Regional Framework Plan for Marine Seismics— OCE Communication, Early Summer 2015

OCE is carefully considering input from the marine seismic community and the UNOLS Marcus Langseth Science Oversight Committee (MLSOC) regarding ways to improve experiment planning. This advice, together with internal NSF discussions, leads us to adopt a Regional Framework Path for marine seismic data acquisition. As the NSF reply to the NRC/NAS Decadal Survey "Sea Change" indicated, we are investigating options for how to support future marine seismic research, including deep crustal seismic capability. A regional approach is expected to be relevant for any feasible model, and thus we intend to get underway with a regional plan so as to understand the ramifications of operating in this mode. Moving forward, we will continue to work with MLSOC and the community at large to assess any need for adjustment.

The regional framework is designed to reduce overall data acquisition costs, and:

- Provide guidance about when to submit proposals for research in a particular area.
- Encourage investigators (both US and potential international teams) with new ideas for work along the path to submit a proposal that could mesh geographically (modest transit) with the framework path.
- Provide rotating access to all regions of scientific interest within a timeframe of several years.

The framework can flex somewhat in response to demand. NSF proposals for projects along the path should be submitted about 18-30 months prior to potential cruise dates. Details of the path can evolve but the main regions are expected to be retained. The length of time in one region will reflect demand and science timeliness considerations for the next region(s) along the path. The vision for this framework is that it can guide planning ~4 years into the future. Subsequent path route(s) will be announced approximately biennially, based on NSF understanding of projected interest areas and MLSOC and community input.

The Table below lists 2015 seismic work, with emphasis in the North Atlantic / Mediterranean. The next opportunity for NSF deep seismic data acquisition in this region would be after 2019/20. Shallow seismic work using existing portable systems, such as currently operated by Scripps or using P-Cable (available via lease agreement), will continue to be scheduled as needed for funded projects in any region.

van Avendonk	Cayman Trough Refraction (German source *)	NSF	Apr, 22 days	R/V *Meteor*
Hutchinson	Mid-Atlantic Extended Continental Shelf	USGS	Apr, 27 d	R/V *Langseth*
Harris/Trehu	Hikurangi Heat flow & BSR mapping, SIO system	NSF	May, 31 d	R/V *Revelle*
Mountain	New Jersey Sea Level – 3D Imaging	NSF	Jun, 42 d	R/V *Langseth*
Hooft-Toomey	Santorini Volcanic System	NSF	Oct/Nov, 23 d	R/V *Langseth*
Rychert (UK)	Equatorial Mid-Atlantic Ridge Lithosphere	NERC	Dec, 17 d	R/V *Langseth*

* Platforms of opportunity may occasionally handle collaborative work that deviates from the Regional Path.