Boxplot of ARL<sub>1</sub> for Various Models on Streaming Data with z and alpha: z:1.96 alpha:1.5, Mean Gap Size of 10 and Data Variance of 4 (No Outliers)

12  $ARL_1$ CTM (2:1.96, a:1.5, (0.1, 10)) CTM (Z:1.96, 2:1.5, (0.1, 15)) WM (Z:1,96,2:1,5,(0.1,20)) CTM (2:1.96, a:1.5, (0.1, 20)) WM (Z:1.96, a:1.5, (0.15, 10)) CTM (Z:1.96,8:1.5,(0.15,10)) WM (z:1.96,a:1.5,10.15,15)) CTM (Z:1, 96, 8:1, 5, (0.15, 15)) WM (Z:1.96, a:1.5, (0.15, 20)) CTM (Z:1, 96, 2:1, 5, (0.15, 20)) WM (Z:1:96, 3:1, 5, (0:2, 10)) CTM (Z:1.96, a:1.5, (0.2, 10)) WM (Z:1,96,8:1,5,10.2,15)) CTM (Z:1.96, a:1.5, (0.2, 15)) WM (Z:1,96,8:1,5,(0.1.10)) SWM (2.1.96, a.1.5,15) TM (Z.1.96, B.1.5, (0.1.15)) WM (Z:1,96,8:1,5,10.1,15)) SWM (2.1.96, a.1.5,20) TM (2:1.96, a:1.5, (0.1, 20)) SWM (2.1.96, a.1.5,25) SWM (2.1.96, 3.1.5,30) TM (Z:1.96, 2:1, 5, (0.15, 15)) Model (Parameters)

16