

University of Nevada Reno: Caithness Geothermal Micro-Earthquake Data  
2000-2001

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Seismograph stations on loan from IRIS PASSCAL were deployed in support of a seismic reflection seismic study in the Steamboat geothermal area, south Reno, Nevada. At the time of the experiment the sponsor was Caithness Geothermal; the Steamboat property has since been acquired by another company. A final report on the reflection and microseismic results was submitted to Caithness Geothermal by Optim, LLC, September 14, 2001. The Steamboat geothermal source currently produces about 75 MW for the Reno urban area.

Reftek 72A data loggers configured with L-28 4.5 Hz 3-component geophones were used in the experiment. One site location (DAS 6033) was relocated during the deployment, other stations remained in place for the duration of the experiment. Instruments were operated in a trigger mode due to the limited ability to handle continuous data in 2000. Data was recorded on older RefTek 2G SCSI portable hard drives and recovered at regular intervals.

All SAC format files include DAS IDs, sample rate information, and phase arrival times. Most event triggers were for earthquakes outside of the array, however numerous shallow events were located within the array and at shallow depths. All phase arrivals for earthquake event triggers were timed, whether these events occurred within the property or outside.

Station Locations:

<u>DAS</u>	<u>LAT</u>	<u>LON</u>	<u>ELEV (m) (NAD 27 Datum)</u>
6097	39.37505	119.78206	1628.8
6030	39.37654	119.76607	1680.8
6099	39.36965	119.75565	1516.1
6101	39.37109	119.77961	1754.1
6029	39.38703	119.76713	1488.6
6102	39.38663	119.75456	1437.8
6003	39.36433	119.77259	1529.2
6114	39.38014	119.75238	1488.7
6044	39.38078	119.75967	1526.8 until 2001:042:21
6044	39.38184	119.76325	1542.0 after 2001:042:21
6060	39.39106	119.76294	1440.7
0429	39.38483	119.77394	1516.0