Boxplot of ARL<sub>1</sub> for Various Models on Streaming Data with z and alpha: z:2.5759 alpha:1, Mean Gap Size of 5, Data Variance of 9 (Outliers in in-control Period)

17.5

12.5

ARL<sub>1</sub> CTM (Z:2.5759, a:1, (0.1, 151) SWM (Z:2.5759, a:1, 20) CTM (2.2.5759, a.1, (0.15, 10))

CTM (2.2.5759, a.1, 30) CTM (Z:2.5759,a:1,10.15,201) CTM (2:2:5759, a:1, (0.1, 10)) WM (2:25759, 2:7, (0.1, 15)) TM [2:2.5759,3:1,(0.1,20)] WM (z:2.5759,a:1,(0.1,201) CTM (2:2:5759, a:1, (0.1, 20)) SWM (2:2.5759, a:1,25) WM (2:2.5759, a:1, (0.15, 10)) WM (z:2.5759,8:1,(0.15, 15)) CTM (2:2.5759,a:1,10.15,15)) TM (2:2.5759, a:1, (0.15, 20)) WM (2:2:5759,3:1,(0.15,20)) TM (2:2.5759, a:1, (0.2, 10)) WM (2:2.5759,a:1,10.2,10)) CTM (Z:2.5759, a:1, (0.2, 10)) TM (Z:2.5759,3:1,10.2,151) WM (z:2.5759,a:1,10.2,151) TM (Z:2.5759,8:1,(0.1, 151) TM (2:2.5759, a:1, (0.15, 10)) WM (2:2.5759, a:1, (0.1, 10)) Model (Parameters)