

Marcus Langseth Science Oversight Committee Activities

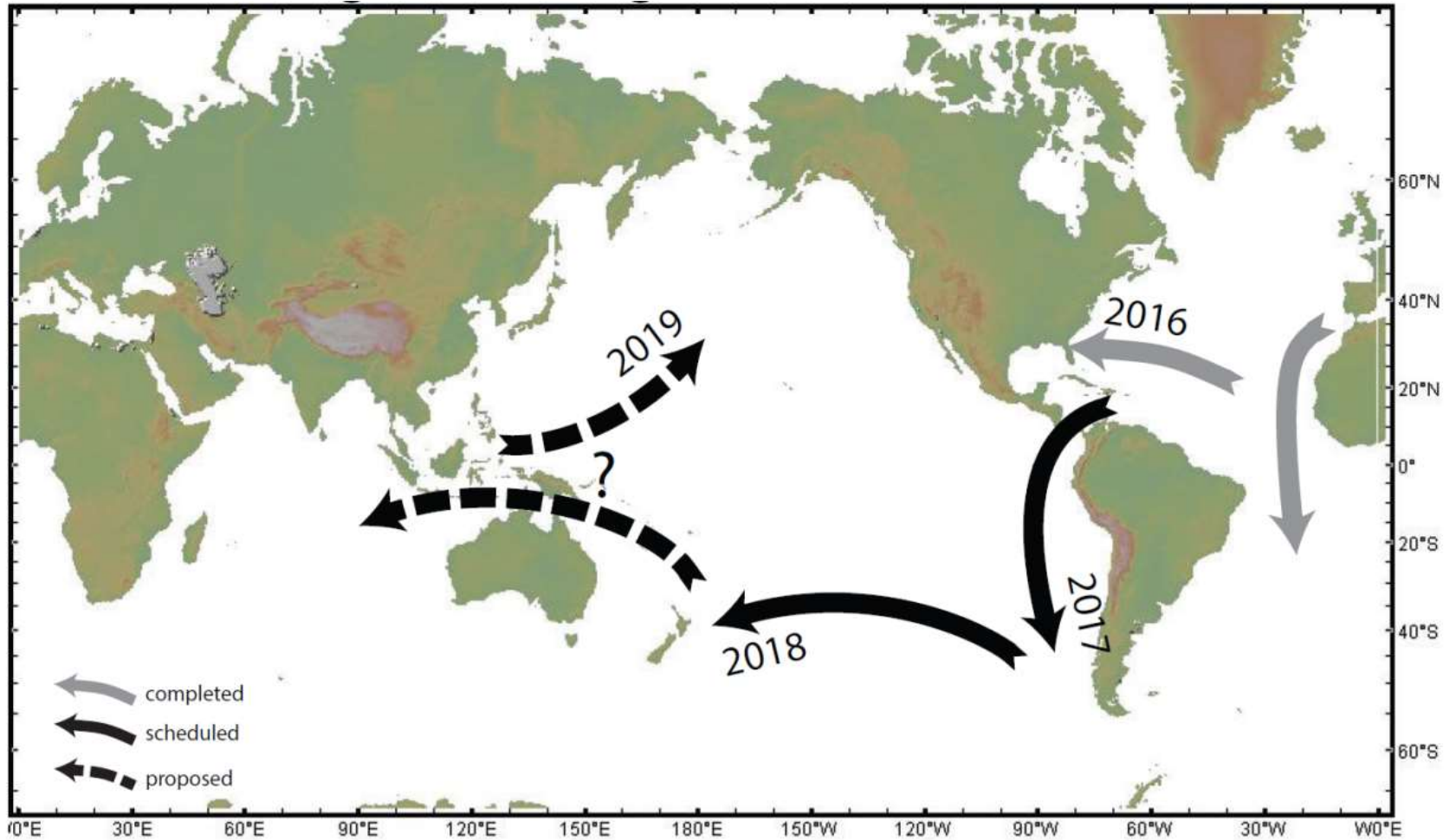
- Marine Seismic Community Survey
- Long-Range Planning
- Efforts to Develop International Collaboration
- DCL Response
- Transition to MSROC



Marine Seismic Community Survey

- 40 questions requesting input on marine seismic data users, needs, etc.
- Help MSROC development
- Key Results:
 - 236 responses in 3 weeks
 - Broad range of science interests
 - Broad interest for all seismic capabilities
 - ~ 1/2 from “non-specialists” (used seismic data or related products in their papers but do not acquire data)
 - Large community that needs marine seismic, much bigger than the few who are actively acquiring these data.

Langseth Regional Framework Plan



Langseth Long – Range Planning Efforts

Request for Letters of Interest

(basic information we can use to assess where regions of interest are)

Letters will be discussed at MLSOC/MSROC meeting

Received 24 LOIs

Efforts to Develop International Collaboration

IODP Forum Meeting - Sept. 2016

Address IODP concerns regarding sufficient/adequate seismic data for project planning and drilling safety

The primary goal is to improve efficiency and data availability by increasing access to international seismic facilities

International representation from US, UK, Germany, Japan

Primary outcome was a follow-up workshop to develop a white paper

Follow-up Workshop at Lamont – 11/21

US, UK, German participants

Primary outcome will be to begin building the framework for MOUs

White paper will be coming out in Feb.

NSF Dear Colleague Letter Response

MLSOC DCL response was submitted to NSF:

Long-range planning to improve operational efficiency and develop non-NSF funding opportunities

Support from academic institutions for student training

Development of international collaboration/cooperation

Transition to MSROC

MSLOC drafted Charter revision

MLSOC will be replaced by MSROC

MSROC will broaden its oversight to cover marine seismic research (2D/3D MCS, High-resolution MCS, Active/Passive OBS)

Membership will include international members (1-2) and OBS specialists

Applications will be reviewed and selected by UNOLS Council

MLSOC Membership

Until 12/2016

Nathan Bangs (Chair) UT Austin

Donna Blackman Scripps

Suzanne Carbotte (MLSOC, ex-officio) LDEO

Sean Gulick (IODP representative) UT Austin

Debbie Hutchinson USGS

Beatrice Magnani SMU

Gregory Mountain Rutgers U.

Dan Lizarralde WHOI

Bobby Reece TAMU

Warren Wood NRL

Maya Tolstoy (ex-officio) LDEO

MSROC Membership

(as stated in Charter)

- ● At least three members with expertise in long-offset 2-D and/or 3-D MCS studies, ideally one of these members will have significant marine seismic industry involvement.
- ● Two members with expertise in ocean bottom seismology (ideally, one each for active and passive source methods), one of whom can serve as a liaison to/from the OBSIP advisory committee
- ● A member who can serve as a liaison to the IODP community through current membership on one of that program's committees
- ● A representative with expertise in issues related to environmental permitting for marine seismics
- ● A member with expertise in high-resolution seismic imaging for shallow subsurface structure
- ● One or more members from the international geophysics community who can serve as a liaison to represent scientists/agencies on issues pertaining to international projects in marine seismic research
- ● Ex-officio representatives of the UNOLS RVTEC and RVOC committees may serve on the Committee.
- ● The *Langseth* operating institution and the OBSIP management may designate non-voting ex-officio member(s).
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Specific Tasks

(as stated in Charter)

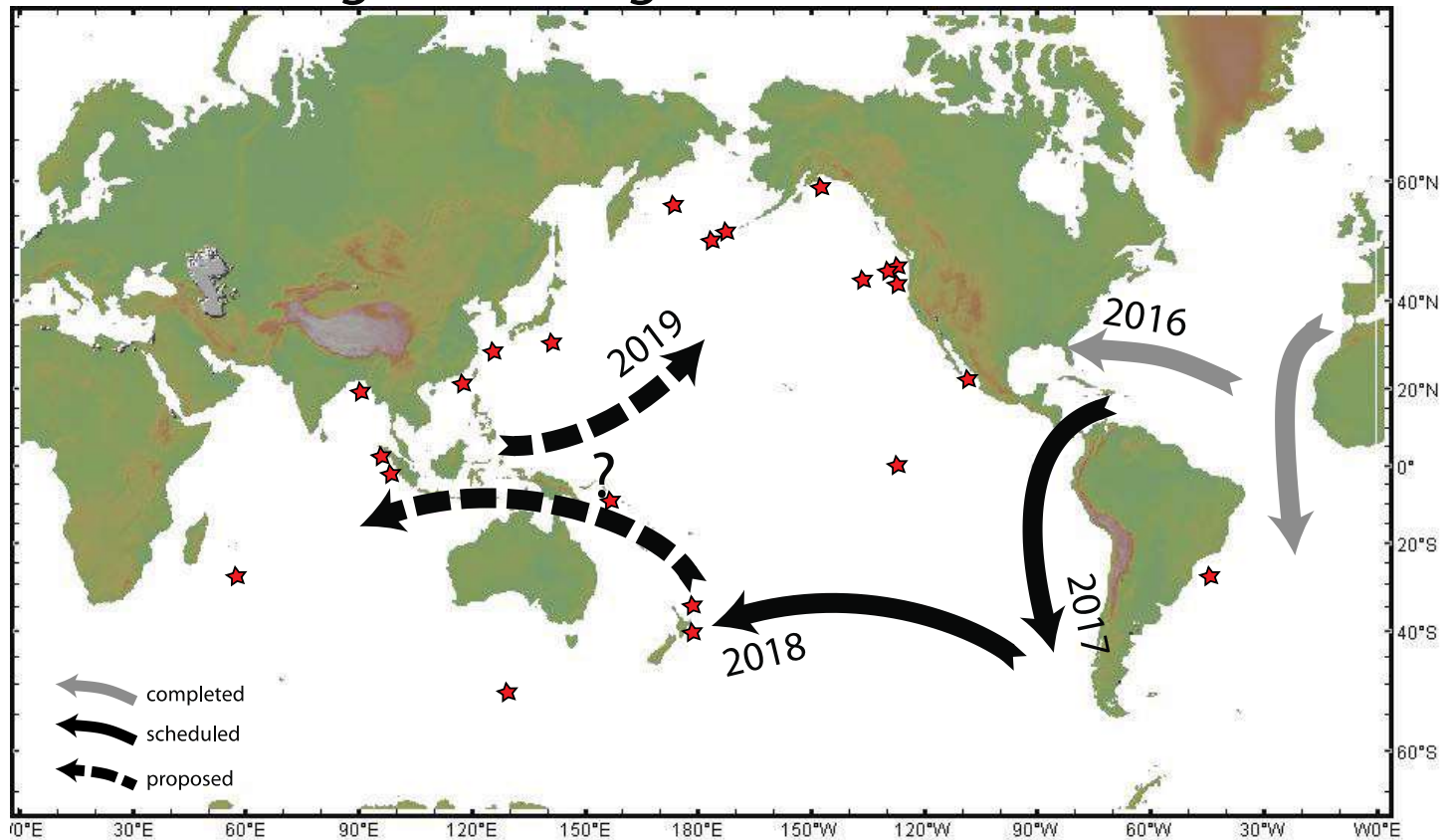
- **(a) Implementation of the Regional Framework Plan**
- **(b) Act to engage and coordinate international participation in the regional framework planning process and to identify international resources that might be available to U.S. researchers. Regularly review the technological information available for use of assets and identify needed updates.**
- **(c) Regularly review the technical capabilities of existing marine seismic assets to ensure they meet the needs of the scientific community, and advocate for upgrades when compelling needs for new capabilities are identified.**
- **(d) Promote the engagement and training of the next generation of marine seismic researchers.**
- **(e) Provide outreach tools and a feedback mechanism to the community, including a forum for input on emerging directions in marine seismic studies**

MSROC

- Goals of this discussion:
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- Do we need to coordinate a MSROC meeting with OBSIP meeting?
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- Do we want a MLSOC –subcomm?
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- What will be our primary interaction with OBSIP? – planning/coordinating use of assets (active (lobby) vs. passive (note wrt Langseth plans) role in overlap with planning), including international, facility review/assessment for need, facility development, defining science goals, experimental (expedition) technique development, outreach to community, training next generation?
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- How will reporting be done? OBSIP, MSLOC-sub, to MSROC to UNOLS to NSF?
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- How do we deal with other, less UNOLS specific, facilities i.e. P-cable, 2D high-res systems? Is our focus Langseth and OBSIP, with occasional ad hoc consideration of other assets?

Letters of Interest (24 total)

Long-Term Langseth Cruise Track



- 1 Adrien Arnulf Juan de Fuca Ridge, 45°45'N, 130°W
- 2 Anne Bécel Wharton Basin
- 3 Tanya Blacic Bowers Ridge-Western Aleutians, 50.8°-55.2° N,
172.8°E-177.7°W
- 4 J. Pablo Canales Southwest Indian Ridge, 32°40'S, 57°15'E
- 5 J. Pablo Canales Offshore S. Oregon and N. California; 40°00'N--44°50'N and
125°15'W
- 6 Suzanne Carbotte Cascadia Subduction Zone
- 7 Gail Christeson Indian Ocean; btwn Austr. and Antarc. (42°S - 48° S, 120° W
-130° W)
- 8 Robert A. Dunn Havre Backarc area, 33°50'S, 179°30'E
- 9 Shuoshuo Han Ryukyu Subudction Zone
- 10 Shuoshuo Han Cascadia Subduction Zone offshore south Oregon
(43°N-44.5°N)
- 11 Shuoshuo Han Cascadia Subduction Zone near 44.5°N
- 12 Shuoshuo Han Sumatra Subduction Zone 0°-4°N

- 13 Nick Hayman Sao Paulo Plateau (27°S -28.5°S & 39°W-41°W)
- 14 Kirk McIntosh South China Sea 17.8 - 19.2N, 115.4 - 116.8 W
- 15 Dan Lizarralde Aleutian Arc; 48 - 54 N; 182 - 188 W
- 16 James S. McClain Gulf of California 22oN to 24oN, 107oW30' to 109oW30'.
- 17 Michael Steckler Indian Ocean off Bangl. and Myan.. 17°-21° N; 90.5°-94.5° E
- 18 Katsuyoshi Michibayashi Bonin Trench; 27.5N - 29N; 141 W - 145 W
- 19 Ingo Pecher Hikurangi Margin; 39 - 38.5 S; 178 - 178.75 W
- 20 Emily Roland Gulf of Alaska; 59 - 61 N, -146 to -152 W
- 21 Emily Roland Gofar Fault, Approximately 4.5° S 106° W on EPR
- 22 Donna Shillington Solomon Islands subduction zone
- 23 Donna Shillington Pacific ocean crustal structure and properties
- 24 Lindsay Worthington Central Alaska-Aleutian trench