

**AT37 Jeffrey Donnelly "Holocene Hurricanes"**  
Pre-Cruise Meeting 5/31/16  
Smith Conference Room (First Floor, Smith Lobby)  
Agenda Items

**Mission Objectives:**

Discovery Bay in Jamaica provides a unique opportunity to develop a reconstruction of intense hurricanes that formed in the deep tropics over the course of the last several millennia. With a series of new sediment cores, targeted using Chirp subbottom sonar, we will develop a high-resolution reconstruction of past hurricane-induced event beds. Given documented sedimentation rates in Discovery Bay the temporal resolution will be more than three times greater than existing reconstructions in the Caribbean. With 10-15 m sediment cores we expect to be able to develop a record that extends back to 6000-7000 years before present, and perhaps to as much as 9000 years.

**Science Activities**

The field program has two main components: Underway Geophysics and On-site Sample collection and detailed mapping.

Chirp subbottom sonar survey, multibeam survey, CTD casts, vibracoring (both from Atlantis and from a portable platform at shallow water target), gravity coring, jumbo piston coring, surface sample collection, deployment of current meters.

\*Filming NOVA documentary

**Agenda Items:**

**1. Chief Scientists & Principal Investigators:**

Jeffrey Donnelly: Chief Scientist, Principal Investigator  
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Peter van Hengstum: Chief Scientist, Principal Investigator  
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2. Identify operating area:

Discovery Bay Jamaica

Lat/Lon: 18° 27.883 N / 77° 24.47 W

\*Vessel will be operating in Jamician Waters

3. Voyage Info:

- a. **NUMBER:** AT37-01
- b. **MOB:** 11 August 2016
- c. **DEPARTURE:** 13 August 2016: Woods Hole, MA
- d. **ARRIVAL:** 24 August 2016: Kingston, Jamaica
- e. **DEMOB END:** 26 August 2016

4. Schedule Notes:

- Science Personnel may move into their rooms 11 August
- Science Personnel may stay aboard until 25 August

5. Science party (size): **XX?**

**Pre-cruise and Administrative:**

1. Financial responsibility: NSF Grant No. \*\*\*\*708
2. Personnel forms: Due: **July 11th** 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 (WHOI SSSG) TBD

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
- Bathymetry System 3.5 kHz
- Multibeam
- Navigation - Position

### **Shipboard Communication**

- Basic Internet access via HiSeasNet

### **CTD/Water Sampling**

- 911+ Rosette 24-position, 10-liter bottle Rosette with dual T/C sensors
- SBE43 oxygen sensor

### **Sediment Sampling**

- Gravity corers
- Multi-core
- Jumbo Piston Core
- Vibracore

### **Winches**

- Hydro Winch with .25" hydro wire
- Trawl Winch with 9/16th trawl wire
- Winch Notes: Winch needed to deploy and recover corers.

### **Over the Side Equipment**

Details: Portable capstan winch will be used from portable platform and could also be used from Atlantis (but we will only use if an issue with the shipboard winches).

### **Special Requirements**

- Electrical Power: yes Identify 3 phase 240v 50-60 hz.
- Small Boat Operations: yes
- SCUBA Diving Operations: yes

### **Vans**

- XX?

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

1. Science/Ship Operations :
  - a. Instrument Deployment / Recovery Procedures:
  - b. Over boarding Equipment (ISM)
  - c. Vans: XX?
  - d. Night Operations: Yes
2. Deck Safety – Safety Shoes
3. Lab Safety – PPE
4. Hazardous Material: None
  - Flammable?
  - Radiological?
  - Other?

\*Complete Radiological authorization with WHOI Safety Department

Please Submit MSDS electronically to [csmith@whoi.edu](mailto:csmith@whoi.edu) and provide 3 hard copies of each MSDS to the 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. Customs 4455 Forms Required
  - b. Berthing plan:  
22 bunks available
  - c. Use of ship's agent or local facilities

Ship's Agents:  
Woods Hole:

Chad Smith  
[csmith@whoi.edu](mailto:csmith@whoi.edu)  
508-289-3811

Shipping Address:

Master: RV Neil Armstrong  
Attention: Jeff Donnelly  
Woods Hole Oceanographic Institution  
266 Woods Hole Rd  
Woods Hole, MA 02543  
USA

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Kingston, Jamaica

**TBA**

### **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](mailto:dla@whoi.edu), or the SSSG Data Manager at [sssgdatamgr@whoi.edu](mailto:sssgdatamgr@whoi.edu)