Recap laboratory exercise, July 13, 2015

AC-meters: measure Milli-Q, filtered DRE and total DRE

For absorption tube, plot:
raw data
Milli-Q corrected dissolved and total absorption
T corrected dissolved and total absorption AND dissolved and total attenuation
S corrected dissolved and total absorption AND dissolved and total attenuation
Total absorption minus dissolved absorption (both TS corrected).
Spectra for each scatter-corrected particulate absorption (different versions, one graph per version).

Spectrophotometer:
Wavelengths: 350 – 800 nm, slow scan speed, zero against air.
Pad samples:
Filter 100 mL seawater for blank – do one filter
Filter 400 mL for sample – do replicates

Seawater blank:
Plot raw blank pad spectrum
Plot blank pad spectrum with null value in IR subtracted

DRE particulate spectrum:
Scan pads with DRE water
Plot raw a_part pad spectrum with null value in IR subtracted
Plot a_part scan with blank spectrum subtracted

Methanol extract:
Pour hot methanol on blank and one DRE filter
Allow to sit for 10 min; add more hot methanol if necessary
Scan blank and DRE pad, and plot each step as above.
Derive a-phyt as the difference between fully corrected spectra for pads before and after methanol treatment.

Compare a_part(λ) between ac-meter and spectrophotometer.