smoothing data

12hr moving average and 1 day moving average did not work well. A clear trend could be easily established

used exponential smoothing for time series forecasting

it works in such a way that the 2nd value in the forecasting column corresponds to the 1st value in the original column that you plan to smooth.

the next value is determined from the previous value and by the error in prediction between the previous original and forecast value [2nd column] multiplied by a smoothing factor.

smoothing factor is between 0 and 1 (0 – forecast based on historical data, 1 – forecast based on last observation)

yt+1 = yt +(y0-yt)   
(y0-yt) is defined as the error from the previous prediction