CALIFORNIA CURRENT ECOSYSTEM (CCE)
A coastal upwelling biome

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Site News: Cross-shore fluxes associated with upwelling filaments

CCE Process Cruise P1706
1 June – 2 July 2017

Lagrangian Process Study
(free-drifting autonomous measurements combined w/ shipboard experiments)

- Driftarray
  (in situ growth, grazing)
- Drifting sediment traps
- CFE
  (C Flux Explorer)
- CF calib
  (C Flux calibration)
- R/V Roger Revelle

Autonomous coastal measurements and mesoscale mapping
(gliders and towed profilers)

- Spray ocean gliders
- Seasoar
- Moving Vessel Profiler
Quantifying exportable organic carbon pools in the CCE

Organic things we do: particulate organic matter (POM) export, dissolved and suspended organic carbon (TOC), FDOM, stable isotopes of OM, environmental (inside and outside cells) metabolomics, active microbial community composition, transcriptomics, OM degradation, OM lateral fluxes etc.
Interannual variability in mean surface PON concentrations in the CCE

PON anomaly relative to interannual (Multivariate ENSO Index) and decadal (North Pacific Gyre Oscillation) climate indices that are relevant for the CCE.

PON anomaly varies with nitrate anomaly at the base of the chlorophyll a maximum (data from the CalCOFI program as augmented by the CCE-LTER).