Expanding Deep Sea Horizons: Scientific Priorities in Abyssal Research

Bathymetry from GEBCO (2014)
The Abyssal zone (4000-6000m) represents nearly 1/3rd of the global ocean, contains key physiographic features (e.g., trenches, abyssal plains, ridges, transforms), and hosts important geophysical, chemical, and biological processes mediated, in some cases, by its depth and isolation. The US research community’s access to the abyssal zone will soon expand with the completion of the upgrade of HOV Alvin to a 6500m depth rating. Along with ROV Jason in two-body mode (6500m) and AUV Sentry (6000m) we are poised to gain new insights into this understudied portion of the oceans.

Expanding Deep Sea Horizons: Scientific Priorities in Abyssal Research

What: A series of three multi-disciplinary online workshops to facilitate small group discussion and achieve community consensus on science priorities including locations, processes, and technologies. One small in-person workshop to synthesize results and craft documents.

Objectives: Develop 1) manuscript for publication describing Abyssal science priorities for the next decade, and 2) white paper outlining activities for a 6500m HOV Alvin Science Verification Cruise.

How to get involved: Workshops are tentatively planned for Spring 2020, pending NSF approval. Express your interest to participate by taking a short survey to gauge community priorities and guide development of the workshop agendas.
Alvin in the Abyss

WORKSHOP  Expanding Deep Sea Horizons: Scientific Priorities in Abyssal Research

Express your interest and take a pre-workshop survey:
go.whoi.edu/abyss-survey

Questions: ndsf@whoi.edu

Virtual workshops (late spring)
- Abyssal operations & technology
- Trenches & Transform Faults
- Abyssal Plains & Seamounts

In-person workshop (summer)
- Abyssal priorities manuscript & SVC white paper