

**Cruise plan for Revelle, 1 July - 5 July 2006**

*Objectives:* Electrical tomography of Loihi Seamount, in order to study hydrothermal and magmatic systems within the volcano. See proposal at <http://marineemlab.ucsd.edu/Projects/Loihi2006/>

*Personnel:*

Steven Constable, SIO, chief scientist  
 Hubert Staudigel, SIO, chief scientist  
 Kerry Key, SIO, postdoc  
 James Behrens, SIO, postdoc  
 Yuguo Li, SIO, postdoc  
 Karen Weitemeyer, SIO, grad student  
 David Myer, SIO, grad student  
 About 9 other grad students, TBA  
 John Souders, SIO, technician  
 Patricia Cheng, SIO, technician  
 Chris Armerding, SIO, technician  
 Garth Englehorn, SIO, technician  
 Cambria Colt, Res Tech  
 Allen Nance, observer  
 Charlie Nance, observer  
 Arnold Orange, observer  
 Margit Orange, observer

<b>Start time</b>	<b>Activity</b>	<b>Elapsed time</b>
08:00 May 29	Revelle arrives at Pier 31	
08:00 May 30	Start loading equipment	32 hours
16:00 July 1	Depart Pier 31	1 hour
17:00 July 1	200 mile transit to station at 12 kts	17 hours
10:00 July 2	Deploy 20 instruments @ 1 hour each	20 hours
06:00 July 3	Deploy transmitter	3 hours
09:00 July 3	25 km transmitter tow	14 hours
23:00 July 3	Recover transmitter	3 hours
02:00 July 4	Recover 20 instruments @ 1 hour each	20 hours
22:00 July 4	Transit 60 mi to Hilo	5 hours
03:00 July 5	Tie up	1 hour
04:00 July 5	Contingency	12 hours
16:00 July 5	End	

**Deck load:**

SUESI (deeptow)	1,500 lbs	2'x6'
Deeptow streamer and winch	1,500 lbs	7'x9'
20 instruments at 350 lbs each	7,000 lbs	2.5'x2.5' each
4 stacks of 6 anchors	9,560 lbs	3'x3' each
Inst. arm rack	1,000 lbs	2.5'x10'
Inst. launching plate	200 lbs	2.5'x2.5'
<b>Total main deck load</b>	<b>20760 lbs</b>	

**Main lab:**

Deeptow power pack	1,500 lbs	3'x3'
--------------------	-----------	-------

24 instrument kits	960 lbs	1.5' x 2.5' each
15 misc boxes	750 lbs	1.5'x2.5' each
Main lab total	3,210 lbs	

*Ship's equipment required:*

Crane on main deck for instrument deployments and recoveries.  
0.680" coaxial deeptow cable, high voltage slip rings, deeptow winch, sheave.  
Deeptow winch control installed in main lab for deeptow operations.  
440-480 VAC 3-phase power in hydro lab at 50 Amps  
12 kHz hull transducer and ship's PDR.