

Ocean Carbon and Biogeochemistry (OCB) Summer Workshop
Woods Hole Oceanographic Institution, Clark 507
July 20-23, 2015

POSTER LIST

On the morning of your designated poster session, please hang posters on the boards set up in the Clark 2 foyer (main entrance to the building) using the hanging materials provided. Posters must be taken down at the end of each day.

MONDAY, JULY 20

Atmospheric Nutrient Deposition: Impacts on Marine Ecosystems and Biogeochemical Cycles

- Ito, T.** et al., Anthropogenic aerosols and climate variability control decadal variability of dissolved oxygen in the North Pacific
- Rivero-Calle, S.** et al., Dust deposition and *Trichodesmium* increase in temperate North Atlantic from 1980-1990s
- Sedwick, P. N.** et al., Biological impact of wet deposition to seasonally oligotrophic waters: Experimental results from the U.S. eastern seaboard
- Somes, C. J.** et al., Oceanic feedbacks limit the impact of atmospheric nitrogen deposition on marine productivity
- St-Laurent, P.** et al., Comparing the impact of atmospheric nitrogen deposition and wind mixing on biological productivity during storm events
- Yang, S., N. Gruber,** The perturbation of the marine nitrogen cycle by atmospheric deposition

Evolving Views on Physical, Ecological, and Biogeochemical Underpinnings of Plankton Blooms

- Aardema, H. M.** et al., Phylogenetic and photo-physiological characterization of newly isolated diatoms from the Ross Sea (Antarctica)
- Dominguez, A.,** Triggering of phytoplankton bloom onset in the Southern Ocean
- Freeman, N. M., N. S. Lovenduski,** Mapping the Polar Front and implications for Southern Ocean biogeochemistry
- Haskell, W. Z. II** et al., O₂/Ar and ¹⁷Δ-based net and gross biological production reveal an annual cycle in export efficiency in a coastal upwelling region
- Laufkotter, C.** et al., Drivers of future changes in export production in marine ecosystem models
- Liu, X., N. M. Levine,** Submesoscale frontal heterogeneity enhances phytoplankton chlorophyll in the North Pacific Subtropical Gyre

- Liu, Y.** et al., Potential impact of climate change on the Intra-Americas Sea: A dynamic downscaling of the CMIP5 model projections
- Marki, A.** et al., Optimality-based model analysis of nitrogen and phosphorus cycling in mesocosm experiments of the Peruvian Upwelling Region
- Preischel, H.** et al., Fine scale phytoplankton diversity of Galveston Bay: Imaging FlowCytobot grants insight into microbial community dynamics
- Rosengard, S. Z.** et al., Ramped oxidation of particulate organic carbon from the Southern Ocean Great Calcite Belt
- Whitney L. P.** et al., Exploring drivers of picoeukaryote diversity and spatial distribution patterns in the North Atlantic
- Zhu, Z.** et al., Interactive effects of iron and temperature on Antarctic diatoms and *Phaeocystis antarctica*

General Interest

- Bachman, B. E.** et al., Planktonic food webs within two Sargasso Sea eddies
- Letscher, R. T.** et al., Preferential utilization of marine DOP and its role in shaping global patterns of productivity, nitrogen fixation, and closing gyre phosphorus budgets
- Najjar, R.** et al., Synergistic impacts of population growth, urbanization, and climate change on watersheds and coastal ecology of the northeastern United States
- Potter, H.** et al., Infrared imaging: A tool to study the impact of breaking waves on the marine environment
- Sherman, E.,** K. Moore, Explicit iron-ligand coupling in the CESM-BEC

TUESDAY, JULY 21

Studying Spatial and Temporal Variability in the Ocean with Shipboard and Autonomous Platforms

- Baer, S. E.** et al., Macronutrient Stoichiometry at the Bermuda Atlantic Time-series Study site and surrounding ocean
- Binetti, U.** et al., Dissolved oxygen concentration at the PAP site: resolving O₂ annual dynamics at an eddy rich site in the temperate North Atlantic using Seagliders
- Bockmon, E.,** A. G. Dickson, An inter-laboratory comparison assessing the quality of seawater carbon dioxide measurements
- Carranza, M. M.** et al., Mixed-layer depth, euphotic depth and Chl-a variability in the Southern Ocean
- De Martini, F.** et al., Cyanobacteria, too small to sink? Strain-specific contribution of cyanobacteria to the carbon export in the Sargasso Sea
- Howe, B. M.,** Enabling water column science at Station ALOHA: A profiling mooring system

- Kinsey, J.** et al., Satellites to the seafloor: Autonomous science to form a breakthrough in quantifying the global ocean carbon budget
- Lampitt, R.**, Luisa Cristini, Fixed point Open Ocean Observatory network (FixO³): Multidisciplinary observations from the air-sea interface to the deep seafloor
- Laperriere, S. M.** et al., A control volume approach for estimating nitrous oxide production and consumption in the Chesapeake Bay
- Long, M. H.** et al., Oxygen metabolism and pH in coastal ecosystems: The Eddy Covariance Hydrogen ion and Oxygen Exchange System (ECHOES)
- Lorenzoni, L.** et al., From the past to the future: Understanding ocean and climate variability through the CARIACO Ocean Time-Series
- Manning, C. C.** et al., Net and gross productivity during a Lagrangian experiment in coastal California
- Munro, D. R.** et al., Recent change in the Southern Ocean carbonate system based on time series observations in the Drake Passage
- Nicholson, D. P.** et al., Biogeochemistry from gliders at HOT and BATS
- Pagnani, M.** et al. (**Presenter: Stephen Diggs**), OceanSITES format and Ocean Observatory Output harmonisation: Past, present and future
- Palevsky, H. I.** et al., The annual cycle of gross primary production, net community production and export efficiency across the North Pacific Ocean
- Quay, P. D.** et al. (**Presenter: H. I. Palevsky**), Spatial variations in primary production and carbon export rates across the North Pacific: estimates from satellite algorithms, a biogeochemical model and tracer measurements from ships of opportunity
- Reed, A.** et al., Oxygen and nitrogen sensing gas floats
- Ruhl, H. A.** et al., Porthole: Evolving biological carbon pump research
- Santamaría-del-Angel, E.** et al., Climate change evaluated at marine time-series stations: The Antares Network, an effort of the Americas in long term studies
- Stanley, R.**, D. J. McGillicuddy, Jr., High-resolution oxygen and fluorescence sections reveal submesoscale hotspots of productivity and respiration
- Valdés, L.**, A. Bode, Sampling once... Using data multiple times
- Williams, N. L.** et al., Using MLR algorithms to predict pH and Ω_{Arag} and evaluate pH sensor performance on SOCCOM biogeochemical Argo profiling floats in the Southern Ocean

WEDNESDAY, JULY 22

Studying Spatial and Temporal Variability in the Ocean with Shipboard and Autonomous Platforms

- Bisagni, J. J.**, Salinity variability along the eastern continental shelf of Canada and the United States, 1973-2013
- Daley, M. C.** et al., Microbial community influenced by a cyclonic eddy in the North Atlantic Subtropical Gyre
- Estapa, M. L.** et al., A year-long record of particulate carbon export and net primary production from profiling floats in the Sargasso Sea

Lorenzoni, L., H. Benway, An integrated observation system of biogeochemical time-series

Sutton, A. J. et al. (**Presenter: A. Kozyr**), CDIAC data management and archival support for a high-frequency atmospheric and seawater $p\text{CO}_2$ data set from 14 open ocean moorings

Evolving Views on Physical, Ecological, and Biogeochemical Underpinnings of Plankton Blooms

Dunne, J. et al., Prototyping global earth system models at high resolution: The role of comprehensiveness touchstones across trade-offs of resolution, comprehensiveness and simulation length

Dutkiewicz, S. et al., Uncertainties in the timing of the spring bloom from space

Filliger, L. Z. et al., Characterizing Southern Ocean diatom community composition to establish ecologically relevant culture representatives for iron physiology experiments

John, J. G. et al., A more productive, but different ocean after mitigation

Lønberg, C. et al., Temperature dependence of ocean heterotrophic prokaryotic production

Rodgers, K. B. et al., Strong sensitivity of seasonal phasing of Southern Ocean carbon fluxes and upper ocean biogeochemistry to wind stirring

Rumyantseva, A. et al. (**Presenter: S. Henson**), Seaglider observations of phytoplankton spring bloom development in the North Atlantic Ocean

Santamaría-del-Angel, E. et al., Phytoplankton blooms in Mexico: An initiative using marine optics as a basis for monitoring programs

Shilova, I. N. et al., Nutrient co-limitation of phytoplankton in the central North Pacific Subtropical Gyre

Sosik, H. M. et al., Seasonal anomalies as proxies for phytoplankton community response to climate trends on a temperate continental shelf

General Interest

Chen, B. et al. (**Presenter: P. Sheldon**), Satellite monitoring of Boston Harbor water quality: Past and future

Kahru, M. et al., Evaluation of errors in satellite estimates of primary production and export production in the Southern Ocean

Mannino, A. et al., ARCTIC-COLORS - COastal Land Ocean inteRactions in the Arctic

Siegel, D. et al., Monitoring and predicting the export and fate of global ocean net primary production: The EXPORTS science plan

Stamieszkin, K. et al., Mesozooplankton grazing effects on particle size spectra

Tseng, C.-M. et al., Air-sea exchange of CO_2 in the East China Sea: Present synthesis and future changes