# AR07-01 OOI Irminger Cruise – R/V Neil Armstrong

Pre-Cruise Meeting 6/10/16

Location: SSSG Conference Room, 3rd Floor Smith Laboratory

Agenda Items

**Mission Objectives:**

To carry out the recovery and redeployment of the NSF Ocean Observatories Initiative (OOI) Irminger Sea Array, servicing four moorings and up to four gliders. The platforms will carry multidisciplinary instrumentation and provide the capability for real time communication of data and control of sampling. A surface mooring will instrument the sea surface and upper ocean, capturing the surface forcing and upper ocean variability. A profiling mooring will measure through the water column. Two additional taut subsurface moorings and the gliders will complete the capabilities to obtain vertical profiles and sample the mesocale (10s to 100 km) variability at the site.

## Science Activities

The following activities are planned:

1) Validate the bathymetry of the site to check the planned positions for the four moorings of the second deployment;

2) Deploy the four new moorings;

3) Recover the four moorings deployed in 2015;

4) Deploy up to four gliders in support of horizontal and vertical sampling in and around the array;

5) Recover one glider deployed in 2015; and

6) Carry out shipboard sampling in support of calibration and validation of the deployed sensors on the moorings and gliders and to add to knowledge of the site.

**Agenda Items:**

1. Chief Scientist & Principal Investigator:

**George Tupper: Chief Scientist**

**Woods Hole Oceanographic Institution**

**Clark South 182B, MS#30 Woods Hole, Ma. USA 02543**

**1 508 289 2693**

gtupper@whoi.edu

**Paul Matthias: Principal Investigator**

**Woods Hole Oceanographic Institution**

**LOSOS 213, MS#57 Woods Hole, Ma. USA 02543**

**+1 508 289 3672**

pmatthias@whoi.edu

1. Identify operating area:

OOI Irminger Sea Array

Lat/Lon: 59° 52.0? N / 39° 30.0? W

Depth Range: 2600 / 280

1. Voyage Info:

**AR07-1**

Mob: 27 Jun 2016

Dep: 30 Jun 2016 Woods Hole, MA

Arr: 28 Jul 2016 Reykjavik, Iceland

DeMob 30 Jul 2016

1. Schedule Notes:
* Science Personnel can move into their rooms June 29
* Science May stay aboard July 28th & July 29th
1. Science party (size): XX?

**Pre-cruise and Administrative:**

1. Financial responsibility: NSF OOI Project Number

1. Personnel forms: Due: ASAP to kgrodzki@whoi.edu Personnel forms contain personal information about the cruise participants and should be treated in a confidential manner.
2. Berthing Plan: Complete and remit to csmith@whoi.edu one week prior to departure
3. Any Special Food Requirements? (Kosher, Allergy, Vegetarian, etc)

**Instrumentation & Technician Support**  ***:***

1. **General Duties of Marine Technician :**

SSSG Technicians (WHOI SSSG) TBD

WHOI sssg techs do not stand watches. But are available 24/7 to train and to assist in operations.

1. **WHOI general use equipment required for cruise** **:**

**Shipboard Equipment**

* 12 kHz Pinger for Wire Use
* A-Frame
* ADCP 150 kHz
* ADCP 300 kHz
* ADCP 38 kHz
* Bathymetry System 12 kHz
* Bathymetry System 3.5 kHz
* Computer Network Crane
* DP System
* Deionized Water System
* EK80 Sonar
* EM122 Multibeam
* Echosounder Knudsen SBP

**Navigation**

* Heading Navigation
* Position POS-MV

**Shipboard Communication**

* Basic Internet access via HiSeasNet
* CTD/Water Sampling
* 911+ Rosette 24-position, 10-liter bottle Rosette with dual T/C sensors Wet Labs FLNTURTD Combination Flourometer and Turbidity Sensor

**Hydrographic Analysis Equipment**

Dissolved Oxygen Titration System (Brinkmann Titrator)

Oxygen Sample Bottles (available in 150 ml sizes)

Salinometer

Salt Bottles (2 cases of 125 ml provided)

**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**: Need to keep samples on board until Armstrong returns to WHOI Sept 14.

**Winches**

CTD Winch with .322" Electro-mechanical wire

Mooring / TSE winch

Tuggers (Science Party supplied)

**Winch Notes:** OOI will bring our own Lebus winch (self spooling) and have reserved a TSE winch spooler from east coast winch pool (Brian Guest).

We will bring a portable generator to power our Lebus winch. (John Kemp).

**Vans**

* 20’ Ball Van
* 20’ Rigging Van
* Generator Rack

\*This will create a deck space issue that will need to be solved by stacking, or mounting all 3 vans/gen rack on the deck.

**Shipboard Administrative Items*:***

1. Science/Ship Operations ***:***
	1. Instrument Deployment / Recovery Procedures:
	2. Over boarding Equipment (ISM)
	3. Vans: 2 + Generator flat rack
	4. Night Operations: Yes
	5. Small Boat Operations: no
2. Deck Safety – Safety Shoes
3. Lab Safety – PPE
4. Hazardous Material**:** Yes
* Lithium batteries for gliders.
* O2 Titrator and Salt chems.
* Small nitrogen tank

Please Submit MSDS electronically to csmith@whoi.edu and provide 3 hard copies of each MSDS to the Chief Mate.

1. Policies: (speed, departure/arrival times, moving aboard, etc.)

11kts

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

## Logistics *[Notes]*

1. Shipping gear to and from vessel

Load list

* 1. Customs 4455 Forms Due at the start of Mobilization
	2. Berthing plan:
		1. bunks available
	3. Use of ship’s agent or local facilities

Shipping Address:

**Woods Hole**

Master: RV Neil Armstrong

Attention: George Tupper

WHOI

266 Woods Hole Rd

Woods Hole, MA 02543

Ship’s Agent:

Chad Smith, WHOI

csmith@whoi.edu

Office: 508-289-3811

Cell: 617-999-4163

**Iceland:**

Master R/V Neil Armstrong

Attn: George Tupper

c/o TVG-Zimsen ehf

Korngardar 2

104 Reykjavik

Iceland

Ship’s Agent:

Jóhann Bogason, TVG-Zimsen

Email: Johann@gara.is

Phone: 011 354 560 0700

Fax: 011 354 5600 780

**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](http://www.sssg.whoi.edu/sssg/pdf/cruiseData_v3.pdf)

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