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 out-of-control Period)  $ARL_1$ 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) WM (z:1.96, a:3, (0.1, 16)) TM (Z:1.96, 2:3, (0.1, 20)) CTM (Z:1.96, 3:3, (0.15, 20)) WM (2:1.96,2:3,(0.1,10)) CTM (z:1.96,a:3,(0:1,10)) TM (Z:1.96, a:3, (0.1, 15)) WM (Z:1.96,2:3,(0.1,20)) CTM (z:1,96,8:3,(0.15, 15)) TM (Z:1.96, a:3, (0.15, 20)) WM (Z:1.96, 8:3, (0.15, 20)) TM (Z:1.96, 2:3, (0.2, 10)) WM (z:1.96, a:3, (0.2, 10)) TM (Z:1,96,3:3,(0.2,15)) CTM (z.1.96, a.3, (0.2, 15)) SWM (Z.1.96,2.3,15) CTM (Z:1.96,8:3,(0.15,10)) WM (Z:1.96,8:3,(0.15, 15)) Model (Parameters)