	128.6	2156	394.8	280.5
80-100mm	0.94	0.88	128.6	1321	399.5	248.8	128.6	1258	414.9	244.3
All	220.0	219.19	128.6	3418	688.3	552.9	128.6	3417	686.7	555.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.5156				98.2050			
Lowest Particle			10.0855				10.0855			

Table A. 287: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	29.04	128.6	3418	999.9	676.6	128.6	3417	973.8	665.1	-1.900	1.890	-0.080	0.600	-1.900	1.900	0.020	0.630
20-40mm	61.49	128.6	3374	858.5	570.9	128.6	3417	848.6	567.3	-1.900	1.900	-0.060	0.440	-1.900	1.900	-0.020	0.500
40-60mm	31.68	128.6	3285	649.5	418.3	128.6	3150	639.3	416.4	-1.900	1.890	-0.050	0.300	-1.900	1.870	-0.040	0.380
60-80mm	6.85	128.6	2118	502.9	299.9	128.6	2156	497.3	299.0	-1.870	1.650	-0.090	0.220	-1.650	1.710	-0.050	0.280
80-100mm	0.65	128.6	1321	486.5	248.9	128.6	1258	475.8	249.6	-0.250	0.150	-0.080	0.090	-0.410	0.410	0.000	0.190
All	129.71	128.6	3418	818.5	570.7	128.6	3417	805.5	564.6	-1.900	1.900	-0.070	0.440	-1.900	1.900	-0.020	0.500

Table A. 288: Matched Droplet Info

A.8.3.2 All Droplets for .LA Image

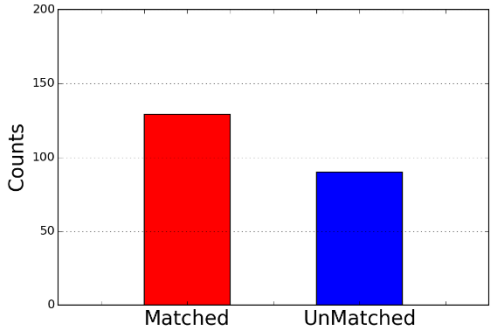

Figure A. 2721: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

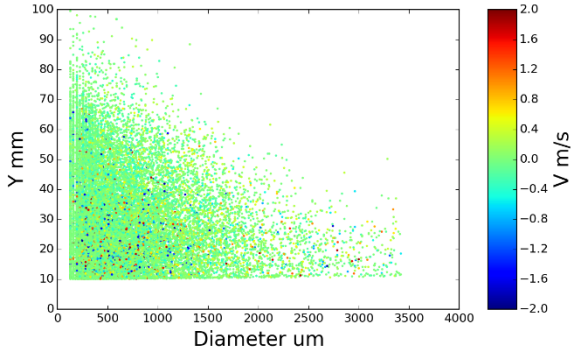

Figure A. 2724: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

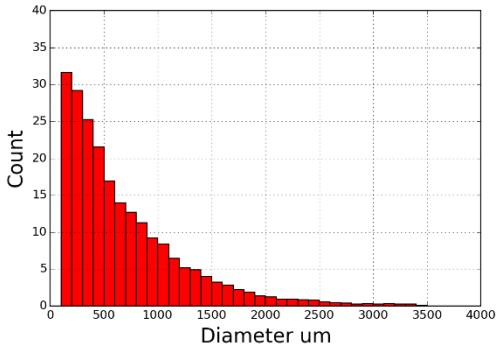

Figure A. 2722: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

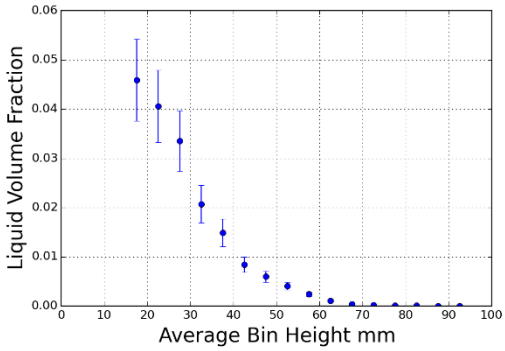

Figure A. 2725: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

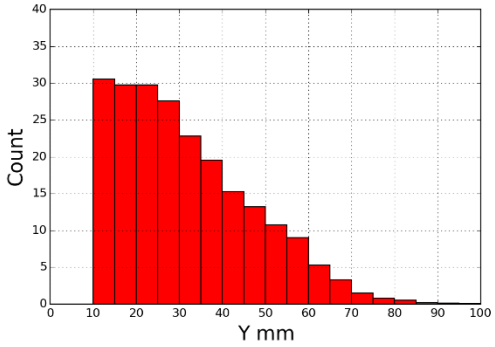

Figure A. 2723: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 All Droplets for .LB Image

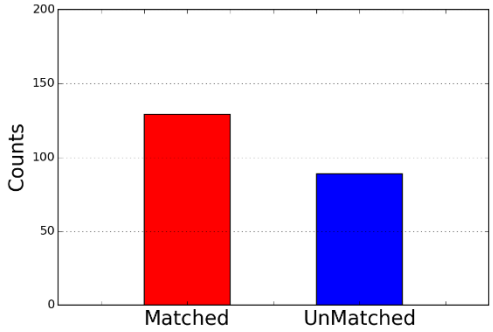

Figure A. 2726: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

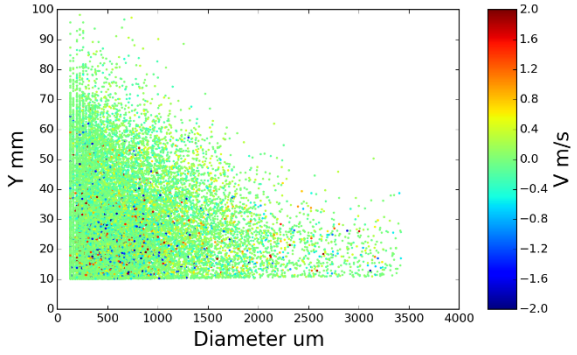

Figure A. 2729: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

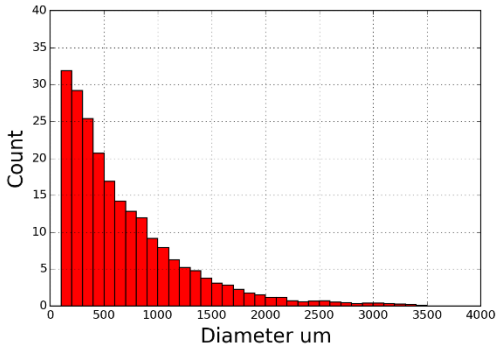

Figure A. 2727: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

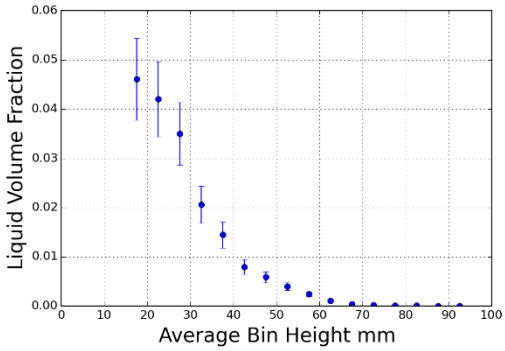

Figure A. 2730: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

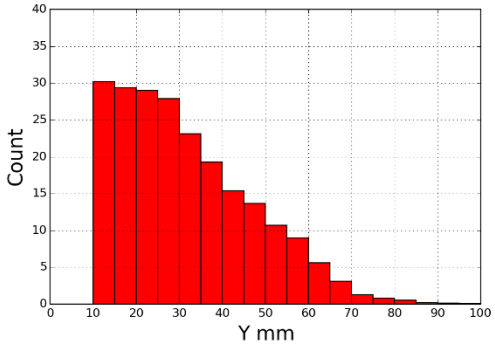

Figure A. 2728: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 Matched Only Droplets for .LA Image

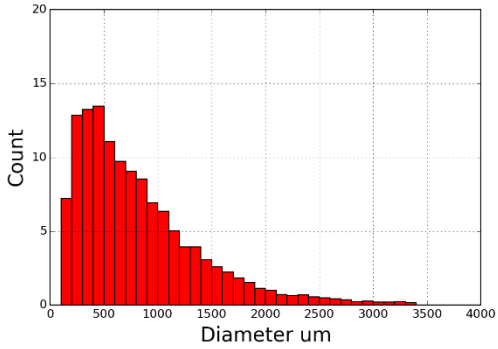

Figure A. 2731: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

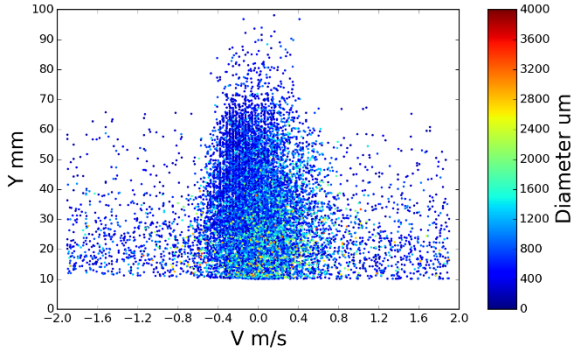

Figure A. 2734: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

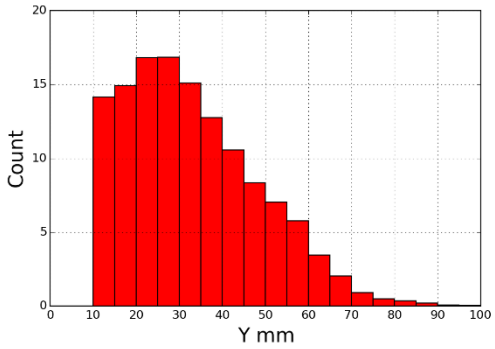

Figure A. 2732: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

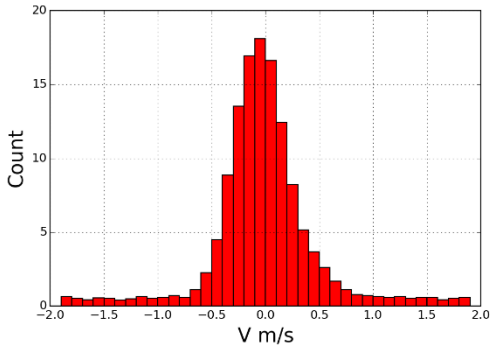

Figure A. 2735: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

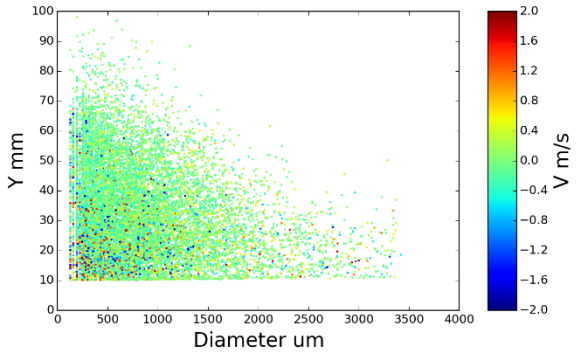

Figure A. 2733: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 Matched Only Droplets for .LB Image

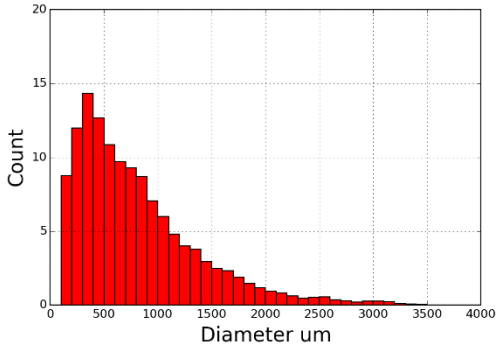

Figure A. 2736: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

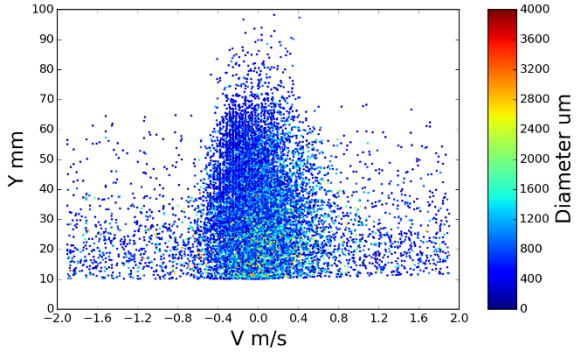

Figure A. 2739: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

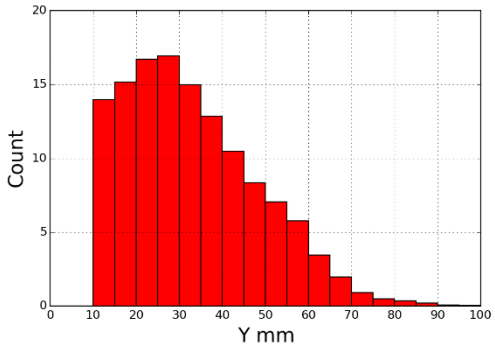

Figure A. 2737: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

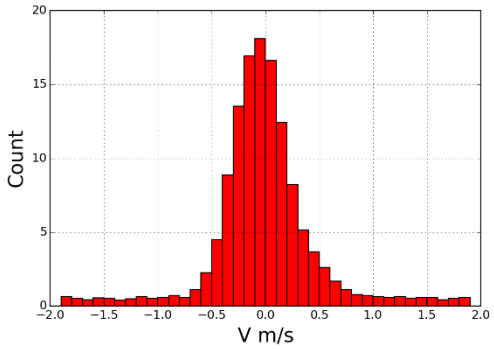

Figure A. 2740: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

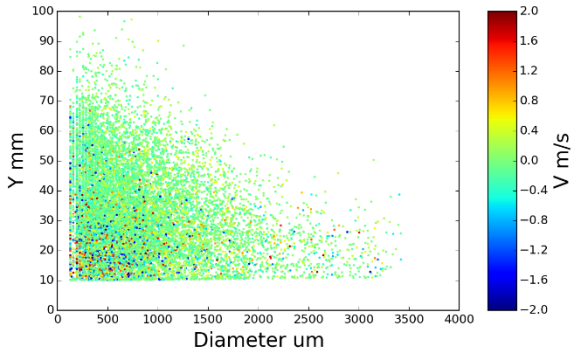

Figure A. 2738: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 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	47.54	48.19	128.6	3416	867.2	696.9	128.6	3397	853.3	695.1
20-40mm	93.96	93.73	128.6	3402	724.3	577.4	128.6	3412	730.2	585.0
40-60mm	41.04	41.78	128.6	2929	534.1	437.8	128.6	2806	525.6	432.2
60-80mm	6.04	6.14	128.6	2650	424.8	359.4	128.6	2645	424.0	361.2
80-100mm	0.39	0.37	128.6	1021	442.5	241.2	128.6	1066	466.4	250.4
All	188.97	190.21	128.6	3416	708.8	591.3	128.6	3412	706.1	593.3
			Height A (mm)				Height B (mm)			
Highest Particle			96.8310				96.9674			
Lowest Particle			10.0855				10.0855			

Table A. 289: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	21.18	128.6	3416	1108	737.0	128.6	3397	1079	728.6	-1.900	1.900	-0.070	0.650	-1.900	1.900	0.010	0.680
20-40mm	53.29	128.6	3402	877.4	611.3	128.6	3412	862.7	605.8	-1.900	1.900	-0.070	0.490	-1.900	1.900	-0.010	0.530
40-60mm	26.27	128.6	2776	651.2	468.6	128.6	2799	640.7	462.3	-1.870	1.900	-0.050	0.320	-1.870	1.900	-0.050	0.370
60-80mm	3.59	128.6	2650	544.3	397.6	128.6	2645	542.6	398.2	-1.900	1.900	-0.060	0.260	-1.870	1.840	-0.040	0.310
80-100mm	0.25	192.9	1021	566.3	212.2	192.9	1066	576.6	225.8	-0.210	0.120	-0.050	0.080	-0.400	0.310	-0.070	0.160
All	104.58	128.6	3416	855.0	623.1	128.6	3412	838.8	615.2	-1.900	1.900	-0.070	0.480	-1.900	1.900	-0.020	0.530

Table A. 290: Matched Droplet Info

A.8.3.2 All Droplets for .LA Image

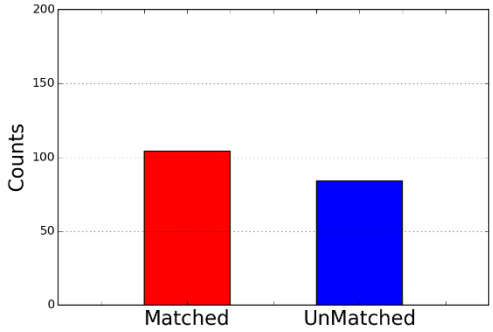

Figure A. 2741: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

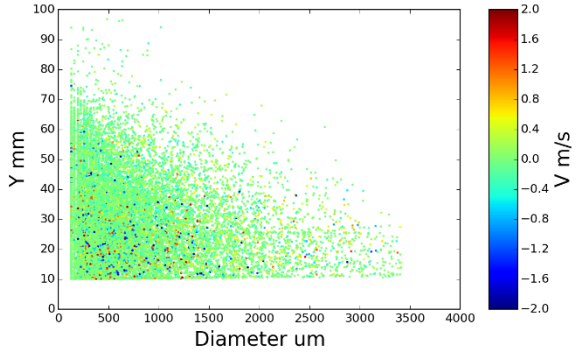

Figure A. 2744: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

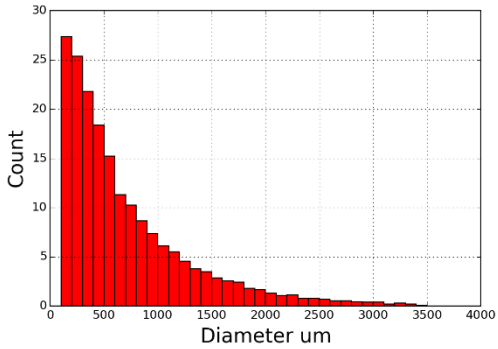

Figure A. 2742: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

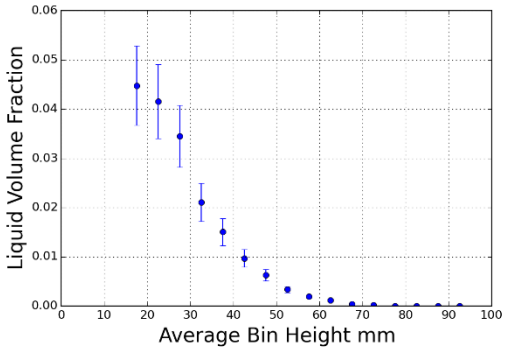

Figure A. 2745: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

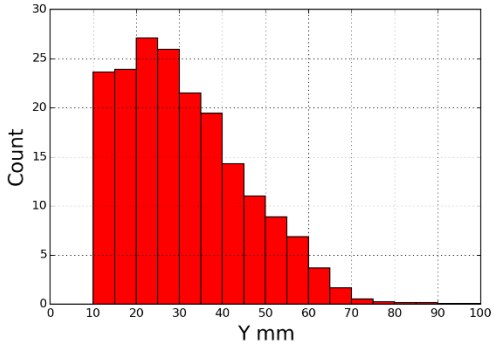

Figure A. 2743: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 All Droplets for .LB Image

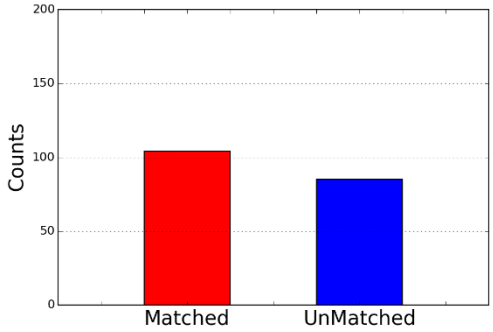

Figure A. 2746: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

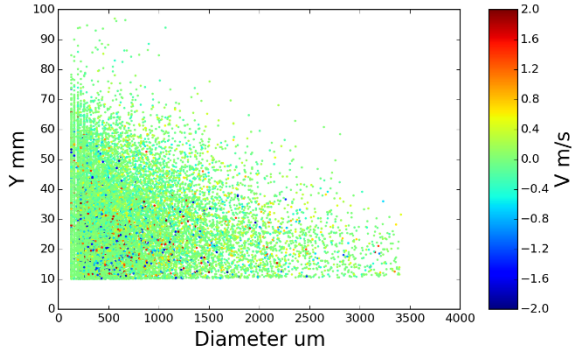

Figure A. 2749: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

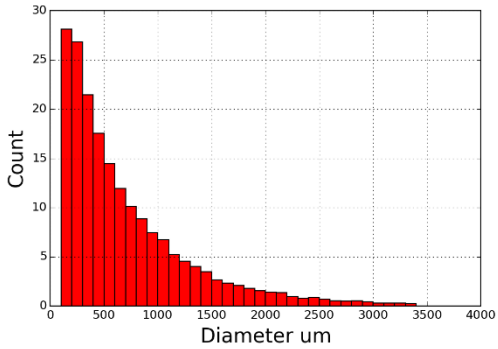

Figure A. 2747: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

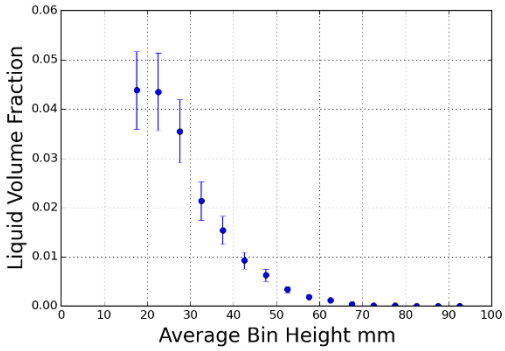

Figure A. 2750: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

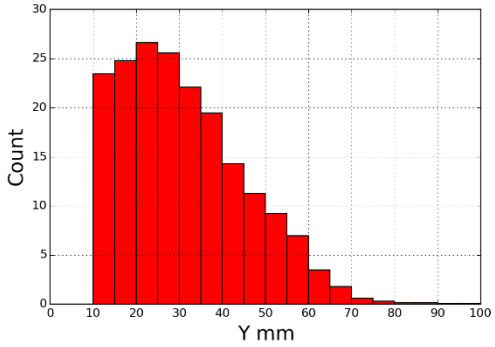

Figure A. 2748: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 Matched Only Droplets for .LA Image

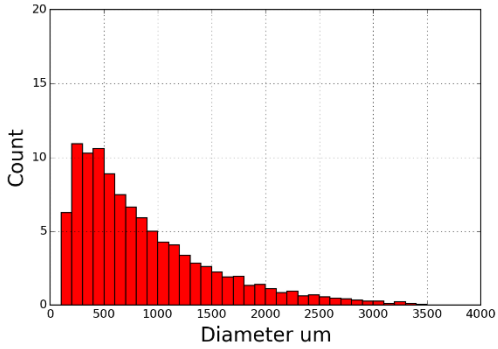

Figure A. 2751: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

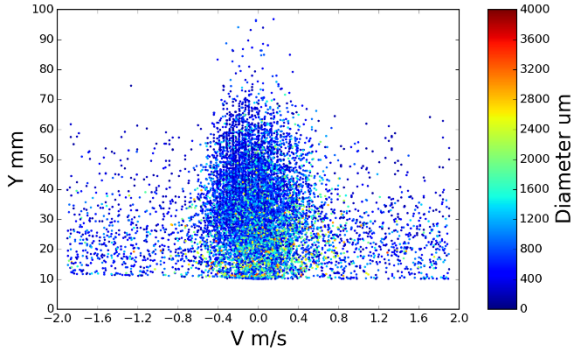

Figure A. 2754: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

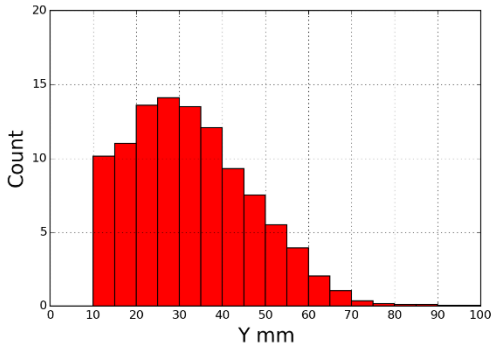

Figure A. 2752: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

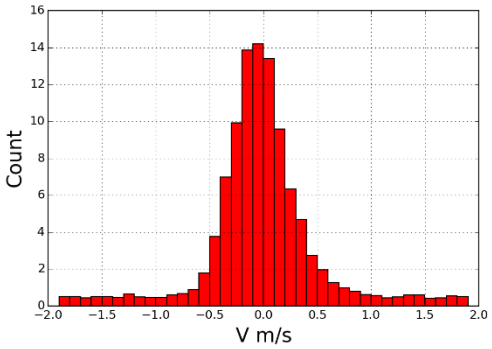

Figure A. 2755: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

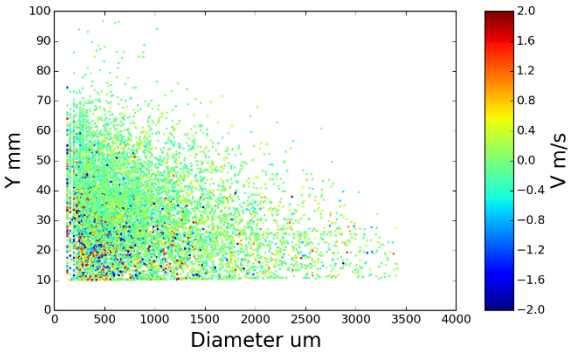

Figure A. 2753: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 Matched Only Droplets for .LB Image

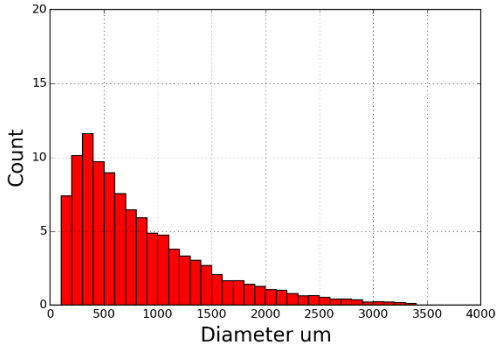

Figure A. 2756: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

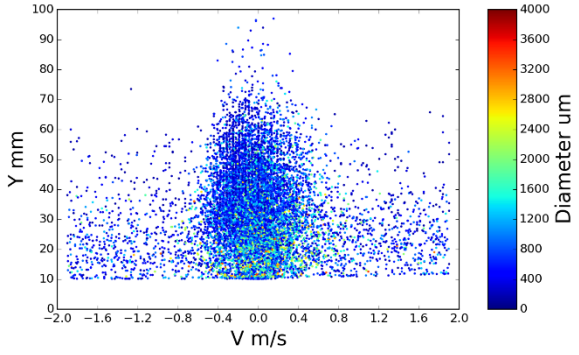

Figure A. 2759: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

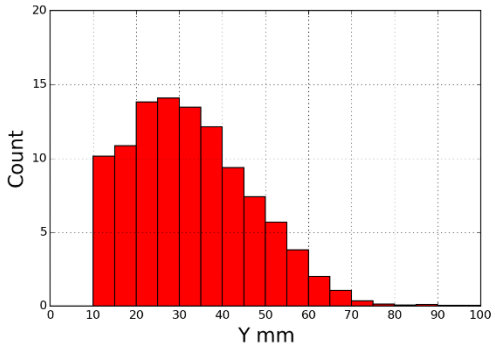

Figure A. 2757: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

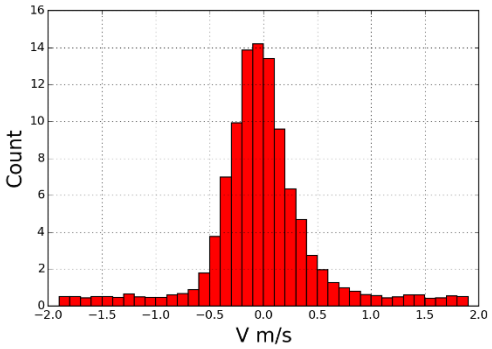

Figure A. 2760: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

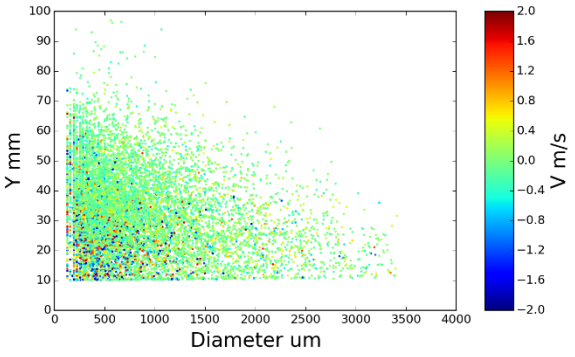

Figure A. 2758: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 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	37.54	38.09	128.6	3415	873.4	719.6	128.6	3401	859.7	716.1
20-40mm	93.16	92.93	128.6	3418	705.7	558.5	128.6	3415	702.0	559.3
40-60mm	48.19	47.5	128.6	3322	468.5	382.4	128.6	2967	469.2	377.5
60-80mm	7.15	7.12	128.6	2152	376.4	283.8	128.6	2094	379.1	289.6
80-100mm	0.26	0.2	128.6	897.8	384.0	249.8	128.6	883.9	417.7	247.3
All	186.3	185.84	128.6	3418	665.0	569.4	128.6	3415	662.1	568.0
			Height A (mm)				Height B (mm)			
Highest Particle			99.2877				95.5270			
Lowest Particle			10.0855				10.0855			

Table A. 291: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	15.65	128.6	3415	1152	778.0	128.6	3387	1116	765.3	-1.870	1.900	-0.060	0.610	-1.890	1.890	0.030	0.660
20-40mm	52.55	128.6	3418	837.3	586.4	128.6	3403	820.7	579.2	-1.900	1.900	-0.070	0.500	-1.890	1.900	-0.000	0.550
40-60mm	29.68	128.6	2807	571.8	409.2	128.6	2967	561.7	404.4	-1.900	1.880	-0.050	0.340	-1.900	1.880	-0.020	0.410
60-80mm	4.2	128.6	2152	473.6	305.5	128.6	2094	468.7	316.1	-1.840	1.900	-0.050	0.320	-1.900	1.580	-0.030	0.340
80-100mm	0.12	128.6	897.8	557.7	231.1	128.6	883.9	554.1	238.9	-1.200	0.060	-0.130	0.330	-0.400	0.330	-0.070	0.210
All	102.2	128.6	3418	793.1	601.0	128.6	3403	776.6	592.0	-1.900	1.900	-0.060	0.470	-1.900	1.900	-0.000	0.520

Table A. 292: Matched Droplet Info

A.8.3.2 All Droplets for .LA Image

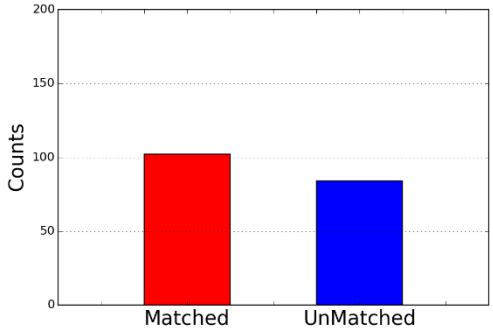

Figure A. 2761: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

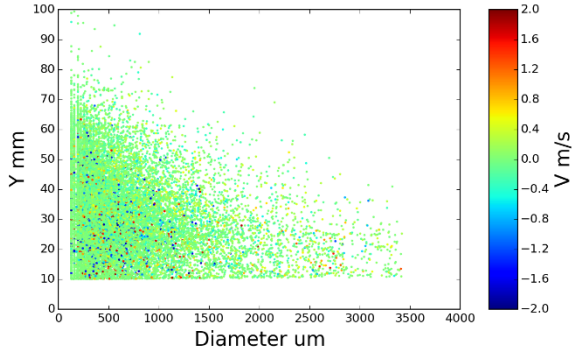

Figure A. 2764: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

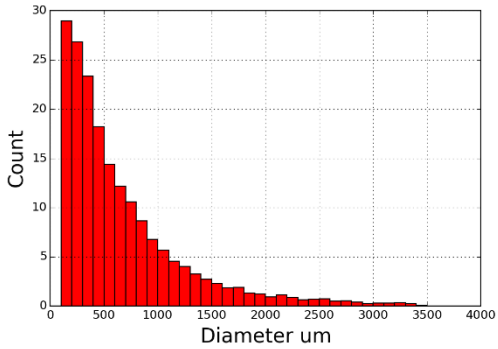

Figure A. 2762: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

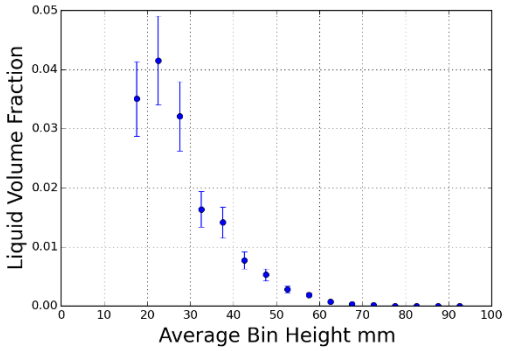

Figure A. 2765: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

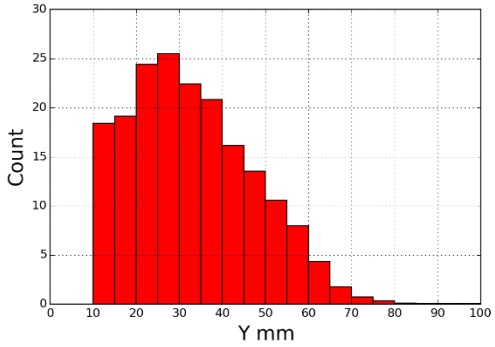

Figure A. 2763: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 All Droplets for .LB Image

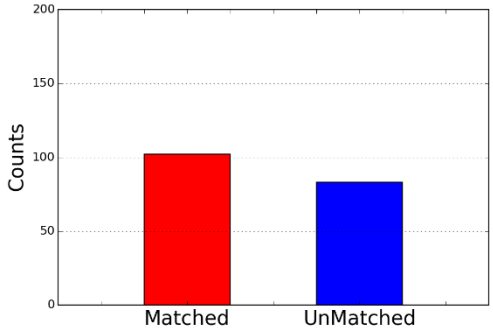

Figure A. 2766: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

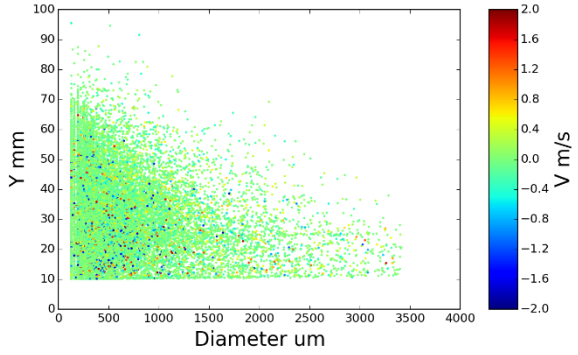

Figure A. 2769: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

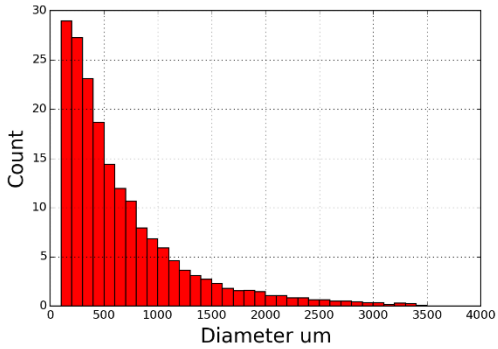

Figure A. 2767: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

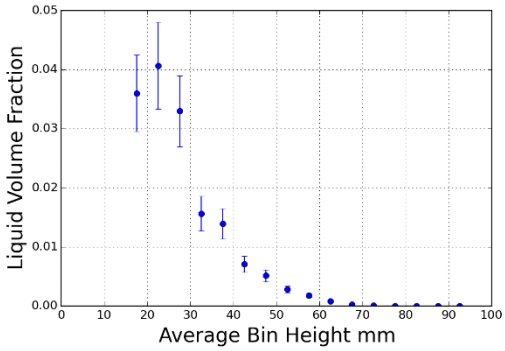

Figure A. 2770: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

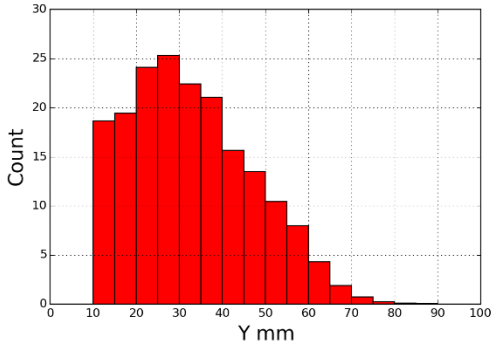

Figure A. 2768: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 Matched Only Droplets for .LA Image

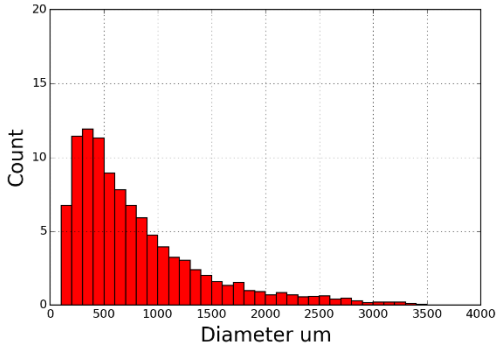

Figure A. 2771: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

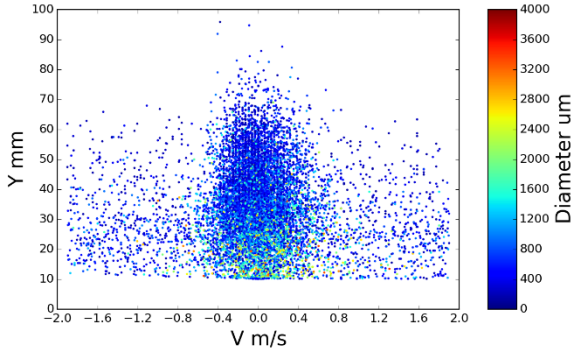

Figure A. 2774: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

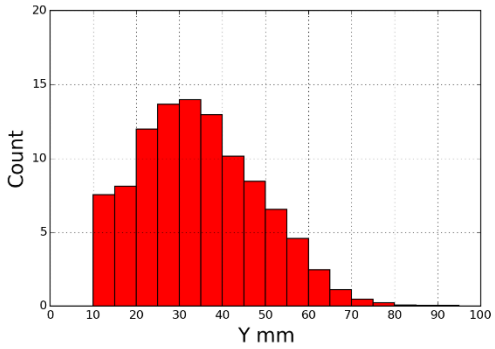

Figure A. 2772: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

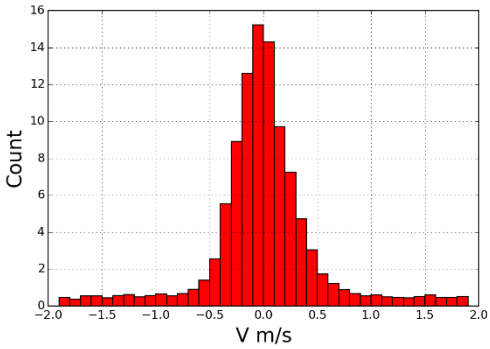

Figure A. 2775: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

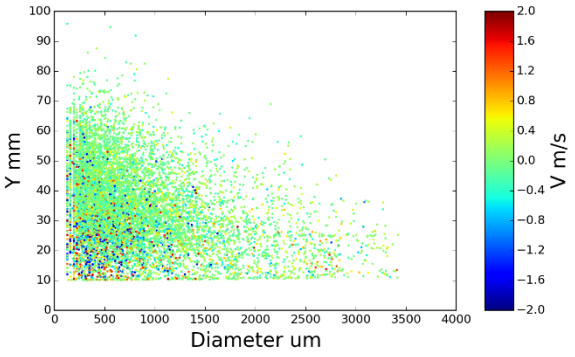

Figure A. 2773: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 Matched Only Droplets for .LB Image

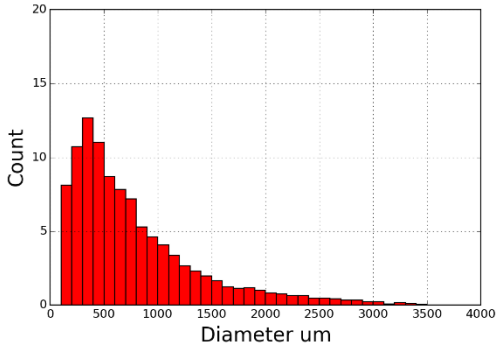

Figure A. 2776: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

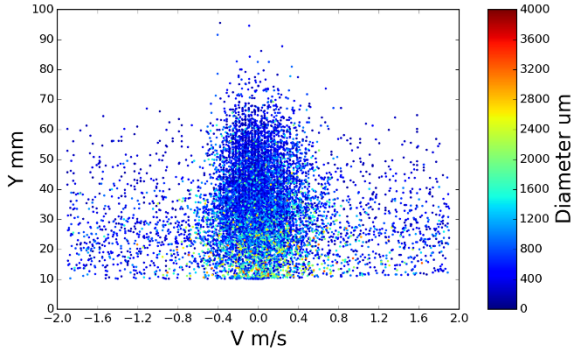

Figure A. 2779: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

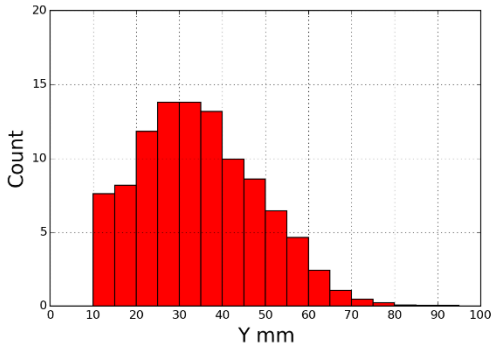

Figure A. 2777: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

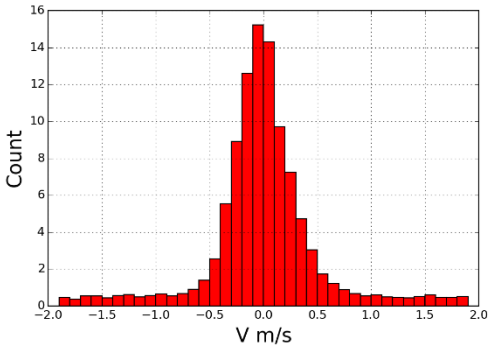

Figure A. 2780: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

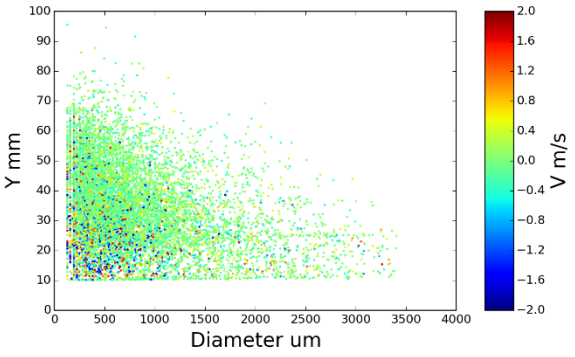

Figure A. 2778: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	31.03	32.48	128.6	3416	870.8	704.5	128.6	3413	857.3	703.2
20-40mm	76.7	76.91	128.6	3414	683.5	550.6	128.6	3406	680.6	553.1
40-60mm	44.58	45.58	128.6	3350	442.0	341.5	128.6	3108	435.5	337.6
60-80mm	6.58	6.83	128.6	2424	364.1	277.8	128.6	2344	363.4	277.2
80-100mm	0.16	0.2	128.6	830.9	432.1	249.7	128.6	818.3	382.2	231.9
All	159.05	162.0	128.6	3416	638.9	551.8	128.6	3413	633.3	552.3
			Height A (mm)				Height B (mm)			
Highest Particle			92.4292				96.0113			
Lowest Particle			10.0855				10.0855			

Table A. 293: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	12.36	128.6	3398	1166	761.0	128.6	3402	1152	770.1	-1.880	1.870	-0.080	0.590	-1.900	1.880	0.020	0.650
20-40mm	42.18	128.6	3414	833.3	589.9	128.6	3406	817.1	584.9	-1.900	1.900	-0.060	0.470	-1.900	1.900	0.010	0.530
40-60mm	27.78	128.6	3003	534.9	362.8	128.6	3108	529.1	359.5	-1.900	1.900	-0.060	0.350	-1.900	1.900	0.000	0.400
60-80mm	3.77	128.6	2424	472.1	314.7	128.6	2344	460.1	303.8	-1.870	1.890	-0.040	0.290	-1.880	1.780	-0.020	0.310
80-100mm	0.11	257.2	830.9	557.5	199.6	222.7	818.3	544.2	192.9	-0.160	0.110	-0.050	0.070	-0.300	0.570	0.090	0.240
All	86.2	128.6	3414	768.8	588.5	128.6	3406	756.2	585.5	-1.900	1.900	-0.060	0.450	-1.900	1.900	0.010	0.500

Table A. 294: Matched Droplet Info

A.8.3.2 All Droplets for .LA Image

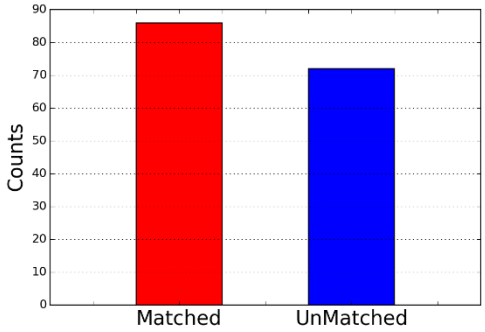

Figure A. 2781: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

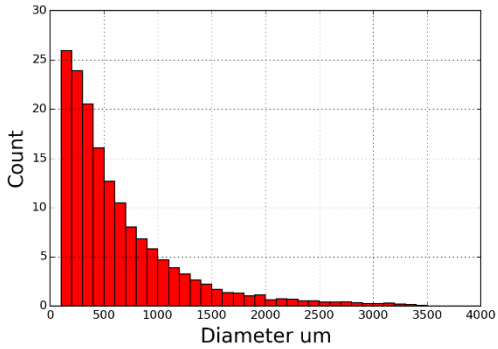

Figure A. 2782: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

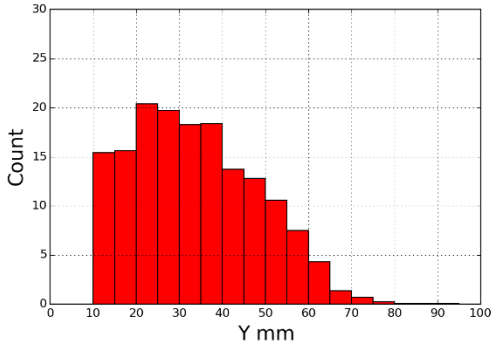

Figure A. 2783: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

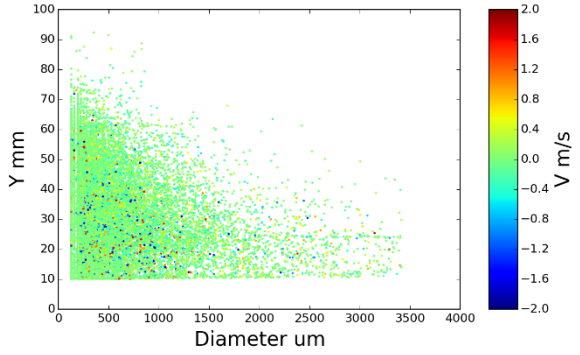

Figure A. 2784: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

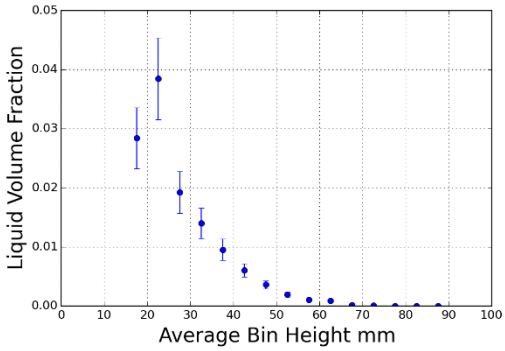

Figure A. 2785: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 All Droplets for .LB Image

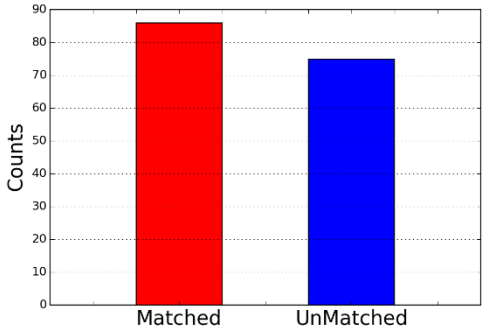

Figure A. 2786: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

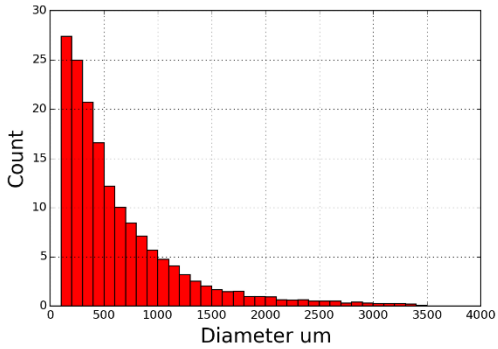

Figure A. 2787: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

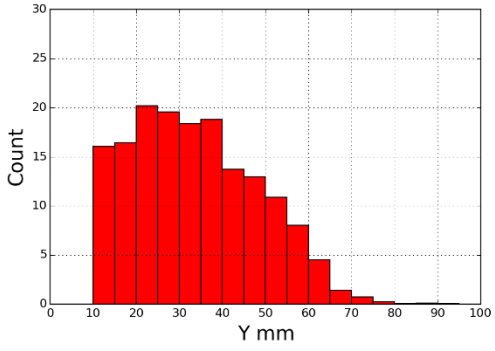

Figure A. 2788: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

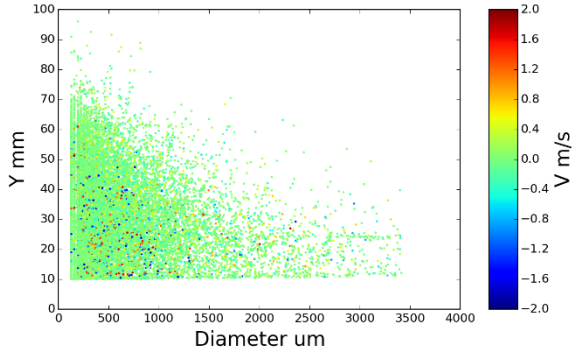

Figure A. 2789: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

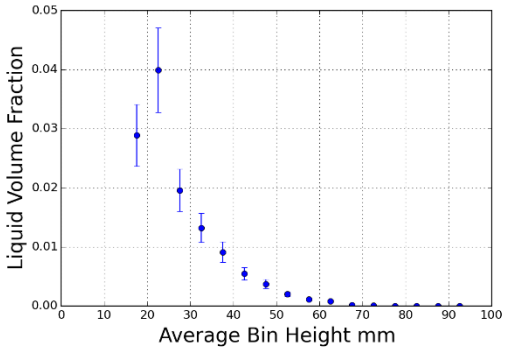

Figure A. 2790: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 Matched Only Droplets for .LA Image

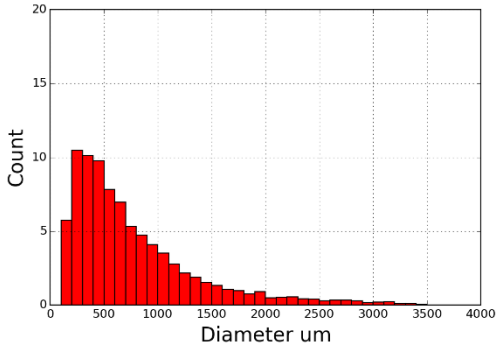

Figure A. 2791: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

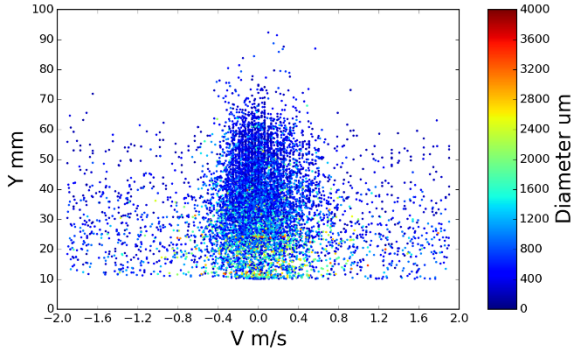

Figure A. 2794: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

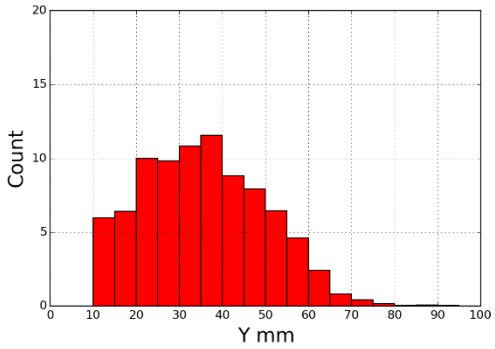

Figure A. 2792: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

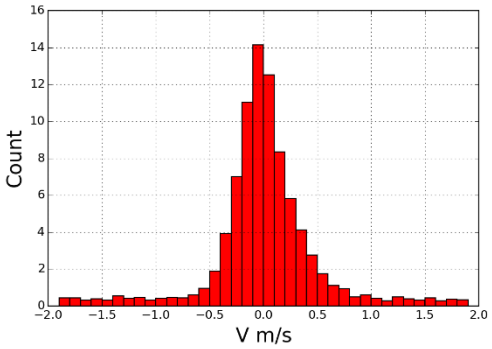

Figure A. 2795: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

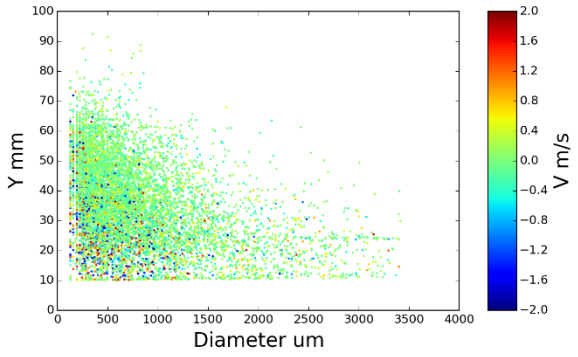

Figure A. 2793: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.3.2 Matched Only Droplets for .LB Image

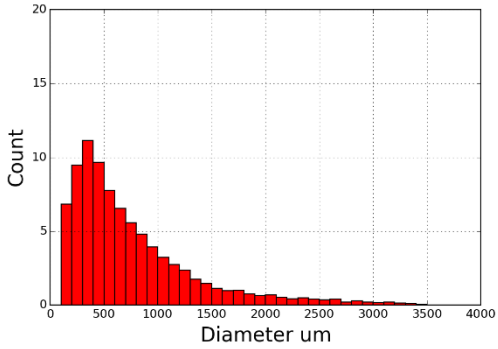

Figure A. 2796: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

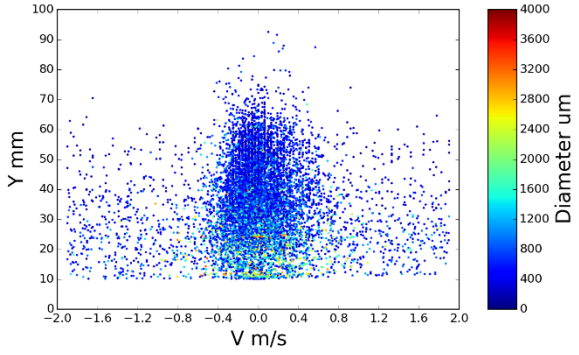

Figure A. 2799: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

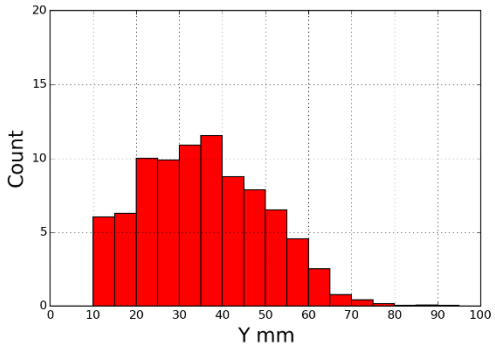

Figure A. 2797: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

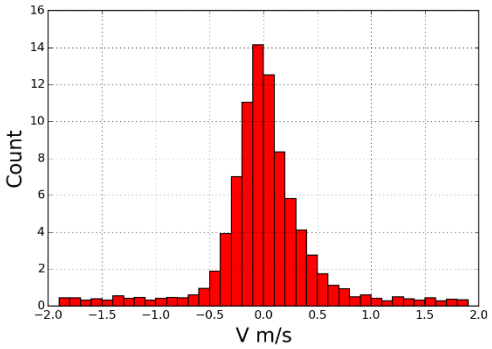

Figure A. 2800: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

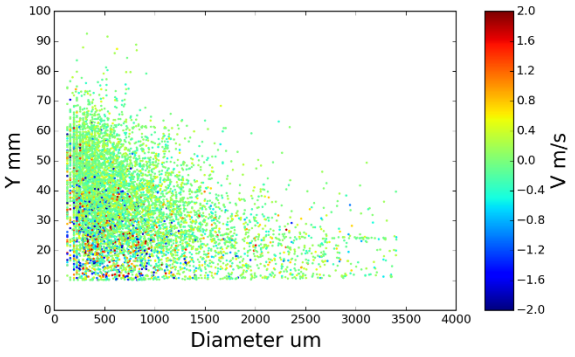

Figure A. 2798: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4 Liquid Level 4

Thermal Conditions	
H20 Flow Rate (lb/hr) / (kg/s)	13477 / 1.698
Ref Mass Flow (lb/hr) / (kg/s)	3252 / 0.410
Ref Mass Flux (lb/hr-ft2) / (kg/s-m2)	30213 / 40.975
Top Two Rows Heat Flux (Btu/hr-ft2) / (kW/m2)	9413 / 29.70
Bundle Exit Saturation Temp (^{0}F) / (^{0}C)	55.3 / 12.94
Bundle Inlet Saturation Temp (^{0}F) / (^{0}C)	55.4 / 13.02
Total Bundle Q (Btu/hr) / (kW)	299958 / 87.91
Total Bundle & Preboiler Q (Btu/hr) / (kW)	299958 / 87.91
Top Two Rows HTC Ratio	0.925
Bundle Inlet Quality	-0.13
Bundle Exit Quality	1.00

Table A. 295: Thermal Conditions

A.8.4.1 Lens 100mm Mag 0_29x

A.8.4.1 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	33.74	33.04	57.1	2869	349.8	354.8	57.1	2953	358.1	358.8
40-60mm	52.54	51.85	57.1	2255	260.7	244.8	57.1	2318	261.5	243.8
60-80mm	33.31	32.88	57.1	1277	197.6	144.2	57.1	1218	198.2	143.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	119.6	117.77	57.1	2869	268.2	266.3	57.1	2953	270.9	267.8
			Height A (mm)				Height B (mm)			
Highest Particle			75.9600				75.9600			
Lowest Particle			27.9786				27.9786			

Table A. 296: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	24.6	57.1	2869	422.4	377.2	57.1	2953	422.4	376.0	-1.840	1.840	-0.090	0.210	-1.770	1.900	0.060	0.320
40-60mm	39.76	57.1	2255	305.8	259.4	57.1	2318	304.1	259.8	-1.880	1.650	-0.090	0.170	-1.760	1.860	0.080	0.280
60-80mm	25.05	57.1	1277	226.3	151.6	57.1	1218	224.6	151.1	-1.900	1.610	-0.090	0.150	-1.710	1.640	0.100	0.240
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	89.41	57.1	2869	315.6	284.5	57.1	2953	314.2	284.1	-1.900	1.840	-0.090	0.180	-1.770	1.900	0.080	0.280

Table A. 297: Matched Droplet Info

A.8.4.1 All Droplets for .LA Image

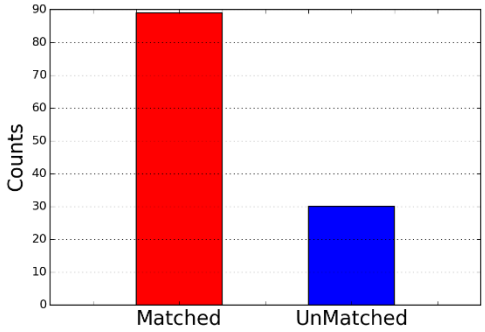

Figure A. 2801: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

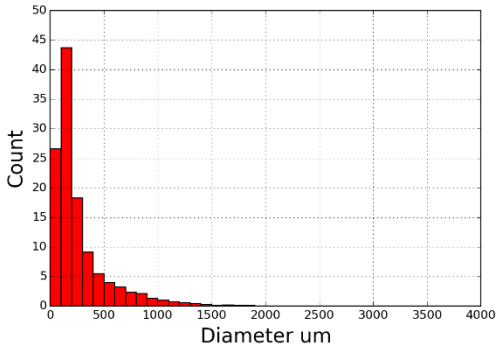

Figure A. 2802: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

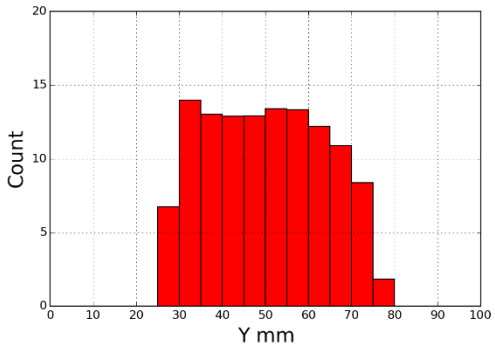

Figure A. 2803: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

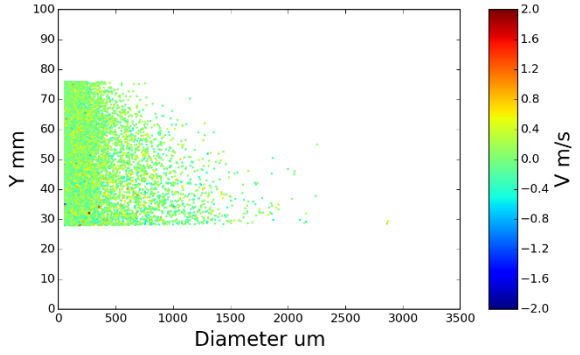

Figure A. 2804: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

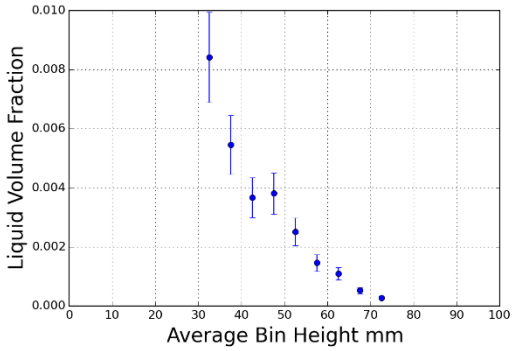

Figure A. 2805: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 All Droplets for .LB Image

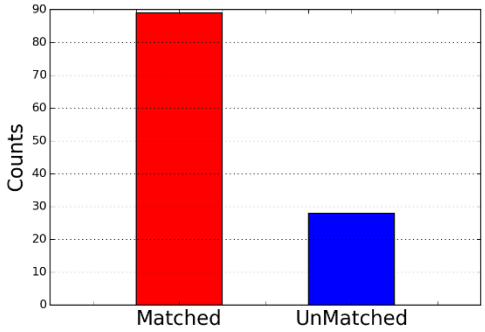

Figure A. 2806: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

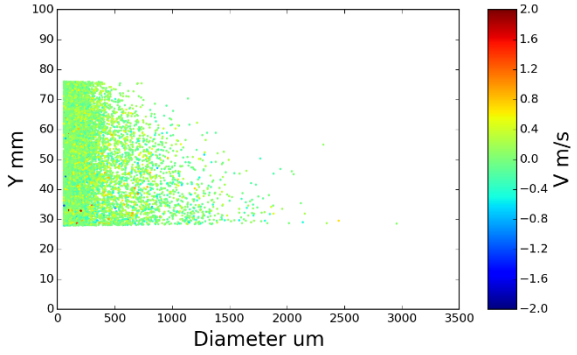

Figure A. 2809: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

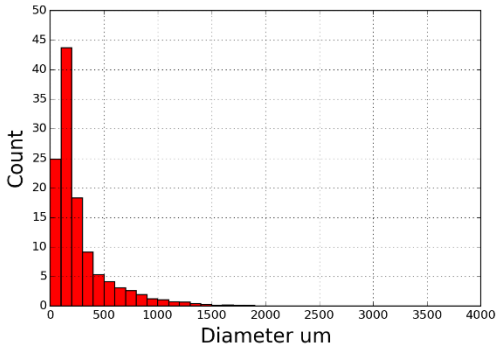

Figure A. 2807: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

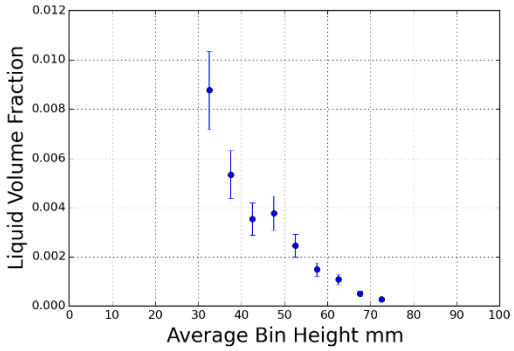

Figure A. 2810: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

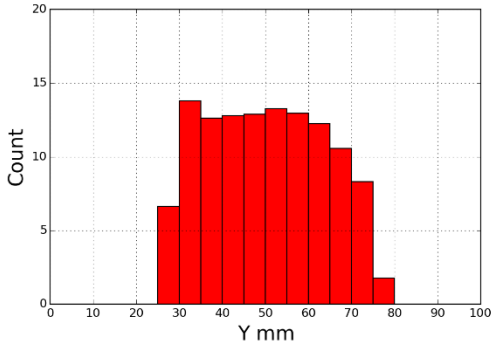

Figure A. 2808: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 Matched Only Droplets for .LA Image

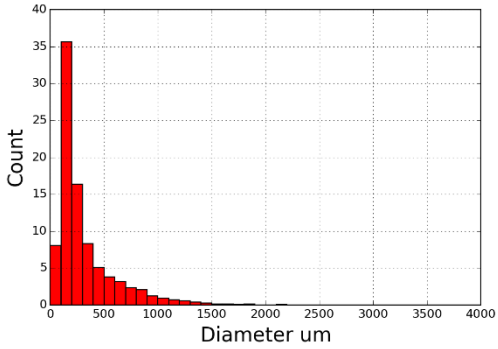

Figure A. 2811: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

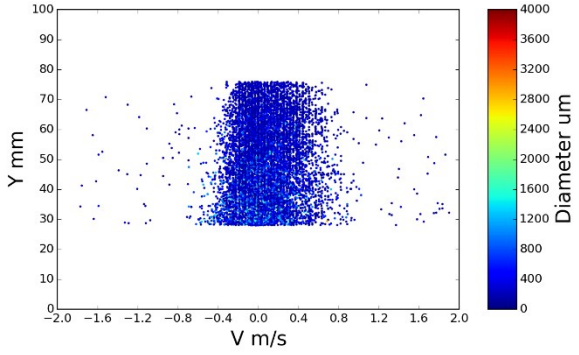

Figure A. 2814: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

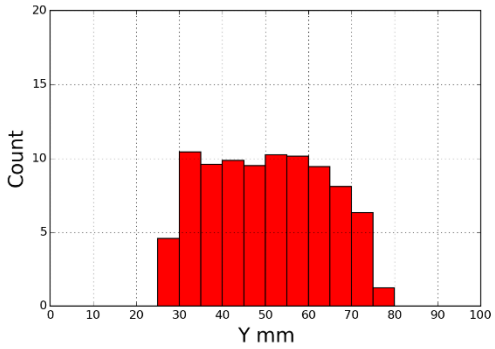

Figure A. 2812: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

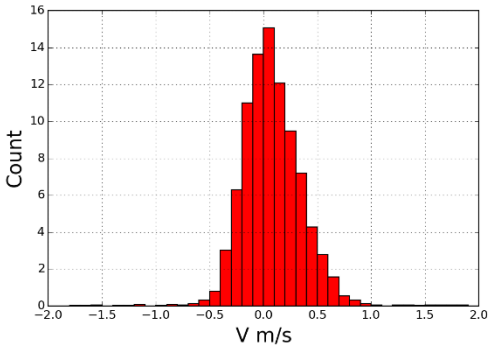

Figure A. 2815: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

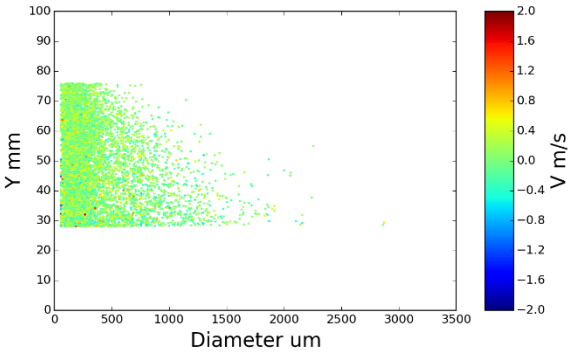

Figure A. 2813: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 Matched Only Droplets for .LB Image

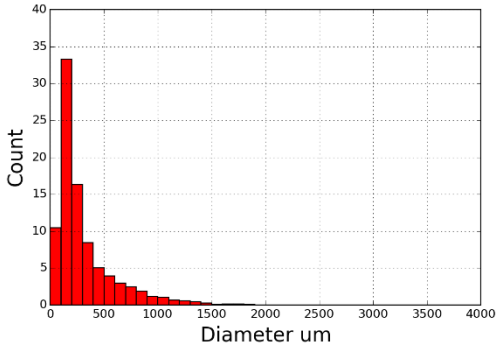

Figure A. 2816: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

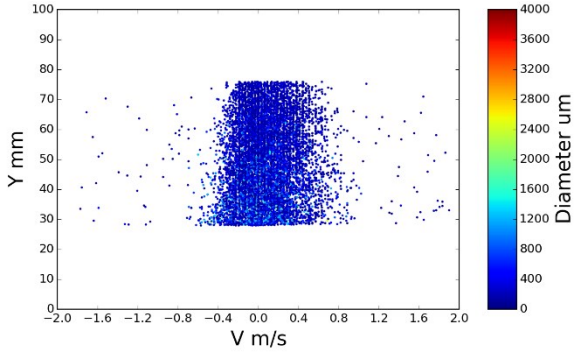

Figure A. 2819: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

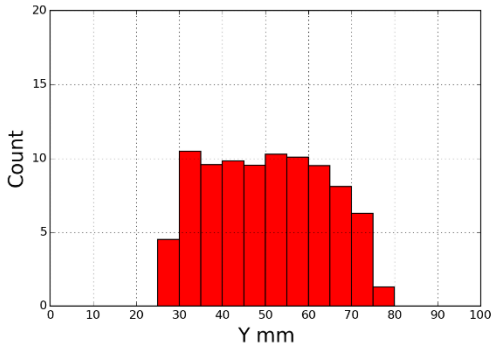

Figure A. 2817: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

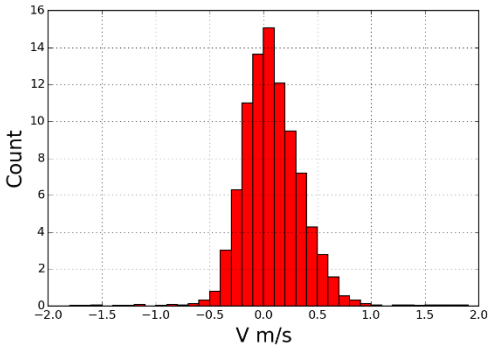

Figure A. 2820: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

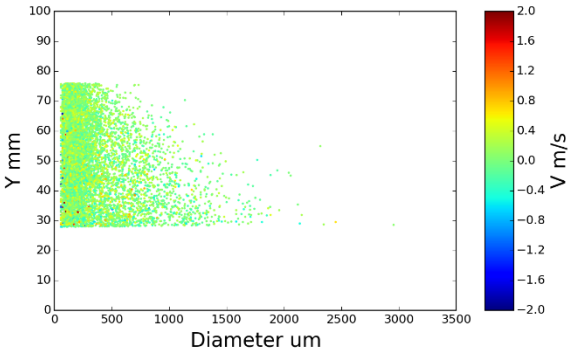

Figure A. 2818: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	39.76	41.14	57.1	2827	297.4	359.7	57.1	2820	293.3	358.6
40-60mm	59.63	60.3	57.1	2394	199.2	233.6	57.1	2331	197.0	232.4
60-80mm	29.07	28.8	57.1	1845	153.5	146.2	57.1	1971	153.9	147.1
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	128.46	130.24	57.1	2827	219.3	270.7	57.1	2820	217.9	270.8
			Height A (mm)				Height B (mm)			
Highest Particle			75.9600				75.9600			
Lowest Particle			27.9786				27.9786			

Table A. 298: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	26.03	57.1	2827	370.8	400.5	57.1	2820	370.2	403.0	-1.870	1.740	-0.060	0.230	-1.900	1.840	-0.170	0.320
40-60mm	40.76	57.1	2394	236.6	264.2	57.1	2331	234.5	265.0	-1.870	1.900	-0.060	0.200	-1.870	1.900	-0.160	0.240
60-80mm	19.74	57.1	1845	179.2	167.1	57.1	1971	177.3	169.1	-1.710	1.800	-0.100	0.150	-1.770	1.770	-0.130	0.180
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	86.53	57.1	2827	263.9	304.9	57.1	2820	262.5	306.9	-1.870	1.900	-0.070	0.200	-1.900	1.900	-0.150	0.250

Table A. 299: Matched Droplet Info

A.8.4.1 All Droplets for .LA Image

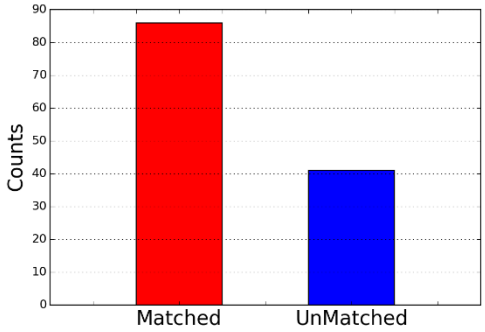

Figure A. 2821: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

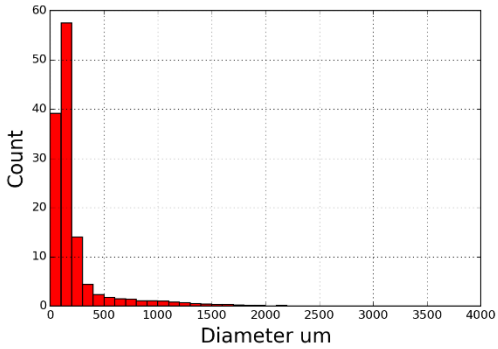

Figure A. 2822: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

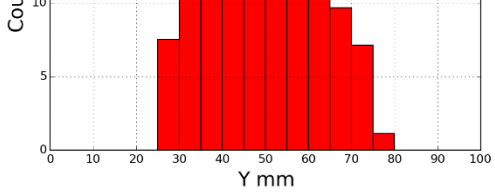

Figure A. 2823: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

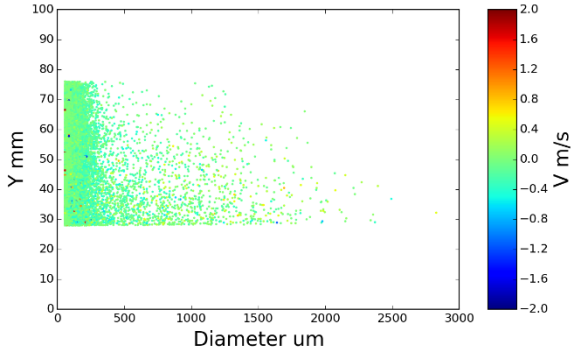

Figure A. 2824: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

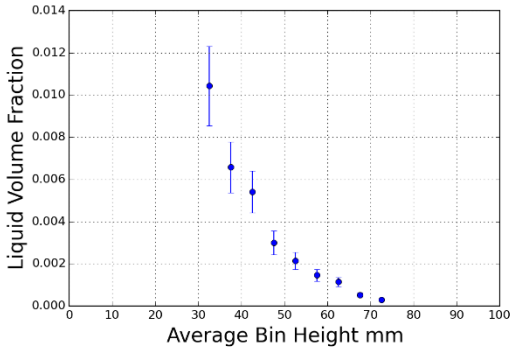

Figure A. 2825: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 All Droplets for .LB Image

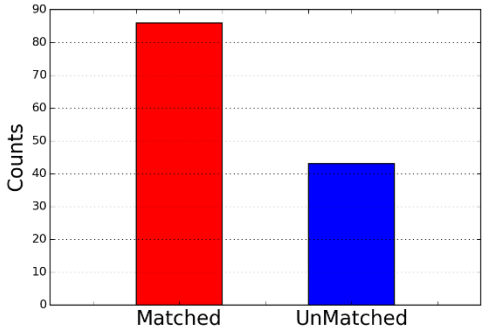

Figure A. 2826: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

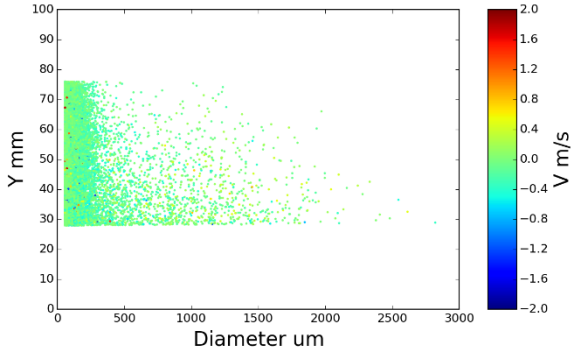

Figure A. 2829: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

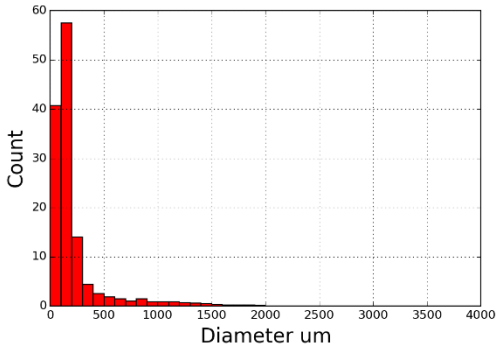

Figure A. 2827: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

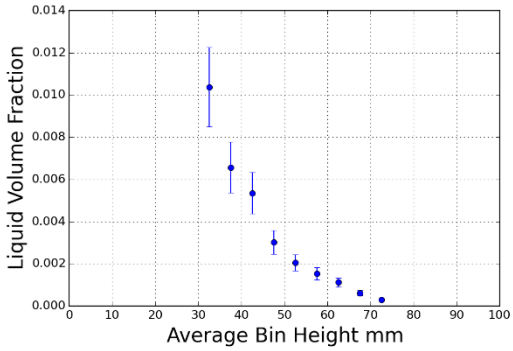

Figure A. 2830: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

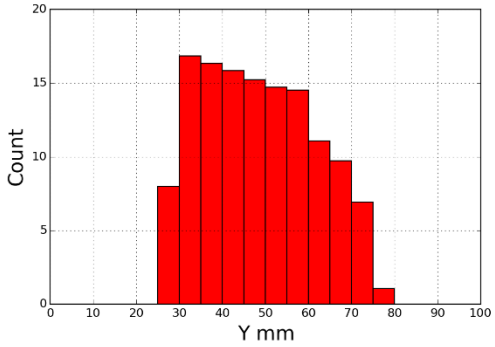

Figure A. 2828: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 Matched Only Droplets for .LA Image

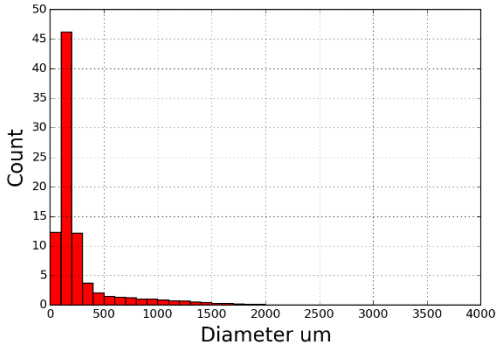

Figure A. 2831: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

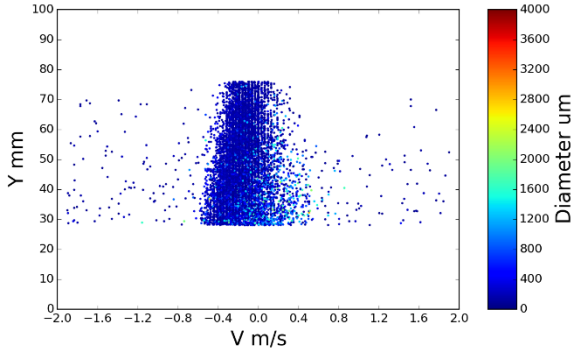

Figure A. 2834: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

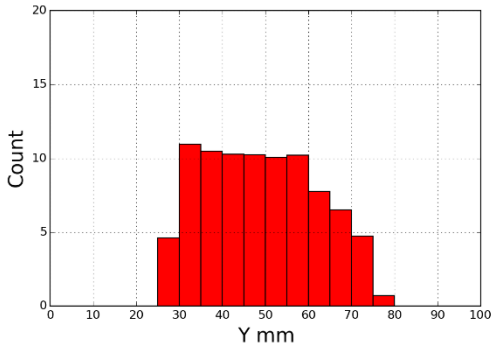

Figure A. 2832: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

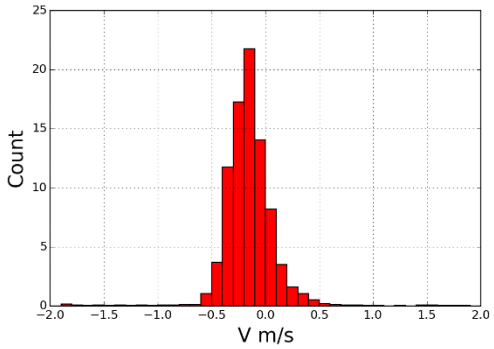

Figure A. 2835: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

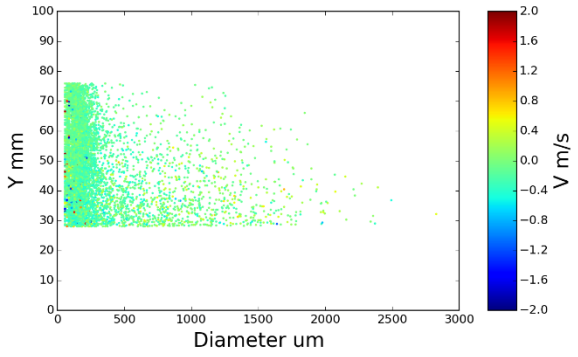

Figure A. 2833: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 Matched Only Droplets for .LB Image

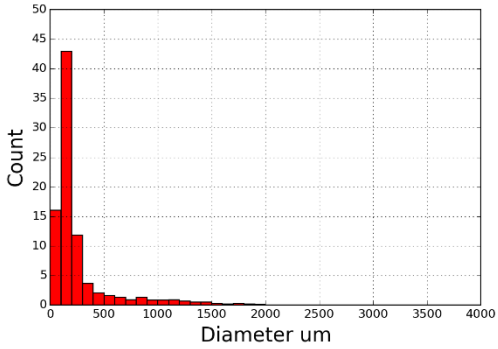

Figure A. 2836: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

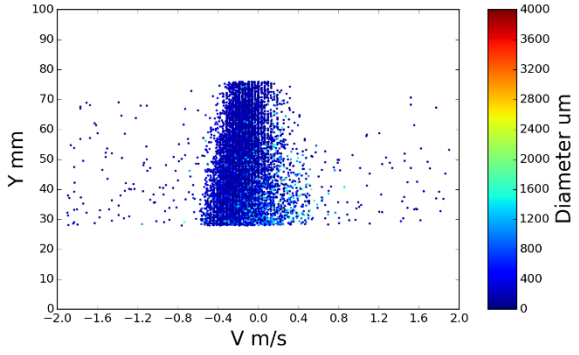

Figure A. 2839: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

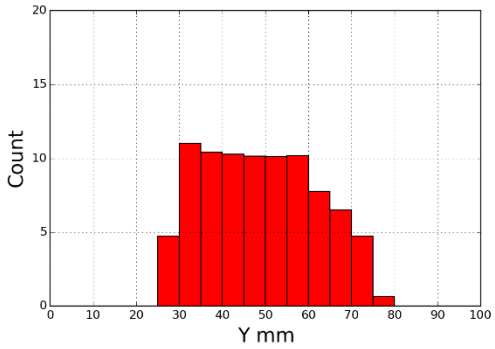

Figure A. 2837: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

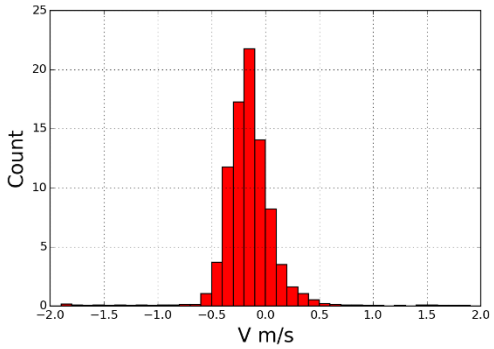

Figure A. 2840: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

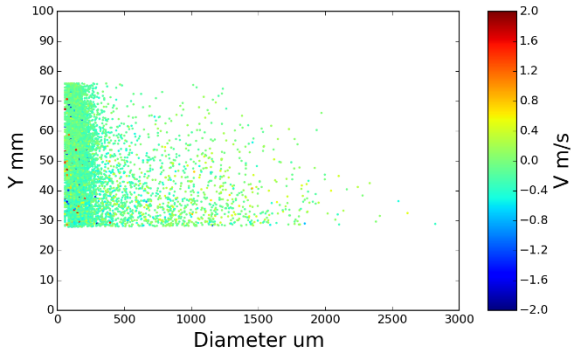

Figure A. 2838: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	35.69	37.18	57.1	2588	281.6	307.8	57.1	2659	277.2	306.9
40-60mm	47.46	48.48	57.1	2135	173.3	181.4	57.1	2105	170.2	179.3
60-80mm	21.6	21.57	57.1	1636	128.6	78.5	57.1	1752	128.4	79.5
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	104.75	107.23	57.1	2588	201.0	228.2	57.1	2659	198.9	228.0
			Height A (mm)				Height B (mm)			
Highest Particle			75.9473				75.9473			
Lowest Particle			27.9786				27.9786			

Table A. 300: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	24.15	57.1	2588	347.1	340.1	57.1	2659	345.2	338.4	-1.900	1.900	-0.040	0.210	-1.840	1.840	-0.020	0.310
40-60mm	32.7	57.1	2135	201.6	201.2	57.1	2105	198.6	199.5	-1.900	1.900	-0.050	0.180	-1.900	1.800	-0.090	0.240
60-80mm	14.33	57.1	1636	146.8	86.9	57.1	1752	144.9	89.9	-1.840	1.740	-0.070	0.170	-1.580	1.840	-0.130	0.190
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	71.18	57.1	2588	239.9	256.3	57.1	2659	237.6	255.2	-1.900	1.900	-0.050	0.190	-1.900	1.840	-0.080	0.260

Table A. 301: Matched Droplet Info

A.8.4.1 All Droplets for .LA Image

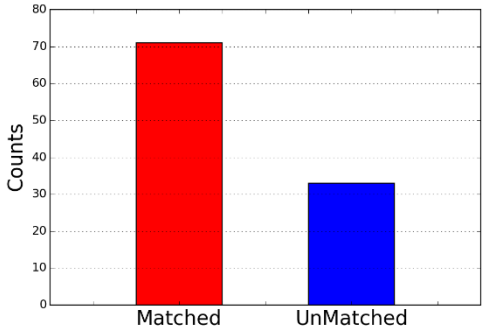

Figure A. 2841: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

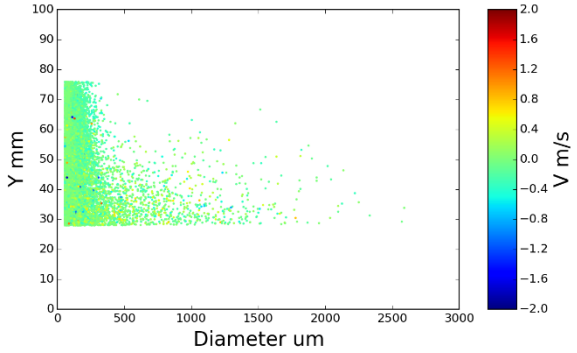

Figure A. 2844: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

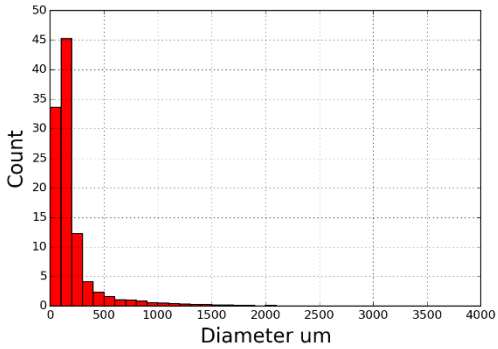

Figure A. 2842: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

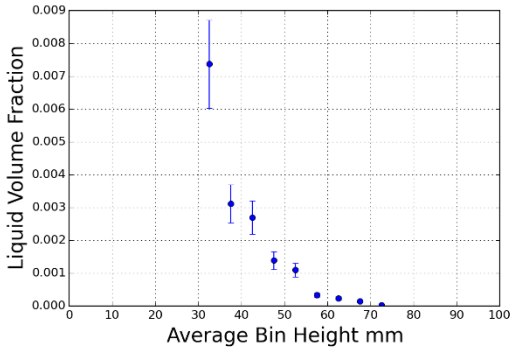

Figure A. 2845: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

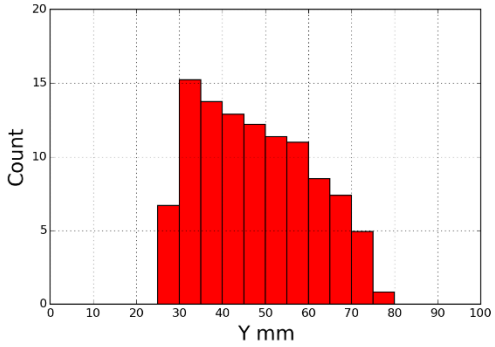

Figure A. 2843: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 All Droplets for .LB Image

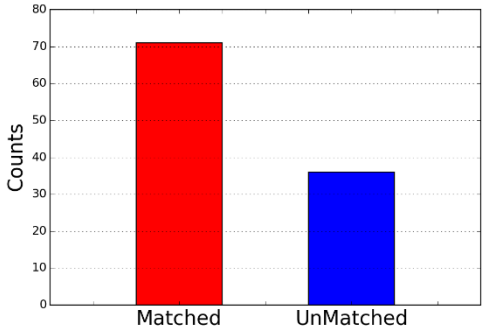

Figure A. 2846: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

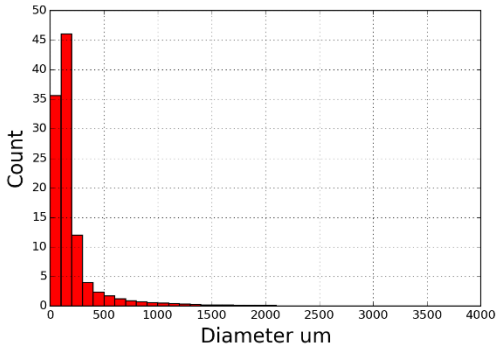

Figure A. 2847: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

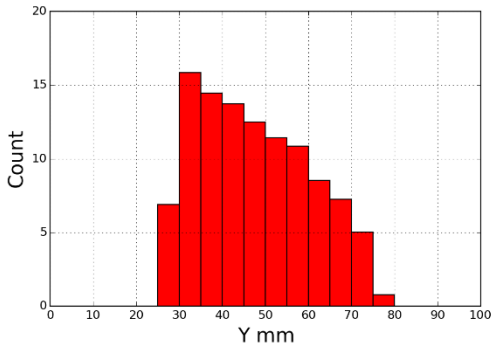

Figure A. 2848: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

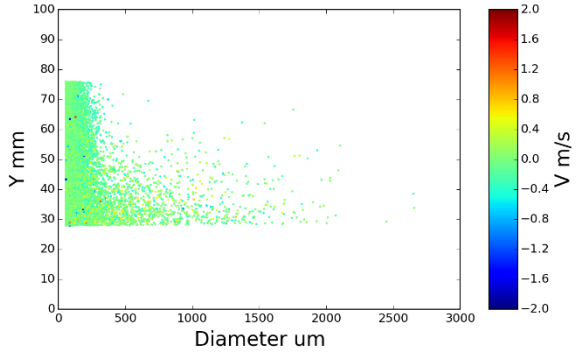

Figure A. 2849: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

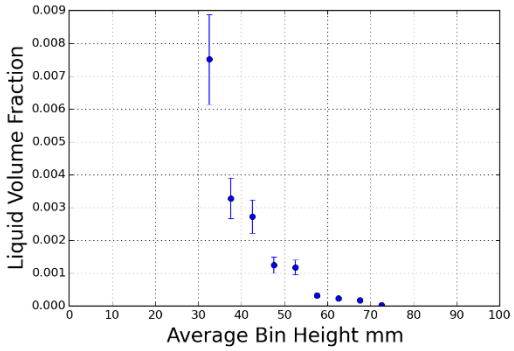

Figure A. 2850: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 Matched Only Droplets for .LA Image

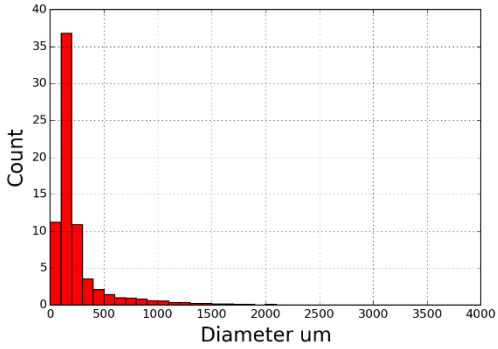

Figure A. 2851: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

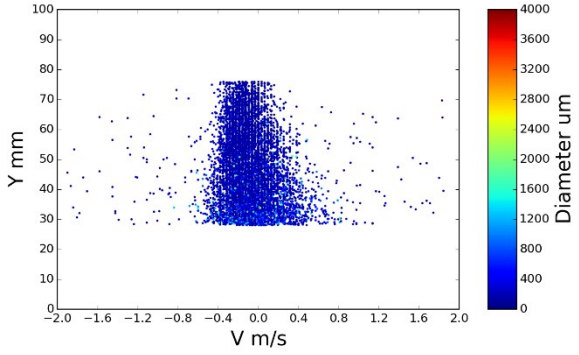

Figure A. 2854: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

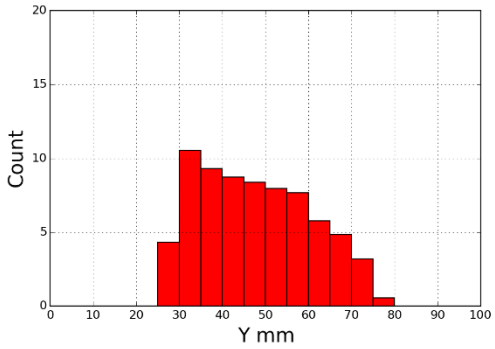

Figure A. 2852: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

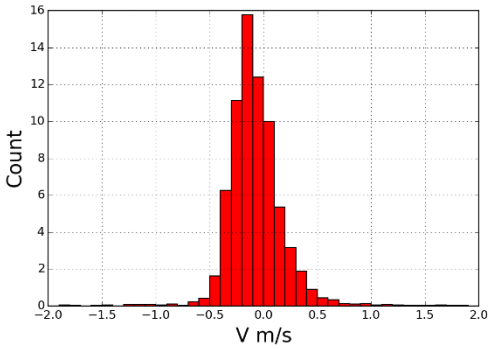

Figure A. 2855: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

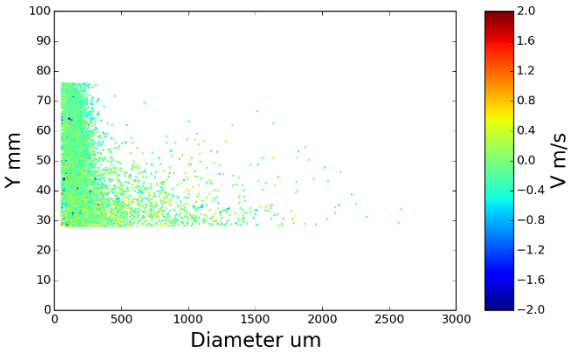

Figure A. 2853: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 Matched Only Droplets for .LB Image

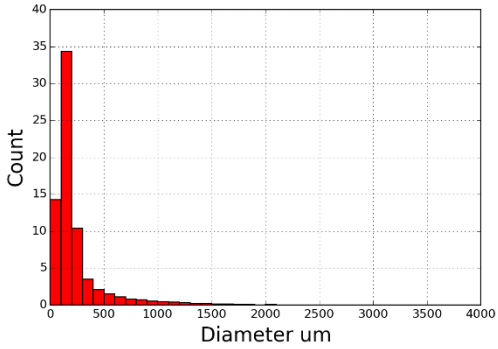

Figure A. 2856: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

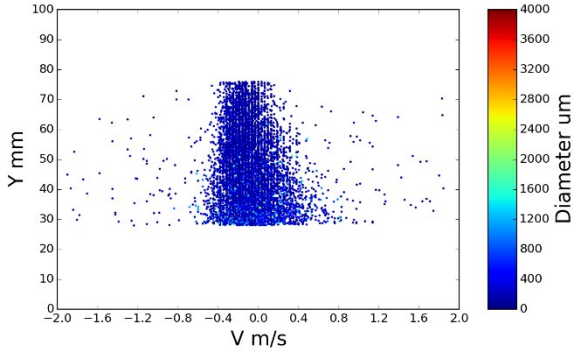

Figure A. 2859: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

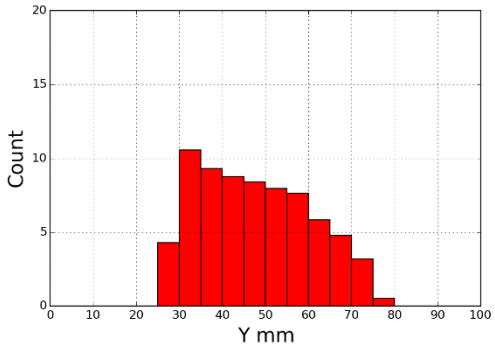

Figure A. 2857: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

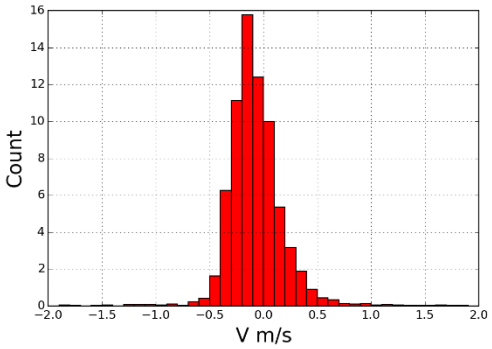

Figure A. 2860: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

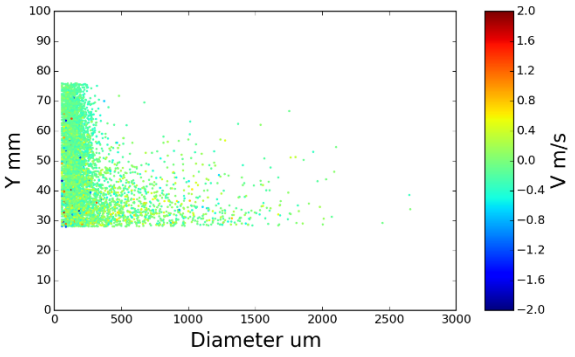

Figure A. 2858: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	33.29	34.34	57.1	2713	299.6	300.3	57.1	2646	298.8	301.4
40-60mm	44.15	44.81	57.1	2605	172.6	158.9	57.1	2575	171.6	156.9
60-80mm	17.9	17.75	57.1	1130	128.9	77.2	57.1	1209	128.5	79.8
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	95.34	96.91	57.1	2713	208.7	221.3	57.1	2646	208.8	222.4
			Height A (mm)				Height B (mm)			
Highest Particle			75.9600				75.9473			
Lowest Particle			27.9786				27.9786			

Table A. 302: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	23.85	57.1	2713	362.1	323.1	57.1	2646	361.1	323.5	-1.870	1.850	-0.050	0.190	-1.610	1.840	0.050	0.260
40-60mm	30.85	57.1	2605	199.8	171.0	57.1	2575	198.5	171.3	-1.840	1.900	-0.040	0.180	-1.740	1.870	-0.000	0.240
60-80mm	11.58	57.1	1130	149.3	86.8	57.1	1209	147.1	89.8	-1.710	1.870	-0.050	0.150	-1.230	1.770	-0.080	0.180
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	66.28	57.1	2713	249.4	244.9	57.1	2646	248.1	245.5	-1.870	1.900	-0.040	0.180	-1.740	1.870	0.000	0.240

Table A. 303: Matched Droplet Info

A.8.4.1 All Droplets for .LA Image

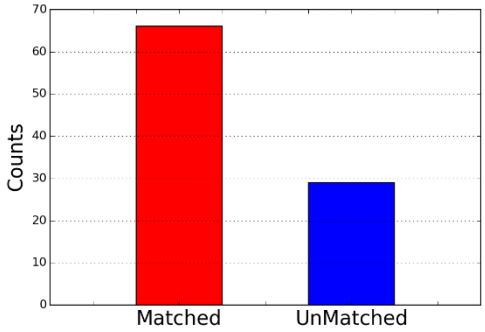

Figure A. 2861: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

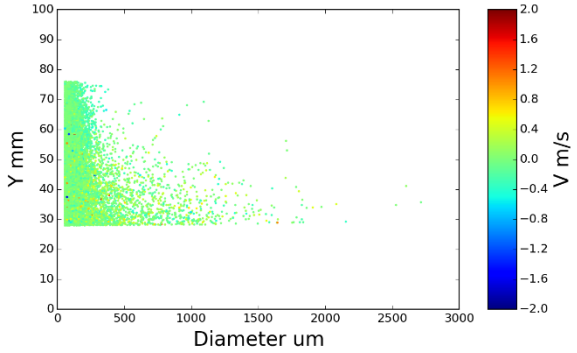

Figure A. 2864: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

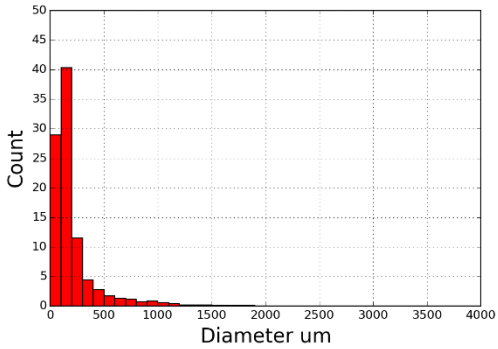

Figure A. 2862: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

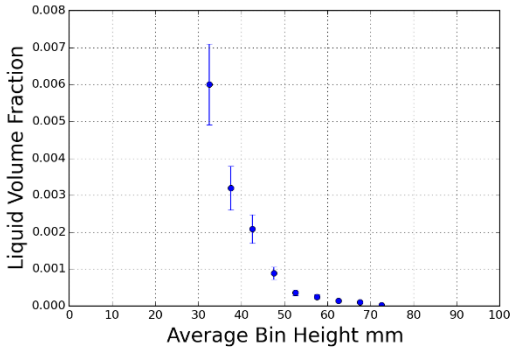

Figure A. 2865: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

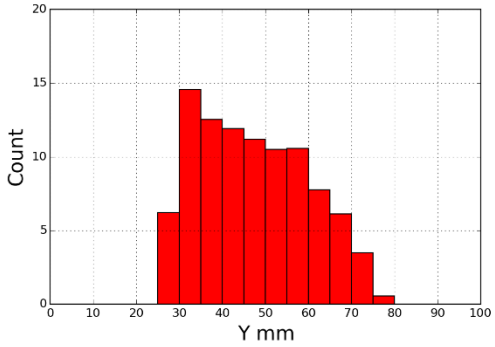

Figure A. 2863: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 All Droplets for .LB Image

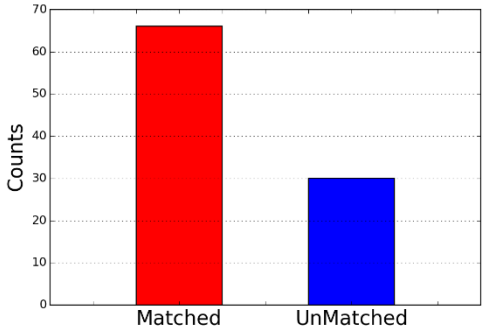

Figure A. 2866: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

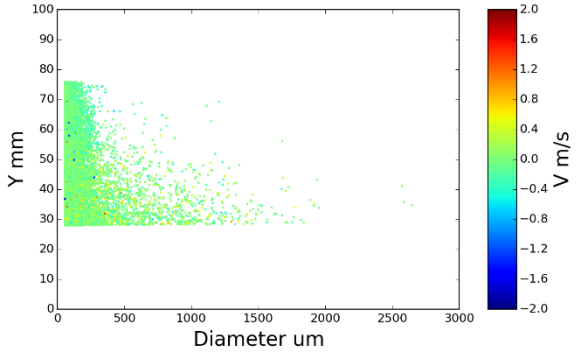

Figure A. 2869: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

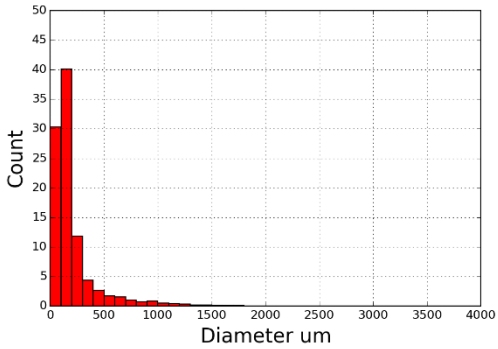

Figure A. 2867: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

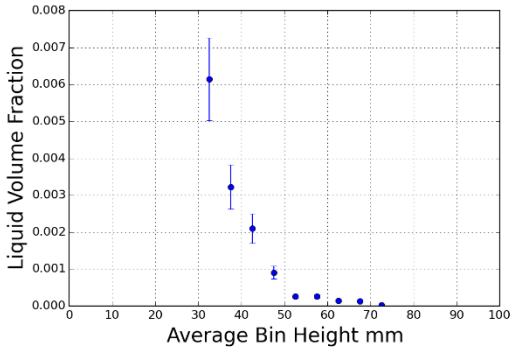

Figure A. 2870: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

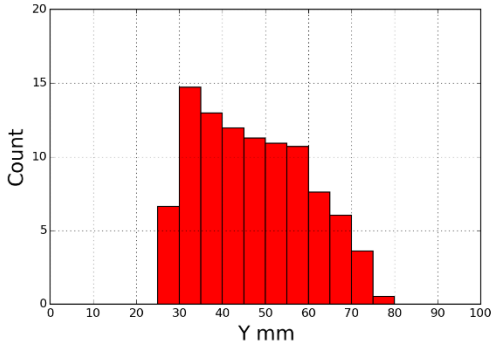

Figure A. 2868: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 Matched Only Droplets for .LA Image

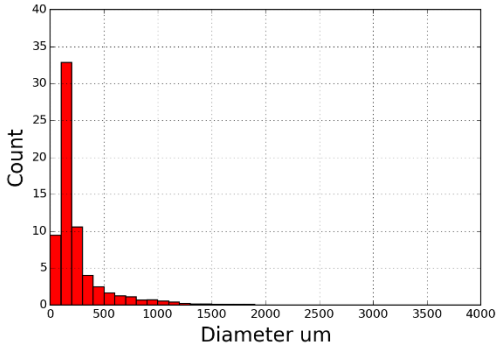

Figure A. 2871: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

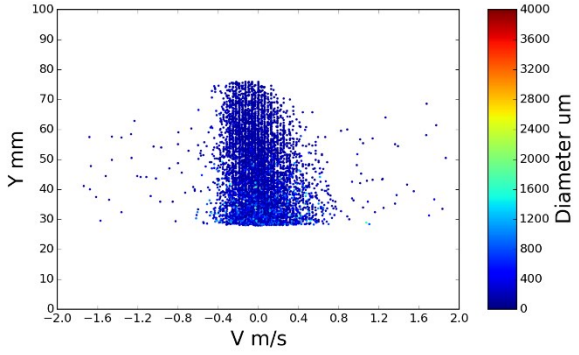

Figure A. 2874: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

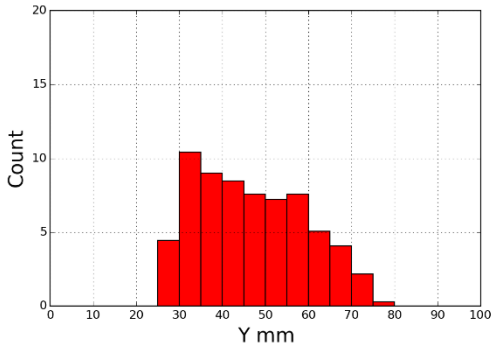

Figure A. 2872: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

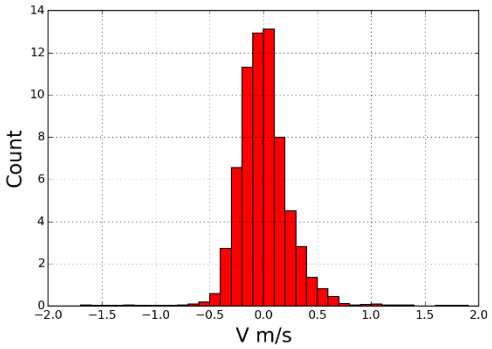

Figure A. 2875: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

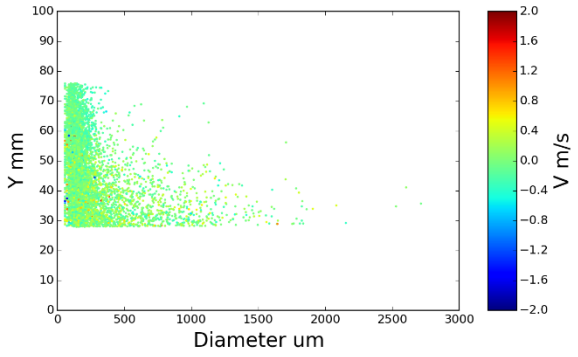

Figure A. 2873: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 Matched Only Droplets for .LB Image

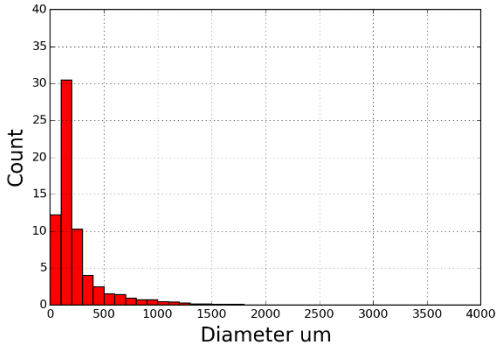

Figure A. 2876: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

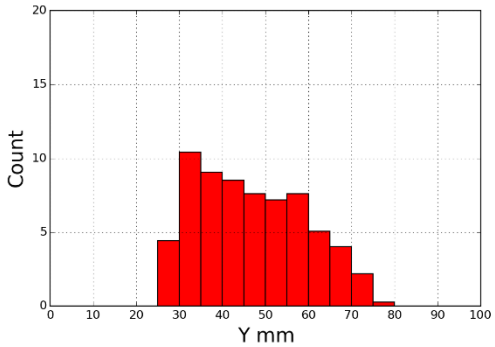

Figure A. 2877: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

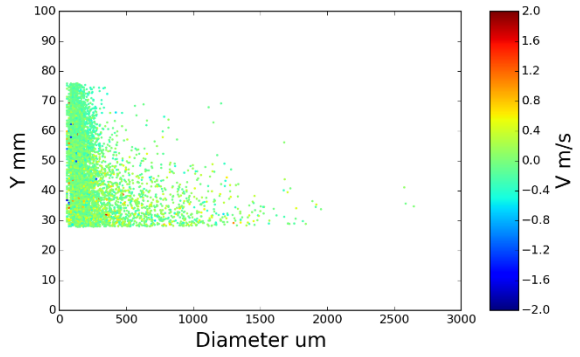

Figure A. 2878: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

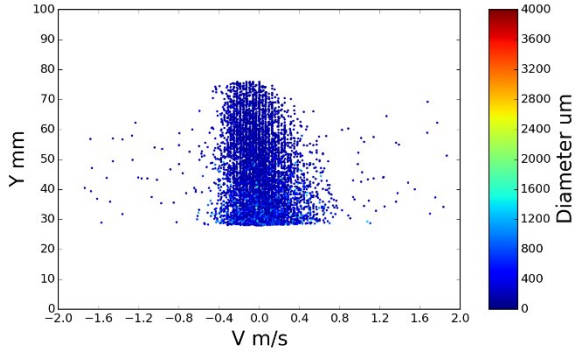

Figure A. 2879: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

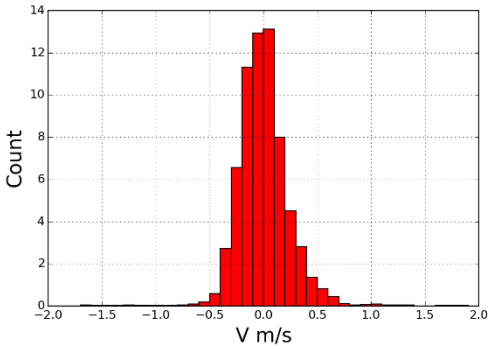

Figure A. 2880: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	0.0	-	-	-	-	-	-	-	-
20-40mm	20.31	20.97	57.1	2070	285.0	280.1	57.1	2110	282.0	283.5
40-60mm	28.62	28.83	57.1	2104	169.3	158.7	57.1	2055	169.5	158.7
60-80mm	12.24	11.93	57.1	927.5	128.7	70.9	57.1	858.5	129.3	68.9
80-100mm	0.0	0.0	-	-	-	-	-	-	-	-
All	61.17	61.73	57.1	2104	199.6	206.6	57.1	2110	199.9	209.0
			Height A (mm)				Height B (mm)			
Highest Particle			75.9107				75.9094			
Lowest Particle			27.9786				27.9786			

Table A. 304: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40mm	14.03	57.1	2070	347.0	305.1	57.1	2110	347.3	308.9	-1.710	1.810	-0.040	0.190	-1.850	1.830	0.040	0.280
40-60mm	19.81	57.1	2104	201.9	178.8	57.1	2055	200.2	180.0	-1.550	1.770	-0.050	0.130	-1.840	1.840	0.010	0.210
60-80mm	7.81	57.1	817.1	149.4	71.8	57.1	858.5	147.3	73.6	-1.800	1.900	-0.040	0.180	-1.770	1.730	-0.050	0.200
80-100mm	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	41.65	57.1	2104	241.0	231.6	57.1	2110	240.0	234.2	-1.800	1.900	-0.040	0.160	-1.850	1.840	0.010	0.240

Table A. 305: Matched Droplet Info

A.8.4.1 All Droplets for .LA Image

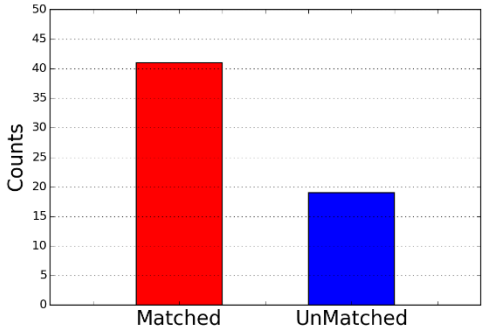

Figure A. 2881: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

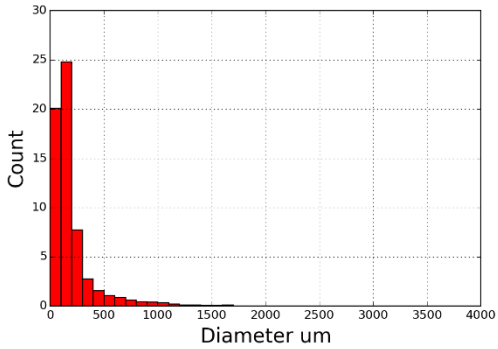

Figure A. 2882: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

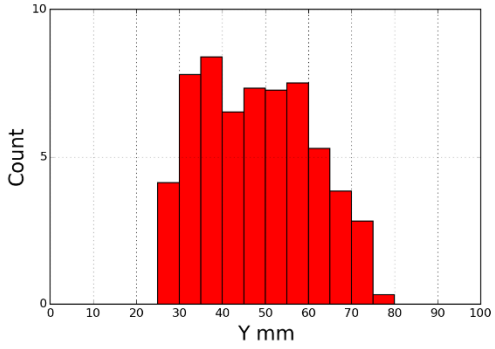

Figure A. 2883: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

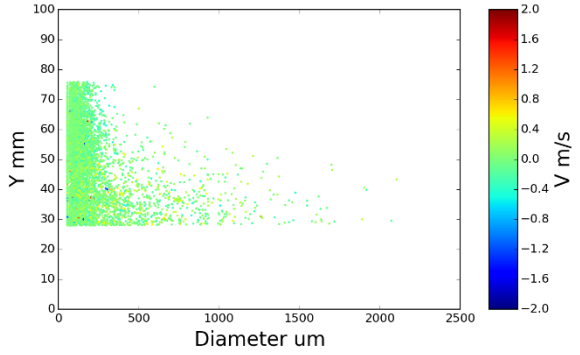

Figure A. 2884: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

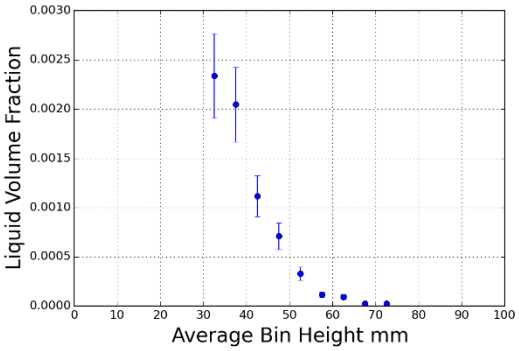

Figure A. 2885: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 All Droplets for .LB Image

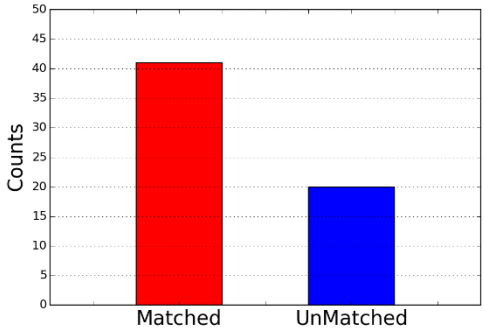

Figure A. 2886: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

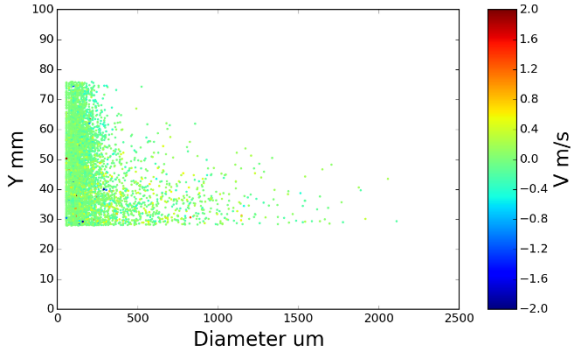

Figure A. 2889: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

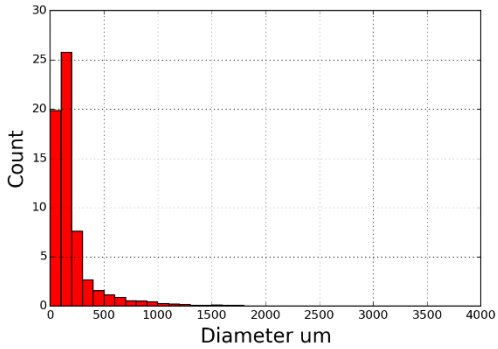

Figure A. 2887: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

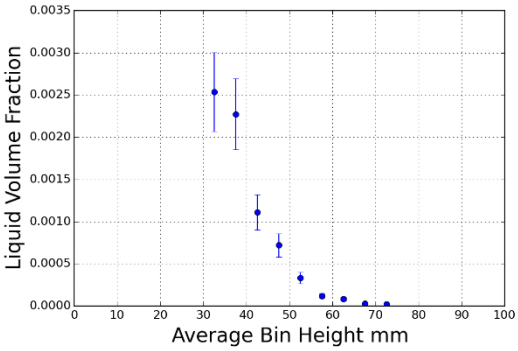

Figure A. 2890: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

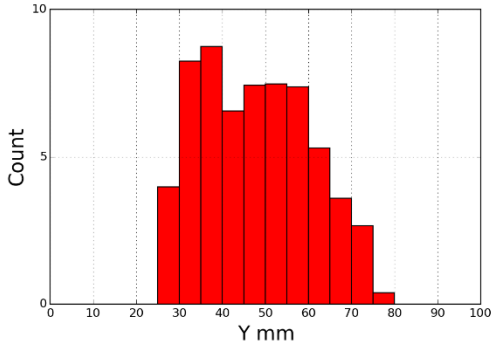

Figure A. 2888: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 Matched Only Droplets for .LA Image

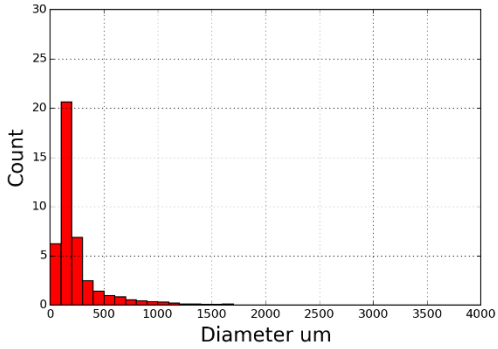

Figure A. 2891: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

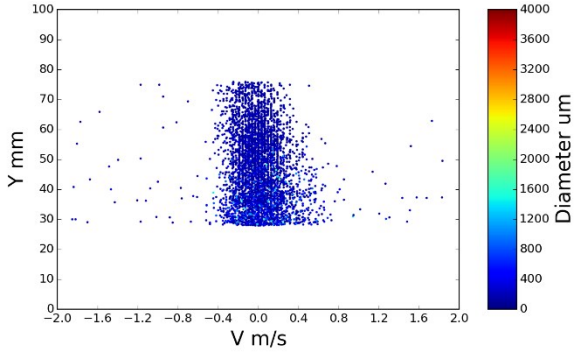

Figure A. 2894: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

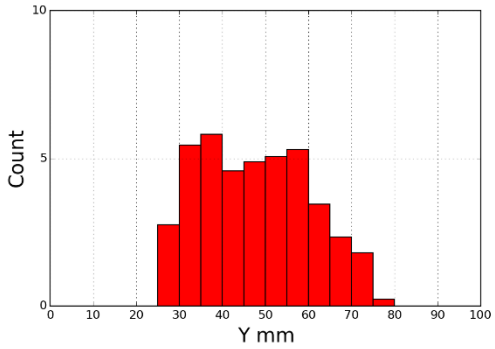

Figure A. 2892: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

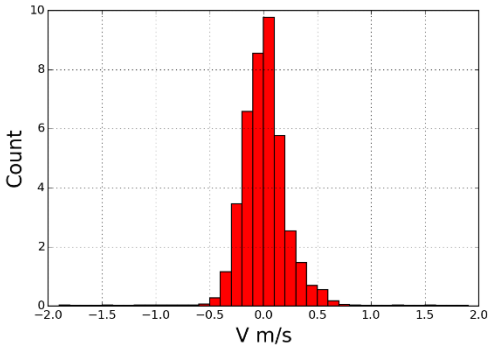

Figure A. 2895: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

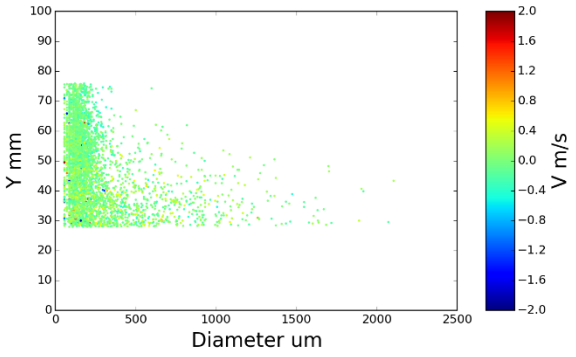

Figure A. 2893: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.1 Matched Only Droplets for .LB Image

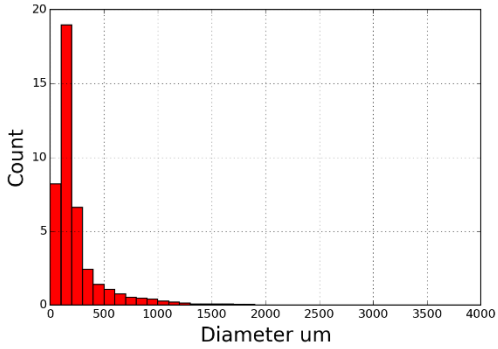

Figure A. 2896: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

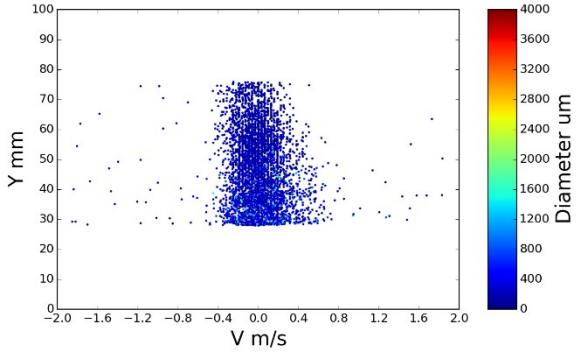

Figure A. 2899: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

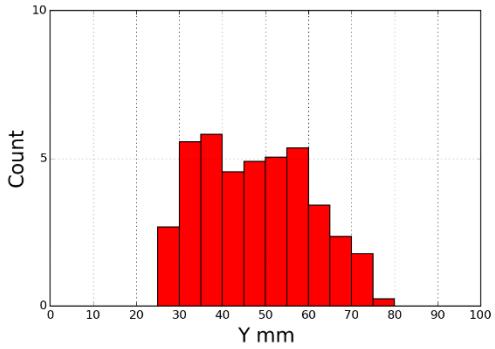

Figure A. 2897: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

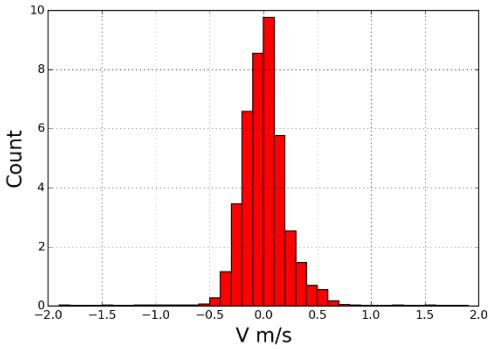

Figure A. 2900: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

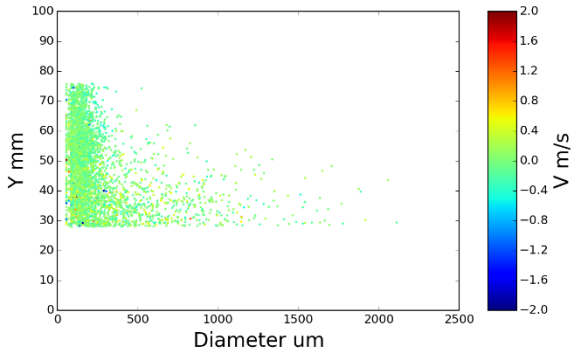

Figure A. 2898: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 Lens 50mm Mag 0_13x

A.8.4.2 Depth J

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	67.47	68.95	128.6	3418	768.2	625.1	128.6	3417	767.7	627.4
20-40mm	43.95	44.07	128.6	3416	647.8	460.6	128.6	3321	651.4	471.6
40-60mm	26.88	26.6	128.6	2000	447.8	289.6	128.6	2116	450.7	290.3
60-80mm	14.26	14.21	128.6	1389	334.8	176.4	128.6	1376	332.9	176.3
80-100mm	3.48	3.41	128.6	1263	265.5	123.8	128.6	1289	268.0	120.6
All	156.04	157.24	128.6	3418	628.3	520.9	128.6	3417	631.4	526.3
			Height A (mm)				Height B (mm)			
Highest Particle			99.8290				99.9429			
Lowest Particle			5.0712				5.0712			

Table A. 306: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	35.92	128.6	3417	939.6	655.3	128.6	3396	927.8	653.5	-1.900	1.890	-0.070	0.520	-1.900	1.900	0.030	0.560
20-40mm	29.7	128.6	3416	743.9	470.7	128.6	3321	743.2	473.0	-1.890	1.900	-0.080	0.290	-1.880	1.870	0.070	0.390
40-60mm	20.01	128.6	2000	514.1	292.5	128.6	2116	513.5	292.4	-1.860	1.870	-0.080	0.200	-1.870	1.810	0.100	0.310
60-80mm	10.29	128.6	1389	385.7	178.8	128.6	1376	379.9	180.3	-1.840	1.840	-0.080	0.180	-1.890	1.770	0.090	0.260
80-100mm	2.37	128.6	1263	304.4	128.9	128.6	1289	298.4	129.6	-0.410	1.650	-0.050	0.180	-1.330	1.550	0.080	0.220
All	98.29	128.6	3417	720.5	536.0	128.6	3396	714.4	534.2	-1.900	1.900	-0.080	0.370	-1.900	1.900	0.060	0.430

Table A. 307: Matched Droplet Info

A.8.4.2 All Droplets for .LA Image

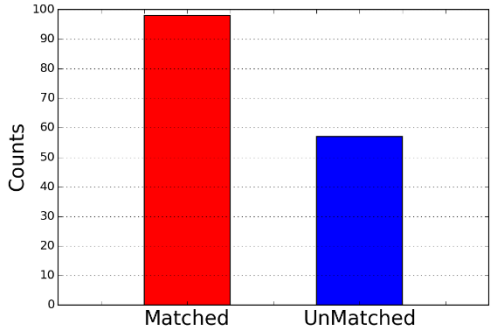

Figure A. 2901: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

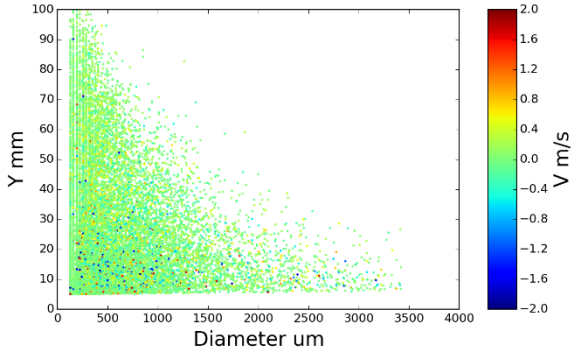

Figure A. 2904: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

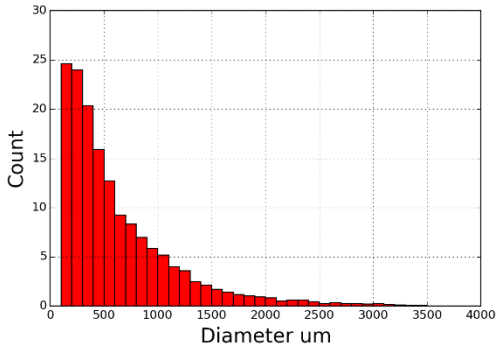

Figure A. 2902: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

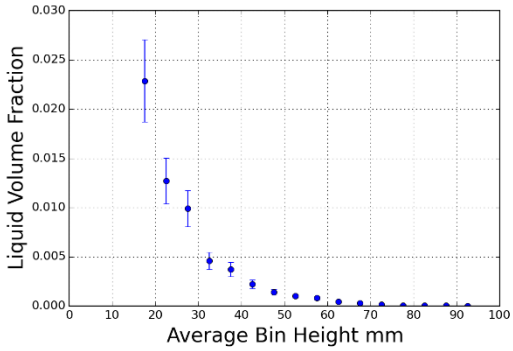

Figure A. 2905: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

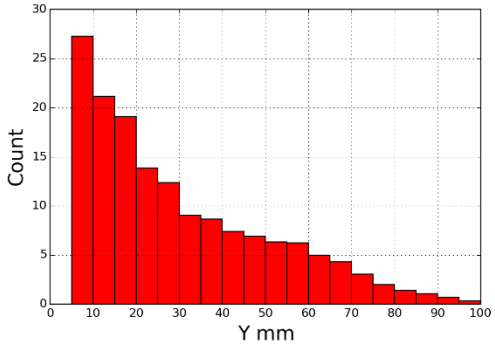

Figure A. 2903: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 All Droplets for .LB Image

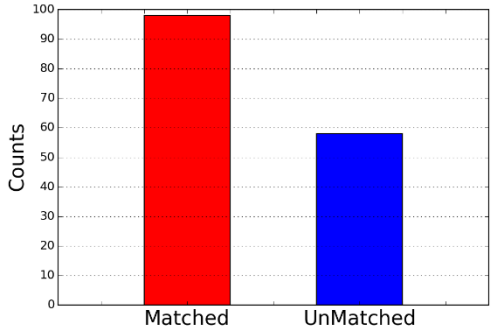

Figure A. 2906: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

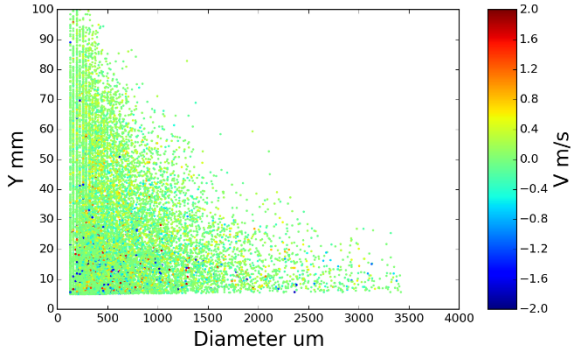

Figure A. 2909: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

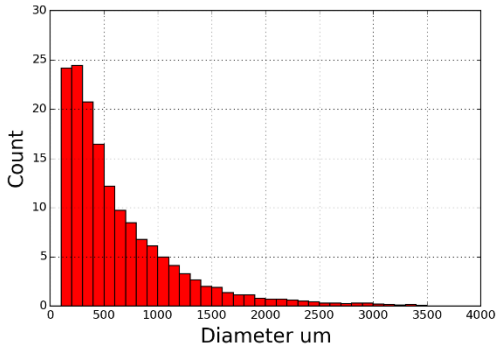

Figure A. 2907: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

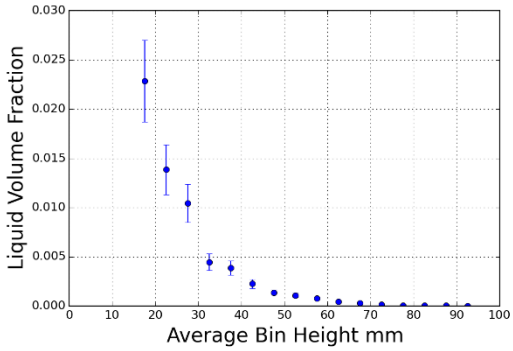

Figure A. 2910: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

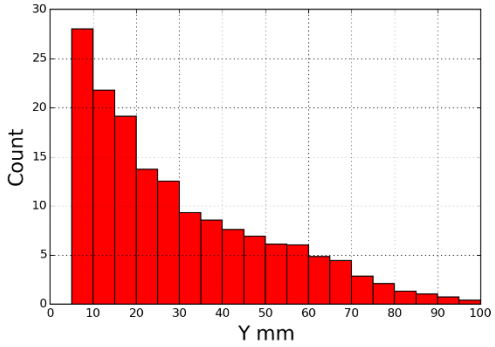

Figure A. 2908: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 Matched Only Droplets for .LA Image

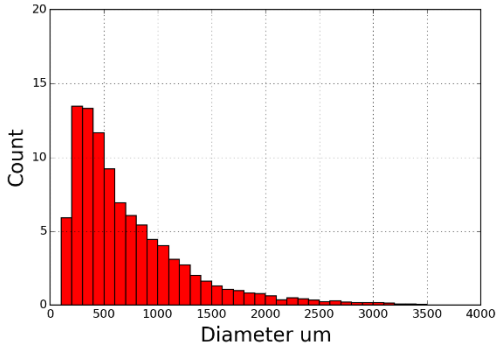

Figure A. 2911: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

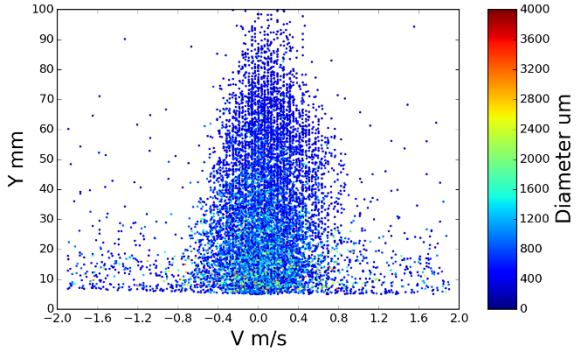

Figure A. 2914: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

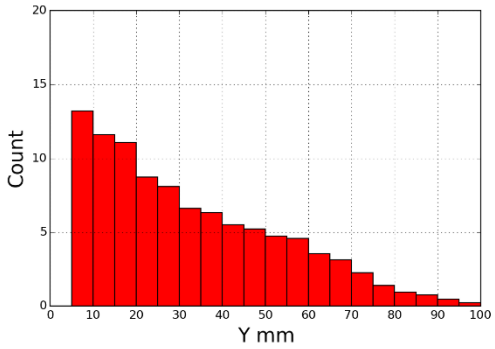

Figure A. 2912: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

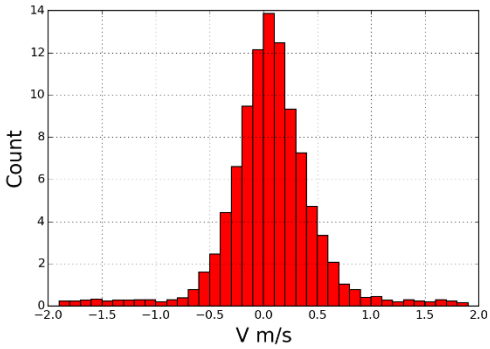

Figure A. 2915: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

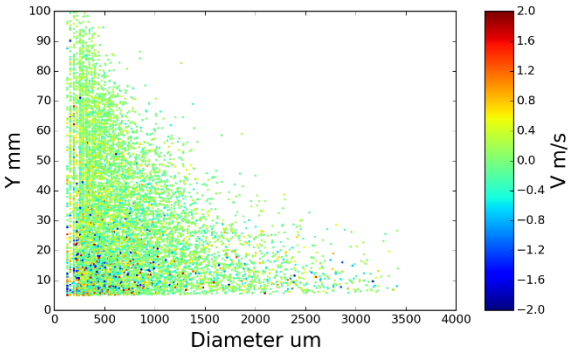

Figure A. 2913: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 Matched Only Droplets for .LB Image

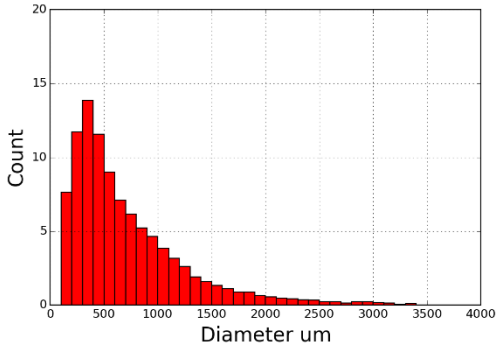

Figure A. 2916: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

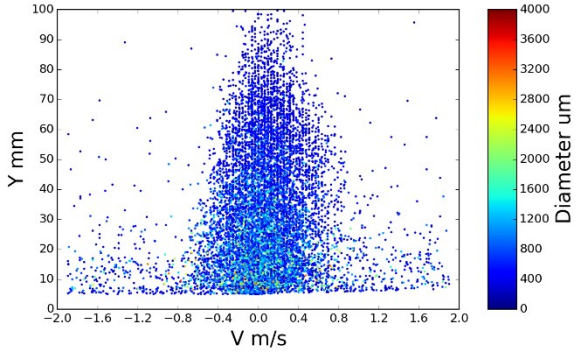

Figure A. 2919: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

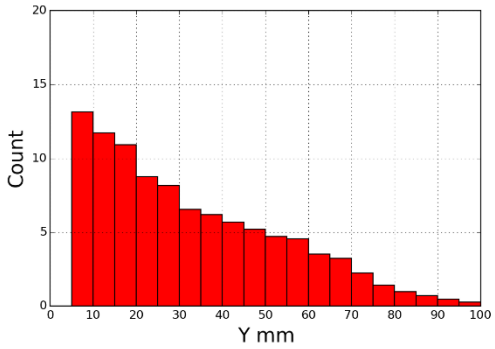

Figure A. 2917: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

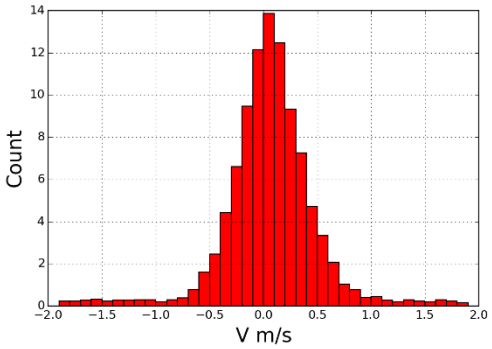

Figure A. 2920: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

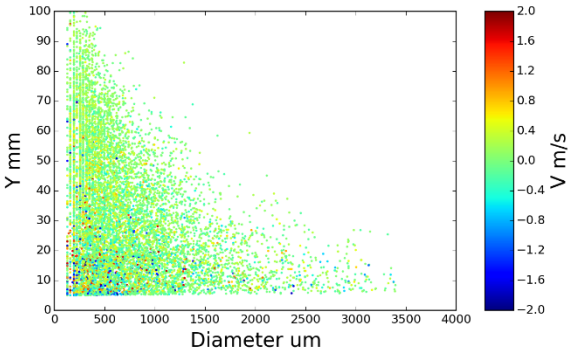

Figure A. 2918: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 Depth K

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	66.6	67.15	128.6	3398	794.3	610.4	128.6	3402	801.3	619.1
20-40mm	44.16	44.05	128.6	3261	644.9	460.6	128.6	3359	644.5	462.6
40-60mm	20.42	20.07	128.6	2359	476.1	365.1	128.6	2261	481.3	366.1
60-80mm	6.75	6.58	128.6	1536	343.1	226.2	128.6	1550	343.4	222.8
80-100mm	0.75	0.74	128.6	686.5	281.5	132.1	128.6	692.5	284.5	127.3
All	138.68	138.59	128.6	3398	675.2	536.5	128.6	3402	680.6	543.2
			Height A (mm)				Height B (mm)			
Highest Particle			99.6295				99.7627			
Lowest Particle			5.0712				5.0712			

Table A. 308: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	36.86	128.6	3387	963.3	627.1	128.6	3402	954.1	624.7	-1.900	1.900	-0.070	0.470	-1.900	1.900	0.030	0.540
20-40mm	29.89	128.6	3261	749.0	468.1	128.6	3359	741.7	468.3	-1.880	1.900	-0.060	0.300	-1.850	1.870	-0.040	0.400
40-60mm	14.17	128.6	2359	580.8	382.1	128.6	2261	576.5	383.8	-1.900	1.840	-0.070	0.230	-1.840	1.900	-0.060	0.300
60-80mm	4.61	128.6	1536	407.9	242.6	128.6	1550	402.5	239.6	-0.350	0.250	-0.070	0.090	-1.840	0.680	-0.030	0.240
80-100mm	0.48	128.6	686.5	333.2	132.8	128.6	692.5	328.5	132.0	-0.220	0.700	-0.070	0.130	-0.630	0.510	-0.010	0.230
All	86.01	128.6	3387	792.5	549.2	128.6	3402	785.2	547.8	-1.900	1.900	-0.070	0.370	-1.900	1.900	-0.010	0.450

Table A. 309: Matched Droplet Info

A.8.4.2 All Droplets for .LA Image

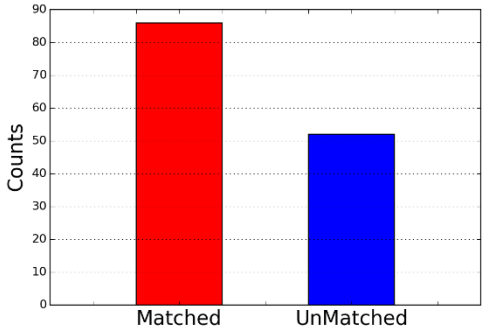

Figure A. 2921: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

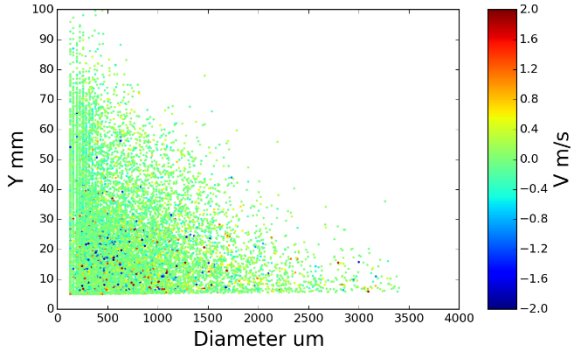

Figure A. 2924: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

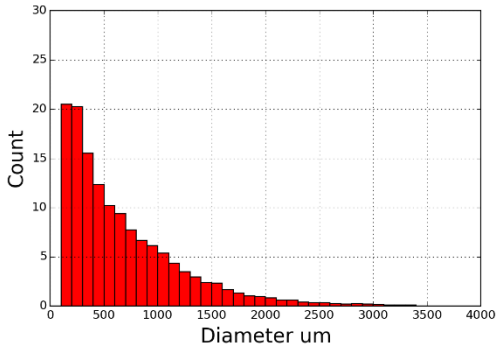

Figure A. 2922: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

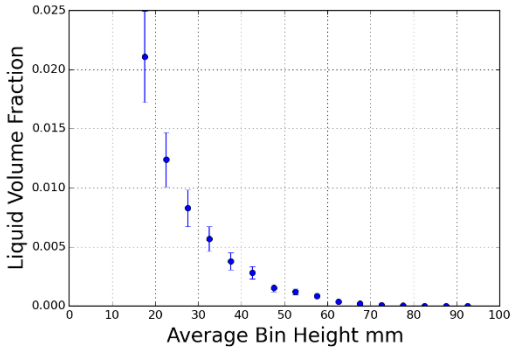

Figure A. 2925: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

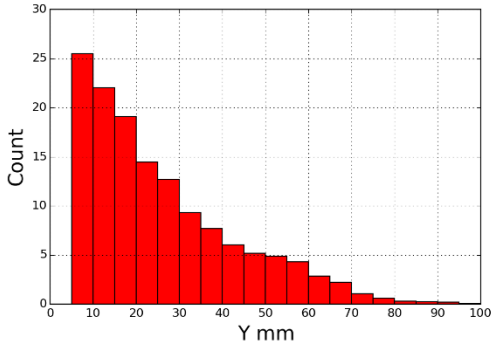

Figure A. 2923: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 All Droplets for .LB Image

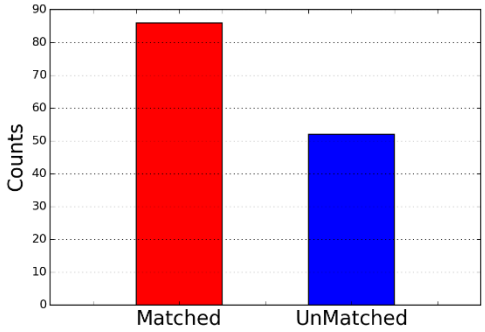

Figure A. 2926: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

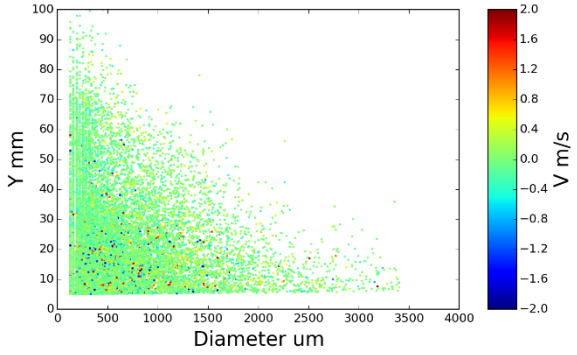

Figure A. 2929: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

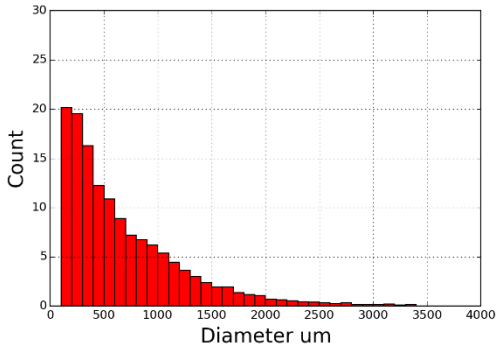

Figure A. 2927: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

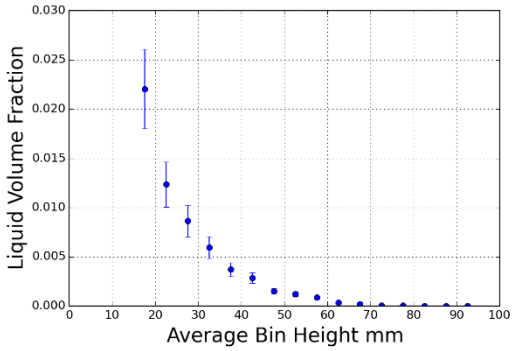

Figure A. 2930: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

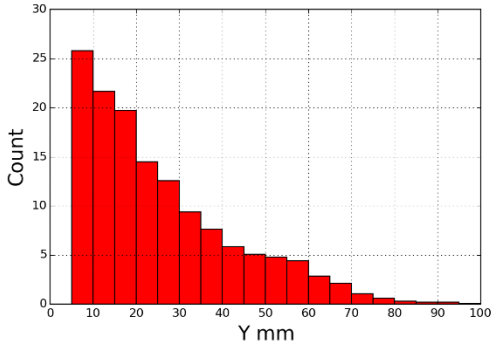

Figure A. 2928: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 Matched Only Droplets for .LA Image

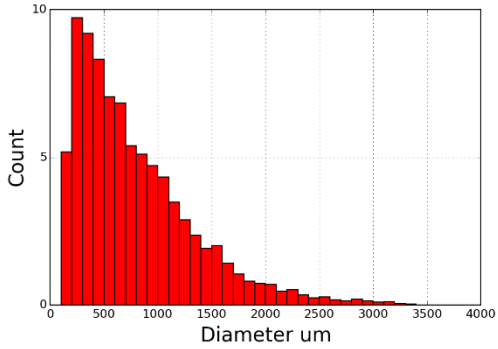

Figure A. 2931: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

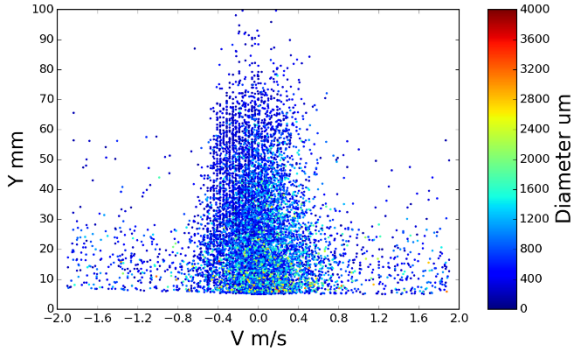

Figure A. 2934: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

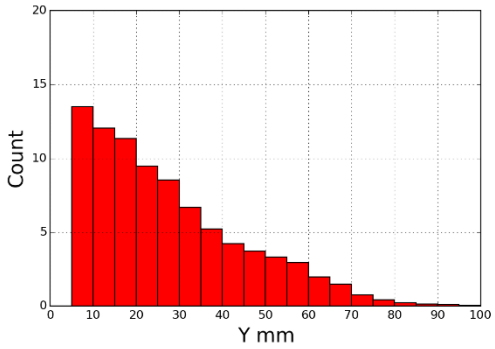

Figure A. 2932: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

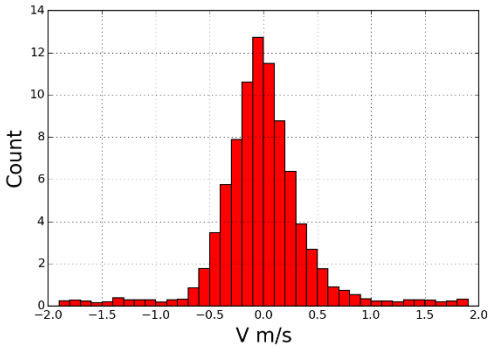

Figure A. 2935: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

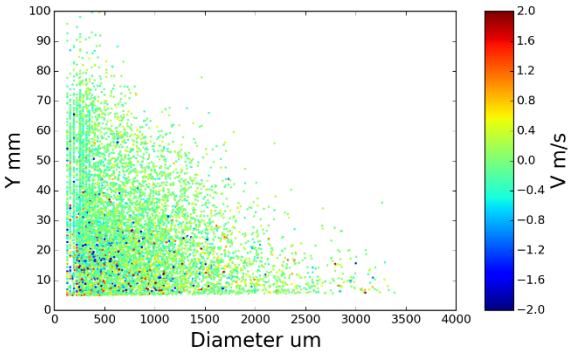

Figure A. 2933: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 Matched Only Droplets for .LB Image

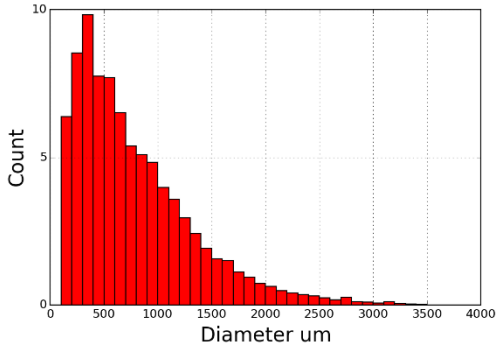

Figure A. 2936: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

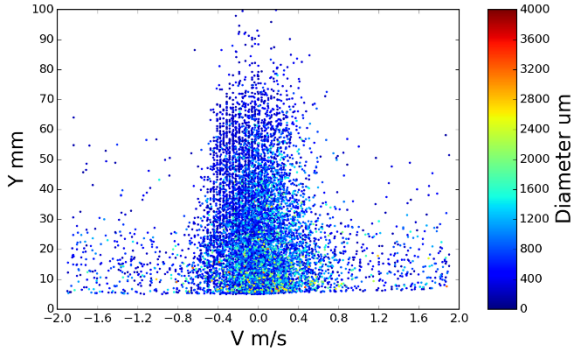

Figure A. 2939: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

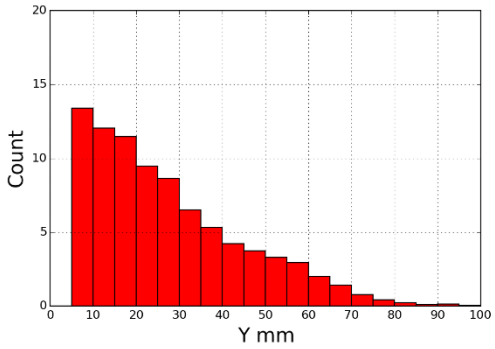

Figure A. 2937: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

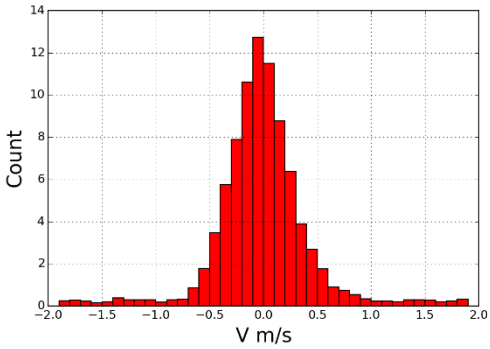

Figure A. 2940: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

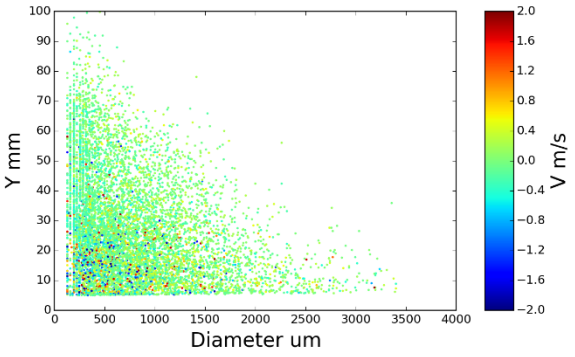

Figure A. 2938: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 Depth L

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	73.49	73.42	128.6	3414	842.0	647.0	128.6	3418	846.5	657.8
20-40mm	62.6	62.71	128.6	3297	653.0	485.8	128.6	3398	651.5	485.4
40-60mm	22.54	22.12	128.6	2697	471.9	392.2	128.6	2533	472.1	393.1
60-80mm	3.5	3.36	128.6	1580	364.7	291.6	128.6	1539	369.8	294.4
80-100mm	0.16	0.15	128.6	766.2	241.2	154.9	128.6	630.0	229.7	127.1
All	162.29	161.77	128.6	3414	706.9	568.9	128.6	3418	709.2	575.2
			Height A (mm)				Height B (mm)			
Highest Particle			97.8347				99.9429			
Lowest Particle			5.0712				5.0712			

Table A. 310: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	37.19	128.6	3410	1058	677.2	128.6	3418	1040	673.5	-1.900	1.880	-0.070	0.540	-1.900	1.900	-0.010	0.580
20-40mm	40.33	128.6	3233	769.2	502.1	128.6	3362	761.4	499.9	-1.900	1.900	-0.060	0.350	-1.900	1.900	-0.020	0.430
40-60mm	14.52	128.6	2697	577.5	423.0	128.6	2533	573.5	425.3	-1.770	1.900	-0.050	0.260	-1.900	1.800	-0.050	0.310
60-80mm	1.96	128.6	1580	481.7	333.5	128.6	1539	476.1	342.5	-0.440	1.710	-0.070	0.170	-1.030	1.720	-0.120	0.260
80-100mm	0.05	128.6	766.2	338.2	225.8	128.6	630.0	289.7	176.4	-0.320	-0.060	-0.180	0.090	-0.320	-0.110	-0.170	0.080
All	94.05	128.6	3410	847.6	594.8	128.6	3418	836.0	590.8	-1.900	1.900	-0.060	0.420	-1.900	1.900	-0.020	0.480

Table A. 311: Matched Droplet Info

A.8.4.2 All Droplets for .LA Image

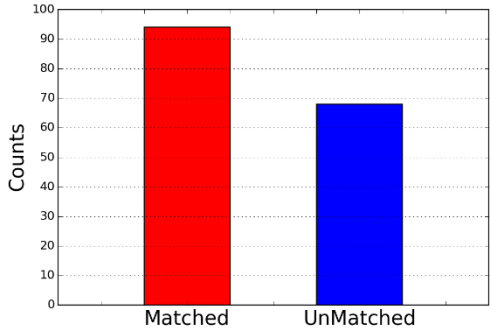

Figure A. 2941: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

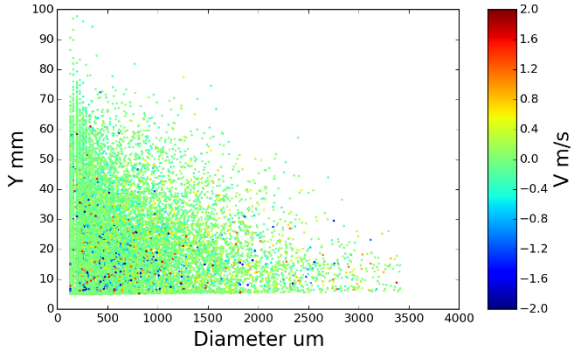

Figure A. 2944: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

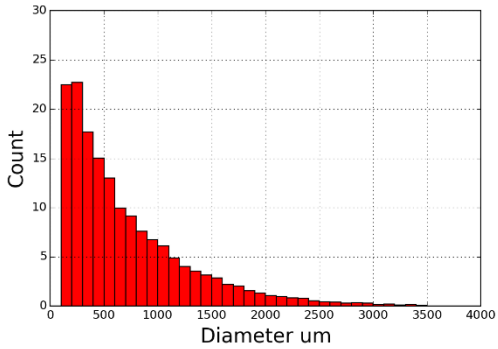

Figure A. 2942: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

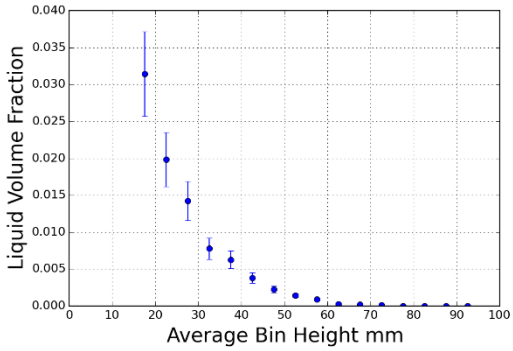

Figure A. 2945: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

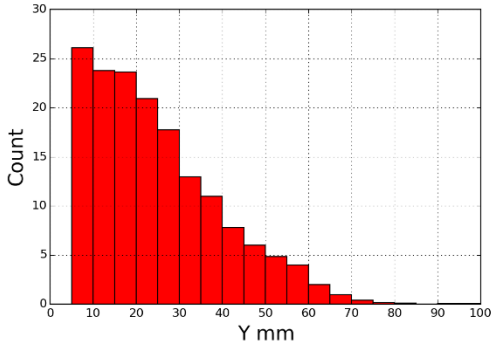

Figure A. 2943: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 All Droplets for .LB Image

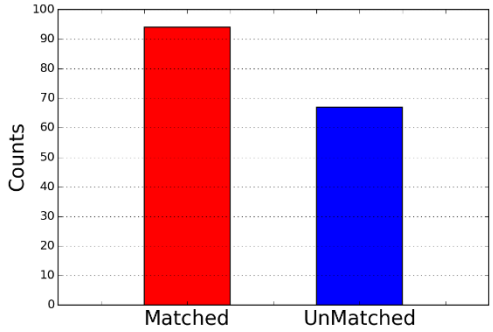

Figure A. 2946: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

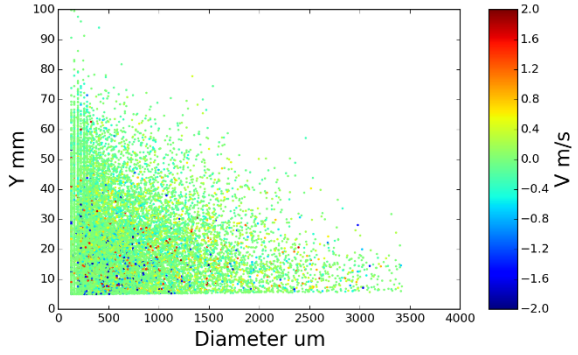

Figure A. 2949: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

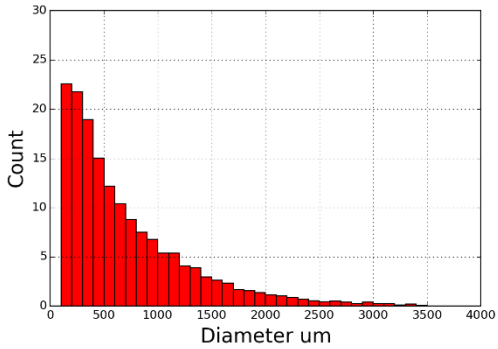

Figure A. 2947: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

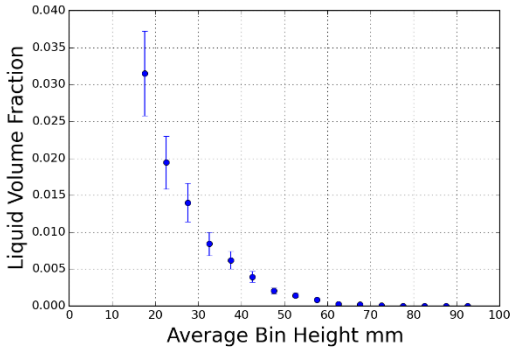

Figure A. 2950: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

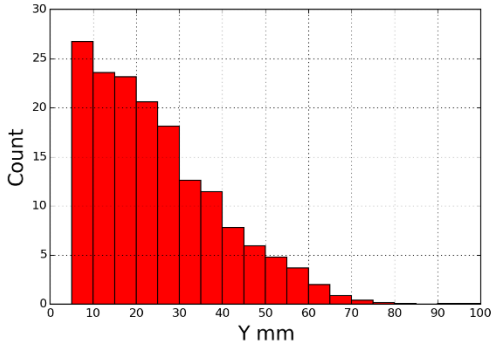

Figure A. 2948: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 Matched Only Droplets for .LA Image

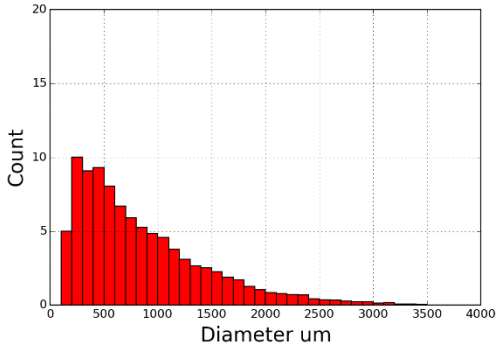

Figure A. 2951: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

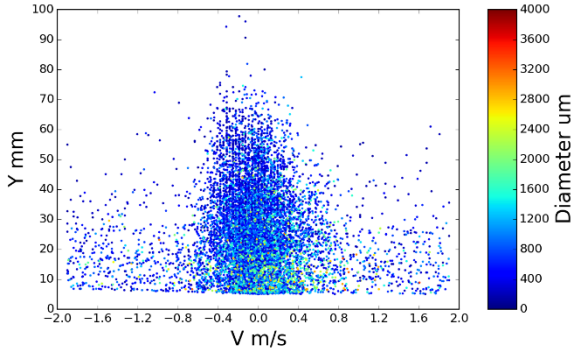

Figure A. 2954: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

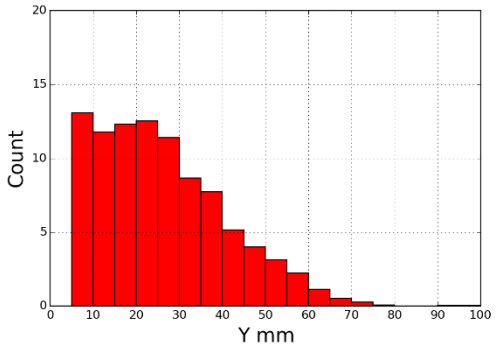

Figure A. 2952: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

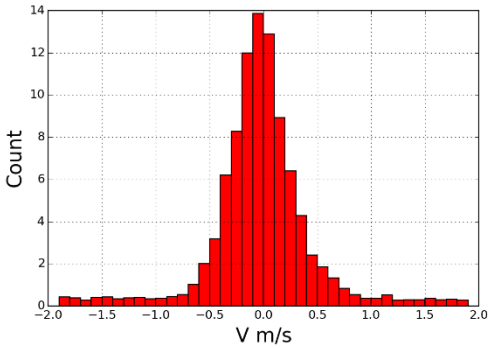

Figure A. 2955: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

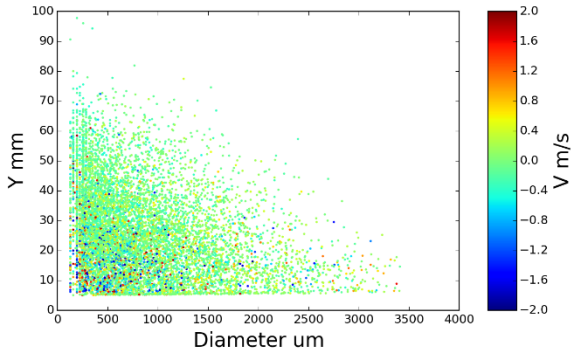

Figure A. 2953: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 Matched Only Droplets for .LB Image

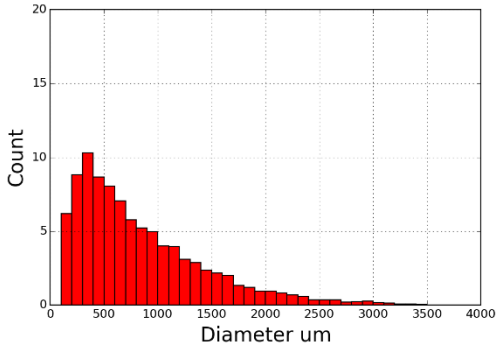

Figure A. 2956: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

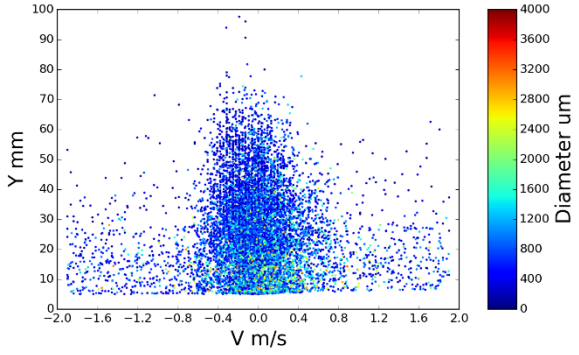

Figure A. 2959: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

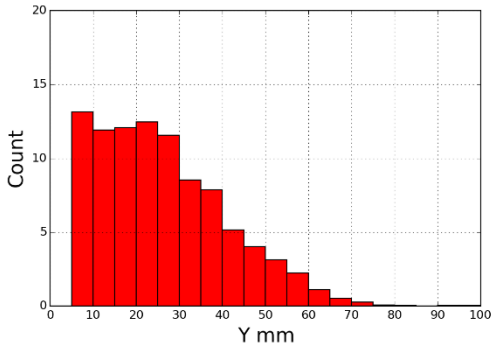

Figure A. 2957: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

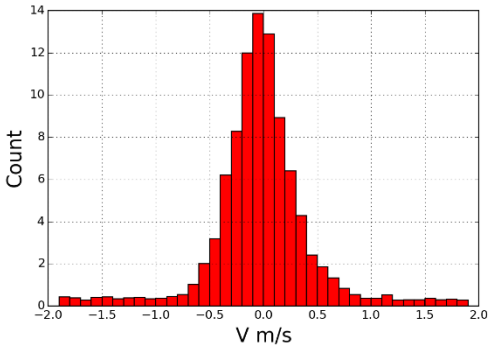

Figure A. 2960: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

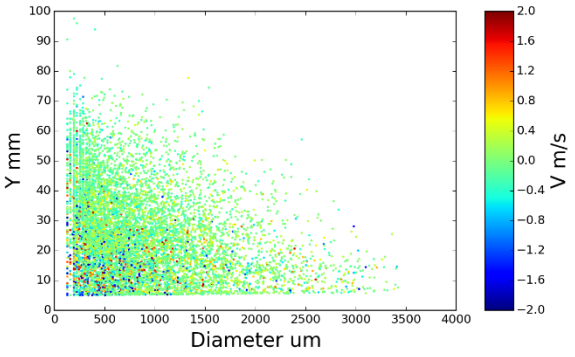

Figure A. 2958: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 Depth M

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	58.85	59.02	128.6	3334	763.2	552.0	128.6	3415	770.0	565.4
20-40mm	39.89	39.74	128.6	3276	548.1	396.4	128.6	3369	547.1	400.8
40-60mm	11.54	11.33	128.6	2644	374.7	315.9	128.6	2564	381.4	319.9
60-80mm	1.39	1.35	128.6	1436	264.5	187.6	128.6	1314	268.7	193.4
80-100mm	0.06	0.07	128.6	222.7	158.7	31.4	128.6	192.9	150.2	22.0
All	111.73	111.51	128.6	3334	639.7	497.5	128.6	3415	644.6	507.8
			Height A (mm)				Height B (mm)			
Highest Particle			97.3503				99.8574			
Lowest Particle			5.0712				5.0712			

Table A. 312: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	33.97	128.6	3334	921.4	567.7	128.6	3415	914.0	571.8	-1.890	1.870	-0.070	0.440	-1.900	1.900	0.040	0.510
20-40mm	26.89	128.6	3276	636.6	411.2	128.6	3369	627.6	410.5	-1.890	1.890	-0.060	0.300	-1.880	1.870	0.030	0.360
40-60mm	7.25	128.6	2644	468.5	357.4	128.6	2564	464.3	359.9	-1.580	1.830	-0.050	0.190	-1.840	1.610	-0.010	0.300
60-80mm	0.6	128.6	1436	362.8	247.6	128.6	1314	360.3	257.0	-0.700	0.090	-0.080	0.120	-0.570	1.020	-0.100	0.260
80-100mm	0.04	128.6	222.7	166.6	34.5	128.6	192.9	159.1	22.8	-0.350	0.000	-0.170	0.150	-0.440	-0.320	-0.370	0.060
All	68.75	128.6	3334	756.9	518.4	128.6	3415	749.1	520.3	-1.890	1.890	-0.070	0.370	-1.900	1.900	0.030	0.430

Table A. 313: Matched Droplet Info

A.8.4.2 All Droplets for .LA Image

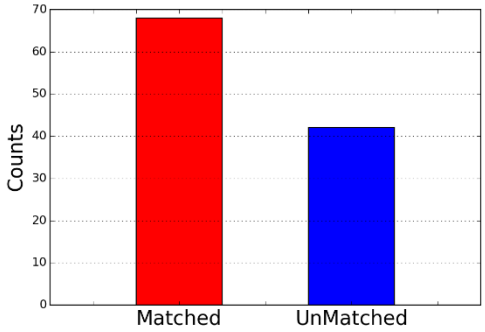

Figure A. 2961: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

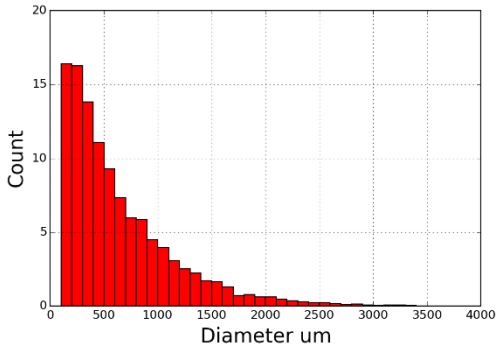

Figure A. 2962: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

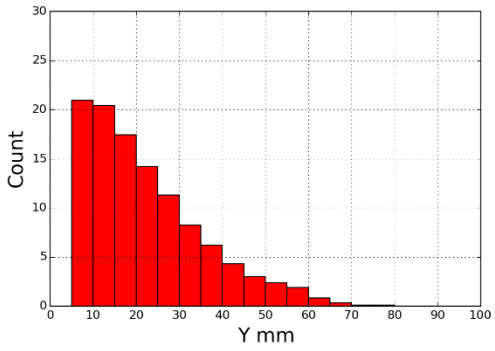

Figure A. 2963: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

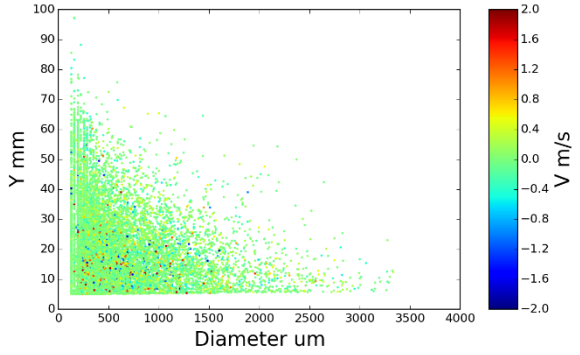

Figure A. 2964: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

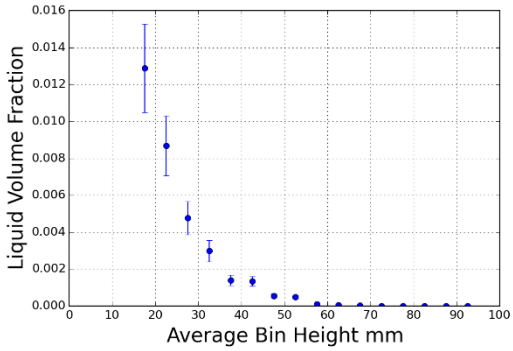

Figure A. 2965: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 All Droplets for .LB Image

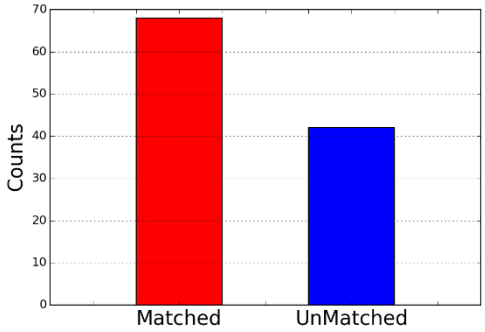

Figure A. 2966: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

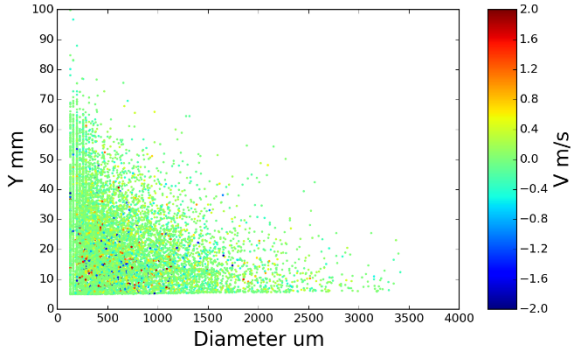

Figure A. 2969: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

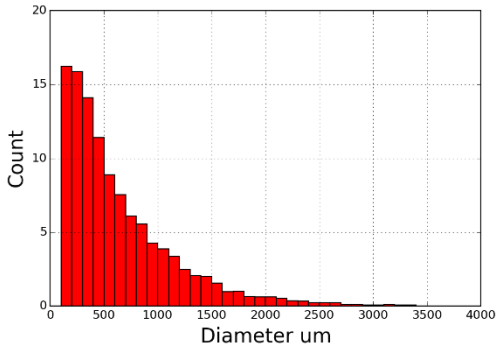

Figure A. 2967: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

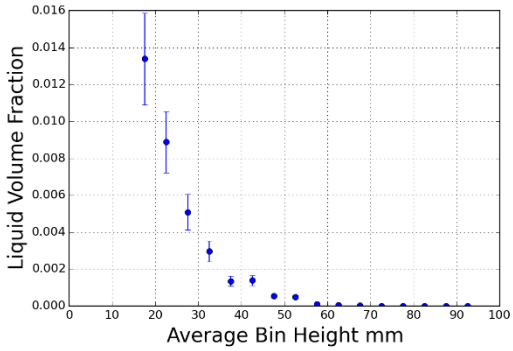

Figure A. 2970: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

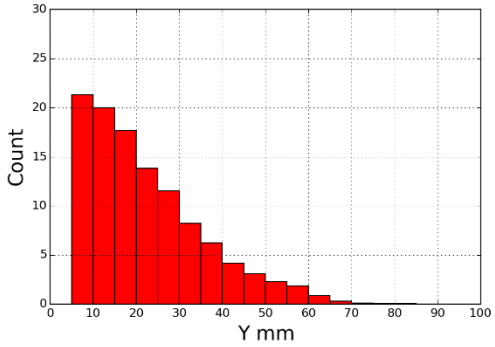

Figure A. 2968: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 Matched Only Droplets for .LA Image

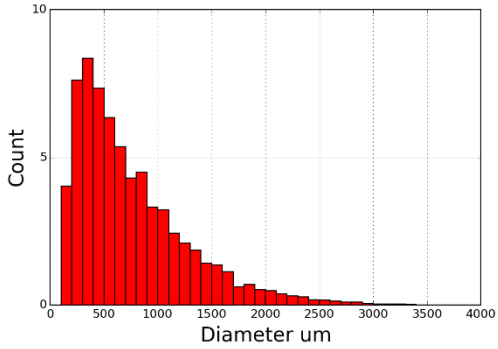

Figure A. 2971: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

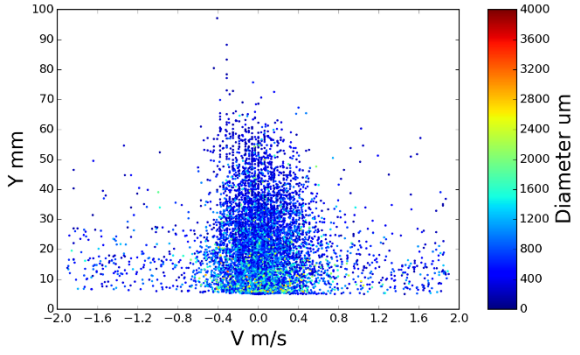

Figure A. 2974: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

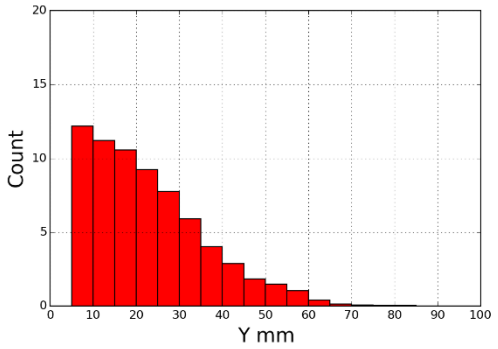

Figure A. 2972: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

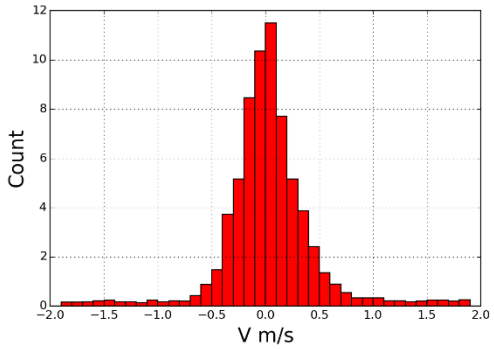

Figure A. 2975: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

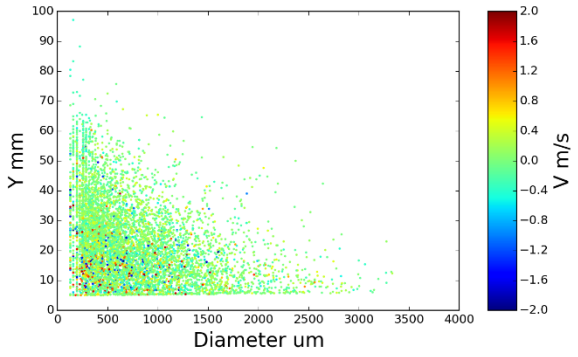

Figure A. 2973: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 Matched Only Droplets for .LB Image

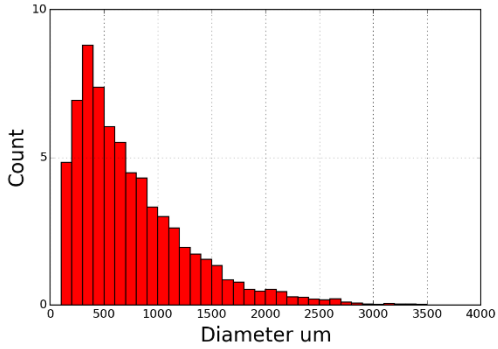

Figure A. 2976: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

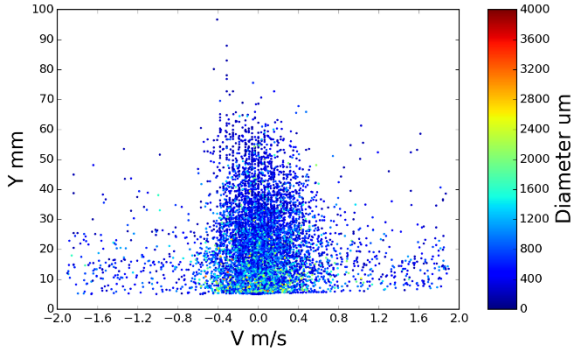

Figure A. 2979: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

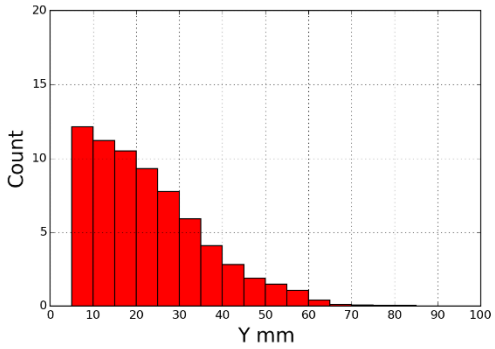

Figure A. 2977: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

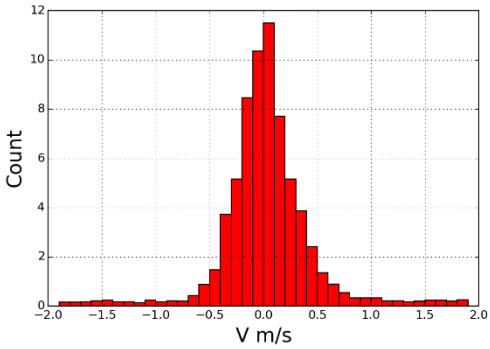

Figure A. 2980: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

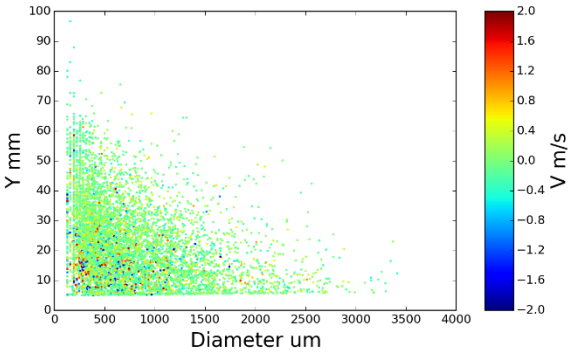

Figure A. 2978: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 Depth N

All Droplets										
	Average Droplet Counts per Image		Diameter A (um)				Diameter B (um)			
Height Bin	Image A	Image B	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	55.83	55.63	128.6	3317	770.7	565.1	128.6	3413	775.4	569.6
20-40mm	37.24	38.42	128.6	2943	562.3	395.0	128.6	2878	552.9	396.0
40-60mm	10.35	10.43	128.6	3071	367.6	291.0	128.6	2945	373.1	299.6
60-80mm	1.15	1.03	128.6	1180	269.8	199.2	128.6	1128	277.8	176.6
80-100mm	0.04	0.03	157.5	192.9	184.0	15.3	128.6	222.7	181.4	39.3
All	104.62	105.54	128.6	3317	650.9	504.9	128.6	3413	649.6	507.9
			Height A (mm)				Height B (mm)			
Highest Particle			99.4871				92.5355			
Lowest Particle			5.0712				5.0712			

Table A. 314: All Droplet Info

Matched Only Droplets																	
	Average Droplet Counts Per Image	Diameter A (um)				Diameter B (um)				X-Velocity (m/s)				Y-Velocity (m/s)			
Height Bin		Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD	Min	Max	Mean	STD
0-20mm	29.96	128.6	3317	959.2	590.9	128.6	3358	950.6	595.7	-1.900	1.900	-0.070	0.510	-1.900	1.890	0.030	0.530
20-40mm	24.78	128.6	2943	655.1	407.6	128.6	2722	648.5	408.5	-1.890	1.870	-0.060	0.310	-1.900	1.890	0.020	0.380
40-60mm	6.47	128.6	3071	458.2	322.1	128.6	2945	457.5	330.6	-1.560	1.900	-0.040	0.230	-1.840	1.500	-0.000	0.280
60-80mm	0.58	128.6	1180	338.9	238.1	157.5	1128	320.6	218.8	-0.890	0.890	-0.050	0.180	-0.440	1.710	-0.020	0.340
80-100mm	0.02	192.9	192.9	192.9	0.0	192.9	222.7	207.8	14.9	-0.280	-0.060	-0.170	0.110	-0.440	-0.250	-0.350	0.090
All	61.81	128.6	3317	778.8	530.9	128.6	3358	771.6	533.5	-1.900	1.900	-0.060	0.410	-1.900	1.890	0.020	0.450

Table A. 315: Matched Droplet Info

A.8.4.2 All Droplets for .LA Image

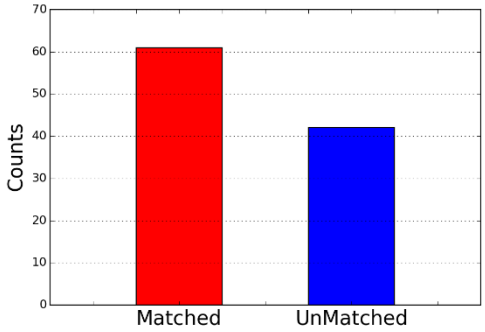

Figure A. 2981: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

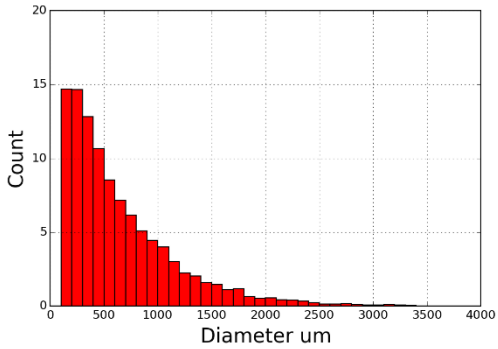

Figure A. 2982: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

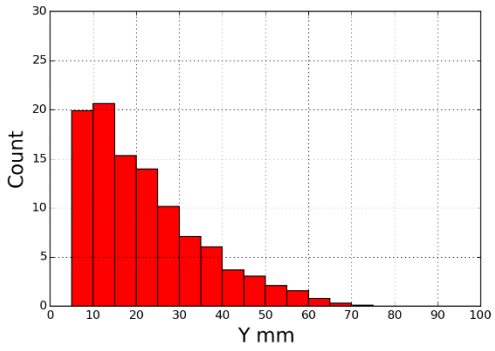

Figure A. 2983: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

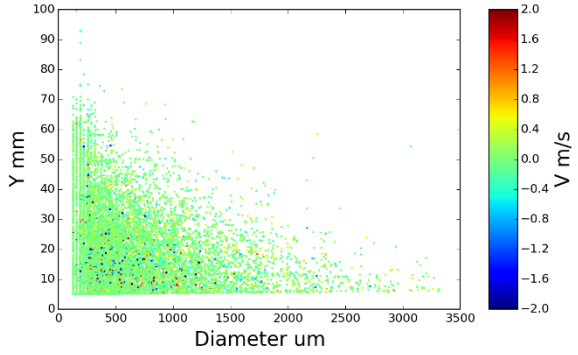

Figure A. 2984: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

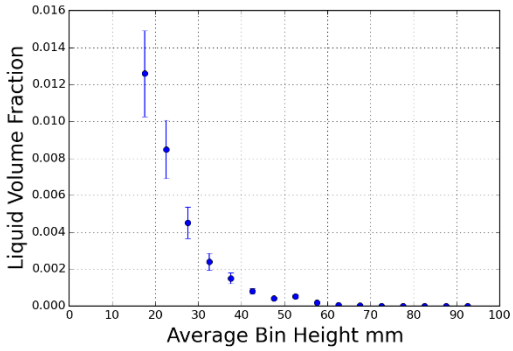

Figure A. 2985: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 All Droplets for .LB Image

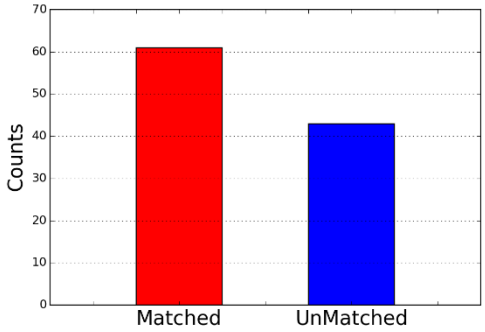

Figure A. 2986: CHC Count Comparison R-134a 55F 10000Btu 30000Lb Tri

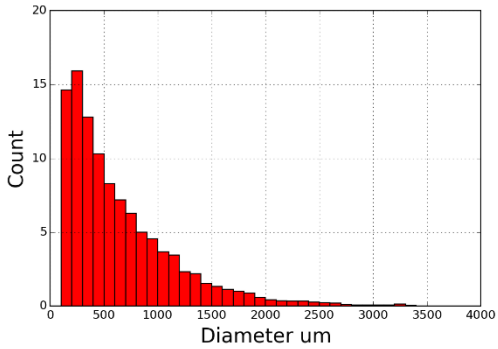

Figure A. 2987: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

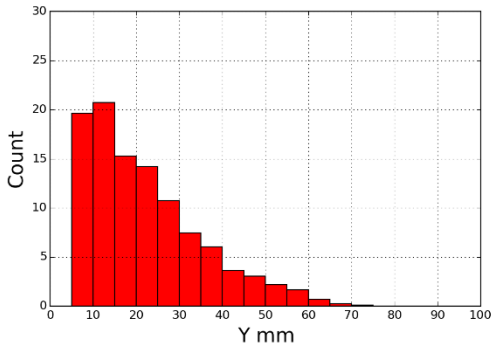

Figure A. 2988: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

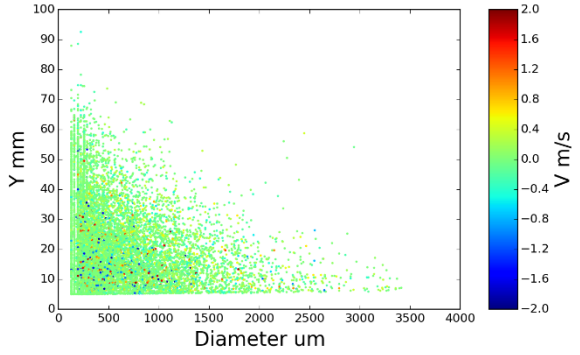

Figure A. 2989: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

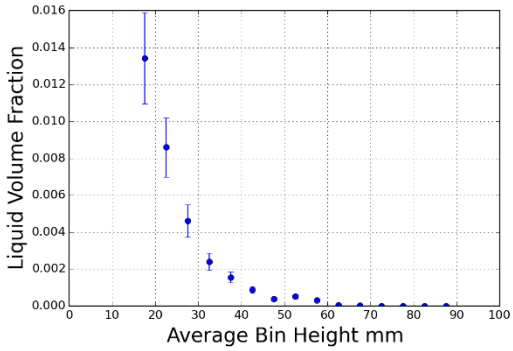

Figure A. 2990: Void Fraction R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 Matched Only Droplets for .LA Image

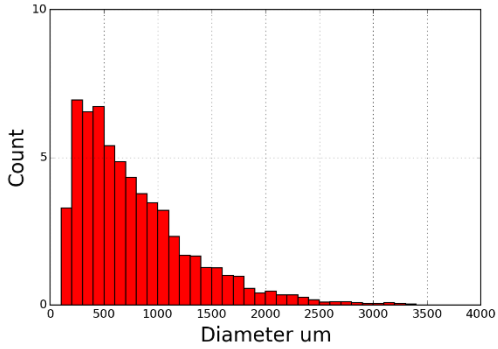

Figure A. 2991: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

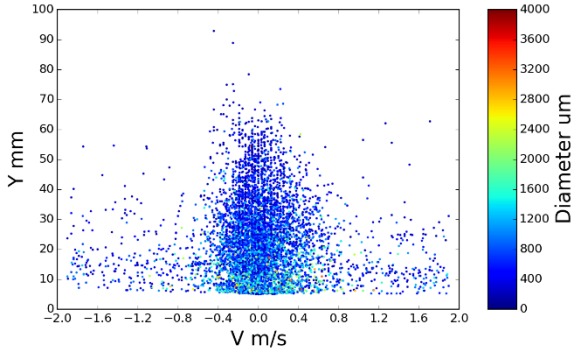

Figure A. 2994: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

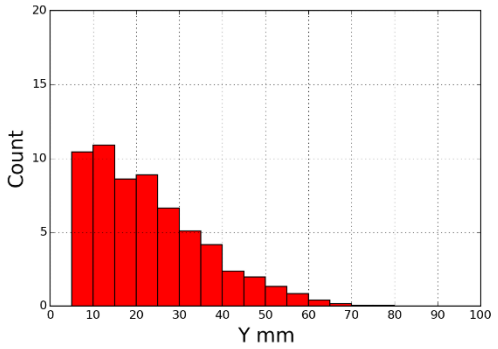

Figure A. 2992: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

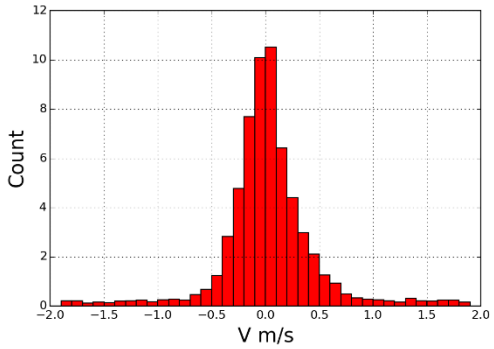

Figure A. 2995: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

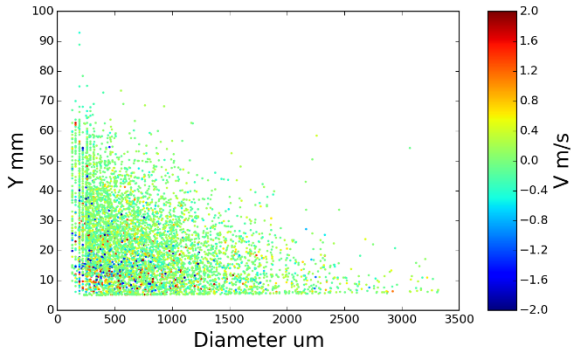

Figure A. 2993: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri

A.8.4.2 Matched Only Droplets for .LB Image

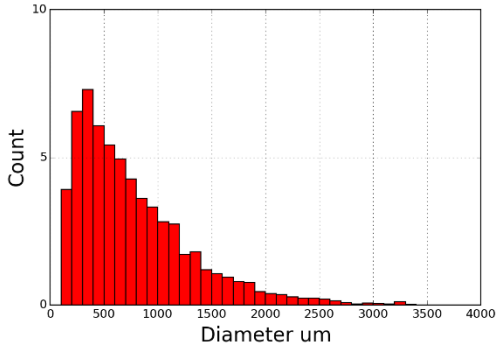

Figure A. 2996: Droplet Diameter Histogram R-134a 55F 10000Btu 30000Lb Tri

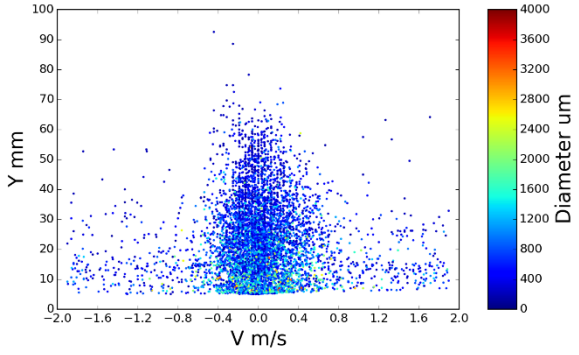

Figure A. 2999: Droplet Height vs Vertical Velocity R-134a 55F 10000Btu 30000Lb Tri

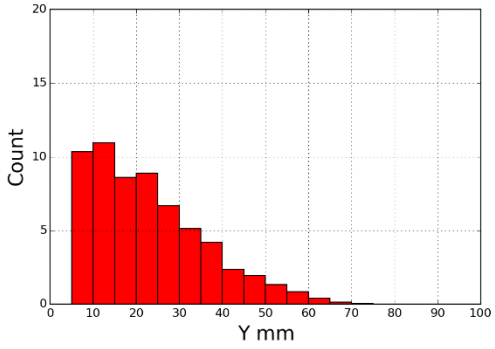

Figure A. 2997: Droplet Height Histogram R-134a 55F 10000Btu 30000Lb Tri

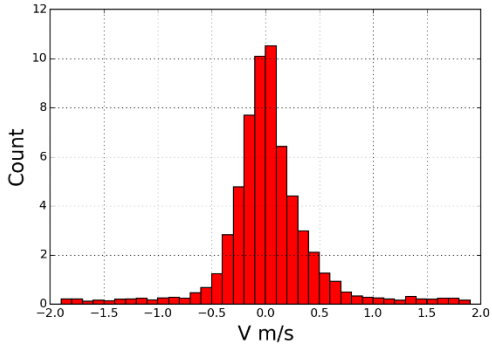

Figure A. 3000: Droplet Vertical Velocity Histogram R-134a 55F 10000Btu 30000Lb Tri

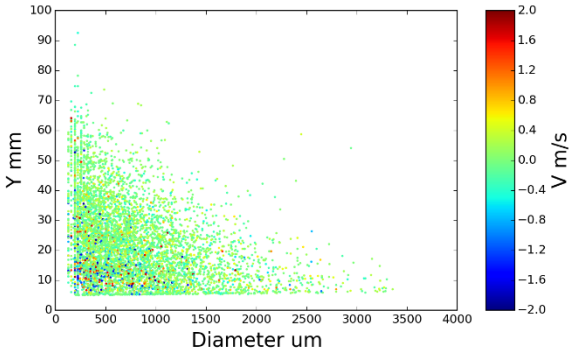

Figure A. 2998: Droplet Height vs Diameter R-134a 55F 10000Btu 30000Lb Tri