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

Model (Parameters)

12

ARL<sub>1</sub>