Boxplot of ARL_1 for Various Models on Streaming Data with z and alpha: z:1.96 alpha:2.5, Mean Gap Size of 10, Data Variance of 4 (Outliers in out-of-control Period)
ARL_1
18
16
14
12
10
8
6
4
SWM (z:1.96,a:2.5,10)
TM (z:1.96,a:2.5,(0.1, 10))
WM (z:1.96,a:2.5,(0.1, 10))
CTM (z:1.96,a:2.5,(0.1, 10))
SWM (z:1.96,a:2.5,15)
TM (z:1.96,a:2.5,(0.1, 15))
WM (z:1.96,a:2.5,(0.1, 15))
CTM (z:1.96,a:2.5,(0.1, 15))
SWM (z:1.96,a:2.5,20)
TM (z:1.96,a:2.5,(0.1, 20))
WM (z:1.96,a:2.5,(0.1, 20))
CTM (z:1.96,a:2.5,(0.1, 20))
SWM (z:1.96,a:2.5,25)
TM (z:1.96,a:2.5,(0.15, 10))
WM (z:1.96,a:2.5,(0.15, 10))
CTM (z:1.96,a:2.5,(0.15, 10))
SWM (z:1.96,a:2.5,30)
TM (z:1.96,a:2.5,(0.15, 15))
WM (z:1.96,a:2.5,(0.15, 15))
CTM (z:1.96,a:2.5,(0.15, 15))
TM (z:1.96,a:2.5,(0.15, 15))
WM (z:1.96,a:2.5,(0.15, 20))
CTM (z:1.96,a:2.5,(0.15, 20))
TM (z:1.96,a:2.5,(0.15, 20))
WM (z:1.96,a:2.5,(0.2, 10))
CTM (z:1.96,a:2.5,(0.2, 10))
TM (z:1.96,a:2.5,(0.2, 10))
WM (z:1.96,a:2.5,(0.2, 15))
CTM (z:1.96,a:2.5,(0.2, 15))
TM (z:1.96,a:2.5,(0.2, 15))
WM (z:1.96,a:2.5,(0.2, 20))
CTM (z:1.96,a:2.5,(0.2, 20))
Model (Parameters)