

## Abstract

Temperature loggers were deployed at various monitoring sites off the upper Florida Keys where other ecological studies were underway, most focused on aspects of *Acropora* spp. status or ecology. Hobo Tidbit® or Pendant® loggers were secured to the substrate at a site and were programmed to record temperature every thirty minutes. In most cases loggers were exchanged every 3-4 months. Gaps in the data exist where loggers failed or were lost. Data collection began in 2003 and is ongoing at certain sites. The time ranges vary at each site. Sites include reef tract and patch reef sites from as far north as Turtle Rocks to as far south as Little Conch Reef.

## Methods

Water temperature loggers were deployed at various reef sites off the upper Florida Keys where *Acropora* spp related research activities (monitoring or experiments) were conducted. The loggers were one of four types: either Stowaway TidbiT (model: TBI32-20+50; Range -20°C to 50°C; Accuracy:  $\pm 0.5^\circ\text{C}$  from 0° to 50°C; Resolution: 0.02°C at 25°C), HOBO MX TidbiT 400 (model: MX2203; Range -20°C to 70°C; Accuracy:  $\pm 0.2^\circ\text{C}$  from 0° to 70°C; Resolution: 0.01°C at 18°F), HOBO MX TidbiT 5000 (model: MX2204; Range -20°C to 70°C; Accuracy:  $\pm 0.2^\circ\text{C}$  from 0° to 70°C; Resolution: 0.01°C), or HOBO PENDANT (UA-001-64; Range: -20° to 70°C; Accuracy:  $\pm 0.53^\circ\text{C}$  from 0° to 50°C; Resolution: 0.14°C at 25°C)- all made by Onset Computer Corporation. Loggers were secured to the substrate out of direct sunlight but in an area with adequate water flow and were set to record the ambient water temperature at 30 minute intervals.

## Files included:

- InventorySites\_Dates.csv: provides the location coordinates and the dates of data coverage for each site
- InventorySites\_Dates.kml: KML file showing location of each site
- Individual .csv files containing all temperature data for each site:

AAA AA-A.csv	Grecian GR-B.csv	NorthNorthDryRocks NNDR-A.csv
Aquarius AQ-A.csv	Grecian Rocks GR_DRM.csv	Pickles PI_DRM.csv
Carysfort CF_DRM.csv	Horseshoe HS-A.csv	Pickles PI-A.csv
Carysfort CF-A.csv	Horseshoe HS-B.csv	Pickles PI-B.csv
Carysfort CF-B.csv	KeyLargoDryRocks KL-A.csv	Pickles PI-C.csv
Conch Shallow CS-A.csv	KeyLargoDryRocks KL-B.csv	Pickles PI-D.csv
CRF Nursery CRF-A.csv	KeyLargoDryRocks KL-C.csv	SandIsland SI-A.csv
Elbow EL-A.csv	LittleConch LC-A.csv	SandIsland SI-B.csv
Elbow EL-B.csv	Molasses ML-A.csv	SouthCarysfort SC-A.csv
Elbow EL-C.csv	Molasses ML-B.csv	TavPatchA TV-A.csv
French FR-A.csv	Molasses ML-C.csv	TurtleRocks TR-A.csv
French FR-B.csv	NorthDryRocks NDR-A.csv	WhiteBank WB-A.csv
French FR-C.csv	NorthDryRocks NDR-B.csv	WhiteBank WB-B.csv
Grecian GR-A.csv	NorthNorthDryRocks NN-A.csv	

**Data Fields:**

Field Name	units (if applicable)	Description
SiteName		Name of site where Logger was deployed
Site		Abbreviated Site name that typically corresponds to project-specific site labels.
Start Date		Earliest day where temperature data are available (range may not be continuous)
End Date		Latest day where temperature data are available (range may not be continuous)
Days with data		Number of days between start and end date where temperature data are available
Depth(m)	meters	Approximate depth in meters of the deployed temperature logger
Lat	decimal degrees	Approximate Latitude where the temperature logger was deployed during the date range listed
Lon	decimal degrees	Approximate Longitude where the temperature logger was deployed during the date range listed
DateTime	MM/DD/YYYY HH:MM:SS	Date and Time stamp of logged temperature
Temp©	degrees celsius	Temperature in degrees celsius recorded by the logger
Logger Type		Either Stowaway TidbiT (model: TBI32-20+50; Range -20°C to 50°C; Accuracy: $\pm 0.5^{\circ}\text{C}$ from 0° to 50°C; Resolution: $0.02^{\circ}\text{C}$ at $25^{\circ}\text{C}$ ), HOBO MX TidbiT 400 (model: MX2203; Range -20°C to 70°C; Accuracy: $\pm 0.2^{\circ}\text{C}$ from 0° to 70°C; Resolution: $0.01^{\circ}\text{C}$ at $18^{\circ}\text{F}$ ), HOBO MX TidbiT 5000 (model: MX2204; Range -20°C to 70°C; Accuracy: $\pm 0.2^{\circ}\text{C}$ from 0° to 70°C; Resolution: $0.01^{\circ}\text{C}$ ), or HOBO PENDANT (UA-001-64; Range: -20° to 70°C; Accuracy: $\pm 0.53^{\circ}\text{C}$ from 0° to 50°C; Resolution: $0.14^{\circ}\text{C}$ at $25^{\circ}\text{C}$ )- all made by Onset Computer Corporation