EARTHQUAKE ACTIVITY IN THE UTAH REGION

Preliminary Epicenters

July 1 – September 30, 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

November 19, 2010

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 artificial 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:

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

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
July 1 – September 30, 2010

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During the three-month period July 1 through September 30, 2010, the University of Utah Seismograph Stations (UUSS) located 320 earthquakes within the Utah region (Figure 1). The total includes four 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. Four 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/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 the Wasatch Front urban area. On November 30, 2005, UUSS extended its capability for producing ShakeMaps to the entire Utah region for shocks of magnitude 4.0 or larger; in the greater Wasatch Front area, outside the urban corridor, the threshold is magnitude 3.5. Since November 26, 2007 UUSS lowered the magnitude threshold for the Utah region to magnitude 3.5. The ShakeMaps are accessible on the UUSS Web page at *http://www.seis.utah.edu/shake*. Earthquakes during 2009 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 8	10:31 MDT	3 mi ENE of Washington, UT (felt, CIIM intensity map, ShakeMap , see Table 1)
M_L 3.0	August 18	06:51 MDT	9 mi WSW of Cedar City, UT
M_L 3.8	August 18	06:52 MDT	9 mi WSW of Cedar City, UT (felt, CIIM intensity map, ShakeMap, see Table 1)
M_L 3.0	September 17	08:56 MDT	29 mi WNW of Santa Clara, UT

Other Notable Seismicity

During the report period, there were three notable spatial clusters of natural earthquake activity (labeled A to 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 11 earthquakes ($0.1 \leq M \leq 2.5$) occurred about twelve miles W of Garland, UT. Seven of these events, including a magnitude 2.5 shock, occurred between September 10 and September 14.

B. A cluster of 10 earthquakes ($0.7 \leq M \leq 2.1$) occurred about two miles S of Mount Pleasant, UT. Eight of these events, including a magnitude 2.1 shock, occurred on August 7.

C. A cluster of 19 earthquakes ($0.5 \leq M \leq 3.8$) occurred about nine miles WSW of Cedar City, UT. Fourteen of these events, including a magnitude 3.8 shock, occurred between August 18 and August 20.

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 122 located shocks ($0.3 \leq M \leq 2.6$) that occurred throughout the report period.

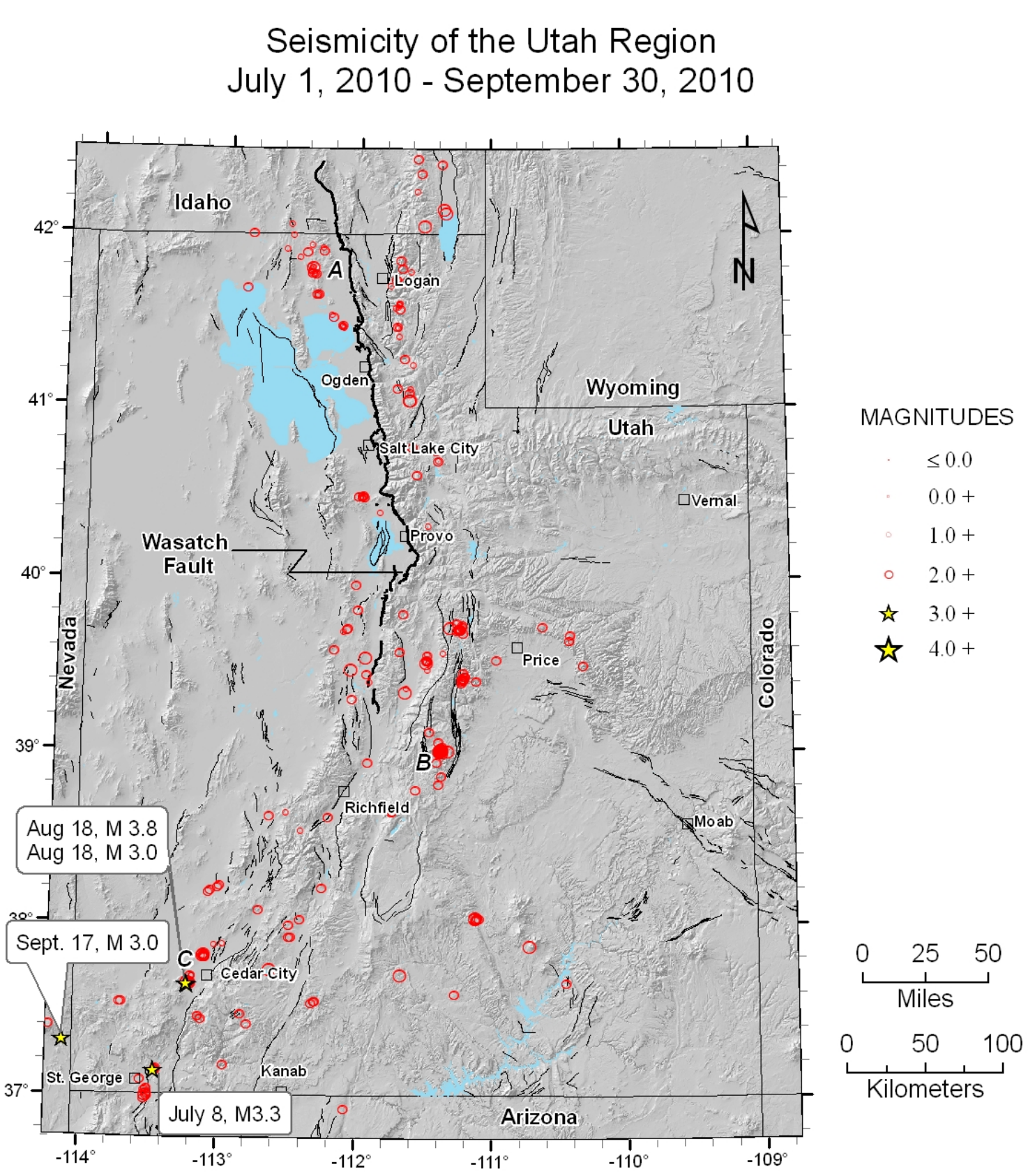

Figure 1. Earthquake epicenters, located by the University of Utah Seismograph Stations, superposed on a map of Quaternary (geologically young) faults compiled by the Utah Geological Survey. The Wasatch fault is shown in bold. Earthquakes of magnitude 3.0 and larger are labeled by local date and size.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

Table 1

EARTHQUAKES FELT AND/OR GENERATING A SHAKEMAP IN THE UTAH REGION
January 1, 2010 to September 30, 2010

Date	Time†	Felt Information‡	Latitude	Longitude	Magnitude§
January 04	09:24 MST 16:24 UTC	Utah. *CIIM*. Felt (III) at Cedar City (?), UT and (II) at New Harmony, La Verkin, Central, St. George, Monroe (?), UT, Las Vegas (?), NV and Sedona (?), AZ.	37º 35.92′	113º 02.33′	M_L 4.1
January 04 January 05	21:55 MST 04:55 UTC	Utah. *CIIM*. Felt (II) at Cedar City and Hurricane, UT.	37º 35.58′	113º 02.77′	M_L 3.3
January 05	01:08 MST 08:08 UTC	Utah. *CIIM*. 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.	40º 21.68′	111º 54.65′	M_L 2.9
January 23	08:48 MST 15:48 UTC	Utah. *CIIM*. Felt (III) at Fort Duchesne (?), UT and (II) at Payson, Santaquin, Lehi and Magna (?), UT.	39º 56.82′	111º 53.45′	M_L 3.0
February 12	15:37 MST 22:37 UTC	Utah. *CIIM*. Felt (II) at Monroe (?), UT and Las Vegas (?), NV.	37º 05.51′	112º 53.54′	M_L 3.0
April 14	12:58 MDT 18:58 UTC	Utah. *CIIM*. *ShakeMap*. Felt (IV) at Torrey, UT, (III) at Boulder, Salt Lake City (?), Ogden (?), UT and (II) at Teasdale, Hanksville, Saint George (?), Eagle Mountain (?), Herriman (?), Bloomfeld (?), NM and Las Vegas (?), NV..	38º 02.02′	111º 06.76′	M_L 3.9

April 15	04:48 MDT 10:48 UTC	Utah. *CIIM*. Felt (III) at Salt Lake City (?), Logan (?), UT, and (II) at Torrey, Draper (?), Sandy (?), Park City (?), Kaysville (?), Ogden (?), Lewinston (?), UT and Malad City (?), ID.	38º 02.62′	111º 06.78′	M_L 3.2
April 15	17:59 MDT 23:59 UTC	Utah. *CIIM*. *ShakeMap*. 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,	41º 42.20′	111º 05.65′	M_L 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. *ShakeMap.*	37º 54.15′	113º 10.68′	M_L 2.9
April 28	11:40 MDT 17:40 UTC	Utah. *CIIM*. Felt (II) at Boulder, UT.	38º 02.09′	111º 06.88′	M_L 3.2
May 2	09:00 MDT 15:00 UTC	Utah. *CIIM*. *ShakeMap*. Felt (III) at Hanksville, UT and (II) at Boulder, Teasdale, Torrey, Loa, Roy (?), UT.	38º 02.24′	111º 06.81′	M_L 3.6
May 27	00:16 MDT 06:16 UTC	Utah. *ShakeMap.*	41º 41.33′	111º 05.23′	M_L 3.1
June 10	10:58 MDT 16:58 UTC	Utah. *CIIM*. 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.	40º 28.42′	111º 58.99′	M_L 2.7
June 11	05:06 MDT 11:06 UTC	Utah. *ShakeMap.*	41º 41.00′	111º 04.54′	M_L 3.0
July 8	10:31 MDT 16:31 UTC	Utah. *CIIM*. *ShakeMap*. Felt (II) at Washington, St. George, Santa Clara, Ivins, Hurricane, Ogden (?), UT and Fredonia (?), AZ.	37º 08.10′	113º 27.22′	M_L 3.2
August 8	11:36 MDT 17:36 UTC	Utah. *CIIM*. Felt (II) at Cedar City, UT.	37º 48.56′	113º 06.26′	M_L 2.8
August 18	06:52 MDT 12:52 UTC	Utah. *CIIM*. *ShakeMap*. Felt (III) at Washington, St. George, UT and (II) at Central, Beryl, Milford, UT and Rock Springs (?), WY.	37º 38.27′	113º 13.33′	M_L 3.8
August 24	05:41 MDT 11:41 UTC	Utah. *CIIM*. Felt (III) at Salt Lake City (?), UT.	37º 38.77′	113º 13.25′	M 2.2

† 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 "NEIS," data are from the National Earthquake Information Service of the USGS.

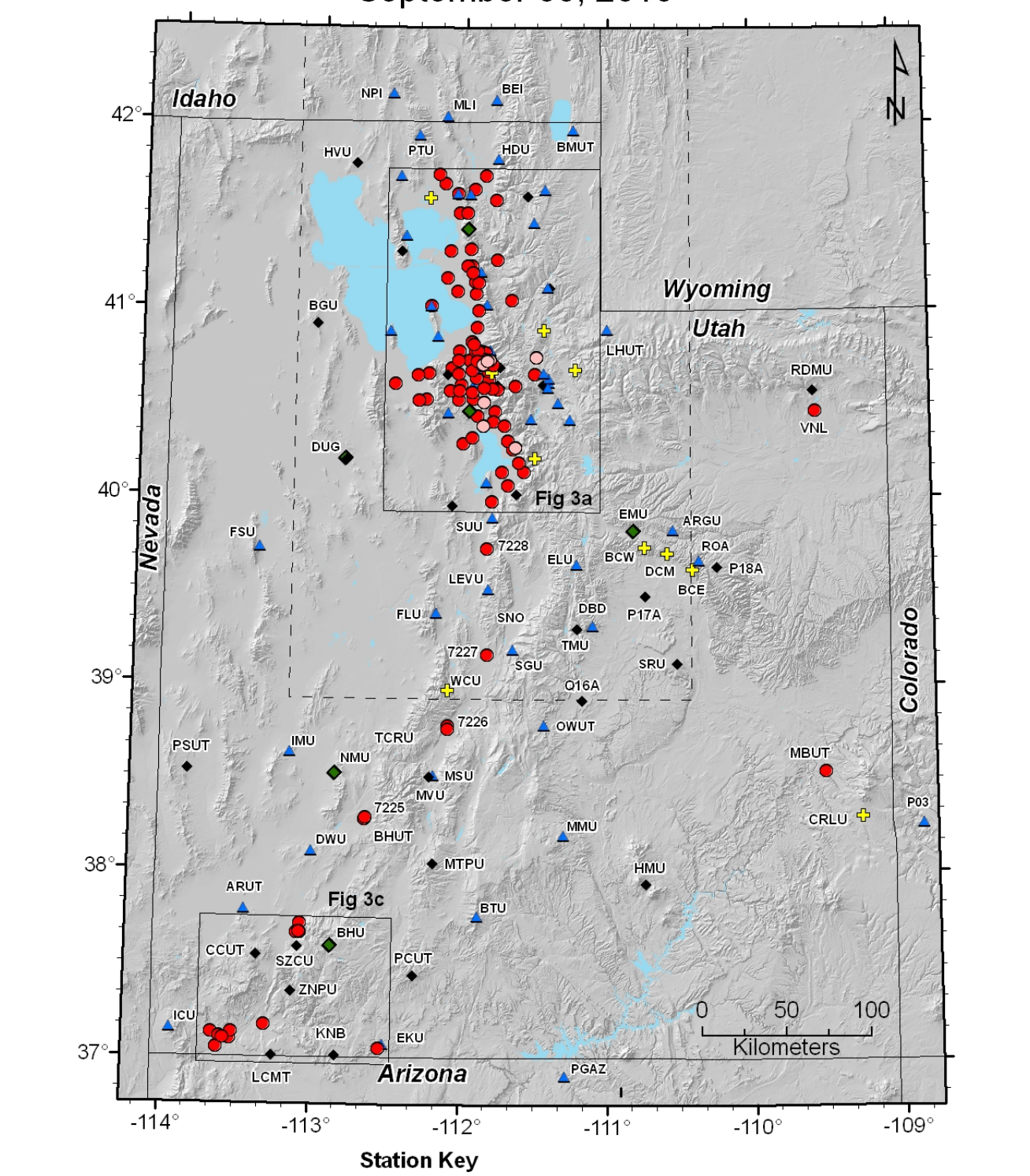
Utah Regional/Urban Seismic Network
September 30, 2010
Idaho
Wyoming
Utah
Nevada
Colorado
Arizona
Fig 3a
Fig 3c
NPI
BEI
MLI
HVU
PTU
HDU
BMUT
BGU
LHUT
RDMU
VNL
DUG
FSU
SUU
7228
EMU
ARGU
ROA
BCW
DCM
P18A
BCE
ELU
LEVU
FLU
SNO
DBD
P17A
TMU
7227
SGU
SRU
WCU
Q16A
7226
OWUT
PSUT
IMU
TCRU
NMU
MSU
MVU
MBUT
P03
CRLU
7225
DWU
BHUT
MMU
MTPU
HMU
ARUT
BTU
BHU
CCUT
SZCU
PCUT
ZNPU
ICU
KNB
EKU
LCMT
PGAZ
0 50 100
Kilometers
42°
41°
40°
39°
38°
37°
-114°
-113°
-112°
-111°
-110°
-109°
Station Key
Single-component, Analog-telemetry, Short-period
Multi-component, Analog-telemetry, Short-period
Multi-component, Digital-telemetry, Broadband
Multi-component, Digital-telemetry, Strong Motion
Bounds of map correspond to standard "Utah Region"
Traditional "Wasatch Front Area"
Multi-comp Strong-Motion, Single Short-Period Digital and/or Analog-telemetry
NetQuakes

Figure 2

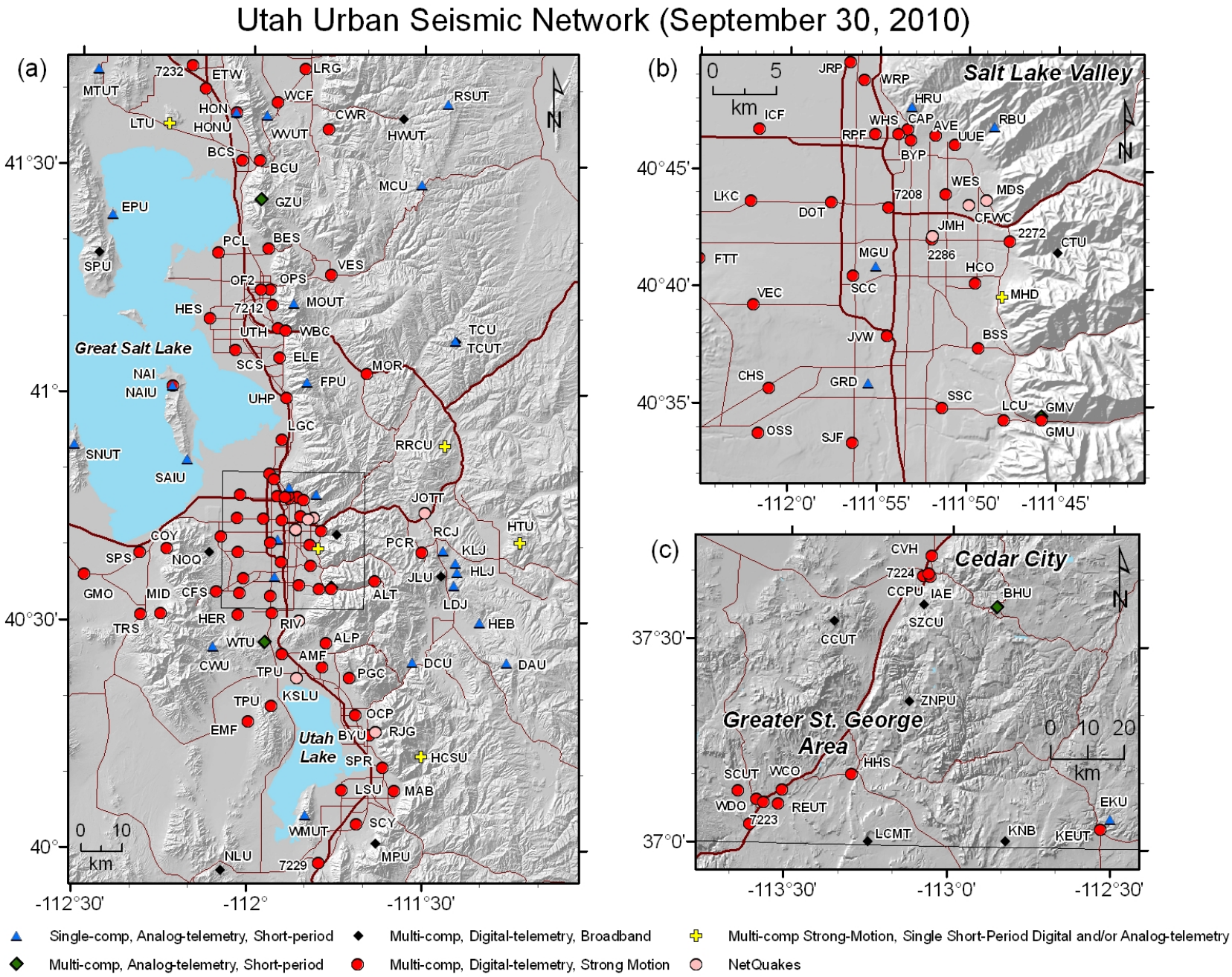
Utah Urban Seismic Network (September 30, 2010)
(a)
(b)
(c)
Salt Lake Valley
Cedar City
Greater St. George Area
Great Salt Lake
Utah Lake
km
41°30'
41°
40°30'
40°
-112°30'
-112°
-111°30'
40°45'
40°40'
40°35'
-112°0'
-111°55'
-111°50'
-111°45'
37°30'
37°0'
-113°30'
-113°0'
-112°30'
Single-comp, Analog-telemetry, Short-period
Multi-comp, Digital-telemetry, Broadband
Multi-comp Strong-Motion, Single Short-Period Digital and/or Analog-telemetry
Multi-comp, Analog-telemetry, Short-period
Multi-comp, Digital-telemetry, Strong Motion
NetQuakes

Figure 3

Table 2. Earthquakes in the Utah Region: July 1–September 30, 2010

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
100701	02:31:25.87	41° 38.33′	112° 20.57′	1.9	0.5	9	171	10	0.15
100701	02:33:43.72	39° 00.24′	111° 22.37′	6.6*	2.0W	16	74	25	0.14
100701	02:34:25.02	39° 00.05′	111° 19.48′	4.5*	2.3W	10	98	26	0.10
100701	04:09:42.27	39° 00.26′	111° 22.86′	9.9*	1.8	12	94	25	0.17
100701	04:20:23.49	39° 00.55′	111° 23.03′	6.6*	1.7	11	94	26	0.11
100701	05:01:18.46	41° 38.93′	112° 19.81′	5.6	1.7	20	76	9	0.14
100701	08:12:46.34	42° 03.24′	112° 32.66′	6.6	0.9	7	160	11	0.08
100701	10:47:57.13	41° 46.78′	111° 37.18′	12.2	0.4	10	78	12	0.08
100702	10:09:42.73	38° 04.45′	112° 42.84′	4.2*	1.1	9	76	25	0.24
100702	12:35:15.76	38° 01.69′	111° 05.61′	9.4*	1.8	11	121	25	0.17
100702	15:15:47.23	39° 00.28′	111° 22.37′	9.9*	1.7	8	120	25	0.07
100703	03:28:59.40	41° 40.79′	112° 52.52′	8.2	1.4	22	148	14	0.16
100703	22:13:44.34	38° 01.77′	111° 06.61′	6.4*	1.6	13	121	24	0.25
100704	03:58:57.12	41° 38.84′	112° 20.21′	4.3	0.5	12	162	10	0.12
100704	11:07:56.69	39° 00.50′	111° 22.99′	13.3	1.4	12	94	26	0.25
100705	03:56:40.42	39° 00.53′	111° 22.92′	7.2*	1.4	8	94	26	0.14
100705	06:49:56.73	41° 45.77′	112° 21.25′	7.6	1.2	24	69	10	0.22
100705	17:06:34.76	41° 38.84′	112° 20.32′	6.6	1.1	18	98	10	0.17
100705	22:17:28.30	38° 59.74′	111° 22.42′	3.3*	1.4	8	96	24	0.14
100705	22:18:09.61	41° 53.75′	112° 17.58′	7.1	1.5	20	78	5	0.17
100706	00:24:31.06	40° 28.66′	111° 58.41′	9.8	0.6	20	100	3	0.21
100706	13:40:26.62	39° 20.51′	111° 38.54′	10.6	2.1W	21	68	9	0.31
100706	13:41:58.48	39° 21.91′	111° 38.21′	15.1	0.6	12	94	10	0.15
100706	16:55:08.75	39° 27.36′	111° 12.64′	3.1*	1.4	11	86	18	0.12
100706	20:01:44.52	41° 55.06′	112° 18.04′	7.4	0.3	8	85	2	0.22
100706	23:14:17.60	38° 59.13′	111° 21.61′	18.1	1.6	11	97	24	0.15
100707	08:46:18.44	40° 28.32′	111° 59.18′	9.4	0.7	27	59	3	0.24
100707	10:58:46.93	42° 26.13′	111° 33.91′	6.5*	1.6	20	124	40	0.18
100707	11:23:08.58	39° 00.59′	111° 22.91′	8.1*	1.6	12	94	26	0.15
100707	13:20:08.06	39° 00.26′	111° 22.67′	12.7	1.5	10	94	25	0.10
100707	18:10:05.41	39° 17.87′	112° 02.64′	9.9	1.2	11	104	14	0.23
100707	19:48:03.99	39° 00.83′	111° 22.98′	12.7*	1.5	7	106	26	0.09
100707	20:34:37.64	36° 59.56′	113° 30.27′	0.2*	1.6	10	163	23	0.35
100707	22:05:18.60	39° 28.53′	111° 28.86′	9.9	0.7	11	90	18	0.15
100708	00:30:07.84	41° 31.72′	112° 13.54′	1.6	0.4	11	98	7	0.14
100708	16:31:17.49	37° 08.10′	113° 27.22′	7.1*	3.2W	19	119	23	0.24
100708	20:11:37.40	37° 08.24′	113° 26.47′	7.1*	1.6	18	117	22	0.28
100708	20:16:41.99	39° 26.00′	111° 11.90′	3.2*	1.5	7	123	15	0.16
100708	22:43:49.40	38° 59.64′	111° 23.30′	15.4	1.7	10	61	21	0.24
100709	01:26:29.84	37° 31.92′	113° 42.03′	0.6*	1.6	19	124	30	0.41
100709	04:10:39.68	37° 31.79′	113° 42.77′	1.2*	1.7	18	150	31	0.40
100709	05:18:40.44	38° 51.37′	111° 22.32′	5.8	1.0	10	106	10	0.19
100709	08:53:34.90	39° 00.05′	111° 22.94′	16.1	1.4	7	94	25	0.16
100709	11:50:12.31	37° 08.82′	113° 26.38′	2.5*	1.2	13	139	23	0.24
100709	12:59:13.57	38° 59.91′	111° 22.89′	2.4*	1.6	14	75	25	0.14

Table 2. Earthquakes in the Utah Region: July 1–September 30, 2010

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
100709	18:53:55.50	39º 01.46′	111º 22.00′	5.2*	1.4	7	109	28	0.18
100710	00:04:57.58	38º 01.91′	111º 06.09′	15.4	1.6	8	121	25	0.11
100710	03:50:02.97	39º 01.36′	111º 22.72′	16.5	1.4	8	93	27	0.17
100710	08:57:51.30	38º 37.22′	112º 38.84′	2.4*	1.2	13	189	18	0.19
100710	11:05:13.97	41º 16.48′	111º 39.68′	14.0	1.0	18	95	24	0.17
100711	01:06:42.58	39º 00.11′	111º 22.97′	12.7	1.5	8	94	25	0.07
100711	02:20:56.59	38º 59.51′	111º 22.65′	1.3*	1.4	12	95	24	0.17
100711	06:22:22.80	39º 00.91′	111º 22.76′	13.9	1.4	9	93	27	0.09
100711	17:23:45.53	38º 59.34′	111º 22.79′	3.9*	1.7	9	95	24	0.15
100711	18:45:19.90	38º 38.60′	111º 44.39′	25.4	1.2	8	107	31	0.11
100713	11:00:04.35	41º 46.16′	112º 20.93′	9.6	0.7	18	70	11	0.23
100713	20:19:06.69	39º 35.12′	112º 10.78′	2.6*	1.0	9	98	23	0.26
100714	03:18:09.32	38º 38.95′	111º 44.03′	3.5*	1.4	10	79	31	0.28
100714	05:49:16.45	38º 59.46′	111º 22.98′	3.5*	1.7	14	95	24	0.19
100714	13:25:36.33	36º 58.04′	113º 31.19′	0.0*	1.4	16	166	25	0.41
100714	22:45:28.63	39º 00.24′	111º 22.92′	8.9*	1.6	9	94	25	0.05
100715	05:40:47.10	41º 51.73′	112º 28.70′	11.9	0.4	13	104	15	0.23
100715	06:56:37.58	37º 08.05′	113º 26.79′	7.1*	1.2	16	118	23	0.21
100715	13:36:04.65	39º 00.71′	111º 23.62′	6.3*	1.6	11	93	26	0.14
100716	01:55:12.51	41º 14.52′	111º 36.03′	2.5*	0.8	22	110	21	0.18
100716	06:40:41.11	41º 06.04′	111º 37.23′	12.7	0.9	14	69	18	0.24
100716	06:44:48.02	40º 18.51′	111º 28.53′	6.3	0.8	18	174	13	0.23
100716	06:50:35.64	41º 04.72′	111º 37.62′	8.5*	1.4	28	102	19	0.25
100716	10:15:41.68	41º 33.71′	111º 41.81′	9.5	1.6	25	58	12	0.14
100716	20:13:22.55	39º 00.20′	111º 23.41′	3.9*	1.7	14	94	25	0.11
100717	00:18:20.43	39º 00.03′	111º 23.10′	18.1	1.3	7	101	25	0.13
100717	05:23:52.82	39º 00.30′	111º 22.77′	1.8*	1.7W	22	94	25	0.18
100717	05:31:45.34	39º 00.16′	111º 22.96′	12.2*	1.5	11	94	25	0.09
100717	05:35:20.48	38º 59.98′	111º 22.96′	11.9*	1.5	8	102	25	0.04
100717	17:09:50.61	38º 59.80′	111º 22.96′	1.7*	1.4	14	98	24	0.26
100718	00:37:55.49	38º 59.98′	111º 23.05′	4.0*	1.6W	12	114	25	0.09
100718	05:55:34.81	38º 59.98′	111º 22.81′	6.2*	1.7	18	79	20	0.17
100718	06:48:00.15	41º 56.01′	112º 22.86′	6.8	0.9	20	92	5	0.14
100720	12:47:57.95	39º 00.18′	111º 22.55′	4.7*	1.8	20	95	25	0.17
100720	17:05:06.31	38º 59.83′	111º 23.05′	6.1*	1.7W	15	75	24	0.15
100720	23:59:17.97	38º 48.54′	111º 23.68′	9.7	1.1	11	107	4	0.24
100721	08:40:39.41	38º 59.89′	111º 23.29′	1.9*	2.1W	26	74	25	0.22
100721	11:49:54.81	39º 00.49′	111º 23.51′	6.1*	1.6	12	94	26	0.22
100721	12:29:15.81	37º 01.16′	113º 31.12′	2.1*	1.5	13	157	24	0.27
100721	12:32:14.94	39º 26.01′	111º 12.23′	7.2*	1.4	13	81	15	0.13
100721	13:21:25.67	38º 59.55′	111º 23.07′	5.2*	1.8	14	95	24	0.16
100722	12:24:55.79	39º 31.63′	110º 57.80′	3.0*	1.7	16	67	24	0.12
100722	13:30:57.82	38º 59.71′	111º 22.27′	4.3*	1.5	9	96	24	0.19
100723	13:02:27.92	38º 59.71′	111º 22.52′	2.2*	1.6	15	96	24	0.23
100723	16:07:14.83	41º 27.64′	111º 43.36′	5.1*	1.8	35	46	18	0.21

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DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
100723	16:10:03.78	41° 27.44′	111° 42.59′	8.2*	0.3	7	172	17	0.16
100723	16:10:03.60	41° 27.60′	111° 43.10′	9.1	0.7	14	120	18	0.18
100724	03:22:52.43	39° 00.48′	111° 22.91′	12.1*	1.6	10	94	26	0.14
100724	17:20:22.51	41° 02.15′	111° 37.24′	5.9*	2.2W	27	52	18	0.20
100724	22:07:57.03	39° 00.07′	111° 23.04′	4.8*	1.7W	16	74	25	0.13
100725	04:37:31.36	41° 02.10′	111° 37.19′	7.3*	2.1W	38	46	18	0.25
100725	18:55:35.96	39° 57.67′	112° 00.97′	5.0	1.5	23	65	5	0.24
100727	04:57:42.67	39° 43.19′	111° 13.03′	1.7	1.4	13	73	9	0.24
100727	12:25:47.19	37° 01.54′	113° 30.27′	2.6*	1.5	15	196	23	0.27
100727	21:52:55.23	37° 26.91′	113° 07.96′	6.8	0.9	14	108	10	0.20
100728	11:34:05.70	37° 52.14′	113° 01.79′	2.2*	0.9	16	60	27	0.29
100728	15:33:24.10	39° 00.35′	111° 23.15′	3.9*	1.7	7	107	25	0.21
100729	04:32:31.06	39° 23.73′	111° 13.44′	7.5	1.1	16	53	11	0.19
100729	04:33:51.97	41° 45.71′	112° 21.55′	15.5	0.2	12	84	10	0.25
100729	05:01:38.31	39° 24.32′	111° 13.60′	8.4	1.5	24	45	12	0.22
100729	05:18:41.21	39° 24.41′	111° 13.24′	7.4	1.4	13	66	12	0.14
100729	06:30:16.57	39° 24.29′	111° 13.49′	0.2*	***	18	53	12	0.21
100729	06:30:48.07	39° 24.73′	111° 12.69′	1.0*	1.6	7	136	13	0.13
100729	08:49:52.74	39° 00.20′	111° 23.01′	9.1*	1.2	10	94	25	0.13
100729	11:43:18.66	37° 52.70′	112° 58.14′	2.3*	0.9	17	67	25	0.27
100729	11:43:25.38	41° 27.35′	112° 08.05′	7.7	0.2	13	102	14	0.16
100729	17:07:24.70	39° 00.09′	111° 22.54′	7.4*	1.2	14	95	25	0.23
100729	19:34:09.43	38° 59.81′	111° 23.11′	4.0*	2.3W	20	75	24	0.20
100729	20:19:01.99	38° 36.77′	112° 12.47′	3.2*	1.1	6	106	12	0.10
100729	20:19:05.53	39° 40.84′	111° 12.81′	1.6	1.3	9	177	5	0.26
100729	20:23:58.45	39° 00.20′	111° 22.63′	3.1*	1.2	10	125	25	0.21
100729	23:20:43.61	40° 41.36′	111° 24.25′	1.7	0.4	9	130	5	0.16
100730	01:18:29.86	37° 04.74′	113° 33.14′	10.2*	1.3	18	141	28	0.23
100730	08:26:21.88	39° 00.36′	111° 22.81′	7.7*	1.8	15	74	25	0.15
100730	15:36:07.36	39° 47.68′	111° 39.64′	2.8*	0.9	11	100	15	0.16
100730	21:58:55.70	38° 59.82′	111° 22.95′	5.5*	1.7	17	95	24	0.16
100731	02:01:31.12	38° 59.81′	111° 22.83′	1.8*	1.8	20	75	24	0.16
100731	07:30:54.78	40° 28.20′	111° 58.21′	10.7	0.4	15	83	2	0.19
100731	11:30:23.24	41° 50.62′	111° 41.70′	7.8	1.3	34	85	8	0.26
100731	17:38:20.90	39° 00.29′	111° 22.60′	6.0*	1.4	12	121	25	0.16
100731	17:39:02.49	38° 59.05′	111° 22.82′	7.6*	1.7	15	96	23	0.24
100731	22:26:03.13	37° 32.74′	112° 17.56′	1.9*	1.2	17	102	11	0.26
100801	02:08:46.09	37° 32.75′	112° 17.90′	1.5*	1.7	21	114	11	0.19
100801	20:58:21.67	37° 28.18′	112° 49.96′	16.9	1.0	18	52	14	0.33
100802	02:41:44.22	39° 00.18′	111° 23.04′	10.3*	1.5	11	94	25	0.16
100802	03:28:25.41	41° 28.05′	112° 08.38′	6.0*	1.3	28	54	14	0.14
100802	12:45:04.82	36° 59.94′	113° 30.20′	1.1*	1.5	15	162	23	0.37
100804	02:57:26.51	39° 42.69′	111° 13.99′	1.7	1.5	13	73	8	0.22
100804	06:55:24.45	41° 24.48′	111° 42.19′	8.4*	0.8	23	64	17	0.19
100804	07:15:03.00	38° 59.91′	111° 22.72′	12.4	1.5	10	95	25	0.13

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DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
100804	19:08:07.00	41° 05.98′	111° 42.86′	2.2*	1.5	13	78	13	0.26
100804	22:55:03.19	40° 28.20′	111° 57.69′	0.1	1.8	23	57	2	0.24
100805	00:40:20.51	39° 00.26′	111° 22.50′	12.9	1.5	10	109	25	0.12
100805	06:02:24.35	39° 24.99′	111° 12.04′	0.8*	1.6	21	121	13	0.15
100805	06:03:32.47	39° 25.42′	111° 12.85′	9.0	1.2	13	164	14	0.18
100805	06:33:33.45	39° 24.87′	111° 13.61′	7.0	1.1	9	198	13	0.19
100805	13:40:30.43	38° 59.71′	111° 22.36′	6.9*	1.4	11	96	24	0.16
100805	17:35:54.08	39° 01.14′	111° 22.74′	15.1	1.4	7	106	27	0.03
100806	04:58:55.92	41° 59.65′	112° 31.56′	14.1	0.3	7	141	17	0.18
100806	06:34:32.97	41° 27.82′	112° 08.62′	7.2*	0.8	14	129	14	0.12
100806	06:47:53.28	41° 28.03′	112° 08.40′	6.6*	0.3	9	140	15	0.08
100806	06:49:55.41	41° 27.94′	112° 08.46′	5.9*	0.8	17	109	14	0.13
100806	07:21:24.67	41° 27.91′	112° 08.65′	4.3*	0.3	11	129	15	0.12
100806	09:18:53.86	39° 06.66′	111° 27.83′	2.4*	1.4	12	82	18	0.16
100806	16:08:33.46	37° 41.91′	111° 39.98′	10.5	2.2W	16	155	19	0.40
100806	18:16:12.62	38° 59.90′	111° 23.19′	4.7*	1.9W	17	75	25	0.12
100806	20:12:30.57	38° 59.30′	111° 22.58′	2.4*	1.6W	18	75	24	0.26
100807	11:47:04.28	39° 00.19′	111° 22.94′	1.5*	1.5	12	94	25	0.15
100807	16:35:05.58	39° 31.76′	111° 27.72′	10.3*	0.9	11	96	24	0.24
100807	16:46:27.80	39° 31.30′	111° 28.61′	1.5*	1.7	14	56	23	0.31
100807	17:03:28.37	39° 31.18′	111° 28.98′	4.4*	0.9	13	94	23	0.16
100807	17:11:25.36	39° 31.34′	111° 29.08′	7.1*	1.3	14	94	23	0.15
100807	17:12:05.60	39° 30.76′	111° 29.35′	2.2*	2.1W	30	45	22	0.31
100807	17:36:35.43	39° 30.54′	111° 28.49′	5.3*	0.8	8	91	22	0.22
100807	18:21:29.86	39° 31.67′	111° 29.05′	8.8*	1.0	13	95	24	0.15
100807	23:23:38.49	37° 48.14′	113° 06.05′	9.3*	1.3	17	54	23	0.27
100808	00:56:37.06	39° 42.19′	111° 14.78′	1.9	1.7	12	118	8	0.25
100808	07:59:40.54	37° 24.65′	112° 47.27′	16.5	1.6	18	68	21	0.19
100808	17:33:19.48	37° 48.12′	113° 06.08′	7.2*	1.3	16	54	23	0.20
100808	17:36:24.34	37° 48.52′	113° 06.25′	2.5*	1.6	16	55	24	0.18
100808	17:36:53.09	37° 48.56′	113° 06.26′	2.3*	2.8W	18	56	24	0.18
100808	20:43:47.65	39° 34.20′	111° 21.80′	3.2*	0.8	7	106	16	0.16
100809	03:47:12.21	37° 48.45′	113° 06.67′	1.3*	2.0W	21	55	24	0.28
100809	07:12:36.63	37° 48.39′	113° 07.01′	7.0*	0.6	11	56	24	0.16
100809	08:28:20.75	37° 55.09′	112° 28.44′	1.4*	1.5	19	56	29	0.23
100809	08:38:14.40	41° 35.38′	111° 42.64′	8.7	0.5	15	100	12	0.18
100809	09:50:25.35	37° 55.02′	112° 29.15′	1.3*	1.4	25	56	30	0.27
100809	11:15:33.57	41° 35.69′	111° 42.26′	9.8	0.9	16	75	12	0.15
100809	12:36:52.62	41° 34.42′	111° 44.16′	2.0*	0.6	10	157	15	0.23
100809	14:02:07.34	41° 34.78′	111° 42.83′	7.6	0.5	11	78	13	0.20
100809	17:30:55.64	41° 36.04′	111° 42.42′	6.1*	0.9	13	74	21	0.21
100809	19:00:03.07	36° 59.02′	113° 31.41′	1.2*	1.6	15	163	25	0.44
100809	22:17:53.18	40° 45.64′	111° 36.14′	11.1	1.0	18	108	15	0.15
100809	23:45:13.05	40° 45.74′	111° 35.95′	10.2	1.1	22	85	15	0.16
100810	02:32:52.77	39° 42.91′	111° 18.29′	7.3	2.6W	31	49	12	0.18

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DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
100810	03:29:09.38	38º 59.79′	111º 22.83′	3.2*	1.7	17	59	20	0.20
100810	18:42:11.31	37º 47.81′	113º 05.70′	2.2*	1.0	15	92	22	0.20
100810	19:22:28.03	38º 59.79′	111º 22.55′	10.3*	1.7	11	95	24	0.21
100810	20:13:25.57	38º 59.72′	111º 22.40′	2.3*	1.7W	15	75	24	0.19
100810	20:44:48.51	39º 00.35′	111º 22.26′	13.4	1.4	11	95	26	0.16
100811	00:16:33.37	39º 00.22′	111º 22.34′	13.9	1.6	9	138	25	0.17
100811	00:41:47.91	39º 00.33′	111º 22.74′	5.5*	1.5W	15	95	25	0.20
100811	01:46:35.37	41º 35.81′	111º 41.93′	9.8	0.4	12	97	11	0.20
100811	11:17:26.99	37º 48.16′	113º 06.62′	2.4*	0.9	13	120	23	0.18
100811	11:44:15.66	39º 42.30′	111º 14.13′	1.8	1.4W	20	70	8	0.25
100811	22:17:40.60	38º 59.81′	111º 22.92′	4.9*	2.5W	23	39	20	0.15
100812	01:57:54.57	39º 24.09′	111º 54.60′	13.9	0.5	11	126	14	0.16
100812	06:50:32.39	38º 59.77′	111º 22.81′	6.4*	1.3	12	59	20	0.24
100812	09:49:24.18	38º 59.98′	111º 22.12′	13.3	1.6	10	78	19	0.10
100812	11:53:03.85	41º 42.02′	111º 46.26′	2.4*	0.4	8	102	11	0.17
100812	11:53:36.28	41º 43.88′	111º 43.89′	9.7	1.0	15	65	9	0.08
100812	18:30:04.75	37º 39.14′	110º 27.04′	1.2*	1.6W	8	185	41	0.18
100812	22:13:14.09	41º 44.36′	111º 44.28′	10.6	0.9	9	84	8	0.10
100812	22:14:18.09	41º 44.32′	111º 43.14′	8.6	0.5	7	88	8	0.15
100813	06:11:08.36	37º 07.88′	113º 26.91′	12.3	1.5	11	147	23	0.15
100813	16:18:54.18	37º 41.13′	113º 11.18′	1.7*	0.6	9	90	13	0.21
100813	16:19:12.82	37º 27.18′	113º 08.45′	3.0*	1.4	17	55	11	0.25
100813	23:30:34.30	38º 59.08′	111º 23.06′	3.3*	1.3	8	81	20	0.16
100814	04:54:36.05	39º 42.38′	112º 04.78′	1.2*	1.6	14	124	28	0.20
100814	10:30:59.18	39º 42.09′	111º 14.23′	1.8	1.6	15	70	7	0.25
100815	11:51:23.33	36º 55.29′	112º 04.49′	7.2*	1.4	14	118	41	0.26
100816	18:32:08.33	39º 41.88′	111º 15.63′	1.9	1.5	11	114	8	0.19
100816	20:31:44.10	37º 23.31′	114º 13.59′	4.3*	1.7	10	154	38	0.23
100818	00:11:37.77	39º 41.72′	112º 06.52′	5.2*	0.8	6	177	29	0.15
100818	00:43:06.17	39º 42.49′	112º 04.59′	1.7*	1.5	10	87	28	0.16
100818	03:27:42.30	39º 00.29′	111º 22.92′	6.5*	1.8	10	69	21	0.11
100818	11:10:16.87	39º 00.02′	111º 22.62′	4.6*	1.7W	13	79	20	0.12
100818	12:44:45.41	37º 38.60′	113º 12.81′	1.5*	1.4	19	77	12	0.23
100818	12:49:13.57	37º 38.57′	113º 12.58′	1.9*	1.6	15	76	12	0.13
100818	12:49:49.77	37º 38.53′	113º 12.56′	1.4*	1.5	15	76	12	0.25
100818	12:51:43.79	37º 38.68′	113º 13.58′	3.0*	3.0W	24	76	13	0.30
100818	12:52:31.97	37º 38.27′	113º 13.33′	6.4	3.8W	21	79	13	0.26
100818	13:18:10.83	37º 38.78′	113º 12.44′	1.7*	1.1	14	76	12	0.25
100818	14:40:31.46	37º 38.12′	113º 12.83′	5.7*	1.5W	16	76	12	0.23
100818	14:41:49.31	37º 38.44′	113º 12.56′	2.7*	2.1W	16	76	12	0.21
100818	15:58:38.62	40º 36.18′	111º 33.78′	2.5*	1.0	9	156	12	0.22
100818	19:17:52.78	37º 38.57′	113º 12.48′	1.7*	1.6	17	80	12	0.19
100818	21:08:32.68	37º 38.17′	113º 13.43′	6.5	1.5	15	80	13	0.23
100819	02:37:50.13	37º 41.18′	113º 12.03′	3.5*	1.3	20	75	14	0.21
100819	05:45:01.49	37º 41.42′	113º 11.15′	1.9*	0.5	12	91	14	0.19

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DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
100819	07:19:04.36	39° 42.21′	111° 13.82′	0.5	1.5W	26	71	7	0.18
100819	10:08:31.36	37° 43.76′	112° 37.54′	1.4*	2.3W	25	52	25	0.22
100819	18:31:19.88	38° 59.70′	111° 22.62′	4.3*	1.6	15	95	24	0.13
100819	22:05:55.17	39° 00.11′	111° 22.69′	12.4*	1.5	9	94	25	0.11
100820	03:33:01.22	38° 59.84′	111° 23.22′	7.3*	1.7	16	75	24	0.13
100820	12:50:53.28	38° 59.78′	111° 22.11′	4.0*	1.4	12	96	25	0.21
100820	13:30:14.72	39° 00.14′	111° 22.43′	1.6*	2.0W	28	74	25	0.20
100820	13:42:20.82	39° 00.26′	111° 21.94′	4.6*	1.4W	16	74	26	0.24
100820	14:02:21.24	36° 59.58′	113° 30.46′	0.0*	2.0W	12	165	24	0.24
100820	14:13:38.43	38° 59.84′	111° 22.53′	12.0*	1.4	10	96	25	0.15
100820	15:52:46.72	37° 59.19′	112° 29.28′	1.7*	1.4	16	66	47	0.25
100820	17:05:04.66	37° 38.50′	113° 12.49′	1.5*	1.4	16	80	26	0.20
100820	17:05:38.31	37° 39.65′	113° 11.43′	5.4*	0.9	9	85	26	0.10
100820	19:01:18.00	39° 00.36′	111° 22.48′	12.9	1.4	8	95	26	0.23
100820	19:22:41.61	39° 44.60′	111° 15.55′	8.3*	1.4	13	117	39	0.25
100820	19:59:55.33	39° 34.61′	111° 41.10′	7.4	1.2	16	89	14	0.20
100821	18:19:15.94	39° 28.21′	112° 02.91′	0.5*	2.5W	24	58	15	0.21
100821	18:38:50.16	40° 28.44′	111° 58.48′	9.4	1.0	17	86	3	0.18
100821	22:20:27.73	39° 41.88′	111° 13.98′	1.8	1.4	13	120	7	0.23
100821	23:21:07.33	38° 55.90′	111° 55.02′	2.9*	1.3	8	78	15	0.16
100822	18:14:24.66	40° 28.59′	112° 00.09′	3.8	1.2	12	86	5	0.27
100822	18:15:38.41	40° 28.83′	111° 58.29′	8.0	1.2	22	81	3	0.17
100823	08:52:31.86	40° 28.30′	111° 58.54′	11.0	0.7	10	77	3	0.19
100823	15:21:16.10	38° 02.06′	111° 07.21′	3.7*	2.0W	16	121	23	0.29
100823	17:33:20.67	38° 01.69′	111° 06.98′	5.2*	2.2W	17	122	24	0.24
100823	19:17:01.86	38° 12.13′	113° 00.79′	1.2*	1.7	22	78	38	0.29
100823	19:30:28.05	38° 12.93′	113° 00.06′	2.2*	1.7	22	76	36	0.18
100824	11:41:30.39	37° 38.77′	113° 13.25′	1.4*	2.2	20	75	25	0.30
100824	11:47:52.12	39° 00.29′	111° 21.83′	12.3	2.0	8	77	19	0.17
100824	12:19:48.49	37° 35.45′	111° 16.37′	14.6*	1.5	10	192	56	0.40
100824	15:56:21.91	39° 33.13′	111° 28.56′	1.7*	1.1	13	163	25	0.18
100824	21:10:23.33	39° 33.94′	111° 28.56′	10.4*	0.8	9	173	25	0.12
100824	22:55:53.33	39° 38.49′	110° 25.04′	7.3*	1.3	14	208	23	0.18
100825	04:02:26.52	39° 42.63′	111° 14.12′	7.7*	1.7	18	117	38	0.17
100825	06:38:20.46	39° 24.30′	111° 06.61′	7.3	1.7	15	87	10	0.17
100825	18:16:36.86	39° 00.12′	111° 22.88′	6.0*	1.7W	24	38	20	0.17
100826	00:53:57.01	39° 49.21′	111° 59.89′	5.5*	1.5	28	68	16	0.27
100826	06:04:09.95	39° 43.89′	111° 12.99′	3.9*	1.7	18	93	41	0.19
100826	07:28:37.49	39° 42.73′	111° 14.76′	5.0*	1.4	21	86	43	0.15
100826	10:32:59.44	38° 59.99′	111° 22.97′	0.2*	1.9W	30	58	20	0.24
100826	13:01:35.02	37° 38.95′	113° 13.29′	2.7*	2.2	20	75	25	0.27
100826	20:46:16.83	39° 29.54′	110° 18.69′	10.9	1.9	12	182	16	0.20
100827	11:17:28.44	41° 54.65′	112° 34.42′	7.4*	0.5	13	141	21	0.21
100827	15:18:18.74	42° 02.58′	111° 30.89′	0.1*	2.2W	32	53	24	0.22
100827	18:48:02.62	39° 03.16′	111° 23.49′	4.3*	1.2	7	118	24	0.17

Table 2. Earthquakes in the Utah Region: July 1–September 30, 2010

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
100828	05:47:50.44	37° 38.84′	113° 13.18′	3.6*	2.5	24	75	25	0.37
100828	11:24:55.28	37° 38.59′	113° 12.75′	0.9*	1.5	14	75	26	0.28
100830	03:24:37.64	41° 47.75′	111° 40.80′	17.3	1.2	18	77	7	0.13
100830	08:01:46.35	37° 26.12′	113° 07.23′	6.7	1.0	12	131	9	0.27
100830	22:51:06.84	41° 47.20′	112° 23.47′	11.5	0.5	7	100	10	0.15
100831	00:16:04.61	38° 01.26′	111° 06.76′	11.1*	1.9W	14	140	25	0.19
100901	02:08:52.92	39° 42.31′	111° 13.97′	1.7	1.5	20	72	8	0.21
100901	13:33:02.59	39° 43.15′	110° 36.89′	4.6*	1.7W	28	79	11	0.23
100902	09:13:06.68	41° 31.02′	112° 12.58′	9.8	1.1	27	76	9	0.19
100902	15:19:59.63	40° 40.83′	111° 24.14′	1.5	1.3	9	128	4	0.25
100903	01:34:23.74	39° 42.34′	111° 14.41′	1.7	1.6	19	73	8	0.25
100903	21:18:53.37	39° 40.13′	110° 24.35′	1.6	1.2	8	138	4	0.28
100905	18:11:19.86	38° 56.17′	111° 24.38′	9.1	1.4	11	88	18	0.28
100906	04:06:50.39	38° 01.44′	111° 07.05′	9.1*	1.6	15	123	24	0.24
100907	03:00:34.53	37° 32.07′	112° 19.02′	5.4	1.5	15	105	10	0.22
100907	14:56:00.31	40° 44.28′	111° 24.97′	5.0	0.9	5	281	9	0.07
100909	05:30:05.66	38° 01.11′	112° 24.55′	2.3*	1.2	13	89	20	0.23
100910	10:35:02.13	42° 00.01′	112° 50.37′	10.6*	1.0	16	274	25	0.13
100910	10:39:35.41	37° 10.29′	112° 57.22′	15.5	1.7	13	130	26	0.18
100910	16:08:37.54	42° 20.90′	111° 32.08′	6.9*	1.0	7	113	33	0.18
100910	20:21:19.31	41° 48.08′	112° 22.61′	10.3	2.5W	19	77	12	0.22
100911	00:29:05.17	41° 48.42′	112° 22.94′	9.9	0.9	16	78	12	0.15
100911	15:29:07.31	41° 48.64′	112° 23.61′	10.6	0.6	10	81	12	0.15
100912	02:57:39.39	41° 48.29′	112° 22.20′	5.7*	0.2	8	89	13	0.20
100912	04:12:49.01	41° 46.47′	112° 23.10′	9.9	0.6	10	80	9	0.24
100912	04:14:46.33	41° 46.24′	112° 22.80′	9.4	1.3	23	73	9	0.24
100912	22:12:04.99	41° 53.51′	112° 25.30′	8.0	1.3	20	97	9	0.24
100912	23:27:52.59	39° 38.41′	110° 24.26′	0.3	0.3	5	196	4	0.22
100913	22:05:53.09	38° 46.35′	111° 33.84′	12.1	1.1	17	56	12	0.17
100914	02:26:39.21	41° 47.73′	112° 23.29′	9.3	0.1	10	85	11	0.30
100914	11:54:38.41	42° 14.75′	111° 34.10′	6.1*	0.9	13	108	23	0.19
100914	16:39:59.51	41° 42.97′	111° 40.04′	10.3	1.2	19	94	13	0.20
100916	13:04:36.31	42° 08.30′	111° 21.76′	0.6*	2.2W	18	135	23	0.26
100916	16:49:42.27	42° 07.20′	111° 21.01′	3.4*	2.3W	16	88	20	0.15
100917	14:33:03.06	38° 10.35′	113° 04.77′	1.8*	1.7	26	139	10	0.40
100917	14:56:29.22	37° 18.52′	114° 07.24′	2.8*	3.0W	16	132	25	0.27
100917	18:15:49.45	38° 11.01′	113° 04.24′	0.1*	1.8	18	135	11	0.35
100919	04:17:07.02	42° 24.18′	111° 22.77′	1.8*	1.1	12	104	46	0.19
100920	02:51:25.72	37° 51.91′	110° 43.06′	1.8	2.1W	24	131	8	0.15
100921	21:41:13.04	39° 32.34′	111° 56.64′	3.5*	2.1W	17	82	12	0.21
100925	17:01:22.23	38° 38.45′	112° 31.20′	6.4	0.9	9	125	7	0.26
100925	20:17:28.31	38° 59.95′	111° 22.45′	5.7*	1.7W	15	59	20	0.15
100926	02:38:36.32	39° 26.77′	111° 55.86′	9.6	1.0	16	98	12	0.25
100926	02:55:46.00	40° 23.23′	111° 50.65′	1.6*	0.4	13	80	11	0.22
100927	04:55:54.29	39° 42.10′	111° 14.22′	1.7	1.7	18	121	7	0.20

Table 2. Earthquakes in the Utah Region: July 1–September 30, 2010

DATE	ORIGIN TIME	LATITUDE	LONGITUDE	DEPTH	MAG	NO	GAP	DMN	RMS
100927	20:43:17.90	39º 00.56′	111º 21.45′	8.8*	1.5	9	110	19	0.10
100928	07:10:55.59	38º 32.11′	112º 24.63′	1.7	0.7	14	72	9	0.25
100928	14:23:39.60	39º 00.13′	111º 23.37′	6.0*	1.3W	15	81	21	0.15
100929	11:58:34.52	38º 59.58′	111º 22.55′	6.7*	1.6	11	122	20	0.17
100929	15:48:59.63	38º 12.12′	112º 15.11′	4.3*	1.3	17	71	19	0.25

number of earthquakes = 320

* 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, 2010

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	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
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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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	INEEL
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
CWR	Coldwater Ranch, Paradise, UT	CWR	EN[ZEN]	3	UU	41° 34.90′	111° 46.89′	1837	Applied Mems	ANSS-130	Digital	ANSS
CWU	Camp Williams, UT	CWU	EHZ	1	UU	40° 26.75′	112° 06.13′	1945	L4C	PSN	Analog	USGS
DAU	Daniels Canyon, UT	DAU	EHZ	1	UU	40° 24.75′	111° 15.35′	2771	S13	PSN	Analog	USGS
DBD	Des Bee Dove, UT	DBD	EHZ	1	UU	39° 18.82′	111° 05.55′	2265	L4C	PSN	Analog	Utah
DCM	Dugout Coal Mine, UT	DCM	EHZ	1	UU	39° 41.70′	110° 35.00′	2537	L4C	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

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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
GRD	Gardner Farm, UT	GRD	EHZ	1	UU	40° 35.93′	111° 55.47′	1323	Ranger	PSN	Analog	USGS
GRR	Grays Lake, ID	GRRI	EHZ	1	IE	42° 56.28′	111° 25.32′	2207	*	*	Digital	INEEL
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	INEEL
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					Episensor			
HVU	Hansel Valley, UT	HVU	HH[ZEN]	3	UU	41° 46.78′	112° 46.50′	1609	Trillium 120	Q330	Digital	USGS
			EN[ZEN]	3					EpiSensor			
HWU	Hardware Ranch, UT	HWUT	BH[ZEN]	3	US	41° 36.41′	111° 33.91′	1830	*	*	Digital	USGS

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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
LOHW	National Elk Refuge, WY	LOHW	BH[ZEN]	3	IW	43° 36.76′	110° 36.30′	2245	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
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
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
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

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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]	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 º 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
P17A	Butcher Ranch, Price, UT	P17A	HH[ZEN]	3	UU	39° 37.67′	110° 14.56′	1687	Trillium 240	Q330	Digital	Utah
			EN[ZEN]	3					EpiSensor			
P18A	Preston Nutter Ranch, Sunnyside, UT	P18A	HH[ZEN]	3	UU	39° 28.38′	110° 44.40′	2743	Trillium 240	Q330	Digital	Utah
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	SMART-24	Digital	Utah
			EN[ZEN]	3					PA-23			

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	INEEL
PTU	Portage, UT	PTU	EHZ	1	UU	41° 55.76′	112° 19.48′	2192	L4C	PSN	Analog	USGS
Q16A	Castle Valley Ranch, Emery, UT	Q16A	HH[ZEN]	3	UU	38° 55.06′	111° 10.30′	1912	STS-2	Q330	Digital	Utah
			EN[ZEN]	3					EpiSensor			
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
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	SCSU	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	INEEL
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
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
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] ELZ	4	UU	40° 27.29′	111° 57.21′	1552	S13	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
WUAZ	Wupatki, AZ	WUAZ	BH[ZEN]	3	US	35° 31.01′	111° 22.43′	1592	*	*	Digital	USGS
WVUT	Wellsville, UT	WVUT	EHZ	1	UU	41° 36.61′	111° 57.55′	1828	L4C	PSN	Analog	USGS
YDC	Denny Creek, MT	YDC	EHZ	1	WY	44° 42.51′	111° 14.60′	2025	L4C	PSN	Analog	USGS
YFT	Old Faithful (YNP), WY	YFT	HH[ZEN]	3	WY	44° 27.05′	110° 50.24′	2292	Trillium 120	72A-07	Digital	USGS
			EN[ZEN]	3					Titan			
			EHZ	1					L4C	None	None	
YGC	Grayling Creek, MT	YGC	EHZ	1	WY	44° 47.77′	111° 06.45′	2075	L4C	PSN	Analog	USGS
YHB	Horse Butte, MT	YHB	EHZ	1	WY	44° 45.07′	111° 11.71′	2157	L4C	PSN	Analog	USGS
			HH[ZEN]	3					40T	ANSS-130	Digital	
			EN[ZEN]	3					Titan			
YHH	Holmes Hill (YNP), WY	YHH	EHZ	1	WY	44° 47.30′	110° 51.03′	2717	S13	PSN	Analog	USGS
			HH[ZEN]	3					Trillium 120	Q330	Digital	
			EN[ZEN]	3					Titan			
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
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
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			

UURSN Code	Location	SEED Station	SEED Channel	No. of Channels	Network Code	Latitude	Longitude	Elevation (meters)	Sensor	Digitizer	Telemetry	Sponsor
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: 702 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/SEED_appA.htm>> 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 Engineering and Environmental 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 accelerometer
EpiSensor	Kinemetrics 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	Kinemetrics Titan accelerometer
Observer	Refraction Technology (REF TEK) 151 Observer broadband seismometer

Digitizer	**Description**
Masscomp	Concurrent Computer Corporation (formerly PSN) 7200C computer (with 12-bit digitizer)
K2	Kinemetrics Altus Series K2 (19-bit resolution field digitizer)
Etna	Kinemetrics Altus Series Etna (19-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 (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)

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
INEEL	Idaho National Engineering and Environmental 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, 2010

August 12, 2010 to August 13, 2010	Stations CRLU, HCSU, and RRCU (EHZ and EN[ZEN]) were installed at the location of the TA adopted vaults R19A, O16A, and N16A, respectively.
Note	The total number of channels has notably changed due to ARRA upgrades in Utah and Yellowstone.