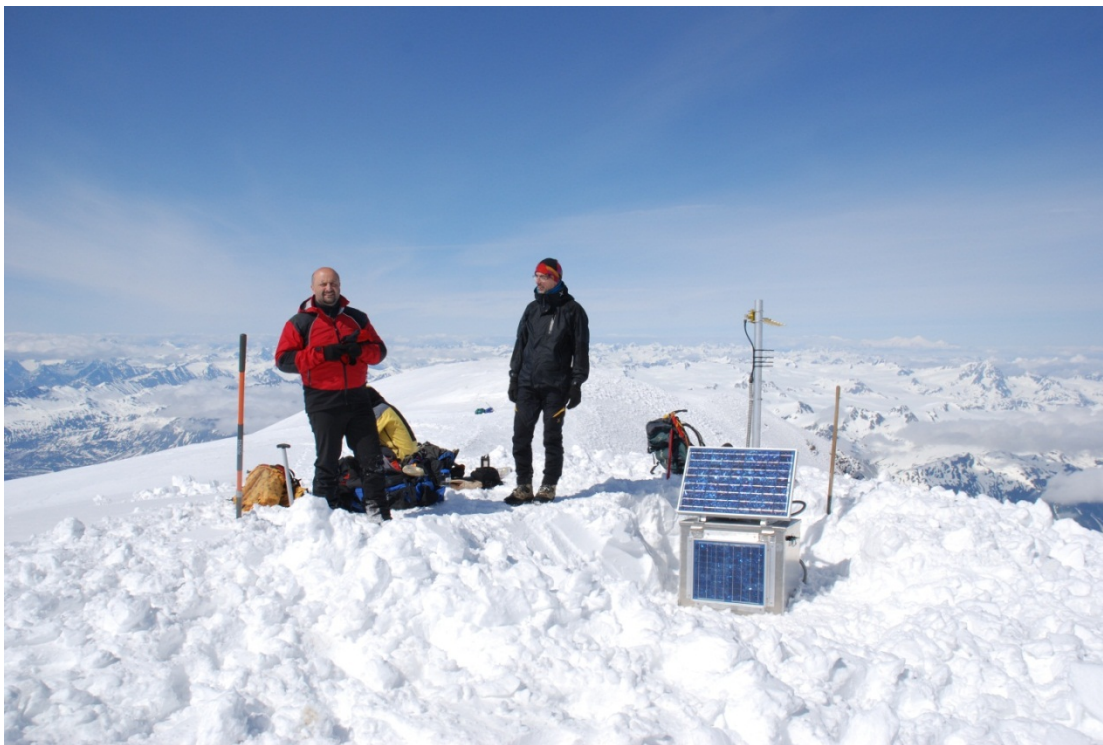


## **Permanent Gas Monitoring Stations USGS, Cascades Volcano Observatory (CVO)**

A permanent gas monitoring station detects and measures the amounts of volcanic gases emitted by the volcano. The main purpose of the gas monitoring station is to measure the ratios of volcanic gases at Mount Saint Helens, which currently emits a mixture of H<sub>2</sub>O, CO<sub>2</sub> and H<sub>2</sub>S from boiling-point fumaroles (~90 degrees C.) If the proportion of CO<sub>2</sub> were to change or if SO<sub>2</sub> were to appear in the emissions, it would give clues to unrest in the hydrothermal system of the volcano.

Currently, there are no permanent gas monitoring stations currently on the volcano. The USGS/CVO is currently in the process of installing two new permanent gas monitoring stations in the summer of 2013 or as funding allows.



**Photograph of typical volcanic gas monitoring station deployed on Mt. Redoubt volcano in Alaska.**