GLEON 11 student workshop  
Sunday 17 October, 2010  
Title: "Tools for dealing with large datasets"

**Goals of workshop:**
1) To encourage thinking about data from a different perspective  
2) To get participants more comfortable with using GLEON sensor data in their research  
3) To share tools to work with large datasets and  
4) To facilitate more collaboration/sharing of skills between GLEON members

**Agenda:**

8:30-9:30am: Overview of issues that need to be considered when dealing with high-frequency sensor data, e.g. sensor error, outliers, calibration and drift.

9:30-11:30am: Five 15-20 minute case studies, given by GLEON students and scientists about how they deal with large datasets using a variety of tools. The scripts or programs presented will be distributed ahead of time. We will encourage attendees to interact with presenters and continue to ask questions during this time. The topics are as follows:

   a. Outlier removal  
   b. Sorting and manipulating text-based data  
   c. Time series statistics  
   d. How to make a heat map figure  
   e. Data manipulation (scenarios, e.g. unit conversions or wind speed transformation on large datasets)

12:30pm - TBA: Optional break out groups led individually by the 5 presenters. Participants can choose to learn more about the topics in smaller groups and ask additionally questions or address other issues.