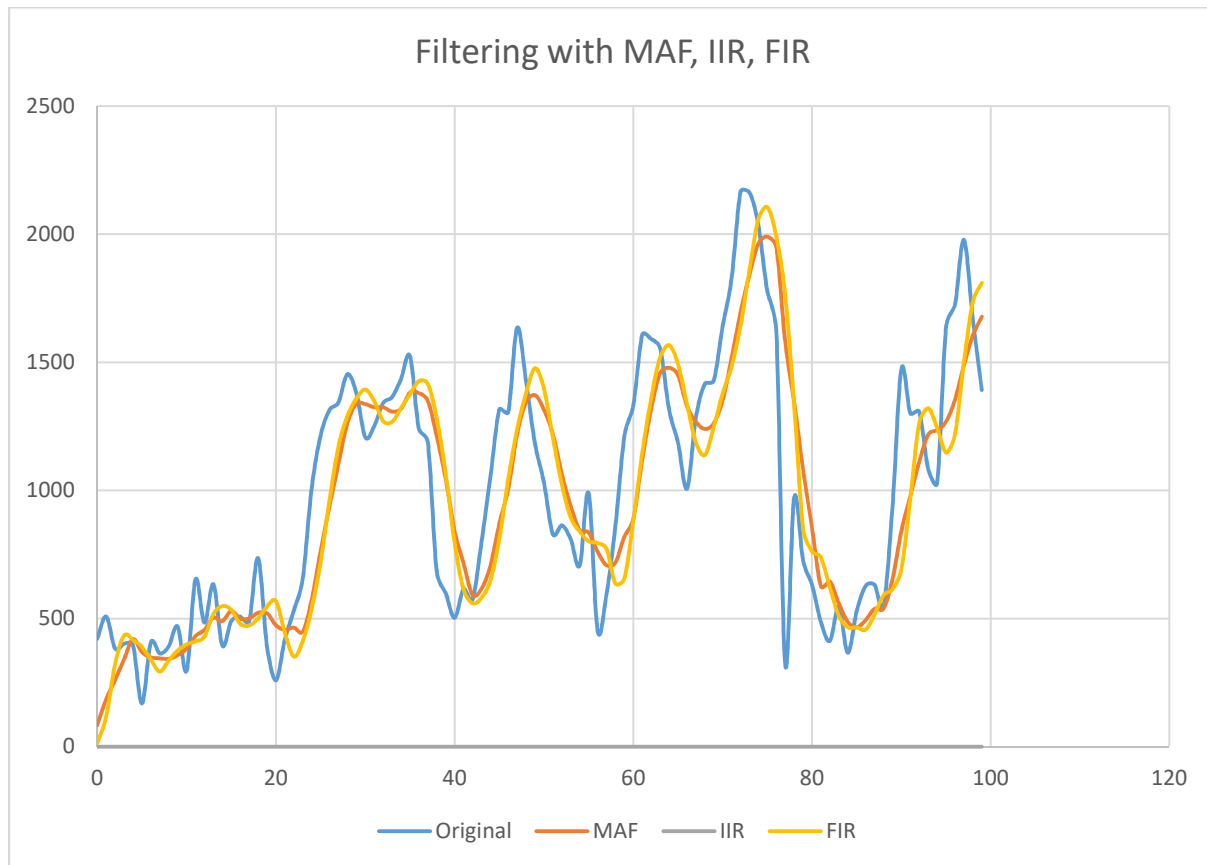


HW10:



I was unable to get the IIR filter to work and after some research thought it was not the best filter. Although it requires more calculations, I believe the **FIR filter worked best** at removing small bits of noise, while maintaining the original data. The FIR values were selected via the matlab function `fir1(4,0.1)` since we will use 5 samples and target a cutoff frequency of 5Hz, which is $1/10^{\text{th}}$ of half the data collection frequency of 100Hz. The weights for the FIR filter were:

0.0338 0.2401 0.4521 0.2401 0.0338