Boxplot of ARL<sub>1</sub> for Various Models on Streaming Data with z and alpha: z:1.96 alpha:2.5, Mean Gap Size of 5, Data Variance of 4 (Outliers in in-control Period) CTM (Z:1.96, a.2.5, (0.15, 10)) (2:1.96, a.2.5, 30) CTM (2:1.96, a: 2.5, (0.1.10)) CTM (2:1.96,8:2.5,(0.1, 15)) CTM (2:1.96, 2:2.5, (0.1, 20)) SWM (2.1.96, a.2.5, 25) WM (2:1.96, 2:2.5, (0.15, 20)) SWM (2:1.96.3:2.5,20) WM (Z:1.96, 2:2.5, (0.1, 20)) WM (Z:1.96,8:2.5,(0.15,10)) CTM (Z:1.96,a:25,(0.15, 15)) TM (2:1.96, a:2.5, (0.15, 20)) CTM (2:1,96,a:25,10.15,20)) TM (Z.1.96, a.2.5, (0.2, 10)) WM (Z:1,96,8:25,(0.1,10)) TM (Z.1.96,a:2.5,(0.1, 15)) WM (Z:1,96,8:25,(0.1,15)) TM (Z.1.96,a:2.5,(0.1,20)) TM (Z:1.96, 8:2.5, (0.15, 10)) WM (Z:1.96, a:25, (0.2, 10)) CTM (2:1.96,3:2.5,10.2,10))

Model (Parameters)

100

 $ARL_1$