NOAA Tide Stations Upgraded to Better Detect Tsunamis

NOAA has upgraded 33 tide stations in an effort to detect tsunamis quicker as part of the National Water Level Observation Network. Network tide stations normally equipped to record tidal data once every hour can now collect tidal data every six minutes, and can transmit that date through NOAA's Geostationary Operational Environmental satellites (GOES).

The upgraded tide gauges also collect one minute averaged tide data that are available to the Pacific Tsunami Warning Center and the West Coast/Alaska Tsunami Warning Center. This enhances the tsunami detection and confirmation capability of the centers, allowing forecasters to view real-time data of any station in the network. "Tsunami detection and confirmation can be vital in preventing the loss of human life," said John H. Dunnigan, assistant administrator of NOAA's National Ocean Service. "Efficient data collection is an essential tool to coastal managers for rapid forecasting and the issuance of critical warnings that can help save lives of people in the tsunami's path."
Using special data collection platforms, water level observations from these tide gauges allow NOAA tidal stations to become an integral part of the Pacific tsunami detection and warning network. Tidal data, matched with data from NOAA's Deep-ocean Assessment and Reporting of Tsunamis (DART) network of buoys, will allow NOAA's National Weather Service tsunami warning centers to confirm a tsunami and forecast the magnitude, direction, and speed of a tsunami wave more accurately.