Boxplot of ARL<sub>1</sub> for Various Models on Streaming Data with z and alpha: z:1.6449 alpha:1.5, Mean Gap Size of 1, Data Variance of 4 (Outliers in both\_in\_and\_out Period) 350 ARL<sub>1</sub> 100 50 CTM (Z:1.6449.3:1.5,10.1.1.6449.3:1.5,20) CTM (2:1.6449, a:1.5, (0.15, 10))

CTM (2:1.6449, a:1.5, 30) WM (2:1.6449, a:1.5, (0.1.10)) CTM (Z:1,6449, 3:1,5,(0.1, 10)) WM (Z:1.6449, 8:1.5, (0.1.15)) WM (2:1.6449, 3:1.5, (0.1, 20)) CTM (Z:1,6449,3:15,10.1,201) WM (Z:1,6449,a:1.5,10.15,10)) CTM (z.1.6449, a.1.5, (0.15, 15)) TM (Z:1.6449, 3:1.5, (0.15, 20)) WM (Z:1.6449, 2:1.5, (0.15, 20)) CTM (2:1.6449, a:1.5, (0.15, 20)) TM (2:1.6449, a:1.5, (0.2, 15)) WM (2:1.6449, a:1.5, (0.2.15)) CTM (Z:1,6449, a:1.5, (0.2, 15)) SWM (2.1. 6449, a.1.5, 15) TM (2:1.6449, a:1.5, (0.1.20)) TM (Z:1,6449, a:1,5,(0.15, 10)) TM (Z:1,6449, a:1,5,(0,15,15)) WM (z.1.6449, a.1.5, (0.15, 15)) TM (2.1.6449, 2.1.5, (0.2, 10)) WM (Z:1.6449, a:1.5, (0.2.10)) CTM (Z.1, 6449, a.1.5, (0.2, 10)) TM (Z:1,6449,2:1.5,10.2,20)) TM (Z:1.6449, a:1.5, (0.1.15)) Model (Parameters)