

New underwater seismometers to be deployed

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Woods Hole Oceanographic Institution scientists plan to deploy 40 ocean bottom seismometers in the Pacific Ocean to better monitor earthquakes.

The seismologists say hundreds of earthquakes occur daily around the world, the majority of them underneath oceans. But since most seismographs are on land, our understanding of basic earthquake processes has been limited.

The new instruments, to be placed on the Eastern Pacific Ocean floor next year, will record both small and large earthquakes.

Jeff McGuire and John Collins at the Woods Hole Oceanographic Institution say their target area is a section of ocean about the size of the states of Connecticut and Rhode Island combined.

The instruments will operate for one year along a fault system known to have large earthquake foreshocks. Researchers say current ocean bottom seismometers record moderate ground motions from nearby small earthquakes and can register the foreshocks, but do not have the range to record the main shocks.

McGuire said, "Although our test area is in the middle of the Pacific Ocean, this technology will have broad application to other faults zones, including those of significant societal relevance such as the nearshore subduction zone off Oregon and Washington."

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