Appendix C. Detailed segmentation statistics.

The tables is this appendix show distribution statistics, by finger position, for the segmentation algorithms tested as compared to the hand marked ground truth for 3-inch slap images. The differences between the segmentation algorithm and ground truth are sorted into bins based on the tolerances allowed for correct segmentation. Specifically, the left/right edges must be within -32/+64 pixels of the ground truth, top edge -64/+64 and bottom edge -64/+128. For each finger position there is a column for each of the four segmentation box edges (L, R, T and B).

The first row ("No Finger Found") shows the counts for when a finger was not detected by the segmentation algorithm. The next four rows show statistics for segmentation edges that are within the specified minimum (MN) and maximum (MX) pixel tolerances compared to the ground truth, so these are considered good segmentations. Rows 1 (MN <= d < 0) and 3 (0 <= d <= MX) show the average value for all differences in that range and rows 3 and 5 show the total count occurring in that range.

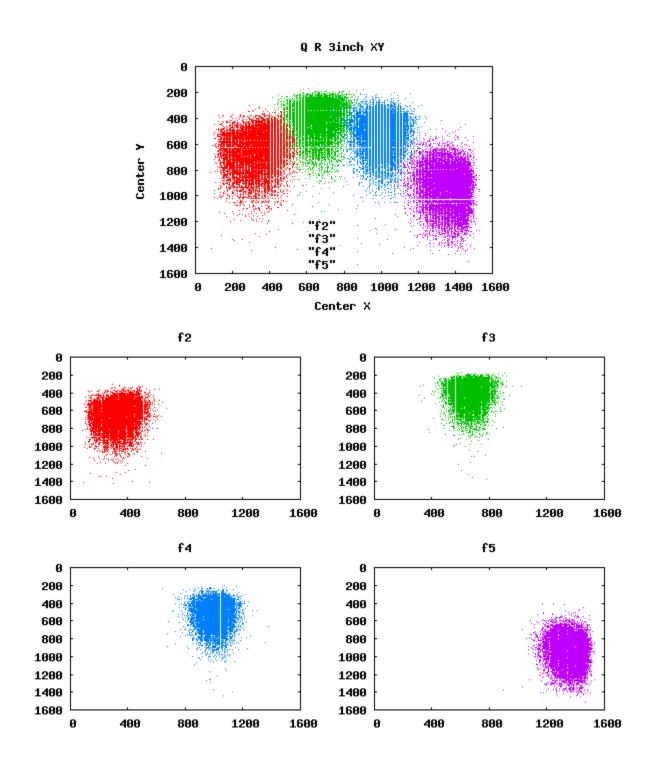
Rows 6-9 also show average difference values and bin counts but for ranges $MN-32 \le d \le MN$ and $MX \le d \le MX+32$, which are just outside the accepted tolerance ranges. Rows 10-13 tally everything greater than 32 pixels away from the accepted tolerance range, $d \le MN-32$ and d > MX+32.

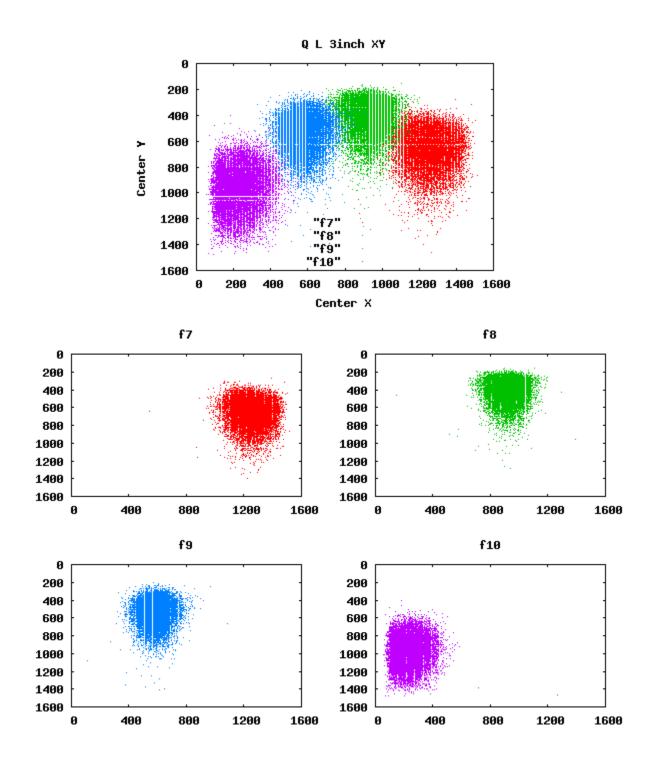
The last three rows show the total count for each bin, the overall average difference value and the standard deviation of all the difference values.

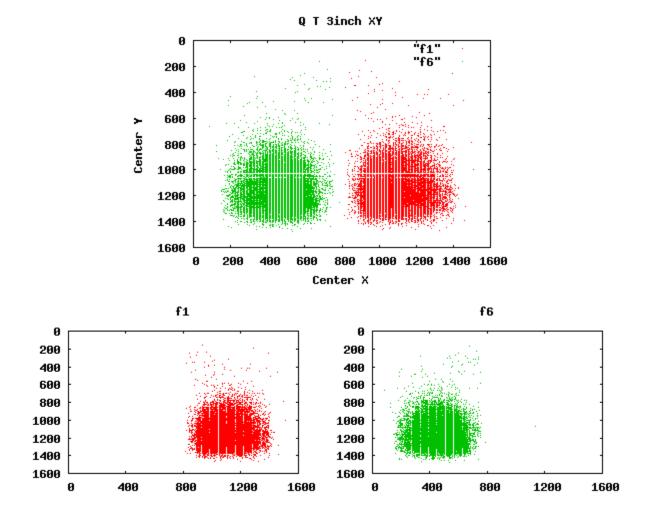
									Q = 1	akota										
	R. Thumb 64				R. Index 361				R Middle 37				R. Ring 25				R. Little 61			
No Finger Found	L	R	54 Т	в	L	R	ы Т	в	L	R	, т	в	L	R	5 Т	в	L	R	т	в
MN <= d < 0	-10.40	-8.04	-12.29	-15.31	-6.83	-7.34	-11.51	-15.74	-7.53	-7.10	-9.90	-17.38	-6.59	-7.15	-8.06	-18.55	-6.85	-8.50	-11.01	-14.31
#	5143	4490	13866	3713	8453	3794	15799	7986	6630	4520	11241	7505	9166	5316	10747	7723	6767	6698	15123	7956
0 <= d <= MX	14.61	15.44	12.66	29.41	6.37	11.37	13.64	22.58	6.74	11.45	15.51	33.05	7.76	13.74	15.71	32.40	6.76	9.50	13.15	20.25
#	18386	19648	10425	17135	16328	21083	9072	16473	18212	20371	13670	16338	15616	19350	14143	15688	17992	17902	9723	16222
MN-32 <= d < MN	-44.63	-41.63	-77.78	-78.10	-42.66	-42.95	-77.87	-75.70	-42.52	-39.83	-71.38	-76.38	-43.41	-39.30	-74.88	-77.29	-43.91	-40.63	-73.35	-77.80
#	463	98	32	121	103	39	23	149	67	29	8	363	82	106	8	498	113	192	23	167
MX < d <= MX+32	76.50 10	75.13 99	84.00 3	143.80	77.19 26	74.33 9	73.87 15	141.72	74.20 25	74.15 20	71.62	141.58	74.17 35	73.98 144	73.09	142.58	71.50 27	77.87	75.77	143.65
#	10	99	3	1153	20	9	15	156	25	20	13	401	30	144	23	456	27	98	13	238
d < MN-32	-143.38	-338.4	-449.55	-338.32	-147.24	-225.57	-570.90	-174.13	-174.65	-222.13	-466.81	-123.09	-152.69	-226.38	-464.00	-121.61	-128.30	-486.88	-442.28	-212.15
#	373	51	59	118	29	28	35	51	26	12	29	98	63	12	39	195	55	37	62	118
d > MX+32	246.07	585.90	656.34	213.81	229.41	345.27	222.35	300.66	272.56	283.75	164.50	226.10	302.25	231.66	207.31	222.94	964.04	181.80	429.27	254.45
#	47	36	37	2182	29	15	24	153	8	16	7	263	6	40	8	408	14	41	24	267
Total #	24422	24422	24422	24422	24968	24968	24968	24968	24968	24968	24968	24968	24968	24968	24968	24968	24968	24968	24968	24968
Average Std Dev	6.28 33.74	11.24 36.82	-1.76 41.12	42.18 80.41	1.85 14.23	8.40	-2.94 29.75	11.78 45.44	2.78	8.14 15.66	3.55	19.46	2.08 16.63	9.64 21.82	4.82	18.37	3.15	4.10 34.03	-2.26 31.94	11.16 47.61
	55.74	30.82	41.12	80.41	14.25	16.46	29.75	43.44	13.66	13.00	24.57	48.17	10.05	21.02	25.70	52.91	27.42	54.05	51.54	47.01
	55.74		41.12	80.41	14.25	10.40 L. In		45.44	13.00		iddle	40.17	10.05		ling	52.91	27.42	54.05 L. Li		47.01
No Finger Found	33.74	L. Th		80.41	14.25		dex	43.44	13.00	L. M		48.17	10.05		ling	52.91	27.42		ittle	47.01
	L	L. Th	umb	В	L	L. In	dex	В	L	L. M	iddle 5 T	В	L	L. R	ling	В	27.42 L	L. Li	ittle	В
	L -7.31	L. Th 6 R -10.36	numb 54 T -13.50	в -14.30	L -6.98	L. In 17 R -9.28	dex '5 T -11.67	B -16.29	L -4.72	L. M 1 R -8.07	iddle 5 T -9.94	B -18.92	L -4.50	L. R 4 R -8.44	ting 1 T -7.63	в -20.48	L -7.56	L. Li 15 R -8.78	ittle 58 T - <u>11.12</u>	B -15.72
No Finger Found MN <= d < 0 #	L -7.31 2586	L. Th 6 R -10.36 6499	numb 54 -13.50 13858	B -14.30 3362	L -6.98 3174	L. In 17 R -9.28 7051	dex '5 T -11.67 15038	B -16.29 7767	L -4.72 5751	L. M 1 R -8.07 6173	iddle 5 T -9.94 10271	B -18.92 8146	L -4.50 5195	L. R 4 R -8.44 7245	ting 1 -7.63 9505	B -20.48 9484	L -7.56 6862	L. Li 15 R -8.78 5310	ittle 58 T -11.12 13827	B -15.72 9716
No Finger Found	L -7.31 2586 16.93	L. Th 6 R -10.36 6499 14.46	T -13.50 13858 12.88	B -14.30 3362 32.49	L -6.98 3174 8.64	L. In 17 R -9.28 7051 9.56	dex 75 T -11.67 15038 14.50	B -16.29 7767 22.51	L -4.72 5751 10.53	L. M 1 R -8.07 6173 10.53	iddle 5 T -9.94 10271 15.72	B -18.92 8146 33.56	L -4.50 5195 12.98	L. R 4 R -8.44 7245 10.67	ling 1 -7.63 9505 16.78	B -20.48 9484 31.95	L -7.56 6862 9.05	L. Li 15 R -8.78 5310 10.18	ittle 58 T -11.12 13827 13.63	B -15.72 9716 19.58
No Finger Found MN <= d < 0 #	L -7.31 2586	L. Th 6 R -10.36 6499	numb 54 -13.50 13858	B -14.30 3362	L -6.98 3174	L. In 17 R -9.28 7051	dex '5 T -11.67 15038	B -16.29 7767	L -4.72 5751	L. M 1 R -8.07 6173	iddle 5 T -9.94 10271	B -18.92 8146	L -4.50 5195	L. R 4 R -8.44 7245	ting 1 -7.63 9505	B -20.48 9484	L -7.56 6862	L. Li 15 R -8.78 5310	ittle 58 T -11.12 13827	B -15.72 9716
No Finger Found MN <= d < 0 # 0 <= d <= MX #	L -7.31 2586 16.93 21462	L. Th 6 R -10.36 6499 14.46 17304	T -13.50 13858 12.88 10415	B -14.30 3362 32.49 16561	L -6.98 3174 8.64 21675	L. In 17 R -9.28 7051 9.56 17461	dex 75 -11.67 15038 14.50 9814	B -16.29 7767 22.51 16600	L -4.72 5751 10.53 19081	L. M 1 R -8.07 6173 10.53 18624	iddle 5 -9.94 10271 15.72 14620	B -18.92 8146 33.56 15468	L -4.50 5195 12.98 19372	L. R 4 -8.44 7245 10.67 17485	ting 1 -7.63 9505 16.78 15366	B -20.48 9484 31.95 13678	L -7.56 6862 9.05 17692	L. Li 15 R -8.78 5310 10.18 19398	ittle 58 -11.12 13827 13.63 10966	B -15.72 9716 19.58 14424
No Finger Found	L -7.31 2586 16.93	L. Th 6 R -10.36 6499 14.46	T -13.50 13858 12.88	B -14.30 3362 32.49	L -6.98 3174 8.64	L. In 17 R -9.28 7051 9.56	dex 75 T -11.67 15038 14.50	B -16.29 7767 22.51	L -4.72 5751 10.53	L. M 1 R -8.07 6173 10.53	iddle 5 T -9.94 10271 15.72	B -18.92 8146 33.56	L -4.50 5195 12.98	L. R 4 R -8.44 7245 10.67	ting 1 -7.63 9505 16.78	B -20.48 9484 31.95	L -7.56 6862 9.05	L. Li 15 R -8.78 5310 10.18	ittle 58 T -11.12 13827 13.63	B -15.72 9716 19.58
No Finger Found MN <= d < 0 # 0 <= d <= MX #	L -7.31 2586 16.93 21462 -40.30	L. Th 6 R -10.36 6499 14.46 17304	T -13.50 13858 12.88 10415 -73.38	B -14.30 3362 32.49 16561 -75.78	L -6.98 3174 8.64 21675 -45.31	L. In 17 R -9.28 7051 9.56 17461	dex 75 T -11.67 15038 14.50 9814 -74.80	B -16.29 7767 22.51 16600 -76.65	L -4.72 5751 10.53 19081 -40.24	L. M 1 R -8.07 6173 10.53 18624 -40.40	iddle 5 7 -9.94 10271 15.72 14620 -73.33	B -18.92 8146 33.56 15468 -76.91	L -4.50 5195 12.98 19372 -40.94	L. R 4 -8.44 7245 10.67 17485 -41.97	ting 1 -7.63 9505 16.78 15366 -72.67	B -20.48 9484 31.95 13678 -76.87	L -7.56 6862 9.05 17692 -43.69	L. Li 19 R -8.78 5310 10.18 19398 -42.44	ittle 58 -11.12 13827 13.63 10966 -73.71	B -15.72 9716 19.58 14424 -77.06
No Finger Found MN <= d < 0 # 0 <= d <= MX # MN-32 <= d < MN #	L -7.31 2586 16.93 21462 -40.30 46	L. The R -10.36 6499 14.46 17304 -43.48 322	T -13.50 13858 12.88 10415 -73.38 20	B -14.30 3362 32.49 16561 -75.78 82	L -6.98 3174 8.64 21675 -45.31 29	L. In 17 R -9.28 7051 9.56 17461 -40.55 341	dex 5 T -11.67 15038 14.50 9814 -74.80 25	B -16.29 7767 22.51 16600 -76.65 185	L -4.72 5751 10.53 19081 -40.24 25	L. M 1 R -8.07 6173 10.53 18624 -40.40 106	iddle 5 T -9.94 10271 15.72 14620 -73.33 9	B -18.92 8146 33.56 15468 -76.91 503	L -4.50 5195 12.98 19372 -40.94 17	L. R 4 -8.44 7245 10.67 17485	ting 1 -7.63 9505 16.78 15366 -72.67 6	B -20.48 9484 31.95 13678 -76.87 772	L -7.56 6862 9.05 17692 -43.69 109	L. Li 15 R -8.78 5310 10.18 19398 -42.44 175	ittle 58 T -11.12 13827 13.63 10966 -73.71 36	B -15.72 9716 19.58 14424 -77.06 212
No Finger Found MN <= d < 0 # 0 <= d <= MX # MN-32 <= d < MN # MX < d <= MX+32 #	L -7.31 2586 16.93 21462 -40.30 46 74.55 186	L. The definition of the second secon	Aumb 54 T -13.50 13858 12.88 10415 -73.38 20 76.00 5	B -14.30 3362 32.49 16561 -75.78 82 144.10 1528	L -6.98 3174 8.64 21675 -45.31 29 74.71 39	L. In 17 R -9.28 7051 9.56 17461 -40.55 341 75.79 43	dex '5 T -11.67 15038 14.50 9814 -74.80 25 73.26 19	B -16.29 7767 22.51 16600 -76.65 185 142.82 192	L -4.72 5751 10.53 19081 -40.24 25 75.97 60	L. M 1 R -8.07 6173 10.53 18624 -40.40 106 73.95 19	iddle 5 7 9.94 10271 15.72 14620 73.33 9 76.57 15	B -18.92 8146 33.56 15468 -76.91 503 142.14 395	L -4.50 5195 12.98 19372 -40.94 17 76.75 287	L. R 4 -8.44 7245 10.67 17485 -41.97 155 72.61 18	ting 1 -7.63 9505 16.78 15366 -72.67 6 74.08 24	B -20.48 9484 31.95 13678 -76.87 772 143.35 388	L -7.56 6862 9.05 17692 -43.69 109 77.27 189	L. Li 19 8 -8.78 5310 10.18 19398 -42.44 175 72.38 12	ittle 58 T -11.12 13.63 10966 -73.71 36 72.09 23	B -15.72 9716 19.58 14424 -77.06 212 142.49 238
No Finger Found MN <= d < 0 # 0 <= d <= MX # MN-32 <= d < MN #	L -7.31 2586 16.93 21462 -40.30 46 74.55 186 -390.32	L. TF 6499 14.46 17304 -43.48 322 76.42 24 -139.26	tumb i4 T -1350 13858 12.88 10415 -73.38 20 76.00 5 -413.52	B -14.30 3362 32.49 16561 -75.78 82 144.10 1528 -364.46	L -6.98 3174 8.64 21675 -45.31 29 74.71 39 -438.93	L. In 17 R -9.28 7051 9.56 17461 -40.55 341 75.79 43 -285.77	dex 5 T 15038 14.50 9814 -74.80 25 73.26 19 -462.46	B -16.29 7767 22.51 16600 -76.65 185 142.82 192 -190.34	L -4.72 5751 10.53 19081 -40.24 25 75.97 60 -381.71	L. M 1 R -8.07 6173 10.53 18624 -40.40 106 73.95 19 -194.50	iddle 5 7 -9.94 10271 15.72 14620 -73.33 9 76.57 15 -73.23 9 76.57	B -18.92 8146 33.56 15468 -76.91 503 142.14 395 -123.36	L -4.50 5195 12.98 19372 -40.94 17 76.75 287 -259.03	L.R 4 7245 10.67 17485 -41.97 155 72.61 18 -253.51	ting 1 7 -7.63 9505 16.78 15366 -72.67 6 74.08 24 -471.72	B -20.48 9484 31.95 13678 -76.87 772 143.35 388 -136.02	L -7.56 6862 9.05 17692 -43.69 109 77.27 189 -156.07	L. Li 15 R -8.78 5.310 10.18 19398 -42.44 175 72.38 12 -194.94	ittle 58 7 -11.12 13827 13.63 10966 -73.71 36 72.09 23 -73.92 23	B -15.72 9716 19.58 14424 -77.06 212 142.4 -251.80
No Finger Found MN <= d < 0 # 0 <= d <= MX # MN-32 <= d < MN # MX < d <= MX+32 # d < MN-32 #	L -7.31 2586 16.93 21462 -40.30 46 74.55 186 -74.55 186 -390.32 109	L. Tř R -10.36 6499 14.46 17304 -43.48 322 76.42 24 -139.26 155	uumb 34 13550 13858 12.88 10415 -73.38 20 76.00 5 413.52 64	B -14.30 3362 32.49 16561 -75.78 82 144.10 1528 -364.46 128	L -6.98 3174 8.64 21675 -45.31 29 74.71 39 -438.93 34	L. In 17 7 9.52 17451 9.56 17461 -40.55 341 75.79 43 -285.777 32	dex 5 7 15038 14.50 9814 25 73.26 19 462.46 46	B -16.29 7767 22.51 16600 -76.65 185 142.82 192 -190.34 54	L -4.72 5751 10.53 19081 -40.24 25 75.97 60 -381.71 24	L. M 1 R -8.07 6173 10.53 18624 -40.40 106 73.95 19 -194.50 29	iddle -9.94 10271 15.72 14620 -73.33 9 76.57 15 -7491.28 37	B -18.92 8146 33.56 15468 -76.91 503 142.14 395 -123.36 136	L -4.50 5195 12.98 19372 -40.94 17 76.75 287 -259.03 16	L R 4 R -8.44 7245 10.67 17485 72.61 18 -253.51 49	ting -7.63 9505 16.78 15366 74.08 24 -471.72 44	B -20.48 9484 31.95 13678 -76.87 772 143.35 388 -136.02 288	L -7.56 6862 9.05 17692 -43.69 109 77.27 189 -156.07 34	L. Li 15 R -8.78 5310 10.18 19398 -42.44 175 72.38 12 -194.94 56	tttle 58 T -11.12 13827 13.63 10966 -73.71 36 72.09 23 -439.22 82	8 -15.72 9716 19.58 14424 -77.06 212 142.49 238 -251.80 102
No Finger Found MN <= d < 0 # 0 <= d <= MX # MN-32 <= d < MN # MX < d <= MX+32 # d < MN-32 #	L -7.31 2586 16.93 21462 740.30 46 74.55 186 186 21 99 90 92 186.21	L. Tř R - 10.36 6499 14.46 17304 - 43.48 322 76.42 24 - 139.26 155 306.21	tumb 4 -13.50 13858 12.88 10415 -73.38 20 76.00 5 -413.52 64 543.93	B -14.30 3362 32.49 16561 -75.78 82 144.10 1528 -364.46 128 211.71	L -6.98 3174 8.64 21675 -45.31 29 74.71 39 -438.93 34 513.04	L. In 17 8 -9.28 7051 9.56 17461 -40.55 341 75.79 43 -285.77 32 490.71	dex 5 7 11.67 15038 14.50 9814 25 73.26 19 	8 -16.29 7767 22.51 16600 -76.65 185 142.82 192 -190.34 54 291.78	L -4.72 5751 10.53 19081 -40.24 25 75.97 60 -381.71 24 240.59	L. M 1 R 	iddle 5 -9.94 10271 15.72 14620 -73.33 9 76.57 15 -491.28 37 152.50	B -18.92 8146 33.56 15468 -76.91 503 142.14 395 -123.36 136 239.00	L -4.50 5195 12.98 19372 -40.94 17 76.75 287 -259.03 16 187.61	L.R 4 7245 10.67 17485 72.61 155 72.61 18 -253.51 49 515.21	ting 7.63 9505 16.78 15366 74.08 24 241.74	B -20.48 9484 31.95 13678 -76.87 772 143.35 388 -136.02 288 239.11	L -7.56 6862 9.05 17692 -43.69 109 77.27 189 -156.07 34 158.35	L. Li 15 R -8.78 5310 10.18 19398 -42.44 175 72.38 12 72.38 12 -194.94 56 381.46	tttle 58 7 -11.12 13827 13.63 10966 -73.71 36 72.09 23 -439.22 82 450.90	8 -15.72 9716 19.58 14424 -77.06 212 142.49 238 -251.80 102 280.87
No Finger Found MN <= d < 0 # 0 <= d <= MX # MN-32 <= d < MN # MX < d <= MX+32 # d < MN-32 #	L -7.31 2586 16.93 21462 -40.30 46 74.55 186 -74.55 186 -390.32 109	L. Tř R -10.36 6499 14.46 17304 -43.48 322 76.42 24 -139.26 155	uumb 34 13550 13858 12.88 10415 -73.38 20 76.00 5 413.52 64	B -14.30 3362 32.49 16561 -75.78 82 144.10 1528 -364.46 128	L -6.98 3174 8.64 21675 -45.31 29 74.71 39 -438.93 34	L. In 17 7 9.52 17451 9.56 17461 -40.55 341 75.79 43 -285.777 32	dex 5 7 15038 14.50 9814 25 73.26 19 462.46 46	B -16.29 7767 22.51 16600 -76.65 185 142.82 192 -190.34 54	L -4.72 5751 10.53 19081 -40.24 25 75.97 60 -381.71 24	L. M 1 R -8.07 6173 10.53 18624 -40.40 106 73.95 19 -194.50 29	iddle -9.94 10271 15.72 14620 -73.33 9 76.57 15 -7491.28 37	B -18.92 8146 33.56 15468 -76.91 503 142.14 395 -123.36 136	L -4.50 5195 12.98 19372 -40.94 17 76.75 287 -259.03 16	L R 4 8 -8.44 7245 10.67 17485 72.61 18 -253.51 49	ting -7.63 9505 16.78 15366 74.08 24 -471.72 44	B -20.48 9484 31.95 13678 -76.87 772 143.35 388 -136.02 288	L -7.56 6862 9.05 17692 -43.69 109 77.27 189 -156.07 34	L. Li 15 R -8.78 5310 10.18 19398 -42.44 175 72.38 12 -194.94 56	tttle 58 T -11.12 13827 13.63 10966 -73.71 36 72.09 23 -439.22 82	8 -15.72 9716 19.58 14424 -77.06 212 142.49 238 -251.80 102
No Finger Found MN <= d < 0 # 0 <= d <= MX # MN-32 <= d < MN # MX < d <= MX+32 # d < MN-32 # d > MX+32 #	L -7.31 2586 16.93 21462 -40.30 46 74.55 186 74.55 186 -390.32 109 186.21 33	L. Tr 6499 14.46 17304 -43.48 322 76.42 24 -139.26 155 306.21 118	tumb i4 T -13.50 13858 12.88 10415 -73.38 20 76.00 5 -413.52 64 -43.93 60	B -14.30 3362 32.49 16561 -75.78 82 144.10 1528 -364.46 128 211.71 2761	L -6.98 3174 8.64 21675 -45.31 29 74.71 39 -438.93 34 513.04 13	L. In 17 R -9.28 7051 9.56 17461 -40.55 341 75.79 43 -285.777 32 490.71 36	dex 5 T 15038 14.50 9814 -74.80 25 73.26 19 -462.46 46 238.93 22	B -16.29 7767 22.51 16600 -76.65 185 142.82 192 -190.34 54 291.78 166	L -4.72 5751 10.53 19081 -40.24 25 75.97 60 -381.71 24 240.59 23	L. M 1 R -8.073 10.53 18624 -40.40 106 73.95 19 -194.50 29 813.92 13	iddle 5 7 9.94 10271 15.72 14620 7 6.57 15 5 .57 15 .52.50 12	B -18.92 8146 33.56 15468 -76.91 503 142.14 395 -123.36 136 239.00 316	L -4.50 5195 12.98 19372 -40.94 17 76.75 287 -259.03 16 187.61 77	L R R -8.44 10.67 17485 -41.97 155 72.61 18 -253.51 49 515.21 12	ting 1 7.63 9505 16.78 15366 74.08 24 -471.72 44 241.74 19	B -20.48 9484 31.95 13678 -76.87 772 143.35 388 -136.02 288 239.11 354	L -7.56 6862 9.05 17692 -43.69 109 77.27 189 -156.07 34 158.35 78	L. Li 15 R -8.78 5.310 10.18 19398 -42.44 175 72.38 12 -194.94 56 381.46 13	ittle 58 T -11.12 13827 13.63 10966 -73.71 36 72.09 23 -439.22 82 450.90 30	B -15.72 9716 19.58 14424 -77.06 212 142.49 238 -251.80 102 28.87 272
No Finger Found MN <= d < 0 # 0 <= d <= MX # MN-32 <= d < MN # MX < d <= MX+32 # d < MN-32 #	L -7.31 2586 16.93 21462 740.30 46 74.55 186 186 21 99 90 92 186.21	L. Tř R - 10.36 6499 14.46 17304 - 43.48 322 76.42 24 - 139.26 155 306.21	tumb 4 -13.50 13858 12.88 10415 -73.38 20 76.00 5 -413.52 64 543.93	B -14.30 3362 32.49 16561 -75.78 82 144.10 1528 -364.46 128 211.71	L -6.98 3174 8.64 21675 -45.31 29 74.71 39 -438.93 34 513.04	L. In 17 8 -9.28 7051 9.56 17461 -40.55 341 75.79 43 -285.77 32 490.71	dex 5 7 11.67 15038 14.50 9814 25 73.26 19 	8 -16.29 7767 22.51 16600 -76.65 185 142.82 192 -190.34 54 291.78	L -4.72 5751 10.53 19081 -40.24 25 75.97 60 -381.71 24 240.59	L. M 1 R 	iddle 5 -9.94 10271 15.72 14620 -73.33 9 76.57 15 -491.28 37 152.50	B -18.92 8146 33.56 15468 -76.91 503 142.14 395 -123.36 136 239.00	L -4.50 5195 12.98 19372 -40.94 17 76.75 287 -259.03 16 187.61	L.R 4 7245 10.67 17485 72.61 155 72.61 18 -253.51 49 515.21	ting 7.63 9505 16.78 15366 74.08 24 241.74	B -20.48 9484 31.95 13678 -76.87 772 143.35 388 -136.02 288 239.11	L -7.56 6862 9.05 17692 -43.69 109 77.27 189 -156.07 34 158.35	L. Li 15 R -8.78 5310 10.18 19398 -42.44 175 72.38 12 72.38 12 -194.94 56 381.46	tttle 58 7 -11.12 13827 13.63 10966 -73.71 36 72.09 23 -439.22 82 450.90	8 -15.72 9716 19.58 14424 -77.06 212 142.49 238 -251.80 102 280.87
No Finger Found MN <= d < 0 # 0 <= d <= MX # MN-32 <= d < MN # MX < d <= MX+32 # d < MN-32 # d > MX+32 # Total #	L -7.31 2586 16.93 21462 -40.30 46 74.55 186 186 21 33 290.32 109 186.21 33	L. Tř R -10.36 6499 14.46 17304 -43.48 322 76.42 24 -139.26 155 306.21 118 24422	uumb i4 T 13550 13858 12.88 10415 75.00 5 4 413.52 64 543.93 60 24422	B -14.30 3362 32.49 16561 -75.78 82 144.10 1528 -364.46 128 211.71 2761 24422	L -6.98 3174 8.64 21675 -45.31 29 74.71 39 -438.93 34 513.04 13 24964	L In 17 R -9.28 7051 9.56 17461 -40.55 341 75.79 43 -285.77 32 490.71 36	dex 5 7 15038 14.50 9814 25 73.26 19 -462.46 46 238.93 22 24964	8 -16.29 7767 22.51 16600 -76.65 185 142.82 192 -190.34 54 291.78 166 24964	L -4.72 5751 10.53 19081 -40.24 25 75.97 60 -381.71 24 240.59 23 24964	L. M 1 R -8.07 6173 10.53 18624 -40.40 106 73.95 19 -194.50 29 813.92 13 24964	iddle 5 7 10271 15.72 14620 76.57 15 76.57 15 152.50 12 24964	B -18.92 8146 33.56 15468 -76.91 503 142.14 395 -123.36 136 239.00 316 24964	L -4.50 5195 12.98 19372 -40.94 17 76.75 287 -259.03 16 187.61 77 24964	L. R 4 R -8.44 7245 10.67 17485 72.61 18 -253.51 49 515.21 12 24964	ting T T -7.63 9505 16.78 15366 74.08 24 -471.72 44 241.74 19 24964	B -20.48 9484 31.95 13678 -76.87 772 143.35 388 -136.02 288 239.11 354 24964	L -7.56 6862 9.05 17692 -43.69 109 77.27 189 -156.07 34 158.35 78 24964	L. Li 15 R 	title 58 7 -11.12 13827 13.63 10966 -73.71 36 72.09 23 -73.72 23 -439.22 82 450.90 30 24964	8 -15.72 9716 19.58 14424 -77.06 212 142.49 238 -251.80 102 280.87 272 24964

Appendix D. Plots of 3-inch segmentation box centers.

The plots in this appendix show the distribution of the segmentation box centers (x,y) for the 3-inch data. There is a combined plot for each slap image and then a smaller plot for each finger position. The individual finger plots are better for seeing the full "spread" of x,y positions detected. The plot for the ground truth (GT) is included as a baseline for comparison. The blank lines that appear in some of the plots are most likely caused by the segmentation algorithm doing some level of sampling of the input image. The reason the lines are not evenly distributed in some plots is an artifact of the sampling when scaling the images for displaying in the report.

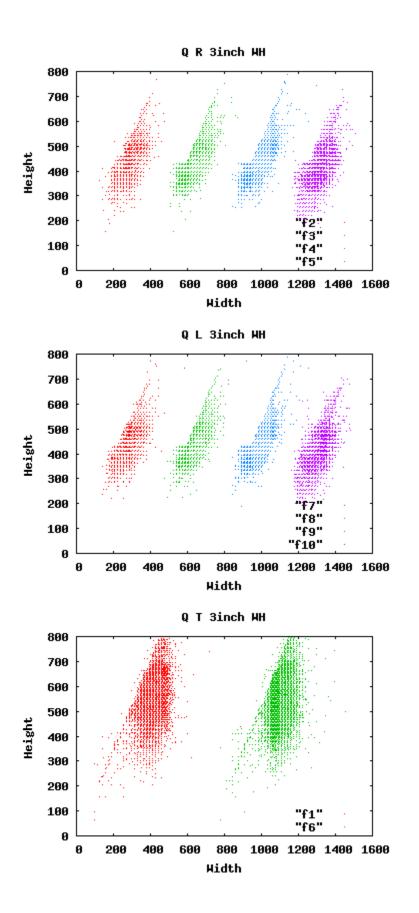






Appendix E. Plots of 3-inch segmentation box widths and heights.

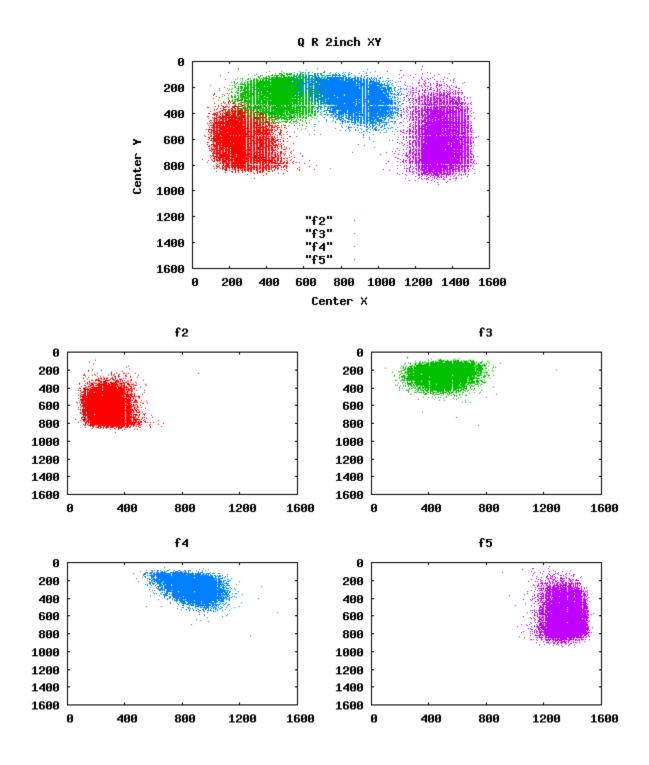
The plots in this appendix show the distribution of the segmentation box widths and heights for the 3-inch data. There is a combined plot for each slap image and then a smaller plot for each finger position. The individual finger plots are better for seeing the full "spread" of widths and heights detected. The widths are "spread out" on the plot by adding 350, 750 and 1050 to the 2nd, 3rd, and 4th widths plotted. The plot for the ground truth (GT) is included as a baseline for comparison. The blank lines that appear in some of the plots are most likely caused by the segmentation algorithm doing some level of sampling of the input image. The reason the lines are not evenly distributed in some plots is an artifact of the sampling when scaling the images for displaying in the report.

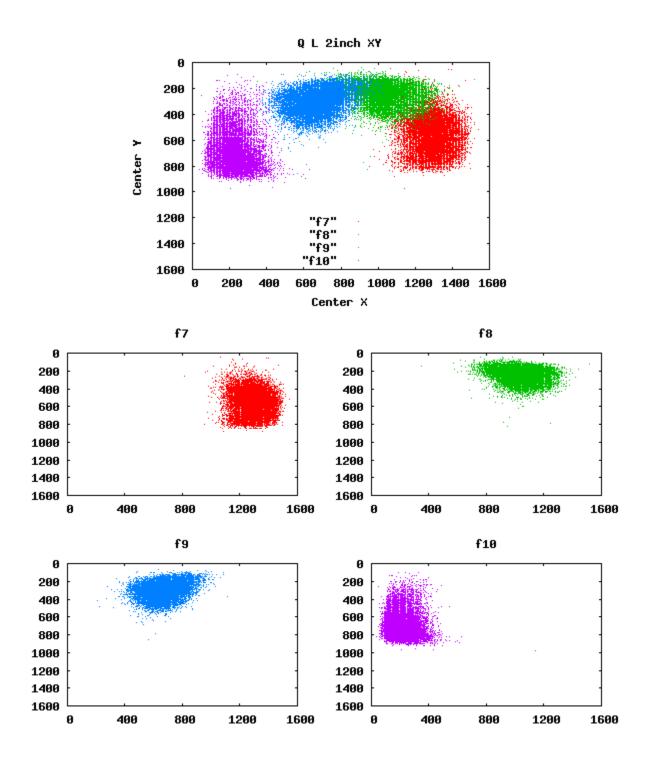


Q = Lakota

Appendix F. Plots of 2-inch segmentation box centers.

The plots in this appendix show the distribution of the segmentation box centers (x,y) for the 2-inch data. There is a combined plot for each slap image and then a smaller plot for each finger position. The individual finger plots are better for seeing the full "spread" of x,y positions detected. The plot for the ground truth (GT) is included as a baseline for comparison. The blank lines that appear in some of the plots are most likely caused by the segmentation algorithm doing some level of sampling of the input image. The reason the lines are not evenly distributed in some plots is an artifact of the sampling when scaling the images for displaying in the report.





Appendix G. Plots of 2-inch segmentation box widths and heights.

The plots in this appendix show the distribution of the segmentation box widths and heights for the 2-inch data. There is a combined plot for each slap image and then a smaller plot for each finger position. The individual finger plots are better for seeing the full "spread" of widths and heights detected. The widths are "spread out" on the plot by adding 350, 750 and 1050 to the 2nd, 3rd, and 4th widths plotted. The plot for the ground truth (GT) is included as a baseline for comparison. The blank lines that appear in some of the plots are most likely caused by the segmentation algorithm doing some level of sampling of the input image. The reason the lines are not evenly distributed in some plots is an artifact of the sampling when scaling the images for displaying in the report.

