## **Outline for Report**

A report of no more than 6 pages including plots.

Your plots etc should address the following.

- 1) Irregularities in the timebase and data gaps (ie intervals where there are no observations) what/where are they and how did you deal with them?
- 2) On what timescales (if any) is the signal time stationary?
- 3) Fourier methods: Can the signal be meaningfully decomposed in the frequency domain- is there different behaviour at low and high frequencies or not? Can the signal be meaningfully decomposed in the time domain- is there different behaviour at different times? Mention the resolution, accuracy, physical units of your spectra.
- 4) Wavelet methods: can the signal be meaningfully decomposed as a sum of signals on different scales?
- 5) Try to characterize the timeseries. Suggest a simple model (eg, an oscillation, a stochastic process) that most closely describes your signal.

## Extra-

What can you learn from more 'advanced methods' eg bispectra, structure function analysis?

NB all plots should be embedded as figures with figure captions. Units/normalization should be specified and plots should have some indication of errors/uncertainties.

**SCC**