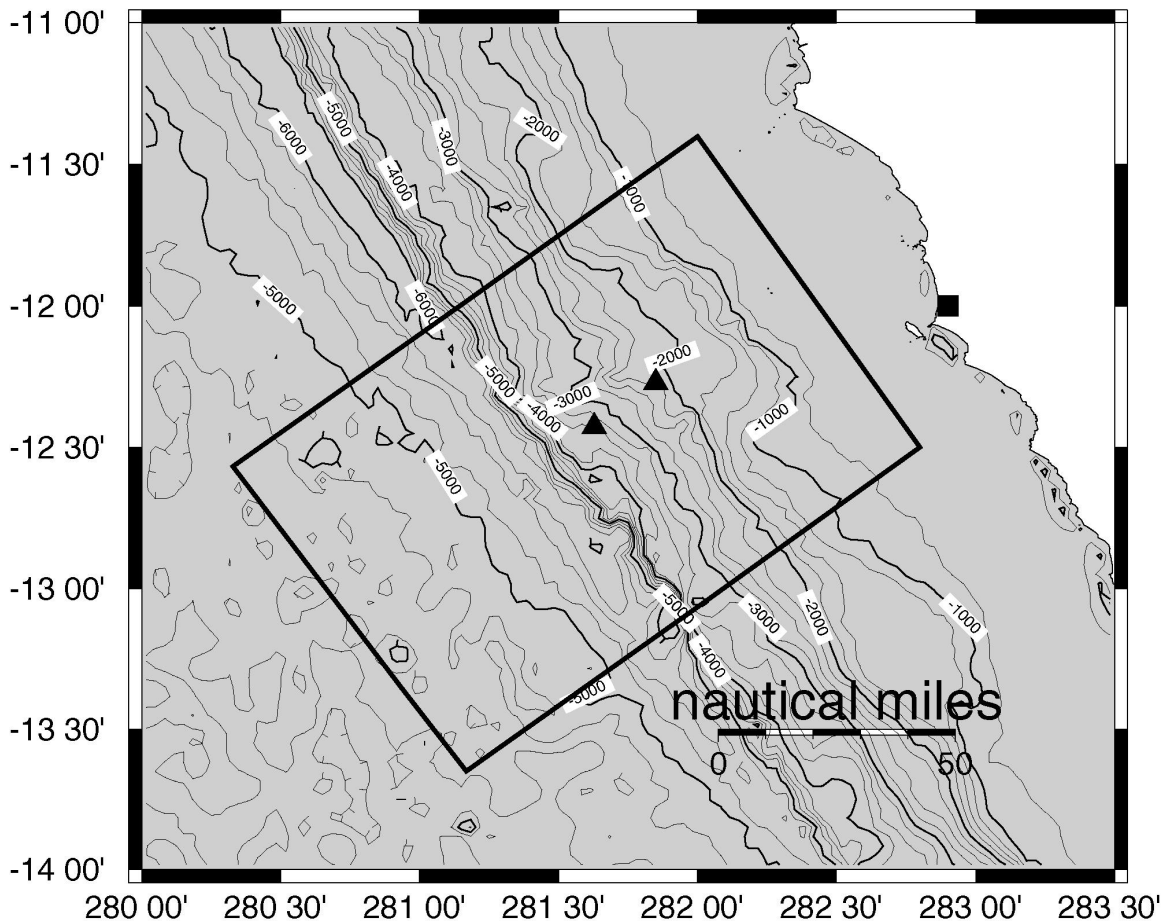


**Cruise Plan – Seafloor Geodesy, Peru  
Sept 30-Nov to 24-Dec, 2003**

We will use the R.V. Roger Revelle to collect GPS-Acoustic data at two seafloor geodetic arrays offshore Lima, Peru. We will also use the MPL control vehicle to conduct a seafloor survey at site. Multibeam data will also be collected along selected lines within the box below. The cruise will depart from Arica, Chile at 1600 on 30 Nov. 2003 and return to Callao, Peru at 0800 23 Dec. 2003



Map of sites.

**Personnel**

The following people will be part of the scientific party on this cruise:

- |   |                |                 |         |
|---|----------------|-----------------|---------|
| ◆ | Dave Chadwell  | Chief Scientist | SIO-MPL |
| ◆ | Katie Phillips | Grad. Student   | SIO-MPL |

◆	Katie Gagnon	Grad. Student	SIO-MPL
◆	Neil Kussat	Grad. Student	SIO-MPL
◆	TBD	Volunteer	
◆	TBD	Volunteer	
◆	Richard Zimmerman	Sr. Dev. Eng.	SIO-MPL
◆	Denis Rimington	Asst. Dev. Eng.	SIO-MPL
◆	Dave Price	Sr. Elec. Tech.	SIO-MPL
◆	TBD	Computer Technician	SIO-STS
◆	TBD	Resident Technician	SIO-STS
◆	TBD number of Peruvian observers		

### *On-Loading*

The ship is scheduled to arrive in Arica, Chile at 0800 on 26 Nov. 2003. Weller will offload on 27 Nov. Our group will load on 28 and 29 Nov. Deep Tow van, GPS towers and slack tensioner will be already onboard. Currently, Deep Tow van will be placed in the inboard van space on the main deck aft. Slack tensioner will be on 01 deck aft. GPS towers will be 02 deck forward. The analytical lab (and darkroom if needed) will be used to store electronics, etc following the September cruise.

Once aboard, several tasks must be completed before departure:

- ◆ Put up the 2 aft GPS towers (1 day, 3 people).
- ◆ The main mast GPS tower will be left up following the September cruise.
- ◆ Assemble the stinger (1 day, 3 people).
- ◆ Move the GPS receivers from Analytical lab and setup in the Hydro Lab
- ◆ Move the computers and controls from Analytical lab and setup in the Electronics Lab.
- ◆ Set up storage and instrument staging in the Main Lab.
- ◆ String wires from computer lab to wet lab
- ◆ String wires from computer lab to Hydro Lab
- ◆ Position slack tensioner, feed main cable through sheaves
- ◆ Terminate fiber optic cable (pull test to 5k lbs, electrical checks of power conductors, test optical fibers)

- ◆ Spot CV aft under A-frame hanging sheave at center strong point.
- ◆ Request wide-mouth block to stbd side of main sheave and air-tugger
- ◆ Prep CV for sea
- ◆ CV systems checks then bay test
- ◆ Verify stinger hydrophone operation prior to departure
- ◆ Secure all gear for sea

### *At-Sea Tasks*

Once at sea, we will complete a number of different tasks:

- ◆ Conduct GPS/Acoustic Surveys at each site (see figure above)
- ◆ Conduct vertical position surveys using seafloor survey device
- ◆ Conduct multibeam survey along selected lines within box given in figure.

### *Tentative Calendar/Timeline (Subject to weather, equipment performance, etc.)*

Nov. 26	0800 Revelle arrives Arica (Weller begins off loading)
Nov. 27	Weller continues offloading
Nov. 28	Deep tow begins on-loading
Nov. 30	Revelle departs 1600 from Arica
Dec. 01	Transit
Dec. 02	Transit
Dec. 03	Arrive site one
Dec. 04	Transponder replacement survey
Dec. 05	Transponder replacement survey
Dec. 06	GPS-A survey site #1
Dec. 07	GPS-A survey site #1
Dec. 08	GPS-A survey site #1
Dec. 09	GPS-A survey site #1
Dec. 10	GPS-A survey site #1, transit to site #2
Dec. 11	GPS-A survey site #2

Dec. 12	GPS-A survey site #2
Dec. 13	GPS-A survey site #2
Dec. 14	GPS-A survey site #2
Dec. 15	GPS-A survey site #2
Dec. 16	Seafloor survey site #2
Dec. 17	Seafloor survey site #2
Dec. 18	Seafloor survey site #2, transit to site #1
Dec. 19	Seafloor survey site #1
Dec. 20	Seafloor survey site #1
Dec. 21	Multibeam survey
Dec. 22	Multibeam survey
Dec. 23	0800 arrival Callao, Peru
Dec. 24	offload

### *Off-Loading*

Once docked in Callao, Peru, we will complete several off-loading tasks which will include repacking gear in the Deeptow Van and shipment of GPS towers with the Slack tensioner back to San Diego:

- ◆ Take down 3 GPS towers (2 aft and 1 main mast)  
NOTE: main mast removal will require large crane
- ◆ Move GPS receivers and gear to Deep Tow van
- ◆ Move computer gear and control from Computer/Electronics lab to Deep Tow van
- ◆ Pull out stinger (clean all parts, store in staging bay, pack Deep Tow extension in Deep Tow van)
- ◆ Store CV in Deep Tow van
- ◆ Prep Deep Tow van and GPS towers and slack tensioner for shipment.

*Last modified 30-JUNE-03 - CDC, RZ*