Marcus Langseth Science Oversight Committee

(MLSOC)
Sunday December 8, 2013
JW Marriott Hotel
515 Mason St.
San Francisco, California

Executive Summary

The Marcus Langseth Science Oversight Committee, (MLSOC) met in San Francisco on Sunday December 8, 2013. This was the winter meeting of this committee and brought together the UNOLS-MLSOC committee, L-DEO Office of Marine Operations, members of the marine seismic community, and federal agency representatives. In addition participants from the early career scientist workshop which had been held on Saturday December 7, 2013 attended this meeting. This provided an opportunity for more information exchange with these early career scientists.

Meeting Minutes

Dale Sawyer/MLSOC Chair opened the meeting at 10:00 am with introductions and a brief overview of the Early Career Workshop held on Saturday, Dec. 7th. This was our first workshop with a focus on bringing early career scientists and members of the marine seismic community together to introduce the national seismic facility at Lamont-Doherty Earth Observatory. We had 13 early career scientists from 9 different universities in attendance.

Agency Reports

Donna Blackman/NSF

Donna gave this report and provided a Power Point presentation. She opened with a re-emphasis that NSF recognizes the importance of marine seismic studies. MGG is working on improving the management of the Program budget, working to minimize out-year mortgaging, and improving the scheduling process. She explained the recommended target date of August 15th for large field proposals, how the Ocean Bottom Seismograph Instrument Pool management office at IRIS is working, and a brief outline of some potential geographic areas where proposal pressure suggests work could happen over the next few years. At present NSF/Integrated Program Section can support approximately 180 days of support for the R/V Marcus Langseth, although a little less if they are 3-D cruises. MGG has typically supported 50-150 days per year. For 2014, the numbers are a little low with 119 days. The outlook for MGG support for Langseth in 2015 is probably reduced with several proposals needing to address some reviewer concerns before the science is ready for support. If done well, the number of science-ready projects could increase for 2016, and if funds are available MGG may be able to bring the number of days up again.

Agency Reports

Tim Schnoor/ONR

Tim gave the ONR report and while MG & G research at ONR has decreased in recent years, ONR continues to support 6 UNOLS ships. Tim updated us on the ONR ships and reported in 2013 ONR has 601 days and in 2014 there are presently ~ 400 days on UNOLS ships. The new ocean class R/V Neil Armstrong and the R/V Sally Ride are on schedule at the shipyard in Anacortes, Washington.

UNOLS report

Jon Alberts/UNOLS provided an overview Power Point of recent UNOLS efforts and news within the UNOLS organization. Some of the recent highlights for UNOLS include for following.

The National Academy of Sciences is conducting a NSF Decadal Survey and has requested UNOLS participation in their meeting on December 5-6, 2013 in San Francisco. The entire NSF/GEO portfolio is being reviewed and the community is being asked to provide their input on the web site: http://nas-sites.org/dsos2015/

UNOLS is currently planning for the Ocean Sciences Meeting to be held in Honolulu on Feb23-28, 2014. An early career workshop is planned for Sunday February 23, 2014 and UNOLS will be active in this workshop and a UNOLS booth is also planned.

UNOLS worked with Maritime Training Services in Seattle this past year on a new gender climate at sea and harassment prevention film which was released in June and is available through Maritime Training Services. Their web site is: http://www.maritimetraining.com

The new UNOLS Research Vessel Operators Committee Safety Orientation film which is shown at the start of each voyage was released in December 2013 and is available through the UNOLS Office. Copies of the film have been sent to all the UNOLS Operator Institutions.

Lamont-Doherty Earth Observatory Operator's Report

Sean Higgins/L-DEO provided the operators report for the R/V Marcus Langseth. See Power Point in the appendices.

Sean has asked the MLSOC for their input on a proposal to trade the BAROVANE 46 to GeoVentures and in exchange GeoVentures would through CONCEPT Systems purchase for L-DEO/OMO- 2 new Power rTNU(s) valued at approximately \$125,000. The Langseth is set up to stream 4 cables and without significant expensive modifications, these BAROVANE 46 would not be used. The MLSOC agreed with this plan, NSF approved it, and L-DEO will move forward on this. A letter will be sent from L-DEO to NSF to document this.

In January 2014, the Langseth will go into a drydock with an expected work package in the range of \$2-2.5 million dollars of work planned. The Glosten Winch Plan and the Long Core/Sponson study is continuing.

The list of equipment on the SSSE and Ocean Instrumentation proposals was reviewed and comments from the MLSOC were encouraged.

There was considerable discussion on the Lead-In terminations as parts are no longer available. At present there are four left and one spare. See the Power Point slides. L-DEO will send the report to MLSOC.

An overview of the 2013 cruises was given and the outlook for 2014 was presented.

MLSOC Committee Business

Dale led a discussion on the current MLSOC membership and that we still have one vacant position open for an industry type representative. The committee needs to take this item for action.

Closed Executive Session

The meeting then moved into a closed session to discuss operating models. It was attended by the MLSOC committee members, NSF program managers, and the UNOLS Office.

Afternoon Sessions- Dec. 8th

Young Career Scientists Workshop

During this afternoon session the participants from the Early Career Workshop were introduced and gave short presentations on their research interests, where they are in their careers, area of study they are interested in, recent work they have done, and what they hope to do in the near future. The short Power Point presentations in are in the appendices.

Science Presentations

Several of the Principal Investigators & Chief Scientists from cruises on the R/V Marcus Langseth gave presentations on recent cruises as well as some upcoming programs. The presentations are in the appendices.

Upcoming GeoPrisms Eastern North American Margin Community Seismic Experiment Donna Shillington/L-DEO covered this project and encouraged the early career community to apply to sail on this cruise. This ENAM project is scheduled for 2014 on the R/V Endeavor in April and September 2014 and on the R/V Marcus Langseth in September.

Reykjanes Ridge Cruise

Fernando Martinez/UH presented early data results from this cruise which was on the R/V Marcus Langseth for 13 August to 15 September 2013. This was a non-seismic cruise using the EM 122 multibeam to conduct bathymetric surveys along the ridge south of Iceland. Magnetics and gravity data was also collected. Early results are showing this was a very successful cruise.

Line Islands Coring Cruise

Pratigya Polissar/L-DEO presented an overview and some data results from the Line Islands Coring cruise which was conducted on the Marcus Langseth from May 1-26, 2012. This was a piston, gravity, and multi-coring cruise and was also very successful.

Deposition and Evolution of the Baranof Fan- Gulf of Alaska Cruise

Maureen LeVoir Walton/UT covered this Extended Continental Shelf cruise which ran on the Langseth from June 6-26, 2011.

USGS Bering Sea Cruise

Elizabeth Yankovsky/ Univ. of South Carolina reported on a project using data from MGL 1111 to compare this data with synthetic seismic sections.

ROV Jason Cruise

Maurice Tivey/WHOI reported on the Jason cruise which was scheduled on the R/V Marcus Langseth from Aug 16-26, 2012. This was a Jason program which had been scheduled on the R/V Thomas Thompson, but had to be rescheduled due to a Z-drive failure on the Thompson. The cruise was successful although it did present some challenges on the deck layout and lab space.

Low-Energy, (3-D) P-Cable Cruise within the Inner California Borderlands

Graham Kent/Univ of Nevada/Reno presented cruise details on the use of the P-cable system which was deployed from the Scripp's R/V New Horizon from Aug 16 to Sept 1, 2013 off of San Diego.

R/V Marion Dufresne Long Core Quality

Helene Leau/IPEV, Head of the Oceanography Department for the Institut Polaire Francais, which operates the R/V Marion Dufresne gave a talk on the long coring system which is known as the "Calypso". She presented data from recent cruises which highlighted the core quality and the recent changes they have made to the system to be able to monitor the core penetration. The issue of core stretching has been eliminated and cruise results will soon be published.

Galicia-3D Cruise

Dale Sawyer/Rice presented a report on the Galicia cruise which was on the R/V Marcus Langseth. Due to engine failure issues, this cruise had to be run as two legs in and out of Vigo, Spain from June 1-25 and July 15 to August 2, 2013. From early results, this was a successful cruise.

Mariner Integrated Seismic and Geophysical Mapping Experiment-

Robert Dunn reported out on this cruise which ran from April 11 to May 19, 2013. The Power Point presentation highlighted data from this cruise which studied the massifs on the Mid_Atlantic Redige south of the Azores.

Costa Rica 3-D Seismic Imaging Project

Nathan Bangs/UT-Austin presented additional data results from this cruise which ran from April 9^{th} to May 12^{th} , 2011.

Shatsky Rise

Will Sager/UH presented a Power Point presentation on the MGL 1004 and MGL 1206 cruises to Shatsky Rise. These cruise legs were from July 17-30, 2010 and March 24 to April 16, 2012. This presentation titled: "Shatsky Rise, Shooting the World's Largest Volcano" and the data from this cruise are included in the appendices.

Meeting Adjourned

The meeting finished at 5:15 pm on Sunday 8 December, 2013. The next meeting will be scheduled at a date to be determined in 2014.