

EARTHQUAKE ACTIVITY IN THE UTAH REGION

Preliminary Epicenters

July 1 – September 30, 2011

Prepared by the University of Utah Seismograph Stations and funded by
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December 1, 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. $36^{\circ} 45' - 42^{\circ} 30'$ N, long. $108^{\circ} 45' - 114^{\circ} 15'$ 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.
- 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:

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

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).

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July 1 – September 30, 2011

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During the three-month period July 1 through September 30, 2011, the University of Utah Seismograph Stations (UUSS) located 330 earthquakes within the Utah region (Figure 1). The total includes six earthquake in the magnitude 3 range and 28 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. Seven earthquakes were reported felt during the report period (see Table 1, a cumulative tabulation of earthquakes during 2011 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>.

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). 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 2011 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 _L 3.2	July 4	21:22 MDT	4 mi SSW of Santaquin, UT (felt, CIIM intensity map, ShakeMap , see Table 1)
M _L 3.0	July 5	08:59 MDT	19 mi SSW of Panguitch, UT (felt, CIIM intensity map, ShakeMap , see Table 1)
M _L 3.3	July 22	01:05 MDT	4 mi SSW of Santaquin, UT (felt, CIIM intensity map, ShakeMap , see Table 1)
M _L 3.7	July 25	21:38 MDT	10 mi SW of Saint Charles, ID (ShakeMap , see Table 1)
M _L 3.0	July 28	16:34 MDT	15 mi W of Emery, UT
M _L 3.5	September 28	00:31 MDT	20 mi N of Tropic, UT (felt, CIIM intensity map, see Table 1)

Other Notable Seismicity

During the report period, there were three notable spatial cluster of natural earthquake activity (labeled A-C 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 36 earthquakes ($0.3 \leq M \leq 1.6$) occurred about 17 miles WSW of Bear River City, UT. Sixteen of these events, including a magnitude 1.6 shock, occurred between July 24 and July 29.
- B. A cluster of 37 earthquakes ($0.7 \leq M \leq 3.3$) occurred about four miles S of Santaquin, UT. Eighteen of these events, including a magnitude 3.3 shock, occurred between July 14 and July 24.
- C. A cluster of 12 earthquakes ($0.9 \leq M \leq 3.5$) occurred about twenty miles N of Tropic, UT. Eleven of these events, including a magnitude 3.5 shock, occurred on September 28.

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 103 located shocks ($-0.5 \leq M \leq 2.9$) that occurred throughout the report period.

Seismicity of the Utah Region

July 1, 2011 - September 30, 2011

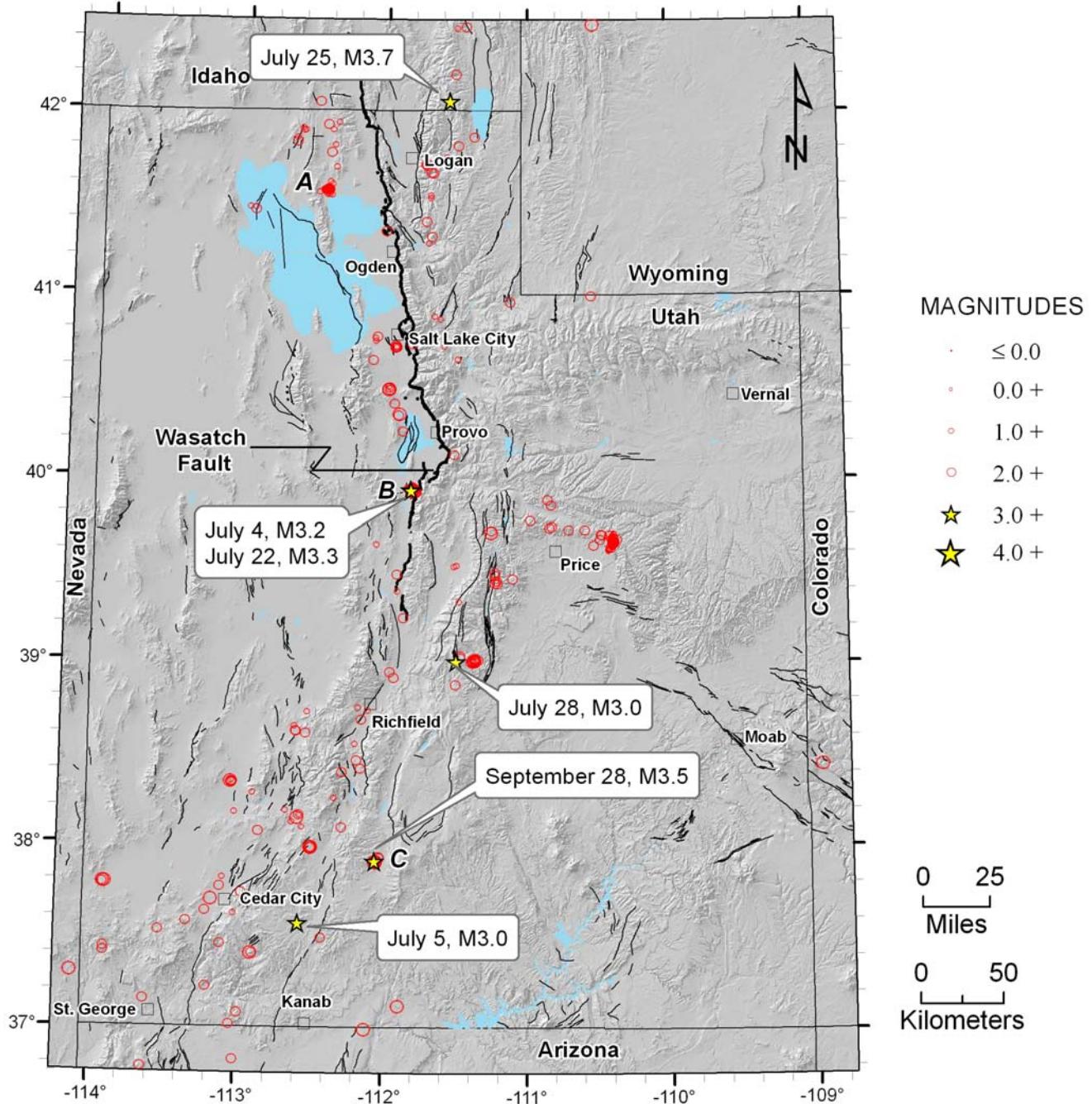


Figure 1. Earthquake epicenters, located by the University of Utah Seismograph Stations, superposed on a map of Quaternary (geologically young) faults compiled by the Utah Geological Survey. The Wasatch fault is shown in bold. Earthquakes of magnitude 3.0 and larger are labeled by local date and size.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

Table 1
EARTHQUAKES FELT AND/OR GENERATING A SHAKEMAP IN THE UTAH REGION
January 1, 2011 to September 30, 2011

Date	Time [†]	Felt Information [‡]	Latitude	Longitude	Magnitude [§]
January 03	05:06 MST 12:06 UTC	Utah. <i>CIIM</i> . Felt (IV) at Kingston, Joseph, Panguitch, and Modena (?), UT, (III) at Marysvale, Beaver, Sevier, and Beryl (?), UT, and (II) at Greenville, Antimony, Monroe, Torrey, Loa, Parowan, Richfield, Cedar City, Milford, Kanab, Saint George, Saratoga Springs, Draper, Tooele, Sandy, Salt Lake City, Centerville, and Garden City (?), UT, Page, Flagstaff, AZ, Mesquite, Henderson, Las Vegas, NV, Eagle (?), ID and National City (?), CA.	38° 14.84'	112° 20.39'	M _L 4.6
January 03	13:23 MST 20:23 UTC	Utah. <i>CIIM</i> . Felt (IV) at Beaver, UT, (III) at Monroe and Teasdale, UT and (II) at Nephi, UT.	38° 14.27'	112° 20.29'	M _L 3.2
January 05	20:18 MST	Utah. <i>CIIM</i> . Felt (II) at Salt Lake City (?), UT.	38° 15.67'	112° 19.99'	M _L 3.1
January 06	03:18 UTC				
January 06	15:31 MST 22:31 UTC	Utah. <i>CIIM</i> . Felt (II) at Beaver (?), AZ.	38° 15.73'	112° 20.03'	M _L 3.5
January 07	15:51 MST 22:51 UTC	Utah. <i>CIIM</i> . Felt (II) at Beaver, UT.	38° 15.42'	112° 19.83'	M _L 3.3
January 12	01:46 MST 08:46 UTC	Utah. <i>CIIM</i> . Felt (II) at Marysvale and Cedar City, UT.	38° 14.31'	112° 20.43'	M _L 3.6
January 20	14:59 MST 21:59 UTC	Utah. <i>CIIM</i> . Felt (III) at Centerfield and Saratoga Springs (?), UT and (II) at Gunnison, South Jordan, La Verkin, Saint George, UT and Lakeside (?), AZ	37° 46.58'	111° 54.57'	M _L 3.3

January 25 January 26	22:10 MST 05:10 UTC	Idaho. <i>CIIM</i> . Felt (III) at Thatcher, Grace, Paris and Preston, ID and Salt Lake City (?), UT and (II) at Bern, Montpelier, Soda Springs, Lava Hot Springs, Downey, Bancroft, Pocatello, Ellis (?), Boise (?), ID and Torrington (?), WY.	42° 25.44'	111° 29.96'	M _L 3.7
February 11 February 12	19:38 MST 02:38 UTC	Utah. <i>CIIM</i> . Felt (III) at Lehi and Saratoga Springs (?), UT and (II) at Eagle Mountain, Draper, Magna, Pleasant Grove, Salt Lake City, UT.	40° 22.89'	111° 55.24'	M _L 2.4
February 13	02:25 MST 09:25 UTC	Utah. <i>CIIM</i> . Felt (III) at Saratoga Springs and Midvale, UT and (II) at Eagle Mountain, Herriman, South Jordan, Orem, West Jordan, Springville, UT and Phoenix (?), AZ.	40° 23.00'	111° 55.15'	M _L 2.7
February 13 February 14	18:09 MST 01:09 UTC	Utah. <i>CIIM</i> . Felt (III) at Draper and Saratoga Springs, UT and (II) at Lehi, Riverton, Eagle Mountain, Herriman, Pleasant Grove, South Jordan, Salt Lake City, UT and Phoenix (?), AZ.	40° 23.10'	111° 55.44'	M _L 2.8
April 11 April 12	21:34 MDT 03:34 UTC	Utah. <i>CIIM</i> . Felt (II) at Cedar City, UT.	37° 46.58'	113° 06.74'	M _L 2.2
April 12	00:11 MDT 06:11 UTC	Utah. <i>CIIM</i> . Felt (III) at Cedar City, UT.	37° 46.34'	113° 06.96'	M _L 2.7
April 13	04:17 MDT 10:17 UTC	Utah. <i>CIIM</i> . Felt (II) at Cedar City, UT.	37° 45.15'	113° 07.88'	M _L 2.7
July 04 July 05	21:22 MDT 03:22 UTC	Utah. <i>CIIM</i> . Felt (III) at Payson, UT and (II) at Mona, Santaquin, Provo, Nephi, Sandy, Salt Lake City, Richfield, and Monroe, UT.	39° 55.82'	111° 49.26'	M _L 3.2

July 05	08:59 MDT 14:59 UTC	Utah. <i>CIIM</i> . Felt (III) at Alton, and Brian Head, UT and (II) at Panguitch, Escalante, and Provo (?), UT.	37° 34.16'	112° 34.48'	M _L 3.0
July 22	01:05 MDT 07:05 UTC	Utah. <i>CIIM</i> . Felt (III) at Santaquin, Salem, Spanish Fork, Cedar Valley, Nephi, and Mount Pleasant, UT and (II) at Mona and Payson, UT.	39° 55.92'	111° 49.39'	M _L 3.3
July 25 July 26	21:38 MDT 03:38 UTC	Idaho. <i>CIIM</i> . Felt (IV) at garden City, UT, (III) at Saint Charles, Franklin, ID, Providence, Salt Lake City (?), UT and (II) at Fish Haven, Preston, Montpelier, ID, Richmond, Lewinston, Hyde Park, Smithfield, Logan, Collinston, Farmington, Centerville, Bountiful, Salem (?), UT.	42° 03.13'	111° 33.51'	M _L 3.7
August 12	16:07 MDT 22:07 UTC	Utah. <i>CIIM</i> . Felt (II) at Riverton, Herriman, South Jordan, Draper, West Jordan, Lehi, Sandy, Salt Lake City, Magna, and Provo, UT.	40° 28.66'	111° 59.02'	M _L 2.5
September 06	08:33 MDT 14:33 UTC	Utah. <i>CIIM</i> . Felt (II) at Sandy (?), UT and Baker (?), NV.	39° 00.19'	111° 22.39'	M _L 2.9
September 28	00:31 MDT 06:31 UTC	Utah. <i>CIIM</i> . Felt (II) at Escalante, Panguitch, Saint George (?), and Salt Lake City (?), UT.	37° 54.58'	112° 03.23'	M _L 3.5

† 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). For a complete list of reported information see the *CIIM* website.

§ 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

September 30, 2011

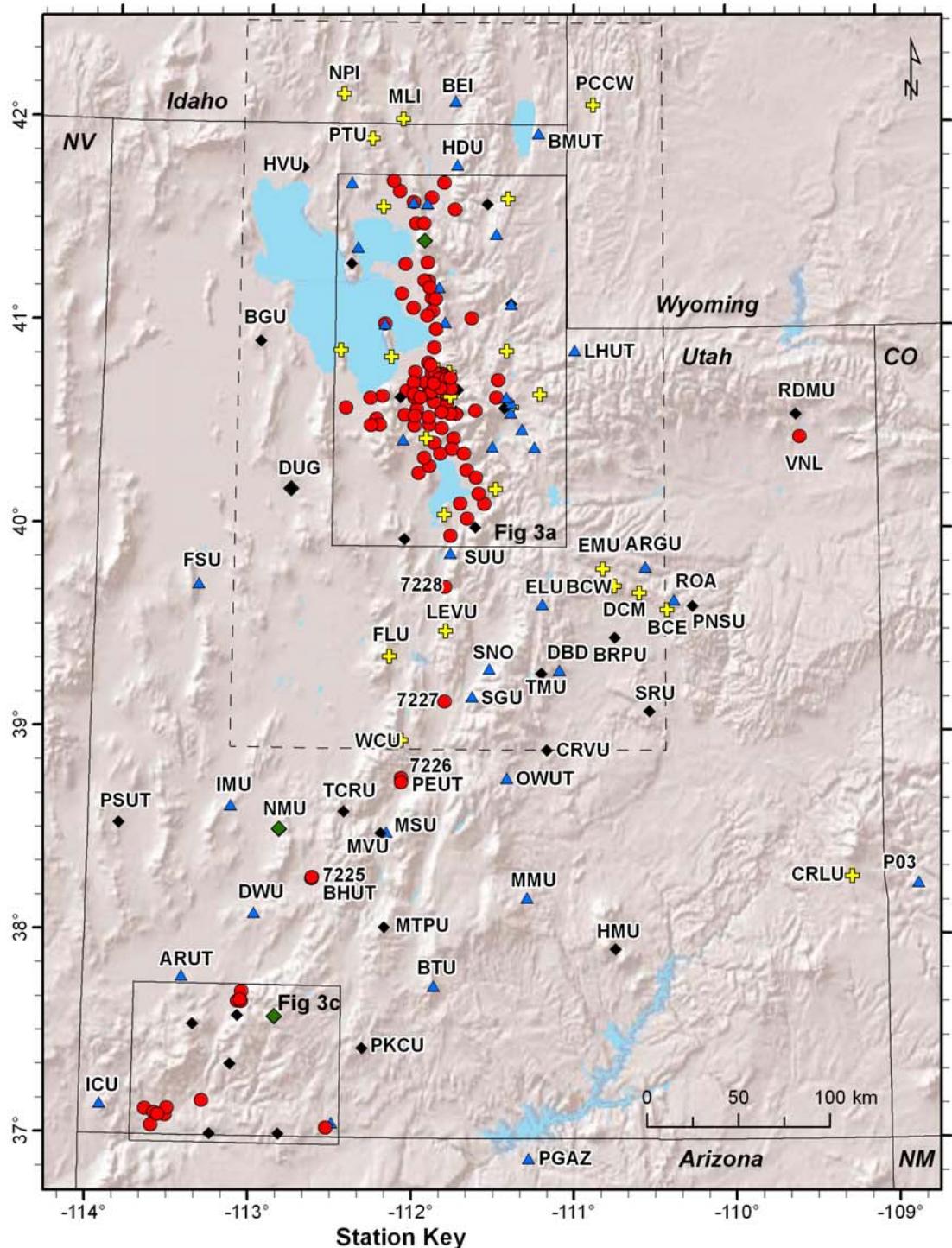


Figure 2

Utah Urban Seismic Network (September 30, 2011)

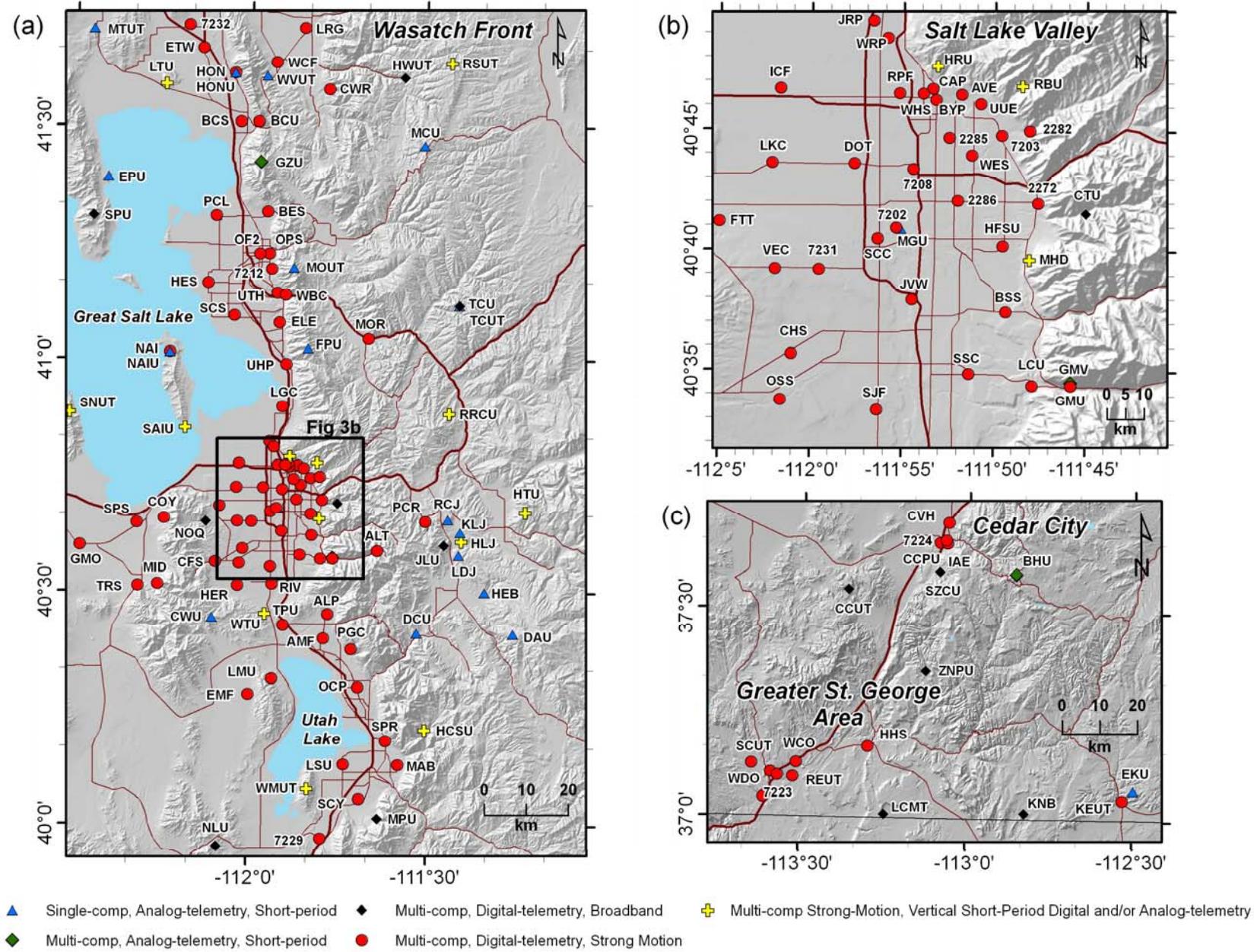


Figure 3

Table 2. Earthquakes in the Utah Region: July 1–September 30, 2011

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
110701	10:15:55.92	38° 15.19'	112° 20.33'	3.9*	0.3	7	104	27	0.25
110701	11:56:25.56	39° 55.72'	111° 49.26'	3.1	1.6	22	56	5	0.24
110701	13:45:55.92	39° 42.60'	111° 15.28'	1.7	1.6W	15	73	9	0.31
110701	13:50:36.58	39° 38.63'	110° 23.90'	0.1	1.5W	11	92	4	0.17
110701	19:45:45.13	42° 11.76'	111° 31.16'	12.0	1.0	9	250	24	0.25
110701	22:50:53.47	39° 39.06'	110° 23.64'	1.6	1.5	11	99	3	0.27
110702	08:48:00.49	39° 55.10'	111° 48.85'	8.5	1.4	12	108	4	0.17
110702	09:24:11.58	39° 38.52'	110° 24.27'	0.0	1.8	13	93	4	0.20
110702	11:02:37.26	38° 59.41'	111° 22.85'	9.4*	1.4	10	81	20	0.15
110702	20:25:18.54	39° 55.88'	111° 49.27'	6.7	2.5W	29	54	5	0.23
110703	03:04:06.67	39° 56.38'	111° 48.85'	3.5	1.3	17	55	6	0.13
110703	04:10:03.52	39° 26.65'	111° 12.87'	2.7*	0.8	8	118	16	0.13
110703	05:17:27.65	39° 38.79'	110° 24.24'	0.0	1.7W	11	94	4	0.17
110703	14:30:55.01	39° 38.64'	110° 23.85'	0.1	0.4	5	192	3	0.18
110703	14:40:32.08	39° 39.70'	110° 23.59'	1.5	-0.1	5	176	2	0.37
110704	09:40:16.93	42° 28.12'	110° 31.77'	1.5*	2.1W	10	149	57	0.20
110704	11:42:40.06	39° 38.73'	110° 24.07'	0.5	1.7W	14	92	4	0.20
110704	13:00:25.35	40° 38.30'	112° 05.91'	2.9	1.6	10	132	2	0.11
110704	14:24:50.55	39° 56.33'	111° 48.89'	1.1	1.1	11	118	6	0.21
110705	03:22:06.63	39° 55.82'	111° 49.26'	6.5	3.2W	46	54	5	0.23
110705	09:16:34.63	39° 39.16'	110° 24.21'	2.2	1.7	11	105	4	0.35
110705	14:59:04.35	37° 34.16'	112° 34.48'	9.6*	3.0W	19	52	25	0.24
110705	16:20:32.85	36° 59.39'	112° 07.02'	12.5*	2.1	9	113	35	0.13
110705	16:21:26.14	39° 40.35'	110° 23.54'	1.6	0.2	5	162	3	0.52
110705	20:37:48.48	39° 39.33'	110° 23.87'	0.0	1.4	9	132	3	0.12
110705	21:58:01.55	39° 40.14'	110° 23.16'	1.5	0.8	6	149	2	0.41
110706	12:04:11.12	39° 38.95'	110° 24.06'	0.0	1.5W	11	98	3	0.20
110706	17:01:19.75	41° 18.74'	111° 41.09'	10.2*	1.1	19	87	22	0.21
110707	07:50:20.79	39° 55.90'	111° 49.02'	6.5	2.1W	31	85	5	0.19
110707	23:40:06.19	41° 32.76'	112° 26.11'	3.4*	0.8	6	131	17	0.09
110709	05:43:09.99	39° 55.73'	111° 48.98'	5.8	1.9W	25	68	5	0.22
110709	13:39:37.02	39° 55.38'	111° 48.80'	8.0	1.2	10	99	4	0.14
110709	15:26:21.25	41° 49.63'	112° 39.93'	6.7	1.1	13	212	11	0.15
110709	15:57:23.56	41° 27.27'	112° 57.31'	3.7*	1.1	12	197	39	0.19
110709	19:01:05.10	38° 56.52'	111° 57.68'	12.0	1.3	9	118	11	0.16
110709	21:47:41.59	37° 17.59'	114° 07.66'	7.0*	2.0	8	131	24	0.10
110709	22:56:50.60	41° 33.77'	112° 26.66'	3.2*	0.8	8	130	16	0.29
110709	23:59:02.36	41° 32.39'	112° 24.51'	3.1*	0.6	6	124	15	0.06
110710	01:03:25.86	41° 33.86'	112° 26.77'	2.9*	0.6	9	131	16	0.26
110710	02:57:23.41	41° 33.32'	112° 29.94'	6.1*	0.5	5	264	18	0.13
110710	05:08:02.48	39° 39.34'	110° 24.01'	0.1	1.6	13	111	3	0.25
110710	05:27:55.12	41° 33.49'	112° 26.82'	2.4*	0.9	13	132	17	0.28
110710	12:51:02.99	39° 55.20'	111° 48.82'	4.6	1.0	10	120	4	0.22
110711	04:39:41.99	39° 39.65'	110° 23.92'	1.5	0.1	5	177	3	0.56
110711	04:40:10.09	39° 40.17'	110° 24.24'	3.0	0.4	5	171	4	0.69

Table 2. Earthquakes in the Utah Region: July 1–September 30, 2011

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
110711	05:30:00.85	38° 16.91'	112° 54.10'	13.7	0.9	10	124	21	0.25
110711	07:18:00.02	39° 40.75'	110° 23.11'	1.5	0.3	5	155	3	0.52
110711	07:18:09.52	41° 43.23'	111° 32.14'	10.5	0.7	9	107	13	0.18
110711	09:25:26.98	39° 39.68'	110° 23.82'	1.5	0.5	5	177	3	0.53
110711	09:29:56.21	39° 39.78'	110° 23.99'	0.2	1.5	8	128	3	0.24
110711	14:43:45.48	39° 54.72'	111° 48.50'	6.5	1.5	15	101	3	0.23
110711	22:29:18.14	39° 55.16'	111° 49.07'	5.7	1.4	15	105	4	0.23
110712	06:38:17.70	39° 39.84'	110° 22.18'	0.8	1.4	7	163	1	0.14
110712	14:05:26.15	39° 56.38'	111° 49.29'	1.1	1.3	12	113	6	0.10
110712	17:52:51.65	39° 54.95'	111° 47.17'	4.1	1.4	12	83	3	0.29
110712	21:34:46.45	39° 41.34'	110° 28.56'	1.6	1.6W	12	129	9	0.25
110713	09:28:01.64	39° 55.91'	111° 48.67'	4.9	2.3W	19	81	5	0.22
110713	10:52:49.25	41° 36.68'	112° 25.24'	2.0*	0.5	5	203	11	0.13
110714	01:35:45.15	39° 56.09'	111° 49.30'	1.4	1.4	13	121	6	0.26
110714	05:32:40.66	39° 40.74'	110° 24.22'	3.5	0.6	5	157	4	0.86
110714	06:23:51.52	41° 33.02'	112° 26.18'	3.3*	0.9	8	130	16	0.22
110714	06:40:24.92	39° 41.53'	110° 29.05'	2.3	1.5	6	127	9	0.29
110714	12:39:47.28	38° 54.49'	111° 56.03'	5.6*	1.7	11	65	15	0.10
110714	19:00:59.39	39° 40.11'	110° 24.41'	1.7	1.9W	13	136	4	0.38
110714	19:47:19.28	39° 55.68'	111° 48.63'	7.6	1.6	15	98	5	0.24
110714	19:49:16.44	39° 41.11'	110° 24.03'	2.2	0.4	5	155	4	0.83
110714	19:49:35.48	39° 40.59'	110° 24.53'	2.8	0.4	5	164	4	0.91
110714	21:25:50.45	41° 33.67'	112° 26.69'	3.0*	0.7	8	131	17	0.21
110714	22:22:25.45	39° 55.86'	111° 48.24'	9.1	1.2	10	96	5	0.13
110715	05:48:51.05	40° 42.67'	111° 55.90'	5.5	0.8	13	111	10	0.14
110715	08:22:48.43	40° 43.33'	111° 56.20'	1.9*	1.0	12	99	13	0.19
110715	13:37:54.15	39° 56.38'	111° 49.10'	1.5	1.2	10	116	6	0.17
110715	15:09:11.23	40° 42.74'	111° 55.97'	4.1	1.6	23	69	10	0.17
110715	17:04:58.00	40° 42.71'	111° 56.18'	4.8*	1.3	16	69	10	0.21
110715	17:11:17.03	39° 55.91'	111° 48.86'	8.5	0.9	5	163	5	0.05
110715	17:26:01.57	40° 42.57'	111° 55.95'	3.2*	0.9	10	112	13	0.12
110716	06:28:50.54	39° 55.62'	111° 49.11'	6.9	1.2	15	120	5	0.20
110716	12:57:47.12	39° 41.21'	110° 23.91'	3.5	0.2	5	156	4	0.87
110716	13:36:27.79	39° 41.23'	110° 24.02'	2.2	0.1	5	155	4	0.89
110716	13:43:34.56	38° 44.87'	112° 10.72'	9.8*	0.3	5	141	25	0.08
110716	13:49:05.88	39° 42.26'	110° 23.64'	4.3	-0.5	5	168	5	0.94
110716	13:49:25.63	39° 41.38'	110° 23.95'	2.7	0.1	5	158	4	0.91
110716	15:06:41.33	40° 42.73'	111° 56.40'	3.9*	1.6	34	41	10	0.23
110716	15:19:14.47	40° 42.35'	111° 56.44'	4.4*	1.3	19	71	11	0.22
110716	17:04:17.82	39° 55.35'	111° 48.03'	6.2	2.3W	28	68	4	0.24
110716	18:50:48.63	39° 26.94'	111° 06.34'	3.5*	1.3W	7	89	15	0.23
110716	21:55:29.05	41° 48.41'	111° 29.86'	4.4*	1.4	17	143	20	0.24
110717	00:04:09.31	39° 56.04'	111° 48.76'	1.4	1.8W	31	90	5	0.24
110717	21:23:43.86	39° 55.91'	111° 47.56'	1.2	1.4	10	83	5	0.27
110717	22:03:00.31	36° 49.48'	113° 00.47'	15.3	1.5	10	235	27	0.37

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DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
110718	01:04:41.08	38° 24.82'	112° 09.51'	0.2*	1.1	14	70	11	0.14
110718	13:28:51.75	39° 55.27'	111° 48.26'	3.2	1.3	12	90	4	0.24
110718	16:49:37.99	39° 56.17'	111° 50.41'	1.5*	1.5	8	95	16	0.22
110718	23:40:05.10	41° 33.92'	112° 26.51'	1.9*	1.3	15	97	16	0.22
110718	23:48:27.16	41° 33.83'	112° 26.59'	2.5*	0.7	11	127	16	0.19
110719	05:14:36.76	41° 34.88'	112° 26.49'	2.1*	0.5	9	95	14	0.15
110719	05:17:37.89	37° 24.36'	112° 54.05'	1.0*	2.4W	21	58	21	0.23
110719	07:08:10.51	39° 41.86'	110° 23.66'	3.7	-0.1	5	163	5	1.00
110719	08:09:23.54	39° 41.88'	110° 23.64'	3.7	0.9	5	164	5	1.00
110719	10:41:53.01	41° 55.17'	112° 26.61'	5.5*	1.2	16	123	23	0.26
110719	12:01:59.28	39° 41.81'	110° 23.57'	4.2	0.7	5	164	5	0.96
110719	13:08:22.97	39° 55.12'	111° 47.79'	8.3	1.0	8	120	3	0.12
110719	16:18:35.31	39° 57.57'	111° 48.67'	2.9	0.7	6	101	8	0.22
110719	18:34:28.43	39° 40.29'	110° 23.80'	0.1	1.5	8	147	3	0.49
110719	19:05:51.56	39° 25.33'	111° 12.69'	9.6	1.6	5	252	14	0.14
110720	10:41:55.89	38° 43.82'	112° 06.47'	3.9*	0.7	6	127	25	0.31
110720	22:28:31.74	39° 54.92'	111° 48.51'	6.8	1.1	12	123	3	0.22
110721	12:04:34.66	38° 20.68'	113° 03.06'	3.9*	0.8	10	135	26	0.14
110721	12:09:23.55	41° 42.29'	111° 43.96'	3.2*	1.0	9	120	11	0.18
110721	12:10:53.37	41° 42.52'	111° 43.49'	2.4*	1.2	9	126	11	0.21
110721	13:47:27.41	39° 56.00'	111° 49.15'	1.5	1.5	10	112	6	0.21
110721	13:48:07.41	39° 56.28'	111° 48.83'	1.4	1.8	10	119	6	0.21
110721	22:41:57.73	41° 41.97'	111° 44.58'	3.9*	0.8	10	100	12	0.28
110721	23:11:17.56	40° 15.06'	111° 52.95'	2.1	1.4	8	113	8	0.12
110722	06:44:12.63	40° 42.97'	111° 35.39'	7.0	0.7	23	64	14	0.20
110722	07:05:35.17	39° 55.92'	111° 49.39'	5.2	3.3W	37	77	6	0.24
110723	08:21:36.96	38° 20.34'	113° 03.06'	2.9*	1.1	12	135	26	0.21
110723	23:22:11.63	37° 37.38'	113° 01.21'	8.1	0.8	12	66	7	0.15
110724	02:33:24.77	41° 33.53'	112° 26.45'	1.9*	0.8	16	127	17	0.21
110724	07:33:45.76	38° 19.96'	113° 02.86'	2.9*	1.0	10	134	26	0.21
110724	11:37:09.76	41° 33.93'	112° 26.46'	0.9*	1.4	19	97	16	0.19
110724	11:40:11.02	41° 34.13'	112° 27.94'	3.0*	0.3	8	186	16	0.09
110724	12:11:24.02	41° 34.12'	112° 28.02'	2.9*	0.4	8	187	16	0.14
110724	12:32:19.48	41° 34.26'	112° 27.19'	2.9*	0.7	9	146	15	0.19
110724	16:15:48.58	41° 34.47'	112° 25.67'	2.9*	0.8	10	93	15	0.31
110724	16:47:23.89	41° 33.57'	112° 26.45'	3.0*	0.5	8	130	17	0.24
110724	17:41:28.61	39° 55.46'	111° 48.83'	0.7	1.1	15	113	5	0.23
110724	17:46:04.76	41° 34.22'	112° 26.98'	2.2*	0.8	12	97	15	0.17
110724	20:50:49.32	38° 23.58'	112° 17.27'	2.4*	1.2	12	105	16	0.21
110724	22:12:51.99	41° 34.04'	112° 26.76'	2.2*	0.6	11	97	16	0.22
110725	00:03:33.58	38° 43.37'	112° 31.90'	2.1*	0.8	10	155	15	0.23
110725	07:48:46.38	40° 57.25'	111° 07.40'	16.9	1.9W	19	128	13	0.20
110725	07:50:30.61	39° 41.36'	110° 25.54'	13.1	1.1	5	155	6	0.16
110725	10:19:59.76	41° 33.88'	112° 26.81'	3.1*	0.6	9	131	16	0.20
110725	10:40:55.49	38° 20.32'	113° 03.37'	1.8*	2.6W	18	135	26	0.24

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DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
110725	13:42:27.78	41° 34.19'	112° 27.72'	3.4*	0.8	8	184	16	0.10
110725	17:38:57.93	39° 51.04'	110° 50.07'	8.3	1.4	7	224	4	0.24
110726	03:38:26.94	42° 03.13'	111° 33.51'	1.1*	3.7W	31	71	29	0.26
110726	09:54:31.42	41° 34.09'	112° 27.07'	2.8*	0.5	7	179	16	0.15
110727	00:48:14.24	41° 34.74'	112° 25.83'	4.9*	0.5	9	194	15	0.29
110727	13:36:48.14	37° 44.07'	112° 58.10'	2.9*	1.8W	19	73	19	0.20
110727	21:11:00.80	41° 33.67'	112° 27.93'	3.9*	0.7	7	180	17	0.17
110728	22:34:55.71	39° 00.04'	111° 29.90'	0.7*	3.0W	17	83	24	0.23
110728	23:38:08.65	39° 52.85'	110° 51.66'	7.1	1.7	8	235	8	0.23
110729	01:03:43.69	39° 01.20'	111° 28.30'	4.2*	1.5W	7	93	24	0.07
110729	01:32:17.01	41° 33.82'	112° 26.47'	2.3*	0.4	8	130	16	0.23
110729	02:17:24.42	39° 01.77'	111° 28.23'	5.2*	1.8	6	90	23	0.19
110729	06:38:45.62	41° 33.87'	112° 25.93'	2.9*	1.6	19	95	16	0.22
110729	06:40:01.66	39° 36.97'	110° 25.12'	3.9	0.3	5	217	7	0.68
110729	08:12:10.43	39° 36.53'	110° 25.54'	5.9	0.4	5	223	8	0.87
110730	13:02:21.22	39° 38.13'	110° 24.20'	0.2	0.4	5	199	4	0.21
110730	18:25:44.82	38° 20.15'	113° 02.95'	1.4*	1.6	14	77	26	0.21
110730	22:34:34.51	39° 22.97'	111° 54.80'	15.2	0.8	6	135	16	0.15
110731	00:06:46.18	38° 36.45'	112° 32.54'	1.9	1.0	10	175	8	0.15
110731	06:43:04.31	41° 16.61'	111° 42.37'	12.7	0.9	23	86	22	0.14
110731	11:30:04.60	38° 26.13'	108° 57.21'	4.4*	2.1W	5	225	22	0.18
110731	23:10:00.18	37° 38.11'	113° 12.95'	2.0*	1.0	10	85	12	0.15
110801	01:28:43.34	38° 59.66'	111° 23.63'	13.1	1.1W	9	94	24	0.09
110801	02:32:23.81	39° 39.63'	110° 23.09'	1.5	0.0	5	176	2	0.37
110801	04:52:40.63	39° 55.19'	111° 48.97'	5.4	1.1	9	124	4	0.20
110801	11:19:35.17	39° 00.44'	111° 22.32'	12.7*	1.8	8	95	26	0.09
110801	12:13:02.76	39° 42.90'	110° 35.91'	0.2	1.3	7	97	3	0.20
110802	02:46:54.37	38° 07.29'	112° 37.69'	3.9*	0.7	9	85	32	0.18
110802	06:08:01.98	39° 42.94'	110° 42.73'	6.1	1.7	16	72	11	0.18
110802	21:12:24.77	41° 34.25'	112° 26.03'	2.2*	0.8	13	94	15	0.21
110803	04:06:16.75	39° 56.42'	111° 48.67'	1.5	1.8W	15	100	6	0.21
110803	14:42:04.35	41° 34.16'	112° 25.91'	2.5*	1.0	13	124	16	0.24
110803	18:12:48.82	39° 44.91'	110° 47.36'	7.0	-0.1	5	171	8	0.15
110804	03:19:36.92	39° 55.30'	111° 49.20'	5.3	1.1	10	105	5	0.19
110804	03:40:44.81	38° 09.68'	112° 34.92'	3.9*	1.6	17	69	37	0.26
110805	23:57:07.33	40° 28.57'	111° 58.55'	9.0	1.5	12	85	3	0.14
110806	04:59:15.77	39° 39.18'	110° 23.56'	1.6	-0.1	5	184	3	0.33
110806	05:22:09.47	39° 37.82'	110° 24.28'	0.2	0.1	5	204	5	0.34
110806	06:09:28.57	39° 37.15'	110° 25.07'	3.0	0.3	5	215	7	0.63
110806	11:01:32.66	40° 29.37'	111° 58.46'	6.9	0.8	15	96	4	0.23
110806	19:35:07.53	39° 42.09'	111° 15.36'	2.2	2.0W	21	72	8	0.26
110806	23:45:46.72	40° 28.70'	111° 58.96'	7.4	2.2W	36	58	4	0.20
110807	02:05:08.04	40° 29.30'	111° 58.55'	6.3	1.0	25	78	4	0.22
110807	09:17:46.35	39° 37.85'	110° 24.31'	0.2	0.0	5	204	5	0.31
110807	09:24:07.01	39° 37.79'	110° 24.09'	0.3	0.5	5	204	5	0.31

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DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
110807	09:35:29.73	39° 37.92'	110° 24.26'	0.3	0.1	5	203	5	0.26
110807	09:36:54.73	39° 37.63'	110° 24.39'	0.1	0.5	5	206	5	0.26
110807	09:47:07.83	39° 37.68'	110° 24.13'	0.2	0.1	5	206	5	0.35
110807	10:41:55.60	39° 26.28'	111° 13.05'	2.5*	1.2	8	118	16	0.19
110807	11:01:19.28	39° 38.33'	110° 24.30'	0.6	-0.2	5	197	4	0.21
110807	12:56:28.03	39° 39.05'	110° 23.46'	1.6	0.8	5	185	3	0.32
110808	05:23:09.22	39° 37.77'	110° 24.20'	0.3	0.8	5	204	5	0.25
110808	12:50:12.26	41° 33.91'	112° 26.59'	2.2*	1.5	15	97	16	0.25
110809	15:22:39.07	39° 54.83'	111° 48.92'	6.9	1.5	7	120	4	0.12
110809	21:06:15.25	39° 37.94'	110° 24.32'	0.3	0.4	5	203	5	0.24
110810	08:50:08.26	37° 00.96'	113° 02.30'	11.5	1.3	7	187	18	0.30
110810	09:55:33.88	37° 24.34'	113° 54.23'	2.2*	1.6	8	203	29	0.32
110810	09:56:27.88	39° 38.97'	110° 23.63'	1.6	1.0	7	136	3	0.29
110810	20:41:22.48	41° 44.87'	111° 34.71'	7.7*	0.1	6	120	16	0.07
110811	04:29:59.11	39° 38.50'	110° 23.97'	1.7	0.9	7	140	4	0.38
110811	04:29:59.08	37° 25.80'	113° 54.38'	3.9*	1.6	10	223	31	0.26
110811	05:25:04.63	38° 32.99'	112° 11.94'	6.7	0.9	10	106	5	0.17
110811	18:02:46.98	40° 43.50'	111° 49.12'	1.6	1.2	12	145	6	0.22
110812	08:11:10.00	39° 36.99'	110° 25.34'	3.1	0.3	5	217	7	0.79
110812	22:07:41.46	40° 28.66'	111° 59.02'	7.2	2.5W	43	47	4	0.23
110813	00:36:57.89	41° 34.40'	112° 25.09'	2.4*	0.6	8	194	14	0.28
110813	00:37:10.37	41° 34.05'	112° 24.72'	4.4*	0.9	8	195	14	0.32
110813	03:09:52.51	38° 05.52'	112° 17.14'	2.2*	1.3	14	75	11	0.25
110813	11:00:40.79	41° 23.58'	111° 43.51'	9.0*	1.0	16	65	20	0.17
110814	01:28:39.17	41° 31.42'	111° 41.56'	10.2	0.8	9	185	14	0.04
110814	01:55:50.72	41° 32.34'	111° 41.64'	10.4	0.4	9	179	13	0.06
110814	22:50:28.06	39° 46.09'	110° 58.84'	12.9	1.0	5	282	15	0.27
110815	12:21:37.33	41° 41.55'	112° 22.67'	3.2	0.8	5	181	7	0.24
110815	20:32:52.90	38° 11.11'	112° 40.46'	3.9*	0.9	12	84	30	0.29
110816	13:50:28.82	39° 01.07'	111° 21.83'	15.1	1.2	6	94	27	0.16
110816	15:32:30.67	38° 10.41'	113° 01.39'	1.6	0.9	10	127	8	0.26
110817	07:19:35.80	39° 38.38'	110° 24.20'	2.2	1.3	8	94	4	0.37
110817	07:20:06.01	39° 38.25'	110° 24.23'	0.6	0.6	5	199	4	0.20
110817	11:34:18.52	40° 44.68'	112° 04.74'	9.3	0.0	7	141	11	0.22
110817	11:51:36.91	38° 37.18'	112° 36.70'	1.5*	1.3	13	112	14	0.24
110817	14:38:26.99	38° 36.96'	112° 36.58'	4.4*	1.0	11	137	14	0.18
110817	15:17:52.25	39° 25.45'	111° 13.71'	6.5*	1.8	17	85	14	0.14
110817	15:59:01.33	40° 46.06'	112° 04.07'	7.3	1.6	14	79	14	0.17
110817	17:04:01.37	38° 38.70'	112° 37.19'	2.5*	0.1	6	231	16	0.17
110817	18:24:18.21	40° 45.66'	112° 04.95'	7.8	0.8	9	97	12	0.15
110818	01:00:02.88	41° 20.51'	112° 00.77'	1.9	1.2	14	99	10	0.16
110818	10:53:33.57	38° 08.65'	112° 35.75'	1.1*	2.2W	19	55	35	0.34
110818	16:01:28.98	41° 51.76'	112° 37.96'	3.8*	--	5	202	15	0.21
110819	08:53:45.24	37° 04.76'	112° 59.19'	13.2	1.7	17	77	16	0.26
110819	10:42:04.13	39° 00.33'	111° 21.70'	12.8*	1.3W	8	95	26	0.09

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110819	16:42:35.60	39° 00.27'	111° 21.98'	11.3*	1.1W	7	95	26	0.06
110820	10:16:02.22	41° 33.82'	112° 26.39'	1.9*	1.5	21	96	16	0.23
110820	15:12:55.04	38° 09.62'	112° 34.73'	3.9*	0.8	13	112	37	0.24
110820	15:53:32.16	39° 36.79'	110° 25.79'	3.9	0.3	5	221	8	0.80
110820	23:11:29.21	39° 39.95'	110° 29.34'	1.8	1.5	10	108	9	0.22
110821	12:48:53.21	39° 31.49'	111° 29.83'	3.9*	0.8	8	151	23	0.24
110821	13:39:24.39	39° 31.10'	111° 30.84'	5.2*	0.7	7	187	22	0.22
110822	04:40:58.99	41° 33.81'	112° 25.98'	1.8*	0.8	19	95	16	0.29
110822	09:44:30.52	40° 59.43'	110° 32.76'	0.7*	1.6	12	266	67	0.24
110823	01:38:17.09	41° 35.95'	112° 24.28'	1.9*	0.5	11	116	13	0.23
110823	06:54:54.82	39° 43.57'	110° 50.65'	4.2*	1.2	6	121	10	0.68
110823	09:26:30.06	39° 39.18'	110° 23.31'	1.6	0.5	5	183	2	0.34
110823	16:41:05.63	42° 02.69'	112° 30.05'	1.3*	0.9	6	236	20	0.15
110824	02:06:10.53	38° 05.79'	112° 33.54'	3.9*	0.7	8	104	33	0.27
110824	14:42:46.21	38° 14.63'	112° 19.72'	3.9*	0.0	8	127	26	0.19
110825	00:54:17.34	41° 39.44'	111° 40.61'	11.6	1.5	17	98	18	0.24
110825	10:27:30.78	39° 00.15'	111° 21.65'	6.4*	1.4W	11	95	25	0.16
110826	00:33:34.17	41° 53.64'	112° 24.23'	6.2	0.7	13	169	8	0.14
110827	00:27:08.24	37° 24.24'	112° 53.34'	1.3*	1.5	14	84	21	0.22
110827	21:20:59.53	39° 38.79'	110° 23.35'	1.6	1.4	7	97	3	0.28
110828	23:08:57.95	41° 54.16'	112° 37.35'	7.3*	0.9	11	208	19	0.25
110829	06:10:50.28	39° 39.21'	110° 23.60'	1.6	0.1	5	183	3	0.33
110830	06:19:59.23	42° 26.91'	111° 30.57'	7.1*	0.7	10	282	43	0.23
110830	17:46:41.77	39° 38.26'	110° 24.29'	0.2	0.6	5	198	4	0.21
110831	05:46:36.02	39° 43.95'	110° 49.67'	5.9	1.3	5	208	9	0.27
110831	18:16:28.92	39° 00.42'	111° 22.25'	10.1*	1.6W	11	95	26	0.10
110831	22:28:43.46	37° 07.08'	111° 53.28'	0.1*	2.6W	13	117	52	0.19
110901	02:01:02.38	39° 00.09'	111° 22.03'	12.4*	0.9	5	131	25	0.05
110901	11:00:07.77	40° 24.18'	111° 56.59'	5.8	1.0	10	116	6	0.12
110902	06:12:48.93	37° 49.10'	113° 05.93'	4.1*	0.9	7	124	30	0.19
110903	04:45:26.27	41° 53.40'	112° 37.04'	7.7*	0.8	11	203	18	0.22
110903	09:26:24.66	39° 36.35'	110° 25.62'	3.9	0.7	5	225	8	0.88
110903	20:48:18.00	41° 27.99'	112° 57.37'	4.3*	0.7	9	197	38	0.29
110904	21:02:31.84	37° 58.91'	112° 29.49'	3.0*	1.0	18	88	28	0.20
110904	23:02:54.65	37° 59.11'	112° 29.87'	1.4*	2.1W	23	73	28	0.26
110905	03:26:48.60	37° 58.99'	112° 30.07'	1.2*	1.5	22	72	29	0.27
110905	04:33:47.42	41° 41.32'	111° 43.82'	2.2*	0.9	12	71	13	0.23
110905	05:37:05.15	38° 20.20'	113° 03.92'	3.0*	0.8	10	195	26	0.35
110905	12:23:22.82	40° 29.90'	111° 59.08'	8.5	0.3	9	185	6	0.16
110905	12:38:34.04	37° 59.00'	112° 30.05'	1.4*	2.1W	21	72	29	0.27
110905	12:44:39.52	37° 58.98'	112° 29.83'	1.4*	2.2W	24	73	28	0.25
110905	14:27:51.28	37° 08.89'	113° 37.49'	5.0*	1.1	12	113	27	0.19
110906	01:55:33.02	40° 20.65'	111° 54.46'	10.3	2.1W	21	92	4	0.21
110906	01:56:33.16	40° 20.30'	111° 54.84'	9.9	1.4	8	136	3	0.10
110906	10:48:45.42	39° 00.21'	111° 22.18'	9.1*	2.1W	15	95	25	0.10

Table 2. Earthquakes in the Utah Region: July 1–September 30, 2011

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
110906	12:34:25.11	39° 00.60'	111° 21.88'	12.8*	1.1	6	95	26	0.10
110906	14:10:06.70	39° 00.13'	111° 22.23'	4.3*	2.5W	21	74	25	0.17
110906	14:33:20.03	39° 00.19'	111° 22.39'	6.4*	2.9W	21	74	25	0.14
110906	14:38:45.61	38° 59.52'	111° 21.83'	5.2*	1.7	9	96	24	0.21
110906	14:48:43.90	39° 00.31'	111° 20.64'	12.6*	1.1W	7	157	26	0.03
110907	21:08:19.95	37° 27.27'	113° 06.44'	0.4*	1.4	10	128	11	0.10
110907	22:52:58.37	37° 31.60'	113° 31.95'	3.6*	1.7	6	292	15	0.18
110908	14:36:50.33	39° 00.17'	111° 21.96'	12.1*	1.6	7	95	25	0.10
110909	13:59:39.04	39° 14.17'	111° 52.28'	2.2*	1.7	12	105	20	0.23
110909	20:31:43.60	39° 37.26'	110° 24.95'	2.8	1.2	6	111	6	0.60
110910	02:07:20.30	37° 45.95'	113° 07.11'	5.1*	1.5	13	101	19	0.31
110910	10:22:00.81	41° 53.44'	112° 36.39'	7.1*	0.8	13	200	19	0.22
110911	01:56:01.59	40° 07.38'	111° 31.24'	5.1*	1.1	9	106	15	0.23
110912	15:39:50.55	40° 38.71'	111° 29.70'	1.6	0.6	7	291	5	0.22
110913	09:53:23.73	39° 38.25'	112° 03.76'	5.0*	0.3	6	160	26	0.28
110914	01:49:57.13	42° 27.25'	111° 26.66'	7.9*	1.2	8	293	47	0.12
110915	08:39:04.04	39° 39.26'	110° 23.43'	1.5	1.2	5	182	2	0.30
110917	03:05:11.72	39° 28.15'	111° 13.71'	3.1*	1.6	8	128	19	0.16
110917	16:30:01.80	37° 41.81'	113° 10.64'	2.2*	2.6W	10	93	14	0.20
110917	17:16:18.12	41° 46.11'	112° 24.96'	9.9	1.6	12	128	7	0.20
110918	01:00:22.40	39° 19.64'	111° 28.69'	21.6	0.8	8	121	5	0.04
110918	07:31:26.35	41° 51.34'	111° 22.98'	3.9*	1.0	10	136	17	0.11
110918	12:49:34.09	41° 56.16'	112° 21.71'	4.4	0.6	6	226	3	0.27
110919	18:28:03.61	38° 04.17'	112° 51.54'	19.5	1.0	7	96	13	0.22
110919	18:57:09.48	39° 37.51'	110° 24.22'	0.1	0.5	5	208	5	0.29
110920	02:18:46.73	37° 46.97'	113° 55.13'	3.1*	2.1W	15	184	42	0.40
110920	10:14:13.84	39° 38.01'	110° 32.19'	2.7	1.7	5	239	8	0.17
110920	15:06:37.75	37° 46.93'	113° 54.40'	1.4*	2.6W	17	182	41	0.42
110921	02:58:11.52	40° 52.80'	111° 39.79'	10.9	0.8	13	130	17	0.15
110921	04:54:32.52	41° 28.15'	112° 59.82'	7.0*	0.5	7	240	39	0.11
110922	16:20:47.99	39° 36.91'	110° 25.50'	3.0	0.9	5	218	7	0.80
110923	02:33:05.74	37° 46.72'	113° 55.40'	5.2*	1.7	11	215	43	0.28
110923	08:18:17.56	39° 39.24'	110° 23.44'	1.6	0.3	5	182	2	0.32
110924	06:17:57.50	37° 13.30'	113° 12.20'	17.0	1.4	12	79	17	0.26
110924	19:56:26.98	37° 34.51'	113° 20.65'	0.3*	1.5	15	113	23	0.22
110926	09:51:58.20	37° 29.27'	112° 25.06'	8.4	1.6	16	72	11	0.27
110926	10:06:03.21	38° 40.86'	112° 09.40'	2.6*	1.1	8	116	19	0.08
110927	06:31:39.80	40° 51.72'	111° 37.29'	8.7	0.3	8	125	16	0.15
110927	08:28:46.46	39° 28.37'	111° 55.12'	2.2	1.3	7	151	10	0.30
110927	16:49:11.64	37° 55.53'	112° 01.46'	6.7*	1.5	9	116	19	0.20
110928	00:21:44.22	37° 54.46'	112° 02.98'	7.0*	2.1W	16	115	19	0.27
110928	00:53:50.82	37° 54.06'	112° 02.98'	4.4*	2.0W	18	115	20	0.28
110928	00:55:16.78	37° 53.73'	112° 03.16'	4.5*	1.7	12	150	20	0.29
110928	02:33:09.46	37° 54.72'	112° 02.31'	7.6*	1.6	11	116	19	0.29
110928	06:31:20.97	37° 54.58'	112° 03.23'	6.9*	3.5W	23	94	19	0.35

Table 2. Earthquakes in the Utah Region: July 1–September 30, 2011

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
110928	06:34:59.62	37° 54.30'	112° 03.28'	13.0	1.8	9	156	19	0.15
110928	06:35:39.66	37° 54.79'	112° 03.15'	10.4	1.9	10	154	18	0.31
110928	06:44:08.24	37° 53.83'	112° 02.56'	2.4*	1.2	10	150	20	0.30
110928	07:05:08.28	37° 54.31'	112° 03.47'	7.5*	2.8W	17	115	19	0.30
110928	08:21:48.16	37° 55.80'	112° 01.51'	7.0*	1.0	10	115	19	0.21
110928	16:20:02.78	37° 55.43'	112° 02.70'	2.7*	0.9	9	115	58	0.17
110928	23:36:36.25	36° 46.82'	113° 37.93'	5.7*	1.7	9	187	43	0.10
110929	10:03:11.25	39° 29.03'	111° 13.76'	3.9*	1.1	5	131	18	0.16
110929	22:43:27.61	38° 27.53'	112° 11.30'	2.2	1.1	9	130	6	0.07
110930	03:20:41.42	39° 39.20'	110° 23.55'	1.6	0.9	5	183	3	0.34
110930	03:35:03.57	39° 38.42'	110° 24.11'	2.2	1.2	7	141	4	0.43
110930	06:16:35.38	41° 51.07'	112° 39.91'	9.1	0.6	12	197	12	0.14
110930	09:25:21.63	41° 48.70'	112° 23.43'	8.8	0.5	10	119	13	0.21
110930	10:18:31.28	41° 39.72'	111° 41.53'	10.9	1.8	22	71	12	0.21
110930	23:28:19.03	38° 52.35'	111° 30.18'	17.1	1.1	10	73	12	0.15

number of earthquakes = 330

* 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
September 30, 2011

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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 Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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'	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 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	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 EN[ZEN]	4	UU	39° 43.82'	110° 44.55'	2614	L4C EpiSensor	K2	Digital	Utah
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] HH[ZEN]	3 3	UU	40° 55.53'	113° 01.79'	1640	EpiSensor Trillium 120	Q330	Digital	ANSS
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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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
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	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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor			
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	*	*	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						FBA23	K2	Digital	Utah			
			EN[ZEN]												
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			
			EHZ	1					EpiSensor	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			

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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
GMU	Granite Mountain, UT	GMU	EH[ZEN] ELZ	4	UU	40° 34.53'	111° 45.79'	1829	S13	PSN	Analog	USGS
GMV	Granite Mountain Vault Sandy, UT	GMV	EN[ZEN]	3	UU	40° 34.40'	111° 45.79'	1829	EpiSensor	K2	Digital	ANSS
GRR	Grays Lake, ID	GRRI	EHZ	1	IE	42° 56.28'	111° 25.32'	2207	*	*	Digital	INL
GZU	Grizzly Peak, UT	GZU	EH[ZEN] ELZ	4	UU	41° 25.53'	111° 58.50'	2646	S13	PSN	Analog	USGS
HCSU	Hobble Creek, Springville, UT	HCSU	EHZ EN[ZEN]	1 3	UU	40° 12.40'	111° 30.14'	1789	L4C EpiSensor	Basalt	Digital	Utah, USGS
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 EN[ZEN]	1 3	UU	40° 36.64'	111° 24.05'	1931	S13 FBA23	PSN K2	Analog Digital	Utah
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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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					Episensor			
HVU	Hansel Valley, UT	HVU	HH[ZEN]	3	UU	41° 46.78'	112° 46.50'	1609	Trillium 120 EpiSensor	Q330	Digital	USGS
			EN[ZEN]	3								
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 3ESP	ANSS-130	Digital	ANSS
			HH[ZEN]	3								
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 Episensor	ANSS-130	Digital	Utah, ANSS, LLNL
			EN[ZEN]	3								
LCMT	Little Creek Mountain, UT	LCMT	HH[ZEN]	3	UU	37° 00.71'	113° 14.63'	1411	3T PA-23	SMART-24	Digital	Utah
			EN[ZEN]	3								
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 EpiSensor	PSN Basalt	Analog Digital	USGS
			EHZ	1								
			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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor	
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	
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									
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									
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	
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	

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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	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
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] ELZ	4	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	PSN	Analog	USGS	
			EHZ	1					L4C	Basalt	Digital	
			EN[ZEN]	3					EpiSensor			
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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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			
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	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
			EHZ	1					EpiSensor			
			EN[ZEN]	3								
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
			EHZ	1					EpiSensor			
			EN[ZEN]	3								
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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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
			EHZ	1					EpiSensor	Basalt	Digital	
			EN[ZEN]	3								
SAIU	South Antelope Island, UT	SAIU	EHZ	1	UU	40° 51.29'	112° 10.89'	1384	L4C	PSN	Analog	USGS
			EHZ	1					EpiSensor	Basalt	Digital	
			EN[ZEN]	3								
SCC	Salt Lake Community College	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	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	Stansbury North, UT	SNUT	EHZ	1	UU	40° 53.10'	112° 30.52'	1652	18300	PSN	Analog	USGS
			EHZ	1					EpiSensor	Basalt	Digital	
			EN[ZEN]	3								
SPR	Wildlife Resource Center Springville, UT	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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor			
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			
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			

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor	
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	EpiSensor	PSN	Analog	USGS	
			EHZ	1						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	EpiSensor	PSN	Analog	USGS	
			EHZ	1						L4C	Basalt		
			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	
WTU	Western Traverse Mountains, UT	WTU	EH[ZEN]	4	UU	40° 27.29'	111° 57.21'	1552	Applied Mems	S13	PSN	Analog	USGS
			ELZ							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	L4C	Trillium 120	72A-07	Digital	USGS
			EN[ZEN]	3						Titan			
			EHZ	1						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	40T	PSN	Analog	Digital	USGS
			HH[ZEN]	3						Titan	ANSS-130		
			EN[ZEN]	3									

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor	
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	
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	
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				

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

Network Statistics: 776 data channels from 251 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>> 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.

Sensor	Description
L4, L4C	Mark Products 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) 151 Observer broadband seismometer
Digitizer	Description
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	Kinemetrics Basalt (24-bit resolution field digitizer)

Taurus Nanometrics Taurus (24-bit resolution field digitizer)

Telemetry	Description
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 JULY 1-SEPTEMBER 30, 2011

- July 1 to August 29 The total number of channels has changed due to ARRA upgrades in Utah (EHZ and EN[ZEN] at seismic stations NPI, MLI, LEVU, and RSUT).
- July 21 New seismic station PCCW (EHZ, EN[ZEN]). This station replaces the EarthScope TA station L17A.
- August 12 to September 3 The total number of channels has changed due to ARRA upgrades in Yellowstone (EH[ZEN], EN[ZEN], HH[ZEN] at seismic stations YMP, YMC, YJC, and YTP).
- August 21 New seismic station YNE (HH[ZEN]).
- September 2 New seismic station YHL (HH[ZEN], EN[ZEN]).