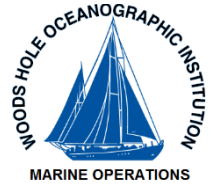


Dr. Plueddemann OOI: KN224 Pioneer Fall 2014
Pre-Cruise Meeting 11/24/14
Agenda Items



Mission Objectives:

This cruise represents the third major infrastructure deployment for the Pioneer Array of the National Science Foundation's Ocean Observatories Initiative (OOI). The Pioneer Array will include a network of moorings and autonomous robotic vehicles to monitor waters of the continental shelf and slope south of New England and, in particular, the shelfbreak front where nutrients and other properties are exchanged between the coast and the deep ocean. Data from the Pioneer Array will provide new insights into coastal ocean processes such as shelf/slope nutrient exchange, air-sea property exchange, carbon cycling, and ocean acidification that are important to the New England shelf, and to continental shelf ecosystems around the world. For further information, see <http://www.oceanobservatories.org>.

Science Activities

The Pioneer-3B cruise has 8 main objectives and 4 ancillary objectives. The main objectives can be grouped into four categories: 1) Deploy 3 Coastal Surface Moorings (CSMs), 2) Deploy 2 Coastal Surface Piercing Profilers (CSPPs), 3) Perform mooring service (full or partial recovery, possible redeployment) of Coastal Profiler Moorings (CPMs), 4) Perform field evaluation activities, including CTD casts with water sampling. The ancillary objectives are 1) Recover a glider near the Offshore site, 2) Compare buoy and shipboard data, 3) Conduct cross-shelf CTD surveys in the vicinity of the moored array, and 4) Conduct surveys using shipboard sensors (ADCP, thermosalinograph, multibeam) in the Pioneer moored array region.

Agenda Items:

1. Chief Scientist:

Dr. Albert Plueddemann
Woods Hole Oceanographic Institution
Clark 202A, MS#29
Woods Hole, Ma. USA 02543
+1 508 289 2789
aplueddemann@whoi.edu

2. Identify operating area:

Continental Shelf and Slope south of New England
Lat/Lon: 40° 00.0' N / 71° 00.0' W
Depth Range: 90 m / 500 m

3. Voyage Info:

- a. **NUMBER:** KN224
- b. **MOB:** Dec 8th WHOI
- c. **DEPARTURE:** Dec 10th WHOI
- d. **ARRIVAL:** Dec 16th WHOI
- e. **DEMOB END:** Dec 17th

4. Schedule Notes:

- Science Personnel can move into their rooms December 9th

5. Science party (size): 12

Pre-cruise and Administrative:

1. Financial responsibility: OOI Project Number
2. Personnel forms: Due: **ASAP** to kgrodzki@whoi.edu
3. Berthing Plan: Complete and remit to csmith@whoi.edu
4. Any Special Food Requirements? (Kosher, Allergy, Vegetarian, etc)

Instrumentation & Technician Support :

1. General Duties of Marine Technician :

SSSG Technicians x3: Amy Simoneau, Ellen Roosen, Robbie Laird (WHOI SSSG)
WHOI sssg techs do not stand watches. But are available 24/7 to train and to assist in operations.

2. WHOI general use equipment required for cruise :

Shipboard Equipment

- Bathymetry System 12 kHz
- ADCP 300 kHz
- Sippican XBT System (Mark 21)
- Multibeam
- Science Underway Seawater System
- ADCP 75 kHz

Shipboard Communication

- Basic Internet access via HiSeasNet

CTD/Water Sampling

- 911+ Rosette 24-position, 10-liter bottle Rosette with dual T/C sensors
- Biospherical underwater PAR (1000m depth limit) with reference Surface PAR
- SBE43 oxygen sensor

- Wet Labs C*Star transmissometer (660nm wavelength)
- Wet Labs FLNTURTD Combination Fluorometer and Turbidity Sensor

Hydrographic Analysis Equipment

- Dissolved Oxygen Titration System (Brinkmann Titrator)
- Salinometer
- Salt Bottles (2 cases of 125 ml provided)
- Oxygen Sample Bottles (available in 150 ml sizes)

MET Sensors

- Air temperature
- Barometric Pressure
- Precipitation
- Relative Humidity
- Short Wave Solar Radiation
- Wind speed and direction

Sample Storage

- Freezer -70°C 3.2 cu. ft. ea.
- Storage Notes: Freezer is backup for chlorophyll and nutrient samples

Winches

- CTD Winch with .322" Electro-mechanical wire
- Other Portable Winch
- Trawl Winch with 9/16th trawl wire
- Winch Notes: Science party to bring split-drum TSE winch and Lantec heavy lift winch

Wire Notes: CTD winch for 24 bottle rosette, CTD winch for release/linepack tests, TSE winch for mooring wire deploy/recover, Lantec winch for anchor raise/lower.

Ship [Other Requirements][Shipboard Equipment/Nav] :

1. Science/Ship Operations :
 - a. Instrument Deployment / Recovery Procedures:
 - b. Over boarding Equipment (ISM)
 - c. Vans: _
 - d. Night Operations: Yes
2. Deck Safety – Safety Shoes
3. Lab Safety – PPE
4. Hazardous Material: no
Please Submit MSDS electronically to csmith@whoi.edu and provide 3 hard copies of each MSDS to the Knorr's Chief Mate.
5. Policies: (speed, departure/arrival times, moving aboard, etc.)

11kts

6. Communication (voice, fax, e-mail, Blog)

Logistics [Notes]

1. Shipping gear to and from vessel
Load list
 - a. US Customs (forms and AMS): N/A
 - b. Berthing plan: 12 Science + 3 SSSG Techs
 - c. Use of ship's agent or local facilities
WHOI Agent: Chad Smith

R/V Knorr / Dr. Plueddemann KN224
C/O Chad Smith
WHOI
266 Woods Hole Rd
Woods Hole, MA
02543

Post-Cruise:

1. Actions departing ship (Clean rooms, remove items from chemical van)
2. UNOLS cruise evaluation [Chief Scientist & Master]
3. Reports to foreign government/State Department [required for work in EEZs]
4. Data delivery [shipboard] USB Hard drive.
5. Data archiving policy
All data on a WHOI Cruise Data Distribution (which includes all underway data) will, by default be considered publicly available once a copy of it has been delivered to the chief scientist at the end of the cruise. Please review the [Cruise Assignment of Data Access Protection](#)

As of January 1, 2011, the default treatment for underway data from Woods Hole Oceanographic Institution (WHOI) research vessels is:

1. Cruise data files are copied by a WHOI SSSG Technician to the distribution media. One copy is delivered to the cruise Chief Scientist, the other is delivered to WHOI's Data Library and Archives. Please note that the distribution of cruise data to other scientist is the responsibility of the Chief Scientist.
2. The **default** access status for the cruise instrument datasets is that they will be immediately accessible by the public. If something other than this default protection is desired, the Chief Scientist must assign alternate protection as indicated below. For cruises funded by the National Science Foundation ,the

maximum protection is two years, for non-NFS cruises, other guidelines may apply.

3. WHOI maintains a local copy of the cruise shipboard data distribution at its Data Library and Archives, which also honors access moratorium periods. If the cruise Chief Scientist wishes to modify the data protection assignments made in this pre-cruise document upon cruise completion, they should contact the

WHOI Data Library and Archives at dla@whoi.edu, or the SSSG Data Manager at sssgdatamgr@whoi.edu