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SEISMICITY OF THE SOUTHEASTERN UNITED STATES DURING 2001 included 103 tectonic (not induced) earthquakes and 2 earthquakes associated with reservoirs with magnitudes exceeding 1.0. The largest earthquake reported during the year was mb(Lg) = 3.9 occurring on December 8, 2001. The epicenter was near Scottsboro, Alabama.

Figure 1 is an epicenter map of earthquakes located during the report period. Figures 2 and 3 are cumulative epicenter maps for the period from July 1977 through December 2001, covered by SEUSSN Bulletins 1 through 36.

SOUTHEASTERN U.S. EARTHQUAKES DURING 2001 lists hypocentral parameters, magnitudes, and arrival times for tectonic earthquakes in the southeastern United States.

SOUTHEASTERN U.S. RESERVOIR ACTIVITY DURING 2001 lists hypocentral parameters, magnitudes, and arrival times for earthquakes near the reservoirs in South Carolina.

SEISMIC STATION LISTING AND NETWORK MAPS contains a listing of seismic stations potentially operational during the report period and maps showing the major network operators in the region. The SEUSSN monitoring area is considered to include all of Florida, Georgia, Alabama, South Carolina, North Carolina, Virginia, West Virginia (south of latitude 37.72 deg North), Maryland, and Delaware; and includes Tennessee and Kentucky - east of longitude 87 degrees West (see Figure 4).

INTERNET ACCESS TO SOUTHEASTERN U.S. EARTHQUAKE CATALOG INFORMATION AND ELECTRONIC VERSIONS OF THE BULLETIN describes how to download southeastern U.S. earthquake catalogs and electronic versions of the SEUSSN Bulletins via the Virginia Tech Seismological Observatory website http://www.geol.vt.edu/outreach/vtso. Hypocentral parameters of events in Bulletin 36 are accessible via the ANSS catalog at http://quake.geo.berkeley.edu/cnss.

DEFINITIONS AND NETWORK OPERATOR CODES contains definitions of various terms and abbreviations used in the Bulletin as well as a listing of codes for network operators and/or contributors.

Acknowledgments

This report is the thirty-sixth SOUTHEASTERN UNITED STATES SEISMIC NETWORK BULLETIN and covers the period from January through December, 2001. The organizations supplying data for this Bulletin are Auburn University, Charleston Southern University, Delaware Geological Survey, Georgia Institute of Technology, Maryland Geological Survey, Millersville University, United States Geological Survey, University of Memphis (Center for Earthquake Research and Information), University of South Carolina, University of Tennessee/Tennessee Valley Authority- Joint Institute for Energy and Environment, Virginia Polytechnic Institute and State University (Virginia Tech Seismological Observatory), and the Westinghouse Savannah River Company.

Several of the plots in this report were generated using the Generic Mapping Tools (GMT) software package developed by Wessel and Smith (1991).

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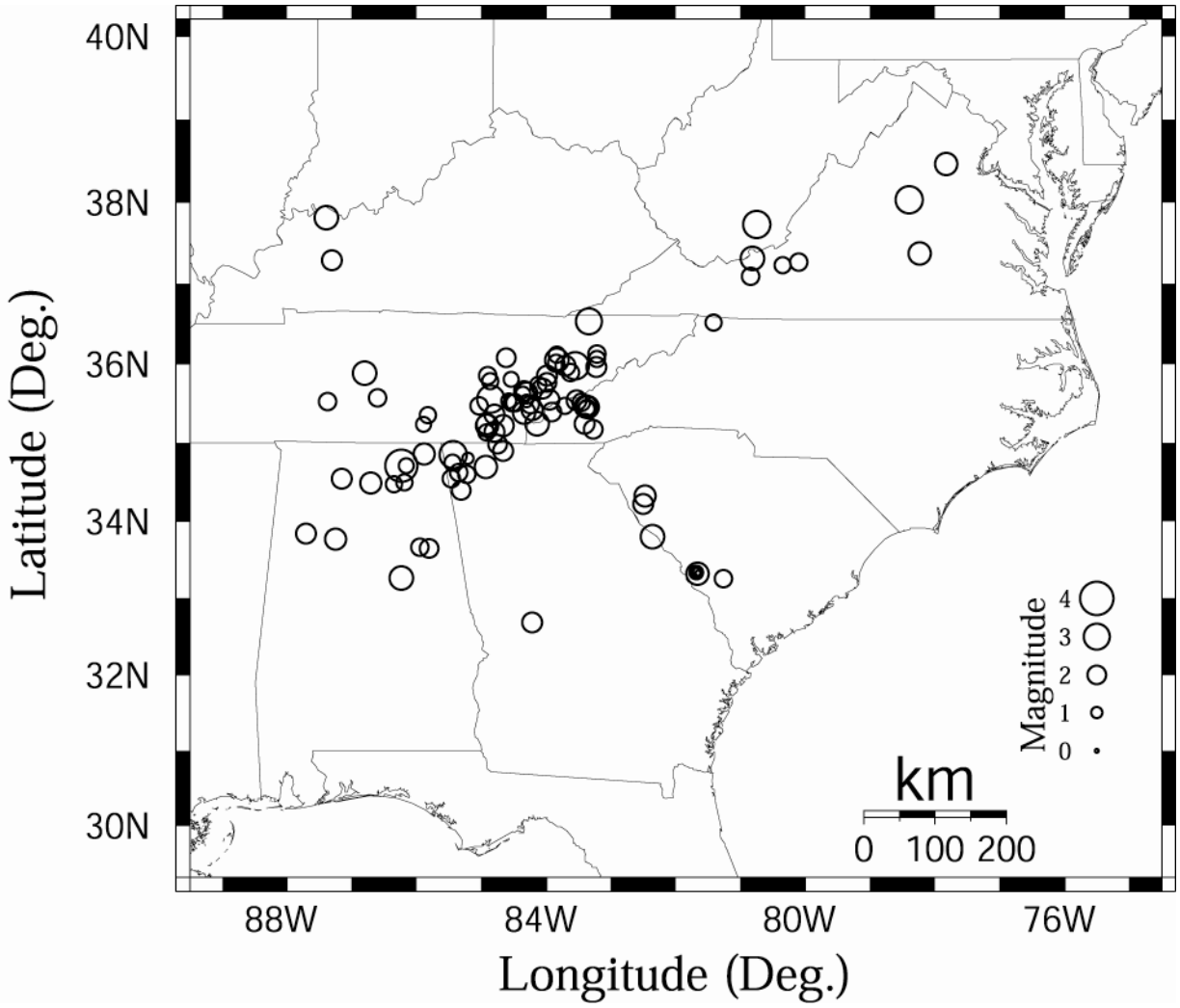

FIGURE 1. Epicenters of earthquakes (M ≥ 0.0) in the southeastern United States for this report period.

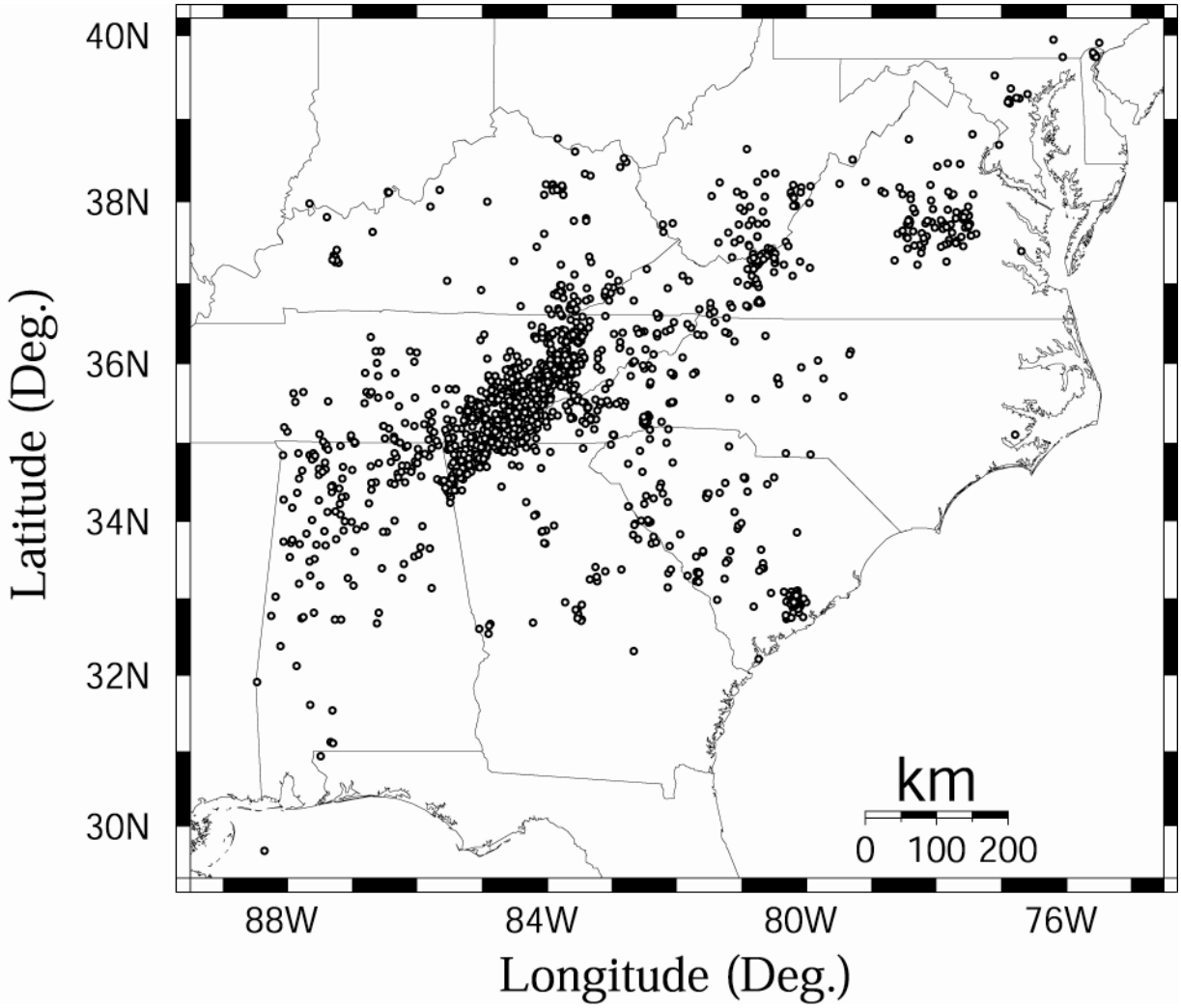

FIGURE 2. Epicenters of earthquakes (M ≥ 0.0) in the southeastern United States from July 1977 through this report period.

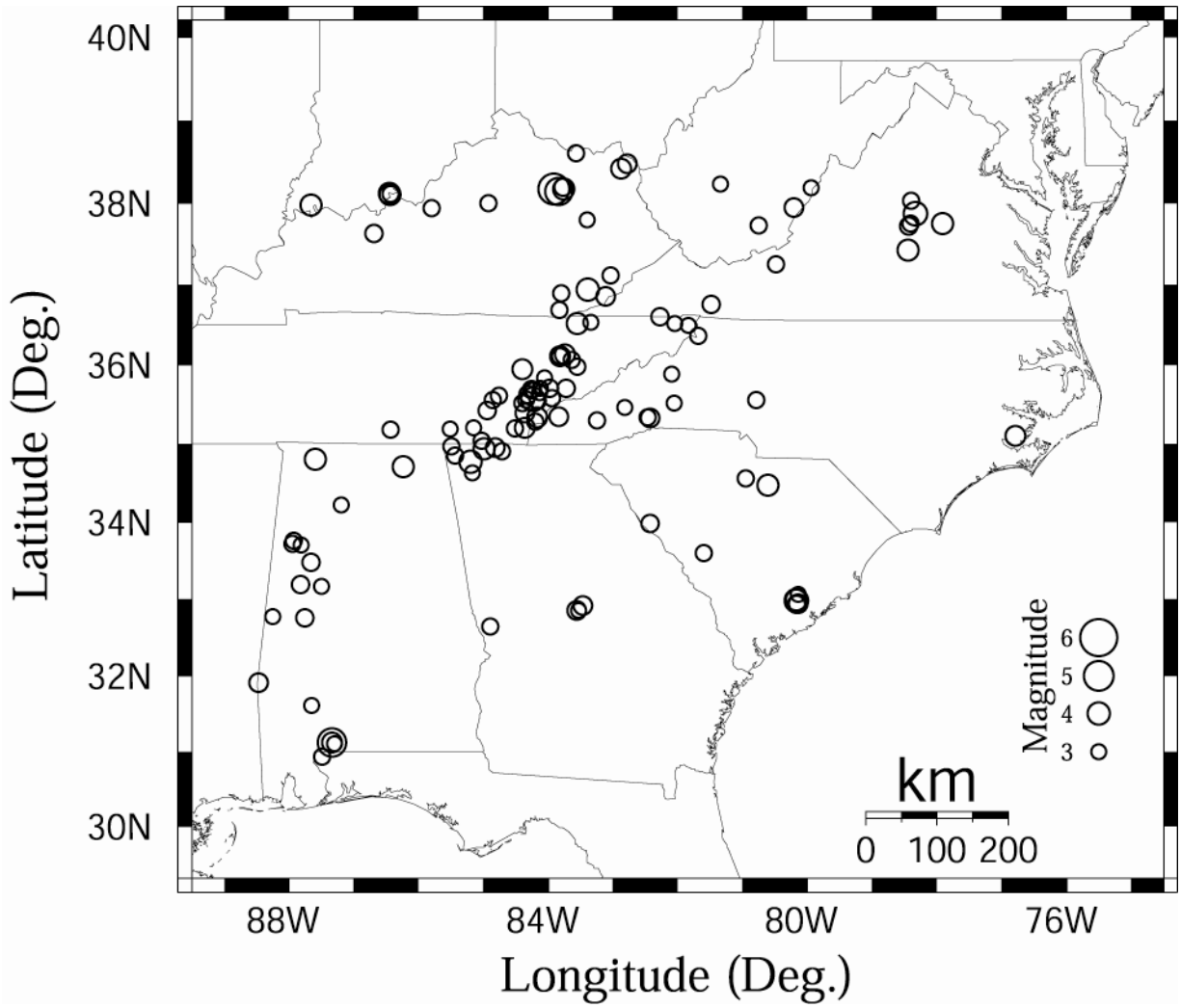

FIGURE 3. Epicenters of earthquakes (M ≥ 3.0) in the southeastern United States from July 1977 through this report period.

SEUSSN EARTHQUAKE CATALOG STATISTICS

TABLE 1. SEUSSN Report Period Earthquake Catalog Statistics

Period: January through December 2001 (1 year)	Tectonic
Number of Earthquakes with M ≥ 0.0	99
Number of Earthquakes with M ≥ 2.0	54
Number of Earthquakes with M ≥ 3.0	7
Number of Earthquakes with M ≥ 4.0	0
Number of Felt Earthquakes	10
Number of Earthquakes with Known ERZ ≤ 5.0 km	88

Largest Earthquake: 8 December 2001; 01:08 – near Scottsboro, AL, mb(Lg)= 3.9, V MM

Period: July 1977 through December 2001 (24.5 years)	Tectonic
Number of Earthquakes with M ≥ 0.0	1975
Number of Earthquakes with M ≥ 2.0	765
Number of Earthquakes with M ≥ 3.0	116
Number of Earthquakes with M ≥ 4.0	8
Number of Felt Earthquakes	230
Number of Earthquakes with Known ERZ ≤ 5.0 km	1423

Largest Earthquake: 27 July 1980; 18:52 - Sharpsburg, KY, mb= 5.2, MMI= VII

SOUTHEASTERN U.S. EARTHQUAKES DURING 2001

Events are listed chronologically (this also applies to multiple hypocenter locations for the same event). All times are Universal Coordinated Time. Most entries in the listing are self-explanatory. Items that might require further explanation are defined in the section entitled DEFINITIONS AND NETWORK OPERATOR CODES.

*****2001 JANUARY 02; 04:45 – MARYVILLE, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010102	044559.5	35.549	83.952	9.7	6	71	223	0.1	D	D/D	6.0	347	0.4	5.5	D		2.2		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	EGT	70.9	56	iPd	04:46:11.20 (0.05)	eS	04:46:19.67 (-0.06)
UTK	DATN	103.0	267	eP	:17.71 (1.51X)	eS	:33.67 (5.21X)
UTK	SLTN	192.7	58	eP+	:30.28 (-0.09)	eS	:53.19 (0.25)
UTK	ABTN	198.7	281	eP	:31.33 (0.05)	iS	:54.40 (-0.04)
UTK	MSAL	259.8	253	eP	:41.76 (2.11X)	eS	:47:13.73 (4.89X)

*****2001 JANUARY 07; 12:15 – NIOTA, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010107	121534.6	35.504	84.517	5.1	14	49	96	0.4	C	C/C	0.9	324	0.3	2.8	C		1.8		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	ORT	48.9	23	eP	12:15:45.70 (2.98X)	iS	12:15:48.82 (0.09)
UTK	DATN	51.6	270	eP	:46.05 (2.88X)	eS	:52.63 (3.13X)
UTK	CRTN	98.5	38	eP	:50.60 (-0.07)	eS	:16:01.46 (-1.09)
UTK	EGT	118.8	68	eP	:58.93 (4.97X)	eS	:11.83 (3.63X)
UTK	PDTN	123.7	258	eP	:54.83 (0.13)	eS	:09.48 (0.01)
UTK	ABTN	150.2	287	eP	:58.99 (0.12)	eS	:16.48 (-0.21)
UTK	SHAL	224.4	239	eP	:16:10.64 (0.06)	eS	:37.73 (0.99)
UTK	SLTN	240.0	64	eP	:13.82 (0.92)	eS	:51.04 (10.29X)
UTK	GOGA	251.4	157	iP	:11.83 (-2.36)	eS	:43.48 (0.51)
UTK	WVT	307.3	284	eP	:18.54 (-2.54)	eS	:56.71 (1.81)

*****2001 JANUARY 14; 11:46 – TELLICO PLAINS, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010114	114610.5	35.419	84.214	9.4	13	99	130	0.3	C	B/D	1.0	353	0.3	2.0	B		2.3		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	EGT	98.7	57	iP-	11:46:26.58 (0.04)	eS	11:46:41.51 (3.18X)
UTK	PDTN	149.5	264	iPu	:34.55 (0.03)	iS	:52.10 (-0.03)
UTK	ABTN	179.2	287	eP	:39.98 (0.77)	iS	:47:00.02 (-0.22)
UTK	SLTN	220.5	58	eP	:45.41 (-0.30)	eS	:12.12 (0.82)
UTK	GOGA	233.1	163	iPd	:47.30 (-0.07)	iS	:14.23 (0.06)
UTK	SHAL	224.0	244	eP	:47.49 (-1.25)	eS	:17.45 (0.91)
UTK	WVT	336.3	285	eP	:47:08.76 (8.66X)	eS	:37.29 (1.10)
UTK	PLAL	354.9	263	eP	:02.54 (0.14)	eS	:44.89 (4.73X)
UTK	WCI	364.1	329	eP	:11.29 (7.76X)	eS	:48.79 (6.67X)

*******2001 JANUARY 17; 12:03 – SHELBYVILLE, TENNESSEE*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010117	120316.1	35.571	86.602	10.6	8	57	133	0.2	D	C/D	1.3	261	0.4	99.0	D		1.9		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	ABTN	56.6	52	iP	12:03:25.53 (0.08)	iS	12:03:32.25 (-0.10)
UTK	MSAL	80.6	185	eP	:30.17 (0.95)	iS	:38.93 (0.07)
UTK	WVT	127.2	300	eP	:36.36 (-0.21)	iS	:51.71 (0.14)
UTK	PLAL	149.1	244	eP	:39.69 (-0.34)	eS	:57.24 (-0.32)

*******2001 JANUARY 20; 11:29 – BRYSON CITY, TENNESSEE*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010120	112954.9	35.535	83.526	17.0	7	47	229	0.2	C	B/D	1.9	357	0.7	1.8	B		2.2		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	EGT	47.4	27			iS	11:30:08.61 (0.07)
UTK	SLTN	161.9	51	eP	12:30:20.83 (0.03)	eS	:39.44 (-0.22)
UTK	ABTN	237.0	280	eP	:31.03 (-0.46)	iS	:58.30 (0.20)
UTK	WCI	389.8	320	eP	:51.29 (0.98)	eS	:31:30.86 (0.20)

*******2001 JANUARY 25; 02:32 – MORRISTOWN, TENNESSEE*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010125	023235.1	36.117	83.210	3.3	10	25	150	0.6	D	D/C	1.2	30	0.6	3.1	C		1.8		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	EGT	25.3	198	iP	02:32:39.23 (-0.14)	eS	02:32:43.63 (1.12)
UTK	CRTN	57.5	279	iP-	:43.91 (-0.74)	iS	:52.02 (0.32)
UTK	ORT	101.3	257	eP	:55.33 (3.61X)	eS	:33:10.74 (6.75X)
UTK	SLTN	104.4	69	eP	:52.07 (-0.17)	eS	:06.96 (2.06)
UTK	PDTN	256.6	249	eP	:33:14.33 (-1.23)	eS	:46.26 (1.28)
UTK	ABTN	262.6	265	iP+	:15.01 (-1.30)	eS	:46.88 (0.61)

*******2001 JANUARY 27; 00:27 – JASPER, ALABAMA*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010127	002719.4	33.838	87.071	0.5	15	79	193	0.3	D	C/D	1.5	341	0.5	1.5	B		2.1		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)

UTK	SHAL	78.9	33	iP	00:27:32.71	(0.24)	eS	00:27:42.03 (-0.09)
UTK	MSAL	117.7	18	eP	:38.46	(-0.29)	eS	:53.57 (0.53)
UTK	PLAL	157.0	324	iPu	:44.69	(-0.29)	eS	:28:03.79 (0.02)
UTK	PDTN	194.7	35	eP	:50.82	(-0.12)	eS	:14.36 (0.28)
UTK	OXF	228.2	290	eP	:55.75	(-0.46)	iS	:23.72 (0.67)
UTK	ABTN	243.6	21	eP	:58.64	(0.07)	eS	:25.90 (-1.14)
UTK	WVT	263.5	345	eP	:28:00.24	(-0.77)	eS	:30.89 (-0.37)
UTK	GOGA	337.8	97				eS	:46.57 (-0.52)

*****2001 JANUARY 27; 12:08 – LAFAYETTE, GEORGIA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010127	120857.0	34.748	85.445	2.4	12	69	148	0.2	D	C/D	1.3	23	0.7	1.5	B		1.7		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	PDTN	69.0	328	iPu	12:09:08.51 (0.08)	iS	12:09:16.82 (-0.06)
UTK	ABTN	139.9	335	eP-	:19.30 (-0.49)	eS	:36.71 (0.17)
UTK	ORT	165.4	38	iP	:23.95 (0.13)	eS	:43.73 (0.23)
UTK	CRTN	217.2	42	eP	:31.74 (-0.25)	eS	:57.15 (-0.42)
UTK	EGT	233.4	56	eP	:35.37 (0.79)		
UTK	GOGA	235.2	129			eS	:10:02.12 (-0.18)
UTK	PLAL	241.9	277			eS	:03.89 (0.01)
UTK	WVT	265.3	306			eS	:09.61 (0.74)

*****2001 JANUARY 31; 05:45 – CRAB ORCHARD, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010131	054549.8	35.849	84.896	0.0	8	54	151	0.4	D	C/D	2.5	346	0.7	6.9	D		1.8		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	ORT	53.8	83	eP	05:45:57.75 (-0.94)	eS	05:46:06.64 (1.36X)
UTK	CRTN	102.8	67	eP	:46:06.78 (0.03)	eS	:20.29 (0.99)
UTK	PDTN	107.5	234	eP	:07.37 (-0.12)	eS	:21.27 (0.69)
UTK	ABTN	109.6	272	eP	:07.70 (-0.13)	eS	:21.93 (0.75)
UTK	WVT	266.4	278	eP	:30.79 (-0.98)	eS	:47:06.01 (3.68X)

*****2001 FEBRUARY 17; 11:05 – ATHENS, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010217	110526.4	35.358	84.798	10.8	8	96	213	0.1	D	C/D	1.3	232	0.8	1.9	B		2.2		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	PDTN	96.1	265	iPu	11:05:41.83 (-0.11)	eS	11:05:53.46 (0.09)
UTK	ABTN	132.4	297	ePu	:47.75 (0.08)	iS	:06:03.33 (0.04)
UTK	GOGA	248.2	150	eP	:06:05.21 (0.25)	eS	:33.26 (0.24)
UTK	WVT	287.3	288	eP	:06.94 (-2.84X)	eS	:41.04 (-0.32)
UTK	PLAL	301.4	263			eS	:43.79 (-0.59)

*****2001 FEBRUARY 18; 19:17 – MARYVILLE, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010218	191704.2	35.767	83.986	7.4	14	33	176	0.2	C	B/C	0.7	358	0.3	1.6	B		2.0		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)

UTK	ORT	32.8	299	eP	19:17:09.87	(0.19)	iS	19:17:13.68 (-0.09)
UTK	CRTN	49.8	15	iPd	:12.39	(-0.00)	eS	:18.60 (0.11)
UTK	EGT	63.9	76	eP	:14.73	(0.05)	eS	:22.29 (-0.18)
UTK	ANTN	120.9	292	eP	:23.41	(-0.33)	iS	:38.01 (-0.12)
UTK	PDTN	177.7	253	eP-	:32.53	(-0.14)	eS	:53.98 (0.40)
UTK	SLTN	184.0	65	eP+	:33.64	(-0.08)	eS	:56.51 (1.12)
UTK	ABTN	192.3	275	iP	:34.92	(-0.06)	iS	:57.77 (0.20)
UTK	GOGA	265.6	170	eP	:39.93	(-5.31X)	eS	:18:17.26 (2.13X)

*****2001 FEBRUARY 20; 07:08 – CLEVELAND, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010220	070836.0	35.140	84.795	10.7	17	21	98	0.3	C	C/B	0.7	343	0.3	1.3	A		2.1		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	OLT	20.9	273	iP	07:08:40.33 (0.44)		
UTK	ORT	96.3	27	eP	:51.79 (0.15)	eS	07:09:03.39 (0.29)
UTK	PDTN	97.2	279	eP	:51.90 (0.12)	iS	:03.22 (-0.13)
UTK	ABTN	145.1	305	eP	:59.14 (-0.20)	eS	:16.22 (-0.21)
UTK	CRTN	145.9	36	eP	:59.01 (-0.47)	eS	:17.04 (0.38)
UTK	EGT	159.9	58	eP	:09:02.14 (0.43)	eS	:21.00 (0.48)
UTK	SHAL	183.0	245	eP	:05.09 (-0.23)	eS	:27.06 (0.31)
UTK	GOGA	227.4	147	eP	:10.91 (-1.18)	eS	:38.07 (-0.21)
UTK	WVT	296.0	293	eP	:24.89 (4.34X)	eS	:53.61 (0.69)
UTK	PLAL	299.8	268			eS	:55.65 (1.94)

*****2001 FEBRUARY 23; 01:38 – TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010223	013819.5	35.348	85.082	0.0	8	17	214	1.0	D	D/D	1.9	328	0.7	5.0	C		1.6		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	DATN	16.8	359	eP	01:38:21.15 (-1.15)	eS	01:38:23.57 (-0.79)
UTK	PDTN	70.3	263	eP	:31.00 (-0.14)	iS	:39.56 (-0.18)
UTK	ABTN	110.5	303	eP	:37.86 (0.16)	eS	:53.55 (2.40)
UTK	CRTN	146.7	50	eP	:43.34 (-0.15)	eS	:39:05.72 (4.60)

*****2001 FEBRUARY 25; 00:54 – NEWPORT, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010225	005425.4	35.960	83.225	0.0	11	9	249	0.2	D	C/D	1.5	272	0.6	1.5	B		2.1		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	EGT	9.3	225	iPd	00:54:26.92 (-0.07)	iS	00:54:28.10 (-0.03)
UTK	CRTN	61.5	296	eP+	:35.60 (-0.01)	eS	:43.20 (0.07)
UTK	ORT	97.6	267	eP	:41.85 (0.29)	eS	:55.39 (1.91X)
UTK	PDTN	249.7	253	eP	:55:04.80 (-0.58)	eS	:55:34.97 (0.53)
UTK	ABTN	260.4	269	eP	:06.56 (-0.15)	iS	:37.23 (0.49)
UTK	GOGA	283.6	185	eP	:09.76 (0.22)	eS	:43.11 (1.47)

*****2001 FEBRUARY 25; 16:38 –HALLS, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010225	163807.1	36.113	83.834	10.5	8	10	166	0.2	C	C/C	2.9	330	0.7	2.8	C		1.7		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME	(RES)	PHASE	ARRIVAL TIME	(RES)
UTK	CRTN	9.6	356	iPd	16:38:09.58	(0.06)	iS	16:38:11.22	(-0.06)
UTK	ORT	48.1	242	eP	:15.22	(0.07)	iS	:21.02	(-0.04)
UTK	EGT	53.7	116	eP	:25.82	(9.75X)	eS	:39.62	(16.95X)
UTK	SLTN	158.2	76	eP	:34.30	(1.74X)	eS	:50.79	(-0.40)
UTK	PDTN	204.9	244	eP	:38.19	(-1.66X)	eS	:39:05.31	(1.68)
UTK	ABTN	206.7	264	eP	:40.23	(0.09)	eS	:03.36	(-0.76)

*******2001 FEBRUARY 27; 16:46 – SWEETWATER, TENNESSEE*******

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010227	1646	26.9	35.659	84.340	15.6	20	28	88	0.4	C	C/B	0.6	348	0.2	0.8	A		2.1		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME	(RES)	PHASE	ARRIVAL TIME	(RES)
UTK	ORT	28.0	7	iPd	16:46:32.29	(0.18)	iS	16:46:36.32	(0.39)
UTK	CRTN	75.1	37	eP-	:38.89	(-0.36)	eS	:48.24	(-0.08)
UTK	EGT	98.0	74	eP+	:42.69	(-0.18)	iS	:54.77	(0.19)
UTK	PDTN	143.5	253	eP-	:49.78	(-0.20)	iS	:47:07.54	(0.68)
UTK	ABTN	161.9	279	eP	:52.33	(-0.52)	eS	:11.81	(0.10)
UTK	SLTN	218.1	66	iPu	:47:01.01	(-0.44)	eS	:27.44	(0.89)
UTK	MSAL	230.7	248	eP	:02.77	(-0.12)	eS	:30.21	(1.18)
UTK	SHAL	247.1	237	eP	:04.20	(-0.72)	eS	:34.71	(2.16)
UTK	GOGA	261.9	162	eP	:08.35	(1.62)	eS	:38.78	(3.11)
UTK	WVT	319.4	280	eP	:14.40	(0.59)	eS	:49.03	(1.10)

*******2001 MARCH 07; 17:12 – DECATUR, TENNESSEE*******

NEIC Felt (III) at Athens. Also felt at Decatur and Etowah. Felt in Hamilton, McMinn, Meigs and Rhea Counties.

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010307	1712	23.8	35.523	84.850	6.8	26	65	82	0.5	D	D/D	0.3	344	0.2	0.7	A		3.2		
NEIC	010307	1712	25.0	35.510	84.810	6.7	11	79											3.2		3

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME	(RES)	PHASE	ARRIVAL TIME	(RES)
UTK	ORT	65.4	49	ePd	17:12:34.72	(0.24)	eS	17:12:42.92	(0.51)
UTK	ANTN	79.8	335	iPu	:36.91	(0.10)	iS	:46.33	(-0.13)
UTK	MYNC	82.4	127	eP	:37.60	(0.38)	eS	:46.95	(-0.22)
UTK	PDTN	95.0	253	ePd	:39.32	(0.10)	iS	:51.63	(0.97)
UTK	CRTN	118.1	50	ePd	:42.69	(-0.23)	iS	:57.56	(0.57)
UTK	ABTN	120.9	290	ePd	:43.52	(0.17)	eS	:57.72	(-0.01)
UTK	EGT	146.5	73	ePd	:46.96	(-0.47)	eS	:13:06.57	(1.77X)
UTK	MSAL	182.3	246	eP	:52.28	(-0.74)	eS	:15.54	(1.06X)
UTK	SHAL	200.5	233	iPd	:55.03	(-0.88)	eS	:20.07	(0.64)
UTK	GOGA	266.5	151	iPu	:13:05.15	(0.13)	eS	:35.93	(0.91)
UTK	SLTN	266.5	67	eP	:04.04	(-1.11)	eS	:35.71	(0.46)
UTK	WVT	277.6	285	ePd	:05.40	(-1.00)	eS	:37.18	(-0.22)
UTK	PLAL	299.6	259	eP	:08.08	(-1.03)	eS	:39.93	(-2.17X)
UTK	WCI	327.2	336	eP	:12.04	(-0.47)	eS	:49.01	(1.02)
UTK	BLA	439.3	63				eS	:14:11.51	(-0.49)
NEIC	MYNC	79.0	128	ePg	17:12:37.60	(-1.6)	eS	17:12:46.95	(X)
NEIC	SWET	106.8	253	ePd	:40.75	(-2.9)	eS	:51.65	(X)
NEIC	SCCK	174.6	108	ePn	:52.01	(-1.3)	eS	:13:12.36	(X)
				ePg	:53.00				
NEIC	GOGA	263.5	152	eP	:13:03.66	(-1.3)			
NEIC	WVT	281.3	285	ePn	:05.09	(-2.1)	eS	:36.09	(X)
NEIC	PLAL	302.5	260	ePn	:07.09	(-2.9)			

NEIC	WCI	329.1	337	ePn	:11.97	(-1.4)			
NEIC	BLO	433.7	340	ePn	:26.72	(0.0)			
							eLg	:14:19.67	
NEIC	BLA	437.0	63	eP	:17.29	(-9.8)			
NEIC	CCM	640.5	298	ePn	:50.56	(-2.4)	eS	:15:15.81	(X)
NEIC	MIAR	807.3	265	eP	:14:13.43	(-0.6)			

*****2001 MARCH 10; 14:06 – FRANKLIN, NORTH CAROLINA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010310	140640.4	35.246	83.407	0.0	19	73	141	0.5	D	C/D	0.6	264	0.4	1.5	B		2.1		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)		PHASE	ARRIVAL TIME (RES)	
UTK	EGT	73.4	8	eP	14:06:52.21	(-0.27)	eS	14:07:01.38	(-0.08)
UTK	ORT	109.8	312	eP	:58.80	(0.39)	eS	:12.41	(0.63)
UTK	CRTN	112.9	340	ePd	:58.93	(0.00)	eS	:13.80	(1.13)
UTK	SLTN	176.6	41	eP-	:07:08.56	(-0.51)	eS	:31.49	(1.32)
UTK	GOGA	203.5	182	iP-	:13.50	(0.24)	eS	:37.70	(0.27)
UTK	PDTN	222.3	271	eP-	:15.79	(-0.44)	eS	:41.90	(-0.59)
UTK	ABTN	255.0	287	iP	:20.84	(-0.11)	eS	:51.62	(1.13)
UTK	SHAL	305.7	254	eP	:26.44	(-0.76)	eS	:08:02.75	(1.44)
UTK	WVT	412.2	285	eP	:39.35	(-0.95)	eS	:23.78	(-0.20)
UTK	WCI	421.6	322				eS	:27.44	(1.44)

*****2001 MARCH 13; 02:49 – GUNTERSVILLE, ALABAMA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010313	024922.2	34.470	86.345	16.8	7	24	233	0.2	D	C/D	1.5	320	0.7	1.9	B		1.6		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)		PHASE	ARRIVAL TIME (RES)	
UTK	SHAL	23.9	260	iP	02:49:27.04	(0.10)	iS	02:49:30.39	(-0.05)
UTK	MSAL	51.5	324	eP	:29.73	(-1.20X)	eS	:37.12	(-0.22)
UTK	PDTN	100.0	27	eP	:37.78	(-0.68)	iS	:50.59	(0.20)
UTK	ABTN	158.5	8	eP	:50.75	(3.17X)	iS	:50:06.02	(-0.01)
UTK	PLAL	168.4	290	eP	:54.48	(5.40X)	eS	:09.08	(0.47)

*****2001 MARCH 21; 23:35 – ALABAMA*****

NEIC Felt in Dade County, Georgia.

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010321	233534.9	34.847	85.438	0.0	22	51	116	0.4	D	C/D	0.4	19	0.3	0.7	A		3.2		
NEIC	010321	233535.1	34.857	85.439	3.0	13	60											3.2		F

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)		PHASE	ARRIVAL TIME (RES)	
UTK	OLT	50.6	48	iP	23:35:43.45	(0.18)			
UTK	PDTN	60.4	322	iPu	:44.95	(0.06)	iS	23:35:52.14	(-0.14)
UTK	MSAL	113.0	270	iPd	:53.45	(-0.04)	eS	:36:07.53	(0.29)
UTK	SHAL	116.2	247	iPd	:54.31	(0.31)	eS	:08.05	(-0.08)
UTK	ABTN	130.4	332	iPu	:55.95	(-0.33)	iS	:11.96	(-0.08)
UTK	CRTN	208.6	44	eP	:36:08.52	(-0.12)	eS	:34.20	(0.80)
UTK	EGT	226.9	58				eS	:39.39	(1.03)
UTK	PLAL	241.5	274	eP-	:12.83	(-0.97)	eS	:42.33	(0.22)
UTK	GOGA	241.7	131	iPd	:13.75	(-0.08)	eS	:41.80	(-0.38)
UTK	WVT	259.6	304	iP+	:15.40	(-0.65)	iS	:46.83	(0.84)
UTK	SLTN	348.7	59	eP	:26.66	(-0.51)	eS	:37:06.14	(0.92)

UTK	WCI	382.2	348	eP	:30.76	(-0.41)	eS	:12.81	(0.66)
UTK	BLA	522.7	58	eP	:56.29	(7.75X)			
NEIC	SWET	60.0	312	eP	23:35:45.18	(-0.7)	eS	23:35:52.50	(X)
NEIC	SCCK	224.6	85	eP	:36:11.05	(0.6)			
NEIC	PWLA	240.2	274	eP	:12.76	(0.3)			
NEIC	PLAL	241.3	274	eP	:12.63	(0.0)			
NEIC	GOGA	242.4	131	eP	:13.31	(0.5)			
NEIC	WVT	259.1	304	eP	:15.04	(0.1)		:	
NEIC	WCI	381.4	349	eP	:30.59	(-0.1)			
NEIC	JSC	389.2	98	eP	:31.70	(0.2)			
NEIC	LHS	427.0	94	eP	:35.18	(-1.2)			
NEIC	BLA	522.6	59	eP	:51.67	(3.1)			
NEIC	CCM	629.4	306	eP	:37:01.66	(-0.6)			
NEIC	ACSO	634.9	19	eP	:35.85	(33.0)			
NEIC	MIAR	746.1	270	eP	:15.37	(-1.6)			

*****2001 MARCH 25; 14:56 – KNOXVILLE, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010325	145655.2	36.010	83.841	5.0	12	21	143	0.2	C	C/C	1.5	355	0.5	3.4	C		1.6		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	CRTN	21.1	360	iPu	14:56:58.76 (-0.02)	eS	14:57:01.48 (0.04)
UTK	ORT	43.3	255	iP-	:57:02.31 (-0.08)	iS	:07.80 (0.07)
UTK	EGT	50.4	104	iP	:02.92 (-0.64)	eS	:10.03 (0.27)
UTK	OLT	143.5	229	eP	:16.61 (-1.79X)	eS	:33.72 (-1.74X)
UTK	SLTN	162.0	72	eP	:21.07 (-0.27)	eS	:41.77 (1.21)
UTK	PDTN	199.4	246	eP	:26.51 (-0.70)	eS	:52.17 (1.47)
UTK	ABTN	205.1	267	eP	:26.80 (-1.31)	eS	:51.86 (-0.37)

*****2001 MARCH 26; 11:13 – NIOTA, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010326	111315.9	35.533	84.572	31.2	6	48	226	0.1	D	C/D	2.5	352	1.0	4.9	C		1.5		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	ORT	48.3	30	iP	11:13:25.06 (0.04)	iS	11:13:31.62 (-0.04)
UTK	PDTN	119.6	256	eP	:34.59 (-0.78)	eS	:49.58 (0.06)
UTK	ABTN	144.5	286	eP	:38.71 (-0.44)	iS	:56.05 (0.04)

*****2001 MARCH 28; 11:19 – NARROWS, VIRGINIA*****

NEIC Felt (III) at Narrows and Pearisburg, Virginia.

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
VTSO	010328	111924.6	37.310	80.812	0.1	6	26	221	0.1	D	C/D	4.4	340	0.9	4.4	C		2.5		
NEIC	010328	111924.6	37.310	80.812	10.0F	15	37										2.6	2.5		3

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
VTSO	WMV	26.4	212	P	11:19:29.22 (-0.06)	S	11:19:32.33 (0.05)
VTSO	BLA	36.5	107	P	:31.03 (-0.05)	S	:35.27 (0.05)
VTSO	CRTN	297.1	246	P	:20:11.28 (0.19)	S	:20:43.69 (-0.06)
NEIC	BLA	36.7	107	eP	11:19:31.06 (-0.3)		
NEIC	SLTN	151.2	231	eP	:48.88 (-0.8)		

NEIC	MCWV	273.6	18	eP	:20:06.05 (0.6)
NEIC	LHS	314.7	180	eP	:11.54 (0.9)
NEIC	SCCK	320.3	218	eP	:13.78 (2.3)
NEIC	JSC	338.0	187	eP	:13.97 (0.3)
NEIC	ORT	349.2	245	eP	:14.24 (-0.8)
NEIC	ACSO	374.7	331	eP	:19.76 (1.4)
NEIC	WCI	493.7	284	ePn	:37.93 (4.4)
NEIC	GOGA	494.8	210	eP	:34.70 (1.0)
NEIC	ABTN	499.3	253	ePn	:33.74 (-0.5)
NEIC	PDTN	506.0	245	ePn	:32.40 (-2.7)
NEIC	WVT	640.5	260	eP	:58.16 (6.0)
NEIC	PLAL	702.8	251	eP	:21:01.98 (1.9)
NEIC	CCM	924.1	278	eP	:24.81 (-3.1)

*****2001 MARCH 30; 22:01 – NIOTA, TENNESSEE*****

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010330	2201	12.3	35.509	84.481	18.1	11	47	164	0.1	C	B/C	0.9	308	0.3	1.3	A		1.8		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	ORT	47.2	20	iP	22:01:20.42 (-0.01)	iS	22:01:26.43 (-0.01)
UTK	OLT	63.4	231	iPu	:22.79 (-0.12)	eS	:30.85 (0.16)
UTK	CRTN	96.0	37	eP	:28.10 (0.13)	eS	:39.66 (0.19)
UTK	EGT	115.6	68	eP	:30.27 (-0.79)	eS	:45.16 (0.37)
UTK	PDTN	127.1	259			iS	:47.81 (0.08)
UTK	ABTN	153.2	286	eP	:36.51 (-0.30)	eS	:54.61 (-0.02)

*****2001 APRIL 05; 23:20 – MADISONVILLE, TENNESSEE*****

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010405	2320	33.3	35.633	84.303	5.1	21	31	91	0.3	C	B/C	0.5	336	0.2	1.1	A		2.3		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	ORT	30.6	360	iPd	23:20:38.54 (0.14)	iS	23:20:42.29 (0.09)
UTK	CRTN	75.5	33	iPu	:45.57 (-0.05)	iS	:54.66 (-0.11)
UTK	OLT	84.6	231	iP	:47.19 (0.10)	iS	:57.45 (0.12)
UTK	EGT	95.6	72	iP+	:48.55 (-0.33)	eS	:21:00.26 (-0.18)
UTK	PDTN	145.9	255	iP-	:57.17 (0.32)	iS	:13.86 (-0.31)
UTK	ABTN	165.7	280	iP	:59.83 (-0.13)	eS	:19.58 (0.02)
UTK	SLTN	216.3	65	eP	:21:07.66 (-0.32)	iS	:33.84 (0.49)
UTK	MSAL	232.7	249	iP	:09.34 (-1.15)	iS	:37.49 (-0.08)
UTK	GOGA	258.2	162	iP	:13.69 (0.03)	eS	:43.74 (0.68)
UTK	WVT	323.2	281	eP	:23.72 (2.04)	eS	:59.37 (2.45)
UTK	WCI	339.6	328	eP	:26.34 (2.63)	eS	:22:06.54 (6.11X)
UTK	PLAL	350.6	259	eP	:28.78 (3.72X)	eS	:09.98 (7.21X)

*****2001 APRIL 09; 03:36 – CORDOVA, ALABAMA*****

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010409	0336	47.6	33.769	87.250	0.0	13	95	235	0.5	D	C/D	1.1	4	0.5	1.4	B		2.4		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	SHAL	94.9	39	eP	03:37:03.54 (0.22)	eS	03:37:14.55 (-0.38)
UTK	MSAL	130.9	24	iP	:09.69 (0.61)	iS	:24.32 (-0.57)
UTK	PLAL	154.6	331	iP	:12.43 (-0.40)	iS	:31.38 (0.03)
UTK	PDTN	210.7	37	eP-	:21.37 (-0.33)	iS	:46.96 (0.26)
UTK	ABTN	257.0	24	eP	:29.22 (0.74)	eS	:58.62 (0.41)

UTK	WVT	267.3	349	iPu	:29.38 (-0.35)	eS :38:01.75 (1.39)
UTK	GOGA	353.5	95	eP	:50.56 (10.21X)	eS :18.84 (0.10)

*******2001 APRIL 13; 07:49 – MASCOT, TENNESSEE*******

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010413	074952.6		35.975	83.698	14.3	12	28	130	0.3	C	C/B	0.6	9	0.3	0.8	A		2.1		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	CRTN	28.1	333	iPu	07:49:57.69 (-0.04)	eS	07:50:01.62 (0.12)
UTK	EGT	37.0	103	iPd	:59:18 (0.11)	eS	:02.76 (-1.07X)
UTK	SLTN	151.0	69	eP	:50:16.56 (-0.34)	eS	:35.24 (0.51)
UTK	OLT	151.1	233	eP	:16.13 (-0.74)	eS	:34.79 (0.14)
UTK	PDTN	209.9	249	eP	:25.43 (-0.51)	eS	:50.78 (0.64)
UTK	ABTN	217.8	268	eP	:26.47 (-0.66)	eS	:52.16 (-0.06)
UTK	WVT	372.7	274	eP	:54.84 (8.64X)	eS	:51:24.89 (-0.33)

*******2001 APRIL 13; 16:36 – SNEEDVILLE, TENNESSEE*******

NEIC Felt in eastern Claiborne County

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
NEIC	010413	163620.8		36.530	83.340	0.0F	16	271											3.0		F
UTK	010413	163620.8		36.526	83.342	0.1	16	58	197	0.8	D	D/D	0.8	344	0.3	1.0	A		3.0		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
NEIC	BLA	271.3	73	eP	16:37:03.18 (0.6)		
NEIC	SWET	275.8	239	eP	:02.94 (-0.2)		
NEIC	JSC	312.5	142	eP	:06.40 (-1.5)		
NEIC	WCI	322.5	307	ePn	:10.06 (0.9)		
NEIC	LHS	323.6	134	ePn	:09.62 (0.4)		
NEIC	GOGA	345.8	182	ePn	:10.43 (-1.7)		
NEIC	BLO	405.9	317	ePn	:21.57 (1.9)		
NEIC	WVT	405.9	265	ePn	:19.14 (-0.5)		:
NEIC	ACSO	412.5	4	ePn	:28.20 (7.7)		
NEIC	COW	424.8	145	ePn	:24.74 (2.6)		
NEIC	PLAL	461.5	250	ePn	:35.28 (-1.5)		
NEIC	MCWV	463.7	40	ePn	:25.52 (-1.5)		
NEIC	HBF	482.6	145	eP	:46.45 (16.9)		
NEIC	RGRS	494.8	144	eP	:44.75 (13.7)		
NEIC	SSPA	658.3	45	ePn	:50.24 (-1.6)		
NEIC	MIAR	954.1	260	eP	:39:16.10 (46.9)		
UTK	CRTN	57.6	231	iP	16:36:30.25 (-0.03)	iS	16:36:37.44 (0.12)
UTK	EGT	69.5	177	eP-	:31.50 (-0.75)	eS	:40.87 (0.11)
UTK	SLTN	109.8	94	iPu	:39.40 (0.52)	eS	:48.32 (-3.97X)
UTK	ORT	110.3	232	eP	:38.89 (-0.03)	iS	:52.34 (-0.02)
UTK	ANTN	174.1	258	eP	:48.51 (-0.55)		
UTK	OLT	215.4	225	eP-	:55.04 (-0.53)	eS	:37:20.89 (-0.23)
UTK	ABTN	258.8	255	eP+	:37:02.03 (0.20)	eS	:34.71 (3.00)
UTK	PDTN	265.6	239	iPu	:01.85 (-0.82)	eS	:35.22 (2.05)
UTK	MSAL	354.4	239			eS	:57.79 (5.69X)
UTK	SHAL	376.0	233	iP+	:15.41 (-0.87)	eS	:56.47 (-0.25)

*******2001 APRIL 15; 06:46 – SPRING CITY, TENNESSEE*******

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010415	064607.8		35.776	84.865	0.1	10	53	154	1.0	D	D/D	1.4	344	0.5	3.7	C		1.7		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME	(RES)	PHASE	ARRIVAL TIME	(RES)
UTK	ORT	52.7	74	eP	06:46:15.14	(-1.38)	eS	06:46:24.77	(1.80X)
UTK	CRTN	103.7	63	eP	:24.22	(-0.68)	eS	:37.30	(-0.24)
UTK	PDTN	105.3	238	iPu	:24.96	(-0.19)	eS	:39.01	(1.02)
UTK	ABTN	113.1	277	eP	:25.04	(-1.36)	eS	:41.95	(1.79)
UTK	EGT	142.2	84	iPu	:32.21	(1.11)	eS	:52.18	(3.93X)
UTK	WVT	270.4	279	eP	:48.93	(-1.34)	eS	:47:20.43	(-0.75)

*******2001 APRIL 15; 15:35 – SYLACAUGA, ALABAMA*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010415	153537.3	33.268	86.237	4.7	22	134	233	0.5	D	C/D	0.7	227	0.5	0.9	A		2.6		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME	(RES)	PHASE	ARRIVAL TIME	(RES)
UTK	SHAL	133.6	345	iPu	15:35:59.20	(0.28)	iS	15:36:15.24	(0.40)
UTK	MSAL	179.7	347	iPu	:36:06.30	(0.10)	iS	:27.75	(0.31)
UTK	PDTN	225.3	9	iP-	:13.04	(-0.36)	iS	:39.30	(-0.39)
UTK	OLT	236.8	28	iPu	:15.23	(0.11)	eS	:41.90	(-0.75)
UTK	PLAL	254.8	319	iP+	:16.53	(-0.78)	eS	:47.13	(0.69)
UTK	GOGA	258.4	86	eP	:18.04	(0.29)	eS	:48.01	(0.81)
UTK	ABTN	290.7	2	eP	:21.09	(-0.66)	iS	:53.76	(-0.36)
UTK	ORT	342.5	31	eP	:30.33	(2.19)	eS	:37:04.95	(-0.23)
UTK	WVT	349.5	336	iPu	:28.02	(-0.96)	eS	:06.82	(0.20)
UTK	CRTN	392.4	33	eP	:34.80	(0.49)	eS	:16.16	(0.31)
UTK	EGT	397.5	42	eP	:37.40	(2.39X)	eS	:17.41	(0.35)
UTK	WCI	548.5	359				eS	:50.13	(1.04)

*******2001 APRIL 16, 00:15 – MADISONVILLE, TENNESSEE*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010416	001533.4	35.529	84.297	14.1	6	42	230	0.2	D	C/D	2.6	349	1.3	6.7	D		1.2		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME	(RES)	PHASE	ARRIVAL TIME	(RES)
UTK	ORT	42.2	359	iPd	00:15:40.50	(-0.07)	iS	00:15:45.86	(-0.01)
UTK	CRTN	85.1	29	iP+	:47.26	(0.02)	eS	:59.59	(2.15X)
UTK	PDTN	143.9	259	eP	:58.36	(1.86X)	eS	:16:12.63	(-0.82)
UTK	ABTN	168.7	284	eP	:16:01.45	(1.04)	eS	:21.00	(0.93)

*******2001 APRIL 23; 03:38 – TENNESSEE*******

NEIC Felt in the Murphy, North Carolina, area.

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
NEIC	010423	033838.0	35.240	84.130	4.0	9	76											2.5		F
UTK	010423	033838.1	35.243	84.135	3.2	23	76	107	0.2	C	B/D	0.3	303	0.3	1.3	A		2.6		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME	(RES)	PHASE	ARRIVAL TIME	(RES)
NEIC	ORT	75.6	348	eP	03:38:50.60	(-1.1)			
NEIC	PDTN	156.8	272	eP	:39:03.13	(-1.3)			
NEIC	SWET	164.6	270	eP	:04.39	(-1.0)			
NEIC	ABTN	193.5	292	eP	:08.97	(-0.2)			
NEIC	GOGA	212.4	163	eP	:11.85	(0.3)			
NEIC	WVT	349.2	288	ePn	:27.30	(-1.9)		:	
NEIC	PWLA	360.3	267	ePn	:30.20	(-0.3)		:	

NEIC	WCI	383.6	330	eP	:40.35	(6.7)		
NEIC	BLA	399.2	56	eP	:35.60	(0.0)		
UTK	ORT	75.5	348	eP	03:38:50.53	(0.03)	iS	03:38:59.72 (0.01)
UTK	OLT	81.6	263	eP-	:51.71	(0.23)	iS	:39:00.80 (-0.62)
UTK	EGT	105.3	46	eP	:55.62	(0.32)	eS	:07.97 (-0.09)
UTK	CRTN	109.4	14	eP-	:55.68	(-0.26)	eS	:08.35 (-0.83X)
UTK	PDTN	156.0	272	iPd	:39:03.34	(0.01)	iS	:21.73 (-0.18)
UTK	ABTN	192.6	292	eP+	:09.11	(0.01)	eS	:31.96 (0.08)
UTK	GOGA	212.3	163	eP	:12.24	(0.04)	eS	:36.96 (-0.24)
UTK	MSAL	235.7	260	eP	:14.23	(-1.64)	eS	:43.42 (0.03)
UTK	SHAL	242.9	249	eP	:16.59	(-0.22)	eS	:45.48 (0.49)
UTK	WVT	348.6	287	eP	:29.43	(-0.40)	eS	:40:08.93 (1.41)
UTK	PLAL	360.4	267	eP	:30.68	(-0.60)	eS	:10.53 (0.50)
UTK	WCI	384.5	330	eP	:36.38	(2.12)	eS	:20.03 (4.85X)
UTK	BLA	398.9	56				eS	:19.69 (1.34)

*****2001 APRIL 27, 00:31 – SUMMERVILLE, GEORGIA*****

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010427	0031	12.4	34.393	85.307	0.6	13	88	150	0.2	C	B/D	0.4	330	0.3	1.9	B		2.0		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	OLT	87.8	17	eP	00:31:27.14 (0.22)	eS	00:31:37.66 (-0.01)
UTK	PDTN	109.5	333	iP-	:30.27 (-0.13)	iS	:43.56 (-0.16)
UTK	SHAL	119.2	272	eP	:31.95 (0.01)	iS	:46.40 (-0.01)
UTK	ABTN	181.0	336	eP	:41.87 (0.13)	iS	:32:03.30 (0.01)
UTK	ORT	191.4	28	iP-	:43.70 (0.32)	eS	:06.53 (0.41)
UTK	GOGA	202.1	122	eP	:45.19 (0.14)	eS	:08.19 (-0.83)
UTK	PLAL	262.0	285	eP	:56.58 (2.81X)	eS	:24.68 (0.79)
UTK	WVT	299.8	311	eP	:32:00.25 (1.82X)	eS	:34.80 (2.87X)

*****2001 APRIL 28, 08:09 – LAFAYETTE, GEORGIA*****

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010428	0809	51.3	34.803	85.203	12.7	8	42	119	0.1	C	C/C	1.2	345	0.6	4.5	C		1.0		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	OLT	41.8	23	iPd	08:09:58.35 (-0.04)	eS	08:10:03.69 (0.07)
UTK	PDTN	78.7	312	iP	:10:04.08 (-0.08)	eS	:13.50 (-0.11)
UTK	SHAL	134.7	253	eP	:13.03 (0.06)	eS	:29.03 (0.17)
UTK	ABTN	145.6	326			eS	:32.73 (0.89)
UTK	ORT	147.4	33			iS	:33.95 (1.61X)
UTK	GOGA	222.5	133			eS	:52.43 (0.27)
UTK	PLAL	263.3	275			eS	:11:02.78 (1.91X)

*****2001 MAY 01, 16:01 – SEWANEE, TENNESSEE*****

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010501	1601	58.2	35.238	85.892	12.3	8	6	172	0.1	D	D/C	2.6	271	0.7	2.0	B		1.5		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	PDTN	5.5	44	iPd	16:02:00.37 (-0.09)	iS	16:02:02.19 (0.08)
UTK	ABTN	74.5	345	eP	:10.75 (0.35)	iS	:19.28 (-0.08)
UTK	SHAL	110.5	216	eP	:16.02 (-0.04)	eS	:29.23 (0.07)
UTK	PLAL	201.1	263	eP	:33.79 (3.51X)	iS	:51.19 (-2.38X)
UTK	WVT	201.5	300	eP	:30.68 (0.35)	eS	:53.23 (-0.43)

*****2001 MAY 02, 17:04 – HUNTSVILLE, ALABAMA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010502	170409.4	34.489	86.712	3.5	16	12	172	0.3	C	C/C	0.3	40	0.3	0.8	A		2.3		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME	(RES)	PHASE	ARRIVAL TIME	(RES)
UTK	SHAL	11.9	122	iPu	17:04:11.46	(0.01)	eS	17:04:13.14	(0.16)
UTK	MSAL	39.8	5	ePu	:16:14	(0.13)	iS	:21.01	(0.11)
UTK	PDTN	117.4	42	eP+	:28.17	(-0.37)	eS	:42.24	(-0.43)
UTK	PLAL	136.4	294	iP	:31.53	(-0.01)	iS	:47.88	(0.05)
UTK	ABTN	164.4	19	iP-	:35.79	(-0.18)	eS	:55.71	(0.22)
UTK	OLT	170.9	64	eP	:36.45	(-0.56)	eS	:57.54	(0.25)
UTK	WVT	208.6	331	eP-	:42.65	(-0.28)	eS	:05:07.40	(-0.10)
UTK	CRTN	322.7	53	eP	:05:01.39	(3.42X)	eS	:40.50	(7.17X)
UTK	GOGA	322.9	111	iP-	:04:55.24	(-2.72)	iS	:36.11	(2.80)

*****2001 MAY 04, 01:16 – SCOTTSBORO, ALABAMA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010504	011636.4	34.711	86.159	26.4	7	51	209	0.1	D	C/D	2.2	306	0.4	3.3	C		1.5		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME	(RES)	PHASE	ARRIVAL TIME	(RES)
UTK	SHAL	51.1	233	iP	01:16:45.50	(0.01)	iS	01:16:52.17	(-0.00)
UTK	PDTN	68.5	24	eP	:47.84	(-0.15)	iS	:56.53	(0.02)
UTK	ABTN	130.4	2	eP	:58.10	(0.76)	eS	17:12.60	(-0.01)
UTK	PLAL	177.9	280				eS	:24.63	(-0.45)

*****2001 MAY 13, 18:17 – SWEETWATER, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010513	181721.5	35.616	84.356	19.1	6	33	247	0.1	D	C/D	4.9	238	1.6	8.9	D		1.5		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME	(RES)	PHASE	ARRIVAL TIME	(RES)
UTK	ORT	32.9	8	iP	18:17:27.80	(0.21)	iS	18:17:32.26	(-0.04)
UTK	PDTN	140.8	255	eP	:43.94	(-0.08)	eS	:18:00.38	(-0.06)
UTK	ABTN	161.4	281	eP	:47.15	(-0.02)	iS	:05.93	(0.06)

*****2001 MAY 17, 06:43 – KNOXVILLE, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010517	064348.5	36.045	83.838	0.3	23	17	67	0.5	C	C/C	0.4	329	0.2	0.9	A		2.7		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME	(RES)	PHASE	ARRIVAL TIME	(RES)
UTK	CRTN	17.2	359	iPd	06:43:51.43	(0.06)	iS	06:43:53.71	(0.24)
UTK	ORT	44.7	250	ePu	:55.89	(-0.03)	eS	:44:01.62	(0.22)
UTK	EGT	51.2	108	eP	:57:12	(0.12)	eS	:03.81	(0.54)
UTK	SLTN	160.5	74	iP	:44:14.28	(-0.43)	eS	:34.32	(0.36)
UTK	PDTN	201.3	245	eP	:20.43	(-0.66)	eS	:45.64	(0.65)
UTK	ABTN	205.6	266	eP	:21.37	(-0.41)	eS	:45.36	(-0.82)
UTK	GOGA	294.1	173	eP	:34.86	(0.96)	iS	:45:08.99	(2.06)
UTK	SHAL	308.7	235	eP	:36.32	(0.61)	eS	:10.17	(0.10)
UTK	WCI	328.6	318	iP-	:38.58	(0.43)	eS	:14.22	(-0.06)
UTK	BLA	331.8	66	eP-	:36.50	(-2.11)	eS	:13.70	(-1.37)

UTK	WVT	359.7	273	eP	:41.61	(-0.37)	eS	:21.56 (0.65)
UTK	PLAL	402.1	254	eP	:49.83	(2.62X)	eS	:32.08 (2.12)

*******2001 MAY 20, 14:47 – BUTLER, GEORGIA*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010520	144731.9	32.691	84.213	17.2	11	106	271	0.4	D	C/D	7.8	307	1.3	8.78	D		2.1		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	GOGA	106.1	41	eP	14:47:49.29 (0.15)	iS	14:48:01.71 (-0.05)
UTK	SHAL	294.2	312	eP	:48:15:67 (0.08)	eS	:47.07 (-0.27)
UTK	PDTN	323.9	333	eP+	:18.51 (-0.76)	iS	:54.10 (0.40)
UTK	MSAL	330.4	317	eP	:17.22 (-2.83X)	eS	:54.52 (-0.53)
UTK	CRTN	390.8	5	eP	:26.52 (-1.01)	eS	:49:14.15 (6.15X)
UTK	ABTN	395.1	334	eP	:30.54 (2.50)	eS	:09.91 (1.03)
UTK	SLTN	458.5	24	eP	:35.93 (-0.03)	eS	:31.67 (9.09X)

*******2001 MAY 21, 02:36 – MARYVILLE, TENNESSEE*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010521	023606.5	35.846	83.982	0.0	14	30	94	0.4	C	C/C	0.6	348	0.2	1.4	B		2.1		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	ORT	30.0	284	eP	02:36:11.60 (0.10)	iS	02:36:15.58 (0.40)
UTK	CRTN	41.3	18	iP+	:13:12 (-0.24)	iS	:18.31 (-0.10)
UTK	EGT	62.0	84	eP	:16.54 (-0.26)	eS	:24.84 (0.45)
UTK	SLTN	180.1	68	eP	:36.43 (0.61)	iS	:57.97 (0.63)
UTK	PDTN	180.9	250	eP	:34.97 (-0.92)	iS	:57.51 (0.06)
UTK	ABTN	192.2	272	eP	:36.80 (-0.88)	eS	:59.53 (-1.01)
UTK	GOGA	274.2	170	eP	:48.76 (-0.72)	eS	:37:21.26 (0.52)
UTK	WVT	348.4	276	eP	:54.01 (-4.63X)	eS	:41.96 (5.38X)

*******2001 MAY 21, 03:19 – FRANKLIN, NORTH CAROLINA*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010521	031928.9	35.175	83.274	0.0	14	81	137	0.6	D	D/D	0.9	285	0.4	2.0	B		2.0		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	EGT	80.6	358	iP	03:19:41.63 (-0.62)	eS	03:19:52.07 (-0.04)
UTK	ORT	124.0	311	eP	:50.73 (1.45)	eS	:20:06.35 (2.02X)
UTK	CRTN	124.8	336	eP	:49.73 (0.33)	iS	:05.39 (0.85)
UTK	SLTN	175.2	36	eP-	:57.50 (0.08)	eS	:19.48 (1.11)
UTK	GOGA	196.4	185	iP-	:20:00.81 (0.10)	eS	:24.71 (0.66)
UTK	PDTN	234.7	273	eP	:07.20 (0.43)	eS	:34.48 (0.13)
UTK	SHAL	315.4	256			eS	:54.61 (2.67X)
UTK	BLA	341.9	48	eP	:19.48 (-0.79)	eS	:58.68 (1.02)
UTK	PLAL	438.4	269	eP	:40.44 (8.33X)	eS	:21:20.33 (2.19)

*******2001 MAY 23, 07:19 – ABBEVILLE, SOUTH CAROLINA*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010523	071942.4	34.219	82.501	0.0	10	127	217	0.4	D	C/D	2.8	308	0.8	3.5	C		2.2		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)

UTK	GOGA	126.5	225	eP	07:20:03.11	(-0.02)	eS	07:20:18.19	(-0.26)
UTK	SLTN	249.2	8	eP	:22.22	(-0.15)	eS	:52.26	(0.79)
UTK	CRTN	251.3	331	iPd	:22.15	(-0.39)	iS	:51.89	(0.12)
UTK	PDTN	328.1	292	iP-	:33.06	(1.06)	eS	:21:09.17	(1.05)
UTK	ABTN	377.5	300	eP	:36.47	(-1.61)	eS	:16.40	(-2.26)

*******2001 JUNE 21, 19:37 – STEVENSON, ALABAMA*******

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010621	193749	0	34.862	85.885	0.0	12	46	149	0.3	C	B/C	0.7	338	0.6	1.5	B		2.3		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	PDTN	45.7	4	iPu	19:37:56.54 (0.02)	eS	19:38:02.11 (0.00)
UTK	ABTN	115.3	350	iP	:38:07.61 (-0.31)	eS	:22.01 (0.06)
UTK	ORT	184.7	51	eP	:18.32 (-0.59)	eS	:42.77 (1.86X)
UTK	PLAL	200.6	274	eP	:21.88 (0.47)	eS	:45.43 (0.19)
UTK	WVT	225.7	309	eP	:27.36 (1.99X)	eS	:52.19 (0.20)
UTK	CRTN	237.5	51	eP	:27.51 (0.26)	eS	:56.32 (1.18)
UTK	GOGA	275.0	125	eP	:32.91 (0.90)	eS	:39:03.31 (-0.03)

*******2001 JUNE 25; 23:04 – CULPEPER, VIRGINIA*******

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
VTSO	010625	230448	2	38.460	77.824	5.0F	12	49	127	0.9	D	D/C	7.4	299	3.2	12.3	D		2.5		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
VTSO	CBN	48.5	126	eP	23:04:56.15 (-0.03)	eS	23:05:02.45 (0.42)
VTSO	SSPA	241.6	359	eP	:05:24.10 (-0.29)	eS	:51.60 (0.88)
VTSO	BLA	267.3	240	eP	:26.20 (-1.37)	eS	:56.50 (0.27)
VTSO	FWV	279.9	251	eP	:28.40 (-0.73)	eS	:58.10 (-0.83)
VTSO	ELN	288.9	244	eP	:30.40 (0.18)	eS	:06:02.50 (1.69)
VTSO	WMV	315.1	243	eP	:32.90 (-0.58)	eS	:07.80 (1.34)

*******2001 JUNE 29, 15:49 – BENTON, TENNESSEE*******

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010629	154902	9	34.984	84.748	0.0	16	105	105	0.5	D	D/D	0.5	11	0.4	2.2	B		2.0		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	PDTN	105.4	288	eP	15:49:20.22 (0.01)	eS	15:49:32.92 (-0.14)
UTK	ORT	110.3	21	eP	:20.86 (-0.13)	eS	:33.70 (-0.72)
UTK	CRTN	158.0	31	iPd	:28.90 (0.31)	eS	:47.72 (0.20)
UTK	ABTN	159.0	309	eP-	:28.17 (-0.58)	eS	:46.84 (-0.95)
UTK	EGT	166.4	52	eP	:29.81 (-0.13)	eS	:50.02 (0.15)
UTK	SHAL	180.5	251	eP	:32.80 (0.66)	eS	:53.16 (-0.50)
UTK	GOGA	210.7	146	eP	:37.05 (0.16)	iS	:50:01.63 (-0.24)
UTK	SLTN	287.6	55	eP	:48.29 (0.72)	eS	:22.30 (2.17X)
UTK	PLAL	303.8	271	iP	:56.28 (6.84X)	eS	:25.38 (2.01)

*******2001 JULY 04, 16:06 – KINGSTON, TENNESSEE*******

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010704	160628	1	35.801	84.542	0.0	9	25	173	0.2	C	C/C	1.9	340	0.7	3.7	C		1.5		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)

UTK	ORT	24.6	61	eP	16:06:32.10	(-0.08)	iS	16:06:35.22 (0.04)
UTK	CRTN	77.2	55	iPd	:40.62	(-0.25)	eS	:49.92 (-0.39)
UTK	PDTN	132.2	244	eP	:49.93	(0.15)	iS	:07:05.97 (0.21)
UTK	ABTN	141.9	274	eP	:51.24	(-0.08)	iS	:08.77 (0.38)
UTK	SLTN	229.3	71				iS	:33.11 (0.87)

*****2001 JULY 07, 10:43 – CHEROKEE, NORTH CAROLINA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010707	104353.3	35.450	83.361	0.0	15	50	130	0.4	D	C/D	0.6	272	0.4	1.1	A		2.5		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)		PHASE	ARRIVAL TIME (RES)	
UTK	EGT	50.4	6	iPd	10:44:01.61	(-0.02)	iS	10:44:07.90	(0.11)
UTK	SLTN	157.1	45	eP	:19.10	(0.16)	iS	:42.35	(4.55X)
UTK	GOGA	226.3	182	eP	:30.01	(0.20)	eS	:56.93	(0.43)
UTK	PDTN	227.0	266	eP	:29.56	(-0.37)	eS	:57.08	(0.37)
UTK	ABTN	253.5	282	eP	:32.99	(-0.72)	iS	:45:03.65	(0.53)
UTK	BLA	328.4	53	eP+	:42.19	(-0.79)	eS	:20.54	(1.38)
UTK	WCI	406.7	320	eP	:56.71	(4.13X)	eS	:45.31	(9.55X)
UTK	PLAL	432.4	264	eP	:54.78	(-0.97)	eS	:41.53	(0.29)
UTK	OXF	561.9	261	eP	:45:11.09	(-0.62)	eS	:46:07.32	(-1.54)

*****2001 JULY 07, 15:25 – BRYSON CITY, NORTH CAROLINA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010707	152504.5	35.517	83.448	0.0	9	45	215	0.0	D	C/D	1.7	330	0.7	3.8	C		1.8		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)		PHASE	ARRIVAL TIME (RES)	
UTK	EGT	44.7	18	eP	15:25:11.45	(-0.46)	eS	15:25:17.45	(0.07)
UTK	ORT	89.0	300	eP	:19:67	(0.44)	eS	:29.91	(-0.20)
UTK	SLTN	157.7	49	eP	:30.78	(0.51)	eS	:49.77	(0.56)
UTK	PDTN	219.9	264	eP	:38.34	(-1.69)	eS	:26:03.20	(-2.85X)
UTK	ABTN	244.3	280	eP	:43.58	(-0.23)	eS	:13.19	(0.80)

*****2001 JULY 08; 03:05 – FRANKLIN, TENNESSEE*****

NEIC Felt in Williamson County.

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
NEIC	010708	030511.1	35.880	86.800	0.0F	10	108											2.6		F
UTK	010708	030511.2	35.882	86.805	0.0	14	63	130	0.5	D	C/D	0.6	331	0.3	1.0	A		2.6	F	

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)		PHASE	ARRIVAL TIME (RES)	
NEIC	SWET	107.9	133	eP	03:05:28.81	(-1.6)	eS	03:05:40.99	(X)
NEIC	PWLA	152.3	229	eP	:35.78	(-1.5)			
NEIC	PLAL	152.3	230	eP	:35.76	(-1.6)			
NEIC	EBZ	245.8	251	eP	:49.30	(-0.2)			
NEIC	CWPT	255.8	274	eP	:49.49	(-1.3)			
NEIC	WCI	264.7	10	eP	:52.75	(0.7)			
NEIC	OXF	282.4	238	eP	:53.78	(-0.4)			
NEIC	SFTN	296.9	260	eP	:55.51	(-0.7)			
NEIC	LRAL	315.8	183	eP	:06:00.06	(1.4)			
NEIC	SCCK	358.1	104	eP	:06.17	(2.1)			
UTK	ABTN	62.8	89	eP+	03:05:21.54	(-0.08)	eS	03:05:28.98	(-0.33)
UTK	PDTN	109.8	128	iPd	:29.29	(-0.01)	eS	:42.15	(-0.52)
UTK	PLAL	152.5	230	iPd	:35.98	(-0.13)	eS	:54.23	(-0.17)

UTK	SHAL	161.8	173	eP	:37.50	(-0.08)	eS	:57.54	(0.60)
UTK	ORT	225.7	88	eP	:47.17	(-0.49)	iS	:06:14.23	(-0.07)
UTK	WCI	261.4	9	eP	:52.39	(-0.21)	iS	:23.69	(0.98)
UTK	OXF	281.7	238	eP	:55.10	(0.01)	eS	:29.30	(2.28)
UTK	GOGA	410.7	131				eS	:07:03.20	(8.64X)
UTK	SLTN	426.0	80	eP	:06:16.74	(3.72X)			

*******2001 JULY 09, 08:37 – CHEROKEE, NORTH CAROLINA*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010709	083724.2	35.458	83.387	2.5	19	50	129	0.4	C	C/C	0.5	276	0.4	1.1	A		2.4		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)		PHASE	ARRIVAL TIME (RES)	
UTK	EGT	49.8	9	iPu	08:37:32.52	(0.06)	eS	08:37:38.39	(-0.18)
UTK	ORT	97.0	301	eP	:40.34	(0.21)	eS	:51.27	(-0.65)
UTK	SLTN	158.1	46	iPd	:50.16	(0.26)	eS	:38:10.09	(1.32)
UTK	PDTN	224.7	265	eP	:38:00.06	(-0.30)	eS	:26.97	(0.25)
UTK	GOGA	227.1	182	eP	:01.00	(0.28)	eS	:27.15	(-0.18)
UTK	ABTN	251.0	282	eP	:03.72	(-0.32)	eS	:33.51	(0.50)
UTK	BLA	329.8	53	eP+	:12.87	(-0.91)	eS	:50.82	(0.95)
UTK	WCI	404.5	320	eP	:24.44	(1.50)	eS	:39:05.54	(-0.18)
UTK	PLAL	430.1	264	eP	:25.78	(-0.32)	eS	:12.18	(1.00)
UTK	OXF	559.7	261	eP	:39:03.84	(21.77X)	eS	:38.00	(-0.81)

*******2001 JULY 09, 08:40 – CHEROKEE, NORTH CAROLINA*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010709	084029.3	35.427	83.373	0.0	9	53	138	0.8	D	D/D	1.3	275	0.8	2.2	B		1.6		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)		PHASE	ARRIVAL TIME (RES)	
UTK	EGT	53.1	7	iP	08:40:38.01	(-0.06)	iS	08:40:43.59	(-0.97)
UTK	ORT	100.0	303	eP	:46.24	(0.44)	eS	:41:01.63	(3.63X)
UTK	SLTN	159.7	45	eP	:56.70	(1.35)	eS	:16.01	(1.50)
UTK	GOGA	223.7	182	iPd	:41:04.58	(-0.82)	eS	:35.03	(3.22X)
UTK	PDTN	225.8	266	eP	:06.45	(0.72)	eS	:28.24	(-4.13X)
UTK	ABTN	253.0	282	eP	:09.96	(0.31)	eS	:40.05	(1.04)

*******2001 JULY 10, 09:19 – CHEROKEE, NORTH CAROLINA*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010710	091920.0	35.457	83.380	0.0	19	50	129	0.5	D	D/C	0.6	281	0.4	1.0	A		2.4		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)		PHASE	ARRIVAL TIME (RES)	
UTK	EGT	49.8	9	eP	09:19:28.18	(-0.07)	eS	09:19:34.44	(0.10)
UTK	SLTN	157.7	46	eP	:45.86	(0.10)	eS	:20:05.93	(1.24)
UTK	ANTN	185.2	296	eP	:50.22	(0.16)	eS	:12.81	(0.68)
UTK	PDTN	225.4	266	eP-	:55.96	(-0.43)	eS	:22.69	(-0.29)
UTK	GOGA	227.1	182	iP-	:57.13	(0.49)	eS	:23.53	(0.12)
UTK	ABTN	251.6	282	eP	:59.42	(-0.78)	eS	:29.91	(0.47)
UTK	BLA	329.3	53	ePu	:20:08.84	(-0.96)	eS	:46.59	(0.53)
UTK	WCI	405.0	320	eP	24.89	(5.81X)	eS	:21:04.69	(2.58)
UTK	PLAL	430.7	264	eP	:21.98	(-0.28)	eS	:06.13	(-1.47)
UTK	OXF	560.3	261	eP	:37.62	(-0.61)	eS	:33.85	(-1.39)

*******2001 JULY 18, 16:00 – DAYTON, TENNESSEE*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010718	160052.2	35.470	85.030	1.2	12	78	117	0.2	C	B/D	0.6	344	0.3	1.4	B		1.9		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)		PHASE	ARRIVAL TIME (RES)	
UTK	PDTN	77.6	254	eP	16:01:05.19	(0.17)	iS	16:01:14.53	(0.02)
UTK	ORT	81.8	53	eP	:05.65	(-0.07)	eS	:15.85	(0.11)
UTK	ABTN	108.0	296	iPd	:09.96	(0.03)	iS	:23.01	(-0.04)
UTK	CRTN	134.6	53	eP	:14.11	(-0.07)	eS	:30.96	(0.59)
UTK	EGT	163.9	73	eP	:18.93	(0.09X)	eS	:35.37	(-3.06X)
UTK	SHAL	184.0	232	iP-	:21.25	(-0.72)	eS	:44.59	(0.75)
UTK	GOGA	269.8	147	eP	:33.53	(-0.93)	eS	:02:05.38	(0.16)
UTK	SLTN	283.8	67	eP	:33.66	(-2.65X)	eS	:10.73	(2.30X)

*******2001 JULY 26; 05:26 – SEVIERVILLE, TENNESSEE*******

NEIC Felt in Blount, Jefferson, Knox and Sevier Counties, Tennessee; standard deviation = 1.1 on 11 of 13 observations.

UTK Felt MMI = IV.

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
NEIC	010726	052644.7	35.932	83.575	5.0F	11	108					6.8		6.1			3.2			F
UTK	010726	052646.0	35.971	83.552	14.3	19	24	107	0.4	C	C/B	0.7	352	0.3	0.6	A		3.3		4

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)		PHASE	ARRIVAL TIME (RES)	
NEIC	MYNC	107.9	208	eP	05:27:04.27	(0.7)	eS	05:27:17.80	(X)
NEIC	SWET	228.0	250	eP	:21.44	(1.1)	eS	:49.88	(X)
NEIC	JSC	279.1	130	ePn	:27.53	(0.7)	eSg	:28:03.34	(X)
				ePg	:30.40				
NEIC	GOGA	280.2	178	ePn	:27.58	(0.6)	eSg	:04.55	(X)
				ePg	:30.63				
NEIC	BLA	315.8	62	eP	:31.36	(-0.3)	eS	:11.13	(X)
NEIC	WCI	351.4	317	ePn	:35.97	(-0.1)			
NEIC	COW	387.0	136	ePn	:42.54	(2.0X)			
NEIC	PLAL	421.4	257	ePn	:45.70	(0.6)			
NEIC	BLO	443.7	325	ePn	:48.28	(0.4)			
NEIC	TWB	445.9	133	ePn	:47.56	(-0.6)	eSg	:52.34	(X)
				ePg	:57.87				
NEIC	LRAL	449.2	225	ePn	:46.33	(-2.3)			
NEIC	MCWV	528.2	37	ePg	:28:06.31	(7.6X)			
NEIC	OXF	553.8	255	eP	:01.19	(-0.7)			
UTK	EGT	24.2	109	iPu	05:26:50.74	(0.08)	iS	05:26:54.03	(-0.04)
UTK	ORT	68.3	265	eP+	:57.20	(-0.07)	iS	:27:05.49	(-0.04)
UTK	MYNC	112.4	208	eP	:27:04.27	(0.07)	eS	:17.80	(0.26)
UTK	SLTN	139.0	67	eP	:08.30	(-0.13)	eS	:25.83	(0.97)
UTK	PDTN	222.1	250	eP-	:20.46	(-0.61)	eS	:47.71	(1.17)
UTK	ABTN	231.0	268	eP	:21.94	(-0.23)	iS	:49.05	(0.61)
UTK	JSC	280.9	131	eP	:27.53	(-0.77)	eS	:28:03.34	(4.29X)
UTK	GOGA	284.0	178	eP	:27.58	(-1.11)	eS	:05.13	(5.42X)
UTK	BLA	312.1	63	iP	:31.36	(-0.85)	eS	:06.10	(0.29)
UTK	SHAL	325.9	239	eP+	:33.37	(-0.51)	eS	:11.44	(2.75)
UTK	WCI	352.3	316	eP	:35.97	(-1.13)	eS	:19.99	(5.72X)

*******2001 JULY 28, 17:48 – ANNISTON, ALABAMA******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010728	174845.4	33.652	85.803	0.9	12	114	191	0.3	C	B/D	1.1	32	0.4	1.6	B		2.0		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	SHAL	113.7	320	iP-	17:49:04.29 (0.21)	eS	17:49:17.64 (-0.25)
UTK	PDTN	179.9	359	iP-	:14.49 (-0.08)	eS	:35.90 (-0.08)
UTK	GOGA	218.7	96	eP	:11.18 (-9.50X)	iS	:46.45 (-0.05)
UTK	ABTN	249.3	354	eP	:24.73 (-0.49)	eS	:54.43 (0.25)
UTK	PLAL	256.0	306	eP	:25.67 (-0.34)	eS	:55.32 (-0.23)
UTK	ORT	285.5	28	eP	:36.73 (7.05X)	eS	:50:04.02 (2.12)
UTK	OXF	346.2	287	iP	:39.06 (1.93)	eS	:12.84 (-1.95)

*****2001 AUGUST 09, 11:31 – DALTON, GEORGIA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010809	113159.3	34.690	84.926	0.0	15	147	132	0.3	D	C/D	0.7	233	0.4	1.6	B		2.5		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	ORT	146.6	22	eP	11:32:23.53 (0.27)	eS	11:32:41.36 (0.48)
UTK	ANTN	166.7	350	eP	:26.52 (0.07)	eS	:46.09 (-0.30)
UTK	ABTN	170.8	321	iP-	:26.90 (-0.18)	eS	:47.26 (-0.23)
UTK	GOGA	195.6	136	iPu	:30.93 (-0.05)	eS	:53.90 (-0.34)
UTK	EGT	199.9	47	eP-	:31.88 (0.17)	eS	:55.70 (0.21)
UTK	PLAL	289.9	277	eP	:43.96 (-0.24)	eS	:33:17.96 (1.08)
UTK	SLTN	320.1	52	eP	:47.42 (-0.63)	eS	:23.15 (-0.38)
UTK	WCI	411.2	342	eP	:49.21 (-9.95X)	iS	:52.49 (9.74X)
UTK	OXF	411.7	269	eP	:33:08.16 (8.95X)	eS	:41.76 (-1.08)

*****2001 AUGUST 11; 19:53 – WARTBURG, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010811	195324.7	36.075	84.617	16.0	14	34	112	0.3	C	C/C	1.0	355	0.4	1.1	A		2.0		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	ORT	33.6	123	iP	19:53:30.47 (-0.25)	iS	19:53:35.55 (0.41)
UTK	ANTN	56.3	281	eP	:33.95 (-0.19)	eS	:41.14 (0.05)
UTK	EGT	120.5	99	eP	:44.74 (0.54)	eS	:58.29 (-0.21)
UTK	ABTN	136.2	262	eP	:46.33 (-0.29)	eS	:54:03.13 (0.45)
UTK	PDTN	142.7	232	eP	:47.57 (-0.07)	iS	:04.21 (-0.18)
UTK	SLTN	228.1	79	iP	:56.82 (-3.61X)	eS	:26.73 (0.33)
UTK	SHAL	256.5	225	eP	:54:04.87 (1.04)	eS	:33.49 (1.21)
UTK	WCI	283.1	327	iP+	:05.86 (-1.22)	eS	:40.51 (2.60X)
UTK	GOGA	313.7	160	eP	:12.85 (1.99X)	eS	:49.40 (4.96X)

*****2001 AUGUST 15; 08:50 – HENDERSON, KENTUCKY*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010815	085002.6	37.806	87.398	18.6	21	102	95	0.7	D	D/D	0.5	265	0.4	0.9	A		2.7		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	WCI	101.6	63	eP	08:50:19.24 (0.10)	iS	08:50:31.99 (0.72)
UTK	SIUC	160.7	267	eP	:29.11 (0.87)	eS	:47.61 (0.75)
UTK	BLO	169.8	26	iP	:28.75 (-0.90)	iS	:49.15 (-0.13)
UTK	UTMT	208.3	219	eP	:32.51 (-3.01X)	iS	:59.61 (0.19)
UTK	ABTN	242.1	151	iPu	:38.64 (-1.08)	eS	:51:07.53 (0.85)
UTK	ANTN	264.7	133	eP	:43.16 (0.63)	eS	:12.15 (0.60)
UTK	SLM	265.1	291			eS	:12.41 (0.87)
UTK	PDTN	313.3	153	iP-	:47.35 (-1.14)	eS	:22.62 (0.75)

UTK	ORT	346.9	126	eP	:55.29	(2.65X)	eS	:30.58	(1.55)
UTK	SHAL	381.0	169	eP	:56.48	(-0.36)	eS	:37.39	(1.08)
UTK	OXF	407.8	207	eP	:59.40	(-0.72)	eS	:44.28	(2.30)
UTK	EGT	422.2	119	eP	:51:01.79	(-0.22)	eS	:45.78	(0.53)
UTK	SLTN	492.6	106	eP	:17.03	(6.32X)	eS	:57.86	(-2.44X)

*****2001 AUGUST 17; 05:59 – ABBEVILLE, SOUTH CAROLINA*****

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010817	0559	44.8	34.325	82.469	0.0	9	137	215	0.5	D	C/D	2.7	293	0.5	3.3	C		2.4		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	GOGA	137.1	223	eP	06:00:07.35 (0.15)	eS	06:00:23.35 (-0.36)
UTK	EGT	190.5	337	eP	:15.55 (-0.12)	eS	:38.31 (-0.06)
UTK	SLTN	237.1	8	eP	:22.55 (-0.50)	eS	:51.86 (0.91)
UTK	ORT	242.7	317	eP	:20.67 (-3.18X)	eS	:50.38 (-1.91)
UTK	PDTN	326.7	290	eP	:41.85 (7.64X)	eS	:01:11.29 (1.08)
UTK	BLA	369.9	29	eP	:44.81 (5.24X)	eS	:26.89 (7.41X)
UTK	ABTN	374.3	299	eP	:41.49 (1.42)	eS	:16.39 (3.97X)

*****2001 AUGUST 27; 07:01 – GREENVILLE, KENTUCKY*****

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010827	0701	14.7	37.285	87.310	15.8	8	132	199	0.3	D	D/D	3.6	304	0.3	2.6	C		2.1		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	WCI	132.5	39	eP	07:01:35.56 (-0.50)	iS	07:01:51.86 (0.15)
UTK	WVT	136.3	200	iPu	:36.56 (-0.11)	iS	:52.94 (0.19)
UTK	PDTN	258.9	149	eP	:52.79 (-1.38)	eS	:02:22.69 (-0.16)
UTK	PLAL	264.6	195	eP	:53.74 (-1.12)	eS	:23.29 (-0.74)
UTK	SHAL	322.8	168	eP	:02:07.08 (5.02X)	eS	:44.89 (8.40X)

*****2001 AUGUST 29, 08:40 – ANNISTON, ALABAMA****

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010829	0840	16.5	33.668	85.946	2.5	12	104	191	0.2	D	C/D	1.3	29	0.5	1.9	B		1.9		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	SHAL	104.2	325	iP	08:40:33.68 (0.12)	iS	08:40:46.10 (-0.09)
UTK	PDTN	178.3	3	iP	:44.98 (-0.33)	eS	:41:06.84 (0.37)
UTK	GOGA	232.0	96	eP	:53.93 (0.17)	iS	:20.93 (0.03)
UTK	PLAL	244.3	307	eP	:54.49 (-0.98)	eS	:23.84 (0.01)
UTK	WVT	322.9	328	eP	:41:05.74 (0.58)	eS	:41.29 (0.69)
UTK	OXF	333.0	287	eP	:06.78 (0.38)	eS	:46.63 (3.88X)
UTK	EGT	346.5	44	eP	:20.07 (11.89X)	eS	:44.44 (-1.38)

*****2001 AUGUST 29, 10:17 – MOULTON, ALABAMA****

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010829	1017	19.4	34.541	87.158	4.4	10	52	167	0.2	C	B/D	0.6	16	0.2	2.2	B		2.2		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	SHAL	52.4	103	iP	10:17:28.25 (0.11)	iS	10:17:34.48 (-0.10)
UTK	PLAL	97.3	300	iPd	:35.49 (0.17)	iS	:46.99 (-0.08)

UTK	PDTN	144.5	55	iP+	:42.40	(-0.44)	iS	:18:00.27 (0.23)
UTK	WVT	186.6	341	iPu	:49.34	(-0.13)	eS	:11.61 (0.11)
UTK	OXF	206.7	270	iP+	:52.40	(-0.24)	iS	:16.95 (-0.02)
UTK	GOGA	363.3	109	eP	:18:20.06	(7.17X)	eS	:57.84 (6.03X)

*****2001 AUGUST 30, 08:33 – SUMMERVILLE, GEORGIA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010830	083349.0	34.545	85.460	2.4	10	88	147	0.2	C	B/D	0.8	290	0.4	1.4	B		1.9		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	PDTN	88.3	336	eP	08:34:03.63 (0.14)	iS	08:34:14.19 (-0.05)
UTK	SHAL	105.6	264	iP+	:06.28 (0.02)	iS	:19.01 (-0.05)
UTK	GOGA	223.0	124	eP	:25.88 (1.05)	eS	:49.91 (-1.11)
UTK	PLAL	244.3	282			iS	:56.29 (-0.04)
UTK	WVT	278.1	310			eS	:35:05.14 (1.61)
UTK	OXF	362.6	271	eP	:41.58 (-0.95)	eS	:22.93 (1.39)

*****2001 AUGUST 31, 04:34 – LAFAYETTE, GEORGIA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010831	043451.7	34.600	85.225	0.5	11	128	133	0.2	D	C/D	1.1	352	0.6	3.0	C		1.8		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	SHAL	127.8	262	eP	04:35:12.98 (0.31)	eS	04:35:28.08 (-0.03)
UTK	ORT	167.7	30	eP	:18.77 (-0.22)	eS	:39.16 (0.14)
UTK	GOGA	209.2	129	iPd	:25.58 (0.06)	eS	:49.53 (-0.78)
UTK	EGT	227.1	50	eP	:38.21 (9.81X)	eS	:55.85 (0.65)
UTK	PLAL	264.3	280	eP	:34.59 (1.18)	eS	:36:03.74 (0.01)
UTK	WVT	291.4	306	eP	:36.19 (-0.55)	eS	:09.41 (-0.09)

*****2001 SEPTEMBER 02; 13:56 – LINCOLNTON, GEORGIA*****

NEIC Felt in Lincoln County.

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
NEIC	010902	135609.2	33.790	82.350	21.0	10	112										2.7	2.5		F
UTK	010902	135609.2	33.794	82.354	20.9	6	112	244	0.3	D	D/D	99.0	340	2.2	99.0	D		2.5		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
NEIC	GOGA	112.3	248	eP	13:56:27.16 (-0.6)		
NEIC	JSC	114.5	61	eP	:27.50 (-0.7)		
NEIC	COW	160.1	106	eP	:35.73 (1.6)		
NEIC	NHSC	215.7	110	eP	:43.20 (1.8)		
NEIC	TWB	222.4	109	eP	:42.15 (0.0)		
NEIC	RGRS	223.5	115	eP	:43.18 (0.8)		
NEIC	BLA	418.1	24	ePn	:57:04.63 (-2.7)		
NEIC	PLAL	542.7	286	ePn	:22.94 (-0.3)		
NEIC	WVT	563.8	299	eP	:24.10 (-1.8)		
NEIC	WCI	607.1	325	ePn	:31.17 (-0.3)		
UTK	GOGA	111.6	248	iPu	13:56:27.28 (0.05)	eS	13:56:40.21 (-0.17)
UTK	EGT	249.1	340	eP	:47.33 (0.32)	eS	:57:16.47 (1.96X)
UTK	SLTN	294.7	4	eP-	:52.04 (-0.60)	eS	:25.01 (0.75)
UTK	ORT	294.8	323	eP	:54.10 (1.55)	eS	:28.17 (4.07X)
UTK	BLA	417.7	24	eP	:57:16.42 (8.68X)	eS	:58:02.89 (12.51X)

UTK	PLAL	542.3	286	eP	:32.83	(9.77X)	eS	:22.73 (5.86X)
UTK	WVT	563.2	299	eP	:58:09.16	(-16.46X)	eS	:31.69 (-49.6X)
UTK	WCI	608.6	325	eP	:43.36	(12.13X)	eS	:59:46.31 (15.30X)

*******2001 SEPTEMBER 03; 02:05 – CUMBERLAND, VIRGINIA*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
VTSO	010903	020557.9	37.369	78.231	5.0F	10	120	225	0.5	D	D/D	38.7	305	5.1	36.8	D		2.5		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
VTSO	CBN	119.6	39	eP	02:06:17.86 (0.31)	eS	02:06:31.60 (-0.30)
VTSO	BLA	194.9	266	eP	:28.14 (-0.31)	eS	:49.50 (-1.16)
VTSO	ELN	223.7	268	eP	:31.92 (-0.04)	eS	:57.40 (0.67)
VTSO	FWV	229.5	277	eP	:32.71 (0.01)	eS	:58.41 (0.41)
VTSO	WMV	244.8	264	eP	:34.86 (0.25)	eS	:07:01.80 (0.49X)
VTSO	PKNC	299.9	242	eP	:45.50 (4.20)	eS	:17.54 (4.65X)

*******2001 SEPTEMBER 06, 15:52 – CHATSWORTH, GEORGIA*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010906	155250.2	34.900	84.663	0.0	15	116	108	0.5	D	C/D	0.4	20	0.3	1.6	B		2.2		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	PDTN	115.8	291	eP	15:53:09.38 (0.14)	iS	15:53:22.93 (-0.40)
UTK	ORT	116.7	16	eP	:09.80 (0.43)	eS	:23.37 (-0.19)
UTK	SWET	120.9	287	eP	:10.20 (0.13)	iS	:24.84 (0.07)
UTK	EGT	166.5	48	eP	:26.03 (8.71X)	eS	:40.23 (2.97X)
UTK	MSAL	183.9	269	eP	:19.94 (-0.09)	eS	:41.45 (-0.48)
UTK	SHAL	185.1	254	eP	:20.02 (-0.20)	iS	:42.07 (-0.19)
UTK	GOGA	198.6	146	eP	:22.38 (0.04)	eS	:45.73 (-0.20)
UTK	SLTN	286.9	53	eP	:33.35 (-1.49)	eS	:54:07.08 (-0.25)
UTK	PLAL	311.8	273	eP	:40.98 (3.19X)	iS	:14.98 (2.55)

*******2001 SEPTEMBER 10, 17:06 – GUNTERSVILLE, ALABAMA******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010910	170605.2	34.493	86.185	10.6	8	39	241	0.2	D	C/D	1.7	326	0.5	4.9	C		1.7		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	SHAL	38.9	260	iPu	17:06:11.89 (0.08)	eS	17:06:16.50 (-0.16)
UTK	MSAL	59.6	311	eP	:15.44 (0.39)	eS	:23.17 (0.89)
UTK	PDTN	91.8	19	iPu	:20.15 (0.01)	eS	:30.83 (-0.26)
UTK	PLAL	181.5	288	eP	:23.08 (-11.2X)	eS	:54.08 (-1.45)
UTK	WVT	235.3	321	eP	:40.19 (-2.08X)	eS	:07:10.66 (1.48)

*******2001 SEPTEMBER 18, 18:18 – TENNESSEE*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010918	181849.4	36.058	83.213	29.5	6	19	165	0.4	D	D/C	8.9	336	1.3	5.0	D		1.7		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	EGT	19.0	204	eP	18:18:54.70 (-0.36)	eS	18:18:59.45 (0.22)
UTK	ORT	99.8	261	eP	:19:06.08 (0.30)	eS	:19:20.48 (2.73X)
UTK	SLTN	107.1	66	eP	:06.97 (0.03)	eS	:20.31 (0.57)

UTK	PDTN	254.1	251	eP	:29.95	(3.03)	eS	:20:01.54 (7.29X)

*******2001 SEPTEMBER 19, 10:50 – BRYSON CITY, NORTH CAROLINA*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010919	105057.1	35.447	83.369	0.1	8	51	221	0.2	D	C/D	1.1	354	0.7	3.3	C		1.7		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	EGT	50.7	7	eP	10:51:05.43 (-0.04)	iS	10:51:11.67 (-0.01)
UTK	ORT	99.1	301	eP	:13.71 (0.27)	iS	:25.55 (0.01)
UTK	SLTN	157.8	44	eP	:22.75 (-0.08)	eS	:42.64 (0.87)
UTK	PDTN	226.3	266	eP-	:34.05 (0.45)	iS	:59.99 (-0.30)

*******2001 SEPTEMBER 19; 23:25 – BRANCHVILLE, SOUTH CAROLINA*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
WSRC	010919	232542.0	33.259	81.259	5.7	8	13	139	0.1	D	D/C	3.0	360	3.0	6.5			1.8		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
WSRC	ELK	12.9	320		23:25:44.45 (-0.01)		
WSRC	SRPN	31.7	284		:47.40 (0.01)	S	23:25:51.85 (0.29X)
WSRC	HAW	34.6	289		:47.70 (0.06)		
WSRC	NPRS	35.3	270		:47.64 (-0.32X)		
WSRC	SRPD	43.8	255		:49.45 (-0.01)	S	:55.20 (-0.21X)
WSRC	COW	53.8	75		:51.93 (0.18)		
WSRC	WAS	102.9	116		:26:00.12 (0.77)	S	:26:12.88 (-0.37X)
WSRC	RGR	106.7	111		:25:58.72 (-1.20)	S	:13.78 (-0.46X)
WSRC	JSC	113.5	360		:26:00.74 (0.62)	S	:14.49 (0.26X)

*******2001 SEPTEMBER 22; 08:43 – MARYVILLE, TENNESSEE*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010922	084328.6	35.733	84.123	12.5	11	26	175	0.4	C	C/C	1.1	342	0.3	1.7	B		1.7		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	ORT	25.5	320	iPu	08:43:33.13 (-0.08)	iS	08:43:36.71 (0.08)
UTK	EGT	76.8	76	eP	:41.76 (0.59)	eS	:51.15 (0.72)
UTK	PDTN	164.7	252	iPu	:54.44 (-0.54)	eS	:44:14.02 (-0.30)
UTK	SWET	173.9	251	eP	:56.38 (-0.06)	eS	:17.46 (0.67)
UTK	SLTN	196.8	66	eP	:59.49 (-0.55)	eS	:22.84 (-0.06)
UTK	GOGA	264.5	167	eP	:44:11.31 (2.29X)	eS	:41.56 (3.14X)
UTK	WVT	337.4	279			eS	:54.61 (0.65)

*******2001 SEPTEMBER 22; 16:01 – CHARLOTTESVILLE, VIRGINIA*******

NEIC Felt in the Charlottesville area.

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
VTSO	010922	160120.6	38.026	78.396	0.4	13	92	167	0.5	D	D/D	6.1	304	3.2	11.1	D	3.2			
NEIC	010922	160120.6	38.026	78.396	2.0	8	92										3.2	2.5		F

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
VTSO	CBN	91.9	77	iP	16:01:35.14 (-0.50)	iS	16:01:47.06 (0.40)

VTSO	BLA	200.2	244	eP	:51.78	(-0.48)	eS	:02:15.84	(0.53)
VTSO	FWV	218.4	258	eP	:53.76	(-0.74)	eS	:19.23	(0.06)
VTSO	MCWV	220.6	326	eP	:54.76	(0.04)	eS	:19.51	(-0.05)
VTSO	ELN	223.7	249	eP	:54.69	(-0.44)	eS	:20.58	(0.31)
VTSO	WMV	249.1	247	eP	:58.76	(0.46)	eS	:27.24	(1.49)
VTSO	SSPA	293.1	8	eP	:02:04.11	(0.54)	eS	:37.46	(2.60X)
NEIC	CBN	92.3	77	eP	16:01:35.13	(-1.9)			
NEIC	BLA	200.2	244	eP	:50.89	(-2.0)			
NEIC	FWV	218.0	258	eP	:53.75	(-1.5)	eS	16:02:19.22	(X)
NEIC	MCWV	220.2	326	eP	:54.35	(-1.1)	eS	:19.17	(X)
NEIC	ELN	225.7	248	eP	:54.68	(-1.6)	eS	:20.57	(X)
NEIC	WMV	249.1	247	eP	:58.75	(-0.6)	eS	:27.23	(X)
NEIC	SSPA	293.6	8	eP	:02:04.08	(-0.7)	eS	:36.69	(X)
NEIC	JSC	489.3	213	eP	:26.28	(-3.6)			

*****2001 SEPTEMBER 28, 07:44 – SANTEETLAH, NORTH CAROLINA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010928	074441.6	35.390	83.913	0.9	15	68	116	0.3	D	C/D	0.6	18	0.4	1.5	B		2.0		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)		PHASE	ARRIVAL TIME (RES)	
UTK	ORT	67.7	328	eP	07:44:53.14	(0.32)	iS	07:45:01.16	(0.06)
UTK	EGT	79.5	44	ePd	:54.62	(-0.14)	eS	:05.13	(0.65)
UTK	PDTN	176.6	266	eP	:45:09.03	(-1.22X)	eS	:30.63	(-0.64)
UTK	SLTN	199.6	54	eP	:13.62	(-0.30)	eS	:37.69	(0.05)
UTK	GOGA	223.3	169	eP	:17.63	(0.03)	iS	:44.18	(0.27)
UTK	MSAL	258.8	257	eP	:22.07	(-0.50)	eS	:52.50	(0.12)
UTK	SHAL	267.7	247	iPu	:23.05	(-0.63)	eS	:54.79	(0.50)
UTK	WVT	363.6	284	eP	:41.84	(6.34X)	eS	:46:13.84	(-0.89)
UTK	BLA	373.1	56	eP	:38.90	(2.19X)	eS	:09.80	(-7.04X)
UTK	PLAL	381.8	264				eS	:17.39	(-1.22)
UTK	LRAL	386.0	228	eP	:45.66	(7.41X)	eS	:25.98	(6.48X)

*****2001 SEPTEMBER 28; 09:58 – CLEVELAND, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	010928	095822.5	35.135	84.918	12.0	15	86	99	0.5	D	C/D	1.4	337	0.3	2.6	B		1.7		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)		PHASE	ARRIVAL TIME (RES)	
UTK	PDTN	86.2	281	iP	09:58:36.31	(-0.18)	iS	09:58:46.81	(0.02)
UTK	ORT	102.4	33	iP-	:38.87	(-0.17)	iS	:51.15	(-0.06)
UTK	MSAL	163.4	259	iP	:47.62	(-1.03X)	eS	:59:07.49	(-0.37)
UTK	EGT	169.8	59	eP	:48.38	(-1.33)	eS	:11.52	(1.84)
UTK	SHAL	172.7	244	eP	:49.62	(-0.51)	iS	:10.78	(0.42)
UTK	GOGA	233.3	145	eP	:58.23	(-0.88)	iS	:25.63	(-0.11)
UTK	WVT	285.9	294	eP	:59:07.46	(1.86X)	eS	:37.81	(0.84)
UTK	PLAL	288.5	268	eP	:07.74	(1.82X)	eS	:38.29	(0.76)
UTK	SLTN	291.6	59	eP	:03.25	(-3.18X)	eS	:42.30	(3.90X)
UTK	LRAL	301.8	220	eP	:06.68	(-0.88)	eS	:38.78	(-1.57)

*****2001 OCTOBER 01; 09:55 – ROANOKE, VIRGINIA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
VTSO	011001	095559.5	37.262	80.099	11.2	10	29	267	0.2	D	C/D	2.0	254	1.3	1.6	B		1.8		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)

VTSO	BLA	29.1	259	iP	09:56:04.75	(-0.15)	iS	09:56:08.95	(0.39)
VTSO	ELN	57.9	272	eP	:09.22	(-0.36)	eS	:16.39	(-0.14)
VTSO	FWV	72.4	300	eP	:12.18	(0.21)	eS	:20.72	(0.07)
VTSO	WMV	79.3	258	eP	:13.31	(0.25)	eS	:22.23	(-0.26)
VTSO	PKNC	164.8	215	eP	:26.02	(-0.12)	eS	:44.90	(0.18)

*****2001 OCTOBER 03, 01:44 – LAFAYETTE, GEORGIA*****

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	011003	0144	03.6	34.619	85.350	5.4	14	86	94	0.3	C	B/D	0.6	352	0.5	2.5	B		1.9		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	PDTN	85.8	328	iPu	01:44:17.69 (0.06)	eS	01:44:27.65 (-0.34)
UTK	SHAL	116.8	260	eP	:22.67 (0.07)	eS	:36.76 (0.20)
UTK	MSAL	123.8	282	eP	:23.74 (0.03)	iS	:38.49 (0.01)
UTK	ORT	171.9	33	iP	:31.43 (0.13)	eS	:52.47 (0.87)
UTK	GOGA	219.5	127	eP	:40.85 (2.05X)	iS	:45:03.93 (-0.49)
UTK	LRAL	232.7	221	iP	:40.08 (-0.75)	eS	:07.76 (-0.12)
UTK	EGT	234.7	52	eP	:40.33 (-0.88)	eS	:10.56 (2.02X)
UTK	PLAL	252.7	280	eP	:42.69 (-0.63)	eS	:12.49 (0.30)
UTK	OXF	372.7	269			eS	:40.58 (2.80X)

*****2001 OCTOBER 08; 00:23 – SAVANNAH RIVER SITE, SOUTH CAROLINA*****

NEIC Felt at Beech Island, Jackson and New Ellenton.

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
WSRC	011008	0023	01.1	33.324	81.665	3.9	10	1	136	0.0	C	B/C	0.5	360	0.5	0.8			2.5		
NEIC	011008	0023	01.2	33.320	81.652	2.8	10	89										2.5	2.6		F
UTK	011008	0023	02.3	33.247	81.716	0.0	16	144	173	0.8	D	D/D	2.6	6	0.3	2.5	B		2.4		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
WSRC	SRAV	1.4	275	P	00:23:01.90 (0.00)		
WSRC	HAW	6.6	51	P	:02.35 (0.00)	S	00:23:03.35 (0.04)
WSRC	SRPN	7.1	85	P	:02.50 (-0.07)		
WSRC	NPRS	7.8	161	P	:02.60 (-0.07)	S	:03.90 (0.02)
WSRC	SRPD	19.3	193	P	:04.60 (0.01)		
WSRC	MBY	20.1	224			S-P	2.4 SEC (-0.35)
WSRC	DXN	30.2	172	P	:06.40 (0.06)	S	:10.58 (0.01)
NEIC	COW	89.0	85	eP	00:23:16.10 (-1.0)	eS	00:23:28.36 (X)
NEIC	JSC	112.3	19	eP	:19.25 (-1.7)	eS	:32.30 (X)
NEIC	NHSC	139.0	99	iPd	:24.54 (-0.5)	iS	:42.40 (X)
NEIC	RGRS	143.4	108	eP	:24.88 (-0.8)		
NEIC	LHS	150.1	31	eP	:25.08 (-1.7)	eS	:42.32 (X)
NEIC	GOGA	169.0	274	eP	:28.04 (-1.3)	eS	:48.02 (X)
NEIC	SCCK	225.7	327	eP	:35.43 (-1.3)	eS	:24:02.45 (X)
NEIC	BLA	445.9	14	ePn	:24:03.15 (-1.8)		
NEIC	LRAL	499.3	268	ePn	:10.75 (-0.9)		
NEIC	PLAL	620.5	289	ePn	:26.30 (-0.8)		
NEIC	WVT	646.1	301	eP	:36.95 (6.6)		
UTK	NHSC	144.3	96	iPd	00:23:24.54 (-0.84)	iS	00:23:42.41 (0.64)
UTK	GOGA	164.0	277	eP	:28.08 (-0.46)	iS	:47.88 (0.70)
UTK	EGT	328.2	334	eP	:52.04 (2.43)	eS	:24:28.75 (3.74)
UTK	SLTN	356.5	354	eP	:52.33 (-0.78)	eS	:31.06 (-0.14)
UTK	ORT	379.0	322	eP	:24:05.28 (9.48X)	eS	:42.82 (6.85X)
UTK	PDTN	442.1	302	eP	:04.03 (0.46)	eS	:50.24 (0.51)
UTK	BLA	455.3	15			eS	:56.15 (3.49X)

UTK	SHAL	470.9	288	eP	:07.74	(0.61)	eS	:25:05.10 (9.08X)
UTK	MSAL	490.9	293	eP	:11.24	(1.65)	eS	:01.29 (0.92)
UTK	LRAL	493.4	269	eP	:10.85	(0.97)	eS	:01.90 (1.01)
UTK	PLAL	617.4	290				eS	:30.34 (2.37)

*****2001 OCTOBER 08; 02:56 – SAVANNAH RIVER SITE, SOUTH CAROLINA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
WSRC	011008	025607.7	33.318	81.672	4.1	8	1	94	0.0	B	B/B	1.0	360	1.0	0.9			1.0		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
WSRC	SRAV	1.1	316	P	02:56:08.45 (-0.07)	S	02:56:09.18 (0.04)
WSRC	NPRS	7.4	155	P	:09.18 (-0.04)		
WSRC	HAW	7.5	50	P	:09.10 (0.01)	S	:10.15 (0.00)
WSRC	SRPN	7.8	81	P	:09.30 (0.02)		
WSRC	SRPD	18.4	192	P	:11.10 (0.04)		
WSRC	MBY	19.2	224			S-P	2.4 SEC (-0.19)
WSRC	DXN	29.6	171	P	:10.38 (-2.46X)		

*****2001 OCTOBER 08; 08:53 – SAVANNAH RIVER SITE, SOUTH CAROLINA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
WSRC	011008	085351.0	33.337	81.681	4.2	10	1	210	0.1	D	C/D	1.3	360	1.3	0.5			1.4		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
WSRC	SRAV	1.4	175	P	08:53:51.94 (0.08)	S	08:53:52.47 (-0.04)
WSRC	HAW	7.2	68	P	:52.33 (-0.04)	S	:53.40 (-0.01)
WSRC	SRPN	8.7	96	P	:52.75 (0.02)	S	:53.40 (-0.65X)
WSRC	NPRS	9.8	156	P	:52.94 (0.04)	S	:54.10 (-0.24)
WSRC	MBY	20.2	218			S-P	2.5 SEC (-0.18)
WSRC	SRPD	20.4	188	P	:54.65 (-0.05)	S	:56.50 (-1.22)
WSRC	DXN	31.9	170	P	:56.40 (-0.13X)	S	:54:00.28 (-0.70X)

*****2001 OCTOBER 14; 06:05 – SAVANNAH RIVER SITE, SOUTH CAROLINA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
WSRC	011014	060508.5	33.348	81.663	3.0	6	3	220	0.0	C	B/D	1.0	360	1.0	1.9			0.7		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
WSRC	SRAV	3.0	213	P	06:05:09.32 (-0.02)	S	06:05:09.98 (0.01)
WSRC	HAW	5.1	73	P	:09.48 (-0.01)	S	:10.57 (0.34)
WSRC	SRPN	7.2	107	P	:09.96 (0.03)	S	:11.00 (-0.01)

*****2001 OCTOBER 15; 22:18 – SAVANNAH RIVER SITE, SOUTH CAROLINA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
WSRC	011015	221806.5	33.348	81.694	4.7	13	3	225	0.1	C	B/D	0.9	360	0.9	0.5			0.8		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
WSRC	SRAV	2.8	153	P	22:18:07.52 (-0.01)	S	22:18:08.32 (0.02)
WSRC	HAW	8.0	79	P	:08.00 (-0.01)	S	:09.12 (-0.04)
WSRC	SRPN	10.0	102	P	:08.60 (0.15)	S	:09.90 (-0.05)
WSRC	NPRS	11.3	153	P	:08.60 (-0.05)	S	:09.76 (-0.53)
WSRC	MBY	20.5	213			S-P	2.5 SEC (-0.28)
WSRC	SRPD	21.4	185	P	:10.22 (-0.13)	S	:12.62 (-0.89X)

WSRC	ELK	32.3	90	P	:11.92	(-0.02)	S	:15.83	(-0.32)
WSRC	DXN	33.3	168	P	:12.38	(0.13)			

*******2001 OCTOBER 28; 16:47 – HOHENWALD, TENNESSEE*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	011028	164709.7	35.527	87.376	0.0	12	88	219	0.7	D	D/D	1.1	347	0.3	1.2	A		1.8		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)		PHASE	ARRIVAL TIME (RES)	
UTK	PLAL	87.7	227	iPd	16:47:23.54	(-0.18)	iS	16:47:33.69	(0.00)
UTK	MSAL	98.9	139	iPd	:25.11	(-0.40)	eS	:36.65	(-0.10)
UTK	SHAL	140.4	150	iPd	:31.67	(-0.49)	eS	:49.10	(0.99)
UTK	PDTN	141.5	101	iP+	:32.58	(0.25)	eS	:48.29	(-0.11)
UTK	OXF	217.0	239	eP	:42.26	(-0.92X)	eS	:48:09.64	(1.69)
UTK	LRAL	278.6	173	eP	:50.34	(-0.44)	eS	:24.82	(3.43)
UTK	MYNC	299.7	99				eS	:28.02	(1.95)

*******2001 OCTOBER 29; 21:40 – CLEVELAND, TENNESSEE*******

UTK Foreshock

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	011029	214042.4	35.232	84.917	3.9	18	74	123	0.4	D	C/D	0.5	353	0.2	1.3	A		2.1		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)		PHASE	ARRIVAL TIME (RES)	
UTK	MYNC	74.0	103	iPd	21:40:54.10	(-0.19)	iS	21:41:02.85	(0.13)
UTK	PDTN	85.0	273	eP	:55.80	(-0.24)	iS	:06.18	(0.47)
UTK	ORT	93.4	36	eP	:57.23	(-0.16)	eS	:08.32	(0.30)
UTK	EGT	164.5	63	eP	:41:08.00	(-0.76)	eS	:27.63	(0.18)
UTK	MSAL	165.9	256	iPu	:07.95	(-1.03)	iS	:28.14	(0.31)
UTK	SHAL	177.8	241	eP	:09.78	(-0.94)	eS	:31.49	(0.40)
UTK	GOGA	242.1	146	iP	:19.63	(1.00)	eS	:46.18	(0.65)
UTK	SLTN	286.2	61	eP	:23.15	(-1.03)			
UTK	PLAL	289.3	265	eP	:27.65	(3.20X)	eS	:55.10	(-0.74)
UTK	LRAL	310.2	219	eP	:27.37	(0.35)	eS	:42:02.55	(2.16)

*******2001 OCTOBER 29; 21:47 – CLEVELAND, TENNESSEE*******

UTK Mainshock

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	011029	214700.7	35.220	84.911	0.0	22	73	95	0.7	D	D/D	0.4	348	0.2	0.8	A		2.5		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)		PHASE	ARRIVAL TIME (RES)	
UTK	MYNC	73.1	103	iP	21:47.12.22	(-0.16)	eS	21:47.20.90	(0.21)
UTK	PDTN	85.7	274	eP	:14.04	(-0.34)	iS	:24.40	(0.29)
UTK	SWET	93.0	270	iP-	:15.18	(-0.38)	iS	:26.72	(0.60)
UTK	ORT	94.2	35	eP	:15.02	(-0.73)	iS	:27.03	(0.57)
UTK	EGT	164.6	62	iP	:27.26	(0.25)	eS	:45.74	(0.03)
UTK	MSAL	166.1	256	iPu	:26.14	(-1.11)	iS	:46.27	(0.15)
UTK	SHAL	177.6	241	iP	:27.84	(-1.26)	iS	:49.76	(0.49)
UTK	GOGA	240.6	146	iP	:37.75	(0.66)	eS	:48:05.40	(1.30)
UTK	SLTN	286.3	61	eP	:44.37	(1.53)	eS	:14.96	(0.69)
UTK	PLAL	289.7	266	eP	:43.50	(0.35)	eS	:16.00	(1.17)
UTK	LRAL	309.5	219	eP	:47.79	(2.21X)	eS	:24.72	(5.59X)
UTK	WCI	356.2	339	eP	:55.31	(3.97X)	eS	:30.41	(1.07)

UTK	OXF	418.7	260	eP	:48:04.49	(5.45X)	eS	:41.41 (-1.55)

*******2001 NOVEMBER 04, 13:10 – BRYSON CITY, NORTH CAROLINA*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	011104	131033.8	35.467	83.711	0.0	10	58	133	0.5	D	D/D	2.6	311	0.3	4.5	C		1.6		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	MYNC	57.8	221	iP	13:10:42.93 (-0.08)	eS	13:10:42.63 (0.04)
UTK	EGT	60.9	38	eP	:43.05 (-0.45)	iS	:50.45 (0.03)
UTK	ORT	72.8	313	eP	:49.12 (3.72X)	eS	:58.57 (4.90X)
UTK	SLTN	179.7	52	eP	:11:02.78 (0.26)	eS	:11:24.62 (1.68)
UTK	PDTN	195.6	264	eP	:06.77 (2.14)	eS	:30.09 (2.83)
UTK	GOGA	229.2	174	eP	:10.05 (1.29)	eS	:35.67 (0.99)

*******2001 NOVEMBER 08; 02:15 – PULASKI, VIRGINIA*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
VTSO	011108	021512.2	37.090	80.840	3.6	8	12	210	0.2	D	C/D	1.4	341	0.8	2.5	B		1.8		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
VTSO	WMV	11.8	280	ePc	02:15:14.32 (-0.14)	eS	02:15:16.15 (0.25)
VTSO	ELN	22.6	20	ePc	:15.86 (-0.44)	eS	:19.02 (0.12)
VTSO	BLA	39.7	70	eP	:19.46 (0.14)	eS	:23.94 (0.10)
VTSO	FWV	54.6	3	eP	:21.79 (0.00)	eS	:28.29 (0.13)

*******2001 NOVEMBER 08; 11:31 – MADISONVILLE, TENNESSEE*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	011108	11:31:23.0	35.487	84.247	0.0	14	47	105	0.6	D	D/C	0.9	262	0.3	2.3	B		1.8		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	MYNC	47.1	167	eP	11:31:30.01 (-0.47)	eS	11:31:36.74 (0.91)
UTK	ORT	47.2	354	iP	:29.89 (-0.61)	iS	:36.31 (0.45)
UTK	EGT	97.4	62	eP	:38.00 (-0.53)	eS	:50.08 (0.48)
UTK	PDTN	147.5	261	iP	:46.35 (-0.20)	eS	:32:03.49 (0.18)
UTK	SLTN	219.2	60	eP	:58.40 (1.57)	eS	:22.39 (0.51)
UTK	MSAL	232.2	253			eS	:26.11 (1.56)
UTK	SHAL	244.8	242	eP	:32:01.21 (1.32)	eS	:30.16 (2.85X)
UTK	PLAL	353.0	262	eP	:14.40 (1.19)	eS	:54.70 (3.81X)
UTK	WCI	356.1	329	eP	:16.69 (3.09X)	eS	:53.59 (2.01)

*******2001 NOVEMBER 17, 00:45 – JEFFERSON, NORTH CAROLINA*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	011117	004559.3	36.514	81.418	0.0	6	63	189	0.8	D	D/D	7.1	329	0.5	15.6	D		1.7		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	SLTN	63.4	263	eP	00:46:09.01 (-0.44)	eS	00:46:22.84 (6.18X)
UTK	ELN	99.1	37	eP	:18.80 (3.65X)	eS	:28.40 (1.99)
UTK	BLA	117.9	49	eP	:14.59 (-3.56X)	eS	:31.29 (-0.25)
UTK	EGT	182.2	249	eP	:28.30 (-0.15)	eS	:50.61 (1.45)
UTK	MYNC	292.4	238	eP	:42.70 (0.56)	eS	:47:19.25 (5.15X)

*****2001 NOVEMBER 17; 11:32 – SEVIERVILLE, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	011117	113209.2	35.892	83.626	11.5	10	30	153	0.4	C	C/C	0.6	340	0.3	1.8	B		1.8		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	EGT	29.7	88	iPu	11:32:14.03 (-0.32)	iS	11:32:18.28 (0.27)
UTK	ORT	61.3	272	eP	:18.96 (-0.23)	eS	:26.46 (0.18)
UTK	MYNC	101.5	207	eP	:24.90 (-0.65)	iS	:37.60 (0.44)
UTK	SLTN	148.7	65	eP	:32.59 (-0.48)	iS	:50.22 (0.20)
UTK	PDTN	212.9	252	eP	:41.18 (0.15)	iS	:33:07.71 (3.01)

*****2001 NOVEMBER 18; 17:15 – BLACKSBURG, VIRGINIA*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
VTSO	011118	171545.3	37.226	80.344	11.6	8	7	303	0.2	D	C/D	1.9	283	1.5	1.8	B		1.6		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
VTSO	BLA	6.9	256	iPc	17:15:47.64 (-0.02)	iS	17:15:49.34 (0.04)
VTSO	ELN	36.6	280	eP	:51.76 (-0.08)	eS	:56.22 (-0.14)
VTSO	WMV	57.1	257	eP	:55.03 (-0.18)	eS	:16:02.33 (0.26)
VTSO	FWV	57.1	314	eP	55.41 (0.23)	eS	:01.96 (-0.09)

*****2001 NOVEMBER 28; 06:27 – BENTON, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	011128	062717.8	35.222	84.666	1.6	21	52	71	0.5	D	D/D	0.4	9	0.2	0.9	A		2.4		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	MYNC	51.8	108	iP	06:27:25.94 (-0.16)	iS	06:27:32.17 (0.19)
UTK	ORT	83.0	23	eP	:30.66 (-0.44)	iS	:40.55 (0.02)
UTK	PDTN	107.8	273	eP	:35.21 (0.14)	iS	:47.68 (0.36)
UTK	EGT	145.1	58	eP	:39.83 (-1.21X)	eS	:58.28 (0.76)
UTK	MSAL	187.8	258	iP	:46.68 (-0.89)	eS	:28:09.11 (-0.10)
UTK	GOGA	229.2	151	iP+	:51.31 (-1.35)	eS	:19.49 (0.99)
UTK	SLTN	266.9	59	eP	:57.99 (0.56)	eS	:29.16 (2.24X)
UTK	WVT	303.6	290	eP	:28:02.17 (0.33)	eS	:36.22 (1.49)
UTK	PLAL	312.0	266	eP	:03.07 (0.20)	eS	:38.02 (1.46)
UTK	LRAL	324.2	222	eP	:03.84 (-0.53)	eS	:40.71 (1.49)
UTK	WCI	364.5	336	eP	:15.06 (5.72X)	eS	:48.64 (0.62)
UTK	OXF	440.7	261	iP	:18.13 (-0.61)	eS	:29:03.43 (-1.22)

*****2001 DECEMBER 01; 21:18 – TELLICO PLAINS, TENNESSEE*****

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	011201	211822.0	35.384	84.337	0.0	19	39	92	0.6	D	D/C	0.3	348	0.2	0.8	A		2.5		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	MYNC	39.3	151	iP+	21:18:28.06 (-0.19)	iS	21:18:32.79 (0.08)
UTK	ORT	58.4	3	eP	:31.13 (-0.17)	iS	:38.20 (0.26)
UTK	CRTN	101.1	26	eP	:37.64 (-0.49)	eS	:51.02 (1.41X)
UTK	EGT	110.3	58	iP+	:39.21 (-0.39)	eS	:52.45 (0.33)
UTK	PDTN	138.0	265	eP-	:43.54 (-0.50)	iS	:59.76 (0.04)
UTK	SWET	146.2	263	eP	:44.68 (-0.67)	iS	:19:01.86 (-0.10)

UTK	MSAL	221.1	255	iP	:58.49	(2.52X)	iS	:22.10 (0.95)
UTK	SLTN	232.1	59	eP	:57.76	(0.33)	eS	:25.89 (2.19)
UTK	SHAL	232.3	244	eP	:58.41	(1.06)	eS	:25.87 (2.28)
UTK	GOGA	233.0	160				eS	:25.08 (1.37)
UTK	WVT	326.5	286	eP	:19:09.73	(0.77)	eS	:47.83 (3.70X)
UTK	PLAL	343.4	264	iP	:16.02	(4.98X)	iS	:53.92 (6.11X)
UTK	LRAL	357.7	224	eP	:16.97	(4.17X)	eS	:57.36 (6.43X)
UTK	WCI	361.9	331	eP	:15.84	(2.52)	eS	:20:00.09 (8.24X)

*******2001 DECEMBER 04; 21:15 – FORREST HILL, WEST VIRGINIA*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
VTSO	011204	211513.9	37.726	80.752	8.5	14	17	172	0.5	D	D/C	3.0	288	1.6	3.2	C	3.1			

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
VTSO	FWV	16.9	198	iPd	21:15:17.62 (0.37)	iS	21:15:20.09 (0.60)
VTSO	ELN	49.4	180	eP	:22.28 (-0.23)	eS	:28.35 (-0.07)
VTSO	BLA	64.2	153	ePd	:24.92 (-0.02)	iS	:32.65 (0.06)
VTSO	WMV	71.2	196	eP	:25.70 (-0.43)	eS	:34.20 (-0.42)
VTSO	PKNC	189.9	191	eP	:44.28 (-0.25)	eS	:16:06.95 (1.01)
VTSO	GFM	202.4	208	eP	:45.45 (-1.07)	eS	:09.98 (0.67)
VTSO	MCWV	228.5	20	eP	:50.38 (-0.02)	eS	:16.53 (0.60)

*******2001 DECEMBER 05; 13:07 – MARYVILLE, TENNESSEE*******

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	011205	130740.0	35.685	84.050	10.9	12	34	116	0.3	C	C/C	0.3	272	0.2	0.6	A		2.2		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	ORT	33.9	317	iPu	13:07:45.62 (-0.12)	iS	13:07:50.09 (0.28)
UTK	CRTN	60.2	18	eP+	:49.47 (-0.35)	iS	:56.71 (-0.07)
UTK	MYNC	68.1	186	iPd	:50.90 (-0.18)	iS	:59.12 (0.20)
UTK	EGT	72.1	70	iP	:51.27 (-0.44)	eS	:08:00.64 (0.62)
UTK	PDTN	169.5	255	eP-	:08:06.19 (-0.38)	eS	:26.08 (-0.08)
UTK	SLTN	193.2	64	ePu	:10.10 (0.52)	eS	:34.25 (2.78X)
UTK	SHAL	271.0	240	eP	:22.78 (3.69X)	eS	:53.81 (5.50X)
UTK	WVT	344.7	279			eS	:09:06.85 (2.48)

*******2001 DECEMBER 08; 01:08 – SCOTTSBORO, ALABAMA*******

NEIC Felt (IV) at Estillfork, Grant, Gurley, Huntsville, New Hope, New Market, Union Grove and Woodville; (III) at Arab, Brownsboro, Harvest, Laceys Spring, Meridianville, Owens Cross Roads and Scottsboro; (II) at Athens, Decatur, Guntersville and Madison. Also felt (III) at Flintville and Winchester; (II) at Fayetteville and Huntland, Tennessee. Felt in much of northeastern Alabama and several counties in Tennessee. Standard deviation = 0.3 on 8 of 22 observations.

UTK Felt MMI=V.

SRCE	DATE	HRMN SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
NEIC	011208	010821.5	34.735	86.245	5.0F	8	170											3.9		4
UTK	011208	010821.9	34.732	86.239	12.8	28	42	95	0.5	D	D/C	0.3	348	0.2	0.7	A		3.8		5

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
NEIC	PLAL	170.1	280	eP	01:08:48.94 (-0.5)		

NEIC	MYNC	196.8	78	eP	:53.01	(-0.1)				
NEIC	LRAL	201.3	201	eP	:53.53	(0.0)				
NEIC	WVT	211.3	318	eP	:54.86	(0.0)				
NEIC	OXF	291.3	266	eP	:09:05.24	(0.1)	eS	01:09:37.57	(	X)
NEIC	MET	340.3	278	ePn	:11.80	(0.5)				
NEIC	WCI	388.1	359	ePn	:17.70	(0.2)				
NEIC	SIUC	424.8	322	iPnd	:22.15	(-0.2)	Lg	:10:18.54	(	X)
				Pg	:28.70					
NEIC	BLO	492.6	357	ePn	:33.36	(2.4X)				
				ePg	:40.40					
NEIC	SLM	560.4	322	ePn	:48.02	(8.4X)	eS	:35.66	(	X)
							Lg	:49.95	(	X)
NEIC	CCM	580.5	311	ePn	:40.38	(-1.7X)				
NEIC	NHSC	589.4	106	ePn	:39.76	(-3.5X)				
NEIC	BLA	592.7	61	ePn	:41.47	(-2.3X)				
NEIC	MIAR	672.8	270	ePn	:51.11	(-2.6X)				
NEIC	ACSO	675.0	24	ePn	:52.99	(-1.1X)				
NEIC	MCWV	788.4	44	ePn	:10:05.34	(-3.1X)				
NEIC	AAM	869.6	14	ePn	:17.45	(-1.2X)				
NEIC	CBN	882.9	62	ePn	:16.87	(-3.5X)				
NEIC	JFWS	971.9	340	ePn	:28.70	(-2.8X)				
NEIC	SSPA	985.2	46	ePn	:28.36	(-4.8X)				
NEIC	WMOK	1147.6	274	ePn	:47.21	(-6.1X)				
NEIC	EYMN	1531.2	345	ePn	:11:33.21	(-6.5X)				
UTK	MSAL	41.8	288	iPu	01:08:29.46	(0.49)	iS	01:08:34.33	(0.13)	
UTK	PDTN	69.8	30	iPd	:33.46	(0.11)	iS	:41.91	(0.14)	
UTK	ABTN	128.5	5	eP	:44.13	(1.53)	eS	:58.84	(1.06X)	
UTK	PLAL	170.3	280	iPu	:48.92	(-0.25)	iS	:09:08.92	(-0.15)	
UTK	PLDM	187.6	282	eP	:51.97	(0.11)	eS	:13.64	(0.01)	
UTK	MYNC	196.6	78	iPd	:53.00	(-0.27)	eS	:16.50	(0.43)	
UTK	LRAL	200.9	201	iPu	:53.51	(-0.40)	iS	:18.01	(0.85)	
UTK	WVT	212.0	317	iPu	:54.95	(-0.66)	eS	:21.17	(1.09)	
UTK	OXF	291.8	266	eP-	:09:05.60	(-0.06)	eS	:40.55	(3.07X)	
UTK	EGT	297.2	63	iPd	:06.26	(-0.18)	eS	:40.79	(1.95)	
UTK	WCI	386.1	358	eP-	:18.04	(0.74)	eS	:10:00.96	(3.33)	
UTK	SLTN	418.7	62	ePd	:20.89	(-0.55)	eS	:07.89	(3.09)	
UTK	NHSC	588.6	106	eP	:41.50	(-0.75)	eS	:42.82	(2.02)	
UTK	BLA	592.3	61	iPd	:41.69	(-1.09)	eS	:45.79	(4.08)	
UTK	MIAR	672.6	270	eP	:51.11	(-1.53)				
UTK	MCWV	787.8	44	eP	:10:05.34	(-1.50)				
UTK	SSPA	985.2	46	eP	:28.36	(-2.81X)				

*******2001 DECEMBER 08; 01:08 – SCOTTSBORO, ALABAMA*******

UTK Aftershock.

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	011208	010822	4	34.710	86.231	0.0	11	43	220	0.4	D	C/D	1.5	344	0.3	1.7	B		3.7		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)	
UTK	MSAL	43.2	291	iPu	01:08:29.46 (0.18)	iS	01:08:34.33	(0.14)
UTK	PDTN	71.5	29	iPd	:33.46 (-0.35)	iS	:41.91	(-0.03)
UTK	ABTN	130.9	5	eP	:44.13 (0.83)	eS	:58.84	(0.67)
UTK	PLDM	188.8	283	eP	:51.97 (-0.40)	eS	:09:13.64	(-0.38)
UTK	EGT	297.7	63	iPd	:09:06.26 (0.36)	eS	:40.79	(2.39)
UTK	SLTN	419.3	62	ePd	:20.89 (-0.02)	eS	:52.53	(-12.43X)

*******2001 DECEMBER 08; 03:02 – SCOTTSBORO, ALABAMA*******

UTK Aftershock.

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	011208	0302	08.9	34.751	86.251	16.0	10	40	121	0.2	C	B/C	1.1	341	0.5	1.4	B		1.6		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	MSAL	40.1	286	eP	03:02:16.67 (0.87)	iS	03:02:20.89 (-0.05)
UTK	PDTN	68.6	32	eP	:19.94 (-0.24)	eS	:28.57 (0.07)
UTK	PLAL	168.8	279			iS	:55.37 (-0.04)
UTK	MYNC	197.3	79	eP	:40.40 (0.19)	eS	:03:02.70 (-0.28)
UTK	LRAL	202.5	200	eP	:41.32 (0.35)	eS	:04.32 (0.03)
UTK	WVT	209.7	317	eP	:39.73 (-2.35X)	eS	:06.88 (0.68)

*******2001 DECEMBER 17; 03:34 – SAVANNAH RIVER SITE, SOUTH CAROLINA*******

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
WSRC	011217	0334	48.7	33.335	81.684	4.9	10	1	208	0.1	C	B/D	0.9	360	0.9	0.5			1.1		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
WSRC	SRAV	1.1	163	P	03:34:49.70 (0.05)	S	03:34:50.37 (0.00)
WSRC	HAW	7.5	66	P	:50.24 (0.08)	S	:51.20 (-0.08)
WSRC	SRPN	8.8	94	P	:50.50 (0.00)		
WSRC	NPRS	9.6	154	P	:50.55 (-0.05)		
WSRC	MBY	19.9	218	P	:52.09 (-0.09)	S	:54.97 (0.09)
WSRC	SRPD	20.1	188	P	:52.40 (0.05)		
WSRC	DXN	31.6	169	P	:54.23 (0.04)		

*******2001 DECEMBER 24; 19:49 – SCOTTSBORO, ALABAMA*******

UTK Aftershock.

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	011224	1949	17.1	34.743	86.245	14.8	21	41	81	0.4	C	C/C	0.4	317	0.2	0.8	A		2.4		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	MSAL	40.9	286	iPu	19:49:24.66 (0.51)	eS	19:49:29.33 (0.02)
UTK	SHAL	47.5	224	ePd	:25.07 (-0.09)	eS	:31.15 (0.08)
UTK	SWET	59.7	28	iPd	:26.78 (-0.28)	iS	:34.66 (0.29)
UTK	PDTN	69.0	31	iPd	:28.42 (-0.07)	eS	:36.95 (0.11)
UTK	PLAL	169.5	280	eP	:44.17 (-0.07)	iS	:50:03.82 (-0.13)
UTK	ANTN	183.3	30	iPd	:46.07 (-0.31)	eS	:09.21 (1.57)
UTK	MYNC	196.9	79	eP	:48.34 (-0.13)	eS	:11.61 (0.37)
UTK	LRAL	201.9	200			eS	:12.74 (0.24)
UTK	WVT	210.7	317	iPu	:49.85 (-0.71)	iS	:15.10 (0.28)
UTK	ORT	218.8	53	eP	:52.06 (0.34)	eS	:19.06 (2.21X)
UTK	OXF	291.3	266	eP	:52.80 (-7.83X)	eS	:33.38 (1.11)
UTK	GOGA	295.9	119	eP	:50:00.44 (-0.77)	eS	:35.92 (2.65)

*******2001 DECEMBER 27; 02:29 – DAYTON, TENNESSEE*******

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
UTK	011227	0229	10.1	35.524	85.117	3.5	23	73	78	0.7	D	D/D	0.6	332	0.2	0.9	A		2.6		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
UTK	ANTN	72.6	352	eP	02:29:22.48 (0.45)	eS	02:29:30.95 (0.05)
UTK	SWET	81.6	245	eP	:22.60 (-0.87)	iS	:33.16 (-0.24)
UTK	ORT	85.0	60	ePu	:24.10 (0.09)	eS	:34.44 (0.10)

UTK	CRTN	137.5	57	iP-	:32.49	(0.09)	eS	:51.82 (2.99X)
UTK	MSAL	160.5	243	eP	:36.55	(0.54)	eS	:56.88 (1.80)
UTK	SHAL	181.8	229	iPd	:40.01	(0.64)	eS	:30:02.15 (1.26)
UTK	WVT	254.2	286	eP	:48.30	(-1.85)	eS	:19.08 (-0.24)
UTK	PLAL	275.9	258	eP	:51.63	(-1.19)	iS	:24.68 (0.74)
UTK	GOGA	279.1	147	eP	:52.74	(-0.47)	eS	:24.22 (-0.40)
UTK	SLTN	288.8	68	eP	:53.66	(-0.88)	eS	:30.36 (3.45X)
UTK	WCI	318.0	340	eP	:59.06	(1.04)	eS	:31.59 (-1.34)
UTK	LRAL	325.9	213	eP	:56.89	(-2.10)	eS	:33.46 (-1.15)
UTK	BLA	461.1	65	eP	:30:20.00	(4.29X)	eS	:31:04.95 (1.42)

*******2001 DECEMBER 27; 22:45 – SAVANNAH RIVER SITE, SOUTH CAROLINA*******

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
WSRC	011227	224504	8.8	33.328	81.655	2.4	9	2	145	0.0	B	A/C	0.4	360	0.4	0.9			0.1		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
WSRC	SRAV	2.3	263	P	22:45:05.24 (-0.25)	S	22:45:06.00 (-0.01)
WSRC	HAW	5.6	48	P	:05.83 (0.01)	S	:06.62 (0.03)
WSRC	SRPN	6.2	88	P	:06.10 (0.05)	S	:06.92 (-0.08)
WSRC	NPRS	8.0	168	P	:06.33 (-0.01)	S	:07.55 (0.04)
WSRC	SRPW	15.6	153	P	:07.89 (0.17X)		
WSRC	MBY	21.1	225	P	:08.39 (-0.03)	S	:10.31 (-0.91X)

SOUTHEASTERN U.S. RESERVOIR ACTIVITY DURING 2001

Events are listed chronologically (this also applies to multiple hypocenter locations for the same event). All times are Universal Coordinated Time. Most entries in the listing are self-explanatory. Items that might require further explanation are defined in the section entitled DEFINITIONS AND NETWORK OPERATOR CODES.

*******2001 JANUARY 04; 12:06 - MONTICELLO RESERVOIR, SOUTH CAROLINA*******

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
USC	200104	120622	8.8	34.346	81.320	1.1	14	2	113	0.1	B		0.3	360	0.3	0.9			1.9		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
USC	MR10	2.0	237	iPd	12:06:23.16 (0.00)	iSu	12:06:23.50 (0.04)
USC	MR01	2.7	126	iPd	:23.20 (-0.06)	iSu	:23.56 (-0.09)
USC	MR07	2.7	349	iPd	:23.25 (-0.02)	iSu	:23.64 (-0.02)
USC	MR05	8.8	189	iPd	:24.26 (0.03)	iSu	:25.33 (-0.02)
USC	JSC	9.2	143	iPd	:24.26 (-0.02)	iSu	:25.37 (-0.07)
USC	MR02	18.9	154	iPd	:25.81 (-0.06)	iSu	:28.16 (-0.08)
USC	LHS	49.3	73	iPd	:30.82 (0.18)	iSu	:36.88 (0.24)

*******2001 OCTOBER 10; 17:35 - JOCASSE RESERVOIR, SOUTH CAROLINA*******

SRCE	DATE	HRMN	SEC	LAT-N	LON-W	DPTH	PH	DMN	GAP	RMS	Q	SQD	ERH1	AZ	ERH2	ERZ	Q	MN	MD	MAGT	I
USC	201010	173536.1		35.094	82.984	6.5	6	11	331	0.0	C	B/D	1.1	360	1.1	1.9			1.6		

SRCE	STA	DIST (KM)	AZM	PHASE	ARRIVAL TIME (RES)	PHASE	ARRIVAL TIME (RES)
USC	JVW	11.4	186	ePd	17:35:38.30 (-0.06)	eSu	17:35:40.14 (0.03)
USC	BG3	12.2	157	ePu	:38.44 (0.00)	eSu	:40.25 (-0.01)
USC	SMT	18.2	176	ePu	:39.42 (0.06)	eSu	:41.88 (-0.02)

SEISMIC STATION LISTING AND NETWORK MAPS

Stations potentially operational in the SEUSSN during the report period are listed below. A list of operator code definitions may be found in the section entitled DEFINITIONS AND NETWORK OPERATOR CODES. After the station listing is a plot of all the stations, followed by maps of individual networks (with station identification codes) operated by major member agencies or groups of the SEUSSN.

Sta. Code	Lat. N (Dg-Min)	Lon. W (Dg-Min)	Elev. (M)	Dates Open-Close	Current Operator	Locality
ABTN	35-53.13	86-06.54	363	8409-	TVA/UTK	Auburntown, TN
AMG	32-03.56	84-13.06	106	7309-	GSW	Americus, GA
ANTN	36-10.30	85-13.88	612	8305	TVA/UTK	Anderson, TN
ATL	33-26.00	84-20.25	272	6306-	GIT	Atlanta, GA
BG3	34-59.58	82-55.90	366	86 -	DPC	Lake Jocassee, SC
BLA	37-12.68	80-25.21	634	6209-	VTSO/NEIC	Blacksburg, VA
BVD	39-46.49	75-29.96	58	8502-	DGS	Bellevue State Park, DE
BWD	39-47.97	75-34.60	63	8502-	DGS	Brandywine Creek State Park, DE
CBN	38-12.30	77-22.40	70	0105 -	USGS	Corbin, VA
CCK	35-01.37	82-59.49	701	9201-	USC	Bad Creek Res., SC
CEH	35-53.46	79-05.58	152	7508-	UNC/USGS	Chapel Hill, NC
COW	33-22.90	80-41.96	60	7710-	USC	Cow Castle Creek, SC
CRTN	36-11.99	83-50.44	488	8403-	TVA/UTK	Comb Ridge, TN
CSB	32-59.22	80-04.31	83	9705-	CSU-USGS	Charleston Southern Univ., SC
CSU	32-59.22	80-04.31	7	9705-	CSU-USGS	Charleston Southern Univ., SC
DATN	35-30.00	85-05.17	636	9903-	UTK	Dayton, TN
DEMA	39-19.12	75-36.59	12	9910-	DGS	DE Emergency Mgmt Agency, DE
DRC	33-06.45	80-23.30	20	8303-	CSU-USGS	Dorchester, SC
DXN	33-03.23	81-37.32	61	9607-	WSRC	Girard, GA
EGT	35-54.05	83-17.88	1103	9406	TVA/UTK	English Mountain, TN
ELK	33-20.88	81-20.83	88	9511--	WSRC	Elko, SC
ELN	37-13.70	80-45.10	634	9612 -	VTSO	Prospectdale, VA
FDKY	36-47.40	85-47.65	306	8703 -	TVA/UTK	Freedom, KY
FWV	37-34.90	80.48.70	756	9612-	VTSO	Forrest Hill, WV
GFM	36-06.66	81-48.42	1726	8205-	CERI	Grandfather Mtn., NC
GOGA	33-24.67	83-28.00	150	94 -	USGS	Godfrey, GA
HAKY	37-06.34	86-35.10	169	8706 -	TVA/UTK	Hadley, KY
HAW	33-21.60	81-36.60	85	0010-	WSRC	Hawthorne Fire Tower, SC
HBF	32-56.85	80-19.96	-89	7303-	USC	Harts Bluff, SC
JSC	34-16.90	81-15.62	120	7405-	USC	Jenkinsville, SC
JVW	34-59.54	82-59.86	554	9111-	USC	Bad Creek Res., SC
LHS	34-28.57	80-48.37	120	7405-	USC	Liberty Hill, SC
MCWV	39-39.49	79-50.74	280	94 -	USGS	Mont Chateau, WV
MGS	32-53.87	80-08.46	9	7603-	CSU -USC	Middleton Gardens, SC
MMC	34-46.79	82-54.91	280	8707-	DPC	Morgan Memorial Church, SC
MOB	33-11.60	81-48.89	67	9510-	WSRC	Waynesboro, GA
MOTN	36-37.08	87-59.20	177	8308-	TVA/UTK	Model, TN
MRG	39-37.98	79-57.26	281	7511-	WVU	Morgantown, WV
MR01	34-19.91	81-17.74	131	7711-	USC -SCEG	Monticello Res., SC
MR02	34-11.58	81-13.81	84	7711-	USC -SCEG	Monticello Res., SC
MR05	34-16.05	81-20.05	103	7807-	USC -SCEG	Monticello Res., SC
MR07	34-22.32	81-19.50	134	7807-	USC -SCEG	Monticello Res., SC
MR10	34-20.18	81-20.25	137	7807-	USC -SCEG	Monticello Res., SC
MSAL	34-50.80	86-40.41	260	8307	TVA/UTK	Monte Sano, AL
MVL	39-59.52	76-21.04	91	7410-	MVU	Millersville, PA
MYNC	35-04.43	89-07.67	550	94 -	USGS	Murphy, NC
NED	39-43.58	75-44.17	90	7211-	DGS	Newark, DE
NPRS	33-15.42	81-38.28	79	91 -	WSRC	Savannah River Lab, SC
OLT	35-09.00	85-01.44	445	9308 -	TVA/UTK	Ooltewah, TN
ORT	35-54.57	84-18.29	370	8307 -	TVA/UTK	Oak Ridge, TN

PDTN	35-16.40	85-50.97	335	8509 -	TVA/UTK	Piedmont, TN
PKNC	36-02.77	81-09.45	785	8211-	CERI	Pores Knob, NC
PLVA	36-39.96	81-09.60	1353	8211-	CERI	Point Lookout, VA
PWLA	34-58.80	88-03.84	204	8005-	CERI	Pickwick Lake, AL
RGR	32-54.45	80-11.65	-52	8606-	CSU-USGS	(Roger Stewart) SC
SCOM	38-44.48	75-24.86	12	9910-	DGS	Sussex Co Emergency Op Ctr, DE
SHAL	34-25.97	86-36.10	328	9803-	UTK	AL
SLTN	36-26.59	82-07.23	1280	8401 -	TVA/UTK	Elizabethton, TN
SMT	34-55.85	82-58.26	498	7704-	USC	Smeltzer Mtn. (Jocassee), SC
SRAV	33-19.50	81-40.80	91	-	WSRC	Savannah River Lab, SC
SRPD	33-09.30	81-42.75	31	7608-	WSRC	Savannah River Lab, SC
SRPN	33-19.74	81-35.33	95	7608-	WSRC	Savannah River Lab, SC
SRPW	33-12.14	81-34.69	77	7608-	WSRC	Savannah River Lab, SC
SVS	32-58.10	80-14.89	3	7603-	USC	Slandsville, SC
SWET	35-12.98	85-55.92	581	0005-	CERI	Sewanee, TN
TCT	36-00.32	87-33.17	245	8803-	TVA/UTK	Tennessee City, TN
TKL	35-39.48	83-46.44	350	78 -	UTK	Tuckaleechee Caverns, TN
TQTN	35-30.96	84-43.55	260	8607 -	TVA/UTK	Tranquillity, TN
TWB	33-06.88	80-06.18	9	8803-	CSU -USC	Tillman's/White's Bay, SC
WAS	32-50.81	80-16.30	9	8303-	CSU-USGS	West Ashley, SC
WMV	37-06.51	80-58.23	1157	8210-	VTSO	Walker Mtn., VA
WSSR	35-16.68	83-34.68	1340	8510-	CERI	Wesser Bald, NC
WVT	36-07.8	87-49.80	153	94	NEIC	Waverly, TN

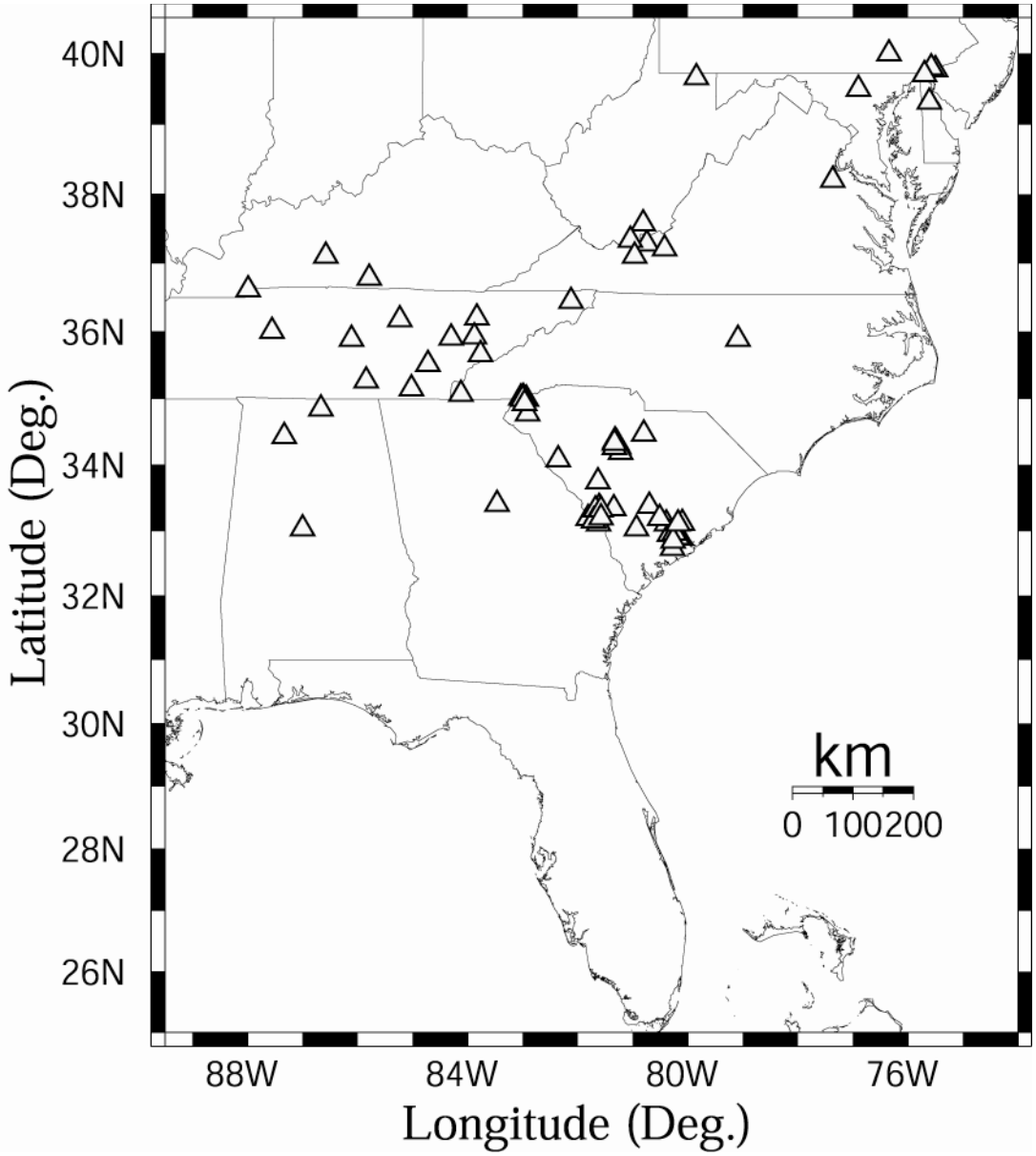

FIGURE 4. Seismic stations (triangles) in the SEUSSN. Triangles indicate stations operating during the report period.

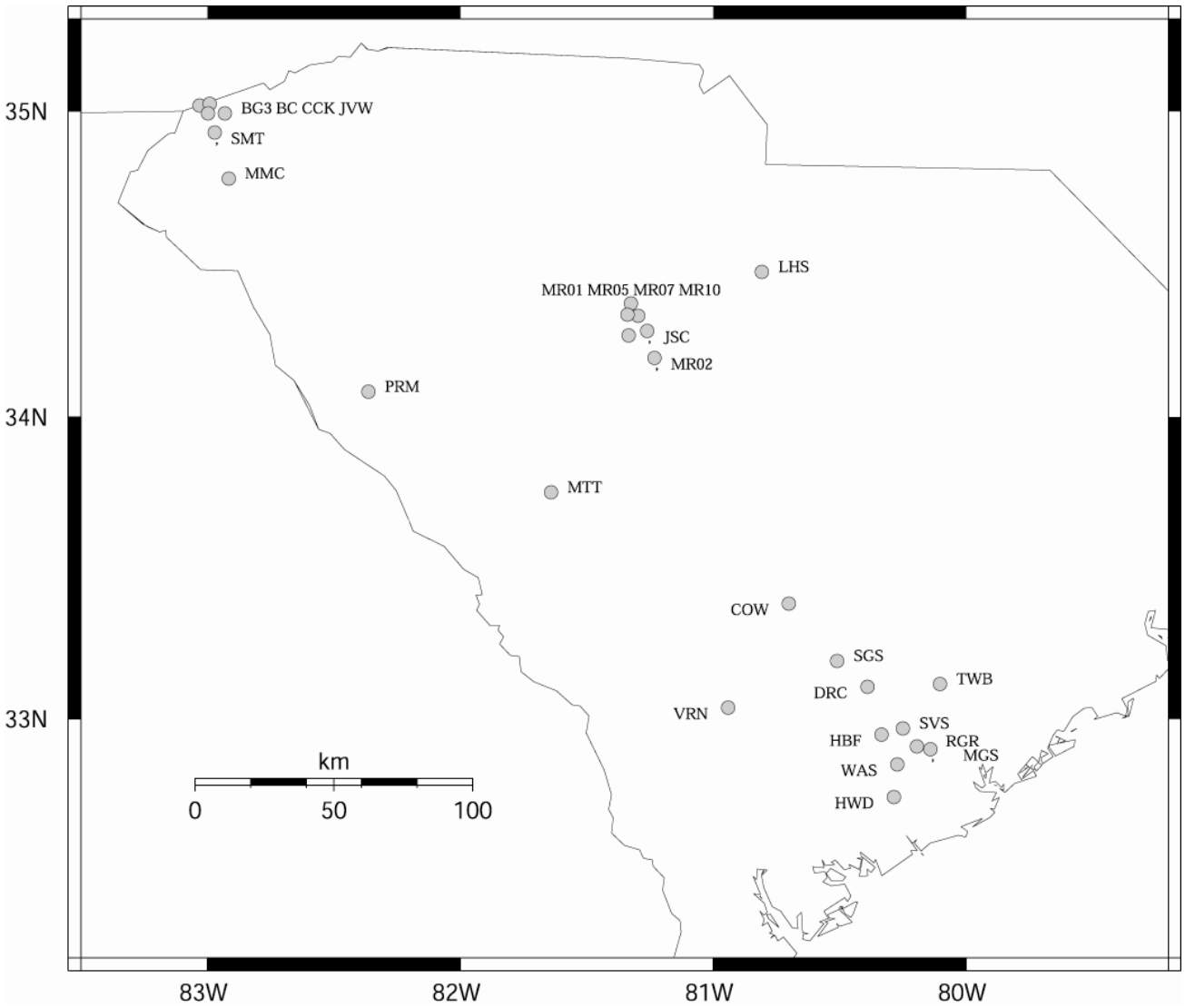

FIGURE 5. South Carolina Seismic Network.

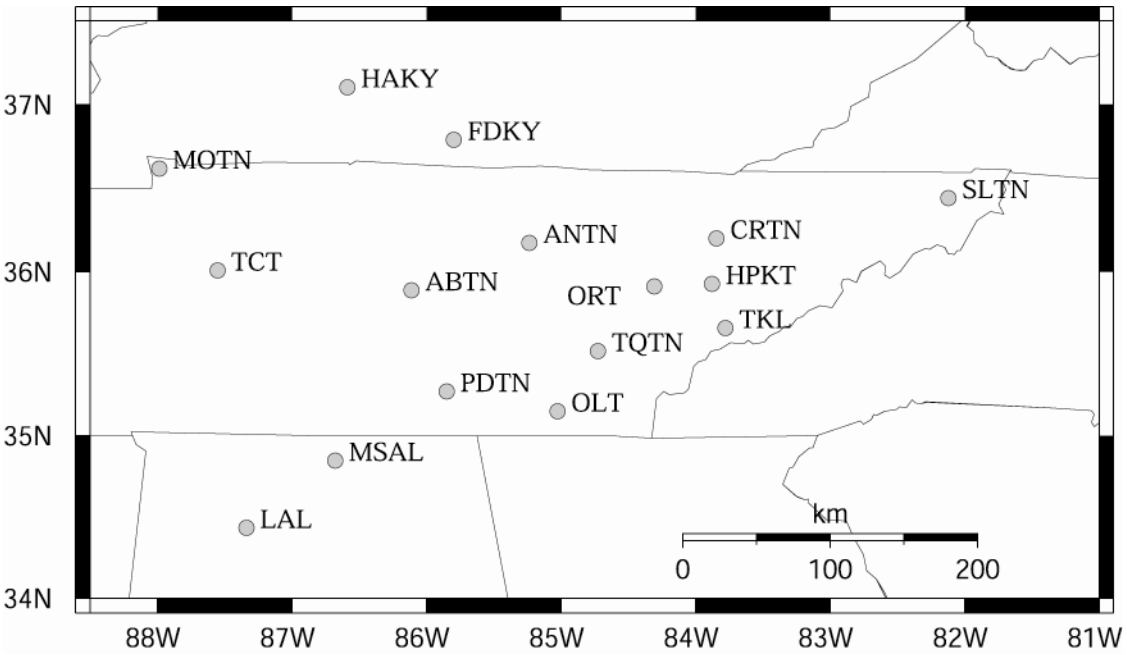

FIGURE 6. University of Tennessee/TVA JIEE Seismic Network.

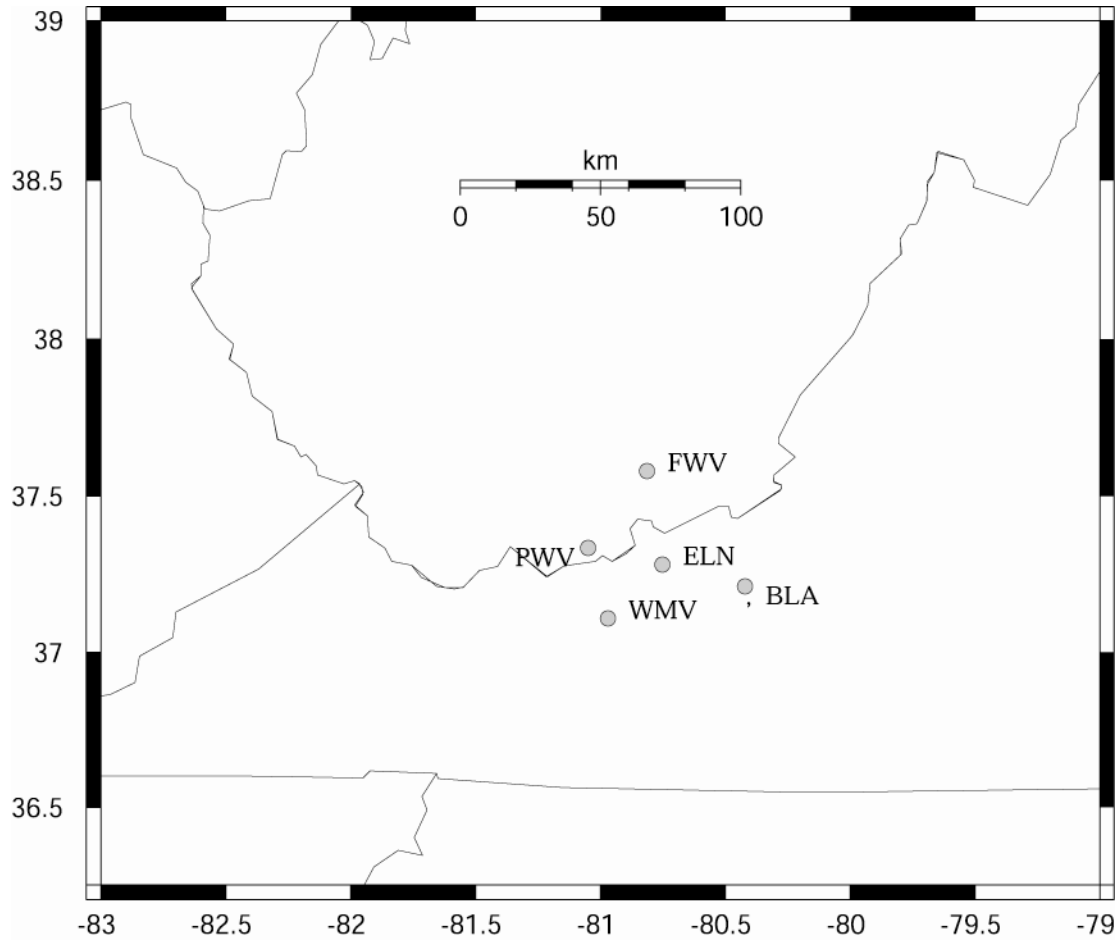

FIGURE 7. Virginia Tech Seismic Network.

INTERNET ACCESS TO SOUTHEASTERN U.S. EARTHQUAKE CATALOG INFORMATION AND ELECTRONIC VERSIONS OF THE BULLETIN

Southeastern U. S. Seismic Network Bulletins

Text files of SEUSSN Bulletins No. 1 through 36, are accessible at **http://www.geol.vt.edu/outreach/vtso/.**

Catalog of Southeastern United States Earthquakes

A catalog of pre-instrumental and instrumentally located earthquakes in the southeastern U.S. region is available at **http://www.geol.vt.edu/outreach/vtso/**. The catalog is a synthesis of information contained in the U.S. Geological Survey State Seismicity Map Series (Stover, C. W., B. G. Reagor, and S. T. Algermissen, 1984, "United States Earthquake Data File," U.S. Geological Survey Open File Report 84-225) and earthquake hypocenter parameters and magnitudes determined by regional seismic network operators in the region. For the period subsequent to July, 1977, the catalog is composed of data appearing in the SEUSSN Bulletins. An important aspect of the Southeastern U.S. Catalog is the estimation of magnitude for a large number of pre-instrumental shocks in the region. These estimates were derived using the region specific relationships between felt area, maximum intensity, and mb(Lg) magnitude developed by Sibol et al. (Bull. Seism. Soc. Am., 77, 1987, pp. 1635-1654).

The Southeastern U.S. Catalog of earthquakes subsequent to July, 1977, is incorporated into the ANSS Composite Catalog, accessible at **http://quake.geo.berkeley.edu/cnss/.**

DEFINITIONS AND NETWORK OPERATOR CODES

Below are some entries in this Bulletin that might require definition. Also given is a detailed listing of agencies or groups (and their letter codes) that supply information to this Bulletin.

AZM: Azimuthal angle from epicenter to station as measured from north (in deg),

DEP: Focal depth estimate (in km); FXD indicates that the depth was held fixed during the epicentral determination,

DIST (KM) Epicentral distance (in km) between the epicenter and a station,

ERROR ELLIPSE: Semi-axes, expressed as lengths (km) and azimuths (deg), of the vertical projection of the error ellipsoid (Lahr, 1980). Horizontal axes are expressed as the semi-major axis (ERHMAX), it's azimuth (AZ), and the semi-minor axis (ERHMIN). The vertical axis (ERZ) is the largest vertical deviation of the error ellipsoid from the hypocenter. A quality measure (Q) for the ellipsoid based on the length of the largest semi-axis (ERHMAX, ERHMIN, or ERZ) may also be supplied. For this Bulletin the following statistics apply for error estimates:

CERI, UTK, and VTSO: Error ellipse projected semi-axes from HYPOELLIPSE corresponding to a chi-square statistic (68%) with one degree of freedom,
GIT: Error ellipse projected semi-axes from LOCA, and
USC: Standard error estimates from HYPO71.
NEIC and USGS: Unknown,

GAP: The largest azimuthal separation (in deg) between recording stations,

HYPOELLIPSE: Computer hypocenter location program (Lahr, 1980),

HYPO71: Computer hypocenter location program (Lee and Lahr, 1974),

LOCA: Computer hypocenter location program developed at the Georgia Institute of Technology,

MBN or mb(Lg): Body wave magnitude determination using Nuttli's formulas for the Lg phase (Nuttli, 1973),

MDB, MDL, MD: Duration/coda length magnitude that approximates either the mb, ML, or an unknown magnitude scale, respectively. As of June 1986 (SEUSSN Bulletin 17), those using a duration magnitude approximating mb(Lg) are CERI, DGS, GIT, UTK and VTSO. Specifically:
CERI: $MDB = -2.36 + 2.23 \log(D) + 0.12 \log(K)$ $(MDB > 2.6)$
$MDB = -3.38 + 2.74 \log(D)$ $(MDB < 2.7)$
VTSO, UTK, and GIT: $MDB = -3.45 + 2.85 \log(D)$ where D is signal duration measured from the P-wave arrival time to the time when the signal returns to background noise, and K is the epicentral distance in kilometers. Those using a duration magnitude approximating ML are USC and USGS.
Specifically:
USGS: $MDL = -0.87 + 2.0 \log(D) + 0.0035 X$ where D is signal duration measured from the P-wave arrival time to the time when the signal returns to twice background noise, and X is the epicentral distance in kilometers. For more information please see SEUSSN Bulletin 17 (page 1) or contact the agency making the estimate for details on their specific procedure,

ML: Local magnitude; contact the agency or group making the estimate for details on their specific procedure,
NO: Number of P, S, and S-P readings used in locating the event,

PHASE: Phase descriptions for either P or S waves, or S-P times. Included under this heading may also be the descriptors; 'i' for an impulsive arrival or 'e' for an emergent arrival. Preliminary first motions may also be given for P wave polarities. These include; 'u', 'c', or '+' for a compressional first arrival, and 'd' or '-' for a dilatational first arrival. '?' indicates that the arrival time is questionable.

Q: Solution quality of the hypocenter (the average of the SQD quality measures, see below; Lee and Lahr, 1974),

RES: Arrival time residual (the difference between the observed and the calculated arrival time, in seconds). An "X" following the value of the arrival time residual means that the arrival time was not used to compute the location of that event,

RMS: Root-mean-square of the weighted arrival time residuals (in sec),

S-P: Difference between the S and P wave arrival times (in sec),

SQD: Measures of the statistical quality of the solution (S), and of the distribution of stations (D) around the hypocenter (Lee and Lahr, 1974),

*XXXX: Code indicating the agency or group that made the hypocentral/magnitude determination; a listing of agencies and groups that operate seismographs in the SEUSSN and/or who supply information to this BULLETIN follows.

Operator Codes

AUAL - Auburn University, AL
CERI - Center for Earthquake Research and Information, TN (formerly Tennessee Earthquake Information Center, TEIC, changed 7/1/87)
CPL - Carolina Power and Light Company, NC
CSU - Charleston Southern University, SC (formerly BCC, Baptist College at Charleston-changed 1991)
DGS - Delaware Geological Survey, DE
DPC - Duke Power Company, SC
GIT - Georgia Institute of Technology, GA
GSA - Geological Survey of Alabama, AL
GSW - Georgia Southwestern College, GA
MGS - Maryland Geological Survey, MD
MVU - Millersville University, PA
NASA - National Aeronautics and Space Administration/Goddard Space Flight Center, WV
NEIC - National Earthquake Information Center, USGS, CO
SCEG - South Carolina Electric and Gas Company, SC
SLU - St. Louis University, MO
TCC - Tidewater Community College, VA
USC - University of South Carolina, SC
USGS - United States Geological Survey, CO
UTK - University of Tennessee/Tennessee Valley Authority- Joint Institute for Energy and Environment
UTM - University of Tennessee at Martin, TN
VP - Virginia Power, VA
VTSO - Virginia Tech Seismological Observatory, VA
VSCC - Volunteer State Community College, TN
WAL - Washington and Lee University, VA
WSRC - Westinghouse Savannah River Company, SC
WVGS - West Virginia Geological and Economic Survey, WV
WVU - West Virginia University, WV