

# Sea Surface Temperature and Meteorological Mooring

## Identification\_Information:

### Citation:

#### Citation\_Information:

Originator: Brainard, R. E.

Publication\_Date: 20021001

Title: Near Real Time Sea Surface Temperature and Meteorological Conditions from CREWS Standard Mooring at Maro Reef, NW Hawaiian Islands

Online\_Linkage: [http://crei.nmfs.hawaii.edu/oceanography/moorings/21529/data/21529\\_full\\_Slunits.asc](http://crei.nmfs.hawaii.edu/oceanography/moorings/21529/data/21529_full_Slunits.asc)

### Description:

Abstract: Site: Maro Reef, NW Hawaiian Islands 25.45, -170.63

Time series data from this mooring provide high resolution sea surface temperature, surface atmospheric pressure, air temperature, compass, and wind velocity components (U/V) ; for the surrounding coral reef ecosystem. Data telemetry also serves to alert researchers to the potential of imminent or ongoing coral reef bleaching or other natural events (hurricanes, storm damage, cooling, etc.) so that additional field observations and data collection efforts can be initiated, if warranted.

Purpose: In situ monitoring of SST and meteorological conditions to correlate local conditions to coral health.

Data telemetry to provide indications of current and imminent events. Provide ground truthing of various remote sensing products.

### Time\_Period\_of\_Content:

#### Time\_Period\_Information:

##### Range\_of\_Dates/Times:

Beginning\_Date: 20021001

Ending\_Date: present

Currentness\_Reference: present

### Status:

Progress: In Work

Maintenance\_and\_Update\_Frequency: Daily

### Spatial\_Domain:

#### Bounding\_Coordinates:

West\_Bounding\_Coordinate: -170.6301

East\_Bounding\_Coordinate: -170.6299

North\_Bounding\_Coordinate: 25.4501

South\_Bounding\_Coordinate: 25.4499

### Keywords:

#### Theme:

Theme\_Keyword\_Thesaurus: CoRIS Discovery Keywords Version 1.0

Theme\_Keyword: Numeric Data Sets > Oceanographic

#### Theme:

Theme\_Keyword\_Thesaurus: CoRIS Theme Keywords Version 1.0

Theme\_Keyword: Physical oceanographic data > Temperature > Sea Surface Temperature (SST)

Theme\_Keyword: EARTH SCIENCE > Oceans > Ocean Temperature > Sea Surface Temperature

Theme\_Keyword: Meteorological data > Temperature - air

Theme\_Keyword: EARTH SCIENCE > Atmosphere > Atmospheric Temperature > Air Temperature

Theme\_Keyword: Meteorological data > Barometric pressure

Theme\_Keyword: Meteorological data > Wind

Theme\_Keyword: EARTH SCIENCE > Atmosphere > Atmospheric Winds > Surface Winds

Theme\_Keyword: Coral reef > Coral reef monitoring and assessment > In situ meteorological

Theme\_Keyword: EARTH SCIENCE > Biosphere > Zoology > Corals > Reef monitoring and assessment > In situ meteorological

Theme\_Keyword: Coral reef > Coral reef monitoring and assessment > In situ physical

### Place:

Place\_Keyword\_Thesaurus: CoRIS Place Keywords Version 1.0

Place\_Keyword: OCEAN BASIN> Pacific Ocean > Central Pacific Ocean > Hawaiian Islands > NW Hawaiian Islands > Maro Reef (25N170W0001)

Place\_Keyword: COUNTRY/TERRITORY > United States of America > Hawaii> Honolulu > Maro Reef (25N170W0001)

Access\_Constraints: None

Use\_Constraints: Preliminary data. Not appropriate for use in publications

Browse\_Graphic:

Browse\_Graphic\_File\_Name: [http://crei.nmfs.hawaii.edu/oceanography/maps/21529\\_standard.jpg](http://crei.nmfs.hawaii.edu/oceanography/maps/21529_standard.jpg)

Browse\_Graphic\_File\_Description: Time series plot of, roughly, hourly sea surface temperature(ordinate) versus time(abscissa)

Browse\_Graphic\_File\_Type: "JPG"

Distribution\_Information:

Distributor:

Contact\_Information:

Contact\_Person\_Primary:

Contact\_Person: Ronald Hoeke

Contact\_Organization: NOAA Fisheries Honolulu Laboratory Coral Reef Ecosystem Investigation

Contact\_Address:

Address\_Type: Mailing Address

Address: 1125B Ala Moana Blvd.

City: Honolulu

State\_or\_Province: HI

Postal\_Code: 96814

Contact\_Voice\_Telephone: (808) 592-7028

Distribution\_Liability: Disclaimer- While every effort has been made to ensure that these data are accurate and reliable within the limits of the current state of the art, NOAA cannot assume liability for any damages caused by any errors or omissions in the data, nor as a result of failure of the data to function on a particular system. NOAA makes no warranty, expressed or implied, nor does the fact of distribution constitute such a warranty.

Standard\_Order\_Process:

Digital\_Form:

Digital\_Transfer\_Information:

Format\_Name: ASCII

Format\_Information\_Content: CREI CREWS Mooring Header File

Telemetered datasets from the NOAA Fisheries Honolulu laboratory. Data columns are defined below. Units follow Systeme International(SI). Missing values are flagged with "nan"(not a number). Date/time are reported in UTC unless specified as local time zone. (Note The full scientific dataset will be uploaded upon recovery of the buoy. In the full dataset all times are indexed to UTC.)

column 01= Argos ID number

column 02= Year of observation(YYYY)

column 03= Month of observation(MM)

column 04= Day of observation(DD)

column 05= Hour of observation(0- 23)

column 06= Compass value, (N | 0-360); degrees (every 6 hours)

column 07= Status of buoy's main battery(volts)

column 08= U component of Wind Speed; z = 2 m; meters/sec

column 09= V component of Wind Speed; z = 2 m; meters/sec

column 10= Atmospheric pressure at z = 1.8 m; millibars

column 11= Sea surface temperature at z = -0.3m; degrees C; (SBE39, Seabird Electronic Inc.)

column 12 = Conductivity; (unused, no values) 0.000 - 8.191 S/m

column 13 = Air temperature at z = 2 m; degrees C;

column 14 = Day of year (DDD | 1-366)

Online\_Option:

Computer\_Contact\_Information:

Network\_Address:

Network\_Resource\_Name:

[http://crei.nmfs.hawaii.edu/oceanography/moorings/21529/data/21529\\_full\\_Slunits.asc](http://crei.nmfs.hawaii.edu/oceanography/moorings/21529/data/21529_full_Slunits.asc)

Fees: on-line data are available free of charge

Metadata\_Reference\_Information:

Metadata\_Date: 20030508

Metadata\_Contact:

Contact\_Information:

Contact\_Person\_Primary:

Contact\_Person: Sun He Bak

Contact\_Organization: NOAA Fisheries Honolulu laboratory Coral Reef Ecosystem Investigation

Contact\_Address:

Address\_Type: Mailing Address

Address: 1125B Ala Moana Blvd.

City: Honolulu

State\_or\_Province: HI

Postal\_Code: 96814

Contact\_Voice\_Telephone: (808) 592-7022

Metadata\_Standard\_Name: FGDC Content Standard for Digital Geospatial Metadata

Metadata\_Standard\_Version: FGDC-STD-001-1998