

Patrick C. Daniel

Monterey Bay Aquarium Research Institute
Information Manager, Central and Northern California Ocean Observing System
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EDUCATION

- 2018 **M.S. Marine Science (Expected Spring 2018)**
Moss Landing Marine Labs, Moss Landing, CA.
Thesis: “Contribution of wave-induced transport to nearshore phytoplankton variability” Advisor: Dr. Thomas Connolly
- 2010 **B.S. Biology, (Minor in Chemistry)**
University of San Francisco, San Francisco, CA

PROFESSIONAL EXPERIENCE

- 2018 - **Data and Information Manager**, MBARI, *Moss Landing, CA*.
Responsible for data management and communication (DMAC) efforts at Central and Northern California Ocean Observing System (CeNCOOS). Ensure the quality control and quality assurance of data streams ingested and archived by CeNCOOS and ensure that data streams are compliant with the standards currently set by IOOS. Responsible for developing and periodically reevaluating data stream plans and working with data providers to improve operating procedures. Responsible for maintaining the CeNCOOS webpage, built in the CMS, Drupal.
- 2015 - 2018 **Graduate Student Researcher**, MLML, *Moss Landing, CA*.
Analyzed a decade of high frequency radar surface current data, in-situ wave buoy measurements, and CeNCOOS shore station water quality data from the Northern California to elucidate the contribution of Stokes drift (wave induced transport) in nearshore phytoplankton variability. Built a 2D surface particle tracking model to track the origins of water masses and assessed the contribution of adding drift to the model.
- 2010 - 2018 **Life Science Technician**, Stanford University, *Pacific Grove, CA*.
Ingest, maintain, and analyze hydrographic profiles from the Peru and the Gulf of California, Mexico as part of an effort to centralize oceanographic sampling efforts in areas of traditionally sparse sampling. This included developing QA/QC tests and flags and reanalyzing 15 years of hydro casts. Responsible for maintaining and analyzing pop-up archival tag datasets as part of a project studying Humboldt squid migration and behavior. Coordinated logistics for and assist in field work in Monterey Bay, Mexico, and Peru. Built and maintained the lab webpage perform maintenance regularly.
- 2009 **Water Analyst Assistant**, University of San Francisco, *San Francisco, CA*

Worked with a team of students to develop a quality assurance project plan (QAPP) in accordance with National Park Service for monitored stream quality at Redwood Creek, Muir Woods, CA, in cooperation with the Big Lagoon Restoration Project led by the National Park Service.

PUBLICATIONS

Hoving, H. J. T., W.F. Gilly, U. Markaida, K.J. Benoit-Bird, Z. W. Brown, **P. Daniel**, B. Campos (2013). Extreme plasticity in life-history strategy allows a migratory predator (jumbo squid) to cope with a changing climate. *Global Change Biology*, 19, 2089–2103. doi:10.1111/gcb.12198.

E. Berkenpas, B. Henning, C. Shepard, A. Turchik, C. Robison, E. Portner, D Li, **P. Daniel**, W. F. Gilly. A Buoyancy-Controlled Lagrangian Camera-Platform for in situ Imaging of Marine Organisms in Midwater Scattering Layers. *IEEE Journal of Oceanic Engineering*. Accepted.

TECHNICAL SKILLS

Highly experienced in Python computing language for data analysis and visualization and web development as well as HTML/CSS for web development. Experienced in developing QA/QC protocols and adopting flagging protocols for oceanographic data and building out NetCDF files for disseminating oceanographic data. Highly experienced in deploying and analyzing SeaBird CTDs.

PRESENTATIONS

- 2017 Eastern Pacific Ocean Conference
“Examining the contribution of wave-induced transport to high neashore Chl-a anomalies”
- 2012 Monterey Bay National Marine Sanctuary Currents Symposium
“Extreme plasticity in life-history strategy allows a migratory predator to cope with climate change”

TEACHING ASSISTANT

Spring 2017 MLML MS263: Data Analysis Techniques in Oceanography
Fall 2017 MLML MS142: Physical Oceanography

FIELD EXPERIENCE

- **R/V *Bip XII*** (CIBNOR, Mexico) – February 2011 – 10 days in Gulf of California
- **F/V *Sandman*** (National Geographic) – May 2011 – 10 days in Gulf of California
- **R/V *New Horizon*** (NSF) – August 2011 – 21 days in Gulf of California
- **R/V *Kilo Moana*** (ONR) – June 2012 – 10 days in Hawaii
- **R/V *Meteor*** (GEOMAR, Germany) – November 2012 – 32 days outside EEZ, Peru
- **R/V *Bip XII*** (CIBNOR, Mexico) – February 2014 – 10 days in Gulf of California
- **R/V *Shana Rae*** (HMS) – November 2013 – 7 days in Monterey Bay
- **R/V *IMARPE V*** (IMARPE, Peru) – November 2014 – 12 days Piata, Peru
- **R/V *Puma*** (UNAM, Mexico) – June 2016 – 22 days in the Gulf of California
- **R/V *Puma*** (UNAM, Mexico) – June 2017 – 24 days in the Gulf of California