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 9 (Outliers in burn-in Period) 350 250 150 CTM (Z:1.96, 8:3, (0.1, 201) (Z:1.96, 2:3, 25) CTM (2:1.96, a:3, (0.1, 15)) SWM (2:1.96, a:3,20) CTM (X:1.96, a:3, (0.15, 10)) (X:1.96, a:3,30) WM (z:1.96, a:3, (0.1, 10)) TM (Z:1.96,3:3,(0.1,15)) WM (z:1.96, a:3, (0.1, 15)) TM (Z:1,96,3:3,(0.1,20)) WM (2:1:96, a:3, (0.1, 20)) TM (Z:1.96,8:3,(0.15, 15)) TM (2:1.96, a:3, (0.15, 20)) CTM (Z:1.96,3:3,(0.15,20)) TM (Z:1.96,3:3,(0.2,10)) WM (2:1.96, a:3, (0.2, 10)) WM (z:1.96, a:3, (0.2, 15)) CTM (z:1.96,a:3,(0.1,10)) SWM (2:1.96, a.3, 15) CTM (Z:1.96,8:3,(0.15, 15)) WM (Z:1.96, 8:3, (0.15, 20)) CTM (Z:1.96, 3:3, (0.2, 10)) TM (Z:1.96,2:3,(0.2, 15)) CTM (2:1.96, a:3, (0.2, 15)) Model (Parameters)