SeaBird SBE19 underway CTD information for the R/V Falkor 160115 cruise in the Central Pacific for the ProteOMZ expedition in 2016.

Website: https://www.bco-dmo.org/dataset/730925
Data Type: Cruise Results
Version: 1
Version Date: 2018-06-15

Project
» The ProteOMZ Expedition: Investigating Life Without Oxygen in the Pacific Ocean (ProteOMZ (Proteomics in an Oxygen Minimum Zone))

Contributors	Affiliation	Role
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Table of Contents

- Coverage
- Dataset Description
  - Methods & Sampling
  - Data Processing Description
- Data Files
- Related Publications
- Related Datasets
- Parameters
- Instruments
- Deployments
- Project Information
- Funding

Coverage

Spatial Extent: **N**:10.544984 **E**:-158.320979 **S**:-26.364655 **W**:-179.289931
Temporal Extent: 2016-01-16 - 2016-02-11

Dataset Description

These CTD data were originally served by R2R and can be accessed here: doi.org/10.7284/121562

CTD data collected during research cruise FK160115 using a Sea-Bird SBE-911+ instrument system onboard the platform RV Falkor.

Location: Tropical/equatorial Pacific along 150 deg W; Honolulu, Hawai'i to Pape'ete, French Polynesia

Methods & Sampling

Underway CTD (Conductivity, Temperature, Depth) data collected during research cruise FK160115 using a Sea-Bird SBE-911+ instrument system onboard the platform RV Falkor.

Data Processing Description

BCO-DMO Data Processing Notes:

- Data a served as they appear in the R2R catalog.

[table of contents | back to top]

Data Files

File	
FK160115_ctd.tar.gz	(GZIP (.gz), 39.73 MB) MD5:2558c4e751651e12e494c1050c19832b

[table of contents | back to top]

Related Publications

Rolling Deck To Repository. (2016). CTD (Conductivity, Temperature, Depth) data collected during research cruise FK160115 using a Sea-Bird SBE-911+ instrument system onboard the platform RV Falkor [Data set]. Rolling Deck to Repository (R2R) Program. https://doi.org/10.7284/121562
Results

[table of contents | back to top]

Related Datasets

IsRelatedTo

Saito, M. A., Saunders, J. (2022) **Relative protein abundance from scaled and corrected exclusive peptide spectral counts from the ProteOMZ R/V Falkor expedition cruise FK160115 in the Pelagic central Pacific Ocean in 2016.** Biological and Chemical Oceanography Data Management Office (BCO-DMO). (Version 1) Version Date 2022-01-13 doi:10.26008/1912/bco-dmo.868030.1 [view at BCO-DMO]
Relationship Description: This dataset was collected asynchronously using another instrument at the same stations during the expedition.

[table of contents | back to top]

Parameters

Parameters for this dataset have not yet been identified

[table of contents | back to top]

Instruments

Dataset-specific Instrument Name	SeaBird SBE19 CTD
Generic Instrument Name	CTD Sea-Bird
Dataset-specific Description	Used for water sampling
Generic Instrument Description	A Conductivity, Temperature, Depth (CTD) sensor package from SeaBird Electronics. This instrument designation is used when specific make and model are not known or when a more specific term is not available in the BCO-DMO vocabulary. Refer to the dataset-specific metadata for more information about the specific CTD used. More information from: http://www.seabird.com/

[table of contents | back to top]

Deployments

FK160115

Website	https://www.bco-dmo.org/deployment/708387
Platform	R/V Falkor
Report	https://service.rvdata.us/data/cruise/FK160115/doc/FK160115_OfficialCruiseReport_Saito_v3.pdf
Start Date	2016-01-16
End Date	2016-02-11
Description	Project: Using Proteomics to Understand Oxygen Minimum Zones (ProteOMZ) More information is available from the ship operator at https://schmidtocean.org/cruise/investigating-life-without-oxygen-in-the... Additional cruise information is available from the Rolling Deck to Repository (R2R): https://www.rvdata.us/search/cruise/FK160115

[table of contents | back to top]

Project Information

The ProteOMZ Expedition: Investigating Life Without Oxygen in the Pacific Ocean (ProteOMZ (Proteomics in an Oxygen Minimum Zone))

Website: https://schmidtocean.org/cruise/investigating-life-without-oxygen-in-the-tropical-pacific/#team

Coverage: Central Pacific Ocean (Hawaii to Tahiti)

From Schmidt Ocean Institute's ProteOMZ Project page:

Rising temperatures, ocean acidification, and overfishing have now gained widespread notoriety as human-caused phenomena that are changing our seas. In recent years, scientists have increasingly recognized that there is yet another ingredient in that deleterious mix: a process called deoxygenation that results in less oxygen available in our seas.

Large-scale ocean circulation naturally results in low-oxygen areas of the ocean called oxygen deficient zones (ODZs). The cycling of carbon and nutrients – the foundation of marine life, called biogeochemistry – is fundamentally different in ODZs than in oxygen-rich areas. Because researchers think deoxygenation will

greatly expand the total area of ODZs over the next 100 years, studying how these areas function now is important in predicting and understanding the oceans of the future. This first expedition of 2016 led by Dr. Mak Saito from the Woods Hole Oceanographic Institution (WHOI) along with scientists from University of Maryland Center for Environmental Science, University of California Santa Cruz, and University of Washington aimed to do just that, investigate ODZs.

During the 28 day voyage named “ProteOMZ,” researchers aboard R/V *Falkor* traveled from Honolulu, Hawaii to Tahiti to describe the biogeochemical processes that occur within this particular swath of the ocean’s ODZs. By doing so, they contributed to our greater understanding of ODZs, gathered a database of baseline measurements to which future measurements can be compared, and established a new methodology that could be used in future research on these expanding ODZs.

[table of contents | back to top]

Funding

Funding Source	Award
Gordon and Betty Moore Foundation: Marine Microbiology Initiative (MMI)	GBMF3782
Alfred P. Sloan Foundation (Sloan)	Unknown ProteOMZ Sloan Foundation
Schmidt Ocean Institute (SOI)	R/V Falkor 160115 SOI ProteOMZ Expedition

[table of contents | back to top]