Boxplot of ARL₁ for Various Models on Streaming Data with z and alpha: z:1.96 alpha:2, Mean Gap Size of 10, Data Variance of 9 (Outliers in in-control Period) CTM (z:1.96, a:2, (0.1, 15)) a:2,20) CTM (Z:1.96, a:2, (0.1, 201) (Z:1.96, a:2, 25) CTM (Z:1.96, a:2, (0.15, 10)) (Z:1.96, a:2,30) TM (2:1,96,2:2,(0.1,10)) WM (2:1.96, a:2, (0.1, 10)) CTM (z:1.96, a:2, (0.1, 10)) TM (Z:1.96,3:2,(0.1,20)) WM (z:1.96, a:2, (0.1, 20)) WM (Z:1.96, 2:2, (0.15, 20)) TM (Z:1.96, 2:2, (0.2, 10)) WM (2:1.96, a:2, (0.2, 10)) CTM (2:1.96, a:2, (0.2, 15)) TM (Z:1.96,3:2,(0.1, 15)) WM (z:1.96,a:2,(0.1,15)) CTM (z:1.96,2:2,(0.15, 15)) TM (Z:1.96, a:2, (0.15, 20)) CTM (z:1.96,3:2,(0.15,20)) CTM (Z:1.96, 3:2, (0.2, 10))

Model (Parameters)

17.5

15.0

12.5

ARL₁