

39481

**Subject:** Fwd: FKNMS water temperature data.  
**From:** Jeff Anderson <Jeff.Anderson@noaa.gov>  
**Date:** Thu, 06 Mar 2008 14:29:10 -0500  
**To:** Francis Mitchell <Francis.Mitchell@noaa.gov>

Francis,

Hello again. How is everything going? Hopefully all is well. As requested, here is the original submission for the Bicentennial Coral Head station water temp. data. I've been trying to use the NODC database to obtain a complete list of all the FKNMS stations, to learn if there are any others that have been missed. It doesn't look like I can create a query to list all Accession Numbers for a particular Submitter. Is that correct, or am I doing something incorrectly?

Thank you again for your help. If you have any questions or concerns, please don't hesitate to contact me.

Take care.

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Jeff Anderson  
Damage Assessment and Resource Protection Team  
Florida Keys National Marine Sanctuary  
305-852-7717, ext. 38  
305-853-0877 (FAX)

----- Original Message -----

**Subject:** FKNMS water temperature data.  
**Date:** Fri, 04 Aug 2006 16:40:01 -0400  
**From:** Jeff Anderson <Jeff.Anderson@NOAA.gov>  
**To:** Francis Mitchell <Francis.Mitchell@noaa.gov>  
**CC:** Donald.Collins@noaa.gov  
**References:** <1fbfb31f77a5.1f77a51fbfb3@noaa.gov> <43E791BC.1060009@noaa.gov>

Francis,

Hello. How are you doing? Hopefully all is well. This is being written to provide our next full data submission for one of the bottom water temperature monitoring stations in the FL Keys.

The first 3 files contain the meta data for the project in general, and the station in particular. The last file is the compressed data file. When extracted, the compressed file should contain the comma-separated data for the station.

If you have any questions or concerns with the data, or the method we submitted it, please don't hesitate to let us know.

Thank you very much and take care.

Jeff Anderson  
Coral Restoration Monitoring Team  
Florida Keys National Marine Sanctuary  
305-852-7717, ext. 38  
305-853-0877 (FAX)

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#### Project Summary

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A total of 38 subsurface recording thermographs have been deployed in the Florida Keys National Marine Sanctuary (FKNMS) and at other selected locations on the Florida Reef Tract and associated hydrologic ecosystems since 1988. These instruments have been programmed to record at 2 hour intervals and placed in permanent housings attached to suitable substrate. Data retrieval, servicing and reprogramming for continuous deployment have occurred, on average, annually. The collected data has been made available to FKNMS Managers and others who monitor and assess environmental conditions that influence FKNMS areas of the Florida Reef Tract.

#### Project Objectives

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The purpose of this project is to document bottom seawater temperature in strategic areas of the Florida Reef Tract on a continuing basis and make that information available to management and research user groups. This is an ongoing project.

#### Project Background

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It is well understood that temperature is a major factor controlling distribution, growth and survival of the world's coral reefs. This is especially true of high latitude reefs such as those of the Florida Reef Tract where seasonal temperature extremes detrimental to coral health frequently occur. Past environmental perturbations in the Caribbean and southeast Florida that may be linked to elevated seawater temperature include coral bleaching, a sea urchin die-off, black band coral disease and a seagrass die-off. The first 3 disturbances occurred on a massive scale throughout the Caribbean and southeast Florida. Large-scale die off of seagrass has thus far only been documented in the Florida Bay area of the Florida Keys. This project is a cost-effective and integral part of an overall plan to monitor the Florida Keys coral reef ecosystem.

#### Project Methods

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Ryan Industries, Inc. recording thermographs were deployed at strategic locations on the Florida Reef Tract during 1988\*. Due to the Ryan Industries discontinuing their product line during the course of the project, a change to another manufacturer's thermograph was implemented. Now, Sea-Bird Electronics, Inc.\* recording thermographs are used. To date, 38 thermographs have been deployed, completing a permanent network of these sensors from southern Broward County to the Dry Tortugas. In response to extreme anthropogenic events on the Florida Reef Tract and surrounding hydrologic ecosystems (e.g. Massive shipwreck groundings and associated reef

restoration), monitoring stations have been positioned to provide project managers additional data for ongoing studies.

A hollow, pre-cast concrete coral head or concrete and PVC monument have been used to protect and conceal thermographs. Where appropriate, bolt-on stainless steel brackets were used to secure instruments to structural supports (e.g. concrete or steel pilings) of fixed bridges or navigational aids.

Experience has shown that a 2 hour recording mode is adequate to monitor changes in reef tract bottom water temperature. Data has been collected, on average, annually from all instruments. Due to mechanical problems with some instruments, there are occasional gaps in the data streams from some of the monitoring stations.

Project Coordinator

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\* Selection of this manufacturer's product does not constitute an official product endorsement by the Florida Keys National Marine Sanctuary or the National Oceanic and Atmospheric Administration.

Readme.txt	Content-Type: text/plain
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tblThermographs.csv	Content-Type: application/vnd.ms-excel
	Content-Encoding: base64

tblStations for Bicentennial Coral Head.csv	Content-Type: application/vnd.ms-excel
	Content-Encoding: base64

FKNMS_200YR_HD_WQDATA.zip	Content-Type: application/x-zip-compressed
	Content-Encoding: base64

24° 57' 24.95

80° 32' 80.53

8-6-98

1-5-2006

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DAY

B. Centennial Coral Head