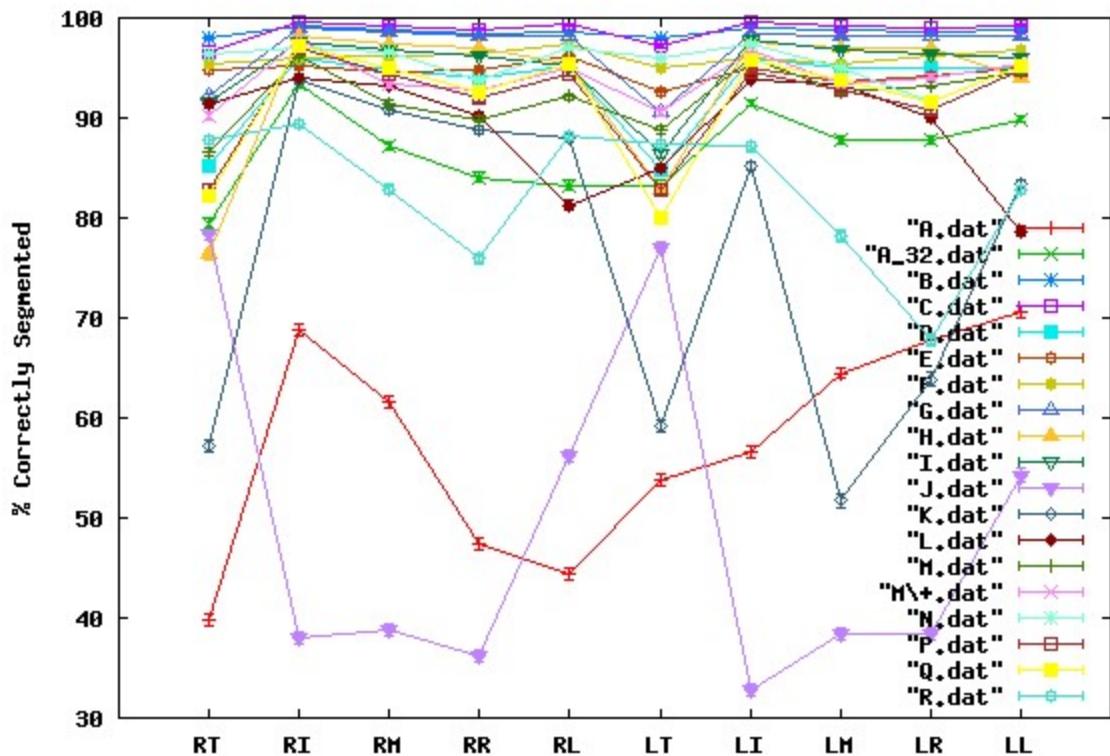


## **Appendix H. Confidence intervals for 3-inch segmentation results.**

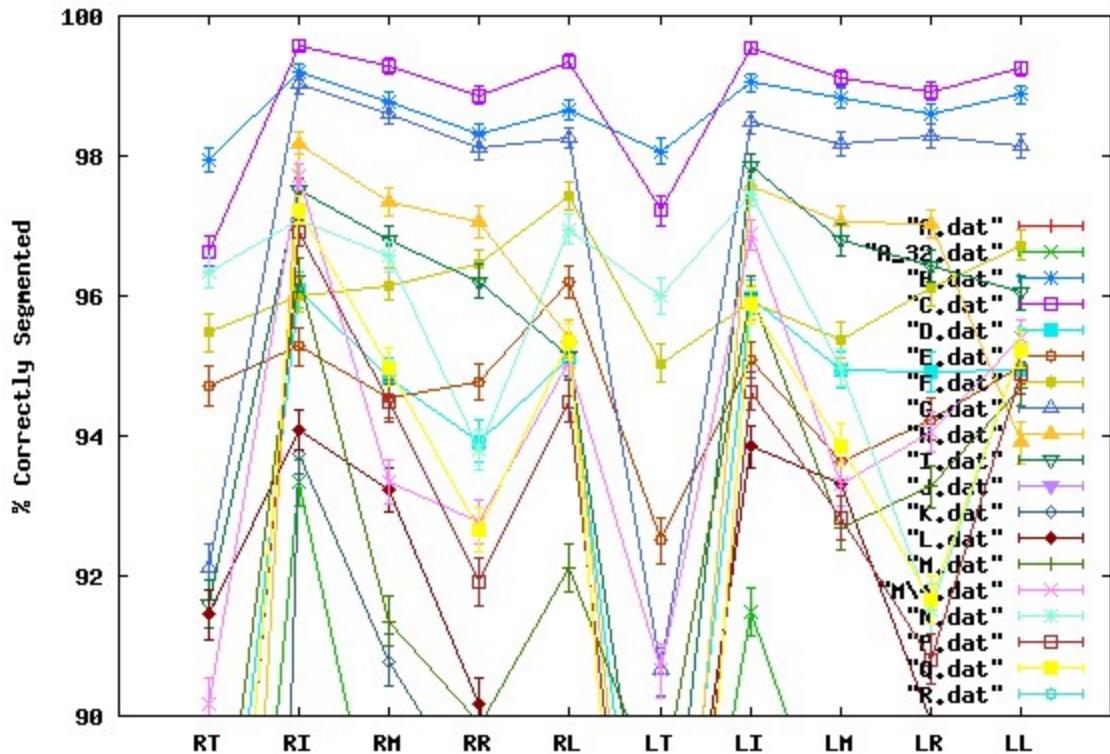
The plots in this appendix are an attempt to show 95% confidence intervals for the 3-inch segmentation results shown in tables in Appendix A for the finger positions and right/left hands. The confidence intervals were computed using the boot strap function in the R statistics package and a sampling of 1,000 iterations. The only issue is that the intervals were so small that they really don't show well in the plots. The plots are shown on two scales. The first shows the results for all the segmentation algorithms. The second shows only results in the range 90-100% correct segmentation. The "None" segmented is not included in the second plot just to make it easier to read.

**Similar to "A\_32", "M+" was the same software as "M" with additional values added to the output of the segmentation algorithm. The additions to the segmentation box returned by the software were; +30 for the top and bottom edges and +15 for the left side. No change was made to the right side.**

### 3 Inch Finger Positions

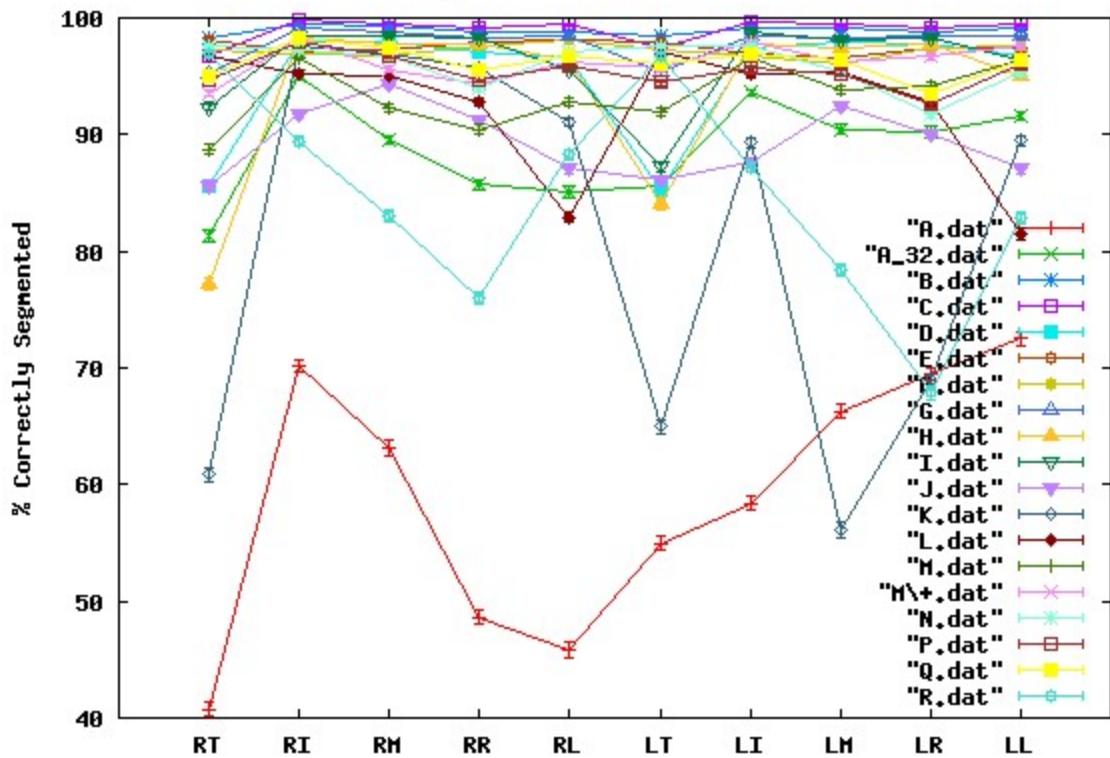


### 3 Inch Finger Positions

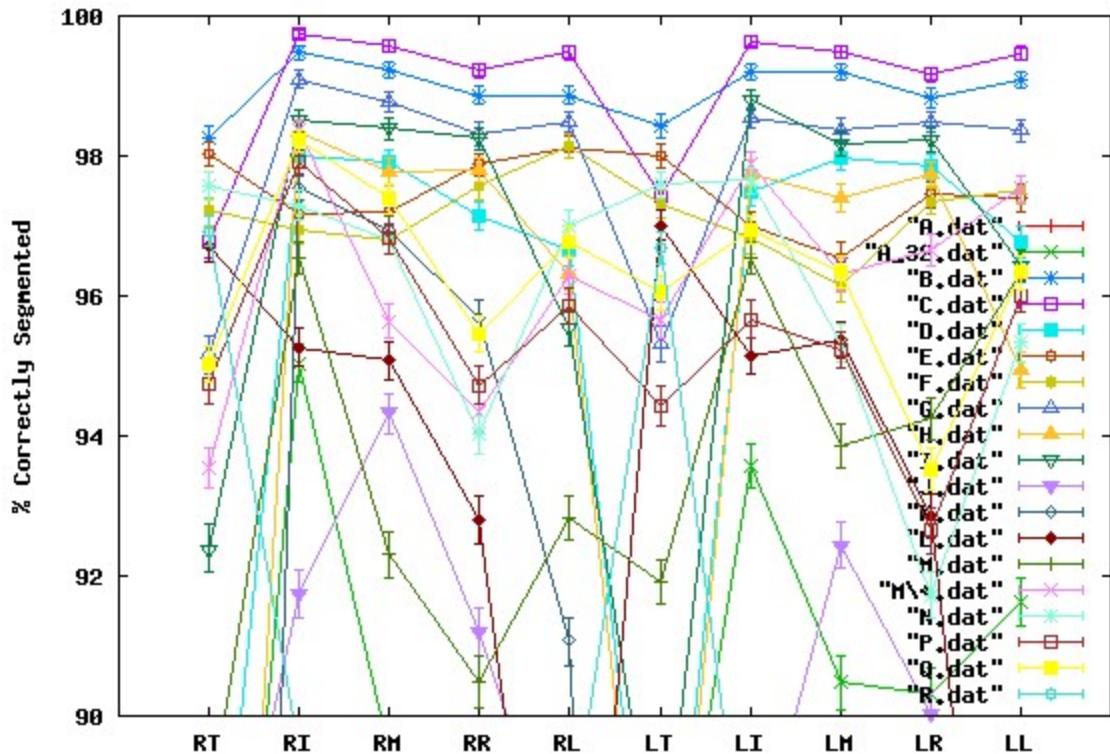


A/M = Aware || B/C = Cogent || D = Dermalog || E/F = NEC || G = Sagem Morpho || H/I = Sonda || J = Ultrascan || K/L = L-1 ID || N = Green Bit || P/Q = Lakota || R = C-DAC

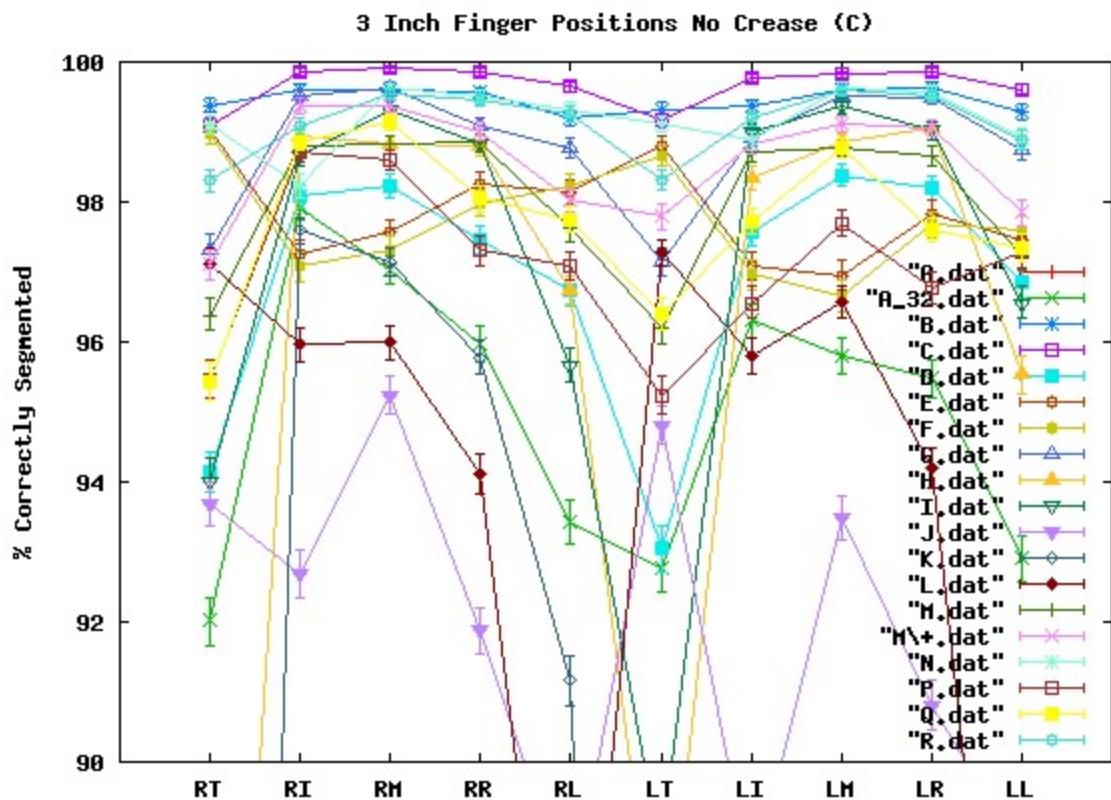
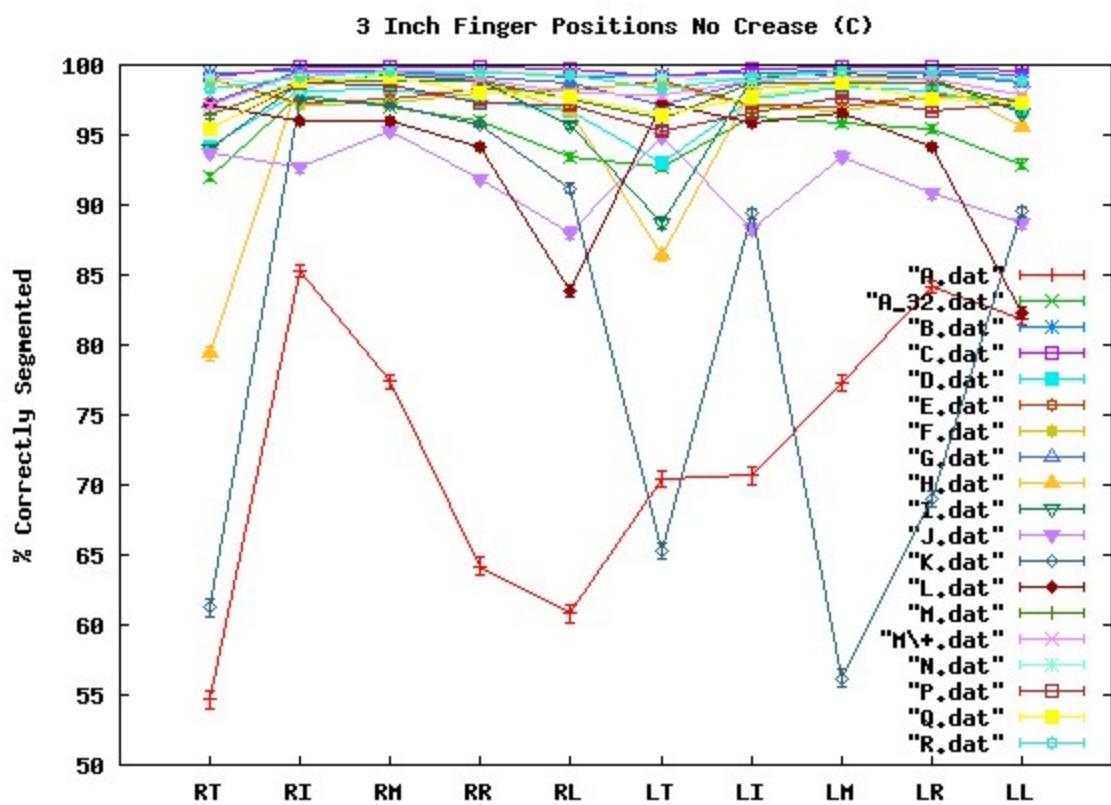
3 Inch Finger Positions No Crease Maximum (B)



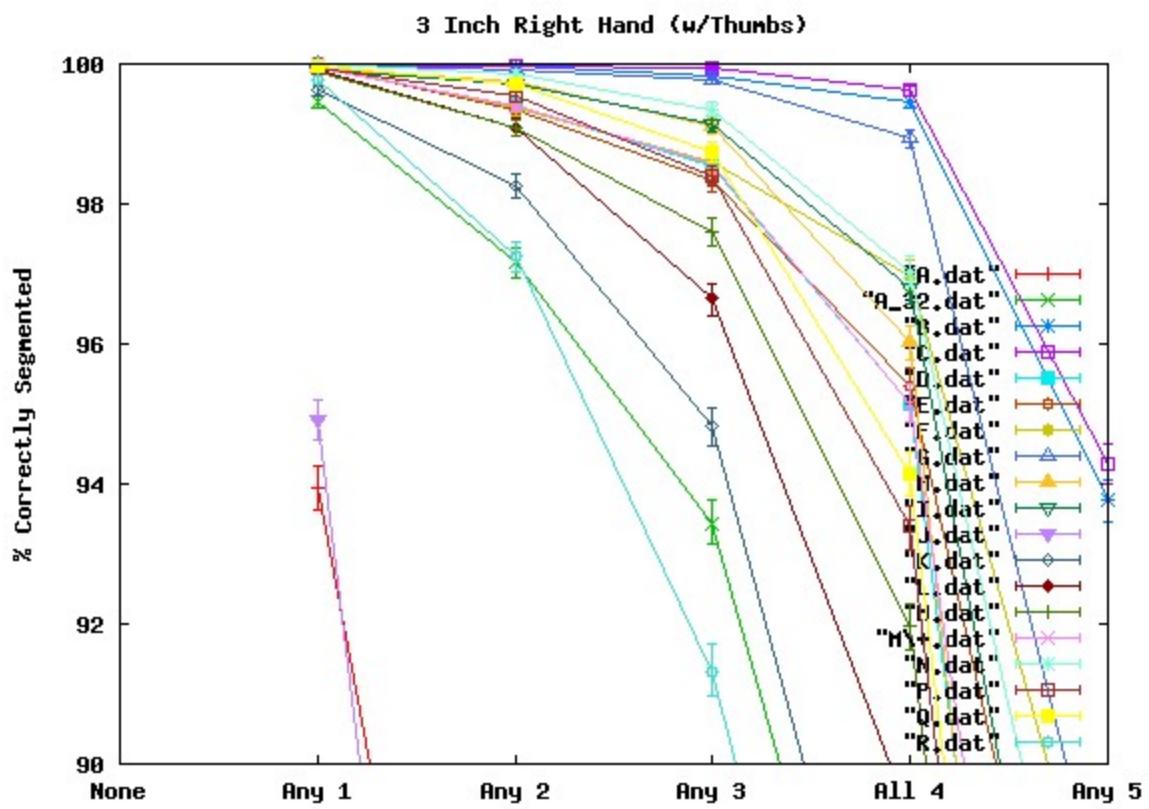
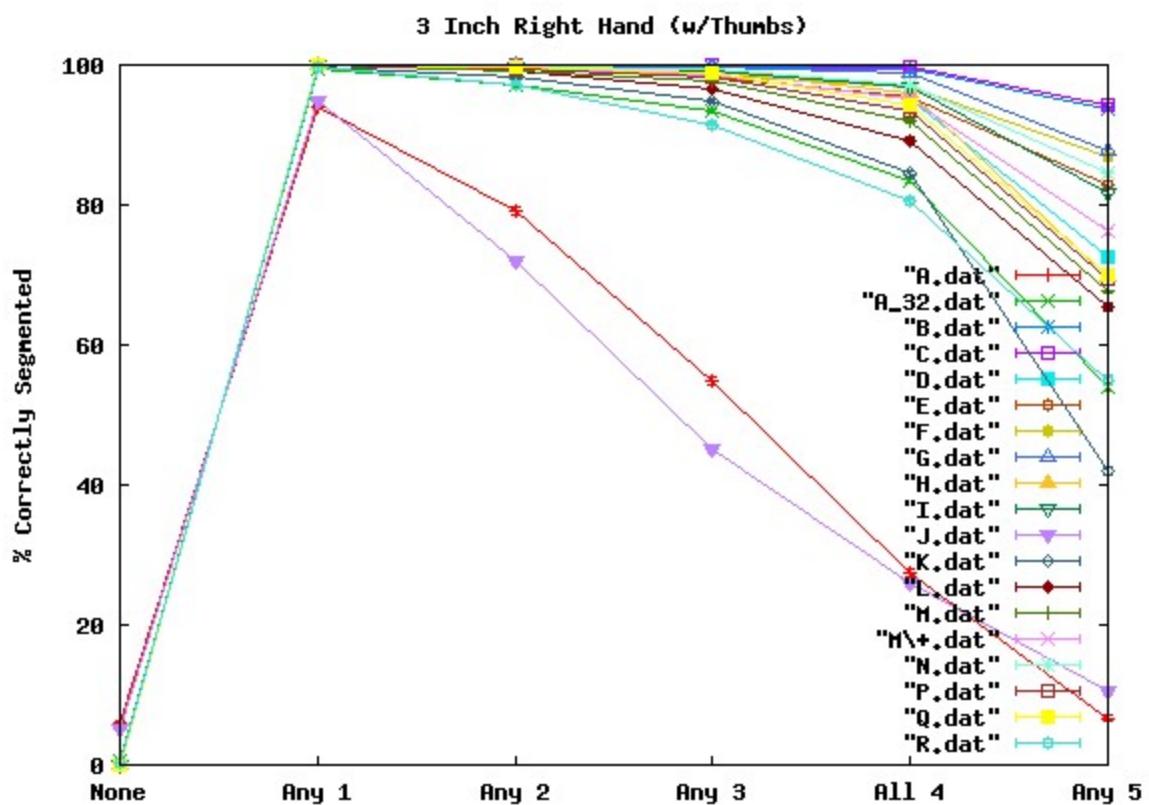
3 Inch Finger Positions No Crease Maximum (B)



A/M = Aware || B/C = Cogent || D = Dermalog || E/F = NEC || G = Sagem Morpho || H/I = Sonda || J = Ultrascan || K/L = L-1 ID || N = Green Bit || P/Q = Lakota || R = C-DAC

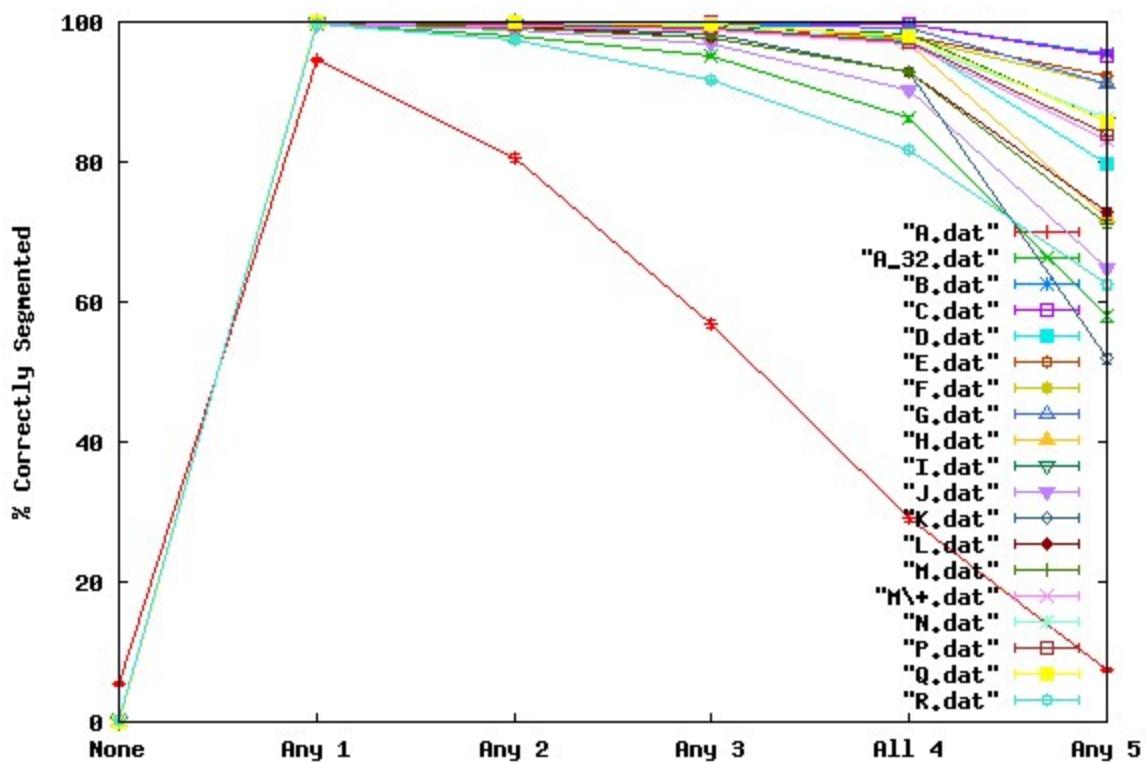


A/M = Aware || B/C = Cogent || D = Dermalog || E/F = NEC || G = Sagem Morpho || H/I = Sonda || J = Ultrascan || K/L = L-1 ID || N = Green Bit || P/Q = Lakota || R = C-DAC

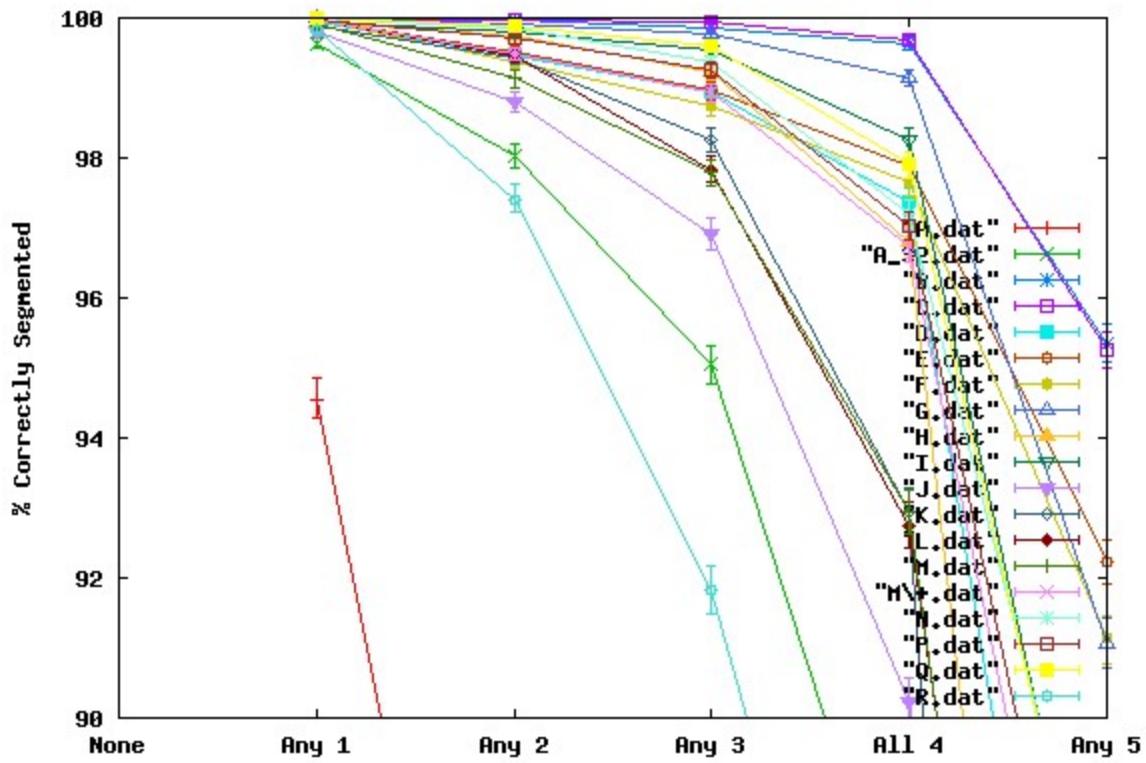


A/M = Aware || B/C = Cogent || D = Dermalog || E/F = NEC || G = Sagem Morpho || H/I = Sonda || J = Ultrascan || K/L = L-1 ID || N = Green Bit || P/Q = Lakota || R = C-DAC

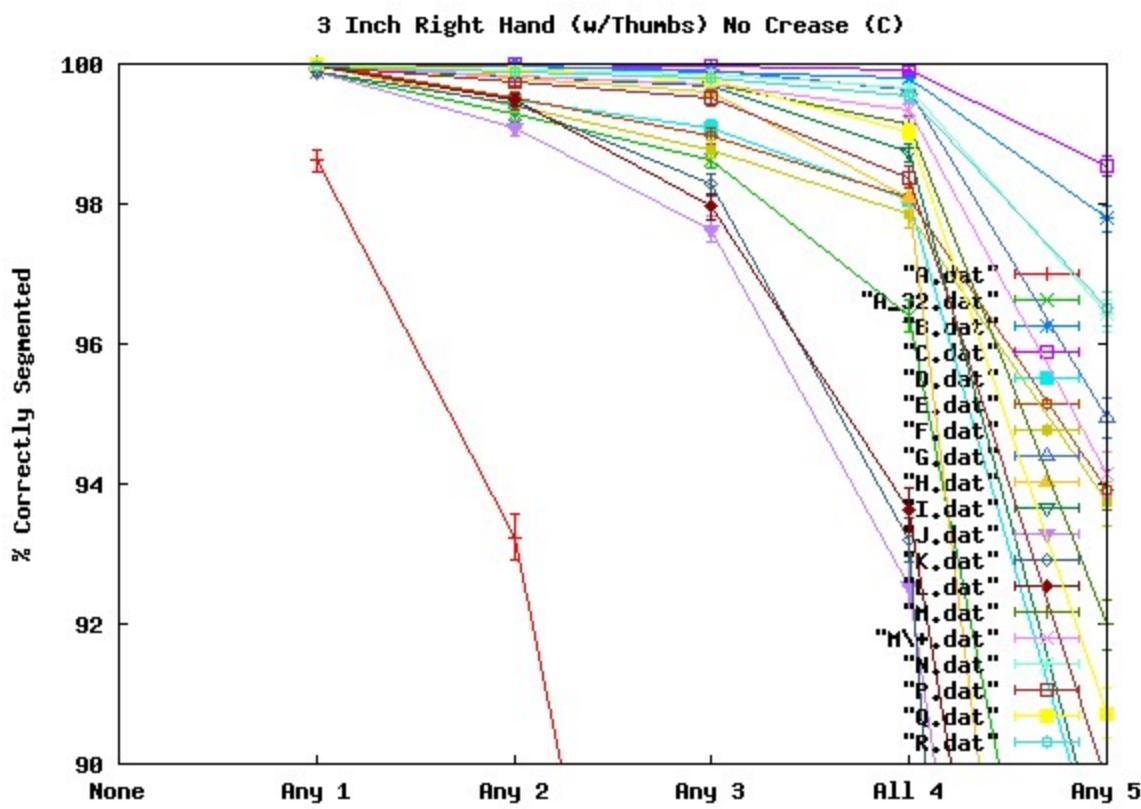
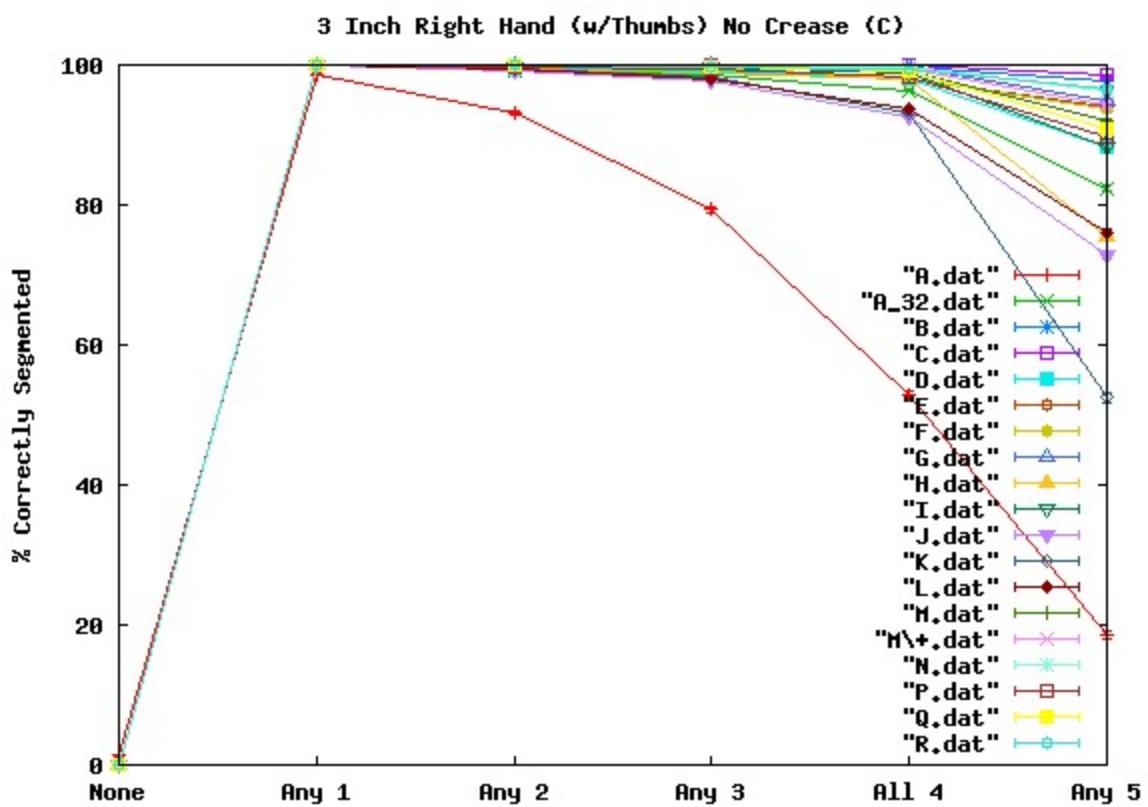
3 Inch Right Hand (w/Thumbs) No Crease Maximum (B)



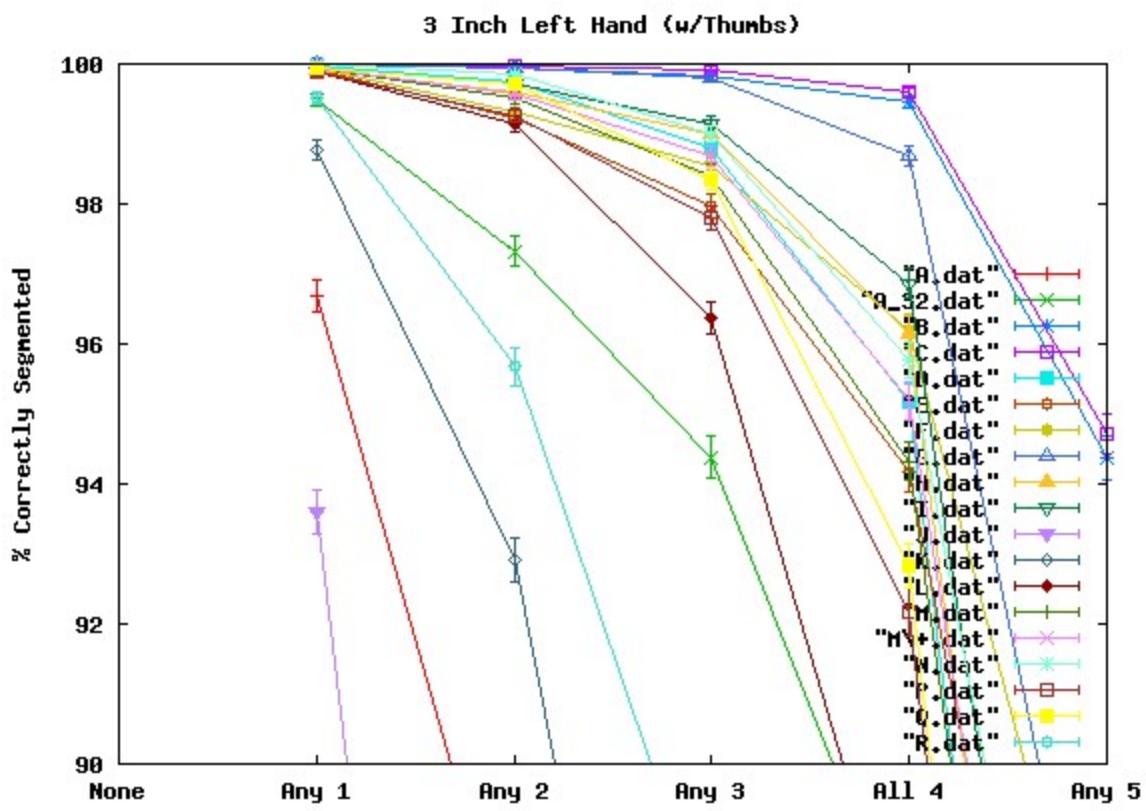
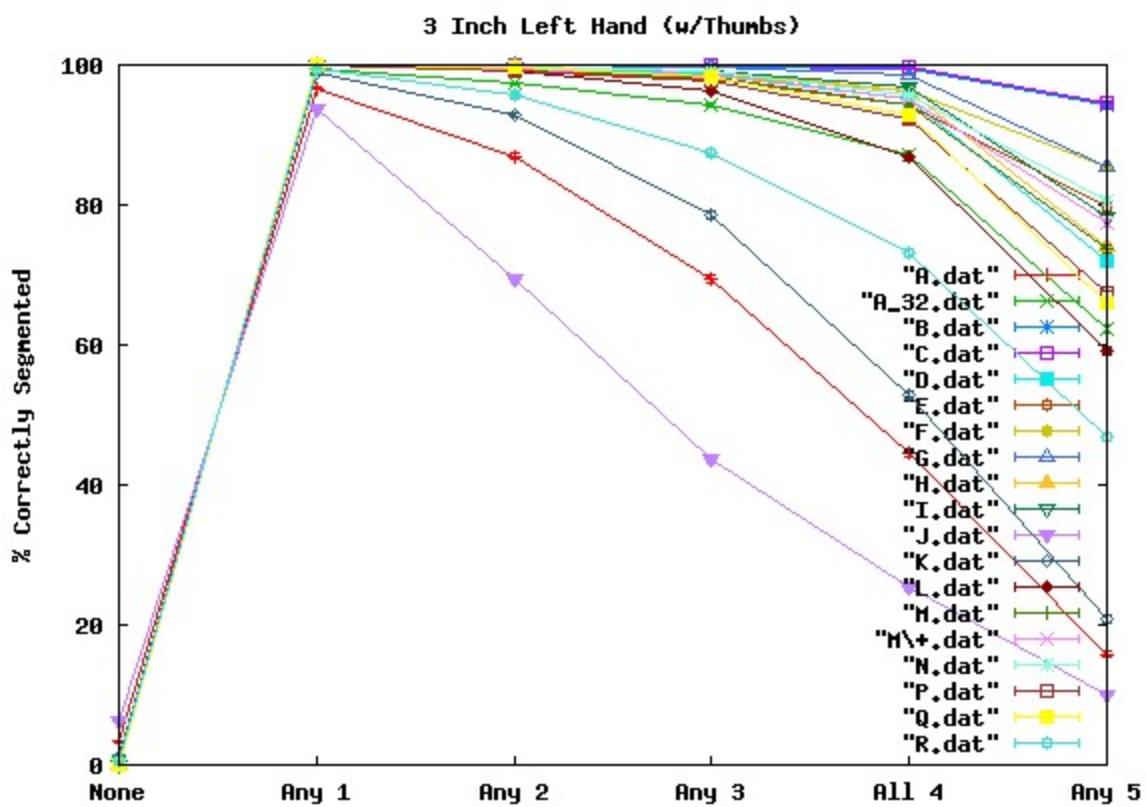
3 Inch Right Hand (w/Thumbs) No Crease Maximum (B)



A/M = Aware || B/C = Cogent || D = Dermalog || E/F = NEC || G = Sagem Morpho || H/I = Sonda || J = Ultrascan || K/L = L-1 ID || N = Green Bit || P/Q = Lakota || R = C-DAC

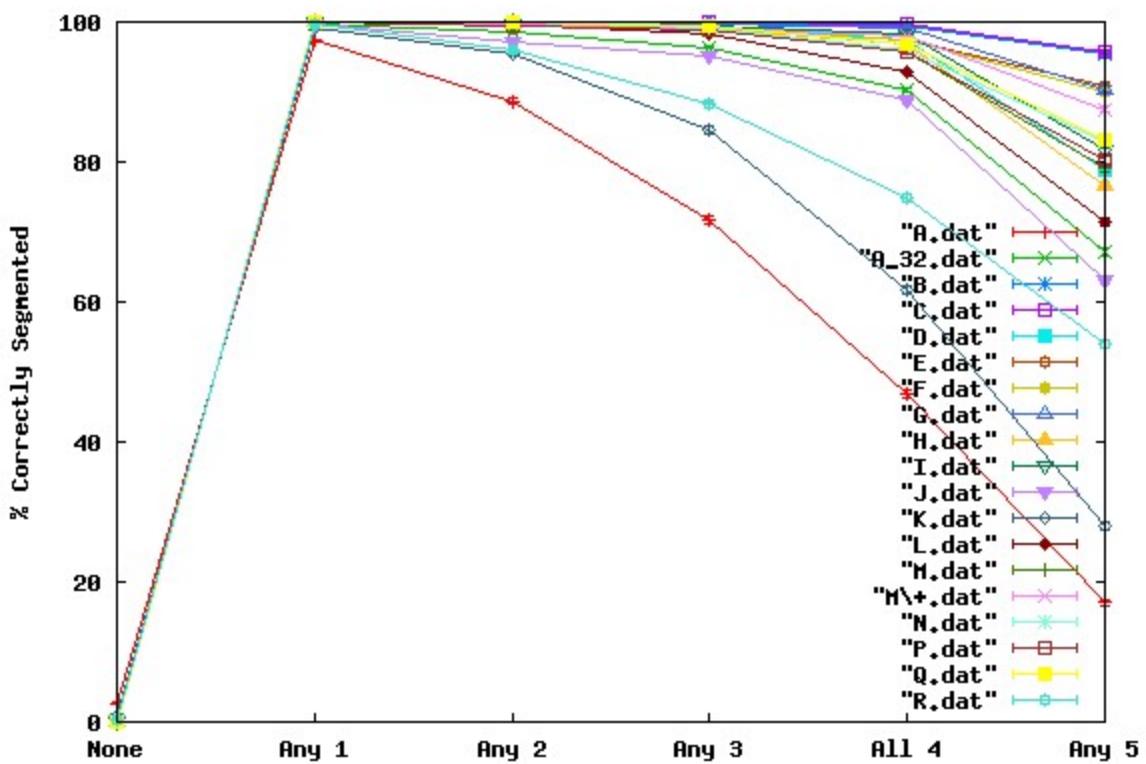


A/M = Aware || B/C = Cogent || D = Dermalog || E/F = NEC || G = Sagem Morpho || H/I = Sonda || J = Ultrascan || K/L = L-1 ID || N = Green Bit || P/Q = Lakota || R = C-DAC

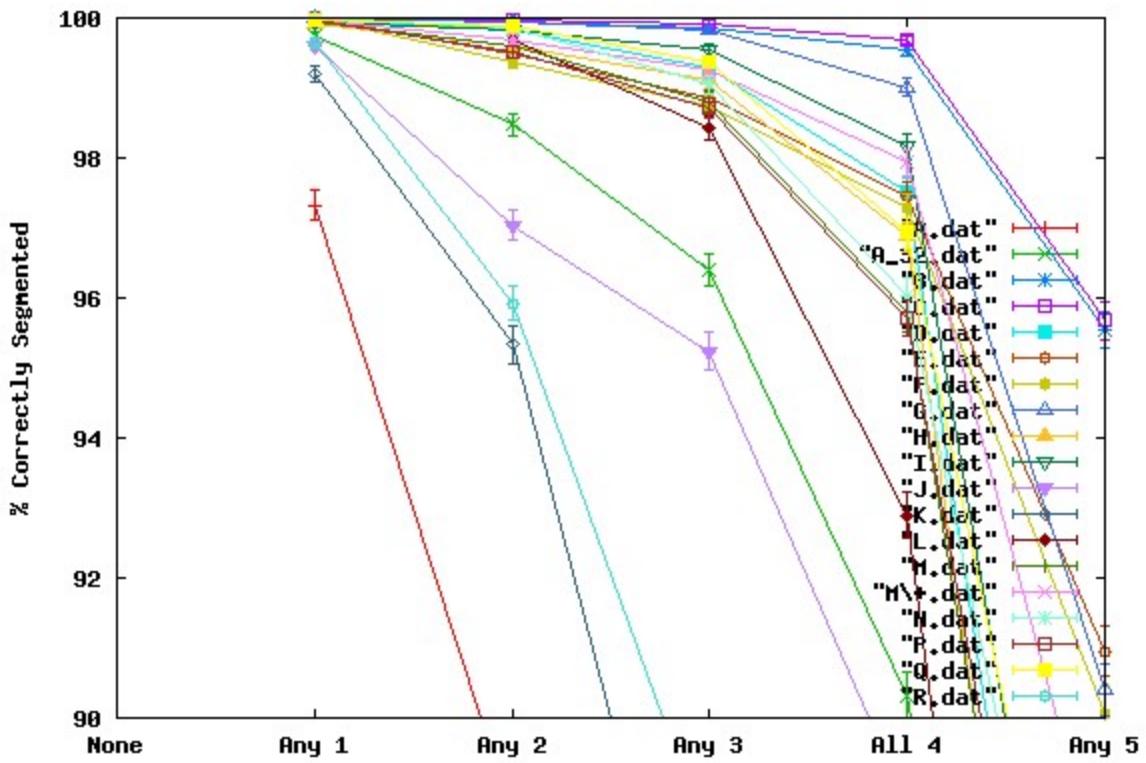


A/M = Aware || B/C = Cogent || D = Dermalog || E/F = NEC || G = Sagem Morpho || H/I = Sonda || J = Ultrascan || K/L = L-1 ID || N = Green Bit || P/Q = Lakota || R = C-DAC

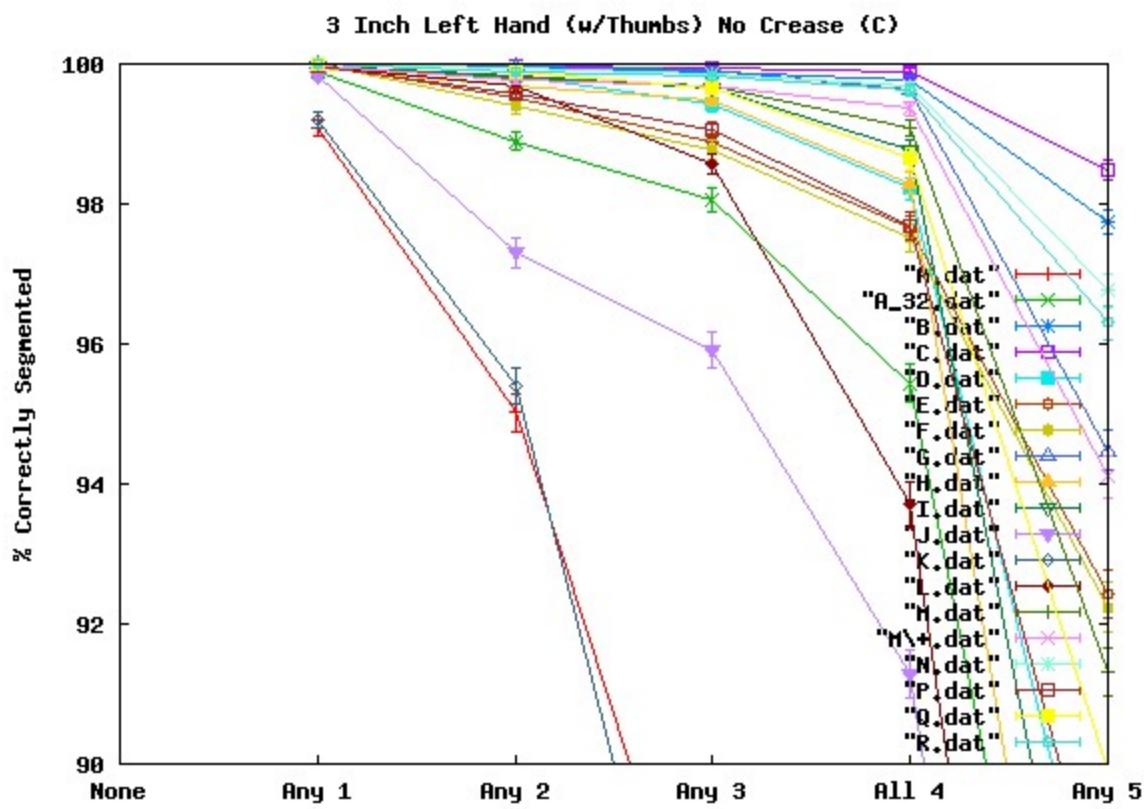
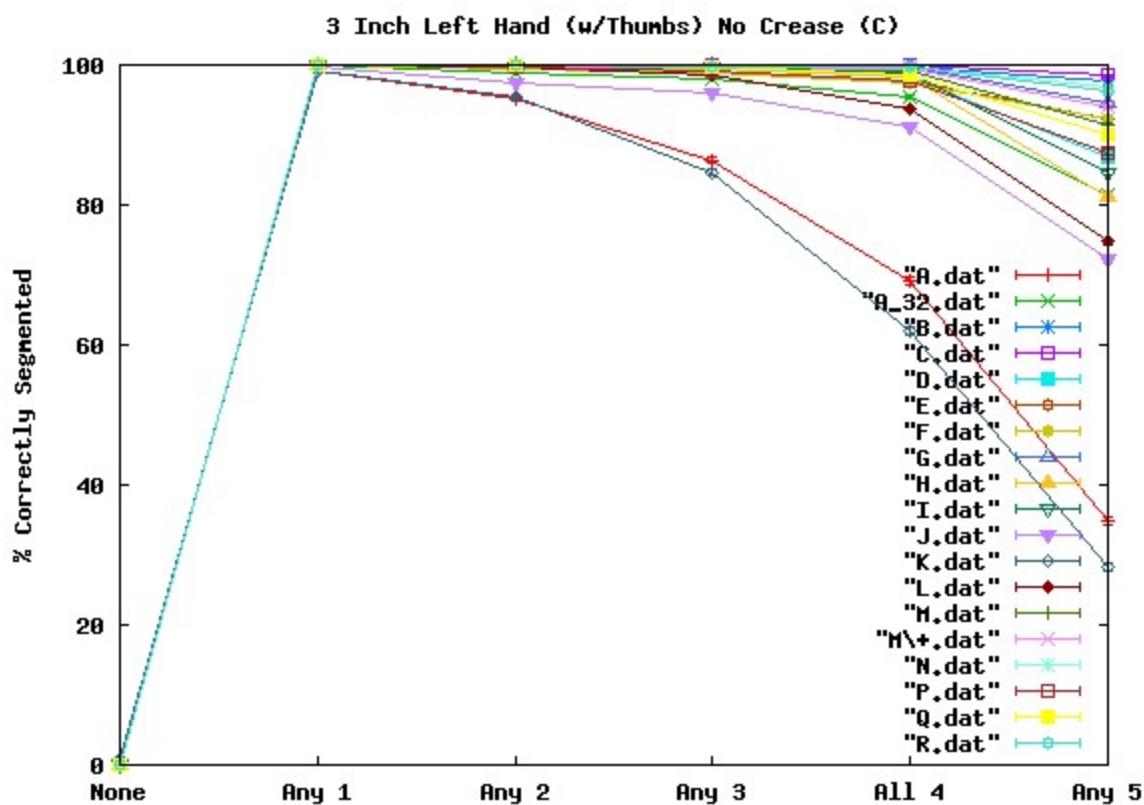
3 Inch Left Hand (w/Thumbs) No Crease Maximum (B)



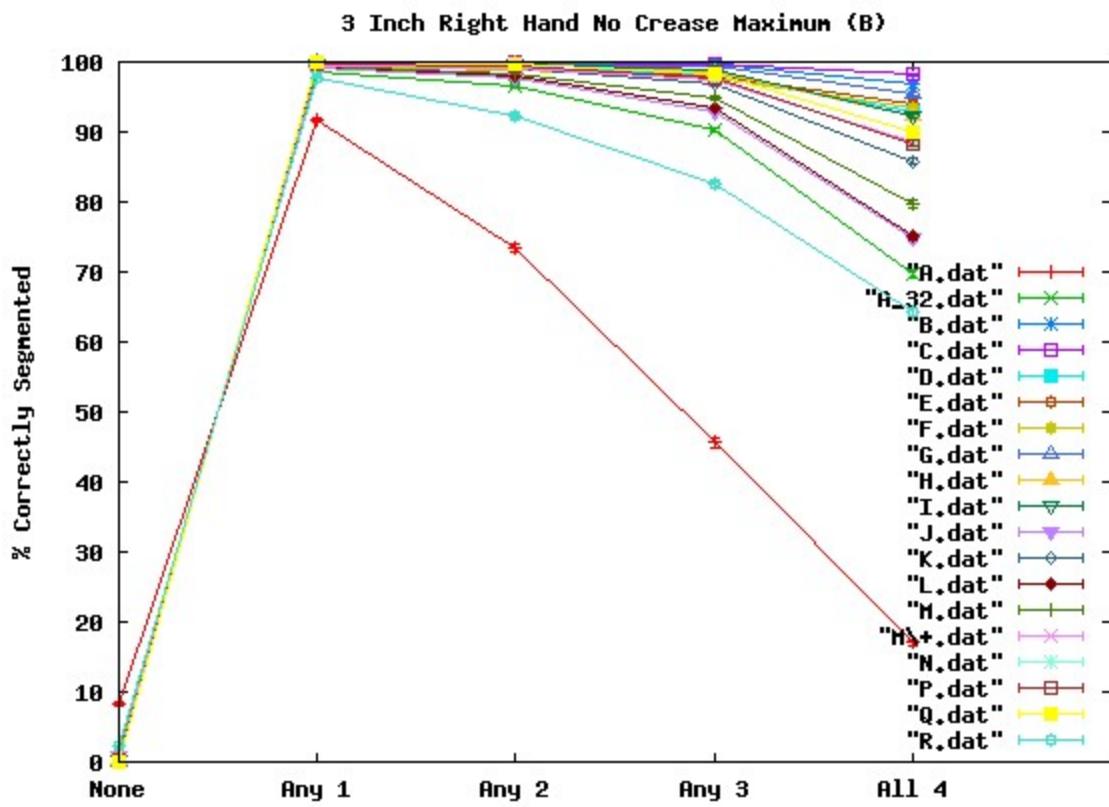
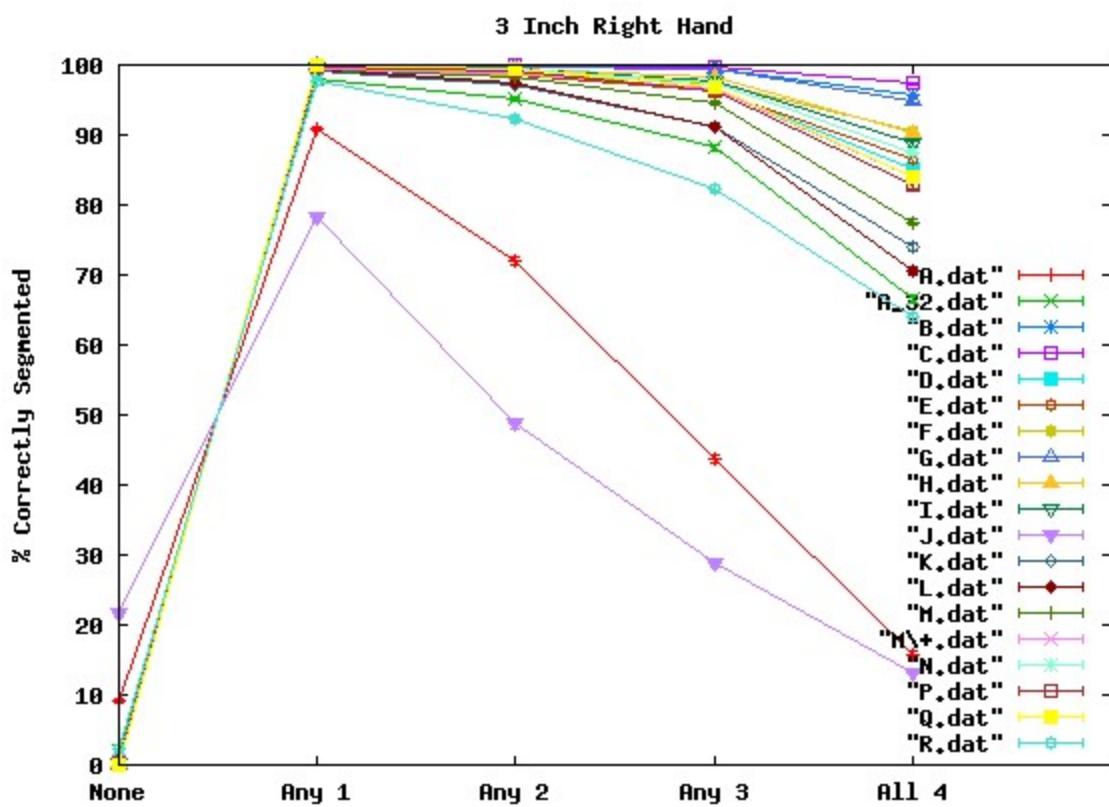
3 Inch Left Hand (w/Thumbs) No Crease Maximum (B)



A/M = Aware || B/C = Cogent || D = Dermalog || E/F = NEC || G = Sagem Morpho || H/I = Sonda || J = Ultrascan || K/L = L-1 ID || N = Green Bit || P/Q = Lakota || R = C-DAC

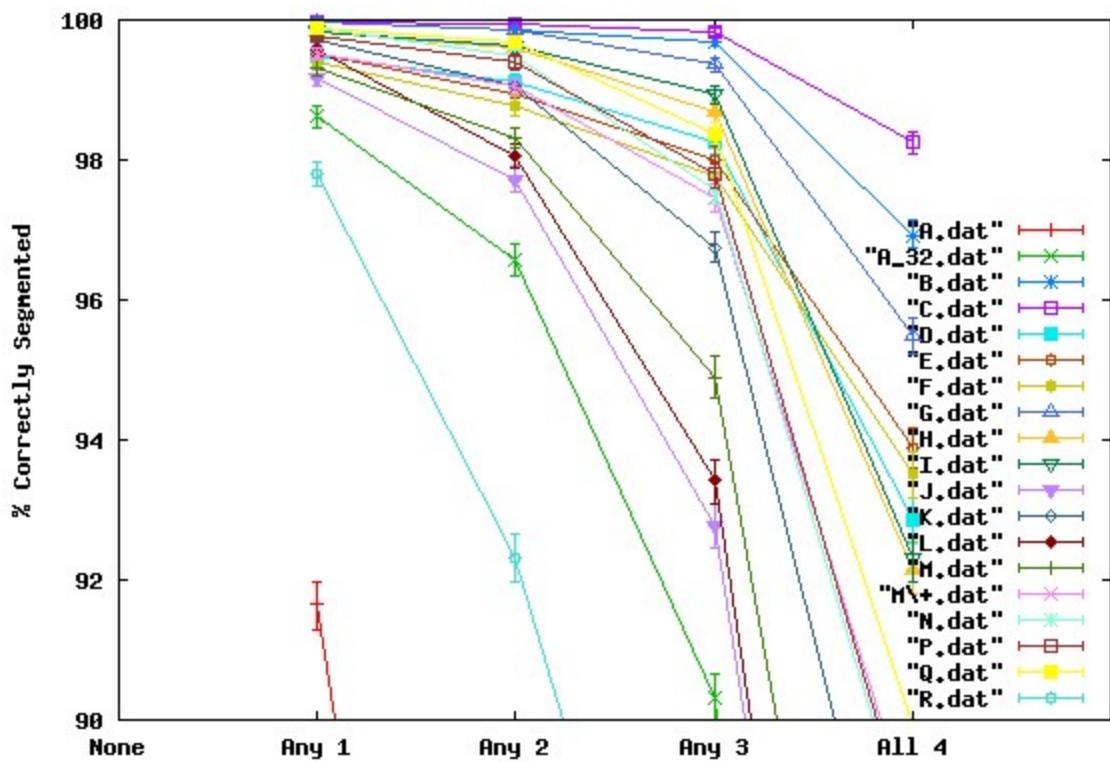


A/M = Aware || B/C = Cogent || D = Dermalog || E/F = NEC || G = Sagem Morpho || H/I = Sonda || J = Ultrascan || K/L = L-1 ID || N = Green Bit || P/Q = Lakota || R = C-DAC

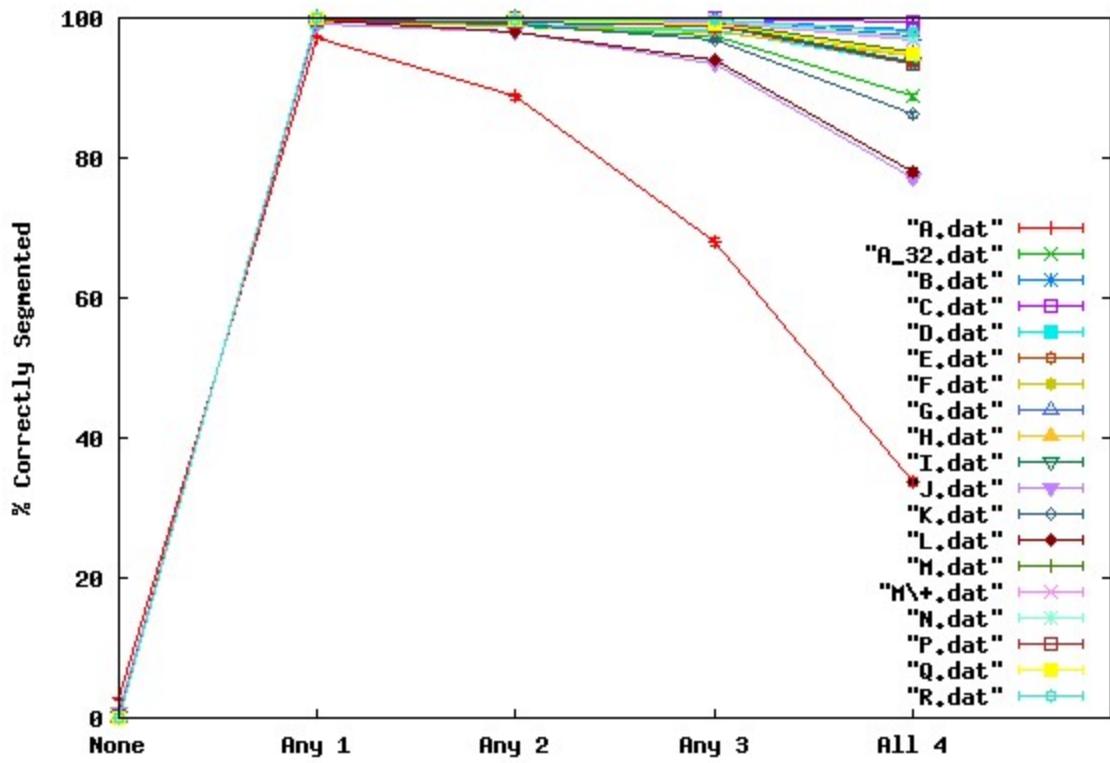


A/M = Aware || B/C = Cogent || D = Dermalog || E/F = NEC || G = Sagem Morpho || H/I = Sonda || J = Ultrascan || K/L = L-1 ID || N = Green Bit || P/Q = Lakota || R = C-DAC

### 3 Inch Right Hand No Crease Maximum (B)

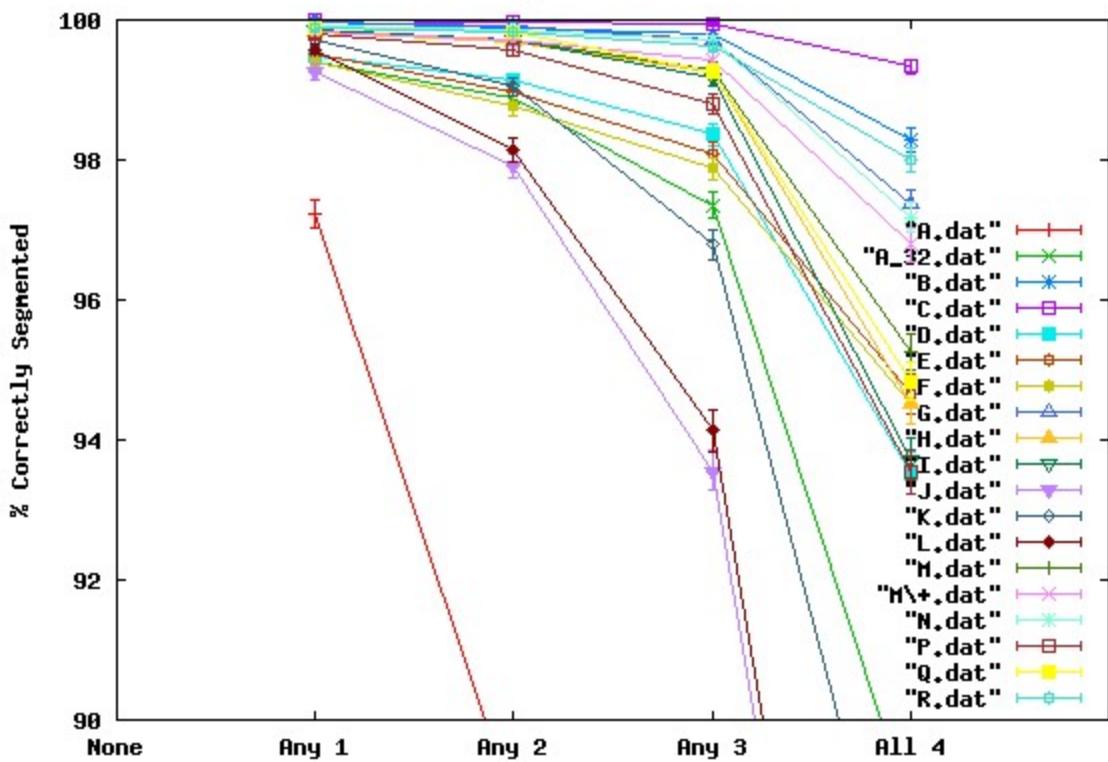


### 3 Inch Right Hand No Crease (C)

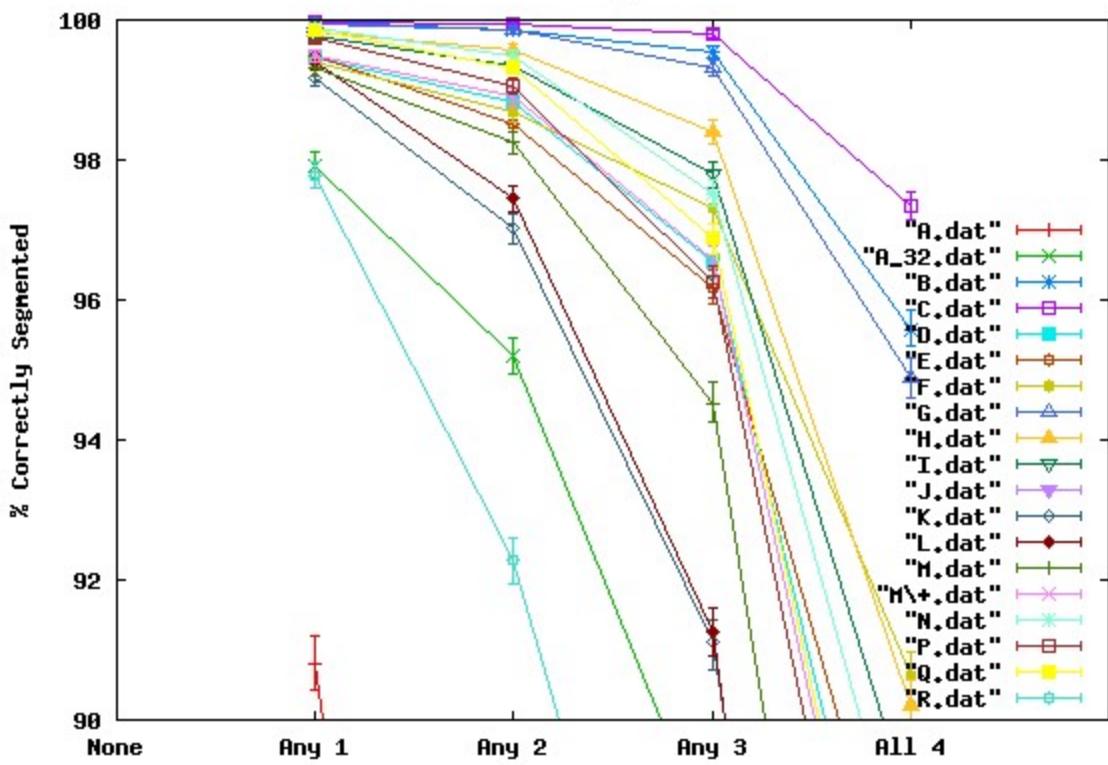


A/M = Aware || B/C = Cogent || D = Dermalog || E/F = NEC || G = Sagem Morpho || H/I = Sonda || J = Ultrascan || K/L = L-1 ID || N = Green Bit || P/Q = Lakota || R = C-DAC

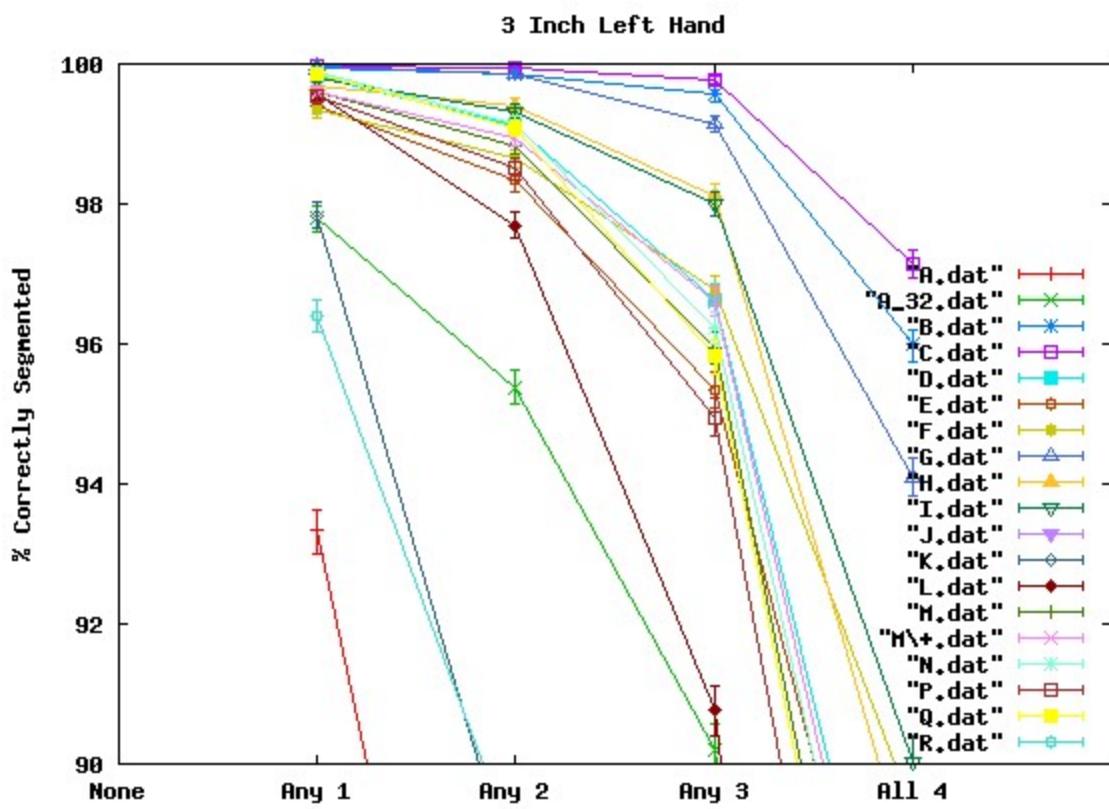
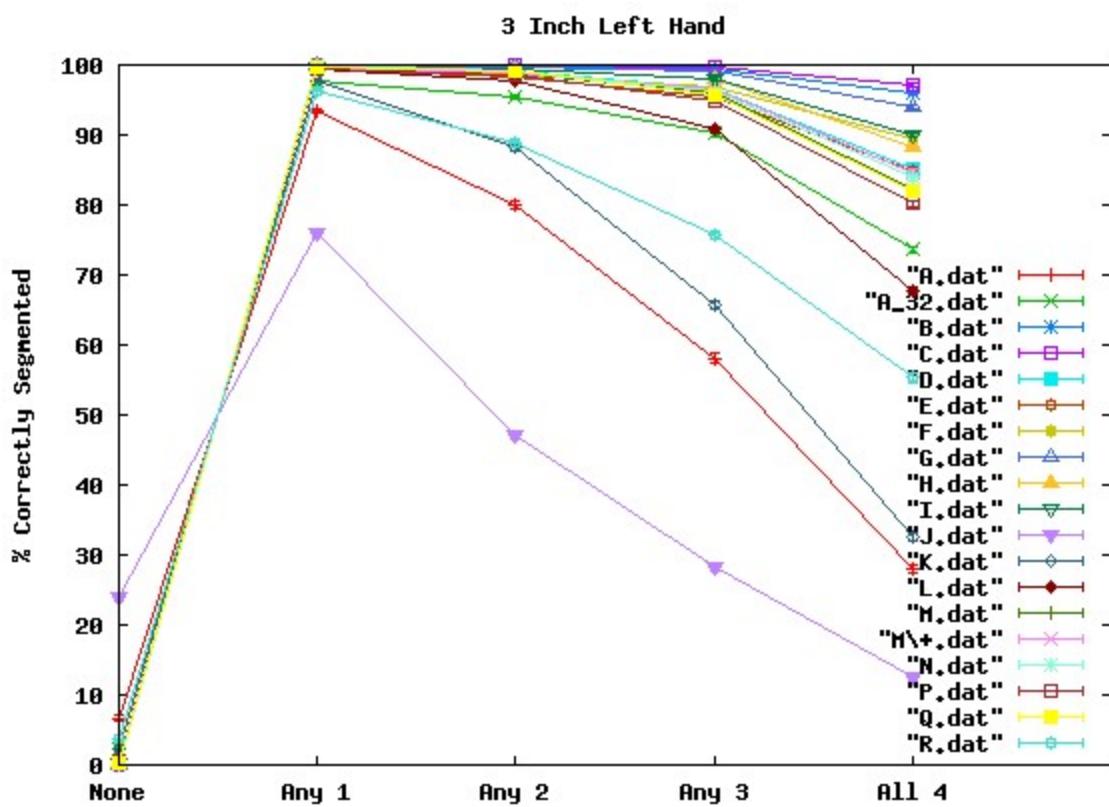
3 Inch Right Hand No Crease (C)



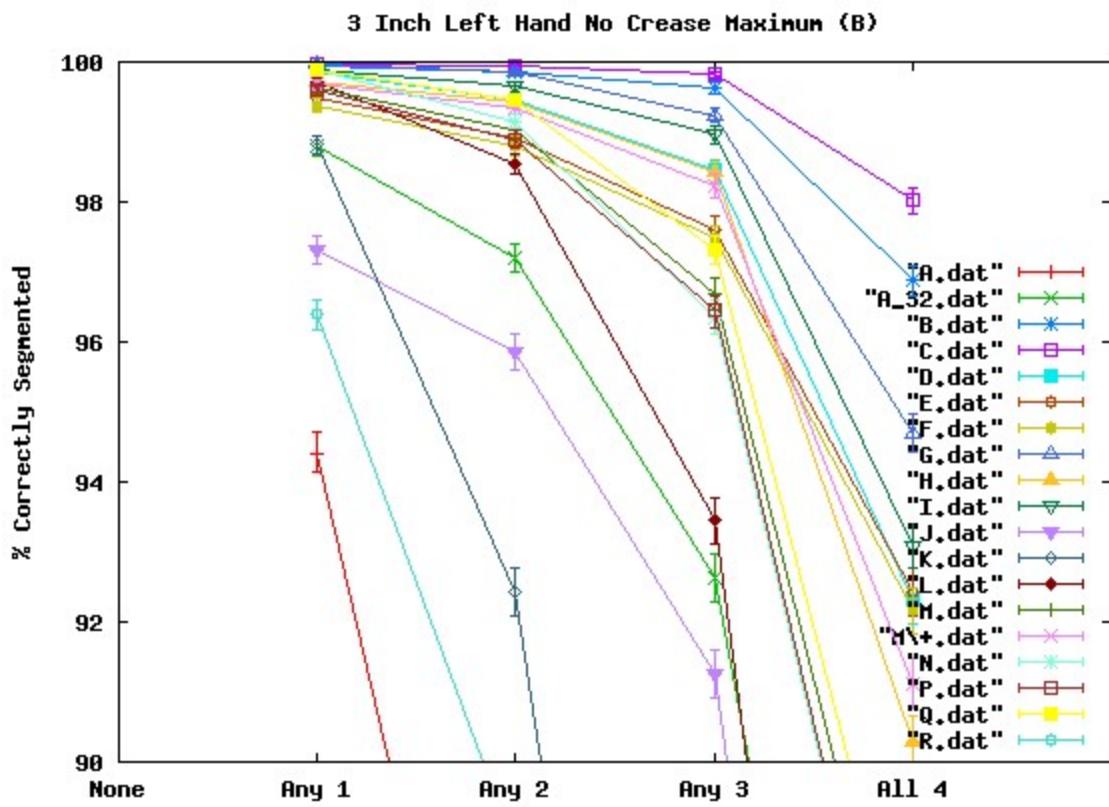
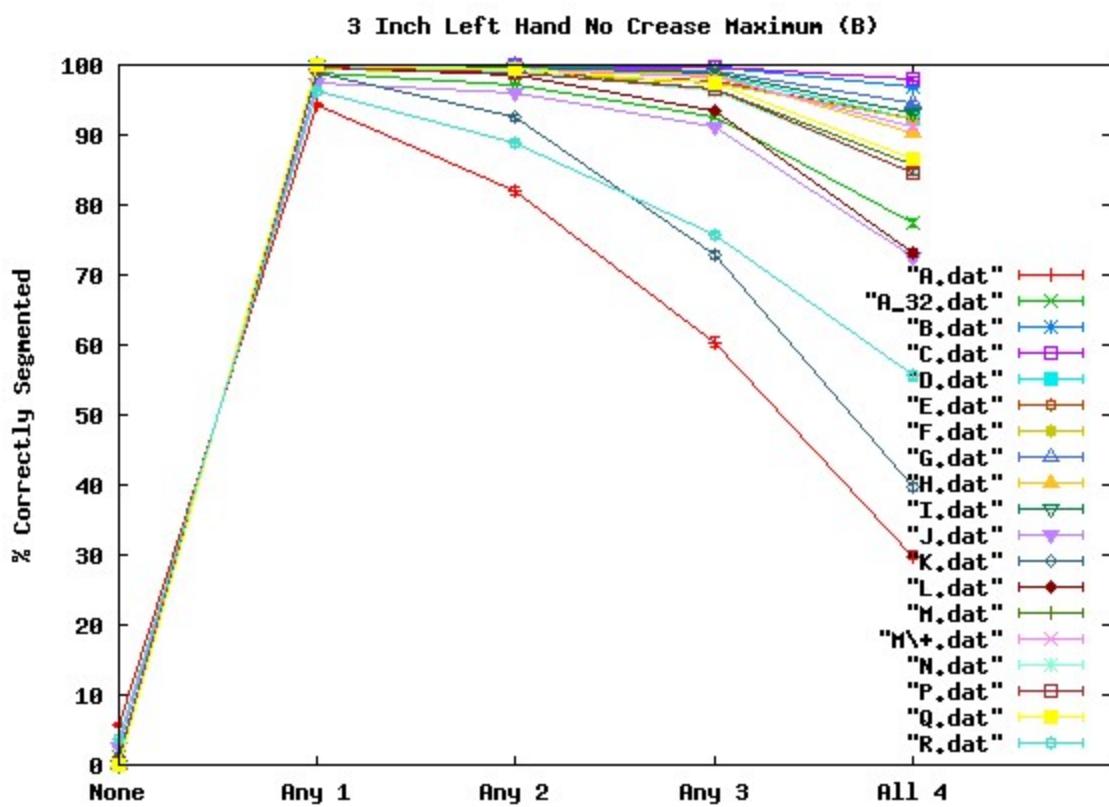
3 Inch Right Hand



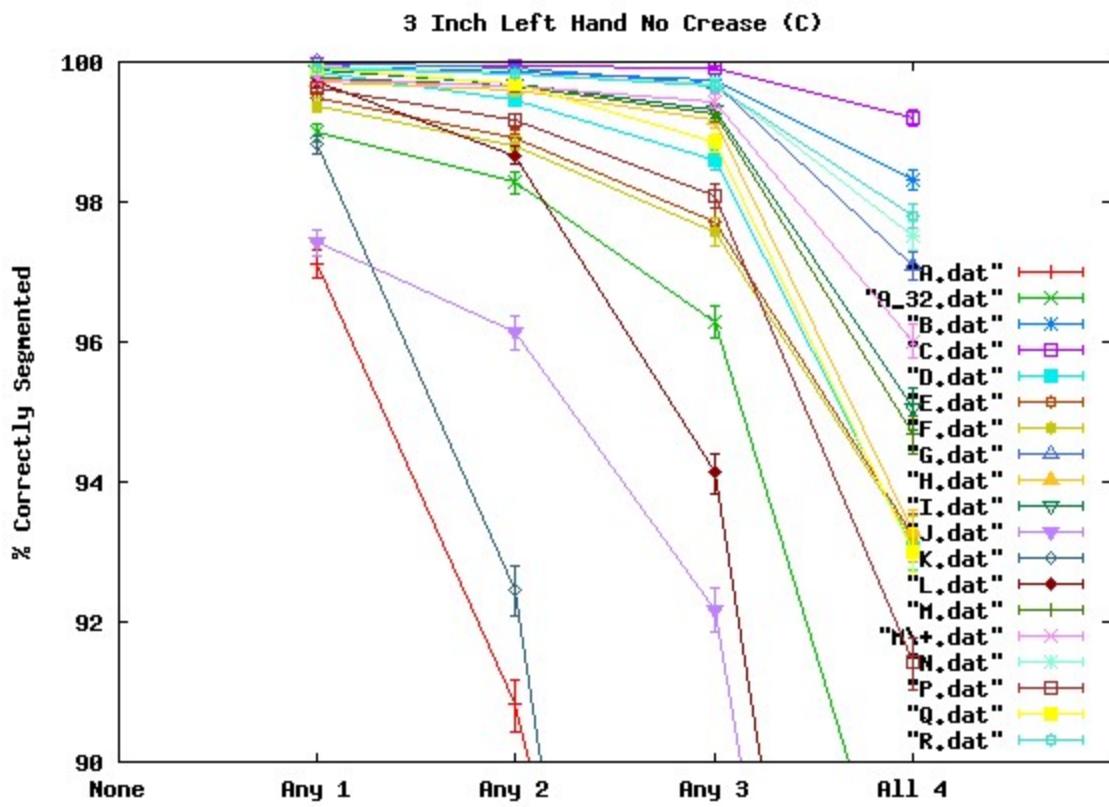
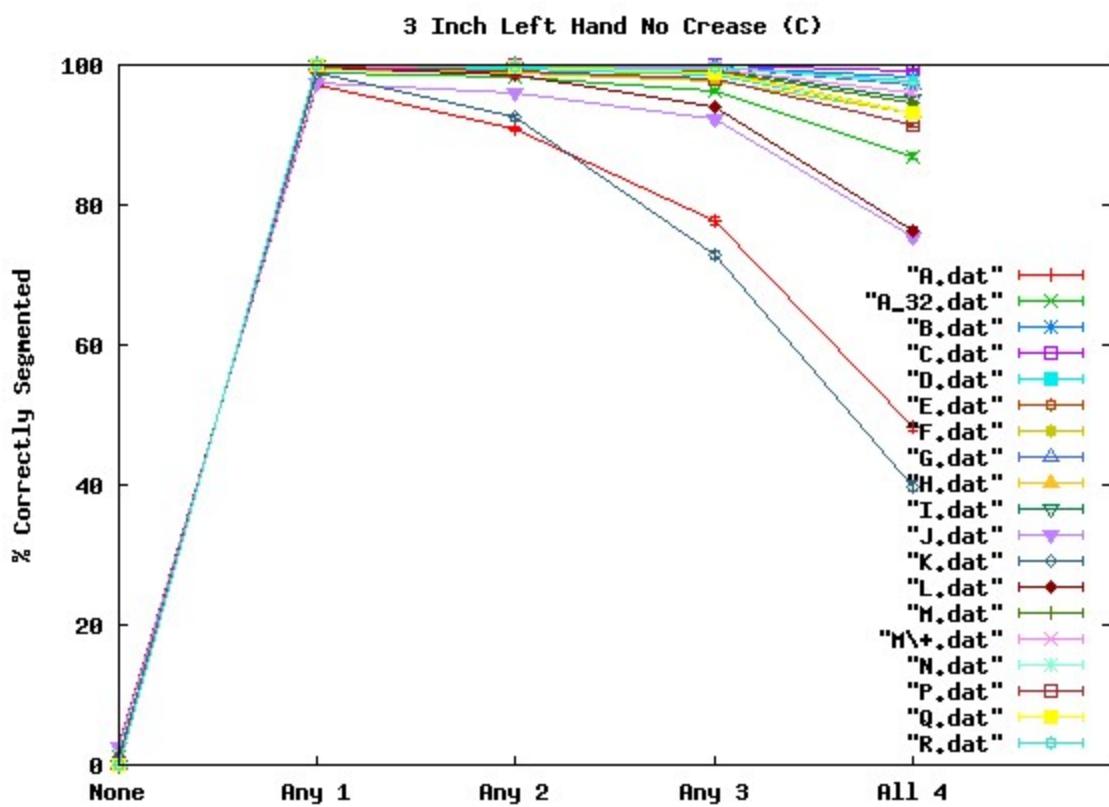
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