Boxplot of ARL<sub>1</sub> for Various Models on Streaming Data with z and alpha: z:1.96 alpha:1, Mean Gap Size of 10, Data Variance of 4 (Outliers in out-of-control Period)  $ARL_1$ CTM (2:1.96, a:1, (0.1, 10)) (2:1.96, a:1, 15) CTM (Z:1.96, a:1, (0.1, 15)) SWM (Z:1.96, a:1,20) CTM (z.1.96, a.1, (0.1, 20)) CTM (Z:1.96,8:1,(0.15,10)) (Z:1.96,8:1,30) WM (Z:1,96,8:1,(0.15,20)) CTM (Z:1.96,3:1,10.15,20)) MW (x:1.98,8:1,(0.1,10)) TM (Z:1.96,3:1,(0.1,15)) WM (z:1:96,a:1,(0.1,15)) TM (Z:1,96,3:1,(0.1,20)) WM (X:1.96, a:1, (0.1, 20)) WM (Z:1,96,8:1,(0.15,10)) TM (Z:1.96, a:1, (0.15, 15)) CTM (Z:1,96,8:1,(0.15, 15)) TM (2:1.96, a:1, (0.15, 20)) TM (Z:1.96,3:1,(0.2,10)) WM (z.1.96, a.1, (0.2, 10)) CTM (Z:1.96.3:1,10.2,10)) WM (z:1.96,a:1,(0.2,15)) CTM (Z:1.96, 3:1, (0.2, 15)) TM (Z:1.96,a:1,(0.15,10)) WM (Z:1.96,8:1,(0.15, 15)) TM (Z:1.96,3:1,(0.2, 15)) Model (Parameters)