

NSF-Sponsored Seafloor Sensors/Instrumentation Workshop

Gleneden Beach, Oregon, July 12-13

Draft Agenda

Objectives: The overarching workshop goal is to chart the future for instrumenting the seafloor to provide real-time data. A key focus will be to develop strategies to enable early warning of geohazards. Topics to be explored include the development of sensors to measure seafloor deformation, temperature and fluid flow with high resolution over broad areas, strategies for transmitting the data to land quickly and efficiently, and methods for obtaining energy from the environment.

Day 1: Thursday, July 12

8:00 – 8:45	Seating and coffee, light breakfast
8:45 – 9:00	Welcome and workshop objectives Chris Parrish, Oregon State University
9:00 – 9:15	NSF vision and anticipated outcomes Shubhra Gangopadhyay, National Science Foundation
Session I: Understanding science needs for seafloor sensing Focus on the following questions: 1) What types of data do we need? 2) Why do we need those data? 3) What are future directions for the collection and use of the data?	
9:15 – 10:15	Talks 1-5 (12 min each)
10:15 – 10:30	Panel discussion for Talks 1-5
10:30 – 10:45	Coffee break
10:45 – 11:45	Talks 6-10 (12 min each)
11:45 – 12:00	Panel discussion for talks 6-10
12:00 – 13:00	Lunch (catered)
Session II: Understanding current state-of-the-art in seafloor sensing (including power, communication, on-board processing, etc.)	
13:00 – 14:00	Talks 1-5 (12 min each)
14:00 – 14:15	Panel discussion for talks 1-5
14:15 – 14:30	Break
14:30 – 15:15	Talks 6-9 (12 min each)
15:15 – 15:30	Panel discussion for talks 6-9
Session III: Brainstorming kick-start	
15:30 – 16:45	Overview of goals for Day 2. Capture high-level points from Day 1 that will inform the Day 2 brainstorming sessions (no discussion—just jot down key points)
18:00	Dinner at local restaurant

Day 2: Friday, July 13

8:00 – 8:45	Seating and coffee, light breakfast
Session IV: Lightning talks	
9:00 –9:30	Lightning talks (2 slides max)
Session V: Gap analysis: where are the chasms between seafloor data needs and what the current state-of-the-art technologies can deliver?	
9:30 –10:45	Gap analysis brainstorming (full group)
10:45-11:00	Coffee break
11:00 – 12:30	Small group break-outs. Each group identifies ~5 of the items identified in the gap analysis sub-session to flesh out
12:30 – 13:30	Lunch (catered)
Session VI: Visioning: how do we close these gaps and design, build, implement and operate the seafloor sensors/networks of the future?	
13:30 – 14:30	Report-outs from small groups.
14:30 – 14:45	Break
14:45 – 16:00	Full-group visioning. Need to capture big-ticket items to address in reports. Ensure that we are tying back to overarching workshop goals and objectives.
16:00	Workshop close. Shuttles depart for EUG and PDX
Next 2 months	Synthesis, report writing