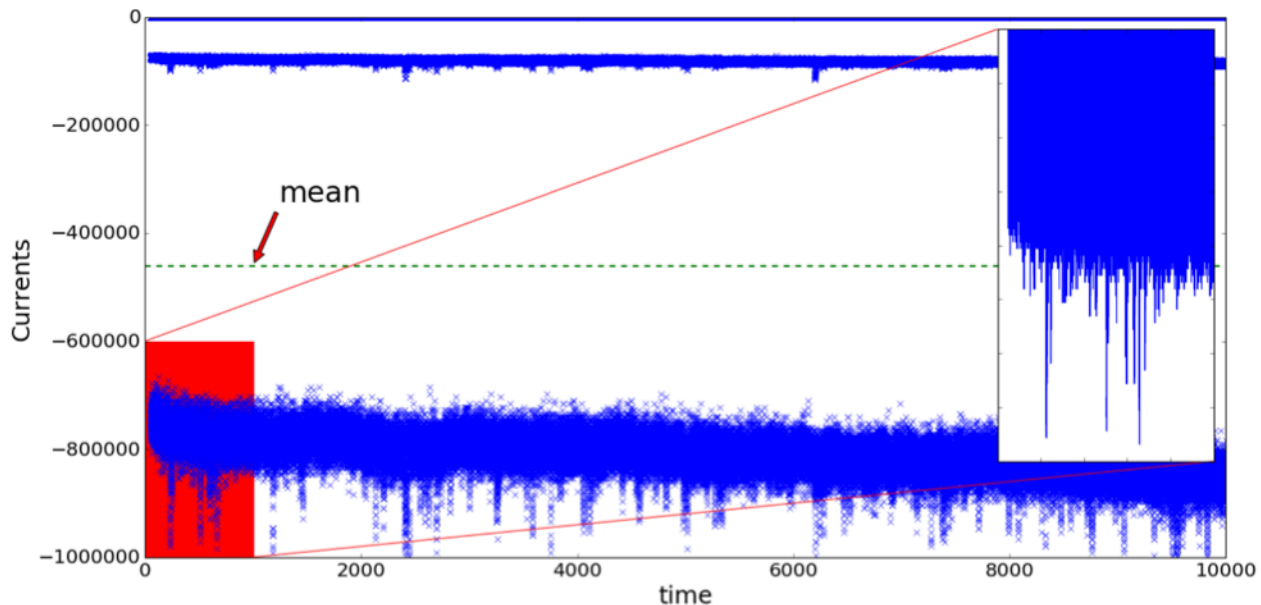# Work with the Sweep0_12.xlsx data
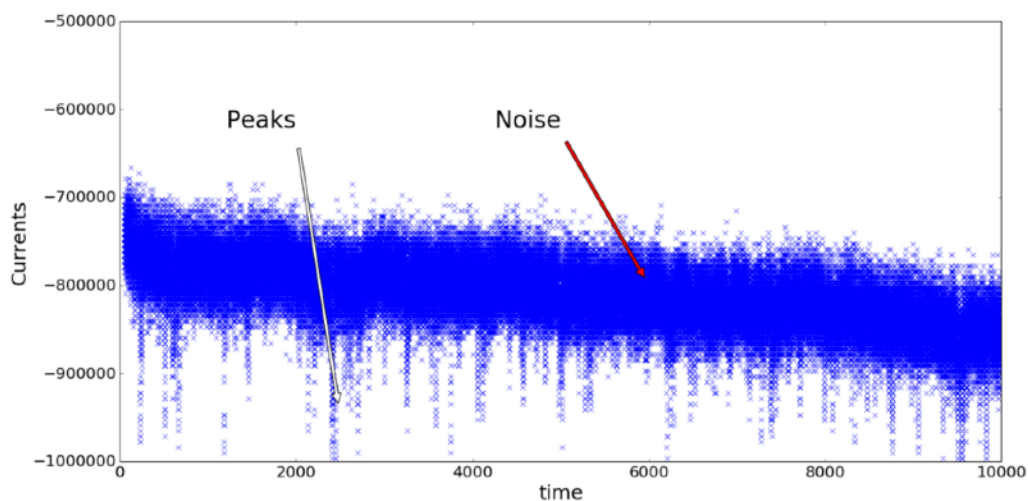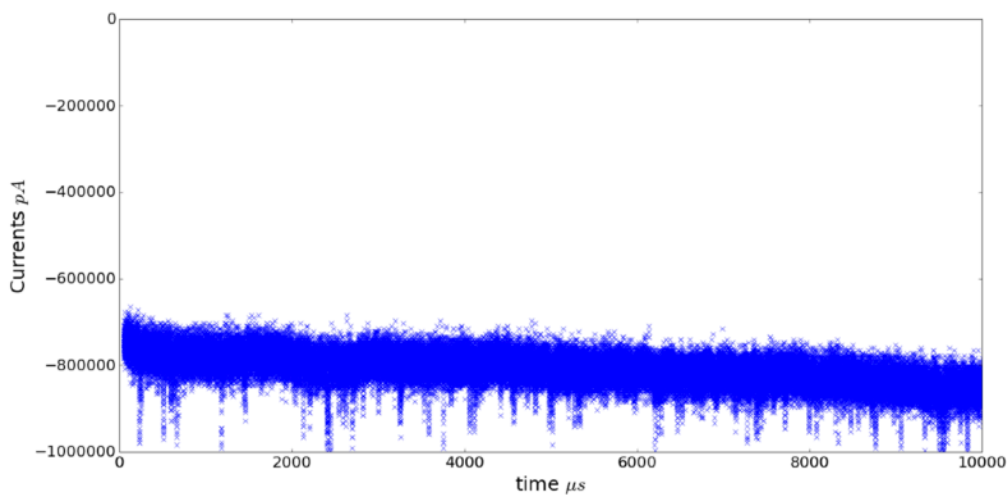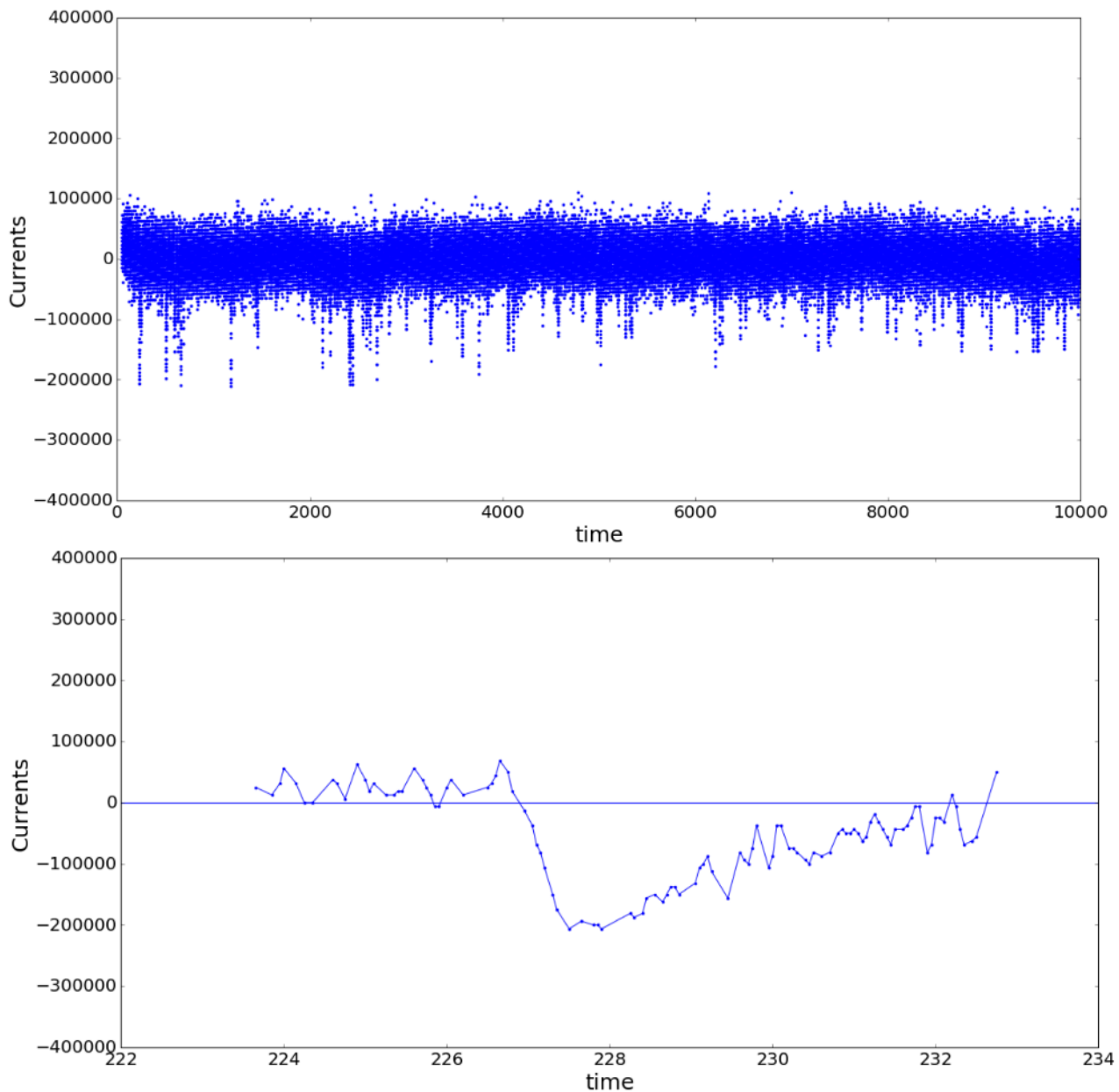
1. The actual data are the ones around -800000.
   Remove the cluster of points near 0.

2. Now your data should something like this. Now de-trend the data.

3. Detrended data will look like below and the zoomed-in plot shows high frequency noise. Now, plot frequency spectrum (power spectrum) of the data to see how does it look like.

4. Use appropriate filter to remove this high frequency noise (medianfiltering, frequency filtering e.g. butterworth, …. many methods are available)

5. Do peak detection.
6. Fit gaussian curve arround detected peak for width calculation.