YAGER / ANNACONDAS Pre-Cruise Meeting April 5, 2012

Voyage AT21-04

Agenda Items

Conference call in phone number: 508-289-3192 / conference code: 213770#

**General Program Overview:**

1. Scientific Objectives: To survey waters in and around the Amazon plume.

The ANACONDAS project builds on observations made by MANTRA/PIRANA in 2001 and 2003 (RV Knorr and Seward Johnson I cruises to the same region) to address specifically

1) how carbon cycling and sequestration in the western tropical North Atlantic (WTNA) is influenced by the Amazon River through its impact on pelagic ecosystem dynamics and

2) the sensitivity of this ecosystem to anthropogenic climate change.

PIRANA revealed the importance of both riverine and atmospheric inputs for driving the high productivity of the WTNA through N2-fixation, and demonstrated the significance of the region to basin-wide biogeochemistry and C cycling. ANACONDAS will now focus on what drives phytoplankton community succession through the plume, light and nutrient requirements, factors limiting productivity, and the fate of production. These components are critical to understand the role of the plume in the regional C cycle, and to predict its response to climate variability and change.

  The NSF-funded ANACONDAS project will also serve as a platform for additional measurements  supported by the Gordon and Betty Moore Foundation's Marine Microbiology Initiative.  ROCA (River-Ocean Continuum of the Amazon) brings additional focus on marine microbial community structure and activities, along with high-resolution measurements of organic matter along the river-ocean continuum.

1. Identify the at-sea Chief Scientist: Tish Yager.
2. Other PI’s:
3. Identify operating area: Western tropical North Atlantic.

Barbados, French Guiana and Brazil coasts.

1. Voyage and Leg **# AT21-04 // July 13 - July 29**

Overview of Schedule: Cruise originates and ends from Bridgetown Barbados.

Mobilize July 11 -12th. Science can move aboard July 11

Depart a.m. July 13

Arrive back in Barbados July 29 - science can stay aboard this night

Demob July 30

1. Science party (size): 34 available bunks
2. Berthing Plan 1 week before mobilization.

**Pre-cruise and Administrative:**

1. Diplomatic clearance requirements for operations in EEZs :

Barbados, Brazil, Guyana, France (French Guiana)

1. Financial responsibility: Purchase Orders -
2. Personnel forms (Passports, Visas, Entry Fees) special food requirements on personnel form. *Passports must be valid for at least 6 months after date of entry.*

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

1. General Duties of Marine Technician: on call 24/7 but do not stand watches. We will

train science as necessary. No Mocness tech or Multi core tech

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

- CTD w/ fluorometer, transmissometer, (24 - 10 ltr bottles)

- both par sensors

- SBE43 O2 sensor

- turbidity sensor

- Dissolved Oxygen Titration Unit w/ sample bottles (tech?)

- Salinometer w/2 cases salt bottles

- Bathy 12 KHz

- ADCP 75 kHz

- Multibeam

- Mocness

- Multicorer to 5000 meters

- 12 kHz pinger for wire use

- 2 Radioistope Vans (14C & 3H)

- - Automated LSC - need multi cell?

- Cold Lab Van (unols) 4°C required temp.

- Trawl wire for multicorer

- Di H2O - how much per day?

- Capstan (?)

- Fume Hood

- Uncontaminated seawater system

- Freezers & Refrigerators

- Walk in refer

- Walk in freezer

- Seamac or small similar winch (with larger drum) for drifting sediment trap deployments

- Small winch for smaller nets and optic package deployments

- Need 100 meters hydro wire x 2 (?)

1. Equipment and instrumentation to be provided by science party:

*Some of this from 2010.*

*2010 info -*

*- Sediment traps (2 @ 300 m w/ ploy pro line LINE SIZE?)*

*- Optical package (1 @ 120# in air. Depth 150m, plus one hand deployed pkg.)*

*- Carboys (hold reserve m-q water)*

*- Drying oven ?*

*- Zooplankton nets*

*- Argos floats where would these be loaded?*

*- O2 tech?*

*- Salt tech? bottles and tech to run*

*- Liquid Nitrogen*

*OTHER: HPLC? Chlorophyl measurements for calibration of Wetlabs?*

*- Specific Data Requirements?*

*- Data Fromat?*

2012

- spectral radiometer

- Liquid Nitrogen ?

4. HAZMATS / CHEM: YES - rads & chems = MSD sheets and inventory form

<http://www.whoi.edu/sbl/liteSite.do?litesiteid=7092>

5. Communication (voice, fax, e-mail)

- High Sea’s Net or Fleet Broadband service

- phone and fax is available

- Other internet shipment

Please see our communication link for further details;

<http://www.whoi.edu/page.do?pid=8579>

## Logistics

Science can move aboard 2 nights prior to departure. Can stay on board night of arrival and continue off load day after arrival.

2.Shipping gear to and from vessel ( WHOI or Barbados both ways)

* 1. How much?
  2. Radioistopes / Hazmats / Cylinders:

* 1. Use of ship’s agent or local facilities (financial responsibility)

**Post-Cruise**:

1. Actions departing ship:

Off load day of arrival and day after arrival

- HAZMAT / Rad waste disposal - Next US port call.

We can consider option of leaving rads on board IF no other group needs the van.

- Samples (store? Or ship)

- dry ice - ?

- gas cylinders - ?

1. 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