Boxplot of ARL₁ for Various Models on Streaming Data with z and alpha: z:2.5759 alpha:1.5, Mean Gap Size of 5, Data Variance of 1 (Outliers in in-control Period) CTM (2:2.5759, a:1.5, (0.15, 10))

CTM (2:2.5759, a:1.5, 30) CTM (Z:2.5759, 2:1.5, (0.1, 10)) CTM (Z:2:5759, 2:1.5,10.1,15)) WM (2:2.5759, a:1.5, (0.1, 20)) CTM (Z:2:5759, 2:1.5, (0.1, 20)) TM (Z:2.5759, a:1.5, (0.15, 10)) WM (z:2.5759,a:1.5,(0.15,10)) TM (Z:2.5759, a:1.5, (0.15, 201) WM (Z:2.5759,2:1.5,10.15,20)) CTM (2:2.5759, a:1.5, (0.15, 20)) WM (2:25759, a:1.5, (0.2.15)) CTM(Z:2.5759,3:1.5,10.2.15)) TM (2:2.5759, a: 1.5, (0.1, 15)) WM (Z:2.5759, a:1.5, (0.1., 15)) TM (2:2.5759, a: 1.5, (0.1, 20)) TM (Z:2.5759, a:1.5, (0.15, 15)) WM (2:2.5759, a:1.5, (0.15, 15)) CTM (Z:2.5759, a:1.5, (0.15, 15)) WM (2:2.5759, a:1.5, (0.2.10)) CTM (2:2.5759, a:1.5, (0.2, 10)) TM (2:2.5759, a: 1.5, (0.2, 15)) SWM (2:2.5759, a.1.5,20) SWM (2:2.5759, a.1.5,25) TM (2:2.5759, a: 1.5, (0.2, 10)) Model (Parameters)

12

 ARL_1