Proposed Short-Term Deployment of Seafloor Seismic Sensors Offshore Oregon, Washington, and British Columbia in Support of Investigations for Geohazards in the Pacific Northwest

Scientists from a number of U.S. and Canadian academic and federal institutions are proposing to conduct geophysical investigations that would provide the observations and data necessary to address fundamental science questions relevant for understanding the structures and processes that contribute to, and result from, earthquakes, tsunami, and associated geohazards in the Pacific Northwest. Because the geological targets are located offshore, the proposed projects include deployment of ocean-bottom seismic instrumentation along linear arrays from the continental shelf to the abyssal plain. Ocean Bottom Seismometers (OBSs) and Ocean Bottom Nodes (OBNs) are stand-alone individual units placed on the seafloor without any cable or rope connecting them. They would be used to record, at different spatial scales, the seismic waves generated by the natural regional seismicity and by acoustic marine sound sources. The data recorded by these instruments would enable researchers to investigate the physical properties of the continental slope sediments and crust, which are critical for predicting the intensity of earthquake-triggered shaking along the Pacific Northwest and assessing tsunami/landslide hazards under hypothetical scenarios of future earthquake rupture.

For more information, please visit **pnwgeohazards.whoi.edu**

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