

# **EARTHQUAKE ACTIVITY IN THE UTAH REGION**

Preliminary Epicenters

October 1 – December 31, 2013

Prepared by the University of Utah Seismograph Stations and funded by  
the U.S. Geological Survey (Cooperative Agreement No. G10AC00085) and  
by the State of Utah

February 14, 2014



## 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.  $36^{\circ} 45' - 42^{\circ} 30'$  N, long.  $108^{\circ} 45' - 114^{\circ} 15'$  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 (yyymmdd) 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 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:

$$RMS = \sqrt{\frac{\sum_i (W_i R_i)^2}{\sum_i (W_i)^2}}$$

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, 2013**

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During the three-month period October 1 through December 31, 2013, the University of Utah Seismograph Stations (UUSS) located 398 earthquakes within the Utah region (Figure 1). The total includes two earthquakes in the magnitude 3 range and 40 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. Three earthquakes were reported felt during the report period (see Table 1, a cumulative tabulation of earthquakes during 2013 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/EQCENTER/QUARTERLY/quarterly.htm>.

*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 (see [http://www.seis.utah.edu/shake/shake\\_trigger\\_area\\_09.pdf](http://www.seis.utah.edu/shake/shake_trigger_area_09.pdf)). 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.seis.utah.edu/shake>. Earthquakes during 2013 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> 3.4	October 14	18:03 MDT	27 mi WNW of Green River, WY
M <sub>L</sub> 3.6	October 17	10:19 MDT	8 mi ENE of Paradise, UT

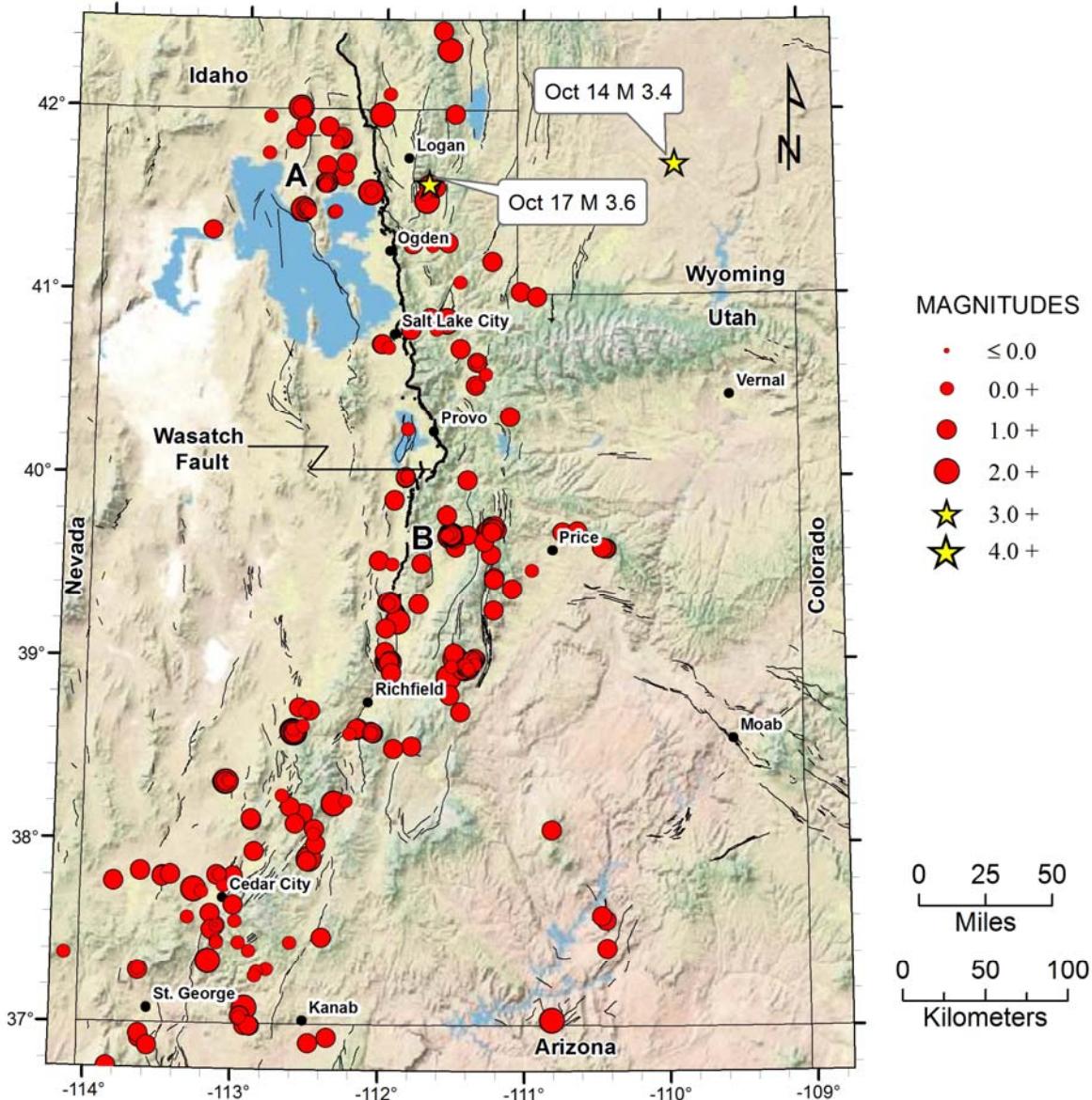
## **Other Notable Seismicity**

During the report period, there were two 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 22 earthquakes ( $0.2 \leq M \leq 1.8$ ) occurred about 16 miles SW of Tremonton, UT. Nine of these events, including a magnitude 1.8 shock, occurred between October 22 and October 26.
- B. A cluster of 35 earthquakes ( $0.8 \leq M \leq 2.8$ ) occurred about 5 miles NW of Fairview, UT. Twenty five of these events occurred on November 15 and eight of these events, including a magnitude 2.8 shock, occurred on November 26.

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 include a total of 144 located shocks ( $0.7 \leq M \leq 2.6$ ) that occurred throughout the report period.

## Seismicity of the Utah Region October 1, 2013 - December 31, 2013



**Figure 1.** Earthquake epicenters, located by the University of Utah Seismograph Stations, superposed 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. Earthquake clusters labeled A and B are discussed in the text.

**Table 1**

**EARTHQUAKES FELT AND/OR GENERATING A SHAKEMAP IN THE UTAH REGION**  
**January 1, 2013 to December 31, 2013**

Date	Time†	Felt Information‡	Latitude	Longitude	Magnitude§
January 23	21:46 MST	Colorado. <i>CIIM</i> . Felt (IV) at Bedrock, CO, (III) at Monticello, Moab UT and Whitewater, Grand Junction, Hotchkiss, Crawford, New Castle, CO, and (II) at Nucla, Redvale, Olathe, Delta, Placerville, Montrose, Clifton, Palisade, Fruita, Ridgway, Telluride, Cortez, Paonia, Lafayette (?), CO.	38° 19.43'	108° 59.43'	M <sub>W</sub> 3.9
January 24	04:46 UTC				
February 06	11:47 MST 18:47 UTC	Utah. <i>CIIM</i> . Felt (III) at Cedar City, UT.	37° 47.48'	113° 07.42'	M <sub>L</sub> 2.7
February 07	12:29 MST 19:29 UTC	Utah. <i>CIIM</i> . <i>ShakeMap</i> . Felt (III) at Farmington, Cedar City, UT.	37° 48.24'	113° 06.35'	M <sub>L</sub> 3.1
February 07	13:02 MST 20:02 UTC	Utah. <i>CIIM</i> . <i>ShakeMap</i> . Felt (III) at Cedar City, UT.	37° 47.30'	113° 07.45'	M <sub>L</sub> 3.4
February 07	13:35 MST 20:35 UTC	Utah. <i>CIIM</i> . Felt (II) at Cedar City, UT.	37° 45.89'	113° 08.11'	M <sub>L</sub> 2.0
February 07	19:47 MST	Utah. <i>CIIM</i> . <i>ShakeMap</i> .	37° 46.39'	113° 07.74'	M <sub>L</sub> 3.7
February 08	02:47 UTC	Felt (III) at Cedar City, Saint George, UT.			
February 07	20:19 MST	Utah. <i>CIIM</i> . Felt (III) at Cedar City, UT and (II)	37° 47.16'	113° 07.52'	M <sub>L</sub> 2.8
February 08	03:19 UTC	at Delta, Provo (?), UT and Grand Junction (?), CO.			
April 19	00:14 MDT 06:14 UTC	Utah. <i>CIIM</i> . Felt (III) at Payson, Salem, Mona, Salina (?), and Willard (?), UT and (II) at Spanish Fork, Mapleton, and Springville, UT.	40° 00.07'	111° 47.59'	M <sub>L</sub> 2.8

**Table 1**

**EARTHQUAKES FELT AND/OR GENERATING A SHAKEMAP IN THE UTAH REGION**  
**January 1, 2013 to December 31, 2013**

May 29	07:32 MDT 13:32 UTC	Utah. <i>CIIM. ShakeMap.</i> Felt (III) at Tremonton, UT and (II) at Plymouth, Portage, and Honeyville, UT.	41° 50.79'	112° 19.35'	M <sub>L</sub> 3.1
May 31	16:34 MDT 22:34 UTC	Utah. <i>CIIM.</i> Felt (II) at Hurricane, UT.	37° 10.44'	113° 24.82'	M <sub>L</sub> 2.8
May 31	16:45 MDT 22:45 UTC	Utah. <i>CIIM. ShakeMap.</i> Felt (III) at Washington and Hurricane, UT and (II) at Saint George, UT.	37° 10.31'	113° 24.78'	M <sub>L</sub> 2.9
July 08	13:30 MDT 19:30 UTC	Utah. <i>CIIM.</i> Felt (II) at Salt Lake City, UT.	41° 07.89'	112° 54.38'	M <sub>L</sub> 1.8
August 13 August 14	23:47 MDT 05:47 UTC	Utah. <i>CIIM. ShakeMap.</i> Felt (III) at Cedar City, UT.	37° 48.48'	113° 10.39'	M <sub>L</sub> 3.0
October 17	10:19 MDT 16:19 UTC	Utah. <i>CIIM. ShakeMap.</i> Felt (III) at Hyrum, Providence, Paradise, Eden, Smithfield, and Ogden, UT, and (II) at Logan, Wellsville, Hyde Park, Huntsville, Richmond, Brigham City, Roy, Clearfield, Syracuse, Layton, and Fayette (?), UT and Blackfoot (?), ID.	41° 36.20'	111° 41.03'	M <sub>L</sub> 3.6
November 25 November 26	21:17 MST 04:17 UTC	Utah. <i>CIIM.</i> Felt (III) at Vernal (?), UT, and (II) at Payson, Park City, Kamas, and Ogden, UT.	39° 40.48'	111° 30.76'	M <sub>L</sub> 2.8
December 09 December 10	18:23 MST 01:23 UTC	Utah. <i>CIIM.</i> Felt (III) at Park City, Salt Lake City, and Midway, UT, and (II) at Provo, UT and Jackson (?), WY.	40° 50.99'	111° 33.22'	M <sub>L</sub> 2.7

† 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

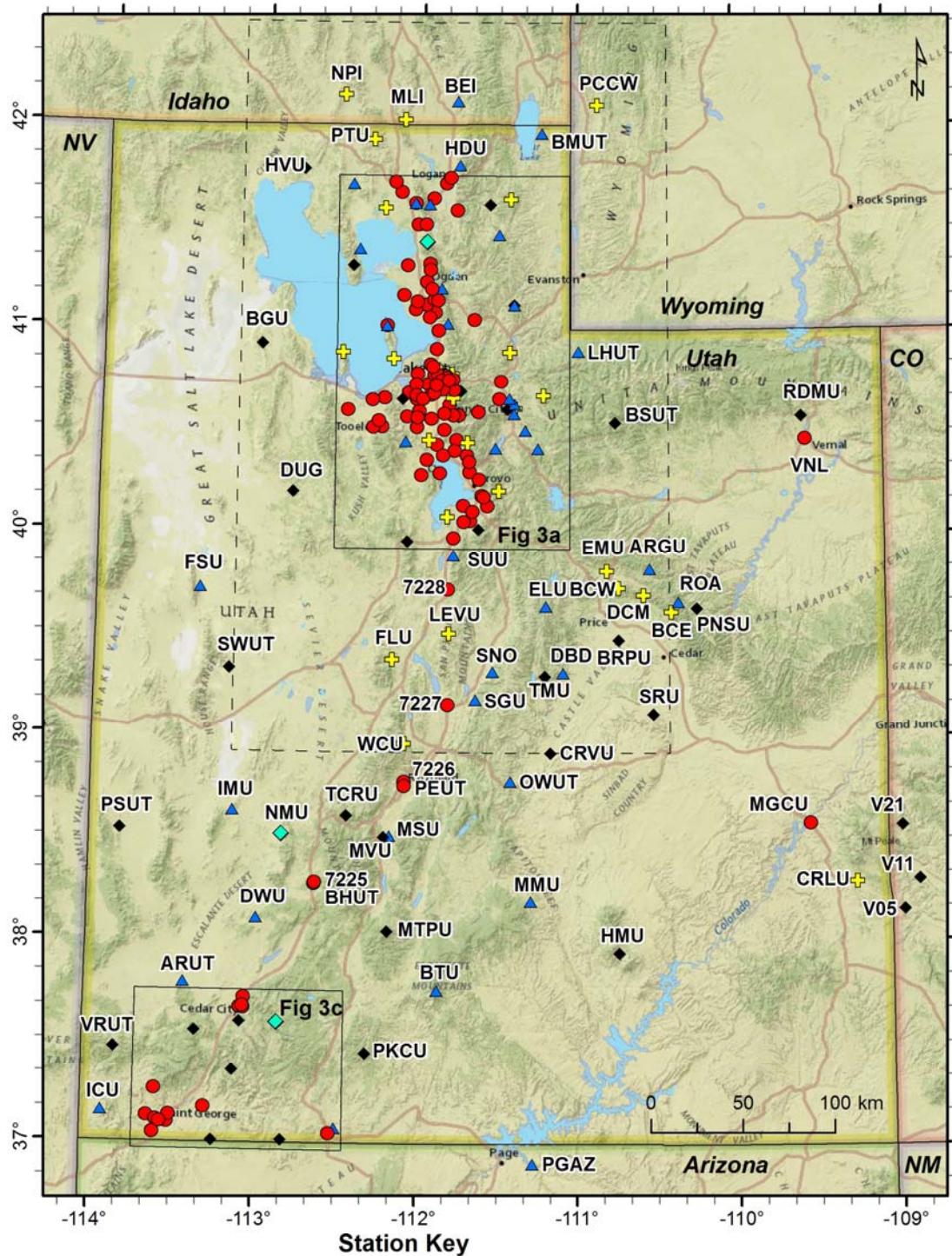
(<http://earthquake.usgs.gov/earthquakes/dyfi/archives.php>), compiled by the U.S. Geological Survey (USGS); *ShakeMap* indicates the availability of computer-generated maps of ground-shaking (<http://www.seis.utah.edu/shake/archive>), produced by the University of Utah Seismograph Stations (UUSS). Roman 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/research/data/pde.php>).

§ Richter local magnitude ( $M_L$ ) or coda magnitude ( $M_C$ ) determined by UUSS. If labeled “NEIC,” data are from the National Earthquake Information Center of the USGS.

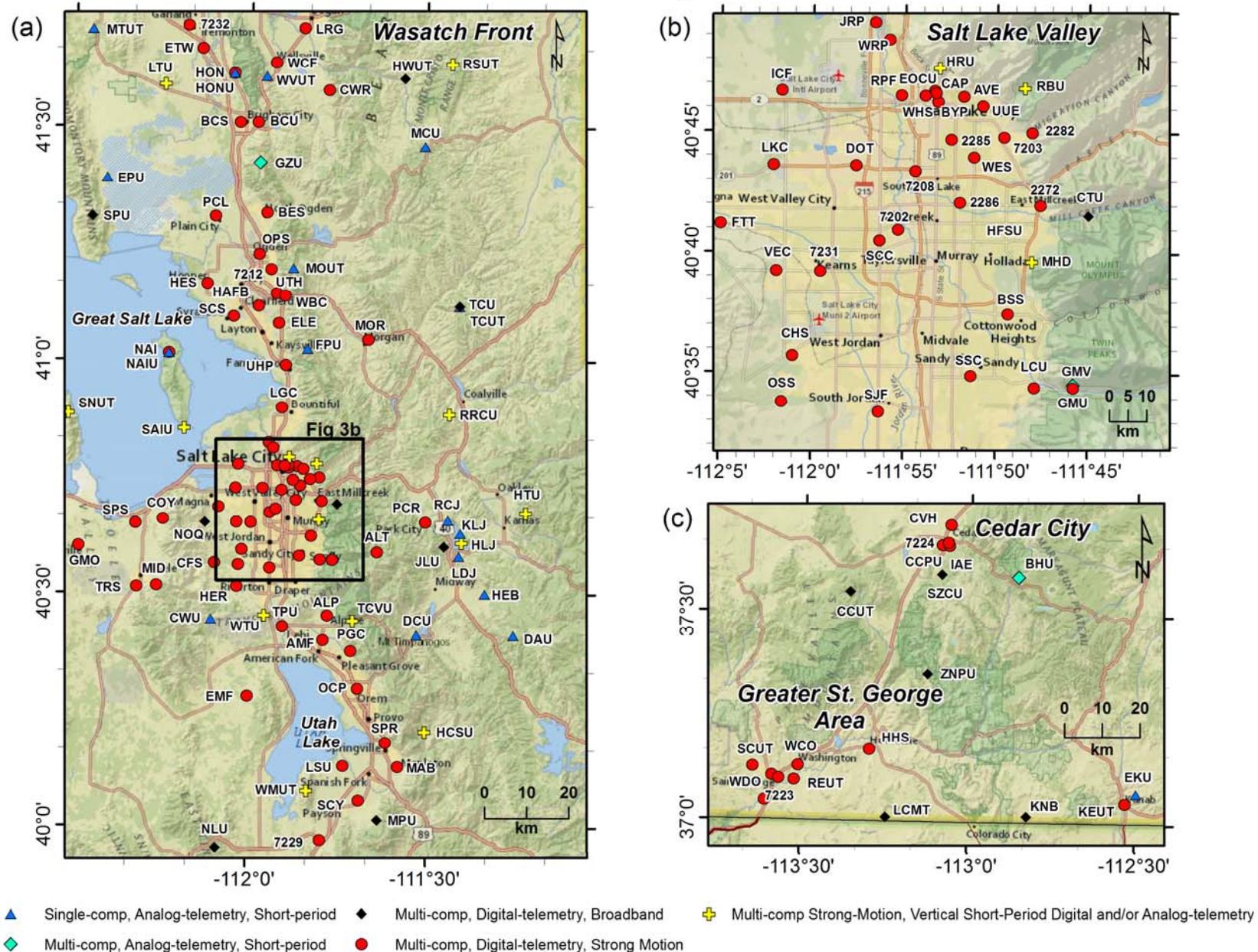
# Utah Regional/Urban Seismic Network

## December 31, 2013



**Figure 2**

## Utah Urban Seismic Network (December 31, 2013)



**Figure 3**

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2013**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
131001	08:10:56.93	41° 17.94'	111° 39.25'	13.6	0.8	20	94	22	0.12
131002	08:16:41.48	41° 58.53'	111° 29.94'	8.1*	1.3	14	66	22	0.13
131002	09:39:05.40	38° 19.96'	113° 03.17'	1.5*	0.4	6	119	26	0.09
131003	01:51:34.32	37° 01.74'	110° 48.73'	6.0*	2.2W	14	188	101	0.20
131004	00:16:11.24	39° 42.28'	111° 15.98'	1.7	1.6	7	152	9	0.13
131004	22:37:21.55	40° 15.42'	111° 49.64'	13.5	0.7	16	131	16	0.18
131005	09:57:10.80	41° 16.46'	111° 32.89'	0.8*	1.3	21	114	21	0.15
131005	11:22:39.15	37° 39.06'	113° 00.10'	1.6	1.5	11	116	8	0.15
131005	23:00:22.48	41° 03.54'	111° 27.54'	18.7	0.8	10	82	8	0.14
131006	06:12:00.20	39° 31.66'	111° 43.27'	15.9	1.4W	14	98	8	0.20
131006	09:25:00.44	37° 45.05'	112° 58.40'	10.3	0.6	6	233	20	0.04
131006	09:57:28.44	37° 25.51'	110° 25.75'	8.9*	1.7W	9	106	63	0.20
131006	17:20:22.32	41° 57.38'	112° 50.87'	1.3*	0.9	12	250	21	0.17
131007	14:16:56.69	38° 57.65'	111° 23.96'	0.0*	1.0W	8	85	20	0.09
131008	20:31:39.84	39° 42.27'	110° 37.58'	-1.6	1.7	9	86	4	0.11
131008	21:35:06.72	39° 42.79'	111° 11.55'	-2.8	1.6	5	215	8	0.08
131009	00:18:46.44	38° 04.21'	110° 48.54'	3.5*	1.9	9	88	16	0.29
131009	01:54:15.44	38° 48.43'	111° 31.12'	13.1	1.2	6	131	9	0.04
131009	02:43:50.70	41° 34.98'	112° 26.46'	3.0	0.4	8	127	10	0.06
131009	13:48:52.83	38° 57.62'	111° 23.81'	3.3*	2.0W	21	50	20	0.20
131010	00:29:34.18	41° 36.26'	112° 25.13'	3.5	1.0	12	89	8	0.13
131010	01:53:23.26	41° 36.30'	112° 25.51'	6.3	0.5	6	120	8	0.06
131010	03:06:31.87	39° 42.88'	111° 15.22'	1.9	1.3	6	164	9	0.08
131010	09:54:41.99	38° 54.25'	111° 31.77'	0.3*	2.1W	22	59	17	0.23
131010	10:29:15.52	41° 35.98'	112° 25.59'	0.8	1.2	15	90	8	0.17
131010	15:41:29.08	38° 35.71'	112° 36.12'	4.5*	1.2	13	64	14	0.14
131010	16:10:37.49	38° 35.83'	112° 35.89'	5.2*	2.0W	17	75	13	0.20
131010	16:49:58.03	41° 35.87'	112° 26.22'	2.6	0.4	6	124	8	0.06
131010	22:08:59.87	41° 36.25'	112° 25.90'	6.7	1.1	12	91	8	0.11
131010	22:32:41.69	41° 35.34'	112° 26.52'	2.5	0.4	7	126	9	0.07
131010	23:12:49.39	38° 36.39'	112° 36.77'	3.3*	2.5W	21	78	14	0.16
131010	23:21:10.54	38° 36.11'	112° 36.38'	3.9*	2.4W	23	76	14	0.17
131011	00:26:32.78	38° 36.23'	112° 36.41'	-0.2*	1.3	15	100	14	0.19
131011	00:50:41.30	38° 57.48'	111° 24.15'	2.6*	1.5W	11	86	20	0.06
131011	02:02:16.54	41° 36.22'	112° 25.87'	6.5	0.7	12	122	8	0.19
131011	03:26:49.51	37° 33.74'	112° 59.24'	8.2	0.3	6	140	10	0.03
131011	09:19:50.66	39° 23.35'	111° 05.14'	1.9	1.4W	15	62	8	0.18
131011	09:49:56.14	37° 22.44'	114° 09.10'	12.3*	0.6	12	231	28	0.15
131011	10:36:01.05	38° 36.82'	112° 36.46'	0.0*	0.9	15	100	14	0.19
131011	12:43:12.71	41° 36.03'	112° 26.10'	4.7	0.3	9	123	8	0.15
131011	15:19:47.68	38° 35.89'	112° 36.50'	4.1*	2.0W	25	75	14	0.14
131012	13:00:38.74	37° 05.25'	112° 54.75'	17.7	2.1W	18	113	11	0.15
131012	18:09:42.46	38° 57.65'	111° 23.78'	5.1*	1.0W	7	94	20	0.05
131013	08:02:57.82	38° 57.42'	111° 23.07'	9.2*	1.2	5	191	19	0.12
131014	07:07:26.42	40° 30.13'	111° 20.75'	9.3	1.5W	25	96	1	0.09

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2013**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
131014	07:49:24.37	37° 46.25'	113° 49.42'	10.5*	1.9W	19	171	34	0.08
131014	09:32:13.03	39° 41.99'	111° 13.52'	3.4	1.0	5	130	7	0.15
131014	10:25:43.75	39° 42.22'	111° 14.18'	1.2	1.2	5	137	8	0.07
131014	17:03:39.09	37° 17.20'	112° 49.91'	6.0*	0.6	6	131	27	0.21
131014	21:09:03.85	41° 54.27'	112° 25.20'	5.0	1.1	9	99	8	0.10
131015	00:03:26.92	41° 43.11'	109° 54.52'	-3.1*	3.4W	21	162	90	0.17
131015	02:01:44.41	39° 43.05'	111° 12.89'	-1.7	1.4	9	140	9	0.17
131015	09:31:09.30	37° 32.44'	113° 07.04'	12.5	-0.2	7	132	7	0.04
131015	10:59:17.52	38° 57.46'	111° 23.62'	1.9*	1.1W	8	94	20	0.11
131015	11:37:50.06	37° 32.27'	113° 07.34'	12.0	1.5W	20	72	7	0.09
131016	02:17:59.30	38° 57.44'	111° 25.05'	4.5*	0.9W	5	203	20	0.03
131016	09:26:25.39	41° 35.32'	112° 26.57'	4.2	0.2	8	127	9	0.07
131016	18:28:00.38	38° 57.54'	111° 23.82'	1.4*	1.5W	12	73	20	0.11
131016	18:31:10.63	38° 57.57'	111° 24.34'	2.3*	2.1W	27	50	20	0.17
131016	18:39:31.40	38° 57.86'	111° 24.31'	5.6*	1.0W	7	110	21	0.06
131016	19:38:17.02	38° 57.52'	111° 23.75'	3.2*	1.0W	6	148	20	0.08
131016	19:52:11.95	38° 58.32'	111° 20.87'	8.7	0.8W	6	143	16	0.15
131016	19:54:46.91	38° 57.50'	111° 23.85'	1.6*	1.3W	9	73	20	0.11
131016	23:06:51.51	38° 57.66'	111° 24.43'	1.7*	1.7W	15	50	20	0.09
131016	23:38:18.16	38° 57.82'	111° 23.67'	8.3*	0.8W	6	131	20	0.10
131017	01:07:56.22	40° 42.09'	111° 27.33'	10.4	1.1W	24	57	5	0.14
131017	01:26:34.65	38° 57.40'	111° 24.77'	7.9*	1.6W	16	71	20	0.16
131017	02:16:18.90	41° 30.56'	111° 42.20'	9.8	2.4W	37	50	10	0.15
131017	03:25:36.02	38° 57.56'	111° 24.33'	1.6*	1.7W	17	71	20	0.15
131017	06:34:36.90	38° 31.67'	111° 47.08'	12.8*	1.5W	18	84	34	0.16
131017	11:39:35.32	38° 57.79'	111° 23.96'	7.2*	0.9W	6	150	20	0.09
131017	13:24:58.52	40° 43.39'	112° 00.82'	6.7	1.4W	22	57	12	0.11
131017	15:27:22.98	38° 57.37'	111° 23.96'	1.5*	1.6W	18	71	20	0.12
131017	16:19:19.95	41° 36.20'	111° 41.03'	11.4	3.6W	42	57	8	0.14
131017	16:28:14.60	41° 34.89'	111° 38.32'	15.5	1.1	10	99	12	0.17
131017	16:45:47.45	41° 35.70'	111° 41.56'	9.5	1.0	17	74	8	0.10
131018	02:00:00.08	37° 48.71'	113° 26.17'	8.3	1.0	13	169	3	0.13
131018	02:13:23.48	38° 57.89'	111° 23.42'	8.0*	1.4	6	108	20	0.01
131018	02:15:57.38	38° 57.47'	111° 23.41'	5.4*	0.9W	7	93	19	0.03
131018	04:23:00.60	38° 58.76'	111° 24.28'	6.8*	1.5	9	95	21	0.21
131018	04:45:15.56	41° 15.47'	111° 39.57'	6.7*	0.8	20	96	24	0.16
131018	07:28:37.06	38° 57.39'	111° 24.32'	1.4*	1.3W	10	73	20	0.10
131018	10:33:34.52	40° 33.63'	111° 16.39'	10.3	0.6	16	142	8	0.10
131018	13:01:50.18	38° 58.18'	111° 24.81'	10.4*	0.7W	5	202	21	0.04
131018	16:37:25.46	40° 43.42'	112° 01.13'	8.3	1.6W	27	66	12	0.15
131019	11:46:51.71	38° 11.21'	112° 37.21'	2.8*	1.5W	17	49	34	0.24
131019	14:23:01.68	39° 29.38'	110° 56.70'	6.0*	0.8W	7	86	23	0.17
131019	18:38:21.07	41° 37.06'	112° 25.12'	8.2	0.6	7	214	7	0.07
131020	06:24:26.31	38° 57.77'	111° 24.73'	1.6*	2.2W	17	74	20	0.09
131020	06:37:12.78	38° 57.41'	111° 24.42'	1.3*	1.7W	17	71	20	0.12

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2013**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
131021	08:05:47.59	37° 56.59'	112° 51.76'	5.9*	1.3	7	171	22	0.19
131021	11:22:12.34	38° 59.34'	111° 21.70'	1.4*	1.0W	7	104	18	0.12
131021	12:05:33.05	37° 54.35'	112° 29.04'	9.6*	2.3W	23	56	30	0.25
131022	01:07:20.95	41° 36.45'	112° 25.59'	8.1	0.7	9	120	7	0.10
131022	05:22:47.82	37° 32.303'	113° 06.92'	11.6	0.4	7	110	7	0.03
131022	06:30:38.35	41° 35.96'	112° 26.19'	7.5	1.1W	17	92	8	0.09
131022	08:27:50.61	41° 36.18'	112° 25.90'	8.2	1.0W	10	122	8	0.07
131022	10:43:01.35	37° 34.81'	113° 18.85'	7.6	0.4	7	110	5	0.06
131022	13:25:51.08	38° 13.23'	112° 14.30'	10.3	0.4	11	82	20	0.11
131022	23:15:37.78	38° 35.42'	112° 13.00'	1.5	0.7	5	144	9	0.17
131022	23:22:42.17	41° 35.58'	112° 26.83'	3.8	0.6	8	127	9	0.12
131023	04:58:04.82	39° 37.04'	110° 26.91'	-3.3	1.3	6	90	3	0.03
131023	05:42:19.86	41° 35.90'	112° 26.38'	5.9	0.4	9	124	8	0.09
131023	06:10:52.35	38° 57.68'	111° 23.76'	2.5*	1.3W	10	72	20	0.07
131023	22:32:09.91	41° 35.33'	112° 26.68'	1.5	0.5	9	127	9	0.15
131023	23:47:17.89	39° 43.26'	111° 13.51'	1.6	1.3	10	80	9	0.27
131024	02:51:53.28	40° 19.73'	111° 06.00'	0.6*	1.5W	14	132	16	0.12
131024	04:20:52.20	41° 36.55'	112° 25.90'	7.2	0.4	8	121	7	0.06
131024	08:35:30.32	41° 36.22'	112° 25.56'	5.8	1.8W	18	91	8	0.12
131024	09:57:46.49	38° 35.35'	112° 36.38'	1.5*	1.5	24	53	14	0.20
131024	11:08:33.59	38° 57.55'	111° 23.95'	3.3*	1.0W	7	110	20	0.08
131024	13:57:57.28	39° 44.17'	111° 12.64'	-3.4*	1.5	9	146	11	0.27
131024	20:54:48.30	41° 32.81'	111° 43.22'	9.0	0.6	7	121	6	0.03
131024	22:08:06.23	38° 56.66'	111° 23.30'	7.0*	1.1	6	145	19	0.15
131025	01:25:10.03	38° 58.01'	111° 23.90'	1.1*	1.2W	12	73	20	0.11
131025	08:48:10.55	40° 58.92'	110° 54.32'	24.3	1.0	16	125	13	0.16
131025	14:06:23.78	41° 36.24'	112° 26.23'	5.7	1.0	13	91	8	0.10
131026	17:18:25.08	38° 57.64'	111° 25.07'	3.0*	2.0W	24	50	20	0.20
131026	17:58:26.88	37° 20.54'	113° 09.99'	16.5	2.3W	24	52	4	0.10
131026	22:06:30.19	41° 58.32'	112° 01.86'	9.4	2.0W	26	55	10	0.12
131027	00:23:01.73	38° 57.32'	111° 23.80'	2.5*	1.3W	9	85	20	0.19
131027	17:12:00.90	38° 57.69'	111° 24.00'	1.5*	1.7W	17	73	20	0.15
131027	17:48:14.75	38° 57.58'	111° 24.07'	1.8*	1.4W	15	70	20	0.14
131027	19:48:50.82	38° 57.65'	111° 24.19'	1.6*	1.7W	16	70	20	0.12
131028	04:56:12.95	38° 19.46'	113° 04.05'	5.6*	2.3W	25	72	25	0.19
131028	07:34:08.90	42° 00.40'	112° 37.53'	6.2*	2.2W	23	165	18	0.20
131028	12:31:56.07	41° 00.56'	111° 01.30'	22.0	1.9W	30	166	13	0.19
131028	13:56:20.52	39° 58.76'	111° 24.05'	0.7*	1.9W	25	85	20	0.23
131028	14:20:48.64	38° 19.29'	113° 02.45'	0.6*	0.4	6	118	24	0.23
131029	06:18:20.79	41° 36.75'	111° 40.99'	2.8*	0.8	8	133	21	0.08
131029	16:47:24.35	39° 43.05'	111° 12.78'	1.3	1.0	7	119	9	0.32
131029	17:31:39.88	37° 53.41'	112° 29.78'	3.7*	1.1	14	64	32	0.16
131029	18:55:07.11	38° 19.30'	113° 04.26'	5.8*	2.4W	30	73	25	0.18
131029	19:17:38.98	38° 19.41'	113° 03.90'	5.8*	1.6W	16	72	25	0.15
131029	23:16:37.54	41° 36.56'	112° 25.76'	5.6	1.8W	19	90	7	0.17

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DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
131030	05:14:01.92	37° 36.20'	113° 09.44'	-3.3	1.2W	13	66	6	0.23
131030	06:45:12.87	38° 37.50'	112° 09.35'	1.6*	1.3	8	161	13	0.22
131030	06:55:39.73	38° 37.00'	112° 09.96'	3.8*	1.3	8	100	12	0.05
131030	07:06:43.51	38° 37.34'	112° 09.88'	1.5*	1.3	8	102	12	0.18
131030	15:09:05.56	38° 06.65'	112° 53.13'	11.8	1.7W	24	38	10	0.14
131030	15:13:42.08	38° 07.18'	112° 53.36'	9.4	1.3	14	96	10	0.16
131030	18:36:41.70	39° 42.99'	111° 14.48'	1.5	1.5	10	73	9	0.24
131031	05:20:57.93	38° 56.94'	111° 23.48'	8.1*	0.6W	7	108	19	0.12
131031	21:35:57.31	36° 59.31'	112° 52.42'	18.4	1.3	9	136	6	0.07
131101	00:01:44.03	39° 00.34'	111° 20.78'	6.5*	1.2	7	101	18	0.03
131101	02:45:45.06	40° 48.25'	111° 48.68'	5.6	1.0W	35	32	3	0.12
131101	02:56:36.32	41° 10.39'	111° 13.73'	5.6*	1.4	14	179	16	0.14
131101	02:56:52.97	38° 44.07'	112° 34.03'	0.7*	1.3W	11	67	17	0.11
131101	10:32:00.35	38° 05.70'	112° 35.03'	3.6*	1.5W	15	72	36	0.16
131101	14:32:51.94	41° 36.47'	112° 25.96'	6.1	1.1W	16	90	7	0.15
131102	00:46:31.49	38° 14.81'	112° 40.63'	6.0*	0.6	8	124	32	0.07
131102	19:52:33.12	38° 57.49'	111° 24.09'	0.8*	2.2	7	134	20	0.07
131102	21:54:53.91	38° 58.08'	111° 26.46'	3.1*	1.4	5	213	21	0.24
131103	00:59:50.76	38° 57.64'	111° 24.34'	1.6*	1.5W	13	70	20	0.12
131104	04:09:56.12	42° 00.45'	112° 37.22'	-3.4*	1.6W	16	165	18	0.22
131104	13:00:09.26	37° 15.65'	112° 50.86'	22.4	0.6	9	124	27	0.10
131105	01:47:53.29	38° 57.52'	111° 23.90'	3.4*	1.2W	7	109	20	0.13
131105	18:32:00.18	39° 00.44'	111° 21.04'	23.0	0.9W	5	147	26	0.07
131105	18:53:39.92	38° 57.66'	111° 24.49'	5.8*	1.0W	5	200	20	0.04
131105	21:23:41.93	39° 42.12'	111° 15.03'	-1.7	1.5	5	168	8	0.02
131105	23:45:08.54	38° 57.01'	111° 23.64'	7.8*	0.8W	5	201	19	0.06
131106	03:24:28.93	38° 57.80'	111° 23.80'	2.2*	1.1W	10	54	20	0.13
131106	12:30:25.27	39° 43.25'	111° 13.87'	1.6	1.3W	19	73	9	0.24
131106	20:14:37.87	38° 57.45'	111° 24.73'	3.2*	1.2W	8	88	20	0.23
131106	21:52:02.00	36° 54.74'	113° 37.40'	2.8*	1.8W	7	235	36	0.13
131107	00:46:42.68	38° 57.46'	111° 24.22'	3.3*	1.3W	8	87	20	0.11
131107	07:17:01.20	38° 57.64'	111° 22.99'	9.0*	1.4	5	128	19	0.00
131107	18:05:30.23	39° 02.16'	111° 29.38'	15.8	1.1W	9	94	21	0.12
131107	19:04:55.76	39° 00.26'	111° 28.83'	1.8*	2.6W	25	42	24	0.11
131108	09:24:19.81	38° 57.72'	111° 24.03'	1.6*	1.4W	14	70	20	0.08
131108	19:21:02.44	41° 49.17'	112° 21.74'	10.3	0.3	7	111	13	0.02
131109	09:05:22.86	38° 57.65'	111° 24.52'	2.3*	2.1W	24	70	20	0.11
131109	09:08:24.89	38° 58.19'	111° 24.94'	2.2*	2.2W	32	47	21	0.23
131109	09:15:15.02	38° 57.33'	111° 23.82'	1.3*	1.2	5	196	20	0.11
131109	09:23:57.29	38° 57.82'	111° 24.05'	4.9*	1.0W	7	110	20	0.09
131109	09:46:25.25	38° 57.32'	111° 23.81'	1.6*	1.1W	10	72	20	0.14
131109	10:15:22.56	38° 57.29'	111° 23.92'	2.0*	1.6W	22	61	20	0.09
131109	14:17:05.33	38° 58.03'	111° 25.35'	6.7*	0.8W	5	205	21	0.01
131109	14:39:00.88	39° 26.48'	111° 12.74'	1.6*	1.3W	11	71	16	0.13
131109	17:36:50.61	38° 57.57'	111° 23.98'	1.7*	1.4W	12	110	20	0.08

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DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
131109	18:28:02.58	42° 05.06'	111° 58.59'	8.4	0.8	10	193	14	0.06
131109	20:27:07.09	37° 24.00'	112° 53.32'	2.8*	0.7	11	128	22	0.16
131109	22:13:15.79	39° 18.20'	111° 44.51'	18.6	1.5W	19	64	18	0.12
131109	23:32:23.50	38° 59.69'	111° 21.41'	4.9*	0.9W	7	103	18	0.23
131110	15:36:35.26	38° 42.88'	112° 31.58'	9.3	0.7	8	152	14	0.14
131110	16:54:38.65	38° 57.43'	111° 23.85'	2.1*	1.2W	14	71	20	0.11
131112	00:09:29.07	40° 37.60'	111° 20.07'	9.9	1.1W	20	63	6	0.18
131112	02:58:57.32	40° 37.27'	111° 20.08'	11.4	0.8	21	63	6	0.20
131112	03:34:39.72	40° 37.86'	111° 20.35'	9.0	0.4	15	80	6	0.09
131112	04:00:57.79	40° 36.73'	111° 19.59'	8.2	0.7	17	65	6	0.18
131112	21:14:54.42	39° 12.43'	111° 53.27'	1.4*	2.6W	28	91	31	0.24
131113	02:41:17.41	41° 38.44'	112° 18.37'	7.3	1.1	19	77	7	0.11
131113	08:11:19.67	38° 56.84'	111° 24.66'	8.4*	1.3	7	111	19	0.15
131113	13:38:40.99	41° 35.67'	111° 41.46'	9.9	1.6W	26	57	8	0.12
131113	15:04:37.18	38° 57.43'	111° 24.20'	2.6*	1.3W	9	72	20	0.10
131113	16:01:47.78	38° 57.65'	111° 23.81'	1.4*	1.0W	7	109	20	0.03
131113	17:19:41.33	41° 35.99'	111° 40.78'	10.3	1.1	18	80	9	0.08
131113	19:38:18.97	38° 02.36'	112° 27.43'	5.7*	0.1	6	190	24	0.22
131114	04:16:18.83	38° 57.65'	111° 30.56'	3.6*	0.9	5	127	30	0.18
131114	12:48:34.16	38° 43.02'	111° 26.62'	-0.4	1.2	5	122	7	0.06
131114	13:44:50.86	38° 57.54'	111° 23.58'	1.9*	1.2W	9	72	20	0.11
131114	14:21:27.99	38° 43.11'	112° 29.42'	0.5*	1.0	6	87	13	0.34
131115	01:39:01.11	38° 57.92'	111° 24.12'	3.1*	1.2W	8	157	21	0.10
131115	03:36:03.68	36° 59.48'	112° 54.64'	20.7	1.4	8	137	8	0.08
131115	03:54:40.33	38° 57.78'	111° 23.26'	3.0*	1.1W	6	107	19	0.09
131115	04:58:05.98	36° 52.45'	113° 34.17'	6.3*	1.5	7	253	33	0.11
131115	05:37:40.77	39° 40.76'	111° 30.93'	4.6*	1.4W	17	106	27	0.16
131115	05:55:09.05	39° 41.27'	111° 30.78'	7.7*	1.0	10	108	27	0.10
131115	06:09:29.53	39° 40.85'	111° 30.83'	3.5*	1.0	9	106	27	0.07
131115	06:34:11.14	39° 40.91'	111° 30.86'	3.3*	1.7W	27	64	27	0.18
131115	06:38:21.39	39° 40.61'	111° 30.29'	2.9*	1.2	9	121	26	0.13
131115	06:43:14.71	39° 40.58'	111° 30.30'	2.0*	1.2	10	121	26	0.10
131115	06:57:32.28	39° 40.91'	111° 31.00'	4.7*	1.7W	29	61	27	0.18
131115	07:18:12.34	39° 40.84'	111° 30.78'	5.8*	1.2	10	120	32	0.16
131115	07:26:17.80	39° 40.33'	111° 30.80'	5.9*	1.2	10	106	32	0.23
131115	07:34:23.54	39° 40.46'	111° 30.66'	5.9*	1.1	11	106	32	0.17
131115	07:53:33.94	39° 40.85'	111° 30.64'	4.8*	1.4W	19	107	27	0.21
131115	08:11:32.75	39° 40.54'	111° 31.28'	8.0*	1.6W	18	72	28	0.17
131115	08:17:12.18	39° 40.50'	111° 30.99'	5.9*	1.1	9	119	32	0.09
131115	08:55:44.42	39° 41.17'	111° 30.90'	5.5*	1.7W	17	122	27	0.13
131115	10:40:57.88	39° 41.02'	111° 30.53'	5.8*	1.4W	17	108	27	0.18
131115	10:51:44.23	39° 41.09'	111° 30.98'	5.3*	2.4W	35	61	27	0.17
131115	10:57:35.87	39° 40.35'	111° 30.94'	4.8*	1.3	15	119	27	0.13
131115	11:04:30.62	39° 39.92'	111° 29.66'	5.6*	1.4W	14	124	25	0.09
131115	11:04:43.65	39° 36.98'	111° 28.80'	7.8*	1.9	6	180	24	0.17

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DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
131115	11:17:02.03	39° 40.63'	111° 31.13'	1.3*	2.2W	31	64	27	0.16
131115	11:23:41.57	39° 41.05'	111° 30.48'	2.8*	1.0	9	108	27	0.08
131115	11:40:49.70	39° 41.48'	111° 30.67'	7.7*	1.0	13	108	27	0.13
131115	12:20:42.17	39° 40.57'	111° 30.62'	3.8*	1.1	17	68	27	0.19
131115	13:43:56.89	39° 41.44'	111° 31.14'	9.9*	0.9	9	122	28	0.26
131115	13:47:02.24	39° 41.01'	111° 31.39'	4.0*	1.5	11	121	28	0.15
131115	17:35:31.02	37° 59.12'	112° 26.42'	1.8*	1.5W	11	99	23	0.16
131116	00:22:24.91	38° 58.20'	111° 24.32'	0.2*	1.6W	18	47	21	0.25
131116	00:36:36.00	38° 57.22'	111° 23.54'	5.6*	1.3	5	118	19	0.01
131116	19:23:27.74	39° 40.90'	111° 30.10'	3.5*	1.1	11	107	26	0.14
131116	21:09:06.43	38° 57.64'	111° 23.77'	4.2*	1.2W	5	120	20	0.05
131117	09:20:26.21	38° 57.16'	111° 23.41'	2.1*	1.2W	11	73	19	0.18
131117	14:56:20.21	39° 18.28'	111° 55.92'	13.6	1.1	9	90	25	0.30
131118	02:41:25.81	39° 18.06'	111° 57.15'	12.7*	0.9	7	217	26	0.32
131118	08:41:48.76	39° 18.81'	111° 57.73'	10.2	1.7W	20	63	19	0.25
131118	20:35:07.00	38° 57.73'	111° 25.06'	2.8*	2.0W	28	50	20	0.18
131119	04:48:54.64	38° 57.44'	111° 24.11'	2.5*	1.4W	10	109	20	0.10
131119	04:55:32.30	38° 57.56'	111° 23.15'	8.6*	1.2	5	192	19	0.08
131119	09:25:56.81	38° 57.73'	111° 24.32'	3.6*	1.0W	6	159	20	0.06
131120	17:59:59.90	39° 00.04'	111° 20.46'	-0.4*	1.6W	17	58	17	0.15
131120	18:00:00.08	39° 00.11'	111° 20.63'	1.7*	1.7W	14	58	18	0.12
131120	20:17:03.12	36° 56.38'	113° 37.72'	2.9*	1.8	10	197	35	0.12
131120	23:03:48.94	38° 30.91'	111° 54.46'	7.5*	1.2	15	82	24	0.20
131121	08:21:44.44	39° 40.88'	111° 32.63'	-0.8*	0.8	8	136	30	0.09
131121	16:49:50.36	38° 57.84'	111° 23.06'	3.1*	1.2	6	107	19	0.17
131122	05:36:21.82	38° 57.58'	111° 23.41'	3.5*	0.9W	8	72	20	0.19
131122	06:08:54.16	38° 09.09'	112° 31.63'	1.9*	1.5W	17	56	32	0.24
131122	07:15:00.71	38° 57.34'	111° 24.03'	1.4*	1.4W	10	72	20	0.11
131123	01:46:30.83	41° 33.27'	112° 06.31'	8.9	2.0W	24	63	8	0.10
131123	01:46:30.87	41° 33.17'	112° 06.58'	8.3	2.0W	26	100	9	0.10
131123	04:20:42.71	36° 59.46'	112° 52.80'	18.0	1.0W	11	136	6	0.10
131123	06:26:20.73	41° 33.31'	112° 06.61'	7.7	0.4	7	102	8	0.03
131123	10:54:33.97	42° 19.68'	111° 32.38'	6.0*	2.2	14	132	48	0.14
131124	20:58:26.83	41° 50.44'	112° 19.41'	5.5	1.9W	27	75	10	0.15
131124	21:02:19.86	41° 51.03'	112° 19.41'	9.3	1.1	20	75	9	0.14
131124	23:14:49.58	41° 50.52'	112° 19.66'	4.7	1.2	21	76	10	0.21
131125	14:24:39.54	38° 57.66'	111° 24.88'	1.1*	2.0	11	74	20	0.08
131125	14:29:05.19	38° 57.19'	111° 25.11'	1.6*	1.8	8	74	19	0.16
131125	22:59:51.47	38° 57.28'	111° 23.94'	2.0*	1.4	8	72	20	0.13
131126	02:25:19.18	39° 40.74'	111° 30.25'	4.0*	1.4	16	91	26	0.15
131126	02:33:07.97	39° 40.75'	111° 30.04'	6.4*	1.3	12	91	26	0.19
131126	02:41:55.18	39° 40.96'	111° 29.87'	3.2*	1.3	11	92	26	0.14
131126	02:52:29.79	39° 41.23'	111° 30.06'	3.0*	1.2	7	93	26	0.13
131126	04:17:48.03	39° 40.48'	111° 30.76'	5.9*	2.8W	31	61	27	0.15
131126	04:21:42.86	39° 40.65'	111° 30.34'	3.7*	2.2W	40	58	26	0.18

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2013**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
131126	05:08:02.81	39° 40.99'	111° 31.01'	10.7*	1.3	13	75	27	0.23
131126	05:26:54.09	39° 41.04'	111° 23.85'	1.8*	1.8W	6	128	17	0.09
131126	08:44:32.41	37° 48.80'	113° 06.85'	9.0*	1.2	10	113	24	0.20
131126	09:55:08.92	37° 26.66'	112° 57.60'	18.7	0.8	7	167	18	0.03
131126	10:34:43.30	39° 16.18'	111° 12.85'	-3.4	1.7	6	176	3	0.23
131126	17:02:30.12	39° 34.60'	111° 14.04'	-0.6	1.3W	11	118	8	0.13
131126	22:13:42.93	39° 10.16'	111° 58.13'	16.2	1.2	9	119	25	0.11
131127	11:20:51.88	39° 37.06'	110° 27.05'	-3.4	1.7	7	90	4	0.11
131127	16:11:18.51	37° 28.65'	112° 23.44'	13.6	1.2	8	126	8	0.04
131127	19:12:08.12	39° 27.12'	111° 12.57'	3.0*	1.6	8	118	17	0.13
131127	22:36:46.91	40° 29.91'	111° 20.55'	13.9	0.8	17	97	1	0.12
131128	02:52:55.76	39° 18.89'	111° 57.13'	16.6	1.2	16	93	20	0.20
131128	03:52:47.91	38° 57.82'	111° 24.24'	1.6*	1.3	6	150	20	0.07
131128	05:07:44.17	38° 57.46'	111° 24.15'	6.1*	1.4	6	150	20	0.07
131128	12:23:34.00	39° 43.77'	111° 14.04'	1.7	1.6	20	70	10	0.24
131128	16:12:54.26	38° 57.37'	111° 24.93'	1.8*	2.0W	22	51	20	0.21
131128	16:36:58.25	38° 57.39'	111° 23.82'	1.6*	1.4	7	109	20	0.07
131128	19:31:36.84	39° 19.13'	111° 56.29'	14.1	1.7W	26	49	21	0.25
131129	01:39:58.97	38° 57.69'	111° 24.01'	2.8*	1.6	7	110	20	0.07
131129	09:06:49.68	39° 59.75'	111° 50.19'	6.9	1.0	21	55	9	0.09
131130	06:08:01.20	37° 27.14'	113° 06.81'	6.9	0.9	10	103	11	0.05
131130	11:54:44.52	38° 57.45'	111° 23.73'	3.9*	1.4W	23	51	20	0.15
131130	16:39:21.17	37° 36.22'	110° 27.82'	6.1*	1.7W	8	193	44	0.14
131130	22:47:30.10	38° 57.52'	111° 23.81'	3.0*	1.6	6	109	20	0.06
131201	02:07:44.56	41° 50.97'	112° 19.95'	6.3	0.4	9	105	9	0.11
131201	02:16:19.15	39° 32.55'	112° 01.35'	1.4*	1.0	8	96	18	0.09
131201	08:42:07.00	41° 41.85'	112° 25.71'	4.4	1.0	19	90	4	0.13
131201	09:07:48.77	38° 57.82'	111° 24.30'	3.0*	1.2	5	150	20	0.08
131201	11:45:47.94	40° 42.12'	111° 58.27'	5.7*	0.5	17	87	14	0.08
131201	17:30:09.08	38° 12.54'	112° 19.14'	5.3*	2.0W	17	52	22	0.19
131202	02:18:02.12	36° 45.58'	113° 50.58'	6.2*	1.5	8	273	60	0.13
131202	13:59:17.21	37° 26.45'	113° 06.76'	10.1	0.2W	7	144	9	0.04
131203	15:56:57.77	37° 48.36'	113° 29.38'	4.4	1.7W	12	118	5	0.10
131204	10:36:30.68	37° 47.92'	113° 29.48'	3.5	1.3	8	243	5	0.08
131204	23:37:52.30	39° 36.75'	110° 25.80'	0.8	1.4	5	116	2	0.20
131205	10:49:02.37	41° 54.15'	112° 35.40'	3.4*	1.5	10	201	21	0.23
131206	01:40:21.48	37° 34.76'	110° 26.07'	6.1*	1.8	7	152	48	0.19
131206	13:00:17.44	37° 49.69'	113° 38.56'	0.7*	1.1	9	215	18	0.11
131206	20:04:57.92	37° 48.75'	113° 05.96'	1.6*	0.4	8	162	24	0.17
131206	22:28:35.63	41° 26.40'	112° 22.51'	4.4*	0.5	6	142	16	0.17
131206	22:30:23.60	41° 26.84'	112° 21.77'	0.0	0.5	12	131	7	0.12
131206	23:49:08.27	41° 16.09'	111° 48.13'	14.2	1.6W	32	68	16	0.13
131207	22:42:44.47	37° 02.02'	112° 56.83'	16.7	0.9	7	166	11	0.06
131208	10:17:40.13	38° 36.35'	112° 04.15'	9.9	1.5	12	122	14	0.10
131208	11:58:15.33	37° 30.85'	113° 08.82'	12.1	1.0W	12	76	10	0.09

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2013**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
131208	13:56:19.40	38° 36.41'	112° 03.94'	6.6*	1.6	26	67	14	0.19
131209	11:36:45.76	41° 20.08'	113° 14.75'	0.1*	1.1	15	143	49	0.25
131210	00:58:48.20	37° 17.77'	112° 45.92'	6.0*	0.9	8	104	31	0.09
131210	01:23:11.51	40° 50.99'	111° 33.22'	12.2	2.7W	47	45	11	0.18
131210	19:16:45.03	38° 36.03'	112° 03.45'	9.7	1.0	9	84	14	0.09
131211	01:32:05.59	38° 59.75'	111° 21.76'	1.2*	0.9W	8	104	19	0.13
131211	08:31:25.58	39° 42.40'	111° 15.52'	3.2	1.3	6	148	9	0.11
131211	17:22:37.70	41° 26.73'	112° 33.12'	9.4	0.1	5	263	13	0.02
131211	19:39:01.90	39° 36.62'	110° 25.18'	-0.7	1.5	6	119	1	0.07
131211	20:41:35.14	39° 42.05'	110° 43.72'	-2.8	1.8	8	166	3	0.05
131212	00:20:52.08	41° 27.36'	112° 34.66'	8.1	1.8W	24	168	16	0.12
131212	00:21:56.70	41° 27.52'	112° 34.77'	7.2*	1.2W	19	169	16	0.17
131212	00:29:55.54	41° 27.28'	112° 34.67'	5.2*	0.5	8	244	16	0.04
131212	01:12:47.72	41° 27.43'	112° 36.06'	3.9*	0.7	8	249	18	0.06
131212	06:42:20.55	41° 27.20'	112° 34.56'	8.1	1.6W	27	150	16	0.14
131212	06:43:07.51	41° 27.73'	112° 35.26'	6.4*	0.7	14	152	17	0.08
131212	16:09:07.37	37° 26.74'	112° 36.64'	24.0	0.9	13	75	27	0.08
131213	01:25:04.41	38° 57.23'	111° 24.18'	6.1*	1.3	6	148	19	0.06
131213	10:00:09.64	41° 27.41'	112° 34.40'	4.5*	0.4	12	206	16	0.12
131213	10:06:32.43	40° 48.22'	111° 37.56'	14.4	0.6	13	109	16	0.10
131213	11:11:27.06	38° 04.07'	112° 27.08'	3.6*	1.5	10	165	24	0.20
131213	15:16:04.72	37° 17.05'	113° 38.48'	2.1*	1.9W	20	80	27	0.15
131213	17:11:11.52	38° 57.63'	111° 24.29'	3.2*	1.8	8	73	20	0.05
131214	08:18:26.34	37° 17.41'	113° 38.63'	6.0*	0.6	8	186	27	0.08
131215	04:46:25.49	39° 43.89'	111° 13.75'	1.5	1.5	12	122	10	0.28
131215	04:52:30.04	42° 26.19'	111° 35.29'	1.9*	1.9W	18	80	54	0.13
131215	06:58:16.49	38° 59.82'	111° 28.42'	5.4*	1.8W	15	66	24	0.13
131215	14:30:37.27	38° 57.66'	111° 24.18'	2.5*	1.1W	9	73	20	0.06
131216	01:20:51.97	37° 44.15'	113° 16.39'	4.6*	2.7W	24	52	16	0.15
131216	04:21:12.74	39° 31.28'	111° 55.71'	11.3	0.8	12	110	10	0.15
131216	10:56:25.20	39° 42.92'	111° 14.46'	1.5	1.3	8	117	9	0.22
131216	16:46:29.87	38° 35.98'	112° 02.97'	9.9	0.9	8	125	15	0.10
131216	16:57:03.43	38° 35.88'	112° 03.98'	8.1	0.8	8	85	14	0.12
131216	20:27:39.79	39° 52.28'	111° 55.06'	5.3*	1.2	6	253	11	0.03
131217	00:20:11.91	39° 59.41'	111° 50.25'	8.8	1.7W	35	45	4	0.19
131217	07:09:56.62	37° 45.22'	113° 04.14'	2.8*	0.9	8	171	18	0.26
131217	22:22:12.31	39° 59.97'	111° 49.74'	10.3	0.8	6	101	9	0.02
131219	00:44:36.21	38° 57.61'	111° 23.77'	2.2*	0.9W	7	108	20	0.07
131219	01:40:29.30	38° 57.50'	111° 24.11'	2.8*	1.8	7	110	20	0.09
131219	08:50:03.42	38° 57.40'	111° 23.75'	3.3*	1.1W	7	108	20	0.09
131219	22:13:25.85	38° 35.92'	112° 02.96'	8.9	1.3	14	82	15	0.16
131220	02:03:07.30	38° 57.39'	111° 23.54'	3.0*	0.9	7	108	20	0.05
131220	07:02:33.47	41° 45.61'	112° 51.00'	5.3	0.9	13	245	7	0.10
131220	12:20:20.33	40° 51.96'	111° 40.38'	8.6	1.2	20	60	15	0.13
131220	20:08:34.55	41° 42.71'	112° 17.14'	4.0*	0.9	12	100	14	0.12

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2013**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
131221	09:33:00.78	41° 27.47'	112° 35.84'	7.4*	2.0W	14	152	17	0.08
131222	01:46:03.16	38° 57.59'	111° 24.00'	2.8*	1.6W	10	85	20	0.10
131223	15:05:56.91	36° 55.80'	112° 20.87'	12.9*	1.9W	11	117	43	0.18
131223	20:20:51.62	37° 02.52'	112° 56.38'	18.7	1.0W	13	125	11	0.11
131224	00:42:55.36	37° 27.10'	113° 06.65'	6.9	0.2	9	140	11	0.04
131224	01:08:30.47	39° 47.41'	111° 32.66'	8.4*	1.8W	27	68	24	0.19
131224	01:28:07.95	39° 37.07'	110° 27.00'	-3.5	1.3	8	89	4	0.08
131224	02:28:27.19	37° 02.58'	112° 56.45'	17.8	1.3W	15	124	11	0.12
131224	06:35:07.01	38° 55.57'	111° 55.64'	11.9	1.3	17	73	15	0.16
131224	11:12:23.58	38° 59.36'	111° 21.67'	2.8*	1.0W	9	104	18	0.05
131224	12:23:35.98	38° 57.55'	111° 23.28'	4.4*	1.5W	12	107	19	0.14
131224	12:37:20.76	38° 57.70'	111° 23.95'	1.8*	1.5W	12	73	20	0.10
131224	15:53:51.11	38° 57.21'	111° 23.56'	1.2*	1.6W	11	108	19	0.11
131225	00:43:46.86	38° 57.36'	111° 23.47'	1.7*	1.1W	10	72	19	0.08
131225	05:32:32.15	38° 38.03'	112° 32.37'	-0.1	0.8	11	82	8	0.08
131225	18:15:47.74	37° 48.33'	113° 00.24'	3.1*	1.5	14	81	24	0.12
131226	05:03:40.17	39° 38.76'	111° 16.84'	4.7	1.0	17	86	7	0.19
131226	13:53:08.74	36° 53.91'	112° 28.52'	17.6	1.4	13	119	18	0.11
131226	15:27:19.08	39° 59.98'	111° 49.91'	9.8	0.8	7	103	4	0.02
131227	12:10:35.86	38° 57.20'	111° 23.80'	2.1*	1.1W	7	109	19	0.06
131227	18:30:55.36	38° 57.31'	111° 24.66'	3.0*	0.9W	7	111	19	0.23
131227	19:12:06.92	37° 43.11'	113° 13.30'	1.5*	0.9	9	144	18	0.11
131227	20:00:12.72	38° 57.58'	111° 23.26'	5.3*	1.1W	7	107	19	0.05
131227	20:09:14.20	38° 57.63'	111° 24.14'	-0.4*	2.2W	22	70	20	0.14
131227	20:19:18.85	39° 02.42'	111° 58.43'	6.6	1.4W	9	138	13	0.11
131227	20:55:22.46	38° 57.48'	111° 23.54'	6.3*	1.0W	7	108	20	0.05
131228	12:15:12.97	38° 57.69'	111° 23.31'	6.0*	1.4W	13	71	19	0.07
131228	22:29:45.66	41° 50.26'	112° 39.37'	7.7	1.8W	20	141	12	0.13
131229	12:58:53.59	38° 56.63'	111° 25.88'	3.3*	1.0	6	171	18	0.11
131230	00:51:49.26	38° 57.09'	111° 24.12'	9.5	1.2	6	148	19	0.12
131230	12:19:06.10	38° 57.55'	111° 23.62'	1.6*	1.4W	11	72	20	0.12
131231	15:05:56.61	42° 09.85'	110° 22.58'	18.5*	1.8	14	173	42	0.13
131231	16:34:10.31	38° 59.42'	111° 57.25'	9.1	1.9W	24	45	12	0.17
131231	16:36:17.64	38° 59.29'	111° 57.35'	10.3	2.2W	23	55	12	0.16
131231	16:39:43.50	38° 59.35'	111° 56.68'	7.4	1.8W	18	65	13	0.18
131231	17:31:41.90	38° 58.96'	111° 56.81'	8.2	1.3	15	56	13	0.23
131231	19:46:30.11	38° 59.46'	111° 56.30'	5.5*	1.4	10	77	14	0.20
131231	21:49:47.28	38° 59.04'	111° 56.72'	6.7	2.1W	28	33	13	0.23

number of earthquakes = 398

\* indicates poor depth control

W indicates Wood-Anderson data used for magnitude calculation

**Table 3**  
**UNIVERSITY OF UTAH REGIONAL/URBAN SEISMIC NETWORK**  
**Operating Seismograph Stations**  
**December 31, 2013**

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

UURSN	Location	SEED	SEED	No. of	Network	Latitude	Longitude	Elevation	Sensor	Digitizer	Telemetry	Sponsor
		Station	Channel	Channels	Code			(meters)				
7229	City Maintenance Shop Santaquin, UT	7229	HN[ZEN]	3	NP	39° 58.35'	111° 47.58'	1520	EpiSensor	Etna	Digital	NSMP, ANSS
7232	City Parks & Recreation Office Tremonton, UT	7232	HN[ZEN]	3	NP	41° 43.13'	112° 10.91'	1320	EpiSensor	Etna	Digital	NSMP, ANSS
AHI	Auburn, ID	AHID	BH[ZEN]	3	US	42° 45.92'	111° 06.02'	1960	*	*	Digital	USGS
ALP	Alpine Fire Station, Alpine, UT	ALP	EN[ZEN]	3	UU	40° 27.26'	111° 46.61'	1510	EpiSensor	K2	Digital	ANSS
ALT	Alta City Offices, Alta, UT	ALT	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	AMF	EN[ZEN]	3	UU	40° 24.11'	111° 47.27'					
ANMO	Albuquerque, NM	ANMO	BH[ZEN]	3	IU	34° 57.01'	106° 27.61'	1743	*	*	Digital	USGS
ARGU	Argyle Ridge, UT	ARGU	EHZ	1	UU	39° 49.37'	110° 32.62'	2828	S13	PSN	Analog	Utah
ARUT	Antelope Range, UT	ARUT	EHZ	1	UU	37° 47.28'	113° 26.42'	1646	L4C	PSN	Analog	Utah
AVE	Avenues, Salt Lake City, UT	AVE	EN[ZEN]	3	UU	40° 46.47'	111° 51.83'	1387	Applied Mems	ANSS-130	Digital	ANSS
B205	Norris205bwY2008, Yellowstone, WY	B205	EH[ZEN]	3	PB	44° 42.81'	110° 40.70'					
B206	Canyon206bwY2008, Yellowstone, WY	B206	EH[ZEN]	3	PB	44° 46.66'	110° 30.70'	2400	IESE-S2	Q330	Digital	PBO
B207	Madison207bwY2007, Yellowstone, WY	B207	EH[ZEN]	3	PB	44° 37.14'	110° 50.91'	2182	IESE-S2	Q330	Digital	PBO
B208	Lakejn208bwY2008, Yellowstone, WY	B208	EH[ZEN]	3	PB	44° 33.61'	110° 24.09'	2406	IESE-S2	Q330	Digital	PBO
B944	Grantt944bwY2008, Yellowstone, WY	B944	EH[ZEN]	3	PB	44° 23.38'	110° 32.63'	2365	IESE-S2	Q330	Digital	PBO
B945	Panther944swY2008, Yellowstone, WY	B945	EH[ZEN]	3	PB	44° 53.64'	110° 44.65'	2249	IESE-S2	Q330	Digital	PBO
BCE	Book Cliffs East, UT	BCE	EHZ EN[ZEN]	4	UU	39° 36.79'	110° 24.51'	2666	L4C EpiSensor	K2	Digital	Utah
BCS	Brigham City Maintenance Shop Brigham City, UT	BCS										
BCU	Brigham City, UT	BCU	EN[ZEN]	3	UU	41° 30.71'	112° 01.98'	1303	EpiSensor	K2	Digital	ANSS
BCW	Book Cliffs West, UT	BCW	EHZ EN[ZEN]	4	UU	39° 43.82'	110° 44.55'	2614	L4C EpiSensor	K2	Digital	Utah
BEI	Bear River Range, ID	BEI										
BES	Bates Elementary School Ogden, UT	BES	EN[ZEN]	3	UU	41° 19.10'	111° 57.26'	1455	EpiSensor	K2	Digital	ANSS
BGMZ	Barton Gulch, MT	BGMT	EHZ	1	MB	45° 14.00'	112° 02.43'	2172	*	*	Analog	MBMT
BGU	Big Grassy Mountain, UT	BGU	EN[ZEN]	3	UU	40° 55.53'	113° 01.79'	1640	EpiSensor Trillium 120	Q330	Digital	ANSS
			HH[ZEN]	3								

UURSN	Location	SEED	SEED	No. of	Network	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
		Station	Channel	Channels	Code							
BHU	Blowhard Mountain, UT	BHU	EH[ZEN]	3	UU	37° 35.55'	112° 51.42'	3230	S13	PSN	Analog	Utah
BHUT	Beaver High School, UT	BHUT	EN[ZEN]	3	UU	38° 16.61'	112° 38.42'	1799	PA-23	SMART-24	Digital	Utah
BMUT	Black Mountain, UT	BMUT	EHZ	1	UU	41° 57.49'	111° 14.05'	2243	S13	PSN	Analog	USGS
BOZ	Bozeman, MT	BOZ	BH[ZEN]	3	US	45° 38.82'	111° 37.78'	1589	*	*	Digital	USGS
BRPU	Butcher Ranch, Price, UT	BRPU	HH[ZEN]	3	UU	39° 37.67'	110° 14.56'	1687	Trillium 240 EpiSensor	Q330	Digital	Utah
			EN[ZEN]	3								
BSS	Butlerville Substation Salt Lake City, UT	BSS	EN[ZEN]	3	UU	40° 37.45'	111° 49.37'	1411	EpiSensor	K2	Digital	ANSS
BSUT	Blindstream Canyon, Hanna, UT	BSUT	HH[ZEN]	3	UU	40° 32.19'	110° 45.67'	3211	Trillium 120 EpiSensor	Q330	Digital	Utah
			EN[ZEN]	3								
BTU	Barney Top, UT	BTU	EHZ	1	UU	37° 45.34'	111° 52.46'	3235	S13	PSN	Analog	Utah
BW0	Boulder, WY	BW06	BH[ZEN]	3	US	42° 46.00'	109° 33.50'	2224	*	*	Digital	USGS
BYP	Brigham Young Park Salt Lake City, UT	BYP	EN[ZEN]	3	UU	40° 46.26'	111° 53.23'	1323	Applied Mems	ANSS-130	Digital	ANSS
BZMZ	Bozeman Pass, MT	BZMT	EHZ	1	MB	45° 38.89'	110° 47.80'	1905	*	*	Analog	MBMT
CAPU	Capitol, Salt Lake City, UT	CAP	EN[ZEN]	3	UU	40° 46.71'	111° 53.40'	1384	Applied Mems	ANSS-130	Digital	ANSS
CCPU	Cedar City Park, UT	CCPU	EN[ZEN]	3	UU	38° 16.61'	112° 38.42'	1799	PA-23	SMART-24	Digital	Utah
CCUT	Cedar City, UT	CCUT	HH[ZEN]	3	UU	37° 33.04'	113° 21.77'	2124	STS-2 Applied Mems	ANSS-130	Digital	USGS
			EN[ZEN]	3								
CFS	Copperton Fire Station Copperton, UT	CFS	EN[ZEN]	3	UU	40° 33.96'	112° 05.61'	1654	EpiSensor	K2	Digital	ANSS
CHS	Copper Hills High School, West Jordan, UT	CHS	EN[ZEN]	3	UU	40° 35.68'	112° 01.03'	1460	Applied Mems	ANSS-130	Digital	ANSS
COM	Craters of the Moon, ID	COMI	EHZ	1	IE	43° 27.72'	113° 35.64'	1890	*	*	Digital	INL
COY	Coyote Canyon, Tooele Valley, UT	COY	EN[ZEN]	3	UU	40° 39.56'	112° 14.34'	1572	Applied Mems	ANSS-130	Digital	ANSS
CRLU	Curley Ranch, La Sal, UT	CRLU	EHZ	1	UU	38° 17.50'	109° 15.64'	2035	L4C Episensor	Basalt	Digital	Utah, USGS
			EN[ZEN]	3								
CRMZ	Chrome Mountain, MT	CRMT	EHZ	1	MGB	45° 27.35'	110° 08.41'	2941	*	*	Analog	MBMT

UURSN	Location	SEED	SEED	No. of	Network	Latitude	Longitude	Elevation	Sensor	Digitizer	Telemetry	Sponsor
		Code	Station	Channel	Channels			(meters)				
CTU	Camp Tracy, UT	CTU	HH[ZEN]	3	UU	40° 41.55'	111° 45.02'	1731	40T	72A-07	Digital	USGS
CVH	Cedar City, Canyon View High School, UT	CVH	EN[ZEN]	3	UU	37° 42.91'	113° 03.85'	1724	PA-23	SMART-24	Digital	Utah
CVRU	Castle Valley Ranch, Emery, UT	CVRU	HH[ZEN]	3	UU	38° 55.06'	111° 10.30'	1912	STS-2	Q330	Digital	Utah
			EN[ZEN]	3					EpiSensor			
CWR	Coldwater Ranch, Paradise, UT	CWR	EN[ZEN]	3	UU	41° 34.90'	111° 46.89'	1837	Applied Mems	ANSS-130	Digital	ANSS
CWU	Camp Williams, UT	CWU	EHZ	1	UU	40° 26.75'	112° 06.13'	1945	L4C	PSN	Analog	USGS
DAU	Daniels Canyon, UT	DAU	EHZ	1	UU	40° 24.75'	111° 15.35'	2771	S13	PSN	Analog	USGS
DBD	Des Bee Dove, UT	DBD	EHZ	1	UU	39° 18.82'	111° 05.55'	2265	L4C	PSN	Analog	Utah
DCM	Dugout Coal Mine, UT	DCM	EHZ	1	UU	39° 41.70'	110° 35.00'	2537	L4C	Basalt	Digital	Utah
			EN[ZEN]	3					EpiSensor			
DCU	Deer Creek Reservoir, UT	DCU	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	DOT	EN[ZEN]	3	UU	40° 43.61'	111° 57.65'	1282	Applied Mems	ANSS-130	Digital	ANSS
DUG	Dugway, UT	DUG	BH[ZEN]	3	US	40° 11.70'	112° 48.80'	1477	STS-2	Q330	Digital	USGS
DWU	Dry Willow, UT	DWU	EHZ	1	UU	38° 06.32'	112° 59.85'	2270	S13	PSN	Analog	Utah
ECR	Eagle Creek, ID	ECRI	EHZ	1	IE	43° 03.24'	111° 22.26'	2086	*	*	Digital	INL
EKU	East Kanab, UT	EKU	EHZ	1	UU	37° 04.48'	112° 29.81'	1829	S13	PSN	Analog	Utah
ELE	East Layton Elementary School, East Layton, UT	ELE	EN[ZEN]	3	UU	41° 04.84'	111° 55.09'	1444	Applied Mems	ANSS-130	Digital	ANSS
ELK	Elko, NV	ELK	BH[ZEN]	3	US	40° 44.69'	115° 14.33'	2210	*	*	Digital	USGS
ELU	Electric Lake, UT	ELU	EHZ	1	UU	39° 38.41'	111° 12.23'	2970	L4C	PSN	Analog	Utah
EMF	Eagle Mountain Gas Tap, UT	EMF	EN[ZEN]	3	UU	40° 16.89'	111° 59.92'	1487	Applied Mems	ANSS-130	Digital	ANSS
EMU	Emma Park, UT	EMU	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	EOCU	EN[ZEN]	3	UU	40° 46.62'	111° 53.95'	1356	EpiSensor	Basalt	Digital	Utah
EPU	East Promontory, UT	EPU	EHZ	1	UU	41° 23.49'	112° 24.53'	1436	L4C	PSN	Analog	USGS
ETW	Elwood Town Hall, Elwood, UT	ETW	EN[ZEN]	3	UU	41° 40.15'	112° 08.53'	1305	Applied Mems	ANSS-130	Digital	ANSS

UURSN Code	Location	SEED	SEED	No. of	Network	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
		Station	Channel	Channels	Code							
FLU	Fool's Peak, UT	FLU	EHZ	1	UU	39° 22.69'	112° 10.29'	1951	18300 EpiSensor	PSN	Analog	USGS
			EHZ	1						Basalt	Digital	
			EN[ZEN]	3								
FPU	Francis Peak, UT	FPU	EHZ	1	UU	41° 01.58'	111° 50.21'	2816	L4C	PSN	Analog	USGS
FSU	Fish Springs, UT	FSU	EHZ	1	UU	39° 43.35'	113° 23.48'	1487	18300	PSN	Analog	Utah
FTT	Fire Training Tower, Magna, UT	FTT	EN[ZEN]	3	UU	40° 41.16'	112° 04.99'	1381	Applied Mems	ANSS-130	Digital	ANSS
FLWY	Flagg Ranch, WY	FLWY	BH[ZEN]	3	IW	44° 04.96'	110° 41.96'	2078	3ESP	RT-130	Digital	ANSS
GBI	Big Grassy Butte, ID	GBI	EHZ	1	IE	43° 59.22'	112° 03.78'	1541	*	*	Digital	INL
GCAZ	Grand Canyon, AZ	GCAZ	EHZ	1	AR	36° 03.51'	112° 11.02'	2072	*	*	Analog	NAU
GMO	Grantsville Maintenance Office, Grantsville, UT	GMO	EN[ZEN]	3	UU	40° 36.04'	112° 28.48'	1320	Applied Mems	ANSS-130	Digital	ANSS
GMU	Granite Mountain, UT	GMU	EH[ZEN]	3	UU	40° 34.53'	111° 45.79'	1829	S13	PSN	Analog	USGS
GRR	Grays Lake, ID	GRRI	EHZ	1	IE	42° 56.28'	111° 25.32'	2207	*	*	Digital	INL
GZU	Grizzly Peak, UT	GZU	EH[ZEN]	3	UU	41° 25.53'	111° 58.50'	2646	S13	PSN	Analog	USGS
H17A	Grant Village (YNP), WY	H17A	BH[ZEN]	3	TA	44° 23.71'	110° 34.57'	2400	STS-2	Q330	Digital	NCF
HAFB	Hill Air Force Base, Hill AFB, UT	HAFB	EN[ZEN]	3	UU	41° 07.07'	111° 58.55'	1471	Applied Mems	ANSS-130	Digital	Utah
HCSU	Hobble Creek, Springville, UT	HCSU	EHZ	1	UU	40° 12.40'	111° 30.14'	1789	L4C	Basalt	Digital	Utah, USGS
			EN[ZEN]	3					EpiSensor			
HDU	Hyde Park, UT	HDU	EHZ	1	UU	41° 48.18'	111° 45.99'	1807	L4C	PSN	Analog	USGS
HEB	Heber, UT	HEB	EHZ	1	UU	40° 30.09'	111° 20.15'	1925	S13	PSN	Analog	Utah
HER	Herriman Fire Station Herriman, UT	HER	EN[ZEN]	3	UU	40° 30.94'	112° 01.85'	1502	EpiSensor	K2	Digital	ANSS
HES	Hooper Elementary School Hooper, UT	HES	EN[ZEN]	3	UU	41° 09.89'	112° 07.30'	1292	EpiSensor	K2	Digital	ANSS
HFSU	Holladay Fire Station Holladay, UT	HFSU	EN[ZEN]	3	UU	40° 40.21'	111° 49.54'	1344	EpiSensor	K2	Digital	ANSS
HHA	Hell's Half Acre, ID	HHAI	EHZ	1	IE	43° 17.70'	112° 22.74'	1371	*	*	Digital	INL
HHS	Hurricane High School, UT	HHS	EN[ZEN]	3	UU	37° 10.43'	113° 17.74'	987	EpiSensor	Etna	Digital	Utah
HLI	Hailey, ID	HLID	BH[ZEN]	3	US	43° 33.75'	114° 24.83'	1772	*	*	Digital	USGS
HLJZ	Hailstone, UT	HLJ	EHZ	1	UU	40° 36.64'	111° 24.05'	1931	S13	PSN	Analog	Utah
			EN[ZEN]	3					FBA23	K2	Digital	
HMU	Henry Mountain, UT	HMU	HH[ZEN]	3	UU	37° 56.28'	110° 44.51'	2430	3T	72A-07	Digital	Utah

UURSN	Location	SEED	SEED	No. of	Network	Latitude	Longitude	Elevation	Sensor	Digitizer	Telemetry	Sponsor
		Station	Channel	Channels	Code			(meters)				
HON	Honeyville, UT	HON	EN[ZEN]	3	UU	41° 36.97'	112° 03.05'	1528	Applied Mems	ANSS-130	Digital	ANSS
HONU		HONU	EHZ	1					L4C	PSN	Analog	USGS
HRU	Hogsback Ridge, UT	HRU	EHZ	1	UU	40° 47.67'	111° 53.14'	1620	Ranger	PSN	Analog	USGS
			EN[ZEN]	3					Applied Mems	ANSS-130	Digital	ANSS
HTU	Hoyt, UT	HTU	EHZ	1	UU	40° 40.52'	111° 13.21'	2576	L4C	PSN	Analog	USGS
			EHZ	1					Episensor	Basalt	Digital	
			EN[ZEN]	3								
HVU	Hansel Valley, UT	HVU	HH[ZEN]	3	UU	41° 46.78'	112° 46.50'	1609	Trillium 120	Q330	Digital	USGS
			EN[ZEN]	3					EpiSensor			
HWU	Hardware Ranch, UT	HWUT	BH[ZEN]	3	US	41° 36.41'	111° 33.91'	1830	*	*	Digital	USGS
IAE	Cedar City, Iron County Adult Education, UT	IAE	EN[ZEN]	3	UU	37° 39.91'	113° 40.02'	1807	EpiSensor	Etna	Digital	Utah
ICF	International Center Fire Station, Salt Lake City, UT	ICF	EN[ZEN]	3	UU	40° 46.69'	112° 01.72'	1281	EpiSensor	K2	Digital	ANSS
ICU	Indian Springs Canyon, UT	ICU	EHZ	1	UU	37° 08.98'	113° 55.41'	1451	S13	PSN	Analog	Utah
IMU	Iron Mountain, UT	IMU	EHZ	1	UU	38° 37.99'	113° 09.50'	1833	L4C	PSN	Analog	Utah
IMW	Indian Meadows, WY	IMW	BH[ZEN]	3	IW	43° 53.58'	110° 56.58'	2670	3ESP	RT-130	Digital	ANSS
ISCO	Idaho Springs, CO	ISCO	BH[ZEN]	3	US	39° 47.98'	105° 36.80'	2743	STS-2	Q330	Digital	ANSS
JLU	Jordanelle, UT	JLU	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	JRP	EN[ZEN]	3	UU	40° 49.54'	111° 56.66'	1284	EpiSensor	K2	Digital	ANSS
KEUT	Kanab Elementary School, UT	KEUT	EN[ZEN]	3	UU	37° 03.02'	112° 31.76'	1514	PA-23	SMART-24	Digital	Utah
KLJ	Keetley, UT	KLJ	EHZ	1	UU	40° 37.85'	111° 24.30'	1992	S13	PSN	Analog	Utah
KNB	Kanab, UT	KNB	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	LCMT	HH[ZEN]	3	UU	37° 00.71'	113° 14.63'	1411	3T	SMART-24	Digital	Utah
			EN[ZEN]	3					PA-23			

UURSN	Location	SEED	SEED	No. of	Network	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor	
		Station	Channel	Channels	Code								
LCU	Little Cottonwood, UT	LCU	EN[ZEN]	3	UU	40° 34.41'	111° 47.91'	1571	Applied Mems	K2	Digital	ANSS	
LDJ	Lady, UT	LDJ	EHZ	1	UU	40° 34.89'	111° 24.52'	2217	S13	PSN	Analog	Utah	
LEVU	Levan, UT	LEVU	EHZ	1	UU	39° 30.39'	111° 48.88'	1996	L4C	PSN	Analog	USGS	
			EHZ	1						Basalt	Digital		
			EN[ZEN]	3									
LGC	Lakeside Golf Course Bountiful, UT	LGC	EN[ZEN]	3	UU	40° 54.04'	111° 54.51'	1292	EpiSensor	K2	Digital	ANSS	
LHUT	Little Humpy Peak, UT	LHUT	EHZ	1	UU	40° 53.49'	110° 59.78'	3084	S13	PSN	Analog	Utah	
LKC	Lee Kay Hunter Education Center Magna, UT	LKC	EN[ZEN]	3	UU	40° 43.62'	112° 02.14'	1289	EpiSensor	K2	Digital	ANSS	
LKW	Lake, WY	LKWy	BH[ZEN]	3	US	44° 33.91'	110° 24.00'	2424	*	*	Digital	USGS	
LOHW	National Elk Refuge, WY	LOHW	BH[ZEN]	3	IW	43° 36.76'	110° 36.30'	2245	3ESP	RT-130	Digital	ANSS	
LRG	Logan River Golf Course Logan, UT	LRG	EN[ZEN]	3	UU	41° 42.82'	111° 51.08'	1362	Applied Mems	ANSS-130	Digital	ANSS	
LSU	Lake Shores, UT	LSU	EN[ZEN]	3	UU	40° 07.94'	111° 43.80'	1375	EpiSensor	K2	Digital	ANSS	
LTU	Little Mountain, UT	LTU	EHZ	1	UU	41° 35.51'	112° 14.83'	1585	L4C	PSN	Analog	USGS	
			EHZ	1						Basalt	Digital		
			EN[ZEN]	3									
MAB	Mapleton Ambulance Building Mapleton, UT	MAB	EN[ZEN]	3	UU	40° 07.85'	111° 34.67'	1440	EpiSensor	K2	Digital	ANSS	
MCID	Moose Creek, ID	MCID	EHZ	1	WY	44° 11.45'	111° 11.03'	2137	L4C	PSN	Analog	USGS	
MCU	Monte Cristo Peak, UT	MCU	EHZ	1	UU	41° 27.70'	111° 30.45'	2664	18300	PSN	Analog	USGS	
MGCU	Grand County Courthouse, Moab, UT	MGCU	EN[ZEN]	3	UU	38° 34.46'	109° 32.89'	1241	EpiSensor	K2	Digital	Utah	
MHD	Mile High Drive, UT	MHD	EHZ	1	UU	40° 39.64'	111° 48.05'	1597	Ranger	PSN	Analog	USGS	
			EHZ	1						Basalt	Digital		
			EN[ZEN]	3									
MID	Middle Canyon, UT	MID	EN[ZEN]	3	UU	40° 31.04'	112° 15.28'	1722	Applied Mems	ANSS-130	Digital	ANSS	
MLI	Malad Range, ID	MLI	EHZ	1	UU	42° 01.61'	112° 07.53'	1896	L4C	PSN	Analog	USGS	
			EHZ	1						Basalt	Digital		
			EN[ZEN]	3									
MMU	Miners Mountain, UT	MMU	EHZ	1	UU	38° 11.57'	111° 17.66'	2387	S13	PSN	Analog	Utah	

UURSN	Location	SEED	SEED	No. of	Network	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
		Station	Channel	Channels	Code							
MOMZ	Monida, MT	MOMT	EHZ	1	MB	44° 35.60'	112° 23.66'	2220	*	*	Analog	MBMT
MOOW	Moose Ponds, WY	MOOW	BH[ZEN]	3	IW	43° 44.92'	110° 44.69'	2128	3ESP	RT-130	Digital	ANSS
MOR	Morgan, UT	MOR	EN[ZEN]	3	UU	41° 02.77'	111° 39.94'	1633	Applied Mems	ANSS-130	Digital	ANSS
MOUT	Mount Ogden, UT	MOUT	EHZ	1	UU	41° 11.94'	111° 52.73'	2743	S13	PSN	Analog	USGS
MPU	Maple Canyon, UT	MPU	EN[ZEN]	3	UU	40° 00.93'	111° 38.00'	1909	EpiSensor	K2	Digital	ANSS
			HH[ZEN]	3					3ESP	ANSS-130	Digital	USGS
MSU	Marysvale, UT	MSU	EHZ	1	UU	38° 30.74'	112° 10.63'	2105	18300	PSN	Analog	Utah
MTPU	Mt. Pierson, UT	MTPU	HH[ZEN]	3	UU	38° 02.49'	112° 11.06'	3112	Trillium 120	Q330	Digital	Utah
			EN[ZEN]	3					EpiSensor			
MTUT	Morton Thiokol, UT	MTUT	EHZ	1	UU	41° 42.55'	112° 27.28'	1373	L4C	PSN	Analog	USGS
MVCO	Mesa Verde, CO	MVCO	BH[ZEN]	3	US	37° 12.62'	108° 29.92'	2170	STS-2	Q330	Digital	ANSS
MVU	Marysvale, UT	MVU	BH[ZEN]	3	LB	38° 30.22'	112° 12.74'	2240	*	*	Digital	Sandia
NAI	North Antelope Island, UT	NAI	EN[ZEN]	3	UU	41° 00.97'	112° 13.68'	1472	EpiSensor	K2	Digital	ANSS
NAIU		NAIU	EHZ	1					L4C	PSN	Analog	USGS
NLU	North Lily Mine, UT	NLU	EN[ZEN]	3	UU	39° 57.29'	112° 04.50'	2036	Episensor	72A-08	Digital	ANSS
			HH[ZEN]	3					3ESP			
NMU	North Mineral Mountain, UT	NMU	EH[ZEN]	3	UU	38° 30.99'	112° 51.00'	1853	S13	PSN	Analog	Utah
NOQ	North Oquirrh Mountains, UT	NOQ	EN[ZEN]	3	UU	40° 39.16'	112° 07.26'	1628	EpiSensor	K2	Digital	ANSS
			HH[ZEN]	3					Trillium 120	ANSS-130	Digital	USGS
NPI	North Pocatello, ID	NPI	EHZ	1	UU	42° 08.84'	112° 31.10'	1640	L4C	Basalt	Digital	ANSS
			EN[ZEN]	3					EpiSensor			
O20A	White River City, CO	O20A	BH[ZEN]	3	TA	40° 08.09'	108° 14.50'	1915	STS-2	Q330	Digital	NCF
OCP	Orem City Park, Orem, UT	OCP	EN[ZEN]	3	UU	40° 17.87'	111° 41.44'	1464	EpiSensor	K2	Digital	ANSS
OPS	Ogden Public Safety Building, Ogden, UT	OPS	EN[ZEN]	3	UU	41° 13.72'	111° 58.54'	1317	Applied Mems	ANSS-130	Digital	ANSS
OSS	Oquirrh Sub Station, UT	OSS	EN[ZEN]	3	UU	40° 33.77'	112° 01.61'	1503	Applied Mems	ANSS-130	Digital	ANSS
OWUT	Old Woman Plateau, UT	OWUT	EHZ	1	UU	38° 46.80'	111° 25.42'	2568	L4C	PSN	Analog	Utah
PCCW	Pine Creek, Cokeville, WY	PCCW	EHZ	1	UU	42° 05.97'	110° 52.36'	1996	L4C	Basalt	Digital	Utah, USGS
			EN[ZEN]	3					EpiSensor			

UURSN Code	Location	SEED	SEED	No. of	Network	Latitude	Longitude	Elevation	Sensor	Digitizer	Telemetry	Sponsor
		Station	Channel	Channels	Code			(meters)				
PCL	Plain City Landfill Plain City, UT	PCL	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	PCR	EN[ZEN]	3	UU	40° 39.25'	111° 30.19'	2100	EpiSensor	K2	Digital	ANSS
PEUT	Richfield, Pahvant Elementary School, UT	PEUT	EN[ZEN]	3	UU	38° 46.55'	112° 05.32'	1644	PA-23	SMART-24	Digital	Utah
PGAZ	Page, AZ	PGA	EHZ	1	AR	36° 54.34'	111° 16.86'	1272	*	*	Analog	NAU
PGC	Pleasant Grove Creek, UT	PGC	EN[ZEN]	3	UU	40° 22.71'	111° 42.62'	1707	EpiSensor	K2	Digital	ANSS
PKCU	Pink Cliffs, UT	PKCU	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	PNSU	HH[ZEN]	3	UU	39° 28.38'	110° 44.40'	2743	Trillium 240	Q330	Digital	Utah
PRN	Pahroc, Range, NV	PRN	HH[ZEN]	3	NN	37° 24.40'	115° 03.05'	1402	Trillium 120	ANSS-130	Digital	UNR
PSUT	Pine Spring, UT	PSUT	HH[ZEN]	3	UU	38° 32.02'	113° 51.28'	1999	Trillium 120	Q330	Digital	Utah
			EN[ZEN]	3					EpiSensor			
PTI	Pocatello, ID	PTI	EHZ	1	IE	42° 52.20'	112° 22.21'	1670	*	*	Digital	INL
PTU	Portage, UT	PTU	EHZ	1	UU	41° 55.76'	112° 19.48'	2192	L4C	Basalt	Digital	ANSS
			EN[ZEN]	3					EpiSensor			
QLMZ	Earthquake Lake, MT	QLMT	EHZ	1	MB	44° 49.84'	111° 25.80'	2064	*	*	Analog	MBMT
R11A	Troy Canyon, Currant, NV	R11A	BH[ZEN]	3	TA	38° 20.93'	115° 35.12'	1756	STS-2	Q330	Digital	NCF
RBUZ	Red Butte Canyon, UT	RBU	EHZ	1	UU	40° 46.85'	111° 48.50'	1676	L4C	PSN	Analog	USGS
			EHZ	1					EpiSensor			
			EN[ZEN]	3					Basalt			
RCJZ	Ross Creek, UT	RCJ	EHZ	1	UU	40° 39.51'	111° 26.36'	2090	S13	PSN	Analog	Utah
RDMU	Red Mountain, UT	RDMU	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	REDW	BH[ZEN]	3	IW	43° 21.74'	110° 51.18'	2322	3ESP	RT-130	Digital	ANSS
REUT	Washington Fields, Riverside Elementary School, UT	REUT	EN[ZEN]	3	UU	37° 05.86'	113° 31.16'	791	PA-23	SMART-24	Digital	Utah
ROA	Roan Cliffs, UT	ROA	EHZ	1	UU	39° 39.69'	110° 21.88'	2962	S13	PSN	Analog	Utah
RPF	Rose Park Fire Station, Salt Lake City, UT	RPF	EN[ZEN]	3	UU	40° 46.52'	111° 55.22'	1287	Applied Mems	ANSS-130	Digital	ANSS

UURSN	Location	SEED	SEED	No. of	Network	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor	
		Station	Channel	Channels	Code								
RRCU	Rees Ranch, Coalville, UT	RRCU	EHZ	1	UU	40° 53.21'	111° 26.22'	2028	L4C	Basalt	Digital	Utah, USGS	
			EN[ZEN]	3					EpiSensor				
RRWY	Rawlins, WY	RRWY	BH[ZEN]	3	IW	41° 41.33'	107° 12.61'	2402	3ESP	RT-130	Digital	ANSS	
RSUT	Red Spur, UT	RSUT	EHZ	1	UU	41° 38.31'	111° 25.90'	2682	S13	PSN	Analog	USGS	
			EHZ	1						Basalt	Digital		
			EN[ZEN]	3					EpiSensor				
SAIU	South Antelope Island, UT	SAIU	EHZ	1	UU	40° 51.29'	112° 10.89'	1384	L4C	PSN	Analog	USGS	
			EHZ	1					Basalt	Digital			
			EN[ZEN]	3					EpiSensor				
SCC	Salt Lake Community College, SLC UT	SCC	EN[ZEN]	3	UU	40° 40.49'	111° 56.37'	1306	EpiSensor	K2	Digital	ANSS	
SCS	Syracuse City Cemetery Shop Syracuse, UT	SCS	EN[ZEN]	3	UU	41° 05.73'	112° 02.81'	1321	EpiSensor	K2	Digital	ANSS	
SCUT	Santa Clara, UT	SCUT	EN[ZEN]	3	UU	37° 07.69'	113° 38.68'	837	EpiSensor	Etna	Digital	Utah	
SCY	Salem City Yard, Salem, UT	SCY	EN[ZEN]	3	UU	40° 03.47'	111° 41.14'	1386	Applied Mems	ANSS-130	Digital	ANSS	
SGSU	St. George Fire Station #4, UT	SGSU	EN[ZEN]	3	UU	38° 16.61'	112° 38.42'	1799	PA-23	SMART- 24	Digital	Utah	
SGU	Sterling, UT	SGU	EHZ	1	UU	39° 10.94'	111° 38.68'	2357	18300	PSN	Analog	USGS	
SHP	Sheep Range, NV	SHP	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	SJF	EN[ZEN]	3	UU	40° 33.37'	111° 56.34'	1356	Applied Mems	ANSS-130	Digital	ANSS	
SNO	Snow College, UT	SNO	EHZ	1	UU	39° 19.18'	111° 32.33'	2503	Ranger	PSN	Analog	Utah	
SMAZ	Slide Mountain, AZ	SMAZ	EHZ	1	AR	36° 19.29'	113° 10.14'	2200	*	*	Analog	NAU	
SNUT	Stansbury North, UT	SNUT	EHZ	1	UU	40° 53.10'	112° 30.52'	1652	18300	PSN	Analog	USGS	
			EHZ	1						Basalt	Digital		
			EN[ZEN]	3					EpiSensor				
SPR	Wildlife Resource Center Springville, UT	SPR	EN[ZEN]	3	UU	40° 10.94'	111° 36.71'	1379	EpiSensor	K2	Digital	ANSS	
SPS	Stansbury Park Sewage Lagoon Stansbury Park, UT	SPS	EN[ZEN]	3	UU	40° 38.97'	112° 18.95'	1293	Applied Mems	ANSS-130	Digital	ANSS	
SPU	South Promontory Point, UT	SPU	EN[ZEN]	3	UU	41° 18.52'	112° 26.95'	2086	EpiSensor	ANSS-130	Digital	ANSS	
			HH[ZEN]	3					3ESP				

UURSN Code	Location	SEED	SEED	No. of	Network	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor					
		Station	Channel	Channels	Code												
SRU	San Rafael Swell, UT	SRU	EHZ	1	UU	39° 06.65'	110° 31.43'	1804	S13	PSN	Analog	Utah, ANSS, IRIS					
			HH[ZEN]	6					STS-2	ANSS-130	Digital						
			EN[ZEN]						EpiSensor								
SSC	Sandy Senior Center Sandy, UT	SSC	EN[ZEN]	3	UU	40° 34.89'	111° 51.35'	1414	EpiSensor	K2	Digital	ANSS					
SUU	Santaquin Canyon, UT	SUU	EHZ	1	UU	39° 53.29'	111° 47.45'	2024	18300	PSN	Analog	USGS					
SWUT	Soap Wash, Delta, UT	SWUT	EN[ZEN]	3	UU	39° 19.72'	113° 11.72'	1644	EpiSensor	Q330	Digital	Utah					
			HH[ZEN]	3					Trillium 120								
SZCU	Shurtz Canyon, UT	SZCU	HH[ZEN]	3	UU	37° 35.72'	113° 05.25'	2026	3T	SMART-24	Digital	Utah					
			EN[ZEN]	3					PA-23								
TCRU	Three Creeks Reservoir, UT	TCRU	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	TCU	EN[ZEN]	3	UU	41° 07.04'	111° 24.47'	2269	EpiSensor	ANSS-130	Digital	ANSS					
			HH[ZEN]	3					3ESP								
TCUT	Toone Canyon, UT	TCUT	EHZ	1	UU	41° 07.07'	111° 24.51'	2320	L4C	PSN	Analog	USGS					
TCVU	Timpanogos Cave, UT	TCVU	EHZ	1	UU	40° 26.61'	111° 42.31'	1730	L4C	Basalt	Digital	Utah					
			EN[ZEN]	3					EpiSensor								
TMI	Taylor Mountain, ID	TMI	EHZ	1	IE	43° 18.30'	111° 55.08'	2179	*	*	Digital	INL					
TMU	Trail Mountain, UT	TMU	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	TPAW	BH[ZEN]	3	IW	43° 29.41'	110° 57.04'	2512	3ESP	RT-130	Digital	ANSS					
TPH	Tonopah, NV	TPH	BH[ZEN]	3	LB	38° 04.50'	117° 13.35'	1883	3ESP	Q330	Digital	Sandia					
TPMZ	Teepe Creek, MT	TPMT	EHZ	1	MB	44° 43.79'	111° 39.94'	2518	*	*	Analog	MBMT					
TPNV	Topopah Spring, NV	TPNV	BH[ZEN]	3	US	36° 56.93'	116° 14.97'	1600	*	*	Digital	USGS					
TPU	Thanksgiving Point, Lehi, UT	TPU	EN[ZEN]	3	UU	40° 25.81'	111° 54.13'	1383	EpiSensor	K2	Digital	ANSS					
TRS	Tooele County Radio Shop, Tooele, UT	TRS	EN[ZEN]	3	UU	40° 30.83'	112° 18.63'	1568	EpiSensor	K2	Digital	ANSS					
U15A	North Rim, AZ	U15A	BH[ZEN]	3	AE	36° 25.80'	112° 17.40'	2489	Trillium 240	Q330	Digital	AZGS					
UHP	Utah Highway Patrol Farmington, UT	UHP	EN[ZEN]	3	UU	40° 59.47'	111° 53.88'	1295	EpiSensor	K2	Digital	ANSS					
UTH	Uintah Town Hall, Uintah, UT	UTH	EN[ZEN]	3	UU	41° 08.65'	111° 55.52'	1389	EpiSensor	K2	Digital	ANSS					

UURSN Code	Location	SEED	SEED	No. of	Network	Latitude	Longitude	Elevation	Sensor	Digitizer	Telemetry	Sponsor
		Station	Channel	Channels	Code			(meters)				
UUE	University of Utah EMCB Bldg. Salt Lake City, UT	UUE	EN[ZEN]	3	UU	40° 46.09'	111° 50.77'	1449	EpiSensor	K2	Digital	ANSS
V05	E. Island Mesa, Paradox Basin, CO	PV05	HH[ZEN]	3	RE	38° 08.87'	108° 50.08'	2142	*	*	Digital	USBR
V11	Davis Mesa, Paradox Basin, CO	PV11	HH[ZEN]	3	RE	38° 17.96'	108° 52.33'	1881	*	*	Digital	USBR
V15	Pinto Mesa, Paradox Basin, CO	PV15	HH[ZEN]	3	RE	38° 20.51'	108° 28.66'	2280	*	*	Digital	USBR
V21	Cone Mountain, Paradox Basin, CO	PV21	HH[ZEN]	3	RE	38° 33.67'	108° 58.50'	2235	*	*	Digital	USBR
VEC	Valley Emergency Communications Center West Valley City, UT	VEC	EN[ZEN]	3	UU	40° 39.21'	112° 01.95'	1480	EpiSensor	K2	Digital	ANSS
VNL	Vernal, UT	VNL	EN[ZEN]	3	UU	40° 27.48'	109° 32.89'	1648	FBA23	Etna	Digital	Utah
VRUT	Veyo Road, Veyo, UT	VRUT	HH[ZEN]	3	UU	37° 27.71'	113° 51.41'	1874	Trillium 120 PA-23	SMART- 24	Digital	Utah
			EN[ZEN]	3								
W13A	Hualapai Mountain Park, Kingman, AZ	W13A	BH[ZEN]	3	AE	35° 06.00'	113° 53.40'	1988	3T	Q330	Digital	AZGS
WBC	Weber Canyon, UT	WBC	EN[ZEN]	3	UU	41° 08.38'	111° 54.05'	1602	EpiSensor	K2	Digital	ANSS
WCF	Wellsville Fire Station, Wellsville, UT	WCF	EN[ZEN]	3	UU	41° 38.37'	111° 55.94'	1387	Applied Mems	ANSS-130	Digital	ANSS
WCO	Washington City Office Building, UT	WCO	EN[ZEN]	3	UU	37° 07.91'	113° 30.56'	837	EpiSensor	Etna	Digital	Utah
WCU	Willow Creek, UT	WCU	EHZ	1	UU	38° 57.88'	112° 05.44'	2673	18300 EpiSensor	PSN Basalt	Analog Digital	USGS
			EHZ	1								
			EN[ZEN]	3								
WDO	Saint George, Washington County School District Office, UT	WDO	EN[ZEN]	3	UU	37° 06.46'	113° 35.19'	831	PA-23	SMART- 24	Digital	Utah
WES	Westminster College Salt Lake City, UT	WES	EN[ZEN]	3	UU	40° 43.97'	111° 51.26'	1341	EpiSensor	K2	Digital	ANSS
WHS	West High School, SLC UT	WHS	EN[ZEN]	3	UU	40° 46.51'	111° 53.93'	1301	EpiSensor	K2	Digital	ANSS
WMUT	West Mountain, UT	WMUT	EHZ	1	UU	40° 04.60'	111° 50.00'	1981	L4C EpiSensor	PSN Basalt	Analog Digital	USGS
			EHZ	1								
			EN[ZEN]	3								
WRP	Water Reclamation Plant Salt Lake City, UT	WRP	EN[ZEN]	3	UU	40° 48.82'	111° 55.87'	1286	Applied Mems	ANSS-130	Digital	ANSS
WTNK	7433 Soaring Heights, NV	WTNK	HH[ZEN]	3	NN	36° 11.50'	115° 00.64'	676	3ESP	ANSS-130	Digital	UNR

UURSN	Location	SEED	SEED	No. of	Network	Latitude	Longitude	Elevation	Sensor	Digitizer	Telemetry	Sponsor	
		Station	Channel	Channels	Code			(meters)					
WTU	Western Traverse Mountains, UT	WTU	EH[ZEN]	4	UU	40° 27.29'	111° 57.21'	1552	S13	PSN	Analog	USGS	
			EN[ZEN]	3					Applied Mems	ANSS-130	Digital	ANSS	
WUAZ	Wupatki, AZ	WUAZ	BH[ZEN]	3	US	35° 31.01'	111° 22.43'	1592	*	*	Digital	USGS	
WVUT	Wellsville, UT	WVUT	EHZ	1	UU	41° 36.61'	111° 57.55'	1828	L4C	PSN	Analog	USGS	
YDC	Denny Creek, MT	YDC	EHZ	1	WY	44° 42.51'	111° 14.60'	2025	L4C	PSN	Analog	USGS	
YFT	Old Faithful (YNP), WY	YFT	HH[ZEN]	3	WY	44° 27.05'	110° 50.24'	2292	Trillium 120	72A-07	Digital	USGS	
			EN[ZEN]	3					Titan				
			EHZ	1					L4C	None	None		
YGC	Grayling Creek, MT	YGC	EHZ	1	WY	44° 47.77'	111° 06.45'	2075	L4C	PSN	Analog	USGS	
YHB	Horse Butte, MT	YHB	EHZ	1	WY	44° 45.07'	111° 11.71'	2157	L4C	PSN	Analog	USGS	
			HH[ZEN]	3					40T	ANSS-130	Digital		
			EN[ZEN]	3					Titan				
YHH	Holmes Hill (YNP), WY	YHH	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	YHL	HH[ZEN]	3	WY	44° 51.05'	111° 10.98'	2691	Trillium 120	Q330	Digital	USGS	
			EN[ZEN]	3					Titan				
YJCZ	Joseph's Coat (YNP), WY	YJC	EH[ZEN]	3	WY	44° 45.33'	110° 20.95'	2684	S13	PSN	Analog	USGS	
YLAZ	Lake Butte (YNP), WY	YLA	EHZ	1	WY	44° 30.76'	110° 16.12'	2580	L4C	PSN	Analog	USGS	
YLT	Little Thumb Creek (YNP), WY	YLT	EHZ	1	WY	44° 26.25'	110° 35.28'	2439	L4C	PSN	Analog	USGS	
YMC	Maple Creek (YNP), WY	YMC	EH[ZEN]	3	WY	44° 45.53'	111° 00.41'	2073	S13	PSN	Analog	USGS	
YML	Mary Lake (YNP), WY	YML	EH[ZEN]	3	WY	44° 36.20'	110° 38.63'	2653	L4C	PSN	Analog	USGS	
YMP	Mirror Plateau (YNP), WY	YMP	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	YMR	HH[ZEN]	3	WY	44° 40.12'	110° 57.90'	2149	Trillium 120	Q330	Digital	USGS	
			EN[ZEN]	3					Titan				
YMS	Mount Sheridan (YNP), WY	YMS	EHZ	1	WY	44° 15.84'	110° 31.67'	3106	L4C	PSN	Analog	USGS	
YMV	Mammoth Vault (YNP), WY	YMV	EHZ	1	WY	44° 58.42'	110° 41.33'	1829	L4C	PSN	Analog	USGS	
YNE	Northeast Entrance (YNP), WY	YNE	HH[ZEN]	3	WY	45° 00.46'	110° 00.48'	2343	Compact	Taurus	Digital	USGS	
YNM	Norris Museum (YNP), WY	YNM	HH[ZEN]	3	WY	44° 43.59'	110° 42.22'	2311	Trillium 240	Q330	Digital	USGS	
YNR	Norris Junction (YNP), WY	YNR	HH[ZEN]	3	WY	44° 42.93'	110° 40.75'	2336	Trillium 120	RT-130	Digital	USGS	
			EN[ZEN]	3					Titan				

UURSN	Location	SEED	SEED	No. of	Network	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor	
		Station	Channel	Channels	Code								
YPC	Pelican Cone (YNP), WY	YPC	EHZ	1	WY	44° 38.88'	110° 11.55'	2932	L4C	PSN	Analog	USGS	
YPK	Parker Peak (YNP), WY	YPK	EH[ZEN]	3	WY	44° 43.91'	109° 55.32'	2897	L4C	PSN	Analog	USGS	
YPM	Purple Mountain (YNP), WY	YPM	EHZ	1	WY	44° 39.43'	110° 52.12'	2582	L4C	PSN	Analog	USGS	
YPP	Pitchstone Plateau (YNP), WY	YPP	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	YSB	EHZ	1	WY	44° 53.04'	110° 09.06'	2072	L4C	PSN	Analog	USGS	
YTP	The Promontory (YNP), WY	YTP	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	YUF	HH[ZEN]	3	WY	44° 42.76'	110° 30.71'	2394	3ESP	ANSS-130	Digital	USGS	
			EN[ZEN]	3					Titan				
YWB	West Boundary (YNP), WY	YWB	EHZ	1	WY	44° 36.35'	111° 06.05'	2310	L4C	PSN	Analog	USGS	
ZNPU	Zion National Park, UT	ZNPU	HH[ZEN]	3	UU	37° 21.37'	113° 07.52'	1953	Trillium 120	Q330	Digital	Utah	
			EN[ZEN]	3					EpiSensor				

\* Station operated by another agency and recorded as part of University of Utah regional seismic network

Network Statistics: 829 data channels from 265 stations were being recorded at the end of this report period

## EXPLANATION OF TABLE

**UURSN Code:** Station code formerly used in routine processing. Due to processing 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:

<b>Band Code</b>	<b>Band Type</b>	<b>Sample Rate</b>	<b>Corner Period</b>
E	Extremely short period	$\geq 80$ Hertz	< 10 seconds
H	High broadband	$\geq 80$ Hertz	$\geq 10$ seconds
B	Broadband	$\geq 10$ to $< 80$ Hertz	$\geq 10$ seconds
S	Short period	$\geq 10$ to $< 80$ Hertz	< 10 seconds

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

<b>Instrument Code</b>	<b>Description</b>
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:

<b>Network Code</b>	<b>Network name; Network operator or responsible organization</b>
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
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	Kinemetrics 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
FBA23	Kinemetrics FBA-23 accelerometer
EpiSensor	Kinemetrics 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
IESE-S2	Institute of Earth Science and Engineering S-2 model borehole seismometer
<b>Digitizer</b>	<b>Description</b>
K2	Kinemetrics Altus Series K2 (19-bit resolution field digitizer)
Etna	Kinemetrics 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	Kinematics Basalt (24-bit resolution field digitizer)
Taurus	Nanometrics Taurus (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

**NETWORK CHANGES DURING OCTOBER 1-DECEMBER 31, 2013**

December 30                    Stations R11A (BH[ZEN]) and RWWY (BH[ZEN]) were added.