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APPENDIX SCR DATABASE USED TO DEVELOP MMAX PRIOR DISTRIBUTIONS

This appendix contains the Stable Continental Regions (SCR) database utilized in the CEUS SSC Project to develop prior distributions for Mmax. The database consists of two components: the catalog of SCR earthquakes and the catalog of SCR crustal domains. The use of these data to develop the Mmax prior distributions is described in Section 5.2.1.1. The databases are based primarily on the work presented in Johnston et al. (1994) updated as described below for the CEUS SSC Project.

K.1 SCR Earthquake Catalog

Johnston et al. (1994) developed a catalog of SCR earthquakes. An important part of that catalog was the development of moment magnitude, \mathbf{M} , estimates for all of the SCR earthquakes contained in the catalog. For the most part, the assessment of moment magnitude was based on correlations with other size measures. These included correlations with other magnitude scales for instrumentally recorded earthquakes and correlations with shaking intensity measures for pre-instrumental earthquakes.

Schulte and Mooney (2005) extended the SCR earthquake catalog of Johnston et al. (1994) to include earthquakes in the time period 1991 through 2003 as well as additional earthquakes identified from the literature that occurred in the time period covered by Johnston et al. (1994). The Schulte and Mooney (2005) update of the Johnston et al. (1994) SCR earthquake catalog was used as the basis for the SCR earthquake catalog used in the CEUS SSC Project. The SCR catalog was extended to cover the time period ending 12/31/2008 utilizing moment magnitudes from the Harvard Central Moment Tensor (CMT) catalog for earthquakes that occurred in the SCR regions described in Section K.2. Table K-1 lists the resulting updated SCR earthquake catalog developed for the CEUS SSC Project. The dates, times, and locations were taken directly from the catalog sources Johnston et al. (1994), Schulte and Mooney (2005), and Harvard CMT.

The magnitudes utilized in the CEUS SSC catalog of SCR earthquakes are values of $E[\mathbf{M}]$, the expected value of moment magnitude given the uncertainty in its estimate. The value of $E[\mathbf{M}]$ also incorporates the effect of the general exponential distribution of earthquake magnitudes. Section 3.3.1 discusses the estimation of $E[\mathbf{M}]$ from observations and the relationships presented in that section are utilized to produce values of $E[\mathbf{M}]$ for the SCR earthquakes. The two general cases are when \mathbf{M} is based on direct observations of moment magnitude computed from wave form inversions (e.g. Harvard CMT value) and when \mathbf{M} is estimated from other size measures. For the case when \mathbf{M} is obtained directly from observations of moment magnitude, its value is designated $\hat{\mathbf{M}}$ to indicate that it is observed with some level of uncertainty. As described in

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Section 3.3.1, in this case $E[\mathbf{M}]$ is obtained by the relationship given in Equation 3.3-5 utilizing the uncertainty in the measurement of \mathbf{M} defined by $\sigma[\mathbf{M}|\hat{\mathbf{M}}]$. For those earthquakes in Table K-1 whose moment magnitudes were directly estimated, the values of $E[\mathbf{M}]$ were computed from the reported values of $\hat{\mathbf{M}}$ utilizing Equation 3.3-5 and the reported values of $\sigma[\mathbf{M}|\hat{\mathbf{M}}]$. The adjustments to $E[\mathbf{M}]$ were made using a b -value of 0.95, an average value found for earthquakes in the SCR domains. The second case is when \mathbf{M} is estimated from other size measures. As discussed in Section 3.3.1, estimation of \mathbf{M} from regression relationships with other size measures directly produces values of $E[\mathbf{M}]$. In this case, the reported values of \mathbf{M} are used directly as $E[\mathbf{M}]$. However, an adjustment to the value of the standard error of the estimate of \mathbf{M} is needed to account for the inflation of the standard error obtained from regression due to the uncertainty in the values of $\hat{\mathbf{M}}$ used in the regressions (see Equation 3.3-8 and related text).

The magnitudes and magnitude uncertainties listed in Schulte and Mooney (2005) were updated as follows. Johnston (1996a, 1996b) provides updates to the magnitude conversion relationships presented in Johnston et al. (1994) as well as updated moment magnitude and magnitude uncertainty estimates for many of the SCR earthquakes. These updated magnitudes were used in updating the SCR earthquake catalog for the CEUS SSC Project. Reported values of standard error given by the relationships in Johnston (1996a, 1996b) were reduced using the average value of $\sigma[\mathbf{M}|\hat{\mathbf{M}}]$ equal to 0.16 reported in Johnston (1996b). The magnitude and uncertainty estimates for those SCR earthquakes that are in the CEUS SSC Project catalog were taken directly from Appendix B.

Updates to the magnitude and uncertainty values reported in Schulte and Mooney (2005) and Johnston et al. (1994) were made for earthquake magnitudes based on maximum intensity, I_0 . These earthquake magnitudes were designated type X in Johnston et al. (1994, Appendix C). The Johnston et al. (1994) type X magnitudes were converted back into I_0 using the relationship given in Johnston et al. (1994) and then new estimates of $E[\mathbf{M}]$ and standard error were obtained using Johnston (1996b). The following table summarizes the adjustments.

Update of Johnston et al. (1994) Type X

EPRI (1994) \mathbf{M}	I_0	Johnston (1996b) $E[\mathbf{M}]$	Johnston (1996b) σ_p	$\sigma[\mathbf{M} I_0]$
4.20	V	4.22	0.522	0.50
	V-VI	4.46	0.522	0.50
4.39	VI	4.72	0.522	0.50
4.62	VI-VII	4.98	0.522	0.50
4.85	VII	5.25	0.522	0.50
5.16	VII-VIII	5.53	0.522	0.50
5.46, 5.47	VIII	5.81	0.524	0.50
5.85, 5.86	VIII-IX	6.11	0.527	0.50
6.24	IX	6.41	0.534	0.51
6.67	IX-X	6.72	0.545	0.52
6.94	X	7.04	0.563	0.54

Johnston et al. (1994) designated type Z as earthquakes of type X with additional uncertainty in the estimates of I_0 . Following Johnston (1996b, Equation 18) the uncertainty in these earthquakes

was set at the nominal standard error for type X, 0.5, times the square root of 2, or a nominal value of 0.7.

Johnston et al. (1994) reports magnitude estimates based on the number of stations reporting the earthquake. These are designated magnitude type D1 in Johnston et al. (1994, Appendix C). Figure K-1 compares the relationships between number of reporting stations, N_R , normalized by the maximum number of stations available, N_M and moment magnitude developed by Johnston et al. (1994) with the updated relationship presented in Johnston (1996b). Significant differences in the estimated values of moment magnitude are indicated on the figure. Therefore, the type D1 magnitudes reported in Johnston et al. (1994) were updated using the relationship presented in Johnston (1996b). The values of N_R/N_M were estimated from the moment magnitudes listed in Johnston et al. (1994) and then used to compute $E[M]$ using the relationship in Johnston (1996b). The value of standard error was reduced from 0.48 reported in Johnston (1996b) to a value of 0.45 representing the uncertainty in the true moment magnitude using Equation 3.3-8 and the average value of $\sigma[M|\hat{M}]$ equal to 0.16 reported in Johnston (1996b).

Many of the moment magnitudes reported in Johnston et al. (1994) were based on correlations between M and various isoseismal areas. Figure K-2 compares these relationships with the updated relationships presented in Johnston (1996b). For the most part, the updated relationships are similar to those published in Johnston et al. (1994) and no update to the magnitude estimates of this type was considered necessary.

K.2 SCR Crustal Domains

Johnston et al. (1994) divided the SCR portions of the earth into 255 domains based on differences in their geology and tectonic history. These domains were used in the CEUS SSC Project without modification to their boundaries. Table K-2 lists the 255 domains. Scanned images of the plates from Johnston et al. (1994) that outline the domains as well as digital listings of the domain boundaries are contained on the CEUS SSC Project web site.

Table K-2 lists the attributes assigned to the domains used in the development of the prior distributions for M_{max} . The AGE attribute has two entries. The first is the age assigned in Johnston et al. (1994). The second is the age of most recent extension (MRE Age) which was found to provide a better means of discriminating between domains in assessing M_{max} priors (see Section 5.2.1.1).

The maximum observed magnitude in each domain is based on the SCR earthquake catalog listed in Table K-1. The number of earthquakes of magnitude equal to or larger than M 4.5 includes the adjustment for the effect of magnitude completeness defined by Equation 5.2.1-3.

As described in Section 5.2.1.1, the domains were grouped into superdomains using the attributes listed in Table K-2. The last two columns of Table K-2 indicate the superdomain number each domain was assigned to. The designation SDNT indicates the superdomain number for the case when the superdomains are separated into two groups by the attribute TYPE. In this case the extension attribute and the MRE Age attribute are used to group the domains into extended superdomains, indicated by the characters SE in the superdomain number, and non-extended superdomains, indicated by the characters SN in the superdomain number. The

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designation SDNC indicates the superdomain number for the case when the superdomains are not separated into two groups by the attribute TYPE.

Table K-1
SCR Earthquake Catalog

Notes:

Year, Month, Day	Earthquake Date
Hour, Minute, Second	Earthquake Time. The time is based on values reported in the primary sources and is assumed to be UTC time. However, these times were not verified as UTC and may contain a mixture time zone values.
Latitude, Longitude	Earthquake Location. The precision of the location values were taken directly from the catalog source.
E[M]	Expected value of Moment Magnitude
sigM	Standard deviation of moment magnitude estimate
DN	SCR Domain Number (see Table K-2)

Table K-1
SCR Earthquake Catalog

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
495	3	31	0	0	0	37.5	121.5	5.22	0.44	133
827	0	0	0	0	0	51.1	12.8	5.25	0.50	192
973	9	0	0	0	0	32.2	46.3	5.53	0.50	81
999	10	0	0	0	0	31.8	119.9	5.25	0.50	132
1058	12	8	0	0	0	34.3	44.7	5.62	0.47	81
1062	2	8	0	0	0	49	12	5.81	0.50	192
1067	11	0	0	0	0	23.6	116.5	6.12	0.32	125
1068	3	18	0	0	0	28.7	36.75	6.9	0.47	81
1088	5	12	0	0	0	51.1	13.1	5.25	0.50	192
1112	0	0	0	0	0	48.417	8.833	5.81	0.50	195
1128	0	0	0	0	0	47.483	7.567	5.81	0.50	195
1130	2	27	0	0	0	33.6	45.7	6.09	0.47	81
1185	4	15	0	0	0	53.22	-0.5	5.53	0.50	187
1194	3	0	0	0	0	32	44.3	4.67	0.44	81
1247	2	20	0	0	0	52	-6	5.28	0.32	197
1275	9	11	0	0	0	51	-2.5	5.49	0.44	196
1279	9	2	0	0	0	49	8	5.81	0.50	195
1344	0	0	0	0	0	38.9	-8.85	5.96	0.50	199
1346	0	0	0	0	0	50.8	12.2	5.39	0.50	192
1366	5	24	0	0	0	50.8	12.2	5.25	0.50	192
1382	5	21	0	0	0	51.5	2.5	5.41	0.44	187
1407	11	0	0	0	0	31.2	112.6	5.25	0.50	130
1430	0	0	0	0	0	32.2	46.4	5.48	0.47	81
1445	2	14	0	0	0	50	6.3	5.81	0.50	196
1445	12	12	0	0	0	24.5	117.6	5.65	0.44	125
1457	0	0	0	0	0	31.9	46.9	5.7	0.47	81
1477	8	6	0	0	0	45.8	3	5.51	0.32	195
1490	3	1	0	0	0	45.85	3.1	5.85	0.32	195
1523	8	14	0	0	0	29.9	121.7	5.25	0.50	125
1528	3	12	0	0	0	39.7	-8.9	5.25	0.50	199
1531	1	26	0	0	0	38.95	-9	7.04	0.54	199
1548	9	13	0	0	0	38	121	6.1	0.32	133
1553	8	17	0	0	0	51.583	13	5.39	0.50	192
1556	1	0	0	0	0	29.4	113.1	5.15	0.32	130
1558	6	0	0	0	0	23.4	111.5	4.81	0.32	129
1568	0	0	0	0	0	41.5	-72.5	5.25	0.50	218
1574	0	0	0	0	0	27.6	119.1	5.25	0.50	125
1574	0	0	0	0	0	41.5	-72.5	5.25	0.50	218
1574	8	19	0	0	0	26.1	119.3	5.83	0.32	125
1575	2	26	0	0	0	53	-1.5	4.9	0.44	187
1580	4	6	0	0	0	50.9	1.7	6.67	0.32	187
1584	0	0	0	0	0	41.5	-72.5	5.25	0.50	218
1585	3	6	0	0	0	31.2	117.7	5.28	0.32	130
1592	0	0	0	0	0	41.5	-72.6	5.25	0.50	222
1600	9	29	0	0	0	23.5	117	6.84	0.32	125

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1604	12	29	0	0	0	25	119.5	7.65	0.32	127
1605	7	13	0	0	0	19.9	110.5	7.47	0.32	126
1611	9	9	0	0	0	21.5	111.3	5.25	0.50	129
1615	0	0	0	0	0	5.1	-1.3	5.81	0.50	100
1618	2	18	0	0	0	16.7	-3.2	5.37	0.44	99
1618	5	26	0	0	0	18.9	72.9	6.41	0.51	106
1624	2	10	0	0	0	32.4	119.5	5.73	0.32	132
1624	9	1	0	0	0	31.2	121.4	4.65	0.32	132
1624	10	0	0	0	0	33.2	107.5	5.25	0.50	131
1626	5	14	0	0	0	66	35.5	5.27	0.44	173
1631	8	14	0	0	0	29.3	111.7	6.38	0.32	130
1635	10	26	0	0	0	33.2	107.5	5.25	0.50	131
1636	0	0	0	0	0	33.1	107	5.25	0.50	131
1636	12	18	0	0	0	5.1	-2.2	6.19	0.32	100
1638	6	11	0	0	0	42.5	-69	5.81	0.50	218
1641	11	26	0	0	0	23.6	116.5	5.47	0.44	125
1651	2	15	0	0	0	26.2	116.6	5.16	0.32	125
1655	3	29	0	0	0	48.5	9.067	5.25	0.50	195
1657	2	15	0	0	0	47.1	0.6	5.53	0.50	196
1661	2	10	0	0	0	45.5	-73	5.25	0.50	227
1663	2	5	0	0	0	47.6	-70.1	6.72	0.52	227
1668	7	25	0	0	0	34.3	118.5	7.87	0.32	132
1679	12	16	0	0	0	31.4	119.5	4.98	0.50	132
1682	5	12	0	0	0	47.9	6.5	6.55	0.32	195
1690	10	7	0	0	0	53	-3	4.77	0.44	185
1692	9	18	0	0	0	50.7	4.333	5.08	0.32	187
1710	4	16	0	0	0	27.8	111.3	5.25	0.50	129
1711	10	6	0	0	0	47.06	0.03	5.93	0.32	196
1720	7	15	0	0	0	28.53	77.2	6.11	0.50	113
1727	7	19	0	0	0	51.5	-3.5	5.09	0.32	196
1727	11	10	0	0	0	42.8	-70.8	4.77	0.32	218
1728	8	3	0	0	0	48.3	7.8	5.55	0.32	195
1732	9	16	0	0	0	45.5	-73.6	6.25	0.32	227
1736	4	30	0	0	0	56.18	-3.77	4.98	0.50	186
1737	12	19	0	0	0	40.8	-74	5.25	0.50	218
1743	6	29	0	0	0	30.7	118.4	4.76	0.32	130
1751	12	19	0	0	0	41	-7	5.53	0.50	200
1752	3	27	0	0	0	40.65	-8.55	5.53	0.50	199
1755	11	18	0	0	0	42.7	-70.3	6.1	0.26	218
1755	12	26	0	0	0	50.8	6.333	5.5	0.32	195
1759	12	22	0	0	0	57.7	11.1	5.1	0.32	177
1764	6	4	0	0	0	24	88	5.81	0.50	118
1764	8	17	0	0	0	17.9	73.7	4.65	0.44	106
1769	11	14	0	0	0	57.46	-4.22	4.69	0.44	185
1772	2	18	0	0	0	68.7	33.3	4.66	0.44	171
1772	6	0	0	0	0	44.37	4.82	5.35	0.32	195
1775	9	8	0	0	0	51.6	-4	5.01	0.32	196

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Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1775	12	30	0	0	0	49.17	-0.4	5.28	0.32	196
1780	0	0	0	0	0	58.5	121	5.08	0.44	147
1782	4	30	0	0	0	26.2	111.7	4.91	0.32	129
1785	1	2	0	0	0	42.3	-71.1	5.25	0.50	218
1786	8	11	0	0	0	54.53	-3.68	4.98	0.50	185
1788	0	0	0	0	0	7.6	1.7	5.74	0.44	92
1791	4	8	0	0	0	24.5	117.7	5.25	0.50	125
1791	12	6	0	0	0	47.4	-70.5	5.5	0.48	226
1795	5	20	0	0	0	9.3	-13.4	4.78	0.32	105
1798	5	23	0	0	0	57.9	56.8	4.76	0.44	166
1799	1	25	0	0	0	46.95	-2	5.91	0.32	196
1803	9	1	0	0	0	27.5	77.7	6.65	0.44	113
1804	5	5	0	0	0	53.3	104	5.41	0.44	149
1806	1	11	0	0	0	25.3	115.7	5.71	0.44	125
1808	8	8	0	0	0	-5.7	-37.7	4.58	0.32	56
1809	12	4	0	0	0	-34	18.4	5.53	0.50	59
1811	6	2	0	0	0	-34	18.4	5.25	0.50	59
1812	2	7	0	0	0	36.5	-89.6	7.8	0.17	228
1816	8	13	0	0	0	57.45	-4.17	4.71	0.32	185
1816	9	9	0	0	0	45.5	-73.6	5.25	0.50	227
1817	3	18	0	0	0	42.25	-2.1	5.24	0.32	201
1817	5	22	0	0	0	44.72	-67.5	4.69	0.32	222
1818	1	0	0	0	0	12.1	-12.4	5.85	0.32	100
1819	6	16	0	0	0	23.6	69.6	7.79	0.32	114
1819	8	31	0	0	0	66.7	15.5	6.38	0.32	179
1819	9	14	0	0	0	26.5	107.2	5.25	0.32	130
1820	0	0	0	0	0	-4.5	11.6	6.35	0.44	74
1822	4	3	0	0	0	24	89	5.25	0.50	118
1823	2	9	0	0	0	7	80	5.25	0.50	107
1824	0	0	0	0	0	-8	-39	5.81	0.50	56
1827	5	0	0	0	0	57.9	108.8	6.4	0.44	149
1827	9	24	0	0	0	31.57	74.35	6.11	0.50	113
1828	7	8	0	0	0	22.6	88.4	5.25	0.50	118
1828	8	22	0	0	0	13	75	5.25	0.50	106
1829	12	1	0	0	0	53.8	82.4	4.95	0.44	156
1831	5	8	0	0	0	47.3	-70.5	5.25	0.50	227
1833	10	4	0	0	0	27	85	6.41	0.51	112
1833	10	18	0	0	0	27	84	5.81	0.50	112
1834	9	3	0	0	0	61	6	5.15	0.32	179
1838	6	9	0	0	0	38.5	-89	5.12	0.48	230
1841	4	3	0	0	0	56.9	8	4.64	0.32	190
1842	5	21	0	0	0	25	87	5.25	0.50	111
1843	1	5	0	0	0	35.5	-90.5	6	0.17	228
1843	3	31	0	0	0	15.2	76.9	5.29	0.32	106
1845	6	19	0	0	0	23.78	68.83	5.53	0.50	114
1845	8	6	0	0	0	22.7	88.4	5.25	0.50	118
1846	0	0	0	0	0	31.6	106	5.22	0.44	131

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1846	5	27	0	0	0	23	80	5.25	0.50	111
1846	7	29	0	0	0	50.2	7.7	4.55	0.32	195
1848	4	26	0	0	0	24.4	72.7	5.48	0.44	113
1850	1	18	0	0	0	58.5	121	5.55	0.44	147
1852	4	29	0	0	0	36.7	-82	5.21	0.26	224
1852	11	9	0	0	0	53.23	-4.12	4.99	0.32	185
1853	4	1	0	0	0	49.27	-1.82	4.72	0.32	196
1854	11	24	0	0	0	29.1	107.1	5.25	0.50	131
1855	2	8	0	0	0	46	-64.5	4.9	0.32	221
1855	12	11	0	0	0	39.1	121.6	5.25	0.50	133
1856	6	10	0	0	0	29.7	108.8	4.79	0.32	130
1856	12	25	0	0	0	21.15	72.9	5.12	0.50	115
1857	10	8	0	0	0	38.7	-89.2	5.13	0.32	230
1858	11	11	0	0	0	38.2	-9	7.09	0.32	199
1859	11	21	0	0	0	-40.7	145.2	4.73	0.32	26
1860	0	0	0	0	0	45.97	-94.82	4.98	0.50	236
1860	10	17	0	0	0	47.5	-70.1	6.08	0.48	227
1861	2	16	0	0	0	22.6	88.4	5.25	0.50	118
1861	7	13	0	0	0	45.4	-75.4	4.71	0.48	227
1861	7	19	0	0	0	39.1	121.7	5.81	0.50	133
1861	8	31	0	0	0	36.2	-81.2	5.63	0.26	223
1862	7	10	0	0	0	7	0.4	6.75	0.32	92
1863	10	6	0	0	0	51.97	-2.88	4.89	0.32	187
1863	11	18	0	0	0	21.8	75.3	5.53	0.50	120
1864	4	29	0	0	0	22.3	72.8	4.98	0.50	115
1864	12	7	0	0	0	33.3	45.9	5.91	0.47	81
1865	5	7	0	0	0	59.5	4.8	4.92	0.32	179
1865	8	17	0	0	0	36	-89.5	5.21	0.32	228
1866	3	9	0	0	0	63.3	6.7	5.75	0.32	183
1866	5	23	0	0	0	25	87	5.67	0.50	111
1866	9	14	0	0	0	46.8	1.2	4.98	0.32	196
1867	4	24	0	0	0	39.17	-96.3	5.08	0.15	235
1867	12	18	0	0	0	44.7	-75.2	4.4	0.15	226
1868	6	18	0	0	0	-32.8	151.6	4.64	0.32	27
1868	9	30	0	0	0	24	85	5.25	0.50	111
1869	10	22	0	0	0	45	-67.5	5.47	0.32	222
1870	10	20	0	0	0	47.4	-70.5	6.55	0.48	226
1872	3	6	0	0	0	50.86	12.28	4.9	0.32	192
1872	4	14	0	0	0	5.5	-0.4	5.06	0.44	92
1873	7	19	0	0	0	44.48	4.72	5.2	0.32	195
1873	12	15	0	0	0	-26.8	127.2	6.04	0.70	9
1875	6	18	0	0	0	40.2	-84	4.6	0.32	235
1875	8	17	0	0	0	50.3	24.2	4.86	0.44	167
1875	12	12	0	0	0	31.57	74.35	5.53	0.50	113
1875	12	23	0	0	0	37.8	-78	4.77	0.32	218
1877	11	4	0	0	0	44.5	-74	4.71	0.32	226
1877	11	15	0	0	0	41	-97	5.05	0.32	255

Appendix K

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1878	1	28	0	0	0	49.8	-0.3	4.78	0.32	196
1878	8	26	0	0	0	50.9	6.4	4.94	0.32	195
1879	2	11	0	0	0	6.5	-3.3	5.56	0.32	100
1880	2	3	0	0	0	-43	146.4	4.62	0.32	26
1880	11	28	0	0	0	56.4	-7.3	4.88	0.32	184
1882	1	0	0	0	0	8.6	81.2	5.81	0.50	107
1882	3	15	0	0	0	54.7	83.2	5.24	0.44	156
1882	10	22	0	0	0	35.9	-95.1	5.58	0.32	231
1883	8	0	0	0	0	30	9.5	4.93	0.44	89
1883	8	28	0	0	0	-25.5	151.7	5.12	0.32	28
1884	4	22	0	0	0	51.83	0.92	4.8	0.32	187
1884	7	13	0	0	0	-40.5	148.5	5.66	0.32	26
1884	8	10	0	0	0	40.6	-74	4.79	0.32	218
1885	1	5	0	0	0	-26.5	116.3	6.5	0.70	7
1885	5	12	0	0	0	-39.9	148.9	5.96	0.32	26
1885	7	2	0	0	0	-39	146	4.92	0.44	26
1885	7	14	0	0	0	24	90	5.25	0.50	118
1886	9	1	0	0	0	32.9	-80	6.9	0.17	218
1886	10	25	0	0	0	61.6	5.9	5.01	0.32	179
1886	11	29	0	0	0	-34.75	148.8	4.79	0.32	27
1888	8	23	0	0	0	50	134	5.53	0.50	139
1889	0	0	0	0	0	6.8	-6.7	5.09	0.44	100
1889	5	30	0	0	0	49.5	-0.5	4.77	0.32	196
1891	9	27	0	0	0	38.25	-88.5	5.52	0.32	230
1892	1	26	0	0	0	-40.4	149.5	6.35	0.32	26
1892	5	15	0	0	0	60.6	4.4	5.4	0.32	194
1892	8	18	0	0	0	51.6	-5.2	4.77	0.32	196
1893	11	2	0	0	0	51.6	-4.6	4.58	0.32	196
1893	11	27	0	0	0	45.5	-73.3	5.12	0.48	227
1894	7	23	0	0	0	68.5	13	5.84	0.32	183
1895	2	5	0	0	0	63.5	5	5.47	0.32	183
1895	8	8	0	0	0	57	133	6.19	0.44	147
1895	8	30	0	0	0	23.5	116.3	5.67	0.50	125
1895	10	31	0	0	0	37	-89.4	6	0.17	230
1896	9	2	0	0	0	50.3	2.88	4.87	0.32	196
1896	12	17	0	0	0	52.02	-2.69	4.75	0.32	187
1897	3	23	0	0	0	45.5	-73.6	4.59	0.48	227
1897	5	10	0	0	0	-37.33	139.75	6.16	0.32	23
1897	5	31	0	0	0	37.3	-80.7	5.91	0.32	224
1897	6	22	0	0	0	19.4	84.9	5.12	0.50	108
1897	8	25	0	0	0	62.5	55	4.86	0.44	168
1900	2	8	0	0	0	10.75	76.75	5.66	0.32	106
1901	1	10	0	0	0	50.5	16.1	4.67	0.32	192
1902	4	10	0	0	0	64.3	27.6	4.81	0.44	173
1902	9	19	0	0	0	-35	137.4	5.38	0.32	19
1902	11	4	0	0	0	38.9	-5.6	5.43	0.44	200
1903	1	14	0	0	0	24	70	5.53	0.50	114

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1903	4	6	0	0	0	-38.43	142.53	4.5	0.37	23
1903	6	4	0	0	0	0	26	6.3	0.37	78
1903	6	19	0	0	0	53.05	-4.38	4.58	0.32	185
1903	7	14	0	0	0	-38.43	142.53	4.58	0.32	23
1903	8	9	0	0	0	38.3	-9	6	0.32	199
1903	11	4	0	0	0	36.9	-89.3	4.97	0.32	228
1904	2	13	0	0	0	56.4	73	5.26	0.44	158
1904	3	21	0	0	0	45	-67.2	5.73	0.32	222
1904	4	9	0	0	0	-37	147.1	4.5	0.44	27
1904	10	23	0	0	0	59	10.5	5.87	0.37	177
1905	7	18	0	0	0	-10.2	-40.4	4.67	0.32	47
1905	8	22	0	0	0	36.8	-89.6	4.95	0.32	228
1906	1	8	0	0	0	39.2	-96.5	4.91	0.32	235
1906	3	27	0	0	0	24.5	118.5	6.04	0.37	125
1906	6	27	0	0	0	52.64	-4	4.87	0.32	185
1906	11	19	0	0	0	-19.1	111.8	7.2	0.19	2
1906	11	20	0	0	0	6.5	0.3	5.09	0.32	92
1907	1	14	0	0	0	65.5	11	5.32	0.37	183
1908	0	0	0	0	0	7.7	-7.8	5.8	0.32	100
1908	4	2	0	0	0	3	25.5	6.3	0.37	73
1909	4	23	0	0	0	38.95	-8.82	6.4	0.37	199
1909	5	16	0	0	0	50	-104	5.72	0.32	237
1909	5	26	0	0	0	41.75	-88.3	5.15	0.48	230
1909	8	5	0	0	0	-22.2	29	5.01	0.32	66
1909	9	27	0	0	0	39.5	-87.4	4.73	0.32	230
1910	1	8	0	0	0	35	122	6.5	0.19	132
1910	5	30	0	0	0	10	27	5.8	0.37	84
1910	10	21	0	0	0	-30.5	24.7	5.26	0.32	63
1910	12	4	0	0	0	-10	140	6.8	0.25	13
1911	3	26	0	0	0	3.1	11	5.79	0.37	73
1911	8	6	0	0	0	53.5	127.1	4.92	0.44	136
1911	11	16	0	0	0	48.22	9.05	6.17	0.25	192
1912	2	20	0	0	0	-29.45	25.06	6.04	0.25	63
1912	4	13	0	0	0	78.9	108	5.12	0.37	170
1912	6	12	0	0	0	32.9	-80	4.5	0.48	218
1912	11	6	0	0	0	42.9	-2.7	5.25	0.50	198
1913	1	1	0	0	0	34.7	-81.7	4.54	0.32	218
1913	4	3	0	0	0	32.2	119.5	5.22	0.37	132
1913	7	19	0	0	0	64	8	5.15	0.37	183
1913	8	4	0	0	0	61.3	5.2	4.95	0.37	179
1913	10	9	0	0	0	3.8	12.3	4.9	0.32	84
1913	10	27	0	0	0	41.67	-8.72	4.7	0.32	199
1913	12	18	0	0	0	-20	147	5.12	0.37	27
1914	2	10	0	0	0	46	-75	5.1	0.48	226
1914	4	13	0	0	0	53.8	81.5	5.06	0.37	156
1914	5	18	0	0	0	31.35	15.25	5.35	0.37	90
1914	5	24	0	0	0	-10	15	6.15	0.25	72

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Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1914	6	7	0	0	0	73	119	5.37	0.37	146
1914	8	17	0	0	0	57	59.4	5.24	0.44	159
1914	9	25	0	0	0	39	-8.82	4.91	0.32	199
1915	6	2	0	0	0	48.9	11.4	4.68	0.32	192
1915	10	10	0	0	0	48.8	11.6	4.84	0.32	192
1916	2	21	0	0	0	35.5	-82.5	5.13	0.32	223
1916	10	18	0	0	0	33.5	-86.2	4.98	0.32	224
1916	12	3	0	0	0	43.7	-7.5	5.25	0.50	198
1917	1	21	0	0	0	-3	10	5.63	0.37	76
1917	4	9	0	0	0	38.1	-90.2	4.86	0.32	229
1917	4	17	0	0	0	18	84	4.66	0.45	117
1917	7	30	0	0	0	28	104	6.5	0.25	131
1918	2	13	0	0	0	23.54	117.243	7.42	0.19	125
1918	6	6	0	0	0	-23.5	152.5	5.8	0.25	32
1919	4	21	0	0	0	22	72	5.25	0.50	113
1919	6	1	0	0	0	27.074	123.315	7.5	0.25	127
1919	6	1	0	0	0	-18	-56	4.75	0.44	49
1919	10	31	0	0	0	-27	31.5	6.5	0.47	64
1919	10	31	0	0	0	24	116.5	5.33	0.45	125
1920	2	8	0	0	0	-35	111	6.15	0.25	6
1920	5	29	0	0	0	25.1	120.5	5.13	0.47	127
1920	11	26	0	0	0	42.4	-8.6	4.97	0.37	199
1921	5	30	0	0	0	-35	145	4.95	0.37	27
1921	9	16	0	0	0	3.8	16.3	4.84	0.32	84
1921	12	1	0	0	0	33.7	122	6.4	0.37	132
1922	1	19	0	0	0	-7	143	7.29	0.37	16
1922	1	27	0	0	0	-22.17	-47.04	4.78	0.32	49
1922	4	7	0	0	0	23.5	119	5.71	0.37	127
1922	4	10	0	0	0	-39.14	144.85	5.11	0.37	26
1922	4	13	0	0	0	60	-110	5.11	0.37	239
1922	5	20	0	0	0	24.7	116.5	4.79	0.44	125
1922	7	26	0	0	0	70	-70	5.12	0.37	248
1922	8	14	0	0	0	52.069	130.539	6.72	0.52	139
1923	10	15	0	0	0	48.5	122.5	4.98	0.50	135
1923	12	8	0	0	0	32	127.5	5.71	0.37	127
1924	3	1	0	0	0	-41.6	145	4.52	0.32	26
1924	5	27	0	0	0	62	135.5	5.34	0.37	147
1924	7	25	0	0	0	72.5	16	5.09	0.37	183
1924	9	30	0	0	0	47.6	-69.7	4.69	0.16	222
1924	10	17	0	0	0	60	-118	5.08	0.37	241
1925	2	1	0	0	0	49.16	-5.22	5.04	0.32	197
1925	2	7	0	0	0	48	105	5.3	0.37	136
1925	2	18	0	0	0	69	145	4.97	0.37	141
1925	3	1	0	0	0	47.76	-69.84	6.18	0.29	227
1925	4	27	0	0	0	38.3	-87.6	4.87	0.32	229
1925	7	30	0	0	0	35.4	-101.3	5.24	0.32	231
1925	9	24	0	0	0	25.51	55.38	5.88	0.37	81

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1925	11	6	0	0	0	26.5	81.5	4.52	0.45	112
1925	12	18	0	0	0	-33	151.6	4.56	0.32	27
1926	2	28	0	0	0	38.58	-7.9	5.28	0.32	200
1926	3	10	0	0	0	66.5	-130	4.55	0.45	241
1926	6	13	0	0	0	20	116.5	4.78	0.45	127
1926	6	29	0	0	0	27	121	5.06	0.44	127
1926	7	30	0	0	0	49.22	-1.82	4.98	0.32	196
1926	8	18	0	0	0	65.8	28.5	4.76	0.44	173
1926	9	19	0	0	0	57.3	67	5.3	0.44	158
1926	9	29	0	0	0	48	122.7	4.98	0.50	135
1926	12	14	0	0	0	-12	121	6.26	0.25	1
1926	12	31	0	0	0	25	77.5	4.47	0.45	112
1927	1	24	0	0	0	59.9	1.8	5.57	0.32	188
1927	2	3	0	0	0	33.5	121	6.6	0.25	132
1927	5	7	0	0	0	35.7	-90.6	4.84	0.32	228
1927	6	2	0	0	0	23.5	81	6.4	0.25	119
1928	4	5	0	0	0	9.8	-13.3	4.51	0.32	105
1929	2	8	0	0	0	24.9	119.9	4.47	0.45	127
1929	4	11	0	0	0	25	77.5	5.39	0.50	112
1929	7	26	0	0	0	-2.5	24.5	5.5	0.37	73
1929	8	12	0	0	0	42.91	-78.402	4.72	0.20	226
1929	8	16	0	0	0	-16.99	120.66	6.26	0.25	1
1929	10	24	0	0	0	22	118	6.57	0.25	127
1929	11	18	0	0	0	44.691	-56.006	6.97	0.31	218
1929	12	28	0	0	0	-39.69	149.45	5.42	0.37	26
1930	1	3	0	0	0	32.2	119.4	5.04	0.44	132
1930	1	9	0	0	0	47.62	-2.88	5.1	0.37	196
1930	4	3	0	0	0	32.5	43.7	5.2	0.37	81
1930	6	25	0	0	0	25	77.5	4.45	0.45	112
1930	7	5	0	0	0	37.6	-4.6	5.21	0.37	200
1930	9	23	0	0	0	27.5	106	5.15	0.37	130
1931	1	8	0	0	0	47.63	-70.17	4.89	0.37	226
1931	4	20	0	0	0	43.4	-73.7	4.58	0.32	224
1931	5	1	0	0	0	3	27	5.21	0.37	73
1931	6	7	0	0	0	54.1	1.5	5.7	0.32	194
1931	6	29	0	0	0	48.5	123.5	4.98	0.37	135
1931	7	1	0	0	0	30	109	4.44	0.45	130
1931	9	17	0	0	0	50.1	127	5	0.44	138
1931	9	20	0	0	0	40.4	-84.21	4.58	0.48	235
1931	9	21	0	0	0	19.421	113.158	6.73	0.25	127
1931	12	17	0	0	0	34.1	-89.9	4.71	0.32	225
1932	6	21	0	0	0	16.7	111.8	5.31	0.37	127
1932	8	14	0	0	0	62.8	154.6	4.97	0.37	140
1932	8	22	0	0	0	36.1	121.6	6.26	0.25	132
1932	11	20	0	0	0	51.71	5.61	4.97	0.37	195
1932	12	31	0	0	0	-28.5	32.75	6.61	0.25	63
1933	2	8	0	0	0	48.8	8.2	4.71	0.37	195

Appendix K

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1933	7	14	0	0	0	42.9	56.5	5.33	0.37	160
1933	12	2	0	0	0	-51.5	-44	6.49	0.25	35
1934	5	12	0	0	0	44.43	4.82	4.75	0.32	195
1934	5	21	0	0	0	25	118.2	5.47	0.37	125
1934	11	12	0	0	0	38	-8.5	5.15	0.37	199
1934	11	18	0	0	0	-34.8	149.2	4.99	0.32	27
1935	3	1	0	0	0	40.35	-96.15	4.5	0.32	235
1935	3	21	0	0	0	24.2	89.5	6.08	0.25	118
1935	4	12	0	0	0	-25.5	151.67	5.14	0.37	28
1935	4	18	0	0	0	70.5	-73	5.38	0.37	248
1935	4	19	0	0	0	31.243	15.3	6.62	0.31	90
1935	6	27	0	0	0	48.1	9.5	5.44	0.32	192
1935	7	17	0	0	0	66.05	8.1	5.26	0.37	183
1935	7	20	0	0	0	21	72.4	4.98	0.50	115
1935	11	1	0	0	0	46.885	-79.004	6.06	0.20	226
1935	12	30	0	0	0	48.6	8.2	4.91	0.37	195
1936	1	12	0	0	0	-27	31	4.82	0.32	64
1936	1	16	0	0	0	-29.8	25.3	5.3	0.32	63
1936	4	1	0	0	0	22.5	109.4	6.24	0.32	129
1936	4	26	0	0	0	28.733	103.497	6.72	0.52	131
1936	6	13	0	0	0	32.75	22.5	5.79	0.37	90
1936	6	20	0	0	0	42.4	-9.8	5.56	0.37	199
1937	1	24	0	0	0	56	130	4.76	0.58	147
1937	3	9	0	0	0	40.47	-84.28	5.11	0.32	235
1937	10	28	0	0	0	-26.1	136.5	5.35	0.37	12
1937	12	20	0	0	0	-25.4	136.5	5.55	0.37	12
1938	1	26	0	0	0	33.12	45.87	5.63	0.37	81
1938	3	11	0	0	0	61.7	4.2	4.75	0.37	183
1938	3	14	0	0	0	21.68	75.2	6.26	0.25	106
1938	3	24	0	0	0	-35.5	146	4.97	0.37	27
1938	4	17	0	0	0	-25.5	137.2	5.84	0.25	5
1938	6	11	0	0	0	50.78	3.58	5.28	0.37	187
1938	7	23	0	0	0	22.4	71.8	4.93	0.37	113
1938	9	10	0	0	0	7.7	79.2	5.56	0.37	117
1938	10	16	0	0	0	43.25	-3.62	5.3	0.25	198
1939	1	20	0	0	0	31.03	15.84	5.7	0.37	90
1939	1	23	0	0	0	31.69	16.06	5.95	0.37	90
1939	2	2	0	0	0	31.8	16.8	5.21	0.37	90
1939	3	26	0	0	0	-32	138	5.79	0.37	21
1939	6	22	0	0	0	5.18	-0.13	6.35	0.24	91
1939	6	28	0	0	0	-29	-49	6.08	0.32	46
1939	8	18	0	0	0	6.2	-0.3	5.25	0.37	100
1939	10	19	0	0	0	48.016	-69.734	5.02	0.36	227
1940	1	19	0	0	0	42.7	121.3	5.89	0.37	137
1940	2	27	0	0	0	8.3	-60.8	5.78	0.25	52
1940	5	24	0	0	0	51.467	11.792	4.85	0.37	192
1940	5	29	0	0	0	67	-135	6.21	0.25	241

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1940	6	23	0	0	0	74.7	-14	5.7	0.37	254
1940	10	31	0	0	0	22.5	70.4	5.71	0.37	113
1940	11	10	0	0	0	-24	30.2	5.16	0.32	65
1940	12	24	0	0	0	43.908	-71.283	5.13	0.47	222
1941	3	4	0	0	0	30.75	15.75	5.17	0.37	90
1941	4	29	0	0	0	-26.791	116.197	6.78	0.25	7
1941	5	4	0	0	0	-26.3	136.9	5.9	0.37	12
1941	5	5	0	0	0	46.5	126.9	6.22	0.25	137
1941	6	27	0	0	0	-25.95	137.34	6.49	0.25	12
1941	9	21	0	0	0	25.1	115.6	5.02	0.32	125
1942	2	14	0	0	0	-29.5	136	4.97	0.37	19
1942	7	8	0	0	0	43.5	121.9	5.71	0.37	137
1943	5	28	0	0	0	48.2	9	5.2	0.37	192
1943	7	16	0	0	0	33	21.5	5.28	0.37	90
1943	11	7	0	0	0	21.6	119.3	4.72	0.45	127
1944	4	9	0	0	0	49.92	-67.43	4.44	0.13	226
1944	6	23	0	0	0	49.42	-67.75	4.79	0.37	226
1944	7	17	0	0	0	35.91	42.55	6.21	0.58	81
1944	9	5	0	0	0	44.958	-74.723	5.71	0.19	226
1944	12	19	0	0	0	39.7	124.3	6.73	0.25	133
1945	9	12	0	0	0	2.5	15.6	5.92	0.27	84
1945	11	8	0	0	0	83	-15	6.16	0.25	251
1946	4	19	0	0	0	-33.5	114.5	4.5	0.70	6
1946	9	14	0	0	0	-40.2	149	5.56	0.37	26
1948	1	21	0	0	0	-31.11	-57.27	4.87	0.32	42
1948	5	23	0	0	0	37.2	121.8	5.71	0.37	133
1948	8	6	0	0	0	-37.36	139.68	5.24	0.37	23
1948	9	26	0	0	0	80.7	99.6	4.97	0.37	170
1949	1	14	0	0	0	33.2	121	5.39	0.37	132
1949	3	10	0	0	0	-34.74	149.2	5.04	0.37	27
1949	5	2	0	0	0	-30.9	116.4	4.6	0.37	7
1949	9	17	0	0	0	3.83	-51.84	5.11	0.32	52
1950	4	14	0	0	0	48	-75.7	4.59	0.37	226
1950	9	30	0	0	0	-30.5	18	4.36	0.45	60
1950	10	28	0	0	0	52.3	79.3	4.56	0.37	157
1951	1	1	0	0	0	47.7	109.9	5.69	0.37	136
1951	3	10	0	0	0	38.18	-3.82	5.47	0.32	200
1951	3	14	0	0	0	50.633	6.717	5.49	0.37	195
1951	4	8	0	0	0	18.5	70.8	4.69	0.45	116
1951	4	19	0	0	0	-19.2	28.8	4.41	0.45	67
1951	4	22	0	0	0	76	-73	5.32	0.37	248
1951	5	28	0	0	0	31.8	27	5.18	0.37	90
1951	6	27	0	0	0	45	-57	4.59	0.37	218
1951	9	17	0	0	0	-18.5	23	5.12	0.50	61
1952	1	28	0	0	0	-32.9	20.5	4.98	0.50	58
1952	3	19	0	0	0	39	125.5	6.2	0.37	133
1952	4	9	0	0	0	35.525	-97.85	5.29	0.12	231

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Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1952	4	20	0	0	0	-69.9	157.7	4.60	0.45	208
1952	5	10	0	0	0	-18	22.5	5.25	0.50	61
1952	6	9	0	0	0	-27.5	18.6	5.25	0.50	60
1952	6	24	0	0	0	-25.5	152.8	4.81	0.37	32
1952	9	7	0	0	0	-34.8	149.3	4.66	0.37	27
1952	10	11	0	0	0	-19.3	23.4	5.02	0.45	61
1952	10	14	0	0	0	48.02	-69.78	4.54	0.32	227
1953	2	22	0	0	0	50.917	10	5.09	0.37	192
1953	4	2	0	0	0	-18	27	5.53	0.50	67
1953	5	1	0	0	0	-29	17	5.53	0.50	61
1953	9	28	0	0	0	41.13	-1.58	5.09	0.37	201
1954	2	28	0	0	0	-34.93	138.69	5.09	0.32	21
1954	7	7	0	0	0	59.8	4.8	4.64	0.37	179
1954	8	18	0	0	0	-19.5	23.5	5.25	0.50	61
1954	8	28	0	0	0	45.17	-56.87	4.79	0.37	218
1954	9	19	0	0	0	-28.5	148.6	4.74	0.37	27
1954	10	16	0	0	0	44.83	-56.8	4.86	0.37	218
1954	11	26	0	0	0	-18	13	4.98	0.50	61
1955	1	31	0	0	0	-12.42	-57.3	6.12	0.37	52
1955	3	30	0	0	0	22.4	118.7	4.78	0.37	127
1955	5	26	0	0	0	25.5	105	4.56	0.37	130
1955	6	3	0	0	0	61.9	4.15	5.12	0.37	183
1955	8	23	0	0	0	31.31	71.38	5.56	0.37	113
1955	11	27	0	0	0	-18	25	5.25	0.50	61
1956	1	29	0	0	0	61.5	131.4	4.72	0.37	147
1956	4	9	0	0	0	49	130.5	4.88	0.37	139
1956	6	3	0	0	0	79.5	-118.5	5.77	0.37	250
1956	6	5	0	0	0	56.8	-58.9	4.67	0.37	247
1956	6	29	0	0	0	-5	22	5.02	0.37	73
1956	7	21	0	0	0	23.3	70	5.96	0.17	114
1956	10	10	0	0	0	28.2	77.7	6.05	0.37	113
1956	10	13	0	0	0	48.5	122	4.98	0.44	135
1957	1	4	0	0	0	7.42	-12.52	5.2	0.44	105
1957	2	11	0	0	0	52.86	-1.15	4.66	0.37	187
1957	4	13	0	0	0	-30.18	26.91	5.56	0.37	60
1957	4	16	0	0	0	-9.5	-67	4.92	0.44	51
1957	8	9	0	0	0	62.3	132	4.59	0.37	147
1957	8	25	0	0	0	22	80	4.9	0.37	111
1958	1	1	0	0	0	-42.2	146.1	4.79	0.37	26
1958	1	23	0	0	0	65.19	6.91	5.42	0.37	183
1958	3	2	0	0	0	67	144	4.69	0.37	141
1958	5	14	0	0	0	47.092	-76.818	4.17	0.16	226
1958	5	17	0	0	0	31.81	11.28	5.25	0.37	89
1958	7	8	0	0	0	50.833	10.117	5.15	0.37	192
1958	8	6	0	0	0	59.61	5.94	4.78	0.37	179
1958	9	25	0	0	0	22.5	109.5	4.7	0.32	129
1959	1	2	0	0	0	47.99	-3.99	5.35	0.37	196

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1959	1	30	0	0	0	61	-78.5	4.46	0.25	237
1959	3	10	0	0	0	-15.31	30.16	5.31	0.37	68
1959	4	14	0	0	0	-14.55	22.11	5.16	0.37	61
1959	5	18	0	0	0	-36.218	148.64	4.61	0.37	27
1959	5	21	0	0	0	-31.4	139	4.64	0.37	21
1959	8	12	0	0	0	-14.96	26.54	5.86	0.37	70
1959	10	12	0	0	0	15.68	80.07	5.15	0.37	117
1959	10	21	0	0	0	65	-87	4.84	0.37	239
1959	11	2	0	0	0	-33.36	135.98	4.64	0.37	19
1959	12	31	0	0	0	43.5	111	4.73	0.37	135
1960	5	12	0	0	0	-9	-72.5	4.92	0.47	51
1960	7	15	0	0	0	-14.15	21.85	4.91	0.37	72
1960	8	26	0	0	0	-11	123.9	5.4	0.37	1
1960	8	27	0	0	0	28.59	76.72	4.7	0.32	113
1960	9	6	0	0	0	64.7	-86.4	4.98	0.37	239
1960	10	19	0	0	0	-21	149.3	4.49	0.32	32
1960	11	5	0	0	0	24	108.5	4.87	0.32	129
1960	12	24	0	0	0	-38.88	143.59	4.79	0.37	23
1961	3	7	0	0	0	30.28	111.2	4.75	0.32	130
1961	5	16	0	0	0	-30.85	147.27	4.61	0.37	27
1961	5	21	0	0	0	-34.547	150.503	5.08	0.37	27
1961	6	12	0	0	0	21.6	106.02	5.53	0.32	130
1961	6	18	0	0	0	-20.1	119.3	4.88	0.37	9
1961	8	23	0	0	0	-18.5	119	4.79	0.37	2
1961	12	28	0	0	0	-28.12	141.57	4.5	0.37	27
1962	3	8	0	0	0	3.73	28.99	5.67	0.37	83
1962	3	18	0	0	0	23.72	114.67	6.00	0.14	125
1962	4	20	0	0	0	24.3	106	4.65	0.32	130
1962	12	15	0	0	0	67.36	13.9	4.73	0.37	179
1962	12	26	0	0	0	39.3	-10.6	5.33	0.32	199
1963	1	18	0	0	0	-32.25	117.17	4.64	0.32	7
1963	2	21	0	0	0	32.6	21	5.71	0.37	90
1963	3	3	0	0	0	36.7	-90	4.62	0.14	230
1963	3	8	0	0	0	76.6	-94.33	5.18	0.37	248
1963	3	14	0	0	0	-25.7	137.4	4.75	0.37	5
1963	4	9	0	0	0	22.5	85.8	4.8	0.70	109
1963	5	8	0	0	0	21.7	84.9	5.1	0.37	109
1963	6	21	0	0	0	47.91	130.61	5.62	0.37	139
1963	6	22	0	0	0	53.1	121.4	5.27	0.37	136
1963	7	13	0	0	0	24.77	70.26	5.61	0.37	113
1963	8	15	0	0	0	56	134.5	4.59	0.37	147
1963	9	4	0	0	0	71.234	-72.998	6.14	0.05	248
1963	9	6	0	0	0	36.47	130.76	5.80	0.05	127
1963	9	23	0	0	0	-16.58	28.46	5.65	0.17	67
1963	10	7	0	0	0	42.9	110.5	5.35	0.37	135
1963	12	14	0	0	0	-2.3	-61.01	5.21	0.20	53
1963	12	26	0	0	0	76.53	23.46	4.62	0.45	169

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Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1964	1	8	0	0	0	46.23	-77.53	3.74	0.12	226
1964	2	13	0	0	0	-18.06	-56.69	5.3	0.25	49
1964	3	23	0	0	0	-17.71	123.16	5.26	0.37	11
1964	3	28	0	0	0	42.997	-101.798	4.84	0.32	255
1964	4	15	0	0	0	21.6	88.07	5.25	0.25	118
1964	5	12	0	0	0	-11	126	4.83	0.25	1
1964	6	19	0	0	0	2.55	-59.3	4.56	0.25	52
1964	7	12	0	0	0	53.8	81.4	4.79	0.25	156
1964	7	14	0	0	0	57.03	7.2	4.71	0.25	189
1964	8	10	0	0	0	9.15	-62.02	5.35	0.25	52
1964	9	23	0	0	0	23.73	114.68	4.74	0.32	125
1965	1	25	0	0	0	-31.93	138.49	4.73	0.25	21
1965	2	15	0	0	0	53.65	81.53	5.2	0.25	156
1965	3	2	0	0	0	-30.52	138.22	5.2	0.25	21
1965	3	14	0	0	0	-31.95	138.57	4.93	0.37	21
1965	3	18	0	0	0	-40.29	149.59	4.5	0.37	26
1965	3	26	0	0	0	24.18	69.56	4.75	0.25	114
1965	5	18	0	0	0	-17.6	49.91	5.38	0.14	71
1965	5	19	0	0	0	-25	112.5	5.09	0.25	4
1965	6	3	0	0	0	-28.084	150.217	4.49	0.32	28
1965	8	15	0	0	0	2.71	-60.24	4.96	0.25	52
1965	8	28	0	0	0	-32.23	138.1	4.69	0.25	21
1965	9	10	0	0	0	-18.1	122.2	4.6	0.37	11
1965	9	14	0	0	0	-38.68	144.24	4.94	0.25	23
1965	10	13	0	0	0	71.1	-20	4.83	0.25	254
1965	10	21	0	0	0	37.5	-91	4.61	0.08	230
1966	1	1	0	0	0	42.8	-78.2	4.26	0.08	226
1966	3	22	0	0	0	64.75	-88	4.69	0.37	239
1966	3	26	0	0	0	-18.54	26.39	5.06	0.25	67
1966	4	5	0	0	0	-16.45	28.68	4.71	0.25	67
1966	5	3	0	0	0	-37.042	147.168	4.40	0.17	27
1966	5	27	0	0	0	24.46	68.69	4.96	0.25	113
1966	6	18	0	0	0	-29.52	29.37	4.92	0.25	60
1966	6	23	0	0	0	-14.17	22.03	4.96	0.25	61
1966	8	15	0	0	0	28.67	78.93	5.51	0.25	113
1966	9	26	0	0	0	22.3	117.9	4.88	0.25	127
1966	10	2	0	0	0	43.83	125.12	4.6	0.25	137
1966	10	9	0	0	0	12.63	30.75	5.64	0.37	82
1966	10	12	0	0	0	-11.94	121.77	5.58	0.25	1
1966	11	13	0	0	0	-23.97	111.67	5.1	0.25	4
1966	12	3	0	0	0	-8.8	135.5	4.55	0.25	13
1967	3	20	0	0	0	35.89	44.08	5.01	0.25	81
1967	3	27	0	0	0	15.6	80.1	5.2	0.25	117
1967	4	20	0	0	0	-16.64	28.26	5.14	0.37	67
1967	4	25	0	0	0	18.26	73.3	4.31	0.45	106
1967	6	4	0	0	0	33.6	-90.9	4.29	0.08	225
1967	6	13	0	0	0	42.9	-78.2	4.07	0.08	226

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1967	6	21	0	0	0	48.7	122	4.63	0.25	135
1967	8	9	0	0	0	39.9	-104.7	4.79	0.15	255
1967	8	21	0	0	0	57.06	4.92	4.67	0.25	194
1967	10	14	0	0	0	-3.32	38.19	5.16	0.14	79
1967	12	10	0	0	0	17.39	73.774	6.27	0.14	106
1967	12	30	0	0	0	20.4	118.2	4.92	0.25	127
1968	1	12	0	0	0	-33.7	25.2	5.01	0.25	59
1968	4	1	0	0	0	25.1	117.6	4.89	0.32	125
1968	5	15	0	0	0	-15.92	26.099	5.70	0.25	61
1968	6	13	0	0	0	23.2	105.2	4.5	0.70	130
1968	7	6	0	0	0	-6.351	133.831	5.64	0.25	16
1968	10	14	0	0	0	-31.522	116.978	6.57	0.08	7
1968	11	9	0	0	0	37.96	-88.46	5.32	0.06	230
1968	12	2	0	0	0	-14.104	23.779	5.47	0.27	61
1968	12	15	0	0	0	-13.47	26.6	4.83	0.25	61
1968	12	31	0	0	0	-31.04	149.26	4.67	0.37	27
1969	4	13	0	0	0	17.838	80.68	5.72	0.10	110
1969	6	17	0	0	0	-25.26	116.73	5.25	0.37	7
1969	6	20	0	0	0	-38.47	146.3	4.79	0.37	26
1969	7	25	0	0	0	21.611	111.803	5.71	0.17	129
1969	8	30	0	0	0	-26.77	26.8	4.9	0.25	63
1969	9	9	0	0	0	-2.602	24.744	5.1	0.25	73
1969	9	11	0	0	0	-33.41	21.8	4.89	0.37	58
1969	9	29	0	0	0	-33.191	19.335	6.38	0.10	58
1969	9	29	0	0	0	65.1	6.5	4.75	0.25	183
1969	10	24	0	0	0	24.76	72.54	5.01	0.25	113
1969	11	20	0	0	0	37.4	-81	4.5	0.14	224
1969	12	17	0	0	0	18.11	110.55	4.79	0.25	127
1970	1	22	0	0	0	48.328	9.094	4.52	0.25	192
1970	2	8	0	0	0	-27.4	125.073	4.33	0.45	3
1970	2	13	0	0	0	24.603	68.617	4.88	0.25	113
1970	3	8	0	0	0	55	-116.6	4.75	0.25	242
1970	3	10	0	0	0	-31.093	116.513	5.46	0.25	7
1970	3	23	0	0	0	21.7	73	5.37	0.10	115
1970	3	24	0	0	0	-22.053	126.666	6.03	0.08	9
1970	4	14	0	0	0	-33.17	19.47	5.69	0.20	58
1970	6	15	0	0	0	-25.97	28.18	4.55	0.37	63
1970	7	25	0	0	0	25.711	88.496	5.06	0.25	112
1970	8	22	0	0	0	-26.36	27.38	4.52	0.37	63
1970	8	29	0	0	0	51.1	135.1	5.3	0.25	139
1970	10	14	0	0	0	31.226	74.34	5.1	0.25	113
1970	10	31	0	0	0	-26.78	26.85	4.62	0.37	63
1970	11	19	0	0	0	-22.19	30.73	4.78	0.37	66
1970	12	2	0	0	0	68.5	-67.55	5.06	0.15	248
1971	2	22	0	0	0	-18.425	26.474	4.87	0.25	67
1971	7	6	0	0	0	-38.423	145.113	4.45	0.32	26
1971	7	26	0	0	0	-31.37	138.76	4.5	0.37	21

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Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1971	8	16	0	0	0	28.879	103.673	5.4	0.25	131
1971	10	2	0	0	0	64.4	-86.5	4.68	0.05	239
1971	11	26	0	0	0	79.438	-17.766	5.06	0.25	253
1971	12	7	0	0	0	55.082	-54.352	5.52	0.15	247
1972	1	15	0	0	0	57.5	121.1	4.63	0.25	147
1972	1	21	0	0	0	71.84	-74.96	4.56	0.15	248
1972	2	3	0	0	0	33.31	-80.58	4.31	0.15	218
1972	2	25	0	0	0	-34.22	147.47	4.5	0.37	27
1972	4	5	0	0	0	23	118.3	4.85	0.37	127
1972	4	14	0	0	0	40.1	122.5	4.45	0.25	133
1972	4	18	0	0	0	-31.58	138.62	4.87	0.32	21
1972	8	9	0	0	0	56.9	127.7	5.15	0.19	147
1972	8	28	0	0	0	-24.992	136.326	5.28	0.10	5
1972	9	2	0	0	0	31.39	16.09	5.53	0.19	90
1972	9	7	0	0	0	45.99	-1.5	5.01	0.25	196
1972	9	30	0	0	0	79.88	-107.72	4.49	0.25	250
1972	10	21	0	0	0	-24.88	115.55	4.71	0.37	3
1972	10	24	0	0	0	-21.8	-40.5	4.83	0.25	46
1972	12	18	0	0	0	-16.7	28.1	5.57	0.17	67
1972	12	27	0	0	0	76.759	-107.093	6.10	0.30	249
1973	3	9	0	0	0	-34.14	150.29	5.06	0.19	27
1973	3	11	0	0	0	-21.96	127.44	4.34	0.45	13
1973	6	15	0	0	0	45.3	-70.9	4.48	0.08	222
1973	12	15	0	0	0	74.2	147.1	4.86	0.25	144
1974	2	1	0	0	0	-17.882	26.05	4.65	0.37	61
1974	3	17	0	0	0	13.32	30.88	4.8	0.25	82
1974	4	3	0	0	0	38.6	-88.1	4.29	0.15	230
1974	4	22	0	0	0	31.6	119.1	5.31	0.10	132
1974	5	10	0	0	0	28.181	103.994	6.8	0.25	131
1974	8	1	0	0	0	-16.652	28.004	4.96	0.25	67
1974	9	4	0	0	0	33.103	13.411	5.68	0.10	90
1974	9	23	0	0	0	-0.296	12.758	5.98	0.05	73
1974	9	27	0	0	0	2.646	-71.355	5.9	0.19	52
1974	10	8	0	0	0	60.6	118.5	4.75	0.25	148
1974	10	15	0	0	0	-70.55	161.3	4.75	0.25	208
1974	11	17	0	0	0	-22	126.53	4.94	0.25	9
1974	12	24	0	0	0	-21.81	153.21	4.59	0.37	32
1975	3	6	0	0	0	-17.08	126.38	4.91	0.32	14
1975	3	8	0	0	0	79.82	-94.07	5.03	0.19	249
1975	4	15	0	0	0	9.42	-61.47	5.27	0.19	52
1975	6	23	0	0	0	50.592	9.859	4.57	0.32	195
1975	6	30	0	0	0	71.44	-71.19	4.75	0.25	248
1975	7	24	0	0	0	-21.09	120.47	4.49	0.37	10
1975	9	2	0	0	0	32.83	121.83	4.93	0.19	132
1975	10	3	0	0	0	-22.21	126.58	4.95	0.25	9
1975	10	6	0	0	0	44.71	-57.07	5.06	0.14	218
1976	1	18	0	0	0	77.816	18.466	5.98	0.19	181

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1976	1	22	0	0	0	8.8	-60.3	4.32	0.45	52
1976	2	19	0	0	0	66.41	-135.28	4.94	0.19	241
1976	3	12	0	0	0	-0.487	12.624	5.06	0.25	73
1976	3	25	0	0	0	35.59	-90.48	4.62	0.08	228
1976	5	15	0	0	0	4.461	19.348	5.43	0.14	84
1976	6	4	0	0	0	24.575	68.41	5.23	0.19	113
1976	6	23	0	0	0	21.415	88.79	5.06	0.25	118
1976	7	1	0	0	0	-29.559	25.112	5.74	0.10	63
1976	8	28	0	0	0	43.88	114.17	4.45	0.25	135
1976	10	6	0	0	0	35.296	124.297	5.32	0.19	132
1976	12	8	0	0	0	-27.91	26.71	5.1	0.25	63
1977	3	24	0	0	0	51.48	16.05	4.64	0.19	192
1977	4	6	0	0	0	61.605	2.466	4.67	0.25	188
1977	8	2	0	0	0	-0.1	-50	4.67	0.25	54
1977	10	19	0	0	0	23.229	107.594	5.06	0.19	130
1978	1	10	0	0	0	3.51	-73.64	4.88	0.25	51
1978	2	5	0	0	0	78.24	-107.33	5.08	0.14	249
1978	5	1	0	0	0	-23.64	115.59	4.76	0.32	3
1978	5	6	0	0	0	-19.55	126.56	4.89	0.37	11
1978	6	16	0	0	0	33.01	-100.72	4.49	0.10	231
1978	9	3	0	0	0	48.283	9.033	5.04	0.17	192
1978	11	28	0	0	0	-23.34	152.52	4.94	0.25	32
1978	12	9	0	0	0	23.951	26.353	5.11	0.19	82
1979	2	6	0	0	0	48.9	116.8	5.02	0.19	136
1979	2	12	0	0	0	-17.34	-63.63	4.92	0.25	51
1979	4	23	0	0	0	-16.616	120.163	6.12	0.08	1
1979	5	21	0	0	0	31.08	110.5	4.92	0.25	130
1979	6	2	0	0	0	-30.818	117.105	6.08	0.05	7
1979	6	27	0	0	0	70.03	-96.48	4.96	0.14	239
1979	7	9	0	0	0	31.45	119.25	5.44	0.08	132
1979	7	14	0	0	0	-18.42	122.82	5.03	0.14	9
1979	8	19	0	0	0	47.672	-69.901	4.72	0.12	227
1979	12	26	0	0	0	54.903	-2.683	4.5	0.25	185
1980	1	7	0	0	0	40.26	125.11	5.09	0.17	133
1980	2	10	0	0	0	48.9	122.02	5.04	0.17	135
1980	3	6	0	0	0	-6.17	-71.16	4.83	0.25	51
1980	7	27	0	0	0	38.18	-83.94	5.01	0.13	226
1980	9	2	0	0	0	17.179	73.707	5.49	0.19	106
1980	11	12	0	0	0	-8.04	-50.14	4.79	0.25	52
1980	11	20	0	0	0	-4.3	-38.4	5.19	0.08	56
1981	3	3	0	0	0	31.39	73.216	4.98	0.19	113
1981	4	25	0	0	0	48.93	121.952	5.02	0.19	135
1981	6	16	0	0	0	-38.913	144.262	4.81	0.37	23
1981	6	18	0	0	0	-10.328	135.476	4.94	0.25	13
1981	8	18	0	0	0	65.67	-90.5	4.6	0.25	239
1981	9	3	0	0	0	69.62	13.68	4.75	0.25	183
1981	11	18	0	0	0	-2.282	22.813	5.53	0.14	73

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Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1981	11	21	0	0	0	79.52	-108.11	4.7	0.19	249
1981	12	15	0	0	0	-65.74	133.6	4.75	0.25	213
1982	1	9	0	0	0	46.98	-66.66	5.47	0.05	222
1982	2	13	0	0	0	-22.096	126.643	4.74	0.25	9
1982	2	14	0	0	0	38.27	125.68	5.17	0.15	132
1982	2	28	0	0	0	37.04	129.6	4.83	0.25	127
1982	4	8	0	0	0	-24.8	-58.1	4.96	0.19	41
1982	4	13	0	0	0	-27.926	26.783	4.88	0.25	63
1982	5	1	0	0	0	31.583	71.41	5.31	0.19	113
1982	6	28	0	0	0	50.733	7.804	4.51	0.37	195
1982	7	29	0	0	0	60.118	2.151	4.79	0.25	188
1982	10	27	0	0	0	23.951	106.049	5.19	0.14	130
1982	11	3	0	0	0	-20.53	120.48	4.69	0.37	9
1982	11	4	0	0	0	-80.79	36.9	4.52	0.25	202
1982	11	21	0	0	0	-37.205	146.956	4.60	0.15	27
1983	1	26	0	0	0	-30.73	117.13	4.96	0.25	7
1983	2	8	0	0	0	-26.26	-59.89	4.88	0.25	41
1983	3	8	0	0	0	59.74	5.38	3.28	0.32	179
1983	8	5	0	0	0	-3.59	-62.17	5.39	0.19	52
1983	9	20	0	0	0	-68.87	122.1	4.45	0.25	202
1983	10	7	0	0	0	43.938	-74.258	4.84	0.05	226
1983	11	8	0	0	0	50.63	5.5	4.68	0.20	187
1983	12	22	0	0	0	11.863	-13.512	6.21	0.12	105
1983	12	25	0	0	0	-5.09	-73.42	5.1	0.19	51
1983	12	29	0	0	0	-30.79	138.4	4.62	0.37	21
1984	3	16	0	0	0	-14.95	123.38	4.64	0.25	14
1984	5	19	0	0	0	-67.43	113	4.91	0.17	202
1984	5	21	0	0	0	32.694	121.513	6.06	0.10	132
1984	7	19	0	0	0	52.958	-4.398	4.95	0.19	185
1984	8	31	0	0	0	-10.698	126.349	4.5	0.70	1
1984	9	8	0	0	0	44.24	-106.019	4.90	0.14	238
1984	10	26	0	0	0	-16.465	28.667	5.29	0.14	67
1984	11	29	0	0	0	-11.614	123.952	4.84	0.25	1
1985	3	13	0	0	0	-15.45	121.853	4.83	0.37	1
1985	4	12	0	0	0	-23.94	-60.55	5.09	0.14	41
1985	4	19	0	0	0	-10.552	124.403	5.05	0.25	1
1985	5	26	0	0	0	37.84	-4.69	4.96	0.19	200
1985	7	23	0	0	0	-19.14	126.77	4.64	0.25	13
1985	7	28	0	0	0	-32.51	122.22	5.13	0.19	8
1985	10	4	0	0	0	-18.304	48.433	5.53	0.14	71
1985	10	23	0	0	0	-11.109	125.159	5.77	0.10	1
1985	12	21	0	0	0	50.14	12.44	4.65	0.32	193
1986	1	2	0	0	0	-34.484	112.098	5.56	0.19	6
1986	1	31	0	0	0	41.65	-81.162	4.65	0.20	226
1986	2	5	0	0	0	62.68	5.05	4.69	0.10	183
1986	2	10	0	0	0	-27.944	26.735	4.88	0.25	63
1986	3	30	0	0	0	-26.31	132.741	5.76	0.05	9

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1986	4	20	0	0	0	57.4	-59.6	5.07	0.20	247
1986	7	18	0	0	0	-16.356	28.502	5.19	0.14	67
1986	8	1	0	0	0	73.031	56.726	4.68	0.19	156
1986	8	15	0	0	0	48.638	126.621	4.95	0.14	137
1986	10	5	0	0	0	-30.546	28.737	5.33	0.14	60
1986	10	22	0	0	0	22.42	118.79	5.01	0.19	127
1986	11	30	0	0	0	-5.5	-35.75	5.08	0.14	56
1987	1	9	0	0	0	-20.11	133.636	5.40	0.14	13
1987	1	26	0	0	0	6.373	12.453	4.89	0.14	85
1987	2	17	0	0	0	33.69	120.66	5.1	0.19	132
1987	3	5	0	0	0	52.48	132.64	5.04	0.19	136
1987	4	18	0	0	0	22.346	79.259	4.79	0.25	111
1987	6	10	0	0	0	38.713	-87.954	4.95	0.08	230
1987	8	2	0	0	0	24.924	115.608	4.99	0.10	125
1987	9	5	0	0	0	22.5	118.73	4.98	0.19	127
1987	12	13	0	0	0	74.46	-93.71	5.35	0.14	248
1987	12	22	0	0	0	-36.11	141.54	4.75	0.19	31
1988	1	3	0	0	0	-14.31	25.4	4.52	0.25	61
1988	1	5	0	0	0	-26.807	26.64	4.92	0.25	63
1988	1	7	0	0	0	0.56	18.43	4.71	0.25	73
1988	1	22	0	0	0	-19.896	133.856	6.56	0.05	13
1988	1	28	0	0	0	32.33	21.2	5.3	0.25	90
1988	1	28	0	0	0	48	-65.58	3.55	0.06	222
1988	1	31	0	0	0	67.81	10.2	4.67	0.25	183
1988	2	6	0	0	0	-16.679	124.663	5.09	0.14	13
1988	3	10	0	0	0	-17.2	13.4	4.52	0.25	61
1988	3	26	0	0	0	33.2	13.34	5.2	0.37	90
1988	6	15	0	0	0	-31.51	126.51	4.88	0.25	19
1988	6	26	0	0	0	-36.27	-52.73	5	0.19	46
1988	8	8	0	0	0	63.673	2.397	5.53	0.17	183
1988	9	6	0	0	0	61.33	47.98	4.85	0.25	167
1988	9	12	0	0	0	-26.89	26.65	4.6	0.25	63
1988	9	30	0	0	0	-20.08	133.84	5.25	0.25	13
1988	11	10	0	0	0	21.2	108.57	4.6	0.25	129
1988	11	25	0	0	0	48.056	-71.28	5.84	0.08	226
1988	12	31	0	0	0	-26.88	26.64	4.8	0.25	63
1989	1	4	0	0	0	-7.486	133.25	4.67	0.25	1
1989	1	12	0	0	0	40.42	122.66	4.83	0.25	133
1989	1	23	0	0	0	61.949	4.504	5.12	0.10	183
1989	1	25	0	0	0	-27.96	26.72	5.14	0.19	63
1989	1	29	0	0	0	59.45	5.9	4.75	0.25	179
1989	3	10	0	0	0	-5.81	-35.56	5.17	0.19	56
1989	3	13	0	0	0	50.72	9.91	5.22	0.19	195
1989	3	16	0	0	0	-16.927	-65.005	5.22	0.14	51
1989	3	16	0	0	0	59.93	-69.66	4.97	0.17	239
1989	3	23	0	0	0	-11.148	123.737	4.75	0.25	1
1989	3	26	0	0	0	-5.05	-37.6	4.7	0.25	56

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Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1989	4	7	0	0	0	-12.516	122.161	5.1	0.25	1
1989	4	8	0	0	0	39.45	-8.92	4.89	0.19	199
1989	5	14	0	0	0	50.87	51.4	4.52	0.25	161
1989	5	28	0	0	0	-25.07	130.78	5.57	0.19	12
1989	6	5	0	0	0	-11.97	14.59	4.96	0.25	72
1989	6	12	0	0	0	21.829	89.754	5.76	0.08	118
1989	6	18	0	0	0	-12.449	121.52	5.20	0.14	1
1989	6	29	0	0	0	51.44	16.07	4.55	0.25	192
1989	7	18	0	0	0	76.865	12.972	4.88	0.19	182
1989	9	29	0	0	0	-30.6	28.7	4.82	0.19	60
1989	10	13	0	0	0	-17.59	122.4	5.47	0.14	11
1989	10	25	0	0	0	57.519	118.811	5.38	0.16	147
1989	10	28	0	0	0	51.6	16.01	4.67	0.25	192
1989	11	20	0	0	0	29.882	106.804	5.14	0.19	131
1989	11	25	0	0	0	23.72	114.52	5.40	0.27	125
1989	12	10	0	0	0	24.81	70.89	4.67	0.25	113
1989	12	25	0	0	0	60.045	-73.538	6.03	0.08	236
1989	12	27	0	0	0	-32.94	151.56	5.28	0.27	27
1990	1	17	0	0	0	-31.68	116.99	5.1	0.25	7
1990	2	7	0	0	0	-26.8301	26.6818	4.5	0.37	63
1990	2	9	0	0	0	31.72	121.03	4.92	0.19	132
1990	2	12	0	0	0	-31.22	-48.9	5.15	0.19	46
1990	2	14	0	0	0	-26.29	27.43	4.5	0.25	63
1990	2	20	0	0	0	32.5564	44.2181	4.6	0.25	81
1990	3	3	0	0	0	-26.9543	26.72	4.9	0.37	63
1990	3	13	0	0	0	-4.03	39.93	5.49	0.14	80
1990	4	2	0	0	0	52.32	-3	4.65	0.25	185
1990	5	20	0	0	0	5.121	32.145	7.22	0.15	82
1990	5	25	0	0	0	8.259	32.9262	4.7	0.25	82
1990	5	28	0	0	0	55.15	58.63	4.6	0.25	159
1990	6	9	0	0	0	75.12	113.1	4.75	0.25	152
1990	6	24	0	0	0	-17.6407	27.7695	4.5	0.25	67
1990	7	18	0	0	0	-26.8569	26.6248	4.6	0.25	63
1990	7	28	0	0	0	74.8794	-79.9866	4.5	0.37	248
1990	9	20	0	0	0	4.2221	9.0551	4.5	0.37	85
1990	9	26	0	0	0	-28.014	26.727	4.97	0.14	63
1990	10	19	0	0	0	46.4373	-75.5759	4.53	0.20	226
1990	10	24	0	0	0	73.3597	54.6741	5.1	0.47	156
1990	11	11	0	0	0	33.94	12.04	5.15	0.14	90
1990	11	29	0	0	0	78.4481	-108.4902	4.7	0.25	249
1990	12	6	0	0	0	-26.35	27.31	4.5	0.25	63
1990	12	31	0	0	0	47.7018	-72.6666	4.16	0.15	226
1991	1	13	0	0	0	65.628	-37.5123	4.6	0.25	239
1991	1	24	0	0	0	-13.1283	23.1763	4.8	0.25	61
1991	2	4	0	0	0	60.9412	-43.3441	4.9	0.25	244
1991	2	12	0	0	0	71.4432	-75.0874	5	0.37	248
1991	2	27	0	0	0	25.6762	103.9086	4.8	0.25	130

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1991	4	19	0	0	0	-4.006	-39.7315	4.7	0.25	56
1991	4	26	0	0	0	20.8118	89.6729	4.7	0.25	118
1991	5	10	0	0	0	-17.3484	24.982	4.7	0.25	61
1991	6	10	0	0	0	-26.8689	26.7138	4.7	0.25	63
1991	6	19	0	0	0	-20.0685	133.9655	5.1	0.25	13
1991	9	10	0	0	0	24.1675	68.6842	4.9	0.25	114
1991	9	30	0	0	0	43.0932	112.5325	4.8	0.25	134
1991	11	3	0	0	0	-26.8912	26.6395	4.9	0.37	63
1991	11	3	0	0	0	28.3437	104.0239	4.5	0.37	131
1991	11	8	0	0	0	26.28	70.58	5.36	0.14	113
1992	1	2	0	0	0	32.3641	-102.9665	4.66	0.16	231
1992	1	4	0	0	0	66.84	-94.46	5.37	0.17	239
1992	1	22	0	0	0	35.3276	121.09	5.02	0.10	132
1992	3	7	0	0	0	-26.4414	27.3387	4.9	0.25	63
1992	4	13	0	0	0	51.16	5.82	5.31	0.10	195
1992	4	17	0	0	0	-20.0236	133.7528	4.6	0.25	13
1992	6	6	0	0	0	-27.9762	26.7805	5	0.37	63
1992	6	12	0	0	0	44.2414	116.2393	4.6	0.37	135
1992	6	13	0	0	0	-23.8616	130.0962	5	0.25	12
1992	7	1	0	0	0	-19.0302	111.8556	4.5	0.25	2
1992	7	9	0	0	0	20.98	89.96	5.3	0.25	118
1992	7	9	0	0	0	-5.5221	137.9927	4.7	0.25	16
1992	7	15	0	0	0	-22.4264	126.5028	4.9	0.25	9
1992	8	31	0	0	0	43.93	106.92	5.33	0.14	135
1992	9	2	0	0	0	45.5822	117.9208	4.7	0.25	135
1992	9	18	0	0	0	21.286	117.6981	5.1	0.47	127
1992	9	29	0	0	0	34.501	14.4913	5.1	0.37	90
1992	9	30	0	0	0	-11.349	134.5335	5.26	0.17	17
1992	10	23	0	0	0	31.35	-4.33	5.55	0.04	95
1992	11	3	0	0	0	35.3446	123.2905	4.57	0.10	132
1992	11	8	0	0	0	61.9791	2.6797	4.5	0.37	183
1992	11	28	0	0	0	-26.9957	26.5164	4.6	0.37	63
1992	12	23	0	0	0	-23.8258	17.3111	4.8	0.25	61
1993	2	4	0	0	0	-7.9448	134.1146	4.8	0.37	13
1993	2	8	0	0	0	-8.8653	133.8904	4.8	0.37	13
1993	2	20	0	0	0	-7.7297	22.3845	4.6	0.25	73
1993	2	21	0	0	0	-20.1311	133.733	5	0.37	13
1993	2	23	0	0	0	-26.3566	27.3881	4.5	0.37	63
1993	3	13	0	0	0	71.211	-71.8438	4.9	0.25	248
1993	3	28	0	0	0	32.9404	123.7381	5	0.25	128
1993	5	5	0	0	0	30.0425	108.2326	4.5	0.37	131
1993	5	16	0	0	0	23.1388	86.8324	4.5	0.25	111
1993	6	2	0	0	0	28.91	47.5708	4.6	0.37	81
1993	6	15	0	0	0	79.7807	-16.6234	4.5	0.25	253
1993	6	30	0	0	0	51.4914	16.0949	4.5	0.25	192
1993	7	18	0	0	0	17.9312	-93.1846	4.5	0.25	215
1993	8	1	0	0	0	15.4	31.67	5.49	0.13	82

Appendix K

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1993	8	10	0	0	0	83.03	-27.92	5.56	0.14	251
1993	8	18	0	0	0	-26.9049	26.6872	4.6	0.25	63
1993	8	24	0	0	0	20.6973	71.4408	5.1	0.37	116
1993	8	28	0	0	0	17.2402	73.7331	5.1	0.25	106
1993	8	29	0	0	0	-26.3489	27.3139	5.2	0.47	63
1993	9	3	0	0	0	19.8473	-13.0178	4.6	0.25	98
1993	9	9	0	0	0	32.2394	20.3859	4.8	0.25	90
1993	9	13	0	0	0	66.3237	5.8379	4.8	0.47	183
1993	9	29	0	0	0	18.077	76.486	6.2	0.37	106
1993	10	13	0	0	0	28.6253	103.3757	4.8	0.25	131
1993	11	1	0	0	0	51.625	16.0294	4.6	0.37	192
1993	12	6	0	0	0	6.8278	78.3202	5.3	0.25	117
1993	12	18	0	0	0	-11.8274	133.8567	4.8	0.37	13
1993	12	20	0	0	0	-26.9098	26.7103	4.7	0.25	63
1993	12	30	0	0	0	38.1635	122.7901	4.6	0.25	133
1994	2	6	0	0	0	3.5021	27.5524	5	0.37	73
1994	2	8	0	0	0	-19.9992	133.5254	5.1	0.25	13
1994	2	11	0	0	0	64.9006	-52.0772	4.6	0.37	246
1994	3	2	0	0	0	26.32	118.64	4.8	0.25	125
1994	5	5	0	0	0	51.648	133.3765	4.9	0.25	139
1994	5	10	0	0	0	-26.8869	26.7634	4.7	0.25	63
1994	6	4	0	0	0	49.0688	129.811	4.5	0.37	139
1994	7	25	0	0	0	34.97	124.43	5.14	0.16	132
1994	8	1	0	0	0	47.994	67.5271	5	0.25	158
1994	8	6	0	0	0	-32.9377	151.1628	5	0.25	27
1994	8	31	0	0	0	25.8963	78.6269	4.8	0.25	112
1994	10	2	0	0	0	-26.4123	27.4682	4.7	0.25	63
1994	10	30	0	0	0	-28.0213	26.7184	5.3	0.25	63
1994	11	30	0	0	0	-30.6245	137.608	4.9	0.25	21
1994	12	29	0	0	0	29.09	103.85	5.12	0.12	131
1995	1	5	0	0	0	59.6137	56.6197	4.9	0.25	166
1995	1	10	0	0	0	20.4195	109.4385	5.53	0.04	126
1995	1	15	0	0	0	20.69	109.8	5	0.25	126
1995	2	10	0	0	0	-26.8338	26.669	4.8	0.37	63
1995	2	25	0	0	0	24.3716	118.6643	5	0.25	127
1995	2	27	0	0	0	-2.9306	39.9749	4.8	0.25	80
1995	3	8	0	0	0	82.3577	-71.7175	5	0.25	249
1995	3	12	0	0	0	17.3784	73.9096	4.6	0.25	106
1995	4	14	0	0	0	30.2885	-103.3188	5.64	0.05	226
1995	4	28	0	0	0	-6.2142	-73.2034	4.6	0.25	51
1995	6	3	0	0	0	47.138	-76.2833	3.28	0.17	226
1995	6	14	0	0	0	-20.149	133.7148	4.8	0.37	13
1995	6	21	0	0	0	21.7637	85.286	4.5	0.47	109
1995	7	4	0	0	0	79.9971	94.8377	5	0.37	154
1995	7	24	0	0	0	38.0329	124.285	5.1	0.25	133
1995	8	25	0	0	0	-23.7538	112.1831	4.6	0.25	4
1995	9	22	0	0	0	1.0903	19.3548	5.24	0.22	73

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1995	10	20	0	0	0	61.5656	116.4441	4.8	0.25	149
1995	10	28	0	0	0	-26.3378	27.5454	4.7	0.25	63
1995	10	30	0	0	0	-49.6603	-42.775	4.6	0.25	35
1995	11	14	0	0	0	68.41	51.61	4.8	0.25	168
1995	11	25	0	0	0	-26.9224	26.6805	4.8	0.37	63
1995	11	29	0	0	0	42.9189	-7.2295	5	0.25	200
1995	12	5	0	0	0	57.6977	107.0928	4.7	0.25	149
1995	12	17	0	0	0	-27.9673	26.6594	4.5	0.25	63
1996	1	14	0	0	0	51.5986	16.1205	4.5	0.37	192
1996	1	15	0	0	0	52.9635	83.7387	4.5	0.25	156
1996	2	7	0	0	0	27.4584	106.5679	4.7	0.25	130
1996	2	28	0	0	0	29.0782	104.7045	5.2	0.25	131
1996	3	29	0	0	0	82.8988	-43.6804	5	0.25	251
1996	6	9	0	0	0	-34.1658	135.8155	4.5	0.25	19
1996	6	15	0	0	0	51.5675	16.2235	5.2	0.37	192
1996	6	26	0	0	0	-18.3579	48.4751	4.98	0.50	71
1996	7	22	0	0	0	44.2	-105.68	4.6	0.37	238
1996	8	13	0	0	0	-30.0363	143.5507	4.9	0.25	27
1996	9	8	0	0	0	-4.4521	-76.7274	4.6	0.37	51
1996	9	11	0	0	0	51.4666	11.7071	4.8	0.37	192
1996	9	16	0	0	0	-26.857	26.7031	4.5	0.25	63
1996	9	25	0	0	0	-37.7783	146.258	4.7	0.25	27
1996	10	30	0	0	0	32.4343	20.5326	4.7	0.25	90
1996	11	9	0	0	0	31.6311	123.3463	5.59	0.03	128
1996	12	11	0	0	0	-27.8959	26.729	4.7	0.25	63
1996	12	13	0	0	0	37.1873	128.7499	5	0.25	128
1997	1	23	0	0	0	17.1421	76.6916	4.7	0.25	106
1997	2	10	0	0	0	-26.933	26.7087	5	0.37	63
1997	3	5	0	0	0	-33.7067	138.9698	4.8	0.25	21
1997	5	2	0	0	0	28.94	122.77	4.5	0.25	125
1997	5	21	0	0	0	23.062	80.088	5.81	0.02	111
1997	5	21	0	0	0	42.85	-7.1535	5.33	0.15	200
1997	6	15	0	0	0	23.98	89.91	4.6	0.37	118
1997	7	21	0	0	0	-26.8706	26.7773	4.7	0.25	63
1997	7	27	0	0	0	33.5481	122.2349	5.1	0.68	132
1997	7	29	0	0	0	-27.9521	26.6442	5.1	0.37	63
1997	8	10	0	0	0	-16.154	124.338	6.24	0.02	14
1997	8	13	0	0	0	29.4139	105.6148	4.9	0.25	131
1997	9	11	0	0	0	-3.6376	-76.9265	4.9	0.37	51
1997	9	11	0	0	0	-31.4593	117.5452	4.6	0.37	7
1997	9	22	0	0	0	54.7642	19.6155	4.7	0.37	175
1997	9	25	0	0	0	-26.372	27.3481	4.7	0.25	63
1997	10	3	0	0	0	-22.7886	147.1643	4.6	0.37	27
1997	10	11	0	0	0	-10.6132	24.6701	4.8	0.25	77
1997	10	24	0	0	0	31.1933	-87.1997	4.88	0.10	217
1997	11	6	0	0	0	46.7275	-71.3546	4.41	0.12	222
1997	12	6	0	0	0	64.904	-88.0878	5.2	0.25	239

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Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
1997	12	11	0	0	0	-26.8974	26.6575	4.5	0.25	63
1998	3	3	0	0	0	-3.7548	-77.322	4.6	0.37	51
1998	3	5	0	0	0	0.8049	17.3948	4.98	0.21	73
1998	3	10	0	0	0	-11.745	-56.9634	5.2	0.25	52
1998	3	29	0	0	0	-12.3957	139.2206	5.1	0.25	13
1998	4	12	0	0	0	-12.4435	25.5442	4.8	0.37	61
1998	4	16	0	0	0	25.0379	107.9586	4.7	0.25	129
1998	4	16	0	0	0	25.2458	108.2534	4.5	0.25	129
1998	5	11	0	0	0	27.0812	71.7594	4.8	0.25	113
1998	5	28	0	0	0	31.4459	27.6426	5.50	0.03	90
1998	6	3	0	0	0	29.15	103.19	4.6	0.25	131
1998	7	13	0	0	0	-27.9098	26.8024	4.5	0.25	63
1998	8	29	0	0	0	43.445	109.0753	4.8	0.25	135
1998	9	24	0	0	0	46.3059	106.3265	5.56	0.03	136
1998	9	25	0	0	0	41.4444	-80.3388	4.55	0.17	226
1998	10	14	0	0	0	60.6616	-44.0581	4.99	0.15	244
1998	11	2	0	0	0	-19.8618	113.8855	4.5	0.37	2
1998	11	5	0	0	0	27.0812	71.7594	4.8	0.25	113
1998	11	17	0	0	0	-26.8668	26.6823	4.5	0.25	63
1998	12	1	0	0	0	26.385	103.938	4.9	0.37	130
1998	12	5	0	0	0	-26.2962	27.5215	4.6	0.25	63
1998	12	22	0	0	0	79.9756	-90.6722	4.8	0.25	249
1999	1	1	0	0	0	80.003	-111.51	5.00	0.24	250
1999	1	5	0	0	0	4.239	44.062	5.6	0.37	79
1999	1	18	0	0	0	33.408	-87.258	4.7	0.25	224
1999	1	25	0	0	0	43.67	-105.094	4.5	0.37	238
1999	1	27	0	0	0	-22.221	16.291	5.1	0.37	61
1999	1	29	0	0	0	2.12	45.721	5.4	0.25	80
1999	1	29	0	0	0	44.648	115.721	5	0.25	135
1999	2	10	0	0	0	32.944	15.277	4.7	0.25	90
1999	2	14	0	0	0	-19.27	21.256	4.6	0.37	61
1999	3	9	0	0	0	-10.8895	128.7734	5.5	0.25	1
1999	4	15	0	0	0	-20.124	134.061	4.7	0.25	13
1999	4	22	0	0	0	-27.939	26.675	5.3	0.25	63
1999	7	18	0	0	0	-6.3221	141.8213	4.8	0.37	16
1999	8	6	0	0	0	-8.543	21.517	4.5	0.25	72
1999	8	17	0	0	0	29.406	105.607	4.8	0.47	131
1999	8	17	0	0	0	67.813	34.498	4.5	0.47	171
1999	8	28	0	0	0	22.915	89.795	4.8	0.25	118
1999	12	7	0	0	0	75.588	-121.197	4.9	0.25	249
1999	12	30	0	0	0	43.735	-105.137	4.9	0.37	238
2000	1	1	0	0	0	46.875	-78.756	4.62	0.11	226
2000	2	8	0	0	0	-26.438	27.474	4.5	0.25	63
2000	3	12	0	0	0	17.244	73.707	4.87	0.28	106
2000	4	11	0	0	0	51.418	16.043	4.7	0.25	192
2000	7	13	0	0	0	-26.383	27.537	4.7	0.25	63
2000	8	13	0	0	0	21.212	71.105	4.7	0.25	113

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
2000	9	5	0	0	0	17.332	73.79	5.17	0.15	106
2000	9	5	0	0	0	1.029	25.835	4.5	0.2	78
2000	10	11	0	0	0	-20.065	112.905	4.93	0.27	2
2000	11	8	0	0	0	77.042	-77.829	6	0.25	248
2000	12	8	0	0	0	59.749	1.924	4.9	0.25	188
2000	12	23	0	0	0	-7.832	135.889	6	0.47	13
2001	1	22	0	0	0	65.879	-52.497	4.7	0.25	246
2001	1	24	0	0	0	-26.742	26.844	4.8	0.37	63
2001	1	26	0	0	0	23.442	70.31	7.6	0.25	114
2001	2	3	0	0	0	-16.906	28.542	4.9	0.25	67
2001	2	28	0	0	0	18.1	-87.9	5.4	0.25	214
2001	3	18	0	0	0	-14.4643	137.0496	5.6	0.37	13
2001	4	5	0	0	0	-15.5248	122.6804	5.3	0.37	13
2001	4	9	0	0	0	43.783	-105.109	4.8	0.37	238
2001	4	12	0	0	0	60.3706	64.5696	5.7	0.37	159
2001	4	14	0	0	0	56.04	-119.583	5.27	0.04	242
2001	4	17	0	0	0	-6.196	22.71	4.7	0.25	73
2001	4	21	0	0	0	46.2	-105.4	5.3	0.25	238
2001	5	2	0	0	0	49.91	130.15	5	0.37	139
2001	5	5	0	0	0	18	-90.6	5.3	0.25	214
2001	5	20	0	0	0	42.806	-7.612	4.7	0.37	200
2001	6	12	0	0	0	22.24	83.918	4.8	0.25	110
2001	6	23	0	0	0	29.325	105.563	4.8	0.25	131
2001	6	25	0	0	0	35.1035	43.4952	5.6	0.25	81
2001	6	26	0	0	0	-26.34	27.487	4.5	0.25	63
2001	6	27	0	0	0	-12.1	-63.7	5.2	0.25	51
2001	7	12	0	0	0	21.2717	70.8706	4.6	0.25	113
2001	7	13	0	0	0	18.1502	78.8564	5.1	0.37	106
2001	7	16	0	0	0	75.5434	-23.5549	5.5	0.25	253
2001	7	25	0	0	0	33.4073	118.8967	4.5	0.25	132
2001	7	25	0	0	0	-12.663	-59.8357	4.5	0.25	52
2001	7	26	0	0	0	30.6635	21.6633	4.8	0.25	90
2001	7	26	0	0	0	48.5692	0.6203	4.8	0.25	196
2001	7	31	0	0	0	80.6	-80.3	5.4	0.25	249
2001	7	31	0	0	0	-9.2026	-70.0348	5.1	0.25	51
2001	7	31	0	0	0	-26.896	26.737	4.8	0.25	63
2001	8	5	0	0	0	-9.2812	137.2033	5	0.25	13
2001	8	5	0	0	0	-6.3181	137.017	4.8	0.25	13
2001	8	9	0	0	0	-26.543	150.3748	4.9	0.25	28
2001	8	13	0	0	0	-8.4663	138.0104	5.2	0.37	13
2001	8	14	0	0	0	76.658	-107.228	5.2	0.25	249
2001	8	16	0	0	0	12.4503	107.3692	4.6	0.25	123
2001	8	18	0	0	0	63.3427	-106.1729	5	0.25	239
2001	8	19	0	0	0	-13.365	119.5607	4.8	0.25	1
2001	8	20	0	0	0	-25.585	133.2451	4.9	0.25	9
2001	8	20	0	0	0	-17.426	129.9737	4.8	0.25	13
2001	8	23	0	0	0	-17.344	140.6926	5.6	0.25	18

Appendix K

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
2001	8	25	0	0	0	36.2641	125.3343	5	0.25	132
2001	8	26	0	0	0	76.3339	-20.322	6.1	0.25	253
2001	8	26	0	0	0	-14.256	123.8186	5	0.25	1
2001	8	30	0	0	0	28.274	19.4471	5	0.25	90
2001	8	30	0	0	0	19.0558	31.2686	4.9	0.25	82
2001	9	2	0	0	0	-6.7649	10.4997	5.1	0.25	76
2001	9	2	0	0	0	37.673	129.78	4.9	0.25	127
2001	9	5	0	0	0	75.1661	-106.1823	5.1	0.25	249
2001	9	5	0	0	0	77.984	-114.673	4.7	0.25	249
2001	9	5	0	0	0	37.109	-104.528	4.42	0.10	255
2001	9	7	0	0	0	28.1113	15.1375	4.9	0.25	89
2001	9	7	0	0	0	29.7381	123.8315	4.6	0.25	127
2001	9	10	0	0	0	29.8725	104.5288	4.8	0.25	131
2001	9	11	0	0	0	18.5	-92.2	5.7	0.25	215
2001	9	13	0	0	0	27.9811	20.8813	5.7	0.25	90
2001	9	14	0	0	0	-40.278	149.7071	5.2	0.25	26
2001	9	14	0	0	0	-20.019	133.804	5	0.25	13
2001	9	15	0	0	0	19.7238	-91.9038	4.7	0.25	214
2001	9	16	0	0	0	32.6497	19.2837	5.5	0.25	90
2001	9	17	0	0	0	23.0733	117.7519	5	0.25	127
2001	9	17	0	0	0	45.3943	113.7827	4.7	0.25	135
2001	9	21	0	0	0	51.508	15.924	4.6	0.25	192
2001	9	22	0	0	0	34.3917	6.15	4.8	0.25	93
2001	9	22	0	0	0	-14.177	124.448	4.5	0.25	14
2001	9	23	0	0	0	18.3224	32.8639	4.9	0.25	82
2001	9	25	0	0	0	11.984	80.225	5.2	0.25	117
2001	9	25	0	0	0	31.7297	29.0631	5.1	0.25	90
2001	9	26	0	0	0	-13.243	147.2773	5.2	0.25	34
2001	9	26	0	0	0	-34.763	151.8227	5.1	0.25	30
2001	9	26	0	0	0	25.8207	22.8831	5	0.25	89
2001	9	28	0	0	0	-32.995	120.9596	5.2	0.25	8
2001	9	28	0	0	0	-30.399	117.319	4.9	0.25	8
2001	9	28	0	0	0	38.0842	126.5439	4.5	0.25	132
2001	9	30	0	0	0	-12.991	126.7785	5.1	0.25	15
2001	10	1	0	0	0	68.8555	-127.6986	4.8	0.25	241
2001	10	2	0	0	0	-16.542	129.5569	4.9	0.25	13
2001	10	2	0	0	0	27.5382	118.6441	4.8	0.25	125
2001	10	3	0	0	0	-6.9671	137.0515	6.2	0.25	13
2001	10	8	0	0	0	34.8007	121.2051	5	0.25	132
2001	10	8	0	0	0	-6.2523	137.4915	4.8	0.25	13
2001	10	9	0	0	0	21.7104	-92.8017	5.1	0.25	214
2001	10	16	0	0	0	47.4945	112.7612	5	0.25	136
2001	10	16	0	0	0	26.8645	49.1077	4.8	0.25	81
2001	10	17	0	0	0	-10.052	133.2564	4.6	0.25	17
2001	10	19	0	0	0	-7.941	12.104	5.3	0.25	76
2001	10	19	0	0	0	-33.712	120.628	5.1	0.25	8
2001	10	20	0	0	0	-31.605	147.4204	4.8	0.25	27

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
2001	10	21	0	0	0	-13.734	122.9126	4.5	0.25	1
2001	10	23	0	0	0	27.8303	18.7848	4.7	0.25	89
2001	10	24	0	0	0	-9.0099	133.5067	4.5	0.25	13
2001	10	25	0	0	0	29.1506	122.51	4.7	0.25	125
2001	10	28	0	0	0	27.2492	70.5076	4.8	0.25	113
2001	10	29	0	0	0	-19.293	115.2423	4.8	0.25	2
2001	10	30	0	0	0	19.1093	19.1265	4.7	0.25	89
2001	11	1	0	0	0	23.513	55.6403	4.6	0.25	81
2001	11	2	0	0	0	23.7152	49.4	5.2	0.25	81
2001	11	2	0	0	0	27.658	19.7634	4.8	0.25	90
2001	11	2	0	0	0	-16.8054	134.754	4.5	0.25	13
2001	11	4	0	0	0	26.8836	21.4003	5.3	0.25	89
2001	11	4	0	0	0	25.3812	47.0527	4.9	0.25	81
2001	11	4	0	0	0	9.4009	4.7531	4.7	0.25	89
2001	11	5	0	0	0	-15.767	126.3471	5.1	0.25	14
2001	11	7	0	0	0	20.8091	74.3352	4.8	0.37	106
2001	11	7	0	0	0	43.775	-105.215	4.7	0.37	238
2001	11	7	0	0	0	24.3326	70.5843	4.6	0.37	113
2001	11	10	0	0	0	-12.809	12.6848	5	0.25	75
2001	11	14	0	0	0	7.8137	105.9438	6.5	0.25	122
2001	11	14	0	0	0	-22.876	151.377	4.8	0.25	32
2001	11	16	0	0	0	31.84	43.2838	4.7	0.25	81
2001	11	17	0	0	0	27.5644	49.4508	4.7	0.25	81
2001	11	18	0	0	0	32.7764	42.6509	4.5	0.25	81
2001	11	19	0	0	0	23.0845	72.7343	4.9	0.25	115
2001	11	19	0	0	0	-26.675	150.897	4.7	0.25	28
2001	11	20	0	0	0	26.1886	19.0605	4.8	0.25	89
2001	11	20	0	0	0	-19.373	128.96	4.8	0.25	13
2001	11	20	0	0	0	-17.96	135.7664	4.8	0.25	13
2001	11	21	0	0	0	-16.784	152.113	4.9	0.25	34
2001	11	21	0	0	0	33.1923	123.9614	4.5	0.25	132
2001	11	23	0	0	0	-16.497	121.1809	4.8	0.25	1
2001	11	23	0	0	0	24.5701	71.1103	4.6	0.25	113
2001	11	25	0	0	0	22.594	52.9846	5	0.25	81
2001	11	26	0	0	0	30.993	18.9136	5.6	0.25	90
2001	11	26	0	0	0	50.1921	16.3672	5	0.25	192
2001	11	26	0	0	0	28.8118	20.472	4.9	0.25	90
2001	12	13	0	0	0	31.157	110.781	4.8	0.25	130
2002	1	7	0	0	0	69.11	-95.87	4.7	0.25	239
2002	1	8	0	0	0	-29.268	24.112	4.7	0.37	63
2002	2	20	0	0	0	51.561	16.082	4.8	0.25	192
2002	2	28	0	0	0	-27.982	26.789	4.8	0.25	63
2002	3	5	0	0	0	-11.779	24.762	5.1	0.25	61
2002	3	5	0	0	0	-30.52	117.18	4.8	0.25	7
2002	3	21	0	0	0	-26.496	27.346	4.6	0.25	63
2002	3	23	0	0	0	-26.877	26.574	4.8	0.25	63
2002	4	16	0	0	0	40.705	128.67	4.6	0.37	133

Appendix K

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
2002	4	19	0	0	0	-23.306	26.115	4.5	0.25	66
2002	4	20	0	0	0	44.513	-73.699	4.91	0.18	227
2002	4	30	0	0	0	29.459	105.647	4.8	0.37	131
2002	5	31	0	0	0	30.293	104.219	4.6	0.25	131
2002	6	13	0	0	0	-20.76	113.752	4.5	0.37	2
2002	6	15	0	0	0	-42.223	147.37	4.7	0.25	26
2002	6	18	0	0	0	38.069	-87.68	4.48	0.10	230
2002	7	12	0	0	0	-26.412	29.015	4.7	0.25	63
2002	7	22	0	0	0	50.889	6.103	4.8	0.25	195
2002	7	23	0	0	0	35.571	122.181	4.9	0.25	132
2002	8	10	0	0	0	35.353	123.252	4.5	0.25	132
2002	9	22	0	0	0	52.52	-2.15	4.8	0.25	187
2002	10	3	0	0	0	31.695	73.704	4.6	0.25	113
2002	10	8	0	0	0	-25.409	115.888	4.6	0.37	3
2002	10	20	0	0	0	44.621	117.371	4.6	0.25	135
2002	12	8	0	0	0	50.91	124.726	4.5	0.25	135
2003	1	23	0	0	0	41.541	-6.005	4.5	0.37	200
2003	2	22	0	0	0	48.342	6.57	4.78	0.31	195
2003	3	22	0	0	0	35.056	124.411	5.1	0.37	132
2003	3	22	0	0	0	48.21	9	4.7	0.37	192
2003	3	23	0	0	0	-13.763	14.273	4.8	0.25	72
2003	3	30	0	0	0	37.573	123.821	4.7	0.25	132
2003	4	29	0	0	0	34.494	-85.629	4.57	0.10	224
2003	5	24	0	0	0	6.498	-65.147	4.5	0.25	52
2003	6	4	0	0	0	75.154	16.726	4.8	0.25	181
2003	6	18	0	0	0	72.07	15.525	4.5	0.25	183
2003	7	4	0	0	0	76.372	23.282	5.4	0.25	169
2003	7	19	0	0	0	-26.425	27.333	4.6	0.25	63
2003	8	4	0	0	0	65.989	5.477	4.8	0.25	183
2003	8	10	0	0	0	27.216	75.739	4.5	0.37	113
2003	8	11	0	0	0	-18.436	147.114	4.8	0.25	33
2003	8	16	0	0	0	43.77	119.643	5.42	0.04	137
2003	10	5	0	0	0	51.517	16.201	4.8	0.25	192
2004	2	6	21	29	21.4	-4.5	137.31	4.87	0.08	16
2004	2	11	9	30	39	-22.51	130.17	4.85	0.13	5
2004	3	24	1	53	49.4	45.38	118.15	5.37	0.02	135
2004	5	29	10	14	28.4	36.66	129.95	5.10	0.03	127
2004	7	10	8	56	20.5	-8.72	130.57	4.81	0.08	1
2004	8	10	10	26	14.7	27.16	103.78	5.35	0.02	130
2004	9	21	13	32	30.8	54.79	20.11	4.74	0.09	175
2004	10	16	10	4	38	33.56	45.63	4.79	0.18	81
2004	12	5	1	52	37.2	48.03	8.04	4.73	0.15	195
2005	1	22	10	48	45.7	-10.76	124.19	5.15	0.07	1
2005	2	22	23	14	17.8	-65.64	133.54	5.46	0.02	213
2005	3	14	9	43	49.1	17.1	73.79	4.91	0.07	106
2005	7	18	2	6	53.8	-10.33	124.72	5.47	0.05	1
2005	7	20	21	54	5.7	43.04	109.04	5.21	0.02	135

Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	E[M]	sigma M	DN
2005	7	25	15	43	41.1	46.86	124.88	5.01	0.03	137
2005	8	5	14	14	48	26.46	103.19	5.26	0.03	130
2005	8	10	22	8	22.6	36.9	-104.79	4.93	0.07	255
2005	9	19	3	27	53.2	49.72	120.93	4.46	0.24	135
2005	11	8	7	54	39	10.12	108.26	5.33	0.03	122
2005	11	10	19	29	54.1	57.48	120.63	5.86	0.01	147
2005	11	26	0	49	37.7	29.66	115.71	5.20	0.03	130
2006	2	15	1	46	4.1	-9.63	126.57	4.74	0.18	1
2006	3	7	18	20	46.1	23.72	70.77	5.48	0.01	114
2006	3	10	7	50	14.4	32.62	73.51	4.96	0.08	113
2006	3	31	12	23	17.9	44.65	124.08	4.76	0.06	137
2006	4	6	17	59	16.4	23.25	70.35	5.56	0.02	114
2006	6	8	16	29	13.3	4.88	-51.96	5.07	0.03	52
2006	8	25	5	51	44.4	28	104.31	5.04	0.08	131
2006	11	17	9	25	21.4	-4.7	138.27	5.08	0.09	16
2007	1	7	1	50	53.8	62.08	1.22	4.85	0.07	184
2007	1	20	11	56	53.7	37.65	128.43	4.76	0.06	132
2007	7	9	15	58	22.3	34.1	6.89	4.85	0.05	93
2007	11	4	20	35	37.3	-67.27	111.53	5.72	0.01	202
2007	11	6	9	38	5.8	21.04	70.49	5.13	0.04	113
2007	11	28	15	16	8.5	10.02	108.28	5.20	0.03	122
2007	12	23	12	56	13	-4.08	39.45	4.90	0.05	80
2008	2	21	2	46	17.9	77.02	19.28	6.10	0.01	181
2008	3	6	12	19	16.4	-24.92	-64.29	4.97	0.05	41
2008	4	18	9	36	59.1	38.49	-87.86	5.3	0.09	229
2008	4	20	7	30	44.3	-3.66	25.97	5.27	0.03	72
2008	4	26	13	14	52.2	50.71	51.8	5.13	0.04	161
2008	6	10	6	5	4.7	49.07	122.47	4.96	0.06	135
2008	8	15	15	52	50.8	82.23	-18.58	4.78	0.05	239
2008	10	7	10	0	48.1	79.77	-116.02	5.77	0.01	250
2008	12	16	5	20	1.5	55.55	13.76	4.30	0.11	177

Table K-2
SCR Domains Updated from Johnston et al. (1994)

Notes:

DN	Domain Number
Type	Domain type E – Extended crust NE – Non-extended crust (crustal age domain)
Age	Domain age assigned in Johnston et al. (1994) CZ – Cenozoic MZ – Mesozoic PZ – Paleozoic PC – PreCambrian
MRE Age	Age of most recent extension. For Type NE domains, this equals Age CZ – Cenozoic MZ – Mesozoic PZ – Paleozoic PC – PreCambrian
Stress	Crustal Stress State in Domain C – Compressive E – Extensive U – Unknown
SS_Ang	Classification of angle between maximum horizontal stress vector and strike of major domain structures with respect to reactivation F – Favorable orientation NF – Unfavorable orientation UK – Unknown
Area	Area of domain in km ²
Mmax_obs	Largest observed magnitude in domain
N ≥ 4.5	Number of earthquakes in domain with magnitudes ≥ M, adjusted for completeness
SDNT	Indicates which Superdomain the domain is assigned to when TYPE is included in the classification
SDNC	Indicates which Superdomain the domain is assigned to when Type is not included in the classification

Table K-2
SCR Domains Updated from Johnston et al. (1994)

DN	Type	Age	MRE Age	Stress	SS_Ang	Area	Mmax_obs	N ≥ 4.5	SDNT	SDNC
1	E	MZ	CZ	C	F	542655	6.3	35.4	SE01	SD01
2	E	MZ	CZ	C	NF	383752	7.2	29.4	SE02	SD02
3	NE	PC	PC	C	UK	369232	4.8	4	SN07	SD15
4	E	MZ	MZ	C	UK	420994	5.1	4	SE08	SD08
5	NE	PC	PC	C	NF	279587	5.8	4	SN06	SD14
6	E	MZ	MZ	C	UK	115589	6.2	3.3	SE08	SD08
7	NE	PC	PC	C	NF	237858	6.7	20.3	SN06	SD14
8	NE	PC	PC	C	NF	501577	5.2	4.6	SN06	SD14
9	NE	PC	PC	C	UK	853794	6	12.5	SN07	SD15
10	NE	PC	PC	C	UK	192642	4.5	1	SN07	SD15
11	E	MZ	CZ	C	F	118809	5.5	4	SE01	SD01
12	E	PC	PZ	C	NF	200768	6.5	7.2	SE18	SD21
13	NE	PC	PC	C	UK	2010402	6.8	81.2	SN07	SD15
14	NE	PC	PC	C	UK	197610	6.2	6.8	SN07	SD15
15	E	PZ	MZ	C	UK	140443	5.1	1	SE08	SD08
16	E	MZ	CZ	C	UK	310194	7.3	23.3	SE03	SD03
17	E	PZ	PZ	C	UK	27315	5.3	3	SE19	SD22
18	NE	PC	PC	C	NF	645753	5.6	1	SN06	SD14
19	NE	PC	PC	C	UK	838499	5.4	5.2	SN07	SD15
20	E	MZ	MZ	C	UK	430647	0	0	SE08	SD08
21	E	PC	CZ	C	NF	109798	5.8	21.6	SE02	SD02
22	E	PC	PC	C	F	31132	0	0	SE13	SD13
23	E	MZ	MZ	C	F	91577	6.2	7.1	SE06	SD06
24	E	MZ	CZ	C	UK	21214	0	0	SE03	SD03
25	E	MZ	CZ	C	NF	38206	0	0	SE02	SD02
26	E	MZ	CZ	C	NF	578458	6.4	16.9	SE02	SD02
27	NE	PZ	PZ	C	UK	1732818	5.4	26.2	SN14	SD22
28	NE	PZ	PZ	C	F	320334	5.1	6.2	SN12	SD20
29	NE	MZ	MZ	C	F	33900	0	0	SN01	SD06
30	E	MZ	MZ	C	NF	64704	5.1	1	SE07	SD07
31	NE	PZ	PZ	C	UK	203355	4.7	1	SN14	SD22
32	E	MZ	MZ	C	UK	465267	5.8	6	SE08	SD08
33	E	MZ	CZ	C	UK	130520	4.8	1	SE03	SD03
34	E	CZ	CZ	C	UK	330468	5.2	2.6	SE03	SD03
35	E	MZ	MZ	C	UK	1174158	6.5	4.3	SE08	SD08
36	NE	PC	PC	C	UK	88752	0	0	SN07	SD15
37	NE	PZ	PZ	C	UK	854067	0	0	SN14	SD22
38	NE	PZ	PZ	C	UK	136385	0	0	SN14	SD22
39	E	MZ	MZ	C	F	90689	0	0	SE06	SD06
40	NE	PZ	PZ	C	UK	239608	0	0	SN14	SD22
41	NE	PC	PC	C	UK	923063	5.1	4	SN07	SD15
42	NE	PC	PC	C	F	509261	4.9	1	SN05	SD13
43	E	MZ	MZ	C	NF	73005	0	0	SE07	SD07
44	NE	PC	PC	C	NF	286827	0	0	SN06	SD14
45	NE	PC	PC	C	NF	718524	0	0	SN06	SD14

Appendix K

DN	Type	Age	MRE Age	Stress	SS_Ang	Area	Mmax_obs	N ≥ 4.5	SDNT	SDNC
46	E	MZ	MZ	C	F	784433	6.1	4.2	SE06	SD06
47	NE	PC	PC	C	UK	941052	4.7	1	SN07	SD15
48	NE	PC	PC	C	UK	324268	0	0	SN07	SD15
49	NE	PC	PC	C	UK	860086	5.3	3	SN07	SD15
50	NE	PC	PC	C	UK	229524	0	0	SN07	SD15
51	NE	PC	PC	C	NF	2130122	5.3	15.1	SN06	SD14
52	NE	PC	PC	C	UK	4715337	6.3	22.2	SN07	SD15
53	E	PZ	CZ	C	NF	281647	5.3	1	SE02	SD02
54	E	MZ	MZ	C	NF	680267	4.7	1	SE07	SD07
55	NE	PC	PC	C	UK	90225	0	0	SN07	SD15
56	NE	PC	PC	C	F	1052751	5.4	8.4	SN05	SD13
57	E	MZ	MZ	C	NF	17869	0	0	SE07	SD07
58	NE	PZ	PZ	C	F	141370	6.4	10.2	SN12	SD20
59	E	MZ	MZ	C	UK	392983	5.2	3.3	SE08	SD08
60	NE	PC	PC	E	UK	577400	5.6	7.5	SN10	SD18
61	NE	PC	PC	E	NF	1197397	5.8	33.2	SN09	SD17
62	E	MZ	MZ	C	F	527118	0	0	SE06	SD06
63	NE	PC	PC	E	NF	480297	6.6	368	SN09	SD17
64	E	PC	PC	E	UK	22629	6.5	2	SE15	SD18
65	E	PC	MZ	E	UK	46793	5.2	1	SE11	SD11
66	NE	PC	PC	E	UK	295236	5	3.9	SN10	SD18
67	NE	PC	PC	E	F	655453	5.7	19	SN08	SD16
68	NE	PC	PC	E	F	60012	5.3	1	SN08	SD16
69	NE	PC	PC	E	NF	11451	0	0	SN09	SD17
70	E	MZ	MZ	E	NF	28193	5.9	1	SE10	SD10
71	E	MZ	MZ	E	NF	701414	5.6	4.1	SE10	SD10
72	NE	PC	PC	C	F	1004603	6.2	13.6	SN05	SD13
73	NE	PC	PC	C	UK	1985264	6.3	28.7	SN07	SD15
74	NE	PC	PC	C	NF	132886	6.4	1	SN06	SD14
75	E	MZ	MZ	U	UK	80902	5	1	SE12	SD12
76	E	MZ	MZ	U	UK	372829	5.6	3	SE12	SD12
77	NE	PC	PC	U	UK	49528	4.8	1	SN11	SD19
78	NE	PC	PC	U	UK	45208	6.3	4.8	SN11	SD19
79	NE	PC	PC	E	F	803876	5.6	2	SN08	SD16
80	E	MZ	MZ	E	NF	492873	5.5	4.9	SE10	SD10
81	NE	PC	PC	C	NF	2971006	6.9	55.2	SN06	SD14
82	NE	PC	PC	C	NF	2034295	7.3	18.7	SN06	SD14
83	NE	PC	PC	C	UK	244105	5.7	1	SN07	SD15
84	NE	PC	PC	C	NF	2323466	6.1	6	SN06	SD14
85	E	CZ	CZ	C	NF	355539	4.9	2.9	SE02	SD02
86	E	MZ	MZ	U	UK	187366	0	0	SE12	SD12
87	E	MZ	MZ	U	UK	81856	0	0	SE12	SD12
88	E	MZ	MZ	U	UK	57545	0	0	SE12	SD12
89	NE	PC	PC	C	NF	3890522	5.3	9.3	SN06	SD14
90	E	MZ	MZ	C	NF	960298	6.8	86.9	SE07	SD07
91	E	MZ	MZ	C	NF	175410	6.5	1	SE07	SD07
92	NE	PC	PC	C	UK	689805	6.8	4	SN07	SD15

DN	Type	Age	MRE Age	Stress	SS_Ang	Area	Mmax_obs	N ≥ 4.5	SDNT	SDNC
93	NE	PC	PC	C	UK	421251	4.9	2	SN07	SD15
94	NE	PC	PC	U	UK	176032	0	0	SN11	SD19
95	NE	PZ	PZ	C	UK	164906	5.5	1	SN14	SD22
96	NE	PC	PC	U	UK	306656	0	0	SN11	SD19
97	NE	PC	PC	U	UK	396208	0	0	SN11	SD19
98	NE	PC	PC	U	UK	1128104	4.6	1	SN11	SD19
99	E	PC	PC	U	UK	429359	5.4	1	SE16	SD19
100	NE	PC	PC	C	UK	1374935	6.2	7	SN07	SD15
101	E	MZ	MZ	U	UK	188729	0	0	SE12	SD12
102	NE	PZ	PZ	U	UK	14966	0	0	SN15	SD23
103	NE	PZ	PZ	C	UK	19779	0	0	SN14	SD22
104	NE	PZ	PZ	U	UK	150047	0	0	SN15	SD23
105	E	MZ	MZ	E	F	1272700	6.2	4	SE09	SD09
106	NE	PC	PC	C	NF	781860	6.3	26.3	SN06	SD14
107	NE	PC	PC	C	UK	79382	5.5	2	SN07	SD15
108	NE	PC	PC	C	NF	155035	4.7	1	SN06	SD14
109	NE	PC	PC	C	UK	41141	5.1	3.9	SN07	SD15
110	NE	PC	PC	C	UK	142062	5.7	2.3	SN07	SD15
111	NE	PC	PC	C	NF	178946	5.8	11.8	SN06	SD14
112	NE	PC	PC	C	UK	504375	6.2	9	SN07	SD15
113	NE	PC	PC	C	F	810970	6.7	71.7	SN05	SD13
114	E	MZ	MZ	C	NF	76406	7.8	31	SE07	SD07
115	E	MZ	CZ	C	NF	39598	5.4	5	SE02	SD02
116	E	MZ	CZ	C	UK	248085	5.4	2	SE03	SD03
117	E	MZ	MZ	C	F	326551	5.6	6	SE06	SD06
118	E	MZ	CZ	C	F	243283	6.1	20.9	SE01	SD01
119	E	PZ	MZ	C	NF	65847	6.4	1	SE07	SD07
120	E	MZ	CZ	C	NF	55041	5.2	1	SE02	SD02
121	E	PZ	MZ	C	NF	61324	0	0	SE07	SD07
122	NE	PZ	PZ	C	UK	310144	6.5	5.1	SN14	SD22
123	NE	PC	PC	C	UK	377393	4.6	1	SN07	SD15
124	NE	PZ	PZ	C	UK	178223	0	0	SN14	SD22
125	E	MZ	MZ	C	NF	383113	7.3	307.5	SE07	SD07
126	E	CZ	CZ	C	NF	64880	7.5	12.1	SE02	SD02
127	E	CZ	CZ	C	NF	1258535	7.7	124.2	SE02	SD02
128	NE	MZ	MZ	C	NF	201788	5.6	4.5	SN02	SD07
129	NE	MZ	MZ	C	NF	603996	6.2	42	SN02	SD07
130	NE	MZ	MZ	C	UK	682979	6.4	91.6	SN03	SD08
131	NE	PC	PC	C	UK	261381	6.8	454.8	SN07	SD15
132	E	CZ	CZ	C	NF	495752	7.9	501.6	SE02	SD02
133	NE	PC	PC	C	F	312369	6.7	107.7	SN05	SD13
134	NE	PZ	PZ	C	F	127045	4.8	1	SN12	SD20
135	NE	PZ	PZ	C	F	712893	5.4	26	SN12	SD20
136	NE	PZ	PZ	C	F	641577	5.7	11.8	SN12	SD20
137	E	MZ	MZ	C	NF	333684	6.2	15.7	SE07	SD07
138	NE	MZ	MZ	C	UK	152897	5	1	SN03	SD08
139	NE	PZ	PZ	C	UK	173986	6.8	20.4	SN14	SD22

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DN	Type	Age	MRE Age	Stress	SS_Ang	Area	Mmax_obs	N ≥ 4.5	SDNT	SDNC
140	NE	PC	PC	U	UK	229180	5	1	SN11	SD19
141	NE	MZ	MZ	U	UK	204323	5	2	SN04	SD12
142	NE	MZ	MZ	U	UK	234618	0	0	SN04	SD12
143	NE	MZ	MZ	U	UK	160531	0	0	SN04	SD12
144	E	MZ	MZ	U	UK	499042	4.9	1	SE12	SD12
145	E	CZ	CZ	U	UK	151400	0	0	SE05	SD05
146	NE	PC	PC	U	UK	296773	5.4	1	SN11	SD19
147	NE	PC	PC	U	UK	750750	6.2	14.5	SN11	SD19
148	E	PC	MZ	U	UK	200729	4.8	1	SE12	SD12
149	NE	PC	PC	U	UK	2249521	6.4	10.8	SN11	SD19
150	E	PC	PC	U	UK	72411	0	0	SE16	SD19
151	NE	PC	PC	U	UK	202499	0	0	SN11	SD19
152	NE	PZ	PZ	U	UK	436997	5.2	1	SN15	SD23
153	NE	PC	PC	U	UK	312722	0	0	SN11	SD19
154	NE	PZ	PZ	U	UK	155264	5	1	SN15	SD23
155	E	MZ	MZ	U	UK	1083894	0	0	SE12	SD12
156	NE	PZ	PZ	C	UK	1206616	5.2	9.8	SN14	SD22
157	NE	PZ	PZ	U	UK	178540	4.6	1	SN15	SD23
158	NE	PZ	PZ	U	UK	1145766	5.3	3.4	SN15	SD23
159	NE	PZ	PZ	U	UK	1334133	5.7	5.3	SN15	SD23
160	NE	PC	PC	U	UK	209438	5.3	1	SN11	SD19
161	E	PZ	PZ	U	UK	561624	5.1	2.9	SE20	SD23
162	E	PZ	PZ	C	NF	276360	0	0	SE18	SD21
163	NE	PC	PC	U	UK	561495	0	0	SN11	SD19
164	NE	PC	PC	C	F	371000	0	0	SN05	SD13
165	E	PC	PC	U	UK	54556	0	0	SE16	SD19
166	NE	PC	PC	U	UK	1276933	4.9	2	SN11	SD19
167	E	PC	PC	C	NF	182051	4.9	2	SE14	SD14
168	E	PC	PZ	U	UK	525509	4.9	2	SE20	SD23
169	NE	PC	PC	E	UK	1166510	5.4	2	SN10	SD18
170	E	CZ	CZ	U	UK	141010	5.1	2	SE05	SD05
171	NE	PC	PC	C	F	241485	4.7	2	SN05	SD13
172	NE	PC	PC	C	UK	96452	0	0	SN07	SD15
173	NE	PC	PC	C	F	821894	5.3	3	SN05	SD13
174	NE	PC	PC	C	F	76920	0	0	SN05	SD13
175	NE	PC	PC	C	F	1056504	4.8	2	SN05	SD13
176	NE	PC	PC	C	F	76985	0	0	SN05	SD13
177	NE	PC	PC	C	F	174915	5.9	2	SN05	SD13
178	E	PZ	MZ	C	NF	26218	0	0	SE07	SD07
179	NE	PZ	PZ	C	NF	342539	6.4	26.6	SN13	SD21
180	E	MZ	MZ	C	NF	274830	0	0	SE07	SD07
181	NE	PZ	PZ	C	UK	109385	6.1	4.4	SN14	SD22
182	NE	PZ	PZ	U	UK	35620	4.9	1	SN15	SD23
183	E	MZ	CZ	C	NF	411360	5.8	33.5	SE02	SD02
184	E	MZ	CZ	C	UK	734600	4.9	2	SE03	SD03
185	NE	PZ	PZ	C	NF	399518	5.1	10	SN13	SD21
186	E	PZ	PZ	C	NF	66123	4.6	1	SE18	SD21

DN	Type	Age	MRE Age	Stress	SS_Ang	Area	Mmax_obs	N ≥ 4.5	SDNT	SDNC
187	NE	PC	PC	C	UK	123709	6.7	31.9	SN07	SD15
188	E	MZ	MZ	C	NF	150936	5.6	6	SE07	SD07
189	E	MZ	MZ	C	NF	15655	4.7	1	SE07	SD07
190	NE	PZ	PZ	C	UK	186309	4.6	1	SN14	SD22
191	E	PZ	CZ	C	F	101917	0	0	SE01	SD01
192	NE	PZ	PZ	C	F	360973	6.2	223.4	SN12	SD20
193	E	CZ	CZ	C	NF	11175	4.7	1	SE02	SD02
194	E	MZ	CZ	C	F	163623	5.7	3.5	SE01	SD01
195	E	CZ	CZ	C	NF	265266	6.6	104	SE02	SD02
196	NE	PZ	PZ	C	UK	540395	5.9	34.5	SN14	SD22
197	E	MZ	MZ	C	F	423541	5.3	2	SE06	SD06
198	E	MZ	MZ	E	NF	57097	5.3	3	SE10	SD10
199	E	MZ	MZ	C	NF	180858	7.1	45	SE07	SD07
200	NE	PZ	PZ	C	F	288764	5.5	15.8	SN12	SD20
201	E	MZ	CZ	C	F	156373	5.2	2	SE01	SD01
202	NE	PC	PC	C	UK	7263353	5.7	3.1	SN07	SD15
203	NE	PC	PC	U	UK	1028169	0	0	SN11	SD19
204	NE	PC	PC	U	UK	79414	0	0	SN11	SD19
205	NE	PC	PC	U	UK	152545	0	0	SN11	SD19
206	NE	PC	PC	U	UK	4175	0	0	SN11	SD19
207	E	MZ	CZ	U	UK	1250511	0	0	SE05	SD05
208	E	CZ	CZ	U	UK	606087	5.2	2	SE05	SD05
209	E	MZ	MZ	U	UK	14821	0	0	SE12	SD12
210	E	MZ	MZ	U	UK	122104	0	0	SE12	SD12
211	E	MZ	MZ	U	UK	346880	0	0	SE12	SD12
212	E	MZ	MZ	U	UK	177314	0	0	SE12	SD12
213	E	MZ	MZ	U	UK	900281	5.5	2	SE12	SD12
214	E	MZ	MZ	C	F	523819	5.4	4.9	SE06	SD06
215	E	MZ	MZ	C	F	89292	5.7	2.9	SE06	SD06
216	E	MZ	MZ	E	UK	1150114	0	0	SE11	SD11
217	E	MZ	MZ	C	NF	501647	4.9	1	SE07	SD07
218	E	MZ	MZ	C	F	1023295	7.3	35.1	SE06	SD06
219	E	MZ	MZ	C	UK	498363	0	0	SE08	SD08
220	NE	PZ	PZ	C	NF	339302	0	0	SN13	SD21
221	E	PZ	MZ	C	F	176827	4.9	1	SE06	SD06
222	NE	PZ	PZ	C	NF	395328	5.7	19.4	SN13	SD21
223	NE	PZ	PZ	C	NF	141177	5.2	2	SN13	SD21
224	NE	PZ	PZ	C	NF	252674	5.9	17.9	SN13	SD21
225	NE	PZ	PZ	C	UK	272762	4.7	2	SN14	SD22
226	NE	PC	PC	C	NF	1297437	6.6	96.5	SN06	SD14
227	E	PZ	MZ	C	NF	136629	6.9	27	SE07	SD07
228	E	MZ	CZ	C	NF	20987	7.8	17.5	SE02	SD02
229	E	PZ	PZ	C	F	82782	5.5	4.1	SE17	SD20
230	NE	PC	PC	C	UK	498443	6.8	30.2	SN07	SD15
231	NE	PC	PC	C	UK	540467	5.7	7.7	SN07	SD15
232	E	PZ	PZ	C	NF	27481	0	0	SE18	SD21
233	NE	PC	PC	C	UK	272794	0	0	SN07	SD15

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DN	Type	Age	MRE Age	Stress	SS_Ang	Area	Mmax_obs	N ≥ 4.5	SDNT	SDNC
234	NE	PC	PC	C	F	130527	0	0	SN05	SD13
235	E	PC	PC	C	NF	325388	5.5	6.5	SE14	SD14
236	NE	PC	PC	C	F	2195241	6	2	SN05	SD13
237	NE	PC	PC	C	UK	1344617	5.7	5.3	SN07	SD15
238	NE	PC	PC	C	F	373331	5.3	9.3	SN05	SD13
239	NE	PC	PC	C	UK	3882973	5.4	20.6	SN07	SD15
240	NE	PC	PC	C	UK	483039	0	0	SN07	SD15
241	NE	PC	PC	C	NF	1067319	6.2	7	SN06	SD14
242	NE	PC	PC	C	F	550542	5.2	2.5	SN05	SD13
243	NE	PC	PC	C	UK	73011	0	0	SN07	SD15
244	NE	PC	PC	C	UK	96381	5	2.3	SN07	SD15
245	NE	PC	PC	U	UK	18765	0	0	SN11	SD19
246	NE	PC	PC	C	UK	296714	4.7	2	SN07	SD15
247	E	MZ	MZ	C	NF	235667	5.6	7.2	SE07	SD07
248	E	CZ	CZ	E	NF	1651160	6.2	16.1	SE04	SD04
249	E	MZ	MZ	C	NF	649859	6.3	20.6	SE07	SD07
250	E	MZ	MZ	C	NF	259139	5.8	4.3	SE07	SD07
251	NE	PZ	PZ	C	UK	189322	6.2	5	SN14	SD22
252	NE	PZ	PZ	U	UK	194188	0	0	SN15	SD23
253	E	PZ	PZ	U	UK	170849	6.1	6.4	SE20	SD23
254	E	MZ	CZ	C	UK	350276	5.7	2	SE03	SD03
255	NE	PC	PC	C	UK	601885	5.1	5.9	SN07	SD15

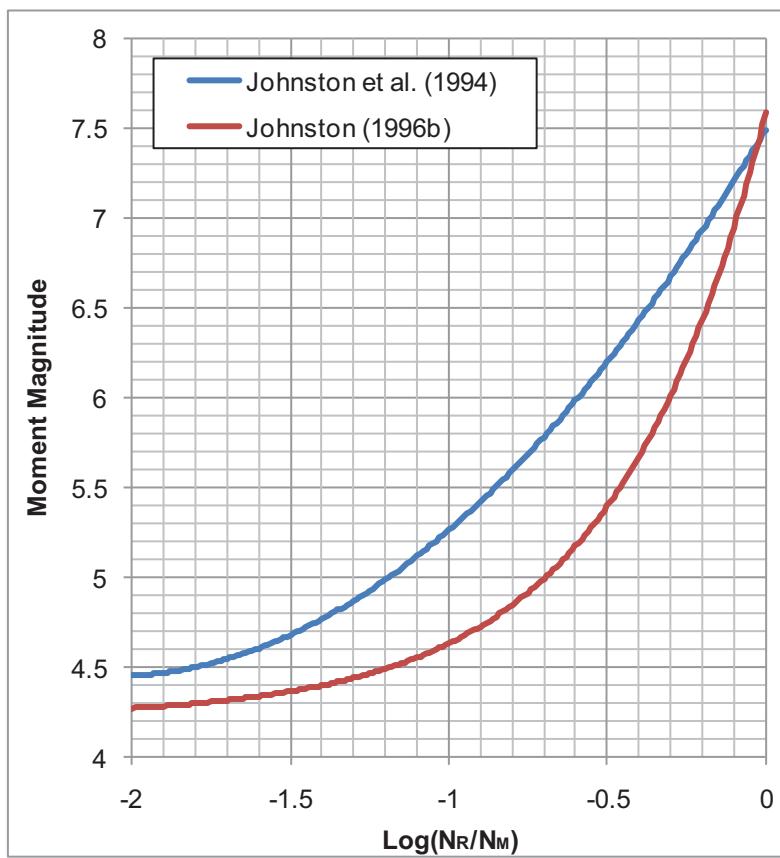


Figure K-1

Comparison of relationships between number of reporting stations and moment magnitude presented in Johnston et al. (1994) and Johnston (1996b).

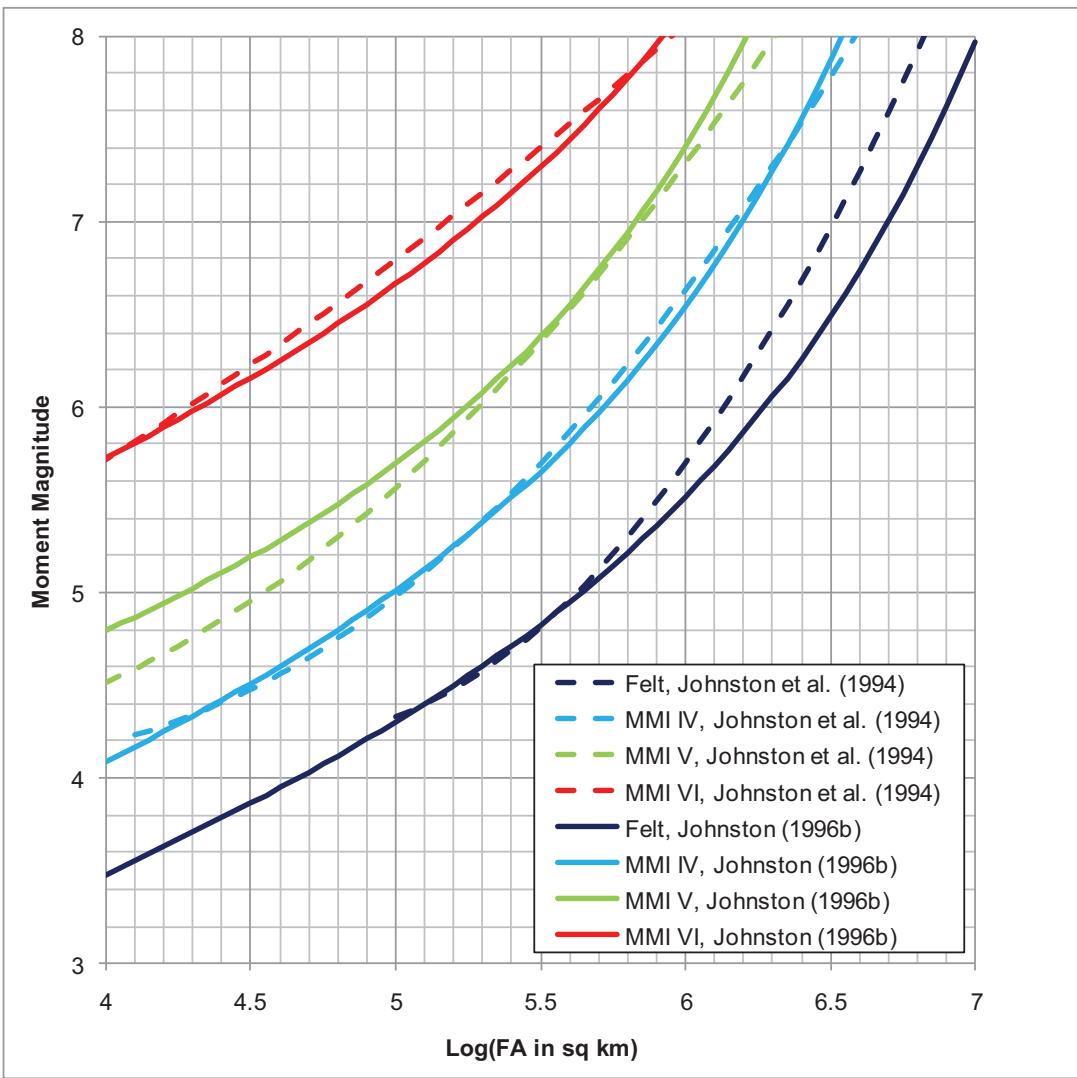


Figure K-2
Comparison of relationships between isoseismal areas and moment magnitude presented in Johnston et al. (1994) and Johnston (1996b).