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 5, Data Variance of 4 (Outliers in out-of-control Period)  $ARL_1^{}$ CTM (z:1.96, a:1,(0.1, 15)) CTM (z.1.96, a.1, (0.1, 20)) SWM (z.1.96, a.1, 25) CTM (Z:1.96, a:1, (0.15, 10)) (Z:1, 96, a:1, 30) SWM (Z.1.96, a.1.15) WM (X:1.96,a:1,(0.1,10)) CTM (z:1.96,a:1,(0:1,10)) TM (Z:1.96, a:1, (0.1, 15)) WW (x:1.98,8:1,(0.1,15)) TM (Z:1.96, 2:1, (0.1, 20)) WM (Z:1.96, a:1, (0.1, 20)) CTM (Z:1.96,8:1,(0.15, 15)) TM (Z:1.96,a:1,(0.15,20)) WM (Z:1.96, 2:1, (0.15, 20)) CTM (Z:1,96,3:1,(0.15,20)) WM (z:1.96, a:1, (0.2, 10)) TM (Z:1,96,3:1,(0.2,15)) WM (Z:1.96, a:1, (0.2, 15)) CTM (z.1.96, a.1, (0.2, 15)) WM (Z:1.96,8:1,(0.15, 15)) TM (2:1.96,3:1,(0.2,10)) Model (Parameters)