

CTD data from the Wave Glider AUV Honey Badger collected in October and November of 2015 during a near-surface Eastern North Pacific Ocean deployment (MAGI project)

Website: <https://www.bco-dmo.org/dataset/654013>

Data Type: Other Field Results

Version:

Version Date: 2016-08-15

Project

» [Long Duration AUVs as tools to explore Mesoscale feature aggregate interactions \(MAGI\)](#) (MAGI)

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Coverage

Spatial Extent: N:29.47909 E:-144.82668 S:19.99672 W:-156.05396

Temporal Extent: 2015-10-27 - 2015-11-03

Dataset Description

These data from the Sea-Bird Glider Payload CTD (GPCTD) include latitude, longitude, temperature, pressure, conductivity, and salinity collected by the AUV Honey Badger (Wave Glider model V2) from October to November of 2015 in the North Pacific Ocean.

For more information on project MAGI and a description of Honey Badger, see: <http://oceanview.pfeg.noaa.gov/MAGI/>

Additional support was provided by the PacX Challenge from Liquid Robotics, Inc.

Methods & Sampling

The AUV Honey Badger is a Wave Glider(R) (model SV2) from Liquid Robotics. It was deployed from the Island of Hawaii in May of 2015 as part of Mesoscale Features Aggregate Interactions (MAGI) project.

For more information on project MAGI and a description of Honey Badger, see: <http://oceanview.pfeg.noaa.gov/MAGI/>

Data Processing Description

These data are raw telemetry data obtained through the Wave Glider management system at Liquid Robotics, International.

For more information about this software please see the Liquid Robotics Software Page:

<http://www.liquid-robotics.com/platform/software/>

BCO-DMO Data Manager Processing Notes:

- * added a conventional header with dataset name, PI name, version date
- * modified parameter names to conform with BCO-DMO naming conventions
- * blank values replaced with no data value 'nd'
- * latitude and longitude were rounded to 5 decimal places from 12.
- * values of "NaN" and "nan" changed to "nd"

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Data Files

File
ctd.csv (Comma Separated Values (.csv), 210.93 KB) MD5:851e936964cdd962863696bbf24c7bdd Primary data file for dataset ID 654013

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Parameters

Parameter	Description	Units
ISO_DateTime_UTC	Time (UTC) in format YYYY-mm-ddTHH:MM:SS[.xx]Z	unitless
lat	Latitude	decimal degrees
lon	Longitude; west is negative	decimal degrees
temp	Temperature	degrees Celcius
press	Pressure	decibars
cond	Conductivity	Siemens per meter
O2_uncal	Dissolved Oxygen (uncalibrated)	unknown
sal	Salinity	practical salinity units

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Instruments

Dataset-specific Instrument Name	GPCTD
Generic Instrument Name	Sea-Bird Glider Payload CTD
Generic Instrument Description	The GPCTD is a modular instrument for autonomous gliders. For more information see: http://www.seabird.com/glider-payload-ctd

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Deployments

HoneyBadger2015

Website	https://www.bco-dmo.org/deployment/653275
Platform	AUV Honey Badger
Start Date	2015-10-31
End Date	2015-11-04
Description	The AUV Honey Badger is a Wave Glider(R) (model SV2) from Liquid Robotics. It was deployed from the Island of Hawai'i in May of 2015 as part of Mesoscale Features Aggregate Interactions (MAGI) project. The trackline is in the North Pacific Ocean and passes the ocean time-series station ALOHA. For more information on project MAGI and a description of Honey Badger, see: http://oceanview.pfeg.noaa.gov/MAGI/

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Project Information

Long Duration AUVs as tools to explore Mesoscale feature aggregate interactions (MAGI) (MAGI)

Coverage: Eastern N. Pacific central gyre

NSF award abstract:

Remote areas of the ocean are difficult to sample for short-lived or episodic features. This project will use a new sampling platform, the Wave Glider, and provide a continuous presence in the central North Pacific gyre. The six month duration of the mission will allow repeated sampling as well as spatial coverage previously unavailable. This mission will incorporate phytoplankton specific sensors as well as a set of optical sensors that will provide information on distribution, physiology and aggregation of a unique diatom-nitrogen fixing cyanobacterium symbiosis. When completed, this program will have generated the first data sets that follow these diatom blooms over extended periods in the region. Access to this instrumentation was facilitated by the PacX challenge, an international competition to produce high quality research from long-duration autonomous vehicles in the North and South Pacific Ocean. As a result of winning that competition, the principal investigator has been awarded the use of 6 months of the Honey Badger Wave Glider time in 2014. The Wave Glider is a wave-powered surface vessel capable of extended duration missions. In order to maximize this the principal investigator will outfit the glider with advanced sensors to quantify zones of intense diatom activity and aggregation along mesoscale features in the Pacific (Project MAGI: Mesoscale feature-AGgregate Interactions).

Note: This project is funded by an NSF RAPID award.



The Honey Badger Team, image courtesy of Tracy Villareal



Honey Badger, image courtesy of Tracy Villareal

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Funding

Funding Source	Award
NSF Division of Ocean Sciences (NSF OCE)	OCE-1430048

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