

# **EARTHQUAKE ACTIVITY IN THE UTAH REGION**

Preliminary Epicenters

October 1 – December 31, 2010

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

March 10, 2011



## 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 (F. W. Klein, 1978, U.S. Geological Survey Open-File Report 78-694) 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 in north-central Utah, above magnitude 2.0 in central and southwestern Utah, and above magnitude 3.0 in southeastern Utah and the eastern Uinta Basin. *These data are preliminary—both the locations and magnitudes 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 7 and MST thereafter.
- Earthquake location coordinates in degrees and minutes of north latitude and west longitude, and depth in kilometers.
- "\*" 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 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, 2010**

by R. Burlacu, P. M. Roberson, J. M. Hale, and W. Pomerleau  
with contributions by  
K. D. Koper, J. C. Pechmann, and K. L. Pankow

University of Utah Seismograph Stations  
115 South 1460 East, Room 107 FASB  
Salt Lake City, UT 84112-0102  
Tele: (801) 581-6274 FAX: (801) 585-5585  
email: [burlacu@seis.utah.edu](mailto:burlacu@seis.utah.edu)  
URL: <http://www.seis.utah.edu> (aka [quake.utah.edu](http://quake.utah.edu))

During the three-month period October 1 through December 31, 2010, the University of Utah Seismograph Stations (UUSS) located 382 earthquakes within the Utah region (Figure 1). The total includes five earthquakes in the magnitude 3 range, and 30 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 2010 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/EOCENTER/QUARTERLY/quarterly.htm>.

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 2010 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://pasadena.wr.usgs.gov/shake/imw>. We urge 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> 3.0	October 22	14:39 MDT	4 mi E of Richfield, UT (felt, CIIM intensity map, ShakeMap , see Table 1)
M <sub>L</sub> 3.1	November 6	14:39 MDT	6 mi ENE Colorado City, AZ
M <sub>L</sub> 3.0	November 7	18:02 MST	29 mi WNW of Page, AZ
M <sub>L</sub> 3.0	November 19	04:38 MST	4 mi S of Aurora, UT
M <sub>L</sub> 3.0	November 24	07:58 MST	19 mi WNW of Page, AZ

### **Other Notable Seismicity**

During the report period, there were two notable spatial clusters of natural earthquake activity (labeled A and B in Figure 1). 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 ( $0.9 \leq M \leq 2.3$ ) occurred about two miles S of Franklin, ID. Seven of these events, including a magnitude 2.5 shock, occurred on December 1.
- B. A cluster of 12 earthquakes ( $0.6 \leq M \leq 3.0$ ) occurred about four miles S of Aurora, UT. Eight of these events, including a magnitude 3.0 shock, occurred on November 19.

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 217 located shocks ( $0.2 \leq M \leq 2.3$ ) that occurred throughout the report period.

# Seismicity of the Utah Region October 1, 2010 - December 31, 2010

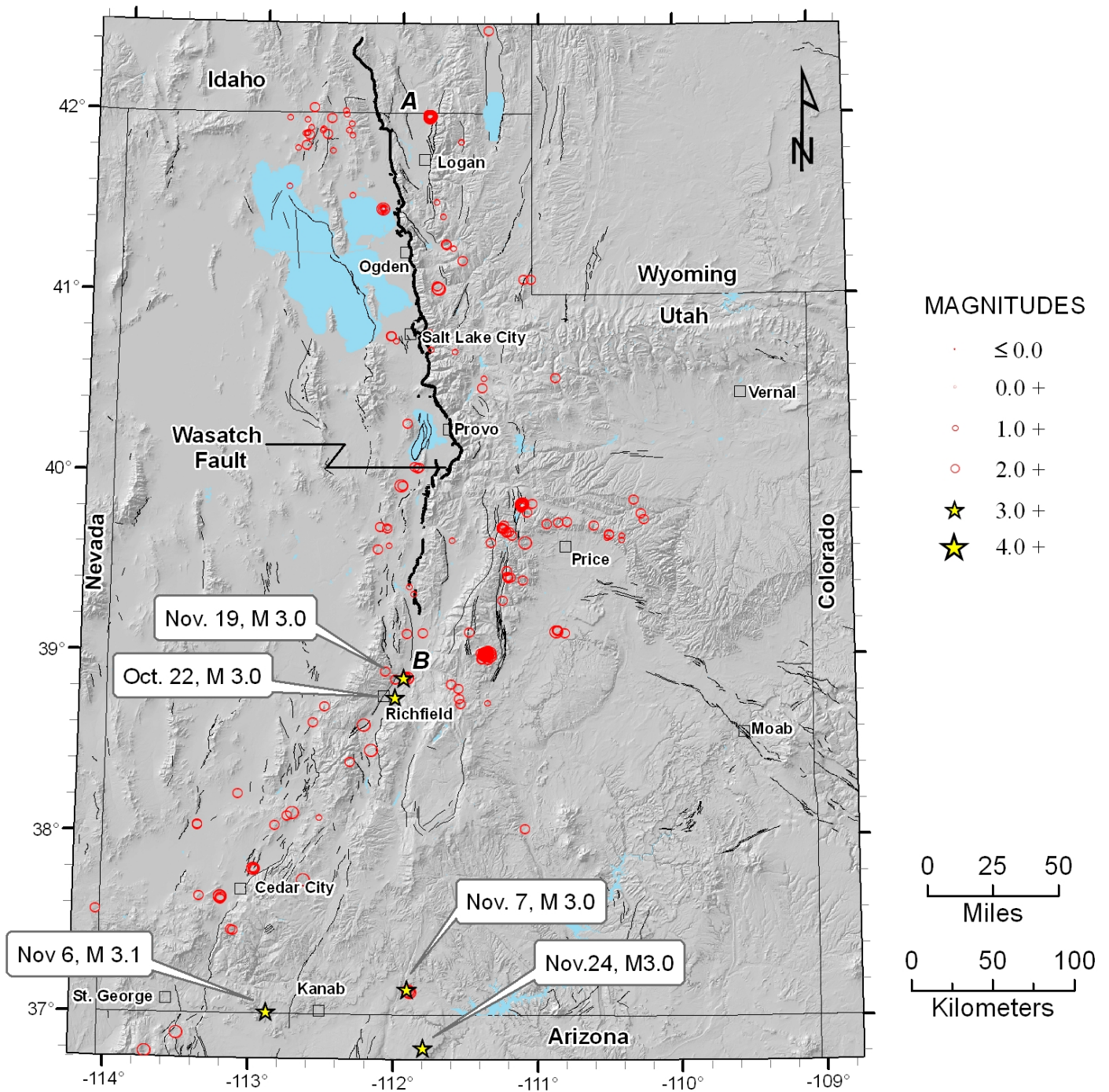


Figure 1. Earthquake epicenters, located by the University of Utah Seismograph Stations, superposed on a map of Quaternary (geologically young) faults compiled by the Utah Geological Survey. The Wasatch fault is shown in bold. Earthquakes of magnitude 3.0 and larger are labeled by local date and size. 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, 2010 to December 31, 2010

Date	Time†	Felt Information‡	Latitude	Longitude	Magnitude§
January 04	09:24 MST 16:24 UTC	Utah. <i>CIIM</i> . Felt (III) at Cedar City (?), UT and (II) at New Harmony, La Verkin, Central, St. George, Monroe (?), UT, Las Vegas (?), NV and Sedona (?), AZ.	37° 35.92'	113° 02.33'	M <sub>L</sub> 4.1
January 04 January 05	21:55 MST 04:55 UTC	Utah. <i>CIIM</i> . Felt (II) at Cedar City and Hurricane, UT.	37° 35.58'	113° 02.77'	M <sub>L</sub> 3.3
January 05	01:08 MST 08:08 UTC	Utah. <i>CIIM</i> . Felt (IV) at Woods Cross (?), UT, (III) at Saratoga Springs, Lehi and Herriman, UT and (II) at Eagle Mountain, American Fork, Draper, Pleasant Grove, Lindon, Orem, Alpine, Provo, Salt Lake City and Ogden (?), UT.	40° 21.68'	111° 54.65'	M <sub>L</sub> 2.9
January 23	08:48 MST 15:48 UTC	Utah. <i>CIIM</i> . Felt (III) at Fort Duchesne (?), UT and (II) at Payson, Santaquin, Lehi and Magna (?), UT.	39° 56.82'	111° 53.45'	M <sub>L</sub> 3.0
February 12	15:37 MST 22:37 UTC	Utah. <i>CIIM</i> . Felt (II) at Monroe (?), UT and Las Vegas (?), NV.	37° 05.51'	112° 53.54'	M <sub>L</sub> 3.0
April 14	12:58 MDT 18:58 UTC	Utah. <i>CIIM</i> . <i>ShakeMap</i> . Felt (IV) at Torrey, UT, (III) at Boulder, Salt Lake City (?), Ogden (?), UT and (II) at Teasdale, Hanksville, Saint George (?), Eagle Mountain (?), Herriman (?), Bloomfield (?), NM and Las Vegas (?), NV..	38° 02.02'	111° 06.76'	M <sub>L</sub> 3.9



April 15	04:48 MDT 10:48 UTC	Utah. <i>CIIM</i> . Felt (III) at Salt Lake City (?), Logan (?), UT, and (II) at Torrey, Draper (?), Sandy (?), Park City (?), Kaysville (?), Ogden (?), Lewinston (?), UT and Malad City (?), ID.	38° 02.62'	111° 06.78'	M <sub>L</sub> 3.2
April 15	17:59 MDT 23:59 UTC	Utah. <i>CIIM</i> . <i>ShakeMap</i> . Felt (VI) at Randolph, UT, (IV) at Woodruff, Dutch John, UT and Cokeville, WY, (III) at Garden City, Logan, Providence, Franklin, Lewinston, Trenton, Coalville, Cornish, Fielding, Salt Lake City, Pleasant Grove, Whiterocks, Payson, UT, Colorado Springs (?), CO and Puyallup (?), WA and (II) at Fish Haven, Hyde Park, Hyrum, Richmond, Huntsville, Paradise, Smithfield, Wellsville, Eden, Mendon, Clarkston, Collinston, Henefer, Ogden, Brigham City, Morgan, Garland, Layton, Willard, Hill AFB, Tremonton, Roy, Farmington, Kaysville, Clearfield, Hooper, Syracuse, Centerville, Bountiful, Park City, Woods Cross, Magna, Midway, Midvale, Sandy, West Jordan, South Jordan, Draper, Riverton, American Fork, Bingham Canyon, Herriman, Provo, Lehi, Orem, Grantsville, Tooele, Eagle Mountain, Lapoint, Santaquin, Saint George, UT, Fish Haven, Paris, Montpelier, Preston, Weston, Malad City, Arimo, McCammon, Inkom, Pocatello, Blackfoot, Boise (?), ID, Evanston,	41° 42.20'	111° 05.65'	M <sub>L</sub> 4.9

		Kemmerer, Big Piney, Rock Springs, Jackson, Lander, WY, Evergreen (?), Milliken {?}, Brighton (?), Colorado Springs (?), CO, Mesquite (?), NV, Irvine (?), Huntington Beach (?), CA, , Des Moines (?), IA.			
April 20	02:57 MDT 08:57 UTC	Utah. <i>ShakeMap</i> .	37° 54.15'	113° 10.68'	M <sub>L</sub> 2.9
April 28	11:40 MDT 17:40 UTC	Utah. <i>CIIM</i> . Felt (II) at Boulder, UT.	38° 02.09'	111° 06.88'	M <sub>L</sub> 3.2
May 2	09:00 MDT 15:00 UTC	Utah. <i>CIIM</i> . <i>ShakeMap</i> . Felt (III) at Hanksville, UT and (II) at Boulder, Teasdale, Torrey, Loa, Roy (?), UT.	38° 02.24'	111° 06.81'	M <sub>L</sub> 3.6
May 27	00:16 MDT 06:16 UTC	Utah. <i>ShakeMap</i> .	41° 41.33'	111° 05.23'	M <sub>L</sub> 3.1
June 10	10:58 MDT 16:58 UTC	Utah. <i>CIIM</i> . Felt (IV) at Midvale, UT,(III) at Lehi, Salt Lake City, UT and (II) at Riverton, Herriman, South Jordan, Draper, Sandy, Saratoga Springs, Kaysville, Logan, UT and Solana Beach (?), CA.	40° 28.42'	111° 58.99'	M <sub>L</sub> 2.7
June 11	05:06 MDT 11:06 UTC	Utah. <i>ShakeMap</i> .	41° 41.00'	111° 04.54'	M <sub>L</sub> 3.0
July 8	10:31 MDT 16:31 UTC	Utah. <i>CIIM</i> . <i>ShakeMap</i> . Felt (II) at Washington, St. George, Santa Clara, Ivins, Hurricane, Ogden (?), UT and Fredonia (?), AZ.	37° 08.10'	113° 27.22'	M <sub>L</sub> 3.2
August 8	11:36 MDT 17:36 UTC	Utah. <i>CIIM</i> . Felt (II) at Cedar City, UT.	37° 48.56'	113° 06.26'	M <sub>L</sub> 2.8
August 18	06:52 MDT 12:52 UTC	Utah. <i>CIIM</i> . <i>ShakeMap</i> . Felt (III) at Washington, St. George, UT and (II) at Central, Beryl, Milford, UT and Rock Springs (?), WY.	37° 38.27'	113° 13.33'	M <sub>L</sub> 3.8
August 24	05:41 MDT 11:41 UTC	Utah. <i>CIIM</i> . Felt (III) at Salt Lake City (?), UT.	37° 38.77'	113° 13.25'	M 2.2

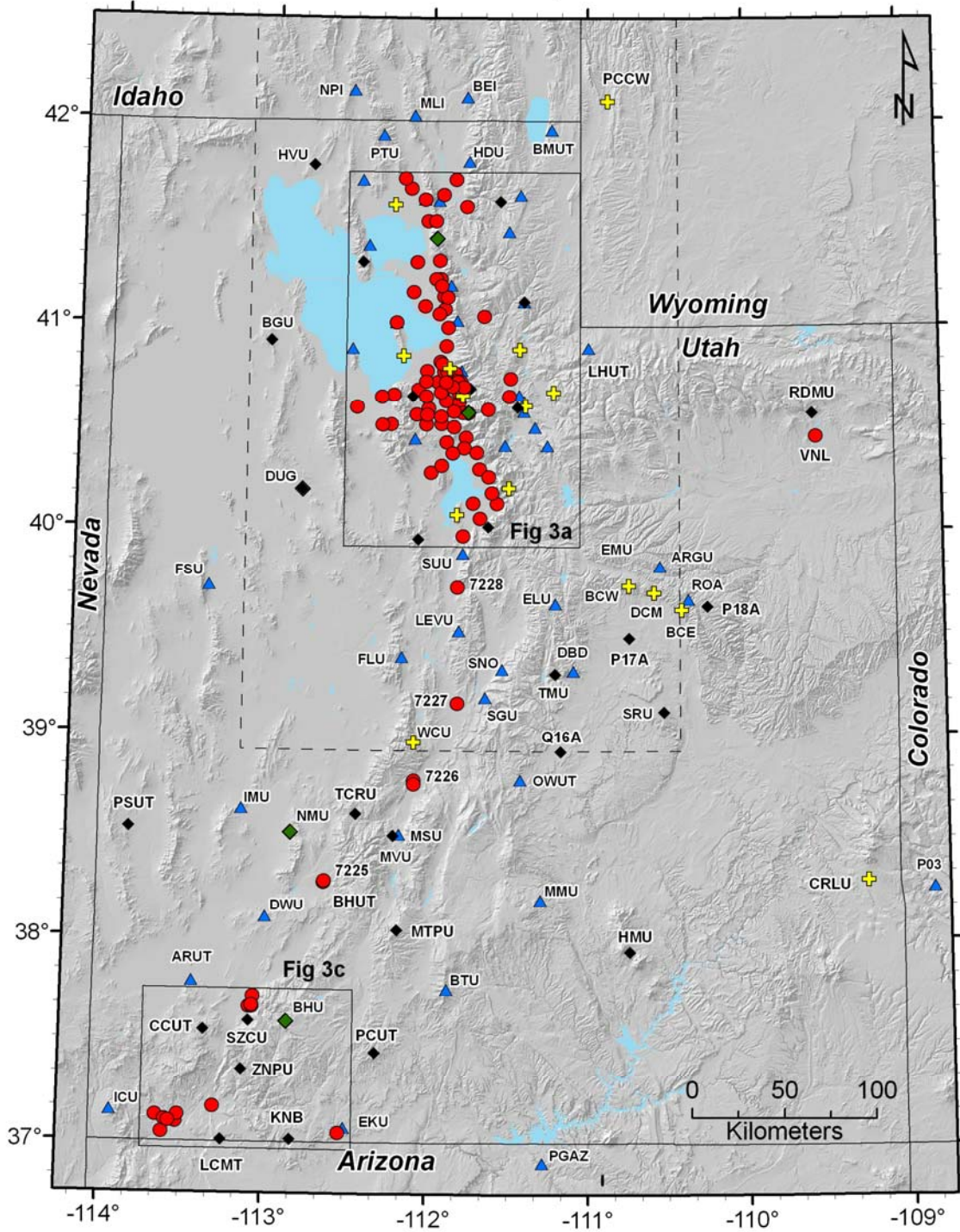
October 22	14:39 MDT 20:39 UTC	Utah. <i>CIIM</i> . <i>ShakeMap</i> . Felt (II) at Monroe, Richfield, Saint George (?), UT, Elko (?), NV, Scottsdale (?), AZ.	38° 45.53'	111° 22.52'	M <sub>L</sub> 3.0
November 5	11:31 MDT 17:31 UTC	Utah. <i>CIIM</i> . Felt (II) at Morgan, Ogden, UT.	41° 01.57'	111° 43.66'	M <sub>L</sub> 2.8
November 17 November 18	23:14 MST 06:14 UTC	Utah. <i>CIIM</i> . Felt (III) at Joseph, Monroe, Sevier, UT, (II) at Saratoga Springs (?), UT.	38° 36.23'	112° 13.94'	M <sub>L</sub> 2.9

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

‡ *CIIM* indicates the availability of a Community Internet Intensity Map (<http://pasadena.wr.usgs.gov/shake/imw/archives.html>), 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's (1) *CIIM* reports and/or (2) PDE Monthly (or) Weekly Listing Files ([http://neic.usgs.gov/neis/data\\_services/ftp\\_files.html](http://neic.usgs.gov/neis/data_services/ftp_files.html)). For a complete list of reported information see the *CIIM* website.

§ 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, 2010



### Station Key

- |   |  |
|---|--|
| <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> </ul> |
|---|--|

Figure 2

# Utah Urban Seismic Network (December 31, 2010)

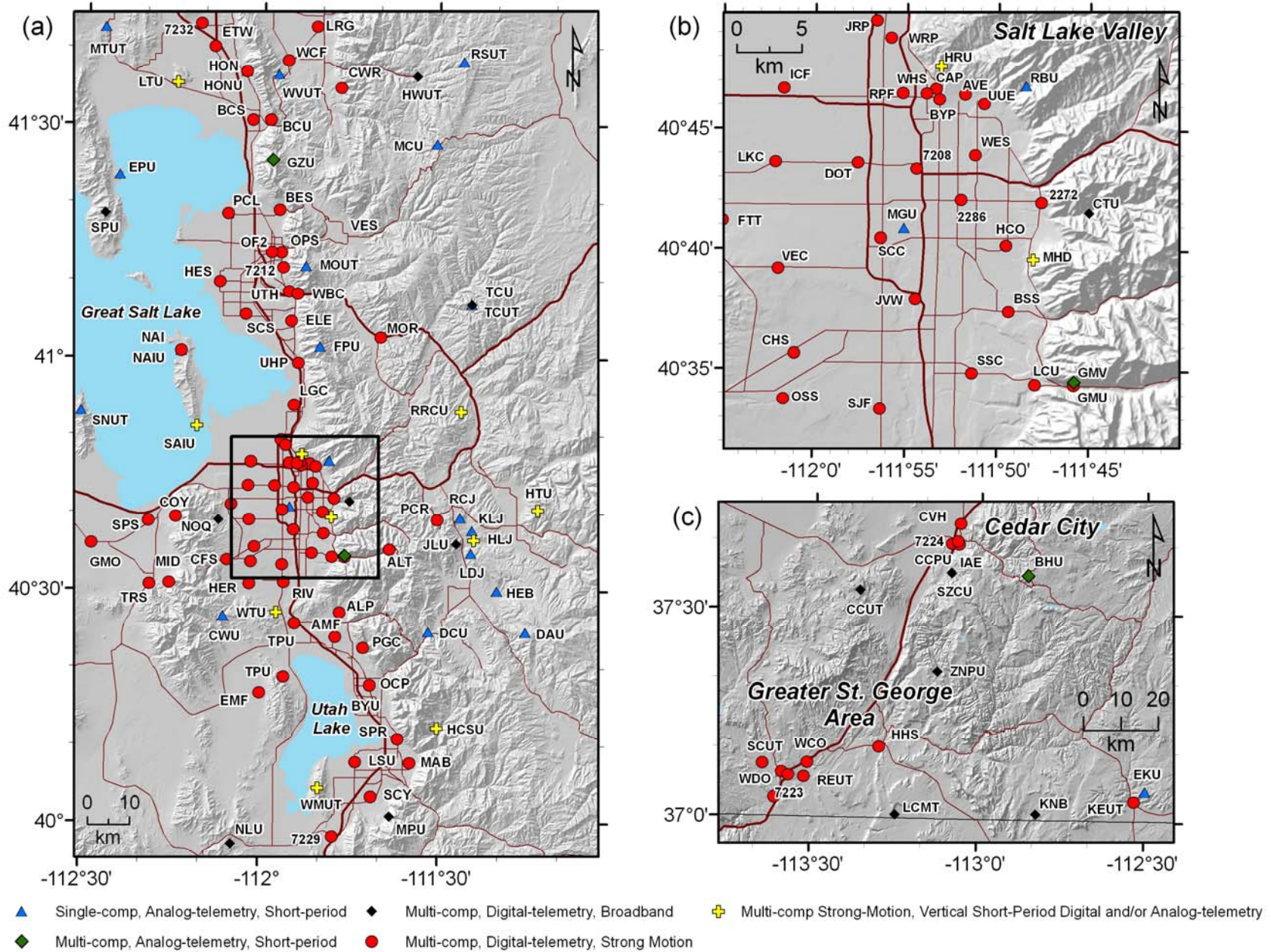


Figure 3

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2010**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
101001	19:56:00.19	41° 52.81'	112° 42.50'	4.4*	0.6	8	182	12	0.08
101001	22:41:38.73	41° 52.77'	112° 43.31'	7.0	0.5	8	187	12	0.22
101002	02:25:05.27	37° 38.53'	113° 12.85'	1.8*	1.4	20	77	12	0.21
101002	15:57:58.58	37° 38.52'	113° 13.05'	1.8*	2.5W	22	79	13	0.26
101002	15:59:30.57	37° 37.76'	113° 12.77'	1.9*	1.0	14	77	12	0.14
101002	16:05:26.70	37° 38.67'	113° 13.10'	2.0*	2.4W	26	75	13	0.24
101002	18:32:40.33	39° 00.19'	111° 22.88'	9.8*	1.5	10	79	21	0.20
101003	07:24:32.32	39° 06.88'	111° 55.74'	19.5	1.0	13	105	22	0.21
101003	17:45:17.07	41° 57.95'	112° 31.61'	2.8*	1.1	23	137	17	0.25
101004	02:01:01.37	38° 05.41'	112° 32.19'	3.9*	0.9	15	107	31	0.26
101005	07:16:07.33	41° 52.93'	112° 42.42'	3.2*	0.4	9	182	13	0.12
101005	21:14:19.21	39° 41.77'	112° 04.83'	2.9*	1.1	8	84	29	0.24
101006	12:27:42.47	39° 24.77'	111° 06.39'	6.2	1.6	13	158	11	0.14
101007	05:19:08.73	39° 42.03'	112° 04.78'	1.4*	0.9	8	90	28	0.14
101007	07:09:00.65	39° 38.85'	110° 30.62'	2.2	0.5	6	129	8	0.08
101007	07:13:24.87	39° 38.16'	110° 24.28'	5.1	0.2	6	103	5	0.09
101008	00:21:34.63	37° 08.33'	111° 53.95'	4.1*	1.5	10	213	50	0.29
101008	03:23:21.13	37° 08.07'	111° 54.02'	2.0*	2.4W	16	116	50	0.37
101008	22:42:38.55	39° 42.35'	112° 07.73'	3.9*	1.4	13	183	28	0.20
101009	03:56:36.36	41° 54.77'	112° 40.71'	9.8*	0.9	14	214	29	0.18
101009	04:38:06.05	39° 22.31'	111° 55.14'	14.8	0.5	12	76	18	0.23
101009	10:06:16.51	39° 42.15'	111° 15.40'	1.7	1.3	19	72	8	0.20
101010	00:03:15.17	42° 00.45'	112° 25.50'	2.5*	0.5	8	150	12	0.24
101010	10:46:03.50	38° 59.63'	111° 21.89'	13.1	1.5	10	119	19	0.24
101010	19:56:31.07	39° 00.36'	111° 22.23'	11.9	1.4	10	78	20	0.16
101011	14:47:00.98	41° 48.92'	112° 42.60'	3.1*	1.1	15	212	24	0.23
101012	04:12:43.74	39° 00.59'	111° 21.85'	12.5	1.8	10	76	20	0.21
101012	09:30:36.99	38° 45.32'	111° 33.42'	1.4*	1.4	17	93	12	0.20
101012	14:25:41.20	37° 27.44'	113° 07.30'	8.5	1.2	12	104	11	0.18
101013	17:52:29.57	39° 00.11'	111° 22.39'	6.6*	1.4W	13	79	20	0.11
101013	20:16:45.16	39° 40.76'	111° 12.47'	0.9	1.3	11	131	4	0.24
101014	04:04:14.45	41° 35.06'	112° 49.67'	8.0*	0.6	14	221	34	0.20
101014	04:42:57.07	39° 00.42'	111° 22.77'	6.2*	1.7	19	53	21	0.17
101014	06:28:46.14	39° 00.29'	111° 22.15'	2.5*	1.6	15	47	20	0.14
101014	11:49:49.44	41° 16.27'	111° 40.25'	12.8	1.0	26	94	24	0.21
101014	12:07:48.76	41° 16.41'	111° 40.38'	11.4*	1.0	27	94	24	0.19
101015	00:37:01.95	38° 02.72'	112° 50.66'	12.0	1.2	18	62	15	0.31
101015	04:28:10.27	39° 06.99'	111° 49.03'	1.4*	1.5W	18	61	17	0.29
101016	10:12:25.84	41° 53.93'	112° 24.04'	6.2	0.6	15	94	7	0.22
101016	11:55:45.03	41° 53.85'	112° 24.35'	3.2	0.0	8	94	8	0.15
101016	14:08:21.18	38° 59.85'	111° 21.54'	4.1*	0.9	7	136	19	0.21
101016	20:44:42.81	38° 48.66'	111° 33.83'	11.7*	1.3	9	189	36	0.15
101017	04:05:04.40	37° 07.43'	111° 53.56'	0.7*	2.1	11	240	54	0.35
101017	07:02:30.08	42° 01.57'	112° 39.35'	6.8*	1.1	20	200	18	0.15
101017	08:54:16.60	38° 42.33'	112° 30.54'	1.5*	1.1	14	113	12	0.25

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2010**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
101017	13:04:20.69	39° 00.75'	111° 22.18'	5.9*	1.6	21	44	20	0.23
101017	13:36:03.50	39° 00.79'	111° 22.42'	9.8*	1.4	10	78	20	0.23
101017	15:47:51.76	39° 44.10'	110° 51.35'	2.9	1.4	11	131	9	0.21
101017	16:38:40.41	41° 53.94'	112° 35.51'	12.4	0.6	14	143	20	0.23
101017	23:39:05.76	39° 00.66'	111° 22.28'	12.0	1.5	13	77	20	0.16
101018	06:45:21.88	41° 15.07'	111° 37.29'	11.8	0.9	23	105	23	0.21
101018	06:57:00.59	41° 52.73'	112° 33.16'	7.8*	1.0	21	126	20	0.17
101018	07:06:56.54	39° 56.14'	111° 58.28'	6.2	1.4	13	89	9	0.24
101018	08:53:15.03	39° 39.70'	110° 24.37'	1.6	0.9	8	123	4	0.27
101020	02:51:06.29	39° 00.60'	111° 21.98'	10.8	1.5	11	64	20	0.23
101020	05:24:21.66	39° 00.28'	111° 22.19'	8.3*	1.6	11	65	20	0.18
101020	05:37:03.88	39° 00.22'	111° 22.32'	3.2*	1.9W	16	45	20	0.22
101020	08:34:10.09	39° 00.76'	111° 22.50'	8.7*	1.7	17	57	21	0.18
101020	09:23:26.56	38° 59.92'	111° 21.99'	3.0*	1.5	13	69	19	0.21
101020	09:50:58.50	39° 00.42'	111° 22.03'	10.5	1.3	10	77	20	0.24
101020	12:26:08.01	39° 00.54'	111° 21.97'	12.5	1.4	11	77	20	0.19
101021	07:29:53.04	39° 00.71'	111° 21.90'	1.3*	1.5	13	74	20	0.20
101021	09:37:24.26	38° 54.26'	112° 05.07'	12.1	1.1	12	128	7	0.21
101021	11:56:43.67	39° 00.45'	111° 22.66'	2.9*	1.5	17	57	20	0.17
101021	12:29:52.75	39° 00.53'	111° 22.38'	0.4*	1.5	14	77	20	0.19
101021	12:43:44.98	39° 00.55'	111° 22.51'	11.8	1.4	11	78	20	0.16
101021	15:38:07.44	39° 00.68'	111° 21.88'	12.4	1.2	11	76	20	0.21
101021	20:39:45.51	39° 00.24'	111° 22.82'	8.1*	1.5	9	79	20	0.15
101021	22:58:10.30	39° 00.46'	111° 22.67'	7.9*	1.7	16	44	20	0.18
101022	09:14:38.20	39° 00.23'	111° 22.52'	8.9*	1.6W	15	46	20	0.16
101022	12:59:14.81	39° 34.84'	112° 08.64'	2.4*	1.1	13	134	23	0.19
101022	20:39:29.27	38° 45.53'	112° 00.64'	1.3*	3.0W	19	104	24	0.23
101023	03:13:55.83	38° 59.88'	111° 22.16'	1.0*	1.3	12	79	19	0.20
101025	06:30:33.38	38° 59.96'	111° 21.83'	11.9	1.9	11	75	19	0.17
101025	07:54:53.74	40° 31.74'	111° 23.53'	12.4	0.7	9	237	6	0.15
101025	14:50:30.32	39° 01.22'	111° 21.30'	2.2*	1.3	10	113	20	0.23
101025	20:26:52.86	40° 02.34'	111° 53.12'	8.3	1.3	14	109	7	0.19
101025	21:17:01.99	39° 00.79'	111° 22.03'	14.0	1.6	12	76	20	0.22
101025	21:34:05.55	40° 01.81'	111° 52.05'	7.1	1.3	15	121	6	0.13
101025	21:54:59.41	40° 02.05'	111° 51.20'	3.5	1.4	20	125	5	0.24
101026	01:07:06.02	39° 00.27'	111° 22.45'	12.1	1.7	15	57	20	0.19
101026	07:14:24.46	37° 38.77'	113° 21.76'	1.1*	1.7	16	105	11	0.22
101026	23:13:29.09	39° 00.12'	111° 22.44'	5.8*	1.6	12	79	20	0.24
101027	11:08:22.56	38° 59.17'	111° 22.45'	1.1*	1.3	13	80	19	0.18
101028	03:52:37.73	38° 24.11'	112° 19.57'	2.4*	1.2	14	113	18	0.19
101028	04:30:25.61	39° 27.84'	111° 13.37'	9.1*	1.4	15	111	19	0.20
101028	22:55:19.93	39° 00.70'	111° 22.40'	9.1*	1.5	16	44	20	0.17
101029	10:07:30.27	41° 32.33'	112° 21.82'	1.8*	0.6	12	112	11	0.24
101029	17:11:56.64	38° 59.97'	111° 21.84'	3.4*	1.5	13	57	19	0.25
101029	23:27:56.92	39° 00.74'	111° 22.22'	3.2*	1.8	11	75	20	0.16

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2010**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
101101	05:15:56.58	39° 00.06'	111° 22.79'	3.2*	1.3	17	45	20	0.24
101101	13:56:18.86	38° 06.87'	112° 43.60'	1.4*	2.1	22	74	24	0.19
101101	21:52:57.64	39° 00.68'	111° 22.47'	6.1*	1.6	18	57	20	0.19
101102	02:08:01.61	38° 05.77'	112° 45.47'	9.8*	1.0	13	73	21	0.24
101102	19:14:41.81	37° 44.61'	112° 38.44'	1.5*	2.0	16	119	25	0.26
101103	01:55:14.07	39° 00.62'	111° 22.59'	2.7*	1.5	18	45	21	0.17
101103	07:53:38.71	39° 00.01'	111° 22.28'	6.3*	1.5	16	58	20	0.17
101103	08:07:09.98	39° 00.52'	111° 22.35'	8.2*	1.5W	21	42	20	0.17
101103	09:14:33.30	38° 59.97'	111° 22.15'	4.5*	1.2	14	66	19	0.16
101103	09:43:48.37	39° 00.46'	111° 21.42'	0.6*	1.4	17	47	19	0.21
101103	14:00:21.73	39° 00.31'	111° 21.38'	4.3*	1.5	13	63	19	0.16
101103	16:21:46.26	38° 59.94'	111° 22.50'	4.6*	1.5	12	79	20	0.20
101103	19:38:21.90	39° 00.92'	111° 20.17'	0.9*	1.6	12	109	18	0.16
101103	22:22:28.83	41° 52.30'	112° 22.42'	8.4	0.5	12	139	8	0.18
101105	07:23:57.63	39° 00.28'	111° 22.59'	2.8*	1.6	15	56	20	0.20
101105	16:45:18.51	39° 00.26'	111° 21.91'	13.6	1.5	10	77	19	0.22
101105	17:30:39.77	41° 01.70'	111° 43.76'	10.2	2.0W	35	50	9	0.23
101105	17:31:28.58	41° 01.57'	111° 43.66'	9.4	2.8W	33	49	9	0.17
101105	17:32:25.30	41° 02.53'	111° 44.12'	11.4	1.1	9	125	9	0.14
101105	19:35:15.22	40° 44.18'	112° 01.85'	6.6	0.6	8	90	12	0.08
101105	21:54:49.42	38° 59.49'	111° 22.25'	1.7*	1.1	11	79	19	0.16
101106	06:17:40.20	39° 00.59'	111° 22.45'	2.8*	1.2	14	65	20	0.21
101106	19:03:44.29	39° 00.46'	111° 21.81'	2.8*	1.6	11	117	26	0.14
101106	20:39:05.14	37° 00.62'	112° 52.73'	11.2*	3.0W	20	177	32	0.39
101107	03:18:58.04	39° 00.77'	111° 20.83'	2.9*	1.5	11	196	32	0.27
101108	01:02:05.67	37° 08.43'	111° 54.46'	0.9*	3.0W	15	116	53	0.41
101108	03:20:07.89	39° 37.79'	111° 37.13'	3.4*	0.8	6	189	22	0.05
101108	11:30:34.94	41° 58.86'	111° 47.95'	1.7*	1.5	16	77	15	0.19
101109	06:26:27.91	39° 00.58'	111° 22.20'	5.5*	1.5	10	95	26	0.23
101109	09:57:17.77	39° 00.93'	111° 21.35'	2.0*	1.5	11	95	27	0.19
101109	10:12:19.01	39° 00.42'	111° 22.42'	1.2*	1.6	14	74	26	0.23
101109	13:14:22.34	41° 25.54'	111° 41.80'	11.5	0.8	13	148	16	0.16
101110	01:04:44.96	41° 28.03'	112° 08.30'	6.2*	0.6	13	97	14	0.20
101110	01:15:40.31	41° 28.10'	112° 08.28'	5.8*	2.4W	32	91	14	0.18
101110	02:41:04.11	37° 27.70'	113° 08.16'	3.7*	1.0	13	112	12	0.19
101110	02:45:49.31	41° 28.01'	112° 08.35'	7.4	0.5	11	127	14	0.12
101110	04:02:24.13	41° 27.91'	112° 08.48'	8.3	1.1	16	84	14	0.12
101110	05:17:02.63	38° 59.76'	111° 22.04'	0.9*	1.2	14	59	19	0.23
101110	13:12:20.06	38° 59.87'	111° 21.53'	6.8*	1.1	15	43	19	0.17
101110	15:47:54.53	39° 00.04'	111° 22.62'	5.0*	1.4	15	57	20	0.22
101110	16:53:54.82	38° 59.88'	111° 22.90'	2.4*	1.4	16	56	20	0.24
101110	18:00:35.76	39° 00.09'	111° 22.35'	5.3*	1.5	15	58	20	0.16
101110	21:35:06.05	39° 45.08'	110° 14.42'	6.9*	1.5	18	150	14	0.19
101111	10:21:36.61	41° 27.75'	112° 08.28'	7.0*	0.8	17	84	14	0.15
101112	03:03:15.51	38° 59.44'	111° 21.77'	3.2*	1.3	13	59	18	0.16



**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2010**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
101112	09:54:48.88	39° 37.38'	111° 05.54'	8.1*	2.1W	24	65	34	0.20
101112	16:53:22.09	39° 00.57'	111° 22.44'	6.4*	1.4	17	44	20	0.19
101113	00:35:33.74	38° 59.91'	111° 22.13'	4.1*	1.4	12	97	19	0.14
101113	10:14:54.36	39° 00.35'	111° 22.14'	8.1*	1.5	17	53	20	0.17
101113	16:38:47.12	39° 00.48'	111° 21.84'	9.0*	1.5	17	55	19	0.22
101113	21:46:22.72	39° 00.58'	111° 22.47'	5.9*	1.5	17	57	20	0.18
101114	00:01:40.16	41° 28.15'	112° 08.55'	5.3*	0.7	13	79	14	0.14
101114	12:33:13.62	39° 00.22'	111° 22.32'	4.6*	1.4	18	57	20	0.15
101115	02:46:41.99	39° 01.50'	111° 21.15'	11.9	1.5	13	101	20	0.24
101115	04:32:26.70	39° 00.86'	111° 22.26'	7.8*	1.5	18	42	20	0.17
101115	18:01:46.51	39° 18.06'	111° 15.30'	1.4	1.1	13	88	4	0.23
101115	22:07:54.17	38° 59.99'	111° 22.29'	8.1*	1.5	13	79	20	0.24
101115	23:57:10.67	39° 47.05'	110° 15.83'	9.8	1.4	14	141	18	0.21
101116	11:21:57.54	38° 02.06'	111° 05.49'	0.0*	1.4	13	161	25	0.29
101116	13:00:48.61	39° 00.23'	111° 22.64'	5.3*	1.5	12	57	20	0.16
101116	21:58:44.85	40° 16.72'	111° 56.55'	1.4	1.4	11	61	4	0.21
101117	02:52:26.91	39° 37.27'	111° 20.17'	12.6*	1.7W	13	123	38	0.15
101117	06:50:37.88	39° 00.31'	111° 22.50'	6.8*	1.2	12	57	20	0.17
101117	19:34:44.07	41° 28.17'	112° 08.85'	2.3*	0.9	13	96	15	0.20
101118	03:09:03.07	38° 52.49'	111° 56.24'	4.4*	1.1	10	104	17	0.12
101118	04:07:05.84	38° 52.06'	111° 55.80'	4.2*	2.0W	24	52	18	0.24
101118	04:46:27.47	38° 12.91'	113° 06.37'	1.5*	1.5	19	108	15	0.35
101118	06:06:13.76	38° 52.22'	111° 56.10'	2.8*	1.4	15	71	17	0.16
101118	06:14:13.12	38° 36.23'	112° 13.94'	0.5*	2.9W	26	50	11	0.25
101118	09:06:04.52	39° 00.41'	111° 22.53'	3.6*	1.4W	17	57	20	0.19
101118	19:24:56.33	39° 00.13'	111° 21.92'	9.9	1.7	14	57	19	0.18
101119	06:33:32.34	39° 00.10'	111° 22.82'	9.8*	1.6	18	58	20	0.22
101119	10:12:07.69	39° 00.01'	111° 20.91'	3.0*	1.4	9	63	18	0.25
101119	11:38:11.43	38° 52.18'	111° 56.85'	9.0	3.0W	23	75	16	0.23
101119	11:45:27.25	38° 52.51'	111° 56.16'	8.6	1.5	16	71	17	0.20
101119	11:57:24.37	39° 00.09'	111° 22.28'	2.3*	1.4	16	58	20	0.18
101119	12:00:57.93	38° 51.70'	111° 56.06'	3.3*	0.8	10	72	18	0.24
101119	12:19:10.37	38° 51.87'	111° 55.47'	3.2*	0.6	11	70	18	0.19
101119	16:35:13.51	40° 47.07'	111° 47.53'	8.3	0.7	12	77	2	0.21
101119	18:05:22.09	39° 00.27'	111° 21.63'	10.1	1.8	10	74	19	0.16
101119	20:47:04.39	38° 51.81'	111° 56.66'	2.6*	1.0	5	122	17	0.10
101119	21:08:16.57	38° 52.51'	111° 56.34'	6.9*	1.1	15	71	17	0.24
101119	21:28:01.56	38° 51.86'	111° 56.63'	10.8	0.7	14	74	17	0.24
101119	22:20:17.60	38° 52.35'	111° 55.91'	4.6*	1.0	16	70	17	0.24
101120	01:17:22.90	38° 59.39'	111° 21.46'	13.3	1.3	12	60	18	0.16
101120	08:33:36.85	38° 51.51'	112° 00.49'	23.6	1.2	9	134	14	0.25
101120	14:31:00.97	36° 53.14'	113° 30.01'	7.1*	2.0	15	177	27	0.26
101120	15:09:36.88	39° 00.34'	111° 24.27'	5.2*	1.2	8	129	22	0.20
101121	03:18:51.94	39° 55.92'	111° 59.11'	5.7	2.2W	32	64	8	0.27
101121	05:23:19.29	39° 00.60'	111° 21.45'	3.8*	1.7	11	59	19	0.23

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2010**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
101121	08:56:12.18	39° 00.04'	111° 21.39'	12.3	1.6	7	76	18	0.11
101121	17:38:25.83	39° 50.02'	111° 06.82'	8.7*	1.8	13	212	23	0.14
101122	03:27:04.01	39° 50.26'	111° 07.04'	7.3*	2.2	16	97	23	0.15
101122	12:07:03.37	39° 49.69'	111° 06.59'	2.6*	1.4	10	174	22	0.09
101122	22:46:38.39	38° 59.91'	111° 22.25'	8.6*	1.6	14	58	19	0.17
101122	23:17:10.38	37° 33.71'	114° 04.74'	3.5*	1.6	13	175	48	0.39
101123	08:35:04.48	39° 00.52'	111° 22.69'	5.6*	1.4	14	94	26	0.17
101124	14:58:21.75	36° 49.08'	111° 47.48'	5.8*	3.0W	16	128	69	0.31
101124	20:22:15.31	38° 59.43'	111° 22.70'	5.2*	1.4	21	44	20	0.16
101125	06:42:50.44	39° 00.13'	111° 22.48'	5.8*	1.1	14	58	20	0.17
101125	07:48:41.68	39° 00.05'	111° 21.92'	7.4*	1.5	20	39	19	0.21
101125	09:39:16.84	39° 00.94'	111° 21.82'	11.9	1.4	13	59	20	0.25
101125	20:03:25.93	39° 00.28'	111° 19.68'	7.1*	1.2	14	62	17	0.26
101125	21:46:36.66	39° 00.53'	111° 22.12'	10.1	1.4	10	77	20	0.18
101126	01:02:12.35	39° 49.96'	111° 07.21'	4.9*	2.2W	29	96	23	0.24
101126	13:26:44.66	41° 28.28'	112° 07.75'	2.5*	0.3	8	137	14	0.13
101126	13:40:32.31	38° 59.79'	111° 21.99'	8.3*	1.4	11	95	19	0.15
101126	14:52:02.09	39° 50.39'	111° 07.13'	4.9*	1.8W	27	97	23	0.14
101126	14:59:40.60	39° 47.36'	111° 04.66'	2.9*	1.3	11	226	20	0.14
101126	15:05:17.51	39° 50.02'	111° 06.98'	10.1*	1.9W	21	101	23	0.17
101126	16:57:39.72	39° 50.19'	111° 07.20'	5.2*	1.9W	26	97	23	0.14
101126	21:17:09.00	39° 50.31'	111° 07.13'	4.6*	1.9W	29	97	23	0.16
101127	00:23:48.57	39° 50.43'	111° 06.98'	9.9*	1.2	16	103	24	0.16
101127	01:14:45.24	39° 50.00'	111° 06.77'	4.1*	1.5	27	97	23	0.20
101128	12:02:08.34	41° 47.96'	112° 46.47'	7.6	0.8	14	208	2	0.17
101129	03:00:49.93	39° 50.17'	111° 06.38'	13.7	1.5	9	176	23	0.21
101129	08:09:11.46	38° 59.72'	111° 22.24'	10.0	1.8	11	59	19	0.21
101129	15:15:51.80	37° 47.97'	112° 59.46'	2.8*	2.0W	17	59	24	0.65
101129	20:13:29.96	37° 47.85'	112° 58.72'	3.0*	1.1	14	88	25	0.37
101130	02:32:02.68	40° 31.99'	110° 52.41'	10.6*	1.7	17	191	35	0.26
101130	10:59:38.32	38° 59.91'	111° 22.46'	5.1*	1.7	16	75	25	0.13
101130	16:02:18.41	39° 00.03'	111° 22.39'	5.9*	1.5W	20	38	20	0.16
101130	19:07:08.49	37° 48.03'	112° 59.13'	3.9*	1.5	16	90	25	0.40
101130	20:44:40.20	37° 48.24'	112° 59.57'	2.2*	1.4	17	84	25	0.34
101201	02:54:41.67	41° 59.08'	111° 48.15'	6.1*	1.4	15	88	15	0.20
101201	02:56:26.23	41° 59.24'	111° 47.57'	1.6*	1.0	19	91	14	0.20
101201	02:57:33.72	41° 58.89'	111° 47.88'	1.5*	2.2W	28	88	15	0.26
101201	03:01:47.11	41° 58.90'	111° 48.01'	2.4*	2.0W	25	87	15	0.19
101201	11:34:38.34	39° 00.08'	111° 22.49'	3.0*	1.6	20	42	20	0.25
101201	11:43:08.53	41° 58.51'	111° 47.86'	1.8*	2.3W	26	83	16	0.15
101201	12:28:36.56	41° 58.92'	111° 47.92'	7.2*	1.1	16	88	15	0.18
101201	13:59:27.18	39° 00.31'	111° 21.90'	9.4*	1.3	13	64	19	0.23
101201	19:13:21.93	39° 00.21'	111° 22.57'	5.1*	1.3W	12	58	20	0.11
101201	23:23:56.03	41° 58.69'	111° 48.49'	3.0*	1.2	9	93	16	0.13
101202	09:02:56.39	39° 00.26'	111° 22.14'	4.5*	1.7	13	58	20	0.15

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2010**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
101202	12:33:44.40	38° 59.33'	111° 22.55'	5.6*	1.2	16	57	19	0.22
101202	18:28:39.37	41° 30.43'	111° 44.64'	16.7	0.6	12	112	19	0.28
101202	20:15:02.44	39° 00.03'	111° 22.63'	10.0	1.3	14	70	20	0.15
101203	05:53:25.47	38° 59.27'	111° 22.64'	8.8*	1.5	12	61	19	0.17
101203	07:12:37.77	39° 40.68'	111° 13.37'	0.0	1.5	10	116	5	0.19
101203	13:29:12.39	39° 41.83'	111° 14.51'	0.3	1.6	16	69	7	0.33
101204	02:37:09.70	41° 50.23'	111° 34.12'	11.8	0.6	11	129	17	0.15
101204	06:12:25.15	41° 50.35'	111° 34.09'	6.4*	0.9	21	130	17	0.20
101204	12:00:22.79	39° 00.01'	111° 22.81'	4.1*	1.5	21	46	20	0.16
101204	14:08:43.15	38° 59.61'	111° 22.45'	4.6*	1.1	17	80	19	0.17
101204	17:54:37.70	38° 28.05'	112° 10.71'	1.3	2.3W	28	49	5	0.25
101204	19:37:19.54	38° 43.56'	111° 32.86'	2.2*	1.4	10	104	12	0.16
101206	05:57:49.29	38° 59.69'	111° 21.79'	4.4*	1.2	14	96	25	0.18
101206	11:20:10.17	39° 00.27'	111° 22.35'	4.6*	1.5	19	74	25	0.23
101206	19:00:08.80	38° 59.93'	111° 22.18'	6.4*	1.4	12	75	25	0.17
101206	22:18:58.33	39° 00.25'	111° 21.99'	5.7*	1.5	14	74	25	0.20
101207	02:46:39.08	38° 58.40'	111° 21.19'	5.7*	1.5	16	77	22	0.21
101207	16:39:05.46	39° 00.07'	111° 22.40'	4.8*	1.7	20	74	25	0.11
101207	19:17:17.61	38° 59.95'	111° 22.90'	4.2*	1.4	19	75	25	0.20
101207	22:27:59.01	38° 59.75'	111° 22.26'	5.8*	1.4	19	75	25	0.19
101207	23:03:33.20	38° 59.93'	111° 22.94'	4.2*	1.6W	20	75	25	0.22
101208	02:14:05.26	38° 59.70'	111° 22.12'	4.4*	1.3	15	75	24	0.15
101208	05:14:41.42	39° 00.15'	111° 22.86'	5.7*	1.7W	21	94	25	0.17
101208	07:25:01.59	39° 00.56'	111° 22.54'	13.5	1.3	9	95	26	0.19
101208	11:28:20.51	39° 43.42'	110° 56.43'	2.0*	1.3	17	60	15	0.20
101208	13:06:33.47	38° 59.42'	111° 22.15'	3.6*	1.2	14	79	24	0.13
101209	01:18:10.38	39° 44.27'	110° 47.73'	2.9	1.4	8	96	9	0.24
101209	02:03:33.67	39° 42.33'	111° 15.47'	1.7	1.6	15	72	9	0.23
101209	03:48:13.27	39° 49.61'	111° 06.85'	2.4*	1.1	9	128	22	0.12
101209	16:35:45.42	39° 39.67'	111° 11.33'	0.2	1.7	13	104	3	0.31
101209	22:06:23.85	39° 08.29'	110° 51.65'	6.2*	1.1	14	80	29	0.17
101209	22:24:50.24	36° 46.80'	113° 42.86'	7.5*	2.0	15	184	45	0.41
101209	22:59:22.96	39° 42.04'	111° 15.65'	1.7	1.3	13	72	8	0.25
101210	10:57:09.69	39° 00.59'	111° 22.07'	14.7	1.3	9	95	26	0.19
101210	11:41:45.85	39° 07.66'	110° 52.18'	6.3*	2.4W	31	51	30	0.25
101210	18:56:42.19	39° 51.57'	110° 19.00'	11.1*	1.6	7	207	22	0.30
101210	21:10:23.02	38° 58.45'	111° 23.67'	19.6	1.4	14	95	22	0.27
101210	22:45:29.34	38° 59.74'	111° 23.34'	4.2*	1.7W	14	95	24	0.18
101210	23:54:03.57	38° 59.61'	111° 22.17'	7.1*	1.5	17	96	24	0.23
101211	03:06:00.68	39° 00.36'	111° 22.58'	2.8*	1.5	16	74	26	0.21
101211	03:16:37.78	39° 07.90'	110° 51.59'	7.6*	1.5	15	81	29	0.18
101211	04:17:49.27	39° 50.16'	111° 02.52'	17.1	1.1	8	101	20	0.04
101211	05:15:06.32	39° 49.11'	111° 07.08'	12.2	1.2	11	152	21	0.32
101211	10:05:46.00	41° 10.84'	111° 33.09'	1.7*	1.3	20	143	30	0.23
101212	06:30:08.31	40° 28.70'	111° 24.27'	8.9	1.7	24	87	6	0.17

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2010**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
101212	11:11:59.07	39° 00.68'	111° 22.12'	15.1	1.6	9	95	26	0.17
101212	11:13:23.88	39° 08.29'	110° 51.95'	7.5*	1.5	17	76	30	0.21
101212	11:22:10.39	39° 07.24'	110° 48.52'	17.1	1.0	11	109	25	0.15
101212	18:02:34.88	38° 37.04'	112° 35.40'	3.5*	1.1	17	59	12	0.18
101212	18:33:27.31	39° 49.65'	111° 06.85'	13.7	1.1	10	156	22	0.27
101212	20:32:29.72	38° 59.93'	111° 22.49'	2.8*	1.4	9	96	25	0.16
101213	05:50:24.87	39° 08.27'	110° 51.65'	10.0*	1.3	19	80	28	0.21
101213	11:20:23.91	39° 42.17'	111° 15.42'	2.2	1.8	14	70	8	0.33
101213	11:35:08.94	39° 40.09'	110° 29.40'	1.8	1.6	8	109	9	0.20
101213	21:34:59.81	38° 58.50'	111° 24.20'	2.0*	1.4	12	74	22	0.21
101213	22:32:42.35	42° 27.40'	111° 22.22'	2.8*	1.7	19	92	41	0.20
101214	03:05:27.01	41° 57.41'	112° 42.42'	6.5*	0.5	12	200	21	0.18
101214	05:26:32.62	38° 59.44'	111° 22.58'	5.3*	1.6	18	75	24	0.26
101214	09:29:19.17	39° 00.54'	111° 21.86'	8.9*	1.3	17	95	26	0.19
101214	09:35:07.18	38° 59.53'	111° 22.00'	6.3*	1.5	12	96	24	0.19
101214	10:32:31.51	38° 59.77'	111° 22.36'	6.2*	1.6	19	96	25	0.21
101214	11:56:37.91	38° 59.76'	111° 22.71'	3.2*	1.7	18	75	24	0.18
101214	12:25:40.28	38° 59.85'	111° 22.06'	7.1*	1.1	12	96	25	0.16
101214	12:30:49.73	38° 59.92'	111° 22.39'	0.4*	1.4	14	96	25	0.21
101214	17:33:59.13	39° 00.99'	111° 22.85'	15.4	1.4	9	93	27	0.28
101214	19:17:08.31	41° 58.99'	111° 47.82'	1.4*	2.2W	18	166	28	0.23
101214	20:57:59.20	37° 37.98'	113° 12.98'	7.3	1.3	15	78	12	0.27
101214	21:25:19.48	39° 00.22'	111° 22.56'	3.8*	1.5	16	95	25	0.23
101214	23:24:42.74	38° 59.95'	111° 23.08'	13.7	1.5	15	95	25	0.20
101215	03:28:33.12	38° 59.99'	111° 22.61'	3.7*	1.7	18	95	25	0.19
101215	08:41:34.15	38° 59.72'	111° 21.92'	8.0*	1.2	10	96	25	0.21
101215	11:03:18.37	39° 43.08'	111° 14.53'	0.2	1.6	20	73	9	0.25
101215	12:07:12.70	41° 59.28'	112° 25.10'	3.5*	0.6	11	208	10	0.18
101215	13:30:24.58	39° 00.19'	111° 22.55'	4.1*	1.8W	22	74	25	0.16
101215	14:29:52.35	41° 58.17'	111° 48.10'	1.1*	1.5	19	169	28	0.16
101215	14:38:04.94	41° 58.98'	111° 47.79'	2.3*	1.6	20	173	28	0.16
101215	15:16:21.85	41° 58.36'	111° 48.38'	6.0*	1.4	16	169	27	0.17
101215	17:39:42.76	41° 58.83'	111° 47.49'	2.0*	1.1	12	90	15	0.11
101215	20:15:13.58	40° 41.41'	111° 46.78'	7.1	0.5	15	91	3	0.14
101216	00:16:36.73	38° 59.75'	111° 23.87'	18.4	1.6	6	148	24	0.13
101216	05:19:49.18	39° 42.11'	111° 15.73'	0.7	1.6	21	73	8	0.29
101216	07:43:46.11	38° 59.97'	111° 22.20'	4.6*	1.5	17	75	25	0.18
101216	08:50:52.47	38° 59.95'	111° 22.07'	7.7*	1.4	13	75	25	0.13
101216	10:17:13.28	39° 00.78'	111° 21.64'	3.2*	1.2	9	111	27	0.14
101216	11:19:58.99	38° 59.70'	111° 22.91'	3.1*	1.3	12	95	24	0.22
101216	13:24:27.56	38° 59.76'	111° 22.48'	6.7*	1.0W	10	80	24	0.19
101216	17:01:08.82	39° 00.35'	111° 22.64'	8.1*	1.8	10	94	26	0.15
101216	22:37:03.10	38° 59.94'	111° 22.07'	9.3*	1.8	8	78	19	0.16
101217	02:23:02.67	38° 59.69'	111° 21.73'	3.5*	2.2	11	59	19	0.16
101217	07:49:06.84	39° 00.00'	111° 22.26'	4.7*	1.5	15	58	20	0.17

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2010**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
101217	10:05:33.44	41° 59.33'	111° 47.96'	1.2*	1.2	11	87	14	0.26
101217	13:11:05.47	41° 58.92'	111° 47.80'	1.3*	1.7	15	84	15	0.18
101217	16:44:15.29	38° 59.91'	111° 22.78'	3.6*	1.7	18	43	20	0.14
101217	17:17:06.84	38° 59.95'	111° 22.79'	4.8*	2.1W	17	58	20	0.15
101217	18:48:52.05	39° 20.07'	111° 53.34'	15.9	0.7	16	75	20	0.18
101217	21:13:33.50	39° 00.06'	111° 22.80'	6.5*	1.6W	17	58	20	0.16
101217	23:47:36.82	38° 59.54'	111° 20.72'	3.2*	2.2	7	113	17	0.15
101218	00:02:33.38	41° 59.09'	111° 47.96'	1.5*	1.1	12	89	15	0.24
101218	00:49:23.29	38° 59.81'	111° 22.43'	6.0*	1.7	9	79	20	0.12
101218	03:38:17.78	41° 47.28'	112° 30.74'	7.7	0.3	8	137	10	0.23
101218	21:53:35.45	38° 59.74'	111° 22.24'	7.0*	1.6	7	96	25	0.10
101219	01:39:54.31	39° 00.17'	111° 22.44'	12.1*	1.6	10	95	25	0.08
101219	11:11:13.48	38° 59.64'	111° 22.16'	2.2*	1.6W	16	96	24	0.18
101219	13:15:23.05	39° 50.05'	111° 06.83'	8.4*	1.6	20	97	23	0.18
101219	15:05:27.24	41° 58.79'	111° 48.12'	3.2*	0.9	9	172	20	0.10
101219	18:39:20.67	39° 00.08'	111° 22.55'	9.6*	1.8	13	95	25	0.12
101219	22:24:17.98	41° 56.23'	112° 22.70'	6.8	0.5	16	92	5	0.26
101220	14:13:04.42	38° 59.76'	111° 22.30'	1.4*	1.5	13	96	25	0.10
101220	14:29:09.65	38° 59.71'	111° 21.96'	1.7*	1.4	11	96	25	0.20
101220	16:35:37.25	38° 50.14'	111° 37.05'	16.1	1.2	14	74	18	0.28
101220	20:05:38.00	40° 40.69'	111° 36.32'	9.0	0.6	13	87	10	0.14
101220	20:40:50.98	39° 00.45'	111° 22.60'	11.2*	1.2	10	94	26	0.13
101221	06:12:10.09	39° 00.15'	111° 22.81'	2.4*	1.8	20	94	25	0.19
101221	06:48:27.93	41° 04.68'	111° 06.32'	1.5*	1.2	19	180	23	0.23
101222	18:57:27.14	39° 25.58'	111° 12.69'	7.6	1.5	10	115	14	0.12
101222	19:28:40.01	39° 25.62'	111° 11.71'	0.2*	1.4	15	84	15	0.26
101223	07:46:17.52	41° 58.25'	111° 48.06'	1.7*	1.7	20	110	28	0.13
101223	09:50:21.17	38° 59.81'	111° 22.05'	6.0*	1.1	13	96	25	0.17
101223	09:54:49.15	38° 59.86'	111° 22.68'	6.8*	1.7	17	95	25	0.16
101223	10:40:06.10	39° 42.13'	111° 14.85'	0.2	1.6	27	70	8	0.23
101223	11:19:38.55	39° 00.21'	111° 23.08'	7.2*	1.7	16	74	25	0.15
101223	15:35:04.23	39° 00.19'	111° 22.39'	6.2*	1.8	10	95	25	0.21
101223	21:31:13.35	41° 59.30'	111° 48.55'	3.2*	1.1	7	109	14	0.10
101223	23:01:22.61	39° 00.19'	111° 22.69'	11.1*	2.1W	18	74	25	0.12
101223	23:43:20.42	39° 00.06'	111° 22.98'	6.5*	2.2W	19	74	25	0.17
101223	23:54:47.04	39° 00.11'	111° 22.61'	5.8*	2.0W	18	74	25	0.11
101224	00:13:58.27	38° 59.64'	111° 22.35'	6.9*	1.6	6	96	32	0.12
101224	04:48:29.68	39° 25.99'	111° 13.14'	3.0*	1.5	9	84	15	0.23
101224	05:43:00.88	38° 59.34'	111° 22.50'	2.7*	1.6	8	95	32	0.14
101224	17:47:20.63	39° 42.04'	111° 15.57'	1.7	1.7W	17	72	8	0.23
101224	23:16:18.83	39° 00.18'	111° 21.85'	7.9*	1.9	12	95	25	0.18
101225	00:06:03.39	38° 59.68'	111° 21.83'	2.4*	1.7	8	96	32	0.18
101225	07:12:36.92	41° 04.75'	111° 03.33'	15.5	1.8	28	134	22	0.24
101225	23:55:00.90	41° 54.25'	112° 35.26'	9.4*	0.9	12	144	21	0.18
101226	04:35:47.56	39° 42.92'	110° 36.11'	0.2	1.3	8	83	3	0.21

**Table 2. Earthquakes in the Utah Region: October 1–December 31, 2010**

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
101226	12:34:26.45	39° 00.10'	111° 22.42'	6.2*	1.5	14	95	25	0.25
101226	23:09:03.63	39° 07.47'	111° 29.49'	2.1*	1.1	9	125	15	0.12
101227	11:55:10.32	40° 45.81'	112° 04.20'	10.2	1.8W	19	65	13	0.15
101227	12:37:24.38	39° 00.40'	111° 22.56'	14.2	1.1	9	95	26	0.09
101227	13:40:21.35	39° 00.59'	111° 23.31'	17.7	1.4	7	94	26	0.12
101227	15:59:26.17	41° 52.27'	112° 41.39'	2.6*	1.0	12	215	12	0.20
101227	21:43:56.39	38° 44.00'	111° 21.64'	13.0	0.8	11	89	8	0.18
101227	22:05:33.49	38° 59.91'	111° 22.42'	6.6*	1.5	15	75	25	0.15
101227	22:32:25.27	41° 58.02'	112° 50.12'	7.6*	0.8	14	246	21	0.15
101228	00:40:58.15	40° 45.71'	112° 03.87'	9.4	1.2	30	57	13	0.21
101228	02:38:50.24	39° 39.83'	110° 29.58'	0.1	1.8	17	105	9	0.24
101228	03:32:12.34	38° 59.77'	111° 22.85'	4.3*	1.1	14	59	20	0.21
101228	04:22:05.09	38° 02.63'	113° 23.24'	2.6*	1.5	15	118	29	0.22
101228	04:29:27.44	38° 02.32'	113° 23.29'	0.8*	1.7	18	119	28	0.28
101228	14:54:00.44	39° 35.94'	112° 04.08'	3.8*	0.8	10	82	24	0.16
101228	16:01:54.30	38° 59.63'	111° 22.97'	4.8*	1.5	18	75	24	0.22
101228	16:11:03.08	41° 58.73'	111° 47.35'	1.7*	1.5	16	172	20	0.15
101228	21:06:00.32	38° 59.77'	111° 23.03'	5.9*	1.5W	20	75	24	0.15
101229	08:11:49.72	39° 00.43'	111° 22.25'	8.2*	1.2	10	95	26	0.13
101229	12:37:31.49	39° 40.88'	111° 13.77'	1.7	1.9	10	178	5	0.21
101230	02:01:41.84	38° 59.84'	111° 22.29'	7.9*	1.7	14	75	25	0.15
101231	04:47:57.76	39° 25.93'	111° 12.92'	6.2*	1.1	10	83	15	0.17

number of earthquakes = 382

\* 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, 2010**

<b>UURSN Code</b>	<b>Location</b>	<b>SEED Station</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	2272	HN[ZEN]	3	NP	40° 41.98'	111° 47.62'	1515	FBA23	Etna	Digital	NSMP, ANSS
2286	Roosevelt Elementary School Salt Lake City, UT	2286	HN[ZEN]	3	NP	40° 42.08'	111° 52.01'	1314	EpiSensor	K2	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	Etna	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	Etna	Digital	NSMP, ANSS
7227	City Maintenance Yard Gunnison, UT	7227	HN[ZEN]	3	NP	39° 09.35'	111° 49.17'	1568	EpiSensor	Etna	Digital	NSMP, ANSS
7228	Juab School District Nephi, UT	7228	HN[ZEN]	3	NP	39° 43.27'	111° 49.49'	1576	EpiSensor	Etna	Digital	NSMP, ANSS
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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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'	1445	EpiSensor	K2	Digital	ANSS
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
BCE	Book Cliffs East, UT	BCE	EHZ	4	UU	39° 36.79'	110° 24.51'	2666	L4C	K2	Digital	Utah
			EN[ZEN]						EpiSensor			
BCS	Brigham City Maintenance Shop Brigham City, UT	BCS	EN[ZEN]	3	UU	41° 30.71'	112° 01.98'	1303	EpiSensor	K2	Digital	ANSS
BCU	Brigham City, UT	BCU	EN[ZEN]	3	UU	41° 30.74'	111° 58.93'	1676	EpiSensor	K2	Digital	ANSS
BCW	Book Cliffs West, UT	BCW	EHZ	4	UU	39° 43.82'	110° 44.55'	2614	L4C	K2	Digital	Utah
			EN[ZEN]						EpiSensor			
BEI	Bear River Range, ID	BEI	EHZ	1	UU	42° 07.00'	111° 46.94'	1859	L4C	PSN	Analog	USGS
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	Q330	Digital	ANSS
			HH[ZEN]	3					Trillium 120			
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
BMN	Battle Mountain, NM	BMN	BHZ	1	NN	40° 25.89'	117° 13.31'	1594	*	*	Digital	UNR
BMUT	Black Mountain, UT	BMUT	EHZ	1	UU	41° 57.49'	111° 14.05'	2243	S13	PSN	Analog	USGS
BON	Boundary Peak, NV	BONR	SHZ	1	NN	37° 57.31'	118° 18.10'	2582	*	*	Digital	UNR
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	Q330	Digital	Utah
			EN[ZEN]	3					EpiSensor			
BSS	Butlerville Substation Salt Lake City, UT	BSS	EN[ZEN]	3	UU	40° 37.45'	111° 49.37'	1411	EpiSensor	K2	Digital	ANSS
BTU	Barney Top, UT	BTU	EHZ	1	UU	37° 45.34'	111° 52.46'	3235	S13	PSN	Analog	Utah



UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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
BYU	Brigham Young University Provo, UT	BYU	EN[ZEN]	3	UU	40° 15.17'	111° 38.97'	1421	EpiSensor	K2	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	ANSS-130	Digital	USGS
			EN[ZEN]	3					Applied Mems			
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	Basalt	Digital	Utah, USGS
			EN[ZEN]	3					Episensor			
CRMZ	Chrome Mountain, MT	CRMT	EHZ	1	MB	45° 27.35'	110° 08.41'	2941	*	*	Analog	MBMT
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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
DCM	Dugout Coal Mine, UT	DCM	EHZ	1	UU	39° 41.70'	110° 35.00'	2537	L4C	K2	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	*	*	Digital	USGS
			EH[ZEN]	6	UU				S13	PSN	Analog	Utah, USGS
			EL[ZEN]									
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]	4	UU	39° 48.84'	110° 48.92'	2268	S13	PSN	Analog	USGS
			ELZ									
			EN[ZEN]	3					FBA23	K2	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
FLU	Fool's Peak, UT	FLU	EHZ	1	UU	39° 22.69'	112° 10.29'	1951	18300	PSN	Analog	USGS
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
GCN	Grand Canyon, AZ	GCN	EHZ	1	AR	36° 02.64'	112° 07.68'	2294	*	*	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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
GMU	Granite Mountain, UT	GMU	EH[ZEN]	4	UU	40° 34.53'	111° 45.79'	1829	S13	PSN	Analog	USGS
			ELZ									
GMV	Granite Mountain Vault Sandy, UT	GMV	EN[ZEN]	3	UU	40° 34.40'	111° 45.79'	1829	EpiSensor	K2	Digital	ANSS
GRD	Gardner Farm, UT	GRD	EHZ	1	UU	40° 35.93'	111° 55.47'	1323	Ranger	PSN	Analog	USGS
GRR	Grays Lake, ID	GRR1	EHZ	1	IE	42° 56.28'	111° 25.32'	2207	*	*	Digital	INL
GZU	Grizzly Peak, UT	GZU	EH[ZEN]	4	UU	41° 25.53'	111° 58.50'	2646	S13	PSN	Analog	USGS
			ELZ									
HCO	Holladay City Offices Holladay, UT	HCO	EN[ZEN]	3	UU	40° 40.07'	111° 49.38'	1362	EpiSensor	K2	Digital	ANSS
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
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
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						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			

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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
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
JVW	Jordan Valley Water District Well, Murray, UT	JVW	EN[ZEN]	3	UU	40° 37.95'	111° 54.46'	1315	Applied Mems	ANSS-130	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			
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
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
LMU	Lake Mountain, UT	LMU	EN[ZEN]	3	UU	40° 18.91'	111° 55.92'	1593	EpiSensor	K2	Digital	ANSS

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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	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						EpiSensor		
MAB	Mapleton Ambulance Building Mapleton, UT	MAB	EN[ZEN]	3	UU	40° 07.85'	111° 34.67'	1440	EpiSensor	K2	Digital	ANSS
MBUT	Moab, UT	MBUT	EN[ZEN]	3	UU	38° 32.00'	109° 30.59'	1376	FBA23	Etna	Digital	Utah
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
MGU	Meadow Brook Golf Course Salt Lake City, UT	MGU	EHZ	1	UU	40° 40.89'	111° 55.09'	1291	Ranger	PSN	Analog	USGS
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						EpiSensor		
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
MMU	Miners Mountain, UT	MMU	EHZ	1	UU	38° 11.57'	111° 17.66'	2387	S13	PSN	Analog	Utah
MOMZ	Monida, MT	MOMT	EHZ	1	MB	44° 35.60'	112° 23.66'	2220	*	*	Analog	MBMT
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
MTLO	Mt. Logan, AZ	MTL	EHZ	1	AR	36° 21.18'	113° 11.94'	2418	*	*	Analog	NAU
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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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 3ESP	72A-08	Digital	ANSS
			HH[ZEN]	3								
NMU	North Mineral Mountain, UT	NMU	EH[ZEN]	4	UU	38° 30.99'	112° 51.00'	1853	S13	PSN	Analog	Utah
			ELZ									
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	PSN	Analog	USGS
OCP	Orem City Park, Orem, UT	OCP	EN[ZEN]	3	UU	40° 17.87'	111° 41.44'	1464	EpiSensor	K2	Digital	ANSS
OF2	Ogden Fire Station ° 2 Ogden, UT	OF2	EN[ZEN]	3	UU	41° 13.70'	111° 56.92'	1358	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
P03	Wild Steer, Paradox Basin, CO	PV03	EHZ	1	RE	38° 15.26'	108° 50.88'	1975	*	*	Analog	USBR
P15	Potato Mountain Paradox Basin, CO	PV15	EHZ	1	RE	38° 20.51'	108° 28.86'	2280	*	*	Analog	USBR
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	PCUT	HH[ZEN]	3	UU	37° 26.63'	112° 18.66'	2834	Trillium 120 PA-23	SMART- 24	Digital	Utah
			EN[ZEN]	3								
PNSU	Preston Nutter Ranch, Sunnyside, UT	PNSU	HH[ZEN]	3	UU	39° 28.38'	110° 44.40'	2743	Trillium 240	Q330	Digital	Utah

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
PRN	Pahroc, Range, NV	PRN	SHZ	1	NN	37° 24.40'	115° 03.05'	1402	*	*	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	PSN	Analog	USGS
QLMZ	Earthquake Lake, MT	QLMT	EHZ	1	MB	44° 49.84'	111° 25.80'	2064	*	*	Analog	MBMT
RBUZ	Red Butte Canyon, UT	RBU	EHZ	1	UU	40° 46.85'	111° 48.50'	1676	L4C	PSN	Analog	USGS
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
RIV	Public Works Building Riverton, UT	RIV	EN[ZEN]	3	UU	40° 31.16'	111° 56.05'	1347	EpiSensor	K2	Digital	ANSS
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
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			
RRI2	Red Ridge, ID	RRI2	BH[ZEN]	3	IW	43° 20.84'	111° 19.20'	2547	3ESP	RT-130	Digital	ANSS
RSUT	Red Spur, UT	RSUT	EHZ	1	UU	41° 38.31'	111° 25.90'	2682	S13	PSN	Analog	USGS
SAIU	South Antelope Island, UT	SAIU	EHZ	1	UU	40° 51.29'	112° 10.89'	1384	L4C	PSN	Analog	USGS
			EHZ	1						Basalt		
			EN[ZEN]	3							EpiSensor	
SCC	Salt Lake Community College	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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
SGU	Sterling, UT	SGU	EHZ	1	UU	39° 10.94'	111° 38.68'	2357	18300	PSN	Analog	USGS
SHP	Sheep Range, NV	SHP	EHZ	1	NN	36° 30.33'	115° 09.61'	1590	*	*	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
SNUT	Stanbury North, UT	SNUT	EHZ	1	UU	40° 53.10'	112° 30.52'	1652	18300	PSN	Analog	USGS
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			
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
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
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			
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
TRC	Troy Canyon, NV	TRC	BHZ	1	NN	38° 20.98'	115° 35.11'	1815	*	*	Digital	UNR



UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
TRS	Tooele County Radio Shop, Tooele, UT	TRS	EN[ZEN]	3	UU	40° 30.83'	112° 18.63'	1568	EpiSensor	K2	Digital	ANSS
TUC	Tucson, AZ	TUC	BH[ZEN]	3	US	32° 18.58'	110° 47.05'	906	*	*	Digital	USGS
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
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
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
VES	Valley Elementary School, Huntsville, UT	VES	EN[ZEN]	3	UU	41° 15.72'	111° 46.20'	1501	Applied Mems	ANSS-130	Digital	ANSS
VNL	Vernal, UT	VNL	EN[ZEN]	3	UU	40° 27.48'	109° 32.89'	1648	FBA23	Etna	Digital	Utah
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
WCN	Washoe, NV	WCN	HHZ	1	NN	39° 18.10'	119° 45.38'	1500	*	*	Digital	UNR
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	PSN	Analog	USGS
			EHZ	1					EpiSensor	Basalt	Digital	
			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	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	PSN	Analog	USGS
			EHZ	1					EpiSensor	Basalt	Digital	
			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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
WTU	Western Traverse Mountains, UT	WTU	EH[ZEN]	4	UU	40° 27.29'	111° 57.21'	1552	S13	PSN	Analog	USGS
			ELZ						Applied Mems	ANSS-130	Digital	ANSS
			EN[ZEN]	3								
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			
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			
YJCZ	Joseph's Coat (YNP), WY	YJC	EHZ	1	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	EHZ	1	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	EH[ZEN]	3	WY	44° 44.38'	110° 09.40'	2774	S13	PSN	Analog	USGS
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
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			
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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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			
			EN[ZEN]	3					Titan	Q330	Digital	
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
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			

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

Network Statistics: 718 data channels from 250 stations were being recorded at the end of this report period

## EXPLANATION OF TABLE

**UURSN Code:** Station code 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:

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/stations/networks.txt>>> for information about registered seismograph network codes. Network codes referenced in this table:

Network Code	Network name; Network operator or responsible organization
AR	Northern Arizona Seismic Network, Northern Arizona University
LB	Leo Brady Network; Sandia National Laboratory
IE	Idaho National Laboratory

IU	IRIS/USGS Network; USGS Albuquerque Seismological Laboratory
IW	Intermountain West Network
MB	Montana Regional Seismic Network; Montana Bureau of Mines and Geology
NN	Western Great Basin; University of Nevada, Reno
NP	National Strong Motion Program; 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 short-period seismometer
S13, 18300	Geotech S13 or 18300 short-period seismometer
Ranger	Kinematics 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	Kinematics FBA-23 accelerometer
EpiSensor	Kinematics EpiSensor accelerometer
Applied Mems	Applied Mems accelerometer
PA-23	Geotech PA-23 accelerometer
Trillium 120	Nanometrics Trillium 120 broadband seismometer
Trillium 240	Nanometrics Trillium 240 broadband seismometer
Titan	Nanometrics Titan accelerometer
Observer	Refraction Technology (REF TEK) 151 Observer broadband seismometer
<b>Digitizer</b>	<b>Description</b>
K2	Kinematics Altus Series K2 (19-bit resolution field digitizer)
Etna	Kinematics 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)

<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

**NETWORK CHANGES DURING OCTOBER 1-DECEMBER 31, 2010**

Note                      During this period, the total number of channels has increased by sixteen due to ARRA upgrades in Utah (stations LTU, SAIU, WCU, and WMUT).