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, Data Variance of 1 (Outliers in in-control Period) CTM (Z:1.96, a:1.5, (0.1, 15)) SWM (Z:1.96, a:1.5, 20) CTM (2:1.96, a:1.5, (0.1, 20))
SWM (2:1.96, a:1.5, 25) CTM (Z:1.96, 2:1.5, (0.15, 10)) (Z:1.96, 2:1.5, 30) CTM (2:1.96, 2:1.5, (0:1.10)) TM (Z:1.96, 3:1, 5, (0.15, 15)) CTM (Z:1,96,a:1.5,(0.15, 15)) WM (Z:1.96,2:1.5,10.15,20)) CTM (Z:1.96, a:1.5, (0.15, 20)) WM (Z:1,96,8:1,5,(0.1,10)) SWM (Z.1.96, a.1.5, 15) TM (Z:1.96,a:1.5,(0.1.15)) WM (Z:1.96,8:1.5,(0.1.15)) TM [Z:1.96,a:1.5,[0.1,20]) WM (2:1.96, 2:1.5, (0:1, 20)) WM (Z:1.96,2:1.5,(0.15, 10)) WM (Z:1.96,8:1.5,(0.15, 15)) TM (Z.1.96, 2:1.5, (0.2, 10)) CTM (2:1.96,3:1.5,10.2,10)) WM (Z:1.96,8:1.5,10.2,15)) TM (Z:1.96,2:1.5,10.2,20)) TM (Z:1.96, 3:1.5, (0.15, 10)) TM (Z:1.96, 8:1, 5, (0.15, 20)) WM (Z:1.96,8:1.5,(0.2, 10)) TM (Z:1.96,a:1.5,10.2, 15)) CTM (Z:1.96,3:1.5,10.2,15))

Model (Parameters)

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 $ARL_1$