Exercises in QC and visualize data

Time: 1:30min

The services that are presented in the morning will be used in the afternoon. These include at least the following:

Getting data from the internet:

- A MyOcean netcdf file example from ftp (CF/seadatanet compliant)
 - download (browser)
 - open using ODV (TODO test, should work now)
 - $^\circ\,$ plot profile and timeseries data from MyOcean FTP server (ODV)
 - Plot a T section from a float complete data (ODV)
- A WxS service
 - $^{\circ}~$ access wps service for tide using (owslib)
 - ° Tide service, check which constituents were used (numpy)
 - get background images using wms (owslib/basemap)
- Make a nice map of the tidal zones (matplotlib)
 Text files
 - Get data from PSMSL (python urllib, zipfile)
 - Data Quality
 - Checking the quality flags in MyOcean data (ncbrowse)
 - Check the quality of PSMSL data (browser)
- Analysis
- Analyze data
 - Plot Sea Level Time series from a tide gauge file (matplotlib)
 - Setup a MCMC model to determine trend breaks in sea-level rise (PyMCMC)

Tools to be used:

- ncbrowse or ncdump
- ODV for dataset (Sylvie will check if ODV will work with the myocean datasets.)
- python notebook example for tide and mapping
- libraries: numpy, scipy, owslib, basemap, matplotlib, PyMCMC

Check access for .. Real time data sea level:http://uhslc.soest.hawaii.edu/thredds/dodsC/uhslc/fdh/OS_UH-FDH347_20130423_D.html