

# Homework assignment #1

# OOI Bio-Optics Summer School

## Homework assignment #1 charge

- Creation of Simple plots:
  - Re-create the exemplars from the pre-work assignment and what we just covered
  - Raw AC-S spectra: L1 versus L2 processed data using Jupyter Hub and kdata
  - Temperature plots: CTD, ACS external, internal comparison and interpretations
  - Chl (fluorometric derived) versus Chl derived from absorption line height
- Interpretations
  - Why did the abs/attenuation spectrum change in the processing: comparison from raw AC-S data (L1) to final L2 product?
  - POC estimates using L2 data: what did you infer from this and what additional data do you need to understand POC patterns?
  - Is absorption by CDOM a factor in the data interpretations? Why or why not?
  - Interpretations on phytoplankton community structure: absorption spectra relative to pigment structure and absorption?
- Where did you struggle in working with the data sets?
  - Accessing the data?
  - Saving data: formats and using it for your own purpose?
  - Data formats and the OOI portal/ Jupyter Hub?
  - Understanding of how/processing steps of the curated data set?
  - Interpretations of the output data sets?
  - What other data do you need for investigating relationships to BGC parameters that may be of interest to you?