

Question 6.1

Describe a situation or problem from your job, everyday life, current events, etc., for which a Change Detection model would be appropriate. Applying the CUSUM technique, how would you choose the critical value and the threshold?

Continuing with my job's financial analysis aspects from previous homeworks... a change detection model would be appropriate when analyzing whether an asset (stock, fund, commodity, etc) has entered a new trading range, versus a quick spike in the asset's immediate price. You would use CUSUM on a larger time frame than 1m, 5m, etc. More likely, 1 hour or 4 hours. A critical value would be a value that slightly eclipses any short term trading spikes in a 1m or 5m timeframe.