Clearly, the 20Hz low pass filter (lower figure) has not reduced the noise sufficiently from the raw signal (top figure). The 0.5 Hz filter (middle figure) has done a pretty good job of removing the noise. However, there still is some noise in the filtered signal.
The low pass 0.5 Hz RC filter (bottom) has the same response as the 1\textsuperscript{st} order Butterworth filter (top). The 3\textsuperscript{rd} order Butterworth filter response (middle) has a sharper cut-off at the corner frequency and results in less noise, but an increase phase lag from the additional 2 poles of the filter.