

**Permanent Seismic Monitoring Stations  
USGS, Cascades Volcano Observatory (CVO)**

Permanent seismic stations on Mt. St. Helens detect background and elevated seismic activity on the volcano and transmit data to the USGS/CVO office in real time. Having sufficient seismometers strategically located on and around the volcano allows for the detection and accurate location of small magnitude earthquakes and other seismic signals that are common at volcanoes. Analysis of the continuous seismic data is used to determine if a volcano is reawakening several miles below the summit of the volcano and it aids in the forecasting of the likely onset time and style of eruptive activity.

Currently, CVO operates and maintains 6 permanent seismic stations within the Mt. St. Helens National Volcanic Monument and on USFS lands adjacent to the monument.

The Pacific Northwest Seismic Network at the University of Washington also operates and maintains 6 permanent seismic stations on Mt. St. Helens.



**Photograph of USGS/CVO seismic station.**