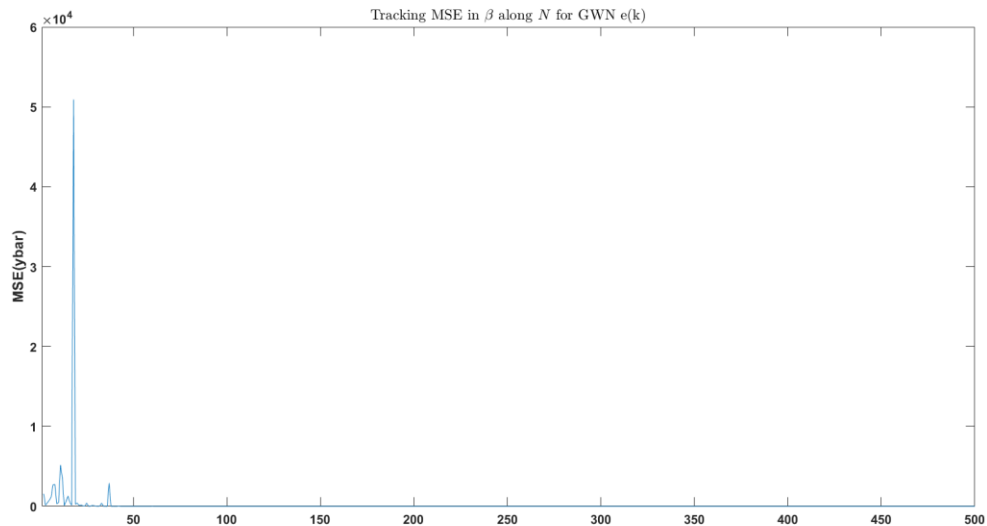


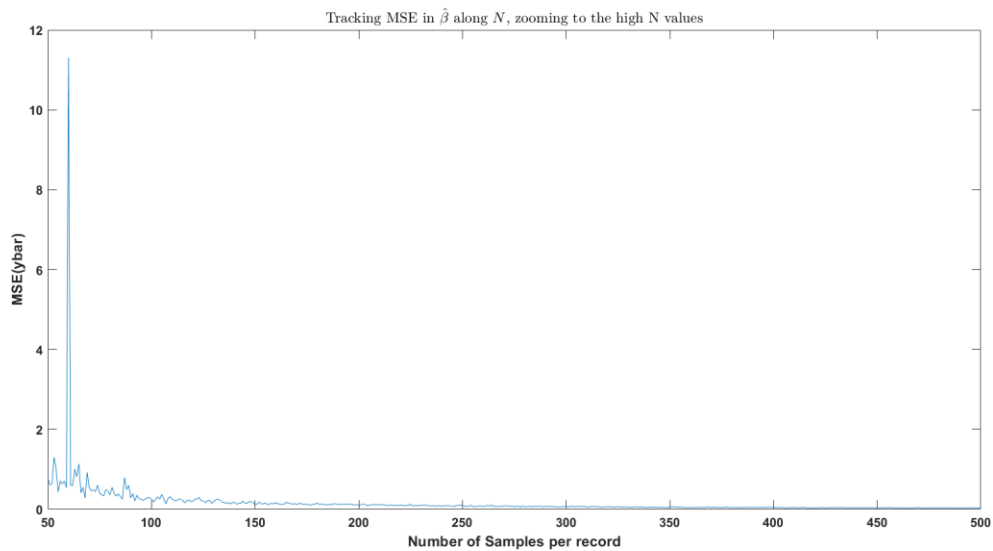
# Numerical verification of consistency

## MSE along N



Since the initial MSEs are very high, the y-scale is also bit high. Hence, I am attaching a graph of the MSEs after the errors fall down to a reasonable range. This is after  $N = 50$ .

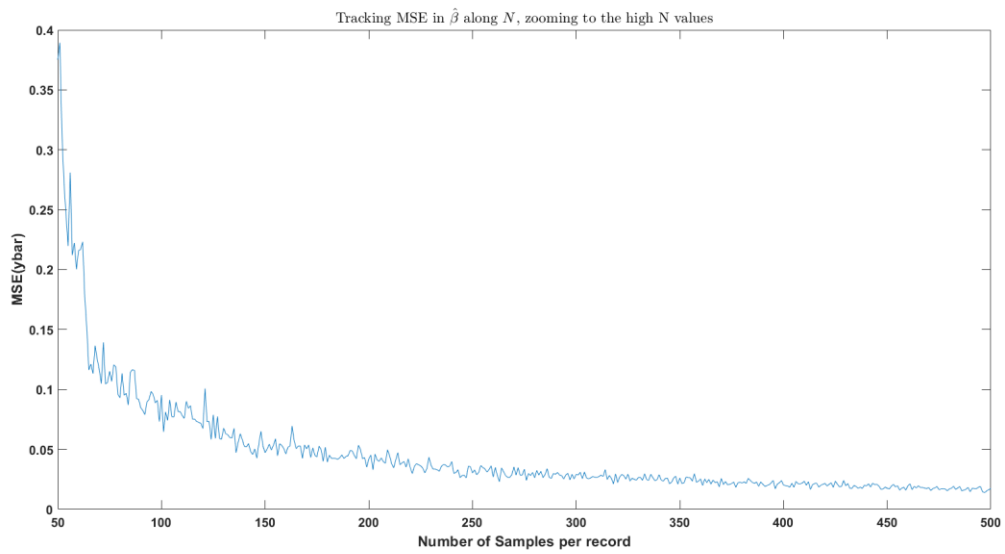
## MSE along N (zoomed)



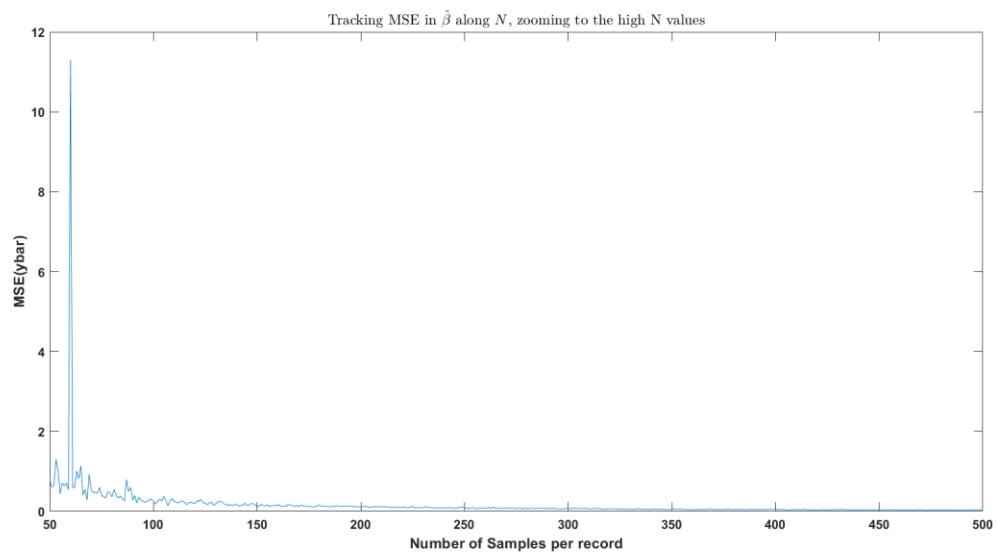
By examining the actual values, I saw that  $MSE < 0.05$  for sufficiently large number of samples.

## Comparing MSE at different $\sigma_e^2$

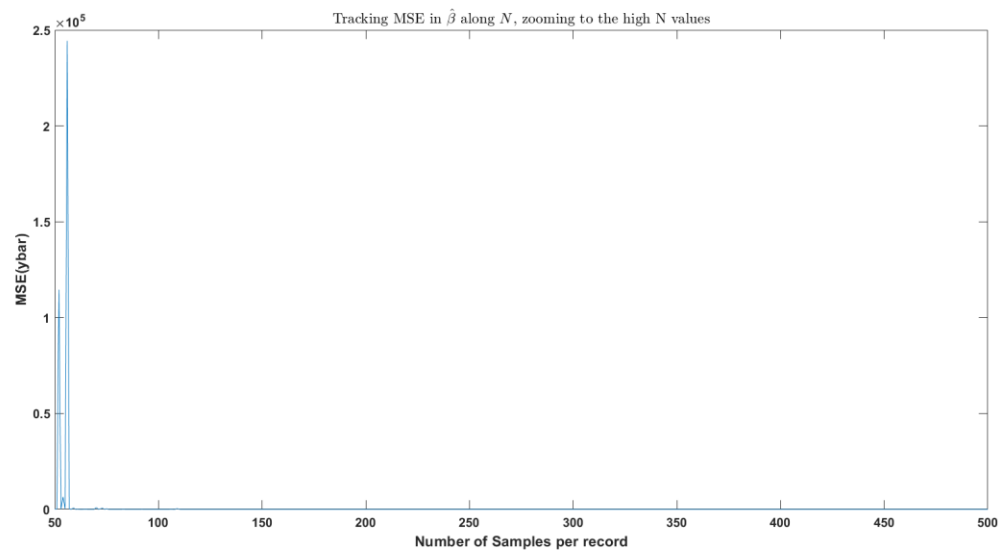
$\sigma_e^2 = 0.5$



$\sigma_e^2 = 1$



$$\sigma_e^2 = 2$$



From the above graphs we can see that the convergence is faster if the variance of the White Noise term is lower.