

# **EARTHQUAKE ACTIVITY IN THE UTAH REGION**

Preliminary Epicenters

October 1 – December 31, 2019

Prepared by the University of Utah Seismograph Stations and funded by  
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## Foreword and Data Explanation

This report contains an epicenter map (Figure 1) and listings of earthquakes (Tables 1 and 2) detected and located in the Utah region (lat. 36° 45' – 42° 30' N, long. 108° 45' – 114° 15' W). The computer program HYPOINVERSE-2000 (F. W. Klein, 2012, U.S. Geological Survey Open-File Report 02-171 revised) was used to process the earthquake data. This report also includes maps and a table of operating seismograph stations in the University of Utah's regional/urban seismic network (Figures 2 and 3, Table 3).

The earthquake listing in Table 2 is estimated to be systematically complete above magnitude 1.5 within the Intermountain Seismic Belt in Utah and above magnitude 2.0 to 2.5 elsewhere in the state. *These data are preliminary—both the locations and magnitudes in this table are subject to revision. The catalog may include some man-made seismic events not yet identified.*

The following data are listed for each earthquake in Table 2:

- Date (yymmdd) and origin time in Universal Coordinated Time (UTC). To convert to local time, subtract seven hours for Mountain Standard Time (MST) and six hours for Mountain Daylight Time (MDT). During the report period, local time was MDT through 02:00 (2:00 a.m.) on November 3 and MST thereafter.
- Earthquake location coordinates in degrees and minutes of north latitude and west longitude, and depth in kilometers below sea level. Note that prior to October 1, 2012, the earthquake depths in these quarterly reports were computed relative to a datum of 1500 m above sea level.
- "\*" indicates poor depth resolution: no recording stations within 10 km or twice the depth.
- MAG, the computed Richter local magnitude ( $M_L$ ) for each earthquake. "W" indicates that peak amplitude measurements from Wood-Anderson records were used. Otherwise, the estimate is calculated from signal durations and is more correctly identified as coda magnitude ( $M_C$ ). The notation "--" indicates that a reliable magnitude estimate could not be made.
- NO, the number of P and S readings used in the solution.
- GAP, the largest azimuthal separation in degrees between recording stations used in the solution.
- DMN, the epicentral distance in kilometers to the closest station.
- RMS, the weighted root-mean-square of the travel-time residuals in seconds:

$$RMS = \left( \frac{\sum_i (W_i R_i)^2}{\sum_i (W_i)^2} \right)^{\frac{1}{2}}$$

where:  $R_i$  is the observed minus the computed arrival time for the  $i$ -th P or S reading, and  $W_i$  is the relative weight given to the  $i$ -th P or S arrival time (0.0 for no weight through 1.0 for full weight).



## EARTHQUAKE ACTIVITY IN THE UTAH REGION October 1 – December 31, 2019

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During the three-month period October 1, 2019, through December 31, 2019, the University of Utah Seismograph Stations (UUSS) located 446 earthquakes within the Utah region (Figure 1). The total includes one earthquake in the magnitude 3 range, and 39 earthquakes in the magnitude 2 range. Earthquakes of magnitude 3.0 or larger (plotted as stars and specifically labeled on Figure 1) are listed below. Two earthquakes were reported felt during the report period (see Table 1, a cumulative tabulation of earthquakes during 2019 that were either felt in the Utah region or for which a ShakeMap was produced, or both). Additional information on earthquakes within the Utah region is available from the University of Utah Seismograph Stations.

### Online Information

A complete copy of this report, including maps and the earthquake catalog, is available on the UUSS web site at <http://www.quake.utah.edu/earthquake-center/quarterly-seismicity-reports>.

*Note:* On October 1, 2012 UUSS began using the ANSS Quake Monitoring System (AQMS) software package for data acquisition and data processing. The primary effect on the data reported herein comes from computing the earthquake locations with a newer version of the computer program HYPOINVERSE-2000 (F. W. Klein, 2012, U.S. Geological Survey Open-File Report 02-171 revised) and a revised and expanded set of velocity models. As implemented at UUSS, this new version of the location program accounts for station elevation differences more accurately and reports focal depths relative to sea level instead of the 1500 m elevation datum used previously.

ShakeMaps—computer maps of the ground shaking produced by an earthquake—are automatically produced by UUSS for earthquakes of magnitude 3 and larger within a 75-mile wide zone along the I-15 corridor and magnitude 3.5 and larger elsewhere in the Utah region. These magnitude thresholds have changed with time as the network of strong-motion stations in the state has expanded. The ShakeMaps are accessible on the UUSS web page at <http://www.quake.utah.edu>. Earthquakes for which ShakeMaps are available are indicated in Table 1.

For earthquakes of magnitude 3 and larger in the Utah region, the U. S. Geological Survey automatically posts a Community Internet Intensity Map (CIIM) on its "Did You Feel It?" web page at <http://earthquake.usgs.gov/earthquakes/dyfi/>. We encourage anyone who feels an earthquake to report their observations on this interactive web site; felt information is available by zip code on the CIIM site or can be obtained from UUSS directly.

## Earthquakes of Magnitude 3.0 or Larger

M<sub>L</sub> 3.2    December 23    15:34 MST    19 mi NE of Lyman, WY

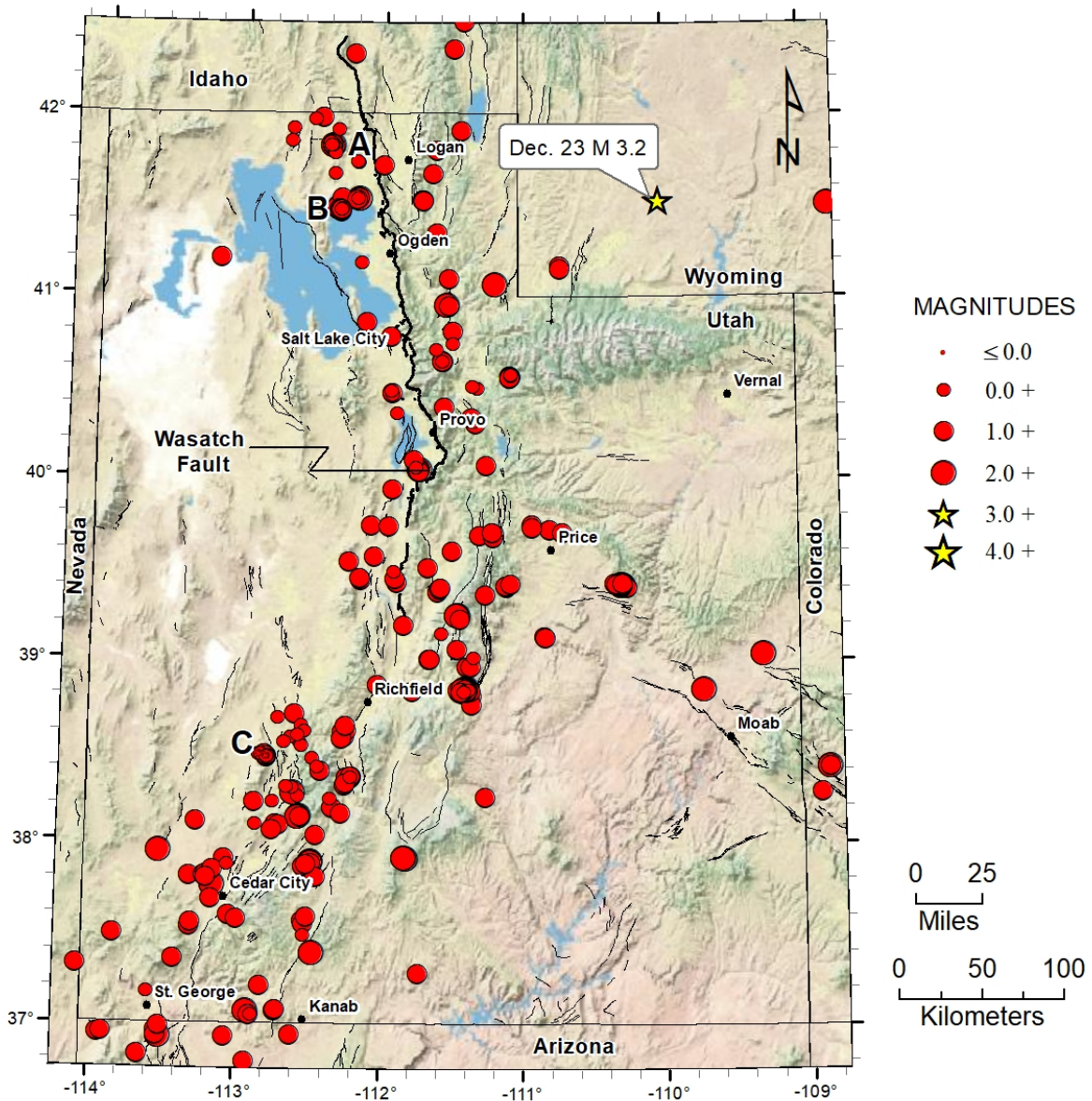
## Other Notable Seismicity

During the report period, there were three notable spatial clusters of natural earthquake activity. For reporting purposes, we define a cluster as ten or more earthquakes occurring within a 10-km (6-mile) radius during the report period.

- A. A cluster of 20 earthquakes ( $0.4 \leq M \leq 2.2$ ) occurred about 14 mi WNW of Garland, UT. Seven of these events, including a magnitude 2.2 shock, occurred between October 20 and October 31.
- B. A cluster of 16 earthquakes ( $0.8 \leq M \leq 2.5$ ) occurred about 13 mi WSW of Corinne, UT. Seven of these events, including a magnitude 2.5 shock, occurred between October 25 and October 30.
- C. A cluster of 60 earthquakes ( $-0.9 \leq M \leq 1.9$ ) occurred about 11 mi NE of Milford, UT. 43 of these events occurred between October 13 and October 24.

In Figure 1, the locally clustered seismic events within a radius of approximately 30 miles of Price, together with a localized cluster about 50 miles to its southwest, are associated with known areas of underground coal mining and are interpreted to be mining-related. These events include a total of 44 located shocks ( $0.6 \leq M \leq 2.1$ ) that occurred during the report period

## Seismicity of the Utah Region October 1, 2019 - December 31, 2019



**Figure 1.** Earthquake epicenters, located by the University of Utah Seismograph Stations, superimposed on a map of Quaternary (geologically young) faults compiled by the Utah Geological Survey (black lines). The Wasatch fault is shown in bold. Earthquakes of magnitude 3.0 and larger are labeled by local date and size. The earthquake clusters labeled A–C are discussed in the text.

**Table 1****EARTHQUAKES FELT AND/OR GENERATING A SHAKEMAP IN THE UTAH REGION****January 1, 2019 to December 31, 2019**

<b>Date</b>	<b>Time†</b>	<b>Felt Information‡</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Magnitude§</b>
January 2	08:47 MST 15:47 UTC	Utah. <i>CIIM</i> . Felt (II) at Joseph and Sevier, UT.	38° 34.67'	112° 15.55'	M <sub>L</sub> 2.9
January 8 January 9	18:46 MST 01:46 UTC	Utah. <i>CIIM</i> . Felt (III) Saint George, UT.	36° 56.30'	113° 30.96'	M <sub>L</sub> 3.1
January 16	15:00 MST 22:00 UTC	Utah. <i>CIIM</i> . <i>ShakeMap</i> . Felt (III) at Central, UT and (II) at Saint George, Ivins, Santa Clara, and Washington, UT.	37° 29.68'	113° 50.95'	M <sub>L</sub> 3.8
February 15	05:02 MST 12:02 UTC	Utah. <i>CIIM</i> . <i>ShakeMap</i> . Felt (IV) at Riverton and Eagle Mountain, UT, (III) at Draper, Lehi, Herriman, and South Jordan, UT, and (II) at Midvale, Alpine, and West Jordan, UT.	40° 27.85'	111° 56.66'	M <sub>L</sub> 3.2
February 15	05:09 MST 12:09 UTC	Utah. <i>CIIM</i> . <i>ShakeMap</i> . Felt (IV) at Riverton, Draper, Lehi, Herriman, and Eagle Mountain, UT, (III) at South Jordan, Saratoga Springs, and American Fork, UT, and (II) at Midvale, West Jordan, and Pleasant Grove, UT.	40° 27.79'	111° 56.88'	M <sub>L</sub> 3.7
February 16	15:05 MST 22:05 UTC	Utah. <i>CIIM</i> . <i>ShakeMap</i> . Felt (II) at Filmore, UT.	38° 43.92'	112° 29.63'	M <sub>L</sub> 3.3
February 20	00:05 MST 07:05 UTC	Utah. <i>CIIM</i> . <i>ShakeMap</i> . Felt (IV) at Filmore, UT, (III) at Richfield, UT, and (II) at Monroe, UT.	38° 44.25'	112° 29.79'	M <sub>L</sub> 4.0
February 20 February 21	20:08 MST 03:08 UTC	Utah. <i>CIIM</i> . Felt (III) at Draper, Lehi, Herriman, and South Jordan, UT, and (II) at Riverton and Saratoga Springs, UT.	40° 28.12'	111° 56.61'	M <sub>L</sub> 2.5

<b>Date</b>	<b>Time†</b>	<b>Felt Information‡</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Magnitude§</b>
February 23	02:31 MST 09:31 UTC	Utah. <i>CIIM. ShakeMap.</i> Felt ((III) at Riverton, Draper, Lehi, Herriman, American Fork, and Salt Lake City, UT, and (II) at Orem and Magna, UT.	40° 28.46'	111° 56.98'	M <sub>L</sub> 3.1
February 24	01:31 MST 08:31 UTC	Utah. <i>CIIM.</i> Felt ((III) at Cedar City, UT.	37° 47.85'	113° 07.77'	M <sub>L</sub> 2.9
March 3	09:10 MST 16:10 UTC	Utah. <i>CIIM.</i> Felt ((II) at Saint George and Dammeron Valley, UT.	37° 29.62'	113° 50.96'	M <sub>L</sub> 3.0
March 4	10:22 MST 17:22 UTC	Utah. <i>CIIM.</i> Felt ((III) at Moab and Blanding, UT and (II) at Thomson, UT.	38° 16.82'	108° 54.66'	M <sub>w</sub> 4.5
March 5	01:04 MST 08:04 UTC	Utah. <i>CIIM.</i> Felt ((III) at Riverton, Draper, and Herriman, UT and (II) at Lehi, South Jordan, and American Fork, UT.	40° 28.18'	111° 56.62'	M <sub>L</sub> 2.5
March 15 March 16	23:28 MDT 05:28 UTC	Utah. <i>CIIM.</i> Felt ((III) at Ferron, UT and (II) at Huntington, UT.	39° 02.41'	110° 56.51'	M <sub>L</sub> 2.8
April 9 April 10	22:32 MDT 04:32 UTC	Utah. <i>CIIM.</i> Felt ((III) at Ferron and Huntington, UT.	39° 03.33'	110° 57.74'	M <sub>L</sub> 3.2
April 13 April 14	21:59 MDT 03:59 UTC	Utah. <i>ShakeMap.</i>	38° 46.31'	112° 45.89'	M <sub>L</sub> 4.1
April 20	05:33 MDT 11:33 UTC	Utah. <i>CIIM.</i> Felt (III) at Wallsburg, Orem, and Heber City, UT and (II) at Midway and Pleasant Grove, UT.	40° 26.02'	111° 25.72'	M <sub>L</sub> 2.6
May 31	11:27 MDT 17:27 UTC	Utah. <i>CIIM.</i> Felt (II) at Richfield, UT.	38° 51.65'	112° 04.28'	M <sub>L</sub> 2.6
June 30	17:43 MDT 23:43 UTC	Nevada. <i>CIIM.</i> Felt (III) at Saint George, Veyo, and Dammeron Valley, UT.	37° 47.83'	114° 18.23'	M <sub>L</sub> 4.3
August 15	10:49 MDT 16:49 UTC	Utah. <i>CIIM.</i> Felt (III) at Saint George, UT.	36° 57.78'	113° 31.01'	M <sub>L</sub> 2.8



Date	Time†	Felt Information‡	Latitude	Longitude	Magnitude§
September 1 September 2	21:59 MDT 03:49 UTC	Utah. <i>CIIM. ShakeMap.</i> Felt (III) at Hurricane, UT and (II) at Orderville, UT.	37° 11.22'	112° 53.52'	M <sub>L</sub> 3.0
September 11 September 12	21:07 MDT 03:07 UTC	Utah. <i>CIIM. ShakeMap.</i> Felt (III) at Panguitch, UT.	37° 52.74'	112° 28.80'	M <sub>L</sub> 2.9
September 24	10:15 MDT 16:15 UTC	Utah. <i>CIIM. ShakeMap.</i> Felt (III) at Tremonton, Garland, Plymouth, Fielding, Snowville, Collinston, Deweyville, Honeyville, Corinne, and Smithfield, UT and (II) at Mendon, Brigham City, Wellsville, Logan, and Ogden, UT.	41° 48.94'	112° 23.38'	M <sub>L</sub> 3.9
October 4	17:44 MDT 23:44 UTC	Utah. <i>ShakeMap.</i>	41° 31.31'	110° 01.58'	M <sub>L</sub> 3.2
November 13 November 14	21:15 MST 04:15 UTC	Utah. <i>CIIM.</i> Felt (III) at Honeyville, UT and (II) at Corinne and Garland, UT.	41° 31.93'	112° 11.38'	M <sub>L</sub> 2.5

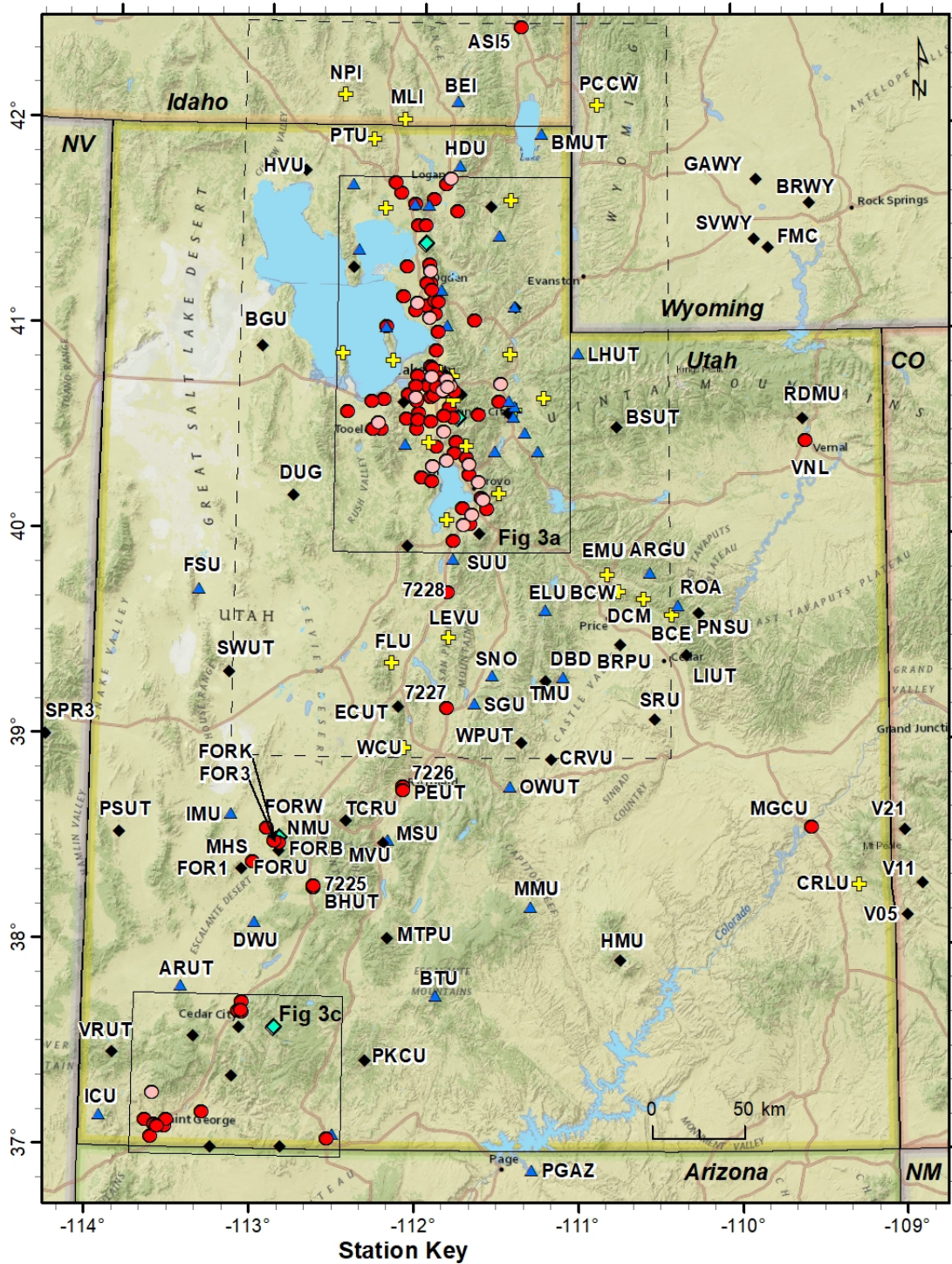
† Times are listed both as Local Time—Mountain Standard Time (MST) or Mountain Daylight Time (MDT)—and as Universal Coordinated Time (UTC).

? Indicates on-line reports that appear questionable given the distance from the source

‡ *CIIM* indicates the availability of a Community Internet Intensity Map (<http://earthquake.usgs.gov/earthquakes/dyfi>), compiled by the U.S. Geological Survey (USGS); *ShakeMap* indicates the availability of computer-generated maps of ground-shaking (<http://www.quake.utah.edu>), produced by the University of Utah Seismograph Stations (UUSS). Roman numerals correspond to the Modified Mercalli intensity scale. Unless otherwise indicated, felt information is from the USGS (1) CIIM reports and/or (2) PDE Monthly (or) Weekly Listing Files (<http://earthquake.usgs.gov/data/pde.php>).

§ Richter local magnitude (M<sub>L</sub>) or coda magnitude (M<sub>C</sub>) determined by UUSS. If labeled “NEIC,” data are from the National Earthquake Information Center of the USGS.

# Utah Regional/Urban Seismic Network December 31, 2019



- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>▲ Single-component, Analog-telemetry, Short-period</li> <li>◆ Multi-component, Analog-telemetry, Short-period</li> <li>◆ Multi-component, Digital-telemetry, Broadband</li> <li>● Multi-component, Digital-telemetry, Strong Motion</li> </ul> | <p><b>Bounds of map correspond to standard "Utah Region"</b></p> <ul style="list-style-type: none"> <li>┌ ─ ─ ─ ┐ Traditional "Wasatch Front Area"</li> <li>⊕ Multi-comp Strong-Motion, Vertical Short-Period Digital and/or Analog-telemetry</li> <li>○ NetQuakes</li> </ul> |
|---|---|

Figure 2

# Utah Urban Seismic Network (December 31, 2019)

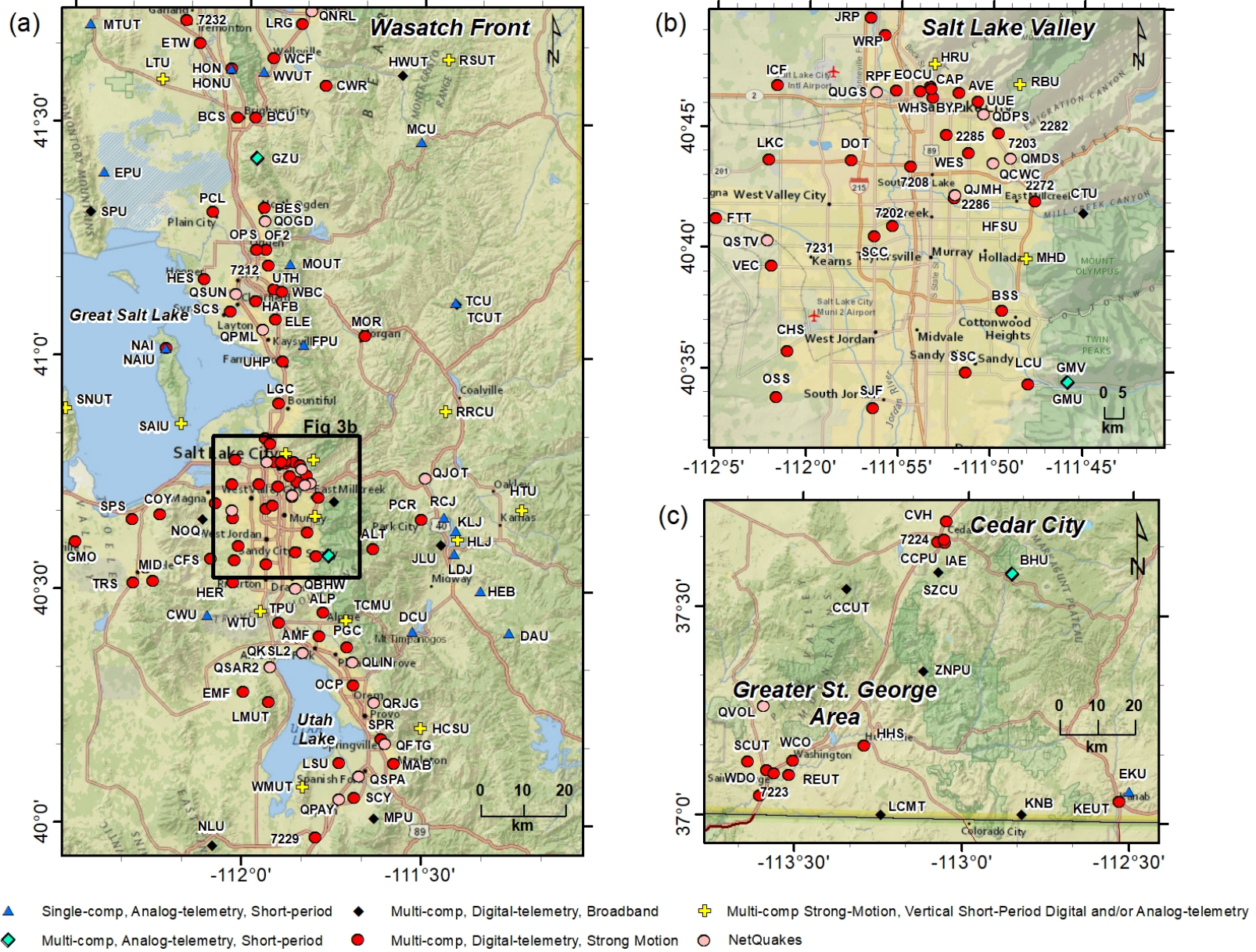


Figure 3

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2019**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
191001	01:18:31.04	36° 55.69'	113° 31.30'	5.9*	1.4W	13	212	15	0.19
191001	01:22:26.74	36° 58.85'	113° 30.23'	8.8	1.4	11	204	12	0.11
191001	02:43:51.97	41° 49.41'	112° 24.05'	1.3*	0.4	11	83	13	0.12
191001	09:14:48.19	38° 50.08'	111° 23.33'	-1.8	0.9W	11	140	7	0.17
191001	10:47:01.61	41° 49.13'	112° 24.13'	0.6*	0.5	11	83	14	0.16
191001	14:27:20.03	36° 57.28'	113° 31.52'	2.2*	1.7W	13	208	26	0.23
191002	02:04:25.90	38° 36.13'	112° 16.33'	10.4	1.4	14	103	15	0.07
191002	10:08:15.21	40° 44.54'	112° 02.32'	6.2	0.8	16	88	12	0.17
191002	10:10:56.88	40° 44.75'	112° 02.20'	8.5	0.9	14	94	13	0.06
191002	13:17:53.53	41° 49.59'	112° 23.84'	2.2*	0.8	9	84	13	0.07
191002	17:49:29.39	41° 50.14'	112° 24.65'	2.8*	0.6	7	136	13	0.03
191002	19:05:43.06	41° 49.46'	112° 23.60'	5.3*	0.9	13	82	13	0.11
191002	19:11:54.82	41° 49.54'	112° 23.91'	4.4*	1.1	14	84	13	0.12
191003	03:10:59.59	38° 49.49'	111° 26.33'	2.8	1.2	8	121	5	0.21
191003	08:32:05.59	39° 00.16'	111° 40.11'	20.4	1.6W	20	59	20	0.15
191003	12:11:59.45	38° 50.05'	111° 23.71'	-0.6	1.1W	12	82	7	0.11
191003	13:12:22.77	38° 24.60'	108° 51.66'	6.2	2.0	13	132	12	0.09
191003	13:21:07.71	38° 24.44'	108° 51.42'	5.5*	1.3	10	133	12	0.12
191004	23:44:14.71	38° 08.35'	112° 33.82'	7.4*	2.9W	26	50	17	0.19
191005	00:38:39.00	38° 08.23'	112° 33.55'	6.4*	1.9W	19	97	35	0.29
191005	14:12:09.88	41° 49.06'	112° 23.00'	6.8	1.5W	18	81	13	0.08
191006	10:35:56.90	38° 08.04'	112° 34.24'	10.8	2.1W	27	50	17	0.22
191006	14:49:05.38	38° 34.21'	112° 37.84'	3.7*	0.5	11	181	17	0.06
191006	20:13:36.71	38° 50.49'	111° 23.92'	-2.0	1.2W	9	130	7	0.15
191007	19:44:13.50	39° 29.04'	111° 55.15'	11.3	0.9	11	131	9	0.15
191008	07:47:57.17	39° 26.28'	112° 09.02'	8.4	1.6W	14	79	7	0.13
191008	09:54:07.08	39° 23.77'	111° 35.42'	13.2	1.1	12	86	23	0.15
191008	23:25:49.00	39° 11.45'	111° 50.82'	6.0*	1.2W	8	105	33	0.14
191009	06:56:59.03	38° 06.46'	113° 16.94'	13.7	1.0	11	112	25	0.13
191009	17:03:22.96	41° 27.57'	112° 19.61'	0.2	1.3	11	108	10	0.15
191009	17:19:45.57	41° 27.99'	112° 19.95'	0.4	1.1W	15	93	10	0.16
191009	20:44:28.31	39° 23.78'	110° 18.33'	-2.6	1.6	7	200	4	0.08
191009	21:44:17.92	39° 26.84'	112° 09.54'	6.2	1.0	8	98	8	0.10
191010	01:24:04.89	41° 32.15'	112° 18.85'	2.5	1.9W	19	84	8	0.13
191010	04:16:37.64	39° 24.57'	110° 18.66'	-1.2	2.1W	16	121	2	0.14
191011	09:23:43.98	42° 21.15'	111° 30.34'	2.5*	1.4	8	147	35	0.19
191011	16:38:07.62	41° 47.88'	111° 37.79'	10.6	1.0	7	119	11	0.02
191011	21:35:12.95	38° 38.19'	112° 33.38'	1.5	0.6	12	164	10	0.07
191013	09:40:45.26	38° 28.85'	112° 50.52'	0.2	-.2	10	224	3	0.09
191013	17:36:37.66	39° 14.65'	111° 28.18'	2.8	2.6W	35	45	10	0.18
191014	01:33:08.01	38° 01.95'	112° 26.85'	4.8*	1.6W	14	87	23	0.27
191014	06:16:44.76	39° 25.03'	110° 20.69'	-1.5	1.3W	10	107	2	0.08
191014	08:51:29.96	39° 21.35'	111° 16.36'	-0.4	1.4	6	194	9	0.06
191014	11:37:16.16	39° 14.73'	111° 27.91'	-1.2	2.7W	26	61	10	0.17
191014	20:27:24.91	37° 48.05'	113° 12.26'	11.6	1.4	15	119	21	0.17

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2019**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
191014	21:48:29.67	39° 24.40'	110° 17.97'	-3.1	1.6W	9	222	3	0.10
191015	04:50:13.78	38° 49.35'	111° 23.07'	0.0	1.5	9	150	6	0.21
191015	05:28:33.08	36° 56.73'	113° 53.76'	10.6*	1.0	6	213	23	0.05
191015	13:52:42.38	38° 49.30'	111° 23.73'	2.0	1.4	10	161	5	0.15
191015	15:06:00.81	38° 49.70'	111° 23.93'	1.0	1.5W	10	151	6	0.08
191015	15:28:20.62	38° 49.85'	111° 24.79'	0.6	1.1W	12	95	6	0.21
191015	15:50:19.11	38° 49.97'	111° 23.57'	-0.4	1.5W	10	85	6	0.10
191016	00:53:27.79	38° 49.80'	111° 23.61'	0.5	1.6W	18	94	6	0.19
191016	00:58:38.32	38° 49.56'	111° 24.00'	1.8	1.6W	16	83	6	0.16
191016	02:07:15.94	38° 50.18'	111° 24.18'	-0.5	1.3W	11	82	7	0.13
191016	07:23:32.29	40° 46.42'	111° 57.22'	6.4	1.0W	24	59	5	0.15
191016	11:48:03.61	38° 49.40'	111° 23.69'	3.1	1.5	6	169	5	0.04
191016	14:22:49.22	38° 05.63'	112° 43.68'	9.2*	1.7W	17	73	24	0.18
191016	15:45:09.39	37° 23.46'	112° 27.90'	-3.2*	2.0W	13	87	15	0.20
191016	16:42:58.09	40° 33.06'	111° 05.89'	6.8*	1.5W	20	126	17	0.16
191016	17:39:14.13	38° 49.04'	111° 22.81'	0.6	1.9	8	157	6	0.21
191016	21:29:27.88	38° 14.93'	111° 16.12'	6.0*	1.7	15	95	58	0.11
191016	23:29:48.92	41° 09.81'	110° 44.57'	20.3	1.9W	18	85	37	0.16
191017	02:12:13.13	38° 50.11'	111° 23.87'	-0.3	1.4W	8	83	7	0.09
191017	02:16:19.81	38° 49.96'	111° 25.43'	1.5	1.6	12	111	6	0.21
191017	03:14:53.64	39° 01.92'	109° 18.60'	6.4*	2.4W	20	143	60	0.13
191017	08:03:49.84	41° 57.97'	112° 31.04'	-1.8*	0.9	8	133	16	0.07
191017	09:55:07.00	38° 28.92'	112° 50.36'	0.1	-4	13	230	3	0.08
191017	09:55:23.83	38° 28.85'	112° 50.90'	0.1	***	7	258	3	0.09
191017	09:55:44.79	38° 29.17'	112° 50.80'	-1.0	-6	11	207	2	0.10
191017	09:56:11.28	38° 28.89'	112° 51.02'	-0.1	***	7	252	2	0.09
191017	13:26:06.59	38° 57.60'	111° 23.95'	-1.1	1.4	5	133	5	0.02
191017	15:01:51.86	39° 25.30'	110° 21.18'	-2.0	1.5	7	121	2	0.07
191017	15:51:05.29	39° 56.05'	111° 56.12'	0.7*	1.1	11	96	12	0.08
191017	23:35:46.40	41° 08.69'	110° 44.63'	24.5	1.6	16	60	35	0.20
191018	02:06:50.06	37° 48.58'	113° 13.15'	2.7*	1.6	14	86	20	0.26
191018	08:29:28.09	38° 18.55'	112° 15.04'	4.9*	1.5W	21	110	30	0.13
191018	08:31:02.62	39° 07.44'	110° 50.59'	5.7*	1.4	8	140	28	0.17
191018	10:55:38.55	36° 56.31'	113° 55.52'	-1.3*	1.9	12	214	23	0.32
191018	12:17:23.96	38° 19.34'	112° 14.74'	4.0*	1.0	13	111	32	0.18
191018	19:33:23.73	41° 46.77'	112° 22.53'	7.5	0.8	9	116	14	0.07
191018	21:24:20.03	38° 47.81'	111° 22.89'	4.9	1.8	6	179	4	0.32
191019	14:28:16.98	41° 54.84'	112° 40.75'	5.9*	0.7	6	178	17	0.05
191019	20:37:01.91	38° 49.68'	111° 22.34'	-1.2	1.3W	9	154	7	0.10
191019	21:06:04.99	38° 49.41'	111° 22.93'	0.2	1.5W	15	151	6	0.16
191019	21:53:41.82	38° 50.29'	111° 25.05'	2.6	1.3	7	148	6	0.29
191019	22:05:30.88	38° 49.17'	111° 23.36'	1.0	1.7	14	149	5	0.20
191020	08:24:32.26	36° 55.52'	113° 03.55'	23.9	1.8W	10	225	19	0.07
191020	10:24:37.76	38° 49.66'	111° 23.70'	1.1	1.4	6	163	6	0.07
191020	16:09:45.63	38° 27.85'	112° 48.03'	0.3	-5	15	284	5	0.09

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2019**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
191020	17:25:37.78	38° 27.90'	112° 47.51'	2.4	0.4	10	188	6	0.06
191020	21:21:22.18	41° 49.27'	112° 23.74'	3.6*	1.5W	20	83	13	0.14
191020	21:57:57.71	41° 50.13'	112° 24.36'	5.1*	0.4	7	133	12	0.17
191020	22:26:40.48	38° 28.51'	112° 46.94'	0.2	-.1	10	299	7	0.12
191020	23:07:11.68	38° 27.64'	112° 47.59'	3.2	1.3	9	188	6	0.05
191021	00:02:47.33	38° 28.14'	112° 47.08'	1.2	-.2	12	187	7	0.04
191021	00:51:07.61	41° 49.18'	112° 23.68'	6.6	1.7W	23	82	13	0.13
191021	12:05:47.21	37° 51.70'	112° 31.87'	7.4*	1.5	17	81	36	0.21
191021	19:38:09.99	38° 28.20'	112° 48.32'	2.7	-.3	11	284	5	0.07
191021	19:48:56.62	40° 33.13'	111° 06.18'	5.0*	1.2	12	126	17	0.16
191021	20:02:08.83	38° 28.03'	112° 47.91'	4.9	1.1	13	117	6	0.05
191022	00:48:27.09	39° 25.50'	111° 53.93'	14.1	1.7W	23	88	12	0.16
191022	00:49:06.95	39° 26.54'	111° 54.94'	12.0	1.4	9	94	11	0.09
191022	04:21:33.48	38° 28.02'	112° 47.18'	0.5	0.3	11	188	7	0.05
191022	04:50:59.31	38° 27.99'	112° 47.41'	0.6	0.1	12	187	6	0.05
191022	06:19:52.22	38° 27.57'	112° 47.72'	3.6	0.2	17	97	6	0.09
191022	06:20:38.87	38° 28.01'	112° 47.87'	3.8	***	12	186	6	0.07
191022	06:20:40.07	38° 27.67'	112° 48.06'	4.5	0.8	13	95	5	0.23
191022	06:21:31.71	38° 28.12'	112° 47.29'	0.0	-.7	10	199	6	0.05
191022	06:22:15.26	38° 28.04'	112° 47.72'	3.0	0.4	14	103	6	0.10
191022	06:29:21.22	38° 27.94'	112° 47.76'	3.5	0.4	13	142	6	0.08
191022	06:35:25.70	38° 28.13'	112° 47.74'	3.1	0.1	12	185	6	0.03
191022	06:42:18.45	38° 27.92'	112° 47.92'	4.2	0.9	13	142	6	0.04
191022	08:50:35.19	38° 50.03'	111° 24.80'	1.6	1.5	7	185	6	0.08
191022	09:28:12.68	38° 28.11'	112° 47.33'	0.1	-.5	10	293	6	0.06
191022	09:48:27.00	38° 50.24'	111° 26.08'	3.7	1.2	9	209	6	0.09
191022	12:05:15.93	38° 28.20'	112° 47.56'	1.2	-.7	10	248	6	0.02
191022	12:50:32.88	38° 27.94'	112° 47.53'	1.8	-.2	10	187	6	0.06
191022	13:07:23.12	38° 27.88'	112° 47.59'	2.7	0.5	11	144	6	0.07
191022	13:23:13.70	38° 28.06'	112° 47.90'	3.6	0.5	14	142	6	0.04
191022	14:09:18.92	38° 50.11'	111° 24.57'	0.1	1.5	9	155	6	0.10
191022	14:11:39.56	38° 50.10'	111° 24.47'	0.3	1.6W	21	85	6	0.18
191022	15:05:16.17	38° 50.40'	111° 24.69'	-0.4	1.0W	9	156	7	0.12
191022	15:10:43.62	38° 50.30'	111° 24.72'	0.1	1.4W	10	121	7	0.13
191022	15:24:19.58	38° 50.22'	111° 24.04'	0.0	1.8	8	152	7	0.10
191022	15:40:55.73	38° 50.13'	111° 24.23'	-0.4	0.9	7	154	6	0.06
191022	18:38:55.86	38° 49.82'	111° 24.55'	1.9	1.4W	12	155	6	0.09
191022	23:26:00.90	38° 50.47'	111° 24.18'	-0.7	1.4W	13	127	7	0.13
191022	23:35:18.19	38° 50.16'	111° 24.36'	-0.4	1.2	7	154	6	0.12
191023	02:06:11.77	38° 49.25'	111° 24.98'	5.8	1.5	6	186	5	0.03
191023	02:24:54.34	38° 49.31'	111° 23.77'	4.7	1.2	6	142	5	0.20
191023	03:02:10.95	38° 51.03'	111° 25.43'	-2.2	1.4	7	116	8	0.11
191023	07:25:47.08	38° 27.87'	112° 47.46'	0.5	-.3	11	188	6	0.05
191023	07:26:05.19	38° 27.71'	112° 47.56'	2.4	0.4	13	118	6	0.07
191023	07:26:17.36	38° 27.61'	112° 47.04'	0.5	0.1	12	190	7	0.10

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DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
191023	07:27:36.91	38° 27.85'	112° 47.41'	0.9	-2	12	188	6	0.05
191023	07:30:31.24	38° 27.98'	112° 47.54'	1.0	-3	9	186	6	0.05
191023	07:31:56.12	38° 28.01'	112° 47.43'	1.1	-2	10	186	6	0.05
191023	07:35:26.59	38° 27.65'	112° 47.62'	2.4	1.3	18	99	6	0.09
191023	07:40:59.15	38° 27.92'	112° 47.46'	0.1	-1	14	188	6	0.07
191023	07:52:41.33	38° 27.39'	112° 47.12'	1.2	0.2	12	192	7	0.10
191023	08:03:32.25	38° 28.12'	112° 47.58'	1.9	-4	11	198	6	0.06
191023	08:08:01.92	38° 27.97'	112° 47.48'	1.8	-3	11	187	6	0.05
191023	11:28:47.59	38° 28.13'	112° 47.66'	0.1	-3	12	198	6	0.06
191023	14:39:23.06	38° 49.70'	111° 23.61'	0.6	1.7W	20	100	6	0.16
191023	16:28:44.07	37° 34.48'	112° 59.42'	8.6	1.4	12	135	9	0.06
191023	16:42:07.47	41° 40.07'	111° 39.61'	7.3	1.8W	22	58	10	0.17
191023	19:17:08.03	38° 27.82'	112° 47.39'	0.3	-2	11	290	6	0.07
191023	21:11:14.80	38° 27.66'	112° 47.70'	2.8	0.0	12	286	6	0.08
191023	23:24:36.71	38° 28.04'	112° 48.06'	4.3	0.0	11	198	5	0.06
191024	03:04:15.27	38° 49.31'	111° 24.56'	6.0	1.7	6	176	5	0.03
191024	03:06:47.50	38° 49.72'	111° 24.82'	2.1	1.8	6	184	5	0.08
191024	03:11:13.57	38° 49.74'	111° 24.78'	1.6	1.4	6	184	6	0.08
191024	03:57:14.64	38° 27.92'	112° 47.45'	1.6	0.4	14	188	6	0.07
191024	04:45:26.27	37° 50.47'	113° 09.36'	3.8*	1.5	8	136	26	0.18
191024	05:00:01.53	37° 33.19'	113° 18.22'	5.6	1.3W	7	100	5	0.18
191024	07:27:23.43	37° 31.91'	113° 18.69'	4.8	1.5W	15	88	5	0.10
191025	04:40:19.75	38° 50.02'	111° 24.65'	0.6	1.7W	16	124	6	0.12
191025	07:33:21.61	39° 23.24'	111° 35.77'	11.2*	1.3W	15	69	23	0.19
191025	12:00:35.36	38° 32.83'	112° 40.77'	5.3*	0.4	11	172	15	0.06
191025	12:06:21.92	41° 28.28'	112° 19.85'	0.4*	1.3	16	96	11	0.13
191025	13:06:04.21	41° 28.56'	112° 18.99'	0.1*	0.9	12	107	12	0.26
191025	21:26:37.18	41° 28.44'	112° 20.14'	0.4*	1.5	14	93	11	0.14
191025	21:31:00.79	37° 04.10'	112° 42.92'	16.5	1.7	10	88	11	0.11
191025	21:43:49.67	41° 28.70'	112° 20.26'	1.6*	2.5W	39	89	11	0.17
191025	22:06:25.66	38° 49.41'	111° 24.79'	4.6	1.4	9	182	5	0.27
191025	22:27:03.57	38° 49.69'	111° 24.76'	1.7	1.5	7	182	5	0.08
191026	03:39:41.53	38° 50.09'	111° 24.09'	-0.2	1.8	11	133	6	0.06
191026	10:04:52.61	38° 48.94'	111° 23.35'	1.6	1.8	9	152	5	0.24
191026	15:19:01.51	37° 04.40'	112° 42.69'	14.2	1.1W	14	86	12	0.14
191027	02:57:02.94	38° 49.26'	111° 25.20'	4.5	0.9W	8	191	5	0.08
191027	04:40:58.26	38° 48.07'	111° 21.84'	2.7	1.5	7	182	6	0.06
191027	05:29:41.65	41° 28.31'	112° 19.99'	-0.4*	1.7W	19	90	11	0.17
191027	07:22:02.98	38° 45.21'	111° 21.77'	3.2	1.3	5	239	6	0.21
191027	13:59:59.78	39° 44.23'	112° 04.90'	0.3*	1.9W	23	75	24	0.32
191027	16:20:13.63	41° 49.39'	112° 23.49'	4.5*	1.4	10	82	13	0.10
191027	20:14:06.55	38° 49.81'	111° 23.73'	-0.3	1.5W	13	137	6	0.15
191027	22:42:03.43	41° 49.31'	112° 23.48'	6.6	2.2W	30	82	13	0.12
191027	23:23:37.36	39° 34.13'	112° 03.35'	5.3*	1.2	12	73	22	0.25
191028	14:08:21.96	41° 49.22'	112° 23.67'	0.5*	0.5	12	82	13	0.08

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DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
191028	22:22:28.80	38° 50.28'	111° 24.33'	-0.2	2.5W	22	126	7	0.21
191029	00:04:58.27	38° 50.08'	111° 24.27'	-0.7	1.9	11	129	6	0.15
191029	00:23:59.31	38° 50.22'	111° 24.71'	-0.2	1.2W	11	122	6	0.08
191029	03:57:51.63	38° 49.60'	111° 25.62'	4.2	1.4W	8	201	5	0.11
191029	04:49:39.08	38° 50.78'	111° 24.13'	-2.2	2.1W	20	88	8	0.16
191029	04:52:59.04	38° 49.82'	111° 24.96'	1.6	1.8W	14	120	6	0.13
191029	04:58:42.92	38° 49.78'	111° 25.44'	3.1	1.9	5	197	6	0.03
191029	05:46:56.38	38° 50.09'	111° 24.07'	-0.3	1.3W	10	152	6	0.17
191029	06:50:04.96	38° 49.78'	111° 24.89'	4.4	1.9	6	186	6	0.17
191029	08:13:19.76	38° 49.87'	111° 26.26'	1.5	1.5	10	170	6	0.15
191029	09:45:50.90	38° 23.13'	112° 25.40'	6.0*	1.1	7	273	25	0.11
191029	11:52:59.05	38° 49.62'	111° 25.12'	3.8	1.4	5	190	5	0.02
191029	15:00:13.12	39° 22.88'	111° 36.20'	8.7*	1.7W	23	81	23	0.19
191029	16:55:56.96	38° 49.80'	111° 25.03'	2.6	1.7	7	189	6	0.09
191029	18:52:30.46	39° 43.43'	110° 56.27'	1.8*	1.4	10	158	15	0.25
191030	07:45:41.28	38° 50.23'	111° 24.21'	-0.7	1.1W	14	129	7	0.12
191030	22:36:32.15	41° 27.82'	112° 19.22'	0.2*	1.4W	20	88	11	0.20
191030	22:38:13.77	41° 28.11'	112° 19.50'	0.3*	0.8W	15	93	11	0.14
191030	22:51:55.00	38° 50.59'	111° 25.51'	-0.8	1.8W	22	109	7	0.15
191030	22:55:46.77	38° 50.58'	111° 26.42'	-0.9	1.1	9	164	7	0.09
191030	22:57:00.78	39° 25.14'	110° 17.95'	-1.1	0.9	6	269	2	0.01
191031	02:29:00.59	38° 50.01'	111° 23.97'	-0.2	1.9W	24	103	6	0.15
191031	02:31:32.81	38° 49.82'	111° 25.44'	1.7	1.5	9	158	6	0.13
191031	02:35:04.40	39° 07.72'	110° 50.98'	2.3*	1.5W	17	114	28	0.10
191031	03:10:31.56	38° 50.06'	111° 25.81'	0.4	1.3	8	106	6	0.21
191031	03:14:08.26	39° 24.45'	110° 17.96'	-1.9	1.5W	11	201	3	0.08
191031	03:17:42.70	38° 24.52'	112° 26.53'	5.8*	0.4	12	151	22	0.08
191031	04:01:55.34	38° 50.22'	111° 24.73'	0.0	1.5W	14	134	6	0.13
191031	12:16:20.74	41° 49.37'	112° 24.01'	2.0*	0.6	11	83	13	0.12
191031	15:48:41.14	38° 49.91'	111° 25.12'	2.8	1.8W	19	118	6	0.14
191031	15:54:13.04	38° 50.13'	111° 25.21'	-0.1	1.7	8	158	6	0.06
191031	19:00:48.27	37° 02.87'	112° 52.66'	17.4	0.9W	8	122	6	0.09
191101	00:45:05.46	39° 00.08'	111° 39.70'	21.2	1.4	13	99	20	0.12
191101	03:06:38.18	40° 33.43'	111° 06.04'	11.5	1.9W	27	106	17	0.18
191101	04:14:16.36	38° 50.58'	111° 25.74'	-1.1	1.4	10	136	7	0.11
191101	05:31:10.98	38° 49.77'	111° 25.81'	3.9	1.8W	18	106	6	0.22
191101	06:03:27.95	38° 32.83'	112° 33.86'	6.6	0.6	8	195	12	0.10
191101	08:00:53.01	38° 50.22'	111° 24.47'	-0.1	2.2W	22	86	6	0.18
191101	08:05:19.28	39° 24.93'	111° 05.55'	-1.7*	1.1W	15	122	11	0.07
191101	09:45:15.34	38° 50.34'	111° 26.14'	0.4	1.4	10	136	7	0.09
191101	10:58:23.00	38° 49.19'	111° 25.79'	5.7	1.5	7	204	4	0.06
191101	16:18:14.99	38° 49.39'	111° 27.09'	6.0	1.6	6	228	5	0.03
191101	18:03:03.13	38° 50.12'	111° 25.94'	0.1	1.5	11	162	6	0.15
191101	19:42:09.00	38° 50.08'	111° 25.70'	0.1	1.2W	10	119	6	0.23
191102	02:13:27.70	38° 49.24'	111° 26.23'	6.6	1.0	8	214	5	0.13



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191102	07:26:15.02	38° 50.19'	111° 23.18'	-1.5	1.5	9	141	7	0.08
191102	09:47:26.10	41° 28.19'	112° 19.26'	-1.4*	1.1	13	95	11	0.18
191102	22:11:56.39	38° 09.36'	112° 16.30'	2.0*	1.2W	11	157	15	0.36
191102	22:26:49.72	37° 45.43'	113° 09.25'	0.2	2.5W	24	44	9	0.25
191103	14:45:18.90	39° 41.95'	110° 43.47'	-3.2	1.4W	12	71	4	0.09
191103	21:04:59.11	38° 28.82'	112° 50.30'	-0.1	-.2	14	235	2	0.09
191103	21:06:02.31	38° 28.69'	112° 50.12'	0.3	-.8	9	243	3	0.08
191103	21:28:56.36	38° 28.75'	112° 50.21'	0.2	-.3	10	239	3	0.09
191103	22:26:54.04	38° 28.85'	112° 50.31'	0.3	-.2	14	234	2	0.10
191103	23:53:51.22	38° 28.93'	112° 49.73'	0.3	-.5	12	253	4	0.33
191104	00:31:12.62	40° 23.12'	111° 33.97'	10.1	1.8W	41	64	5	0.18
191104	00:54:05.47	38° 28.81'	112° 50.39'	-0.1	0.1	15	231	2	0.13
191104	01:02:28.80	38° 28.82'	112° 50.16'	0.1	-.6	12	239	3	0.10
191104	01:58:56.18	39° 23.93'	110° 16.00'	-3.4	1.6	8	211	6	0.21
191104	05:22:25.61	38° 40.74'	112° 43.14'	15.0	0.8	9	243	21	0.06
191104	06:19:36.35	37° 48.73'	113° 11.76'	10.9	1.6W	18	47	19	0.17
191104	18:45:15.27	40° 05.96'	111° 46.74'	8.8	1.0	6	124	5	0.05
191105	04:35:35.96	38° 50.17'	111° 24.17'	-0.3	1.6	9	114	6	0.06
191105	05:50:06.42	37° 52.37'	113° 03.31'	11.4*	0.9	16	62	26	0.20
191105	10:16:58.29	39° 00.65'	111° 21.18'	-3.3	0.6W	6	109	2	0.13
191105	13:26:55.58	39° 41.65'	111° 12.83'	4.2	1.7W	23	58	6	0.21
191105	13:45:01.26	39° 41.39'	111° 14.00'	6.6	1.8W	24	78	6	0.17
191105	20:18:11.73	37° 48.84'	113° 12.39'	8.5*	1.5W	17	47	21	0.14
191105	20:44:44.95	39° 40.33'	111° 12.98'	4.1	1.1	13	174	4	0.09
191105	22:49:59.80	41° 40.14'	112° 22.10'	8.2	0.5	9	123	7	0.07
191106	00:14:52.51	39° 35.81'	111° 30.39'	1.8*	1.5W	23	80	26	0.13
191106	01:25:17.07	38° 49.93'	111° 24.85'	0.6	1.2	8	185	6	0.10
191106	03:55:51.62	37° 18.74'	114° 05.27'	6.3*	1.0	11	137	23	0.13
191106	05:30:30.62	38° 31.63'	112° 33.23'	4.0*	0.6	7	210	13	0.06
191106	08:00:15.64	38° 28.74'	112° 50.65'	1.1	***	11	251	2	0.13
191106	08:00:29.06	38° 28.70'	112° 51.04'	-0.1	0.3	14	137	1	0.12
191106	08:02:15.29	38° 28.82'	112° 50.69'	0.1	-.9	10	252	3	0.11
191106	08:02:20.92	38° 28.78'	112° 50.57'	-0.1	-.1	13	224	3	0.12
191106	08:02:28.03	38° 28.62'	112° 51.01'	0.0	0.3	9	139	2	0.14
191106	15:28:20.43	39° 41.86'	111° 13.28'	3.7	1.0W	20	113	7	0.18
191106	16:25:42.49	37° 51.95'	112° 29.96'	5.3*	1.6W	17	79	34	0.14
191106	22:47:28.75	39° 25.08'	110° 19.79'	-1.0	1.5	6	163	1	0.04
191106	23:20:51.49	41° 58.65'	112° 27.78'	0.4*	1.0	13	117	13	0.11
191107	02:41:11.33	40° 33.05'	111° 05.98'	6.1*	1.0	17	125	17	0.18
191107	03:29:35.33	40° 33.06'	111° 05.90'	0.6*	1.0	10	129	17	0.14
191107	04:56:26.67	38° 57.74'	111° 22.27'	-3.4	1.4W	10	88	4	0.19
191107	07:57:33.55	40° 33.93'	111° 05.54'	6.6*	0.6	11	135	16	0.18
191107	08:19:19.60	40° 33.34'	111° 05.70'	5.9*	1.0	14	127	17	0.10
191107	08:42:36.94	40° 33.43'	111° 05.80'	9.0	0.8	9	132	17	0.11
191107	10:07:11.02	38° 49.77'	111° 25.08'	1.0	1.4	11	157	6	0.20

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DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
191107	17:01:49.09	40° 32.89'	111° 06.20'	12.3	1.5	25	75	17	0.18
191107	18:51:22.06	37° 53.02'	112° 28.75'	6.4*	2.3W	26	61	31	0.17
191107	18:52:18.06	37° 53.48'	112° 28.66'	10.3*	2.4W	23	58	31	0.18
191108	00:35:31.60	38° 36.19'	112° 32.00'	3.1	0.6	12	136	8	0.08
191108	02:03:41.74	38° 36.19'	112° 31.94'	2.0	0.7	9	192	7	0.10
191108	06:45:55.64	38° 50.13'	111° 24.33'	-0.7	1.4W	13	89	6	0.11
191108	16:26:53.85	42° 30.00'	111° 25.97'	3.5*	1.6W	12	114	40	0.21
191108	19:32:52.51	37° 48.59'	113° 19.32'	0.1*	1.7	14	97	11	0.30
191109	05:51:22.10	39° 13.25'	111° 27.15'	5.8*	1.1	9	169	17	0.05
191109	17:23:45.42	37° 12.57'	112° 49.08'	19.6	1.0	10	146	21	0.12
191109	18:35:24.54	39° 30.16'	111° 40.72'	3.5*	1.0	12	110	12	0.20
191110	18:59:57.79	38° 13.98'	112° 21.02'	5.9*	0.7	11	156	26	0.17
191110	19:59:54.13	38° 05.62'	112° 52.04'	3.2*	0.8	9	245	11	0.05
191111	00:00:03.35	38° 51.56'	112° 01.51'	13.4	1.8	11	204	13	0.13
191111	01:42:52.58	38° 11.21'	112° 20.13'	2.2*	1.2	16	93	21	0.17
191111	15:10:37.82	38° 16.37'	108° 55.01'	1.0	1.9	15	84	5	0.10
191111	20:41:32.82	38° 49.92'	111° 23.02'	-1.4	1.6	9	147	7	0.14
191112	00:27:49.08	38° 16.13'	112° 36.36'	6.2	2.0W	24	72	3	0.10
191112	08:08:03.35	38° 49.91'	111° 25.25'	2.6	2.3W	27	81	6	0.14
191112	18:45:21.34	40° 02.79'	111° 44.54'	-0.6	1.5W	23	52	5	0.16
191112	19:50:47.48	39° 44.68'	110° 56.55'	-0.1*	1.7	14	171	13	0.23
191113	21:45:16.04	38° 49.80'	111° 25.62'	1.7	1.4W	14	82	6	0.13
191114	04:15:34.52	41° 31.93'	112° 11.38'	10.2	2.5W	33	70	8	0.19
191114	17:18:58.06	39° 24.59'	110° 17.66'	-3.2	2.0	12	185	3	0.11
191114	20:26:38.82	37° 35.67'	113° 02.66'	6.3	1.7W	17	95	4	0.12
191115	17:33:57.96	38° 18.10'	112° 39.48'	6.3	0.3	17	96	3	0.12
191116	06:03:07.23	41° 31.68'	112° 12.12'	9.6	0.8	19	81	8	0.14
191116	09:30:32.10	41° 31.97'	112° 11.87'	10.8	1.3	25	71	8	0.18
191116	12:22:14.20	41° 54.22'	111° 27.02'	6.8*	1.2	15	115	19	0.14
191116	15:30:37.85	40° 44.09'	111° 30.39'	11.9	0.7	15	99	18	0.12
191116	20:53:36.09	41° 44.03'	112° 12.49'	4.9*	0.5	10	69	16	0.14
191116	22:29:24.79	41° 43.76'	112° 12.18'	5.9*	0.6	13	71	16	0.12
191116	23:59:27.94	37° 52.81'	112° 28.85'	5.1*	1.5W	14	82	32	0.21
191117	04:13:59.15	41° 43.65'	112° 12.23'	8.1	0.9	16	56	15	0.13
191117	13:58:41.49	41° 42.83'	112° 00.97'	14.7	1.2	27	41	11	0.14
191117	22:55:14.15	38° 29.38'	112° 50.56'	-0.6	0.0	11	218	1	0.10
191118	10:32:35.12	38° 21.41'	112° 12.72'	4.8*	1.1	14	117	35	0.14
191118	10:33:05.47	38° 21.47'	112° 12.57'	6.4*	1.2	18	64	35	0.16
191118	12:57:33.69	38° 21.28'	112° 12.63'	6.5*	0.7	12	131	35	0.09
191118	15:10:26.05	40° 02.75'	111° 44.68'	3.2	1.9W	25	49	2	0.28
191118	18:21:30.38	39° 25.07'	110° 20.02'	-1.3	1.6W	11	83	1	0.18
191118	19:46:48.57	37° 03.92'	112° 54.50'	18.0	2.1W	15	141	9	0.10
191118	21:13:19.40	40° 02.72'	111° 44.97'	8.3	1.3	23	78	6	0.25
191118	21:13:41.71	40° 03.32'	111° 46.10'	6.3	0.9	8	76	6	0.16
191118	21:14:47.09	40° 02.01'	111° 44.93'	4.7	1.1	10	85	6	0.12

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191118	21:15:02.24	40° 02.53'	111° 44.50'	7.4	2.4W	32	45	5	0.22
191118	21:18:50.38	40° 02.30'	111° 45.02'	5.4	1.8W	31	53	6	0.20
191119	05:34:06.29	38° 20.89'	112° 12.64'	14.1*	1.5	20	73	34	0.14
191119	05:34:06.29	38° 21.10'	112° 12.19'	-0.4*	1.7W	18	68	34	0.18
191119	07:08:40.00	39° 24.58'	110° 18.12'	-1.9	1.5	8	183	3	0.04
191119	09:48:16.69	39° 24.57'	110° 18.01'	-2.7	2.1W	11	201	3	0.12
191119	14:27:47.89	39° 22.41'	111° 36.40'	9.4*	1.3	15	119	23	0.13
191120	02:20:17.14	38° 14.83'	112° 34.49'	9.2	0.7	13	125	7	0.15
191120	02:25:50.56	41° 49.61'	112° 23.88'	0.0*	0.5	13	84	13	0.09
191120	03:28:50.49	39° 24.46'	110° 18.17'	-2.2	2.0	10	183	3	0.12
191120	13:44:38.77	38° 36.53'	112° 14.42'	13.1	1.1	11	107	18	0.09
191120	16:36:49.75	39° 24.46'	110° 17.85'	-2.8	1.7W	12	184	3	0.13
191120	18:39:09.83	38° 38.00'	112° 14.76'	10.1	1.0	8	231	18	0.18
191120	20:04:52.65	39° 24.45'	110° 18.17'	-1.9	1.6W	9	200	3	0.08
191121	01:23:47.76	39° 24.77'	110° 18.20'	-1.9	1.7W	15	117	2	0.09
191121	03:25:58.45	39° 24.32'	110° 17.66'	-3.4	1.7	8	203	3	0.14
191121	05:22:36.30	39° 24.68'	110° 19.00'	-1.2	1.3	6	195	2	0.03
191121	06:12:26.84	40° 21.11'	111° 54.14'	6.0	0.8	16	103	9	0.15
191121	06:59:32.81	38° 05.42'	112° 42.55'	8.2*	1.3	22	89	22	0.16
191121	08:35:15.46	40° 51.03'	112° 07.73'	7.2	1.1	26	58	4	0.15
191121	12:09:58.72	40° 17.92'	111° 20.66'	10.0	1.6	26	86	15	0.16
191121	12:52:22.18	40° 18.32'	111° 21.53'	7.8	0.8	11	89	15	0.12
191122	09:51:45.03	37° 02.61'	112° 53.34'	17.3	1.9W	14	148	7	0.13
191122	16:33:19.28	38° 28.28'	112° 51.53'	1.8	-0.6	6	182	1	0.10
191123	04:39:57.02	38° 50.35'	111° 25.34'	-0.8	2.0	14	114	7	0.22
191123	05:02:55.52	41° 48.96'	112° 23.00'	3.9*	0.9	15	80	14	0.13
191123	20:29:06.91	42° 19.52'	112° 14.02'	0.6*	1.3	12	244	31	0.13
191123	21:38:42.22	38° 21.44'	112° 12.43'	6.1*	1.7W	21	117	35	0.15
191123	21:54:03.00	38° 21.02'	112° 14.19'	5.9*	1.4	10	204	34	0.12
191124	00:00:47.71	38° 03.65'	112° 45.03'	6.6*	1.0	15	69	22	0.23
191124	06:11:52.56	38° 49.93'	111° 23.07'	-0.8	1.6W	18	103	7	0.15
191125	11:11:45.41	38° 49.13'	111° 25.88'	6.2	1.4	8	206	4	0.06
191125	12:17:55.03	41° 10.52'	112° 10.35'	7.9*	0.8	14	81	18	0.08
191125	15:57:19.36	38° 49.65'	111° 46.73'	15.2*	1.7	16	135	31	0.11
191125	17:28:25.79	39° 24.39'	110° 17.01'	-3.4	1.7W	13	206	4	0.19
191126	00:15:08.80	36° 47.49'	112° 54.84'	17.5	1.6W	7	185	26	0.11
191126	15:00:42.04	38° 50.37'	111° 23.36'	-2.8	1.5W	14	108	7	0.25
191127	12:04:51.38	38° 13.05'	112° 45.09'	11.0*	0.5	9	210	25	0.07
191127	12:43:45.07	41° 54.53'	112° 20.75'	6.0	0.7	8	103	3	0.02
191127	20:12:20.26	41° 49.61'	112° 24.13'	0.4*	0.9	12	96	13	0.14
191128	02:44:23.08	39° 43.03'	110° 48.85'	-3.5	1.4	9	143	6	0.17
191128	20:42:31.78	41° 49.45'	112° 23.76'	0.5*	0.6	12	124	13	0.11
191129	10:23:39.88	41° 50.50'	112° 41.12'	1.4	0.8	7	154	10	0.11
191201	00:18:53.28	40° 27.27'	111° 56.19'	7.7	0.8	12	98	1	0.11
191201	00:39:50.90	40° 28.47'	111° 56.70'	5.3	0.8	13	78	2	0.15

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191201	00:58:00.20	40° 27.88'	111° 56.21'	6.4	0.9	15	94	2	0.14
191201	05:56:18.81	38° 50.20'	109° 44.04'	7.2*	2.5W	25	119	33	0.13
191201	13:10:11.53	37° 52.39'	112° 30.80'	5.6*	1.0	14	57	34	0.20
191201	13:26:36.50	40° 29.32'	111° 19.96'	14.5	0.9	17	65	1	0.14
191201	13:26:55.62	40° 30.05'	111° 22.08'	-1.7	0.5	10	122	3	0.16
191202	05:09:34.07	39° 24.50'	110° 18.00'	-2.1	1.7W	12	201	3	0.11
191202	12:11:09.14	37° 09.85'	113° 35.49'	14.9	0.9	14	78	6	0.08
191203	01:49:30.70	37° 56.41'	113° 31.94'	-0.2*	2.5W	22	66	19	0.24
191203	11:41:35.92	41° 28.27'	112° 19.93'	0.0*	1.9W	24	90	11	0.17
191203	19:17:23.45	41° 28.13'	112° 19.75'	0.2*	1.1	15	89	11	0.24
191204	02:42:41.49	40° 48.08'	111° 30.60'	12.6	1.2W	27	82	11	0.11
191204	19:37:44.80	39° 24.34'	111° 07.76'	4.4*	1.4W	17	71	11	0.14
191204	21:24:05.13	38° 17.69'	112° 36.95'	4.9	0.4	11	104	3	0.09
191205	19:53:54.67	37° 54.03'	113° 04.90'	7.0*	1.8	13	61	24	0.23
191206	08:27:24.82	38° 35.00'	112° 34.80'	1.9*	0.4	8	168	12	0.05
191206	22:01:38.34	40° 19.89'	111° 22.22'	5.8*	1.1	9	166	13	0.11
191208	00:08:46.94	39° 24.14'	111° 07.15'	0.6	1.4	11	103	10	0.11
191209	22:07:03.94	39° 03.32'	111° 27.97'	-1.0*	1.3W	12	136	11	0.07
191209	23:36:40.77	37° 16.51'	111° 43.88'	37.1	1.2	8	222	55	0.17
191210	09:32:28.41	39° 24.17'	111° 07.13'	1.2	1.6W	17	46	10	0.13
191210	15:23:50.79	38° 28.63'	112° 48.60'	6.0	-.1	11	102	6	0.06
191210	15:32:29.28	38° 28.80'	112° 48.59'	7.0	1.9W	22	66	4	0.09
191210	22:09:28.10	37° 29.00'	112° 31.67'	3.1*	0.9	11	77	20	0.32
191211	11:50:13.16	37° 54.42'	111° 48.99'	15.2	2.0W	18	158	18	0.19
191211	11:50:13.31	37° 54.63'	111° 50.04'	14.0	2.0W	15	109	18	0.18
191211	17:03:44.48	41° 27.87'	112° 19.69'	0.5*	1.1	14	94	11	0.11
191211	17:18:27.58	41° 28.22'	112° 20.09'	-0.9*	1.8W	21	90	11	0.08
191211	22:00:20.28	39° 24.90'	110° 18.52'	-1.6	2.0W	13	116	2	0.10
191212	00:38:00.17	41° 28.17'	112° 19.74'	-1.9*	1.3	13	95	11	0.15
191212	02:41:00.41	36° 49.37'	113° 38.83'	5.2*	1.2	11	189	42	0.14
191212	05:30:16.52	39° 24.73'	110° 17.85'	-2.5	1.7	10	201	3	0.15
191212	19:46:58.85	39° 24.65'	110° 18.46'	-1.6	2.0	10	198	2	0.07
191213	01:11:25.78	38° 27.32'	112° 28.55'	3.1*	0.5	11	86	17	0.07
191215	02:49:38.18	37° 40.83'	113° 09.88'	-0.2	1.4	13	80	7	0.19
191215	04:34:58.39	40° 56.89'	111° 33.31'	7.9	2.1W	37	54	12	0.16
191215	07:35:20.66	40° 56.70'	111° 32.26'	13.1	1.0	14	99	11	0.08
191215	11:36:20.28	38° 41.97'	112° 36.47'	1.5*	1.2	10	155	17	0.15
191216	21:56:07.07	38° 33.93'	112° 16.37'	11.4	1.1	15	105	16	0.15
191217	01:31:42.71	37° 21.00'	113° 25.21'	-0.1*	1.5	14	77	23	0.24
191217	02:57:58.96	39° 24.53'	110° 17.62'	-3.0	1.8W	15	203	3	0.16
191217	07:13:46.30	39° 24.81'	110° 18.34'	-1.8	2.0W	18	116	2	0.26
191217	10:36:47.05	41° 31.56'	112° 12.69'	6.9	1.3	13	74	8	0.18
191218	09:29:29.98	40° 42.04'	111° 37.60'	8.7	0.5	13	96	10	0.14
191218	11:49:19.34	36° 55.26'	113° 30.17'	11.9*	2.2W	14	168	25	0.24
191218	16:24:49.15	38° 12.82'	112° 52.81'	5.5*	1.2	13	67	16	0.13

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191219	04:12:15.95	41° 05.47'	111° 32.54'	10.2	1.3	20	74	12	0.06
191221	13:04:01.35	39° 08.66'	111° 34.66'	22.8	0.8	8	121	7	0.09
191221	17:20:08.39	41° 11.92'	113° 11.07'	7.3*	1.0	10	132	33	0.16
191221	23:39:44.87	36° 56.12'	112° 36.25'	22.9	1.5	11	129	21	0.15
191222	01:06:22.10	38° 27.41'	112° 47.55'	0.4	0.4	9	190	8	0.11
191222	12:44:50.26	39° 43.95'	111° 57.58'	10.3*	1.1	7	134	27	0.05
191222	12:52:54.42	39° 40.96'	111° 18.87'	1.5*	1.3W	10	141	11	0.21
191222	17:28:47.11	38° 49.88'	111° 25.18'	2.1	2.0W	25	51	6	0.17
191222	17:55:33.23	38° 50.05'	111° 25.35'	1.6	1.9W	22	80	6	0.15
191222	18:29:17.33	38° 49.76'	111° 26.47'	1.6	1.6	11	189	6	0.23
191223	01:53:38.55	39° 24.83'	110° 19.21'	-1.2	1.9	6	193	1	0.04
191223	18:21:12.02	37° 29.03'	113° 50.21'	0.2	1.4	10	113	3	0.04
191223	20:45:14.00	37° 32.99'	112° 31.44'	1.8*	1.4	13	53	22	0.24
191223	21:29:06.08	37° 35.04'	112° 30.48'	3.1*	1.4	12	147	23	0.22
191223	22:34:08.16	41° 31.31'	110° 01.58'	60.5	3.2W	29	62	16	0.24
191223	23:31:03.61	39° 32.36'	112° 14.25'	1.3*	1.9W	15	136	19	0.22
191224	02:32:21.61	40° 03.91'	111° 15.93'	6.1*	1.5	12	89	32	0.12
191226	10:06:46.70	41° 30.95'	111° 43.87'	10.3	1.0	13	82	8	0.09
191226	12:23:26.68	38° 49.28'	111° 25.41'	5.0	1.3	9	154	5	0.12
191226	12:29:06.83	41° 31.39'	111° 44.08'	10.5	1.7W	18	86	8	0.11
191226	12:29:41.67	41° 31.46'	111° 43.71'	9.8	1.7W	14	90	8	0.12
191227	23:54:40.43	38° 49.86'	111° 23.83'	0.1	1.3W	14	82	6	0.15
191228	00:07:00.28	38° 49.77'	111° 26.50'	1.7	1.2	9	172	6	0.21
191228	05:40:10.92	38° 49.88'	111° 25.73'	1.6	1.6	11	117	6	0.11
191228	15:27:10.82	38° 49.82'	111° 23.83'	-0.2	1.1W	7	91	6	0.02
191228	16:04:05.43	38° 49.30'	111° 24.22'	1.0	2.0	6	132	5	0.01
191228	18:34:33.31	38° 50.27'	111° 24.37'	-0.7	2.0	9	126	7	0.07
191228	23:30:01.48	38° 49.56'	111° 25.66'	3.7	1.2W	6	203	5	0.04
191229	15:48:51.41	38° 50.10'	111° 27.74'	1.6	1.5	9	232	7	0.15
191229	17:13:45.09	38° 49.75'	111° 25.78'	3.2	1.4W	10	111	5	0.07
191229	17:43:45.23	41° 03.53'	111° 12.54'	19.6	2.4W	36	71	18	0.26
191229	20:40:59.94	37° 48.31'	112° 26.65'	5.9*	1.2	11	123	35	0.30
191230	04:54:45.75	38° 49.92'	111° 25.38'	1.6	1.0W	10	195	6	0.07
191230	05:14:02.59	37° 33.70'	112° 32.04'	3.2*	1.8W	18	54	24	0.24
191230	15:33:38.89	40° 38.39'	111° 35.23'	9.1	0.3	12	136	7	0.07
191230	16:57:17.37	41° 20.41'	111° 37.55'	10.1	1.4W	27	97	17	0.19
191230	18:09:49.60	40° 38.60'	111° 35.13'	9.6	1.3W	30	68	7	0.14
191230	18:52:36.56	40° 38.26'	111° 35.05'	10.1	1.0	23	101	7	0.09
191230	19:01:42.96	40° 38.30'	111° 34.68'	10.6	1.1W	24	70	7	0.17
191230	19:57:02.69	41° 29.93'	108° 47.84'	6.5*	2.7W	15	185	60	0.17
191231	10:49:25.12	38° 34.50'	112° 15.24'	13.0	1.5	12	81	17	0.08

number of earthquakes = 446

\* indicates poor depth control

M indicates moment magnitude

W indicates Wood-Anderson data used for magnitude calculation

**Table 3**  
**UNIVERSITY OF UTAH REGIONAL/URBAN SEISMIC NETWORK**  
**Operating Seismograph Stations**  
**December 31, 2019**

<b>SEED Station</b>	<b>Location</b>	<b>SEED Channel</b>	<b>No. of Channels</b>	<b>Network Code</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Elevation (meters)</b>	<b>Sensor</b>	<b>Digitizer</b>	<b>Telemetry</b>	<b>Sponsor</b>
2272	Eastwood Elementary School Salt Lake City, UT	HN[ZEN]	3	NP	40° 41.98'	111° 47.62'	1515	EpiSensor	Basalt	Digital	NSMP, ANSS
2285	Liberty Park Salt Lake City, UT	HN[ZEN]	3	NP	40° 44.70'	111° 52.49'	1298	EpiSensor	Basalt	Digital	NSMP, ANSS
2286	Roosevelt Elementary School Salt Lake City, UT	HN[ZEN]	3	NP	40° 42.08'	111° 52.01'	1314	EpiSensor	Basalt	Digital	NSMP, ANSS
7202	Meadowbrook Golf Course Murray, UT	HN[ZEN]	3	NP	40° 40.93'	111° 55.36'	1293	EpiSensor	Basalt	Digital	NSMP, ANSS
7203	Bonneville Golf Course Salt Lake City, UT	HN[ZEN]	3	NP	40° 44.81'	111° 49.63'	1457	EpiSensor	Basalt	Digital	NSMP, ANSS
7208	SR 201/I-80 Bridge Array, Salt Lake City, UT	EN[ZEN]	3	NP	40° 43.38'	111° 54.43'	1291	EpiSensor	K2	Digital	NSMP, ANSS
7212	Annex Bldg., Weber State University, Ogden, UT	HN[ZEN]	3	NP	41° 11.75'	111° 56.50'	1422	EpiSensor	Basalt	Digital	NSMP, ANSS
7223	Dixie State College St. George, UT	HN[ZEN]	3	NP	37° 06.02'	113° 33.94'	815	EpiSensor	Etna	Digital	NSMP, ANSS
7224	Southern Utah University Cedar City, UT	HN[ZEN]	3	NP	37° 40.35'	113° 04.29'	1782	EpiSensor	Basalt	Digital	NSMP, ANSS
7225	City Maintenance Yard Beaver, UT	HN[ZEN]	3	NP	38° 17.01'	112° 38.32'	1808	EpiSensor	Etna	Digital	NSMP, ANSS
7226	UDOT IT Radio Shop Richfield, UT	HN[ZEN]	3	NP	38° 45.43'	112° 05.26'	1616	FBA23	Basalt	Digital	NSMP, ANSS
7227	City Maintenance Yard Gunnison, UT	HN[ZEN]	3	NP	39° 09.35'	111° 49.17'	1568	EpiSensor	Basalt	Digital	NSMP, ANSS
7228	Juab School District Nephi, UT	HN[ZEN]	3	NP	39° 43.27'	111° 49.49'	1576	EpiSensor	Basalt	Digital	NSMP, ANSS
7229	City Maintenance Shop Santaquin, UT	HN[ZEN]	3	NP	39° 58.35'	111° 47.58'	1520	EpiSensor	Etna	Digital	NSMP, ANSS

SEED Station	Location	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
7232	City Parks & Recreation Office Tremonton, UT	HN[ZEN]	3	NP	41° 43.13'	112° 10.91'	1320	EpiSensor	Etna2	Digital	NSMP, ANSS
AHID	Auburn, ID	BH[ZEN]	3	US	42° 45.92'	111° 06.02'	1960	*	*	Digital	USGS
ALP	Alpine Fire Station, Alpine, UT	EN[ZEN]	3	UU	40° 27.26'	111° 46.61'	1510	EpiSensor	Etna2	Digital	ANSS
ALT	Alta City Offices, Alta, UT	EN[ZEN]	3	UU	40° 35.42'	111° 38.25'	2635	Applied Mems	ANSS-130	Digital	ANSS
AMF	Tri-Cities Golf Course American Fork, UT	EN[ZEN]	3	UU	40° 24.11'	111° 47.27'	1445	EpiSensor	Basalt	Digital	ANSS
ANMO	Albuquerque, NM	BH[ZEN]	3	IU	34° 57.01'	106° 27.61'	1743	*	*	Digital	USGS
ARGU	Argyle Ridge, UT	EHZ	1	UU	39° 49.37'	110° 32.62'	2828	S13	PSN	Analog	Utah
ARUT	Antelope Range, UT	EHZ	1	UU	37° 47.28'	113° 26.42'	1646	L4C	PSN	Analog	Utah
AVE	Avenues, Salt Lake City, UT	EN[ZEN]	3	UU	40° 46.47'	111° 51.83'	1387	EpiSensor	Etna2	Digital	ANSS
B206	Canyon206bwy2008, Yellowstone, WY	EH[ZEN]	3	PB	44° 46.66'	110° 30.70'	2400	IESE-S2	Q330	Digital	PBO
B207	Madisn207bwy2007, Yellowstone, WY	EH[ZEN]	3	PB	44° 37.14'	110° 50.91'	2182	IESE-S2	Q330	Digital	PBO
B208	Lakejn208bwy2008, Yellowstone, WY	EH[ZEN]	3	PB	44° 33.61'	110° 24.09'	2406	IESE-S2	Q330	Digital	PBO
B944	Grantt944bwy2008, Yellowstone, WY	EH[ZEN]	3	PB	44° 23.38'	110° 32.63'	2365	IESE-S2	Q330	Digital	PBO
B945	Panthr944swy2008, Yellowstone, WY	EH[ZEN]	3	PB	44° 53.64'	110° 44.65'	2249	IESE-S2	Q330	Digital	PBO
B950	Norris950bwy2013, Yellowstone, WY	EH[ZEN]	3	PB	44° 42.77'	110° 40.71'	2328	IESE-S2	Q330	Digital	PBO
BCE	Book Cliffs East, UT	EHZ	1	UU	39° 36.79'	110° 24.51'	2666	L4C	Basalt	Digital	Utah
		EN[ZEN]	3					EpiSensor			
BCS	Brigham City Maintenance Shop Brigham City, UT	EN[ZEN]	3	UU	41° 30.71'	112° 01.98'	1303	EpiSensor	Etna2	Digital	ANSS
BCU	Brigham City, UT	EN[ZEN]	3	UU	41° 30.74'	111° 58.93'	1676	EpiSensor	Etna2	Digital	ANSS
BCW	Book Cliffs West, UT	EHZ	1	UU	39° 43.82'	110° 44.55'	2614	L4C	Basalt	Digital	Utah
		EN[ZEN]	3					EpiSensor			
BEI	Bear River Range, ID	EHZ	1	UU	42° 07.00'	111° 46.94'	1859	L4C	PSN	Analog	USGS
BES	Bates Elementary School Ogden, UT	EN[ZEN]	3	UU	41° 19.10'	111° 57.26'	1455	EpiSensor	K2	Digital	ANSS
BGMT	Barton Gulch, MT	EHZ	1	MB	45° 14.00'	112° 02.43'	2172	*	*	Analog	MBMT
BGU	Big Grassy Mountain, UT	EN[ZEN]	3	UU	40° 55.53'	113° 01.79'	1640	EpiSensor	Q330	Digital	ANSS
		HH[ZEN]	3					Trillium 120			
BHU	Blowhard Mountain, UT	EH[ZEN]	3	UU	37° 35.63'	112° 51.72'	3250	S13	PSN	Analog	Utah

SEED Station	Location	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
BHUT	Beaver High School, UT	EN[ZEN]	3	UU	38° 16.61'	112° 38.42'	1799	PA-23	SMART-24	Digital	Utah
BMUT	Black Mountain, UT	EHZ	1	UU	41° 57.49'	111° 14.05'	2243	S13	PSN	Analog	USGS
BOZ	Bozeman, MT	BH[ZEN]	3	US	45° 38.82'	111° 37.78'	1589	*	*	Digital	USGS
BRPU	Butcher Ranch, Price, UT	HH[ZEN]	3	UU	39° 28.38'	110° 44.40'	1687	Trillium 240	Q330	Digital	Utah
		EN[ZEN]	3					EpiSensor			
BRWY	Blue Rim, WY	HH[ZEN]	3	UU	41° 37.32'	109° 30.19'	2098	Trillium 120	Centaur	Digital	Utah
BSS	Butlerville Substation Salt Lake City, UT	EN[ZEN]	3	UU	40° 37.45'	111° 49.37'	1411	EpiSensor	Etna2	Digital	ANSS
BSUT	Blindstream Canyon, Hanna, UT	HH[ZEN]	3	UU	40° 32.19'	110° 45.67'	3211	Trillium 120	Q330	Digital	Utah
		EN[ZEN]	3					EpiSensor			
BTU	Barney Top, UT	EHZ	1	UU	37° 45.34'	111° 52.46'	3235	S13	PSN	Analog	Utah
BW06	Boulder, WY	BH[ZEN]	3	US	42° 46.00'	109° 33.50'	2224	*	*	Digital	USGS
BYP	Brigham Young Park Salt Lake City, UT	EN[ZEN]	3	UU	40° 46.26'	111° 53.23'	1323	EpiSensor	Etna2	Digital	ANSS
BZMT	Bozeman Pass, MT	EHZ	1	MB	45° 38.89'	110° 47.80'	1905	*	*	Analog	MBMT
CAPU	Capitol, Salt Lake City, UT	EN[ZEN]	3	UU	40° 46.71'	111° 53.40'	1384	Applied Mems	ANSS-130	Digital	ANSS
CCPU	Cedar City Park, UT	EN[ZEN]	3	UU	38° 16.61'	112° 38.42'	1799	PA-23	SMART-24	Digital	Utah
CCUT	Cedar City, UT	HH[ZEN]	3	UU	37° 33.04'	113° 21.77'	2124	STS-2	ANSS-130	Digital	USGS
		EN[ZEN]	3					Applied Mems			
CFS	Copperton Fire Station, Copperton, UT	EN[ZEN]	3	UU	40° 33.96'	112° 05.61'	1654	EpiSensor	Etna2	Digital	ANSS
CHS	Copper Hills High School, West Jordan, UT	EN[ZEN]	3	UU	40° 35.68'	112° 01.03'	1460	EpiSensor	Etna2	Digital	ANSS
CMI	Centennial Mountains, ID	EHZ	1	RC	44° 30.99'	111° 37.05'	2267	L4C	*	Analog	BYU-I
COMI	Craters of the Moon, ID	EHZ	1	IE	43° 27.72'	113° 35.64'	1890	*	*	Digital	INL
COY	Coyote Canyon, Tooele Valley, UT	EN[ZEN]	3	UU	40° 39.56'	112° 14.34'	1572	EpiSensor	Etna2	Digital	ANSS
CRLU	Curley Ranch, La Sal, UT	EHZ	1	UU	38° 17.50'	109° 15.64'	2035	L4C	Basalt	Digital	Utah, USGS
		EN[ZEN]	3					EpiSensor			
CRMT	Chrome Mountain, MT	EHZ	1	MGB	45° 27.35'	110° 08.41'	2941	*	*	Analog	MBMT
CTU	Camp Tracy, UT	HH[ZEN]	3	UU	40° 41.55'	111° 45.02'	1731	Observer	ANSS-130	Digital	USGS
		EN[ZEN]	3					R147			
CVH	Cedar City, Canyon View High School, UT	EN[ZEN]	3	UU	37° 42.91'	113° 03.85'	1724	PA-23	SMART-24	Digital	Utah
CVRU	Castle Valley Ranch, Emery, UT	HH[ZEN]	3	UU	38° 55.06'	111° 10.30'	1912	STS-2	Q330	Digital	Utah
		EN[ZEN]	3					EpiSensor			



SEED Station	Location	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
CWR	Coldwater Ranch, Paradise, UT	EN[ZEN]	3	UU	41° 34.90'	111° 46.89'	1837	EpiSensor	Etna2	Digital	ANSS
CWU	Camp Williams, UT	EHZ	1	UU	40° 26.75'	112° 06.13'	1945	L4C	PSN	Analog	USGS
DAU	Daniels Canyon, UT	EHZ	1	UU	40° 24.75'	111° 15.35'	2771	S13	PSN	Analog	USGS
DBD	Des Bee Dove, UT	EHZ	1	UU	39° 18.82'	111° 05.55'	2265	L4C	PSN	Analog	Utah
DCM	Dugout Coal Mine, UT	EHZ	1	UU	39° 41.70'	110° 35.00'	2537	L4C	Basalt	Digital	Utah
		EN[ZEN]	3					EpiSensor			
DCU	Deer Creek Reservoir, UT	EHZ	1	UU	40° 24.82'	111° 31.61'	1829	L4C	PSN	Analog	USGS
DOT	Utah Dept. of Transportation Region II Offices, Salt Lake City, UT	EN[ZEN]	3	UU	40° 43.61'	111° 57.65'	1282	Applied Mems	ANSS-130	Digital	ANSS
DUG	Dugway, UT	BH[ZEN]	3	US	40° 11.70'	112° 48.80'	1477	STS-2	Q330	Digital	USGS
DVCI	Devils Canyon, ID	HH[ZEN]	3	IE	44° 22.99'	114° 02.31'	1997	Trillium 120	Q330	Digital	INL
DWU	Dry Willow, UT	EHZ	1	UU	38° 06.32'	112° 59.85'	2270	S13	PSN	Analog	Utah
ECRI	Eagle Creek, ID	EHZ	1	IE	43° 03.24'	111° 22.26'	2086	*	*	Digital	INL
ECUT	Ebbs Canyon, Scipio, UT	HH[ZEN]	3	UU	39° 10.30'	112° 07.99'	2136	Trillium 120	Centaur	Digital	Utah
EKU	East Kanab, UT	EHZ	1	UU	37° 04.48'	112° 29.81'	1829	S13	PSN	Analog	Utah
ELE	East Layton Elementary School, East Layton, UT	EN[ZEN]	3	UU	41° 04.84'	111° 55.09'	1444	EpiSensor	Etna2	Digital	ANSS
ELK	Elko, NV	BH[ZEN]	3	US	40° 44.69'	115° 14.33'	2210	*	*	Digital	USGS
ELU	Electric Lake, UT	EHZ	1	UU	39° 38.41'	111° 12.23'	2970	L4C	PSN	Analog	Utah
EMF	Eagle Mountain Gas Tap, UT	EN[ZEN]	3	UU	40° 16.89'	111° 59.92'	1487	EpiSensor	Etna2	Digital	ANSS
EMU	Emma Park, UT	EH[ZEN]	3	UU	39° 48.84'	110° 48.92'	2268	S13	PSN	Analog	USGS
		EN[ZEN]	3					FBA23	K2	Digital	Utah
EOCU	EOC, State Capitol Campus, Salt Lake City, UT	EN[ZEN]	3	UU	40° 46.62'	111° 53.95'	1356	EpiSensor	Basalt	Digital	Utah
EPU	East Promontory, UT	EHZ	1	UU	41° 23.49'	112° 24.53'	1436	L4C	PSN	Analog	USGS
ETW	Elwood Town Hall, Elwood, UT	EN[ZEN]	3	UU	41° 40.15'	112° 08.53'	1305	EpiSensor	Etna2	Digital	ANSS
FLU	Fool's Peak, UT	EHZ	1	UU	39° 22.69'	112° 10.29'	1951	18300	Basalt	Digital	USGS
		EN[ZEN]	3								
FLWY	Flagg Ranch, WY	BH[ZEN]	3	IW	44° 04.96'	110° 41.96'	2078	3ESP	RT-130	Digital	ANSS
FMC	FMC Mine, Green River, WY	HH[ZEN]	3	UU	41° 24.49'	109° 46.67'	1903	40T	RT-130	Digital	Utah
FOR1	Milford Southwest, UT	HH[ZEN]	3	UU	38° 22.13'	113° 05.63'	1642	Trillium 120	Centaur	Digital	Utah
FOR2	Blundell East, UT	HH[ZEN]	3	UU	38° 29.70'	112° 52.34'	1760	Trillium 120	Centaur	Digital	Utah
FOR3	Blundell North, UT	HH[ZEN]	3	UU	38° 30.80'	112° 52.85'	1699	Trillium 120	ANSS-130	Digital	Utah
		EN[ZEN]	3								
FOR4	Blundell West, UT	HH[ZEN]	3	UU	38° 29.92'	112° 53.79'	1657	Trillium 120	Centaur	Digital	Utah
FORB	Blundell, Power Plant, UT	EN[ZEN]	3	UU	38° 29.41'	112° 51.30'	1845	EpiSensor	Basalt	Digital	Utah

SEED Station	Location	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
FORK	Blundell, UT	EH[Z12]	3	UU	38° 30.07'	112° 53.19'	1408	Omni-2400	Obsidian	Digital	Utah
		EN[Z12]	3					Silicon-ULN			
FORU	South Mineral Mountains, UT	HH[ZEN]	3	UU	38° 27.53'	112° 51.68'	1840	40T	ANSS-130	Digital	Utah
FORW	Milford Wind Farm, UT	EN[ZEN]	3	UU	38° 33.76'	112° 56.21'	1516	EpiSensor	Obsidian	Digital	Utah
FPU	Francis Peak, UT	EHZ	1	UU	41° 01.58'	111° 50.21'	2816	L4C	PSN	Analog	USGS
FSU	Fish Springs, UT	EHZ	1	UU	39° 43.35'	113° 23.48'	1487	18300	PSN	Analog	Utah
FTT	Fire Training Tower, Magna, UT	EN[ZEN]	3	UU	40° 41.16'	112° 04.99'	1381	EpiSensor	Etna2	Digital	ANSS
GAWY	Genesis Alkali Granger, WY	HH[ZEN]	3	UU	41° 44.43'	109° 51.13'	2011	Trillium 120	Centaur	Digital	Utah
GBI	Big Grassy Butte, ID	HH[ZEN]	3	IE	43° 59.22'	112° 03.78'	1541	*	*	Digital	INL
GCAZ	Grand Canyon, AZ	EHZ	1	AR	36° 03.51'	112° 11.02'	2072	*	*	Analog	NAU
GMO	Grantsville Maintenance Office, Grantsville, UT	EN[ZEN]	3	UU	40° 36.04'	112° 28.48'	1320	EpiSensor	Etna2	Digital	ANSS
GMU	Granite Mountain, UT	EH[ZEN]	3	UU	40° 34.53'	111° 45.79'	1829	S13	PSN	Analog	USGS
GRII	Grays Lake, ID	EHZ	1	IE	42° 56.28'	111° 25.32'	2207	*	*	Digital	INL
GZU	Grizzly Peak, UT	EH[ZEN]	3	UU	41° 25.53'	111° 58.50'	2646	S13	PSN	Analog	USGS
HAFB	Hill Air Force Base, Hill AFB, UT	EN[ZEN]	3	UU	41° 07.07'	111° 58.55'	1471	EpiSensor	Etna2	Digital	Utah
HCSU	Hobble Creek, Springville, UT	EHZ	1	UU	40° 12.40'	111° 30.14'	1789	L4C	Basalt	Digital	Utah, USGS
		EN[ZEN]	3					EpiSensor			
HDU	Hyde Park, UT	EHZ	1	UU	41° 48.18'	111° 45.99'	1807	L4C	PSN	Analog	USGS
HEB	Heber, UT	EHZ	1	UU	40° 30.09'	111° 20.15'	1925	S13	PSN	Analog	Utah
HER	Herriman Fire Station Herriman, UT	EN[ZEN]	3	UU	40° 30.94'	112° 01.85'	1502	EpiSensor	Etna2	Digital	ANSS
HES	Hooper Elementary School Hooper, UT	EN[ZEN]	3	UU	41° 09.89'	112° 07.30'	1292	EpiSensor	K2	Digital	ANSS
HHAI	Hell's Half Acre, ID	HH[Z12]	3	IE	43° 17.70'	112° 22.74'	1371	*	*	Digital	INL
HHS	Hurricane High School, UT	EN[ZEN]	3	UU	37° 10.43'	113° 17.74'	987	EpiSensor	Etna	Digital	Utah
HLID	Hailey, ID	BH[ZEN]	3	US	43° 33.75'	114° 24.83'	1772	*	*	Digital	USGS
HLJ	Hailstone, UT	EHZ	1	UU	40° 36.64'	111° 24.05'	1931	S13	PSN	Analog	Utah
		EN[ZEN]	3					FBA23	K2	Digital	
HMU	Henry Mountain, UT	HH[ZEN]	3	UU	37° 56.28'	110° 44.51'	2430	Trillium 120	Q330	Digital	Utah
		EN[ZEN]	3					EpiSensor			
HON	Honeyville, UT	EN[ZEN]	3	UU	41° 36.96'	112° 03.05'	1546	Applied Mems	ANSS-130	Digital	ANSS
HONU	Honeyville, UT	EHZ	1	UU	41° 36.90'	112° 03.00'	1515	L4C	PSN	Analog	USGS
HRU	Hogsback Ridge, UT	EHZ	1	UU	40° 47.67'	111° 53.14'	1620	Ranger	PSN	Analog	USGS
		EN[ZEN]	3					EpiSensor	Etna2	Digital	ANSS

SEED Station	Location	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
HTU	Hoyt, UT	EHZ	1	UU	40° 40.52'	111° 13.21'	2576	L4C	PSN	Analog	USGS
		EHZ	1					Basalt	Digital		
		EN[ZEN]	3					EpiSensor			
HVU	Hansel Valley, UT	HH[ZEN]	3	UU	41° 46.78'	112° 46.50'	1609	Trillium 120	Q330	Digital	USGS
		EN[ZEN]	3					EpiSensor			
HWUT	Hardware Ranch, UT	BH[ZEN]	3	US	41° 36.41'	111° 33.91'	1830	*	*	Digital	USGS
IAE	Cedar City, Iron County Adult Education, UT	EN[ZEN]	3	UU	37° 39.91'	113° 40.02'	1807	EpiSensor	Etna	Digital	Utah
ICF	International Center Fire Station, Salt Lake City, UT	EN[ZEN]	3	UU	40° 46.69'	112° 01.72'	1281	EpiSensor	Etna2	Digital	ANSS
ICU	Indian Springs Canyon, UT	EHZ	1	UU	37° 08.98'	113° 55.41'	1451	S13	PSN	Analog	Utah
IMU	Iron Mountain, UT	EHZ	1	UU	38° 37.99'	113° 09.50'	1833	L4C	PSN	Analog	Utah
IMW	Indian Meadows, WY	BH[ZEN]	3	IW	43° 53.58'	110° 56.58'	2670	3ESP	RT-130	Digital	ANSS
ISCO	Idaho Springs, CO	BH[ZEN]	3	US	39° 47.98'	105° 36.80'	2743	STS-2	Q330	Digital	ANSS
JLU	Jordanelle, UT	EN[ZEN]	3	UU	40° 36.12'	111° 27.00'	2285	EpiSensor	ANSS-130	Digital	ANSS
		HH[ZEN]	3					3ESP			
JRP	Jordan River State Park Salt Lake City, UT	EN[ZEN]	3	UU	40° 49.54'	111° 56.66'	1284	EpiSensor	Etna2	Digital	ANSS
KEUT	Kanab Elementary School, UT	EN[ZEN]	3	UU	37° 03.02'	112° 31.76'	1514	PA-23	SMART-24	Digital	Utah
KLJ	Keetley, UT	EHZ	1	UU	40° 37.85'	111° 24.30'	1992	S13	PSN	Analog	Utah
KNB	Kanab, UT	HH[ZEN]	3	UU	37° 01.00'	112° 49.34'	1715	3T	ANSS-130	Digital	Utah, ANSS, LLNL
		EN[ZEN]	3					EpiSensor			
LCMT	Little Creek Mountain, UT	HH[ZEN]	3	UU	37° 00.71'	113° 14.63'	1411	3T	SMART-24	Digital	Utah
		EN[ZEN]	3					PA-23			
LCU	Little Cottonwood, UT	EN[ZEN]	3	UU	40° 34.41'	111° 47.91'	1571	EpiSensor	Etna2	Digital	ANSS
LDJ	Lady, UT	EHZ	1	UU	40° 34.89'	111° 24.52'	2217	S13	PSN	Analog	Utah
LEVU	Levan, UT	EHZ	1	UU	39° 30.39'	111° 48.88'	1996	L4C	Basalt	Digital	USGS
		EN[ZEN]	3					EpiSensor			
LGC	Lakeside Golf Course Bountiful, UT	EN[ZEN]	3	UU	40° 54.04'	111° 54.51'	1292	EpiSensor	Etna2	Digital	ANSS
LHUT	Little Humpy Peak, UT	EHZ	1	UU	40° 53.49'	110° 59.78'	3084	S13	PSN	Analog	Utah
LIUT	Lila Canyon, UT	HH[ZEN]	3	UU	39° 25.45'	110° 19.51'	2178	Trillium 120	Centaur	Digital	Utah
LKC	Lee Kay Hunter Education Center Magna, UT	EN[ZEN]	3	UU	40° 43.62'	112° 02.14'	1289	EpiSensor	Etna2	Digital	ANSS
LKWY	Lake, WY	BH[ZEN]	3	US	44° 33.91'	110° 24.00'	2424	*	*	Digital	USGS
LMUT	Lake Mountain, UT	EN[ZEN]	3	UU	40° 15.69'	111° 55.69'	2330	EpiSensor	K2	Digital	ANSS
LOHW	National Elk Refuge, WY	BH[ZEN]	3	IW	43° 36.76'	110° 36.30'	2245	3ESP	RT-130	Digital	ANSS
LRG	Logan River Golf Course Logan, UT	EN[ZEN]	3	UU	41° 42.82'	111° 51.08'	1362	EpiSensor	Etna2	Digital	ANSS

SEED Station	Location	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
LSU	Lake Shores, UT	EN[ZEN]	3	UU	40° 07.94'	111° 43.80'	1375	EpiSensor	Etna2	Digital	ANSS
LTU	Little Mountain, UT	EHZ	1	UU	41° 35.51'	112° 14.83'	1585	L4C	PSN	Analog	USGS
		EHZ	1					EpiSensor	Basalt	Digital	
		EN[ZEN]	3								
MAB	Mapleton Ambulance Building Mapleton, UT	EN[ZEN]	3	UU	40° 07.85'	111° 34.67'	1440	EpiSensor	Etna2	Digital	ANSS
MCID	Moose Creek, ID	EHZ	1	WY	44° 11.45'	111° 11.03'	2137	L4C	PSN	Analog	USGS
MCU	Monte Cristo Peak, UT	EHZ	1	UU	41° 27.70'	111° 30.45'	2664	18300	PSN	Analog	USGS
MGCU	Grand County Courthouse, Moab, UT	EN[ZEN]	3	UU	38° 34.46'	109° 32.89'	1241	EpiSensor	K2	Digital	Utah
MHD	Mile High Drive, UT	EHZ	1	UU	40° 39.64'	111° 48.05'	1597	Ranger	Basalt	Digital	USGS
		EN[ZEN]	3					EpiSensor			
MID	Middle Canyon, UT	EN[ZEN]	3	UU	40° 31.04'	112° 15.28'	1722	EpiSensor	Etna2	Digital	ANSS
MLI	Malad Range, ID	EHZ	1	UU	42° 01.61'	112° 07.53'	1896	L4C	Basalt	Digital	USGS
		EN[ZEN]	3					EpiSensor			
MMU	Miners Mountain, UT	EHZ	1	UU	38° 11.57'	111° 17.66'	2387	S13	PSN	Analog	Utah
MOMT	Monida, MT	EHZ	1	MB	44° 35.60'	112° 23.66'	2220	*	*	Analog	MBMT
MOOW	Moose Ponds, WY	BH[ZEN]	3	IW	43° 44.92'	110° 44.69'	2128	3ESP	RT-130	Digital	ANSS
MOR	Morgan, UT	EN[ZEN]	3	UU	41° 02.77'	111° 39.94'	1633	Applied Mems	ANSS-130	Digital	ANSS
MOUT	Mount Ogden, UT	EHZ	1	UU	41° 11.94'	111° 52.73'	2743	S13	PSN	Analog	USGS
MPU	Maple Canyon, UT	EN[ZEN]	3	UU	40° 00.93'	111° 38.00'	1909	EpiSensor	ANSS-130	Digital	ANSS USGS
		HH[ZEN]	3					3ESP			
MSU	Marysvale, UT	EHZ	1	UU	38° 30.74'	112° 10.63'	2105	18300	PSN	Analog	Utah
MTPU	Mt. Pierson, UT	EN[ZEN]	3	UU	38° 02.49'	112° 11.06'	3112	EpiSensor	Q330	Digital	Utah
		HH[ZEN]	3					Trillium 120			
MTUT	Morton Thiokol, UT	EHZ	1	UU	41° 42.55'	112° 27.28'	1373	L4C	PSN	Analog	USGS
MVCO	Mesa Verde, CO	BH[ZEN]	3	US	37° 12.62'	108° 29.92'	2170	STS-2	Q330	Digital	ANSS
MVU	Marysvale, UT	BH[ZEN]	3	LB	38° 30.22'	112° 12.74'	2240	*	*	Digital	Sandia
NAI	North Antelope Island, UT	EN[ZEN]	3	UU	41° 00.97'	112° 13.68'	1472	EpiSensor	Etna2	Digital	ANSS
NAIU	North Antelope Island, UT	EHZ	1	UU	41° 00.97'	112° 13.68'	1472	L4C	PSN	Analog	USGS
NLU	North Lily Mine, UT	EN[ZEN]	3	UU	39° 57.29'	112° 04.50'	2036	Episensor	ANSS-130	Digital	ANSS
		HH[ZEN]	3					Trillium 120			
NMU	North Mineral Mountain, UT	EH[ZEN]	3	UU	38° 30.99'	112° 51.00'	1853	S13	PSN	Analog	Utah
NOQ	North Oquirrh Mountains, UT	EN[ZEN]	3	UU	40° 39.16'	112° 07.26'	1628	EpiSensor	K2	Digital	ANSS
		HH[ZEN]	3					Trillium 120			
NPI	North Pocatello, ID	EHZ	1	UU	42° 08.84'	112° 31.10'	1640	L4C	Basalt	Digital	ANSS
		EN[ZEN]	3					EpiSensor			
O20A	White River City, CO	BH[ZEN]	3	N4	40° 08.09'	108° 14.50'	1915	STS-2	Q330	Digital	NCF
OCP	Orem City Park, Orem, UT	EN[ZEN]	3	UU	40° 17.87'	111° 41.44'	1464	EpiSensor	Etna2	Digital	ANSS

SEED Station	Location	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
OF2	Ogden Fire Station ° 2 Ogden, UT	EN[ZEN]	3	UU	41° 13.70'	111° 56.92'	1358	EpiSensor	Etna2	Digital	ANSS
OPS	Ogden Public Safety Building, Ogden, UT	EN[ZEN]	3	UU	41° 13.72'	111° 58.54'	1317	EpiSensor	Etna2	Digital	ANSS
OSS	Oquirrh Sub Station, UT	EN[ZEN]	3	UU	40° 33.77'	112° 01.61'	1503	EpiSensor	Etna2	Digital	ANSS
OWUT	Old Woman Plateau, UT	EHZ	1	UU	38° 46.80'	111° 25.42'	2568	L4C	PSN	Analog	Utah
PCCW	Pine Creek, Cokeville, WY	EHZ	1	UU	42° 05.97'	110° 52.36'	1996	L4C	Basalt	Digital	Utah, USGS
		EN[ZEN]	3					EpiSensor			
PCL	Plain City Landfill Plain City, UT	EN[ZEN]	3	UU	41° 18.60'	112° 06.00'	1290	Applied Mems	ANSS-130	Digital	ANSS
PCR	Park City Recreation Center, Park City, UT	EN[ZEN]	3	UU	40° 39.25'	111° 30.19'	2100	EpiSensor	Etna2	Digital	ANSS
PEUT	Pahvant Elementary School, Richfield, UT	EN[ZEN]	3	UU	38° 46.55'	112° 05.32'	1644	PA-23	SMART-24	Digital	Utah
PGA	Page, AZ	EHZ	1	AR	36° 54.34'	111° 16.86'	1272	*	*	Analog	NAU
PGC	Pleasant Grove Creek, UT	EN[ZEN]	3	UU	40° 22.71'	111° 42.62'	1707	EpiSensor	K2	Digital	ANSS
PIO	Pioche, NV	HH[ZEN]	3	NN	37° 56.83'	114° 29.48'	1887	Trillium 120	Q330	Digital	UNR
PKCU	Pink Cliffs, UT	HH[ZEN]	3	UU	37° 26.63'	112° 18.66'	2834	Trillium 120	SMART-24	Digital	Utah
		EN[ZEN]	3					PA-23			
PNSU	Preston Nutter Ranch, Sunnyside, UT	HH[ZEN]	3	UU	39° 37.67'	110° 14.74'	2743	Trillium 240	Q330	Digital	Utah
		EN[ZEN]	3					EpiSensor			
PRN	Pahroc, Range, NV	HH[ZEN]	3	NN	37° 24.40'	115° 03.05'	1402	Trillium 120	ANSS-130	Digital	UNR
PSUT	Pine Spring, UT	HH[ZEN]	3	UU	38° 32.02'	113° 51.28'	1999	Trillium 120	Q330	Digital	Utah
		EN[ZEN]	3					EpiSensor			
PTI	Pocatello, ID	EHZ	1	IE	42° 52.20'	112° 22.21'	1670	*	*	Digital	INL
PTU	Portage, UT	EHZ	1	UU	41° 55.76'	112° 19.48'	2192	L4C	Basalt	Digital	ANSS
		EN[ZEN]	3					EpiSensor			
PV05	E. Island Mesa, Paradox Basin, CO	HH[ZEN]	3	RE	38° 08.87'	108° 50.08'	2142	*	*	Digital	USBR
PV11	Davis Mesa, Paradox Basin, CO	HH[ZEN]	3	RE	38° 17.96'	108° 52.33'	1881	*	*	Digital	USBR
PV15	Pinto Mesa, Paradox Basin, CO	HH[ZEN]	3	RE	38° 20.51'	108° 28.66'	2280	*	*	Digital	USBR
PV21	Cone Mountain, Paradox Basin, CO	HH[ZEN]	3	RE	38° 33.67'	108° 58.50'	2235	*	*	Digital	USBR
Q12A	Willow Creek Ranch, Ely, NV	HH[ZEN]	3	NN	39° 02.40'	114° 19.88'	1625	Trillium 120	Q330	Digital	UNR
QBHW	Bridle Trail Rd, Draper, UT	HN[ZEN]	3	UU	40° 30.23'	111° 51.35'	1400	Gsig-AC63	Gsig-GMS	Digital	ANSS
QCSP	White Pine Dr., Tooele, UT	HN[ZEN]	3	UU	40° 32.75'	112° 16.56'	1538	Gsig-AC63	Gsig-GMS	Digital	ANSS
QCWC	E 2100 S, Salt Lake City, UT	HN[ZEN]	3	UU	40° 43.54'	111° 49.94'	1373	Gsig-AC63	Gsig-GMS	Digital	ANSS
QDPS	Dept of Public Safety Univ. of Utah, Salt Lake City, UT	HN[ZEN]	3	UU	40° 45.60'	111° 50.46'	1460	Gsig-AC63	Gsig-GMS	Digital	ANSS
QFTG	N 450 E St., Springville, UT	HN[ZEN]	3	UU	40° 10.42'	111° 36.12'	1395	Gsig-AC63	Gsig-GMS	Digital	ANSS
QJHW	Red Rock Ranch, Teton County, WY	HN[ZEN]	3	UU	43° 34.99'	110° 24.65'	2169	Gsig-AC63	Gsig-GMS	Digital	ANSS

SEED Station	Location	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
QJMH	S 900 E, Salt Lake City, UT	HN[ZEN]	3	UU	40° 42.21'	111° 51.97'	1312	Gsig-AC63	Gsig-GMS	Digital	ANSS
QJOT	Whileaway Rd., Snyderville, UT	HN[ZEN]	3	UU	40° 44.50'	111° 41.68'	1977	Gsig-AC63	Gsig-GMS	Digital	ANSS
QKSL2	Lehi, UT	HN[ZEN]	3	UU	40° 15.98'	111° 50.07'	1371	Gsig-AC63	Gsig-GMS	Digital	ANSS
QLIN	884 E 490 N, Lindon, UT	HN[ZEN]	3	UU	40° 20.83'	111° 29.63'	1538	Gsig-AC63	Gsig-GMS	Digital	ANSS
QLMT	Earthquake Lake, MT	EHZ	1	MB	44° 49.84'	111° 25.80'	2064	*	*	Analog	MBMT
QMDS	S 2600 E, Salt Lake City, UT	HN[ZEN]	3	UU	40° 43.74'	111° 48.97'	1405	Gsig-AC63	Gsig-GMS	Digital	ANSS
QNRL	E 500 N, Logan, UT	HN[ZEN]	3	UU	40° 44.44'	111° 49.49'	1407	Gsig-AC63	Gsig-GMS	Digital	ANSS
QOGD	1723 N 900 E, North Ogden, UT	HN[ZEN]	3	UU	41° 17.38'	111° 57.11'	1361	Gsig-AC63	Gsig-GMS	Digital	ANSS
QPAY	N 300 E Payson, UT	HN[ZEN]	3	UU	40° 03.18'	111° 43.70'	1404	Gsig-AC63	Gsig-GMS	Digital	ANSS
QPML	S Whitesides St., Layton, UT	HN[ZEN]	3	UU	40° 03.47'	111° 57.23'	1334	Gsig-AC63	Gsig-GMS	Digital	ANSS
QRJG	N 1450 E, Provo, UT	HN[ZEN]	3	UU	40° 15.65'	111° 37.96'	1530	Gsig-AC63	Gsig-GMS	Digital	ANSS
QSAR2	Saratoga Springs, UT	HN[ZEN]	3	UU	40° 20.17'	111° 55.43'	1420	Gsig-AC63	Gsig-GMS	Digital	ANSS
QSPA	520 S, Spanish Fork, UT	HN[ZEN]	3	UU	40° 17.47'	111° 52.95'	1413	Gsig-AC63	Gsig-GMS	Digital	ANSS
QSTV	S City Vistas Way, Kearns, UT	HN[ZEN]	3	UU	40° 40.25'	112° 02.18'	1416	Gsig-AC63	Gsig-GMS	Digital	ANSS
QSUN	1412 N 350 W, Sunset, UT	HN[ZEN]	3	UU	41° 08.04'	112° 01.97'	1373	Gsig-AC63	Gsig-GMS	Digital	ANSS
QUGS	240 N Redwood Road, SLC, UT	HN[ZEN]	3	UU	40° 46.45'	111° 56.32'	1300	Gsig-AC63	Gsig-GMS	Digital	ANSS
R11B	Troy Canyon, Currant, NV	HH[ZEN]	3	NN	38° 20.93'	115° 35.12'	1756	STS-5A	Q330	Digital	UNR
RBU	Red Butte Canyon, UT	EHZ	1	UU	40° 46.85'	111° 48.50'	1676	L4C	Basalt	Digital	USGS
		EN[ZEN]	3					EpiSensor			
RCJ	Ross Creek, UT	EHZ	1	UU	40° 39.51'	111° 26.36'	2090	S13	PSN	Analog	Utah
RDMU	Red Mountain, UT	HH[ZEN]	3	UU	40° 34.25'	109° 34.17'	2087	Trillium 120	SMART-24	Digital	Utah
		EN[ZEN]	3					PA-23			
REDW	Red-Top Meadows, WY	BH[ZEN]	3	IW	43° 21.74'	110° 51.18'	2322	3ESP	RT-130	Digital	ANSS
REUT	Washington Fields, Riverside Elementary School, UT	EN[ZEN]	3	UU	37° 05.86'	113° 31.16'	791	PA-23	SMART-24	Digital	Utah
ROA	Roan Cliffs, UT	EHZ	1	UU	39° 39.69'	110° 21.88'	2962	S13	PSN	Analog	Utah
RPF	Rose Park Fire Station, Salt Lake City, UT	EN[ZEN]	3	UU	40° 46.52'	111° 55.22'	1287	Applied Mems	ANSS-130	Digital	ANSS
RRCU	Rees Ranch, Coalville, UT	EHZ	1	UU	40° 53.21'	111° 26.22'	2028	L4C	Basalt	Digital	Utah, USGS
		EN[ZEN]	3					EpiSensor			
RSUT	Red Spur, UT	EHZ	1	UU	41° 38.31'	111° 25.90'	2682	S13	Basalt	Digital	USGS
		EN[ZEN]	3					EpiSensor			
RWWY	Rawlins, WY	BH[ZEN]	3	IW	41° 41.33'	107° 12.61'	2402	3ESP	RT-130	Digital	ANSS
SAIU	South Antelope Island, UT	EHZ	1	UU	40° 51.29'	112° 10.89'	1384	L4C	PSN	Analog	USGS
		EHZ	1					EpiSensor	Basalt	Digital	
		EN[ZEN]	3								
SCC	Salt Lake Community College, SLC UT Salt Lake City, UT	EN[ZEN]	3	UU	40° 40.49'	111° 56.37'	1306	EpiSensor	Etna2	Digital	ANSS

SEED Station	Location	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
SCS	Syracuse City Cemetery Shop Syracuse, UT	EN[ZEN]	3	UU	41° 05.73'	112° 02.81'	1321	EpiSensor	K2	Digital	ANSS
SCUT	Santa Clara, UT	EN[ZEN]	3	UU	37° 07.69'	113° 38.68'	837	EpiSensor	Etna	Digital	Utah
SCY	Salem City Yard, Salem, UT	EN[ZEN]	3	UU	40° 03.47'	111° 41.14'	1386	Applied Mems	ANSS-130	Digital	ANSS
SGSU	St. George Fire Station #4, UT	EN[ZEN]	3	UU	38° 16.61'	112° 38.42'	1799	PA-23	SMART-24	Digital	Utah
SGU	Sterling, UT	EHZ	1	UU	39° 10.94'	111° 38.68'	2357	18300	PSN	Analog	USGS
SHP	Sheep Range, NV	HH[ZEN]	3	NN	36° 30.33'	115° 09.61'	1590	Trillium 120	ANSS-130	Digital	UNR
SJF	South Jordan Fire Station, South Jordan, UT	EN[ZEN]	3	UU	40° 33.37'	111° 56.34'	1356	Applied Mems	ANSS-130	Digital	ANSS
SMAZ	Slide Mountain, AZ	EHZ	1	AR	36° 19.29'	113° 10.14'	2200	*	*	Analog	NAU
SNO	Snow College, UT	EHZ	1	UU	39° 19.18'	111° 32.33'	2503	Ranger	PSN	Analog	Utah
SNOW	Snowking Mountain, WY	BH[ZEN]	3	IW	43° 27.75'	110° 45.31'	2390	3ESP	RT-130	Digital	ANSS
SNUT	Stansbury North, UT	EHZ	1	UU	40° 53.10'	112° 30.52'	1652	18300	PSN	Analog	USGS
		EHZ	1					EpiSensor	Basalt	Digital	
		EN[ZEN]	3								
SPR	Wildlife Resource Center Springville, UT	EN[ZEN]	3	UU	40° 10.94'	111° 36.71'	1379	EpiSensor	K2	Digital	ANSS
SPR3	Spring Creek 3, NV	HH[ZEN]	3	NN	38° 59.93'	114° 19.88'	2815	Trillium 120	RT-130	Digital	UNR
SPS	Stansbury Park Sewage Lagoon Stansbury Park, UT	EN[ZEN]	3	UU	40° 38.97'	112° 18.95'	1293	EpiSensor	Etna2	Digital	ANSS
SPU	South Promontory Point, UT	EN[ZEN]	3	UU	41° 18.52'	112° 26.95'	2086	EpiSensor	ANSS-130	Digital	ANSS
		HH[ZEN]	3					3ESP			
SRU	San Rafael Swell, UT	EHZ	1	UU	39° 06.65'	110° 31.43'	1804	S13	PSN	Analog	Utah, ANSS, IRIS
		HH[ZEN]	3					STS-2	ANSS-130	Digital	
		EN[ZEN]	3					EpiSensor			
SSC	Sandy Senior Center Sandy, UT	EN[ZEN]	3	UU	40° 34.89'	111° 51.35'	1414	EpiSensor	Etna2	Digital	ANSS
SUU	Santaquin Canyon, UT	EHZ	1	UU	39° 53.29'	111° 47.45'	2024	18300	PSN	Analog	USGS
SVWY	Solvay Mine, WY	HH[ZEN]	3	UU	41° 27.02'	109° 51.88'	1950	Trillium 120	Centaur	Digital	Utah
SWUT	Soap Wash, Delta, UT	EN[ZEN]	3	UU	39° 19.72'	113° 11.72'	1644	EpiSensor	Q330	Digital	Utah
		HH[ZEN]	3					Trillium 120			
SZCU	Shurtz Canyon, UT	HH[ZEN]	3	UU	37° 35.72'	113° 05.25'	2026	3T	SMART-24	Digital	Utah
		EN[ZEN]	3					PA-23			
		EHZ	1								
TCMU	Timpanogos Cave Mouth, UT	EHZ	1	UU	40° 26.26'	111° 42.71'	2045	L4C	Basalt	Digital	Utah
		EN[ZEN]	3					EpiSensor			
TCRU	Three Creeks Reservoir, UT	HH[ZEN]	3	UU	38° 36.57'	112° 26.83'	2293	Trillium 120	SMART-24	Digital	Utah
		EN[ZEN]	3					PA-23			
TCU	Toone Canyon, UT	EN[ZEN]	3	UU	41° 07.04'	111° 24.47'	2269	EpiSensor	ANSS-130	Digital	ANSS

SEED Station	Location	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
		HH[ZEN]	3					3ESP			
TCUT	Toone Canyon, UT	EHZ	1	UU	41° 07.07'	111° 24.51'	2320	L4C	PSN	Analog	USGS
TMI	Taylor Mountain, ID	EHZ	1	IE	43° 18.30'	111° 55.08'	2179	*	*	Digital	INL
TMU	Trail Mountain, UT	HH[ZEN]	3	UU	39° 17.79'	111° 12.49'	2731	Observer	ANSS-130	Digital	Utah, ANSS
		EN[ZEN]	3					EpiSensor			
TPAW	Teton Pass, WY	BH[ZEN]	3	IW	43° 29.41'	110° 57.04'	2512	3ESP	RT-130	Digital	ANSS
TPH	Tonopah, NV	BH[ZEN]	3	LB	38° 04.50'	117° 13.35'	1883	3ESP	Q330	Digital	Sandia
TPMT	Teepee Creek, MT	EHZ	1	MB	44° 43.79'	111° 39.94'	2518	*	*	Analog	MBMT
TPNV	Topopah Spring, NV	BH[ZEN]	3	US	36° 56.93'	116° 14.97'	1600	*	*	Digital	USGS
TPU	Thanksgiving Point, Lehi, UT	EN[ZEN]	3	UU	40° 25.81'	111° 54.13'	1383	EpiSensor	Etna2	Digital	ANSS
TRS	Tooele County Radio Shop, Tooele, UT	EN[ZEN]	3	UU	40° 30.83'	112° 18.63'	1568	EpiSensor	Etna2	Digital	ANSS
U15A	North Rim, AZ	BH[ZEN]	3	AE	36° 25.80'	112° 17.40'	2489	Trillium 240	Q330	Digital	AZGS
UHP	Utah Highway Patrol Farmington, UT	EN[ZEN]	3	UU	40° 59.47'	111° 53.88'	1295	EpiSensor	Etna2	Digital	ANSS
UTH	Uintah Town Hall, Uintah, UT	EN[ZEN]	3	UU	41° 08.65'	111° 55.52'	1389	EpiSensor	Etna2	Digital	ANSS
UUE	University of Utah EMCB Bldg. Salt Lake City, UT	EN[ZEN]	3	UU	40° 46.09'	111° 50.77'	1449	EpiSensor	Etna2	Digital	ANSS
V12A	Nelson, NV	HH[ZEN]	3	NN	35° 44.00'	114° 51.07'	1098	Trillium 120	Q330	Digital	UNR
VEC	Valley Emergency Communications Center West Valley City, UT	EN[ZEN]	3	UU	40° 39.21'	112° 01.95'	1480	EpiSensor	Basalt	Digital	ANSS
VNL	Vernal, UT	EN[ZEN]	3	UU	40° 27.48'	109° 32.89'	1648	EpiSensor	Obsidian	Digital	Utah
VRUT	Veyo Road, Veyo, UT	HH[ZEN]	3	UU	37° 27.71'	113° 51.41'	1874	Trillium 120	SMART-24	Digital	Utah
		EN[ZEN]	3					PA-23			
W13A	Hualapai Mountain Park, Kingman, AZ	BH[ZEN]	3	AE	35° 06.00'	113° 53.40'	1988	3T	Q330	Digital	AZGS
WBC	Weber Canyon, UT	EN[ZEN]	3	UU	41° 08.38'	111° 54.05'	1602	EpiSensor	Etna2	Digital	ANSS
WCF	Wellsville Fire Station, Wellsville, UT	EN[ZEN]	3	UU	41° 38.37'	111° 55.94'	1387	EpiSensor	Etna2	Digital	ANSS
WCO	Washington City Office Building, UT	EN[ZEN]	3	UU	37° 07.91'	113° 30.56'	837	EpiSensor	Etna	Digital	Utah
WCU	Willow Creek, UT	EHZ	1	UU	38° 57.88'	112° 05.44'	2673	18300	PSN	Analog	USGS
		EHZ	1					EpiSensor	Basalt	Digital	
		EN[ZEN]	3								
WDO	Saint George, Washington County School District Office, UT	EN[ZEN]	3	UU	37° 06.46'	113° 35.19'	831	PA-23	SMART-24	Digital	Utah
WES	Westminster College Salt Lake City, UT	EN[ZEN]	3	UU	40° 43.97'	111° 51.26'	1341	EpiSensor	Etna2	Digital	ANSS
WHS	West High School, SLC UT Salt Lake City, UT	EN[ZEN]	3	UU	40° 46.51'	111° 53.93'	1301	EpiSensor	Etna2	Digital	ANSS



SEED Station	Location	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
WMUT	West Mountain, UT	EHZ	1	UU	40° 04.60'	111° 50.00'	1981	L4C	PSN	Analog	USGS
		EHZ	1					Basalt	Digital		
		EN[ZEN]	3					EpiSensor			
WPUT	Wasatch Plateau, UT	HH[ZEN]	3	UU	38° 59.85'	111° 21.53'	2618	Trillium 120	Taurus	Digital	Utah
WRP	Water Reclamation Plant Salt Lake City, UT	EN[ZEN]	3	UU	40° 48.82'	111° 55.87'	1286	EpiSensor	Etna2	Digital	ANSS
WTNK	7433 Soaring Heights, NV	HH[ZEN]	3	NN	36° 11.50'	115° 00.64'	676	3ESP	ANSS-130	Digital	UNR
WTU	Western Traverse Mountains, UT	EH[ZEN]	3	UU	40° 27.29'	111° 57.21'	1552	S13	PSN	Analog	USGS
		EN[ZEN]	3					Applied Mems	ANSS-130	Digital	
		BH[ZEN]	3					*	*	Digital	
WUAZ	Wupatki, AZ	BH[ZEN]	3	US	35° 31.01'	111° 22.43'	1592	*	*	Digital	USGS
WVUT	Wellsville, UT	EHZ	1	UU	41° 36.61'	111° 57.55'	1828	L4C	PSN	Analog	USGS
YDC	Denny Creek, MT	EHZ	1	WY	44° 42.51'	111° 14.60'	2025	L4C	PSN	Analog	USGS
YDD	Grant Junction, Yellowstone, WY	HH[ZEN]	3	WY	44° 24.00'	110° 34.80'	2400	STS-2	Q330	Digital	USGS
		EN[ZEN]	3					Episensor			
YEE	East Entrance (YNP), WY	HH[ZEN]	3	WY	44° 29.12'	109° 53.81'	2270	Compact	Taurus	Digital	USGS
YFT	Old Faithful (YNP), WY	HH[ZEN]	3	WY	44° 27.05'	110° 50.24'	2292	Compact	Centaur	Digital	USGS
		EN[ZEN]	3					Titan			
YGC	Grayling Creek, MT	EHZ	1	WY	44° 47.77'	111° 06.45'	2075	L4C	PSN	Analog	USGS
YHB	Horse Butte, MT	EHZ	1	WY	44° 45.07'	111° 11.71'	2157	L4C	PSN	Analog	USGS
		HH[ZEN]	3					Compact	ANSS-130	Digital	
		EN[ZEN]	3					Titan			
YHH	Holmes Hill (YNP), WY	EHZ	1	WY	44° 47.30'	110° 51.03'	2717	S13	PSN	Analog	USGS
		HH[ZEN]	3					Trillium 120	Q330	Digital	
		EN[ZEN]	3					Titan			
YHL	Hebgen Lake, MT	HH[ZEN]	3	WY	44° 51.05'	111° 10.98'	2691	Trillium 120	Q330	Digital	USGS
		EN[ZEN]	3					Titan			
YHR	Hawk's Rest, WY	HH[ZEN]	3	WY	44° 06.36'	110° 04.90'	2976	Trillium 120	Q330	Digital	USGS
YJC	Joseph's Coat (YNP), WY	EH[ZEN]	3	WY	44° 45.33'	110° 20.95'	2684	S13	PSN	Analog	USGS
YLA	Lake Butte (YNP), WY	EHZ	1	WY	44° 30.76'	110° 16.12'	2580	L4C	PSN	Analog	USGS
YLT	Little Thumb Creek (YNP), WY	EHZ	1	WY	44° 26.25'	110° 35.28'	2439	L4C	PSN	Analog	USGS
YMC	Maple Creek (YNP), WY	EH[ZEN]	3	WY	44° 45.53'	111° 00.41'	2073	S13	PSN	Analog	USGS
YML	Mary Lake (YNP), WY	EH[ZEN]	3	WY	44° 36.20'	110° 38.63'	2653	L4C	PSN	Analog	USGS
YMP	Mirror Plateau (YNP), WY	EHZ	1	WY	44° 44.38'	110° 09.40'	2774	S13	PSN	Analog	USGS
		HH[ZEN]	3					Trillium 120	Q330	Digital	
		EN[ZEN]	3					Titan			
YMR	Madison River (YNP), WY	HH[ZEN]	3	WY	44° 40.12'	110° 57.90'	2149	Trillium 120	Q330	Digital	USGS
		EN[ZEN]	3					Titan			

SEED Station	Location	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
YMS	Mount Sheridan (YNP), WY	EHZ	1	WY	44° 15.84'	110° 31.67'	3106	L4C	PSN	Analog	USGS
YMV	Mammoth Vault (YNP), WY	EHZ	1	WY	44° 58.42'	110° 41.33'	1829	L4C	PSN	Analog	USGS
YNE	Northeast Entrance (YNP), WY	HH[ZEN]	3	WY	45° 00.46'	110° 00.48'	2343	Compact	ANSS-130	Digital	USGS
YNM	Norris Museum (YNP), WY	HH[ZEN]	3	WY	44° 43.59'	110° 42.22'	2311	Trillium 240	Q330	Digital	USGS
YNR	Norris Junction (YNP), WY	HH[ZEN]	3	WY	44° 42.93'	110° 40.75'	2336	Trillium 120	Q330	Digital	USGS
		EN[ZEN]	3					Titan			
YPC	Pelican Cone (YNP), WY	EHZ	1	WY	44° 38.88'	110° 11.55'	2932	L4C	PSN	Analog	USGS
YPK	Parker Peak (YNP), WY	EH[ZEN]	3	WY	44° 43.91'	109° 55.32'	2897	L4C	PSN	Analog	USGS
YPM	Purple Mountain (YNP), WY	EHZ	1	WY	44° 39.43'	110° 52.12'	2582	L4C	PSN	Analog	USGS
YPP	Pitchstone Plateau (YNP), WY	EHZ	1	WY	44° 16.26'	110° 48.27'	2707	S13	PSN	Analog	USGS
		HH[ZEN]	3					Trillium 120	Q330	Digital	
		EN[ZEN]	3					Titan			
YSB	Soda Butte (YNP), WY	EHZ	1	WY	44° 53.04'	110° 09.06'	2072	L4C	PSN	Analog	USGS
YTP	The Promontory (YNP), WY	EHZ	1	WY	44° 23.51'	110° 17.10'	2384	L4	PSN	Analog	USGS
		HH[ZEN]	3					Trillium 120	Q330	Digital	
		EN[ZEN]	3					Titan			
YUF	Upper Falls (YNP), WY	HH[ZEN]	3	WY	44° 42.76'	110° 30.71'	2394	Compact	ANSS-130	Digital	USGS
		EN[ZEN]	3					Titan			
YWB	West Boundary (YNP), WY	EHZ	1	WY	44° 36.35'	111° 06.05'	2310	L4C	PSN	Analog	USGS
ZNPU	Zion National Park, UT	HH[ZEN]	3	UU	37° 21.37'	113° 07.52'	1953	Trillium 120	Q330	Digital	Utah

\* Station operated by another agency and recorded as part of University of Utah regional seismic network  
Network Statistics: 986 data channels from 315 stations were being recorded at the end of this report period

## EXPLANATION OF TABLE

**UURSN Code:** Station code formerly used in routine processing. Because of software limitations, the station code may not be the station code used by the original operator. For multi-component stations, the vertical, east-west, and north-south high gain (low gain) components are identified by an appended Z(V), E(L), and N(M), respectively, in UUSS phase files.

**Location:** General description of station location. YNP = Yellowstone National Park.

**SEED Station:** The SEED (Standard for the Exchange of Earthquake Data) station code used by the original operator.

**SEED Channel:** The SEED format uses three letters to name seismic channels. See <<[http://www.iris.edu/manuals/SEEDManual\\_V2.4.pdf](http://www.iris.edu/manuals/SEEDManual_V2.4.pdf)>> for information about the SEED channel naming convention. Relevant sections are reproduced below. In the SEED convention, each letter describes one aspect of the instrumentation and its digitization. The first letter specifies the general sampling rate and the response band of the instrument. Band codes used in this table include:

Band Code	Band Type	Sample Rate	Corner Period
E	Extremely short period	≥ 80 Hertz	< 10 seconds
H	High broadband	≥ 80 Hertz	≥ 10 seconds
B	Broadband	≥ 10 to < 80 Hertz	≥ 10 seconds
S	Short period	≥ 10 to < 80 Hertz	< 10 seconds

The second letter specifies the family to which the sensor belongs. Sensor families used in this table are:

Instrument Code	Description
H	High gain seismometer
L	Low gain seismometer
N	Accelerometer

The third letter specifies the physical configuration of the members of a multiple axis instrument package. Channel orientations used in this table are:

Z E N      Traditional (Vertical, East-West, North-South)

**Number of Channels:** Total number of waveform channels recorded.

**Network Code:** The FDSN (Federation of Digital Seismographic Networks) registered network code. See <<[http://www.iris.edu/dms/nodes/dmc/services/network\\_codes](http://www.iris.edu/dms/nodes/dmc/services/network_codes)>> for information about registered seismograph network codes. Network codes referenced in this table:

Network Code	Network name; Network operator or responsible organization
AE	Arizona Broadband Seismic Network, Arizona Geological Survey
AR	Northern Arizona Seismic Network, Northern Arizona University
IE	Idaho National Laboratory Seismic Network

IU	IRIS/USGS Network; USGS Albuquerque Seismological Laboratory
IW	Intermountain West Network, U.S. Geological Survey
LB	Leo Brady Network; Sandia National Laboratory
MB	Montana Regional Seismic Network; Montana Bureau of Mines and Geology
NN	Western Great Basin Network; University of Nevada, Reno
NP	National Strong Motion Network; U.S. Geological Survey
PB	Plate Boundary Observatory
RE	U.S. Bureau of Reclamation Seismic Networks; U.S. Bureau of Reclamation, Denver Federal Center
UU	University of Utah Regional Network; University of Utah
US	US National Network; USGS National Earthquake Information Center
WY	Yellowstone Wyoming Seismic Network; University of Utah

**Latitude, Longitude:** Sensor location in degrees and decimal minutes; North latitude, West longitude.

**Elevation:** Sensor altitude in meters above sea level.

<b>Sensor</b>	<b>Description</b>
L4, L4C	Mark Products L4 or L4C short-period seismometer
S13, 18300	Geotech S13 or 18300 short-period seismometer
Ranger	Kinometrics Ranger short-period seismometer
40T	Guralp CMG-40T broadband seismometer
3T	Guralp CMG-3T broadband seismometer
3ESP	Guralp CMG-3ESP broadband seismometer
STS-2	Streckheisen STS-2 broadband seismometer
STS-5A	Streckheisen STS-5A broadband seismometer
FBA23	Kinometrics FBA-23 accelerometer
EpiSensor	Kinometrics EpiSensor accelerometer
Applied Mems	Applied Mems accelerometer
PA-23	Geotech PA-23 accelerometer
Compact	Nanometrics Compact broadband seismometer
Trillium 120	Nanometrics Trillium 120 broadband seismometer
Trillium 240	Nanometrics Trillium 240 broadband seismometer
Titan	Nanometrics Titan accelerometer
Observer	Refraction Technology (REF TEK) Model 151 Observer broadband seismometer
R147	Refraction Technology (REF TEK) Model 147 accelerometer
IESE-S2	Institute of Earth Science and Engineering S-2 model borehole seismometer
Gsig-AC63	Geosig-AC63 NetQuakes accelerometer
Omni-2400	Geospace OMNI-2400
Silicon-ULN	Silicon Audio Ultra Low Noise

<b>Digitizer</b>	<b>Description</b>
K2	Kinometrics Altus Series K2 (19-bit resolution field digitizer)
Etna	Kinometrics Altus Series Etna (18-bit resolution field digitizer)
72A-07	Refraction Technology (REF TEK) model 72A-07 (24-bit field digitizer)

72A-08	Refraction Technology (REF TEK) model 72A-08 (24-bit field digitizer)
ANSS-130	Refraction Technology (REF TEK) model 130-ANSS/02 (24-bit resolution field digitizer)
RT-130	Refraction Technology (REF TEK) model RT-130 (24-bit resolution field digitizer)
Q330	Quanterra, Inc. Q330 digitizer (24-bit resolution field digitizer)
SMART-24	Geotech SMART-24 digitizer (24-bit resolution field digitizer)
PSN	PSN-ADC-SERIAL version III (16-bit resolution field digitizer)
Basalt	Kinometrics Basalt (24-bit resolution field digitizer)
Taurus	Nanometrics Taurus (24-bit resolution field digitizer)
Gsig-GMS	Geosig-GMS NetQuakes (24-bit resolution field digitizer)
Centaur	Nanometrics Centaur (24-bit resolution field digitizer)
Obsidian	Kinometrics Obsidian (24-bit resolution field digitizer)
Etna2	Kinometrics Etna 2 (24-bit resolution field digitizer)

<b>Telemetry</b>	<b>Description</b>
Analog	Data transmission is analog along part of the transmission pathway
Digital	Data are converted to digital form at the station site
None	On-site recording system

**Sponsor (or Operator for stations marked by \* in preceding columns)**

USGS	U.S. Geological Survey
Utah	State of Utah
ANSS	Advanced National Seismic System
INL	Idaho National Laboratory
USBR	U.S. Bureau of Reclamation
LLNL	Lawrence Livermore National Laboratory
Sandia	Sandia National Laboratory
BYU-I	Brigham Young University, Idaho (formerly Ricks College)
MBMT	Montana Bureau of Mines and Geology
NSMP	National Strong Motion Project, U.S. Geological Survey
UNR	University of Nevada, Reno
AZGS	Arizona Geological Survey
NAU	Northern Arizona University
NSF	National Science Foundation
PBO	Plate Boundary Observatory

**NETWORK CHANGES DURING OCTOBER 1–DECEMBER 31, 2019**

NONE