University of Oregon Field Geophysics 2014 (UOFG2014) Experiment Report
October 17-18, 2014

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Purpose

The purpose of the UOFG2014 experiment is to collect 24 hours of continuous ambient noise over Newberry Volcano, Oregon (43.7194°, -121.2405°). This data will be used to image the subsurface at Newberry Volcano by a University of Oregon graduate student.

Experiment description

An array of 24 vertical component geophones (Ultra-Light Exploration Seismograph system by Geometrics from IRIS PASSCAL) was deployed east of Paulina Lake in Newberry National Volcanic Monument, Oregon USA. Figure 1 shows the local geographic location of the array and Figure 2 shows the detailed geometry of the array. Each instrument recorded continuously for 24 hours (October 17-18, 2014) at a sampling rate of 62.5 Hz. The data are stored in 73 separate SEG2 files. Each file contains 24 traces (corresponding to the 24 geophones in the array) of ~1000s.

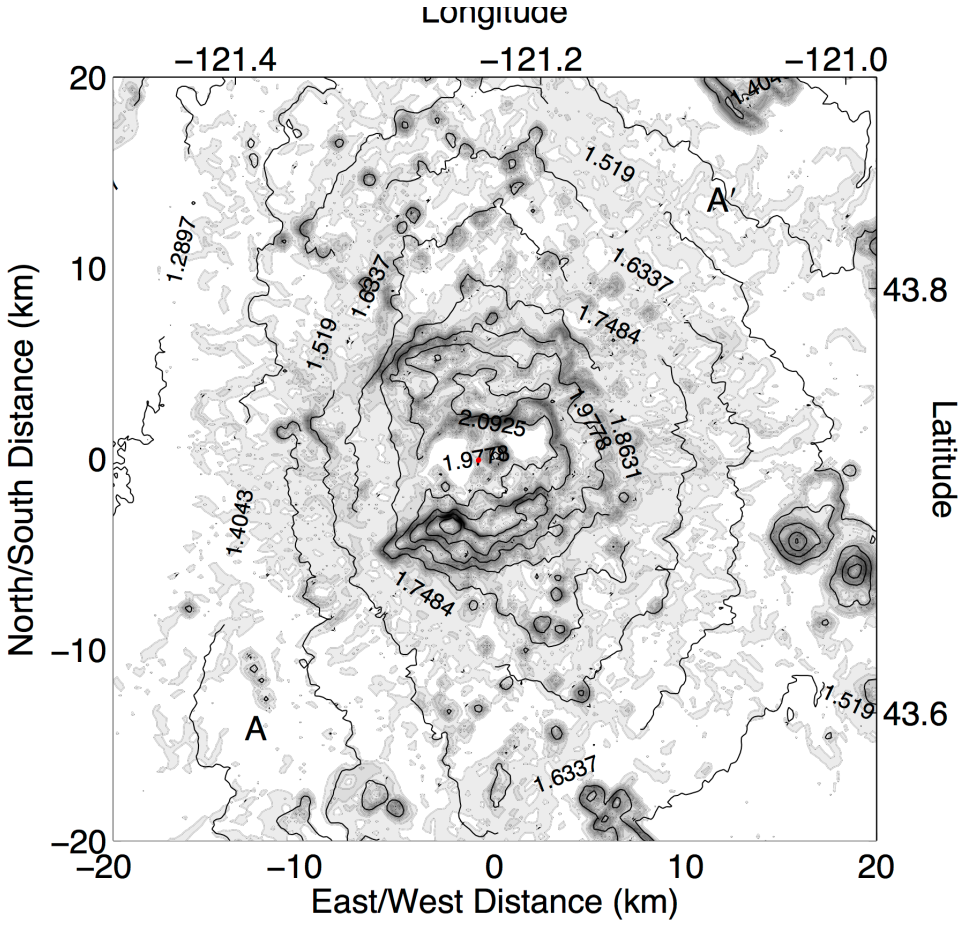

Figure 1: The geographic location of the array on Newberry Volcano, Oregon is shown by the red dot. Topography is contoured in kilometers. The bottom and left axes shows distance in kilometers with respect to Newberry Volcano (the map origin). The top and right axes show the geographic coordinates (decimal degrees).

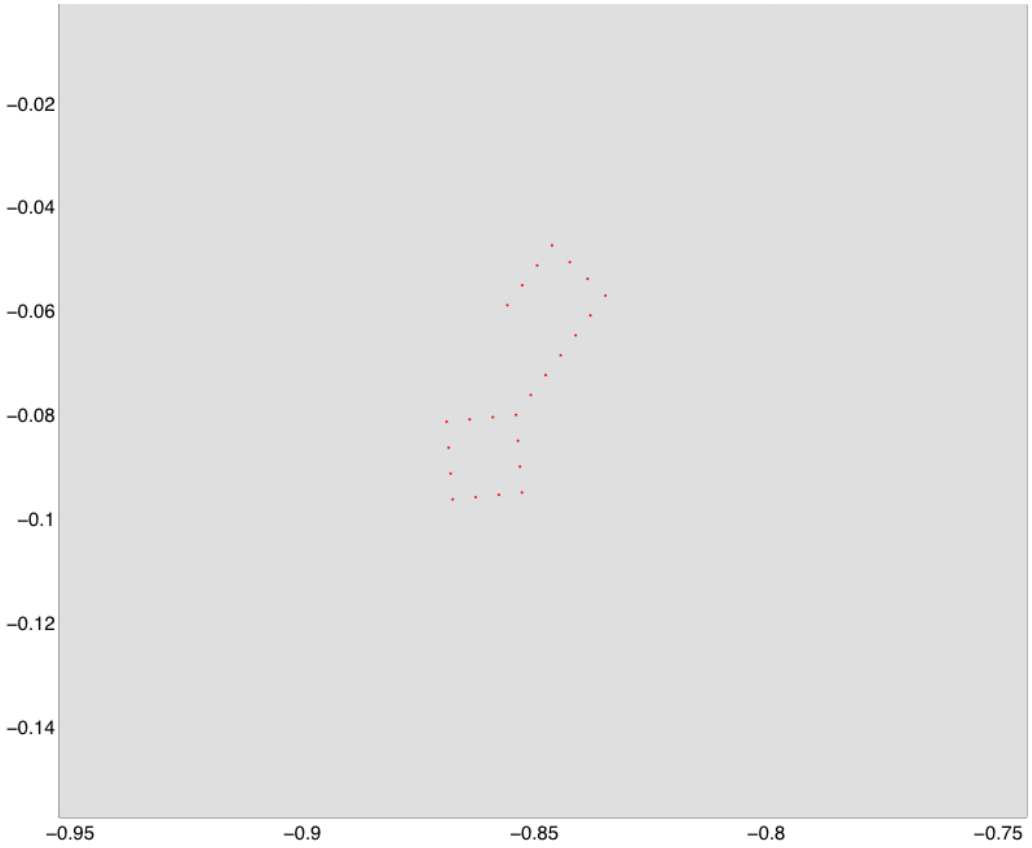

Figure 2: Detailed geometry of the array. Geophone positions are shown by red dots. Map axes are in kilometers following the orientation of Figure 1.