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Description

A homogeneous earthquake catalogue for Bulgaria and adjacent areas covering the time span 1981–2019 (instrumental seismicity) is presented. The catalogues including instrumental seismicity of Solakov et al. (1993) and Botev et al. (2010), covering the time interval 1981–2000, were updated for the period 2001–2019 using instrumentally determined focal earthquake parameters.

Data for earthquake catalogues are from the Bulgarian seismological network (NOTSSI). At present the Bulgarian seismological network ensures reliable registration and high quality information for earthquakes occurred in Bulgaria and surroundings. Since 2005–2006, real-time data exchange between Bulgaria and Greece, Romania, Serbia, Northern Macedonia and Turkey was implemented. These data are also used in hypocentral location.

The here presented catalogue for the period 1981–2019 is homogenized concerning magnitude. Regression equations (presented in Solakov et al., 2018) are applied to convert magnitude scales used in Bulgarian seismological routine practice (M_d and M_p) to the widely used moment magnitude. For stronger events are given moment magnitude estimation (if exist) from Global Centroid Moment Tensor Catalog (with priority) or EMSC catalogue.

The catalogue is processed in the sense that duplicated events and quarry blasts are removed. A comprehensive assessment of catalogue completeness indicates that no earthquake with moment magnitude, M_w 3.2 or greater has been omitted in the whole instrumental period (1981–2019).

The following information is given in the catalogue:

- Date: Year, month, day;
- Origin time in standardize GMT: Hour, minute and second;
- Epicenter coordinates: Latitude φ° N and Longitude λ° E;
- Focal depth in km;
- Estimated moment magnitude, M_w ;
- Epicentral/Maximum intensity (European macroseismic scale – EMS-98) I_0/I_{max} (if available).

It should be stated that the catalogue will be updated annually.

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Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
1981	4	1	10	55	2	41.96	23.21	4	3.3	3.5
1981	4	2	12	30	11	41.93	22.99	8	3.4	4.5
1981	5	3	22	16	10	42.13	25.2	14	3.2	
1981	5	6	4	41	17	41.88	23.99	8	4.0	5.5
1981	5	25	18	1	33	44.02	27.59	15	3.4	
1981	6	8	3	19	24	42.76	27.52	2	3.4	
1981	6	10	1	54	40	42.59	27.83	12	3.2	
1981	6	13	14	40	0	41.82	22.84	9	3.4	
1981	7	17	19	17	44	41.92	23	9	3.2	
1981	7	21	17	45	42	42.63	27.64	6	3.2	
1981	7	23	6	15	0	43.15	27.45	6	4.4	6.5
1981	8	26	19	42	48	41.96	23.23	15	4.0	4.5
1981	8	30	15	40	37	42.15	25.23	16	4.3	5.5
1981	9	4	0	22	1	43.14	27.57	7	3.9	5.5
1981	9	5	0	8	24	41.85	23.24	16	3.3	
1981	9	7	17	43	12	41.4	22.6	8	4.7	5.5
1981	9	13	22	9	45	41.74	25.26	5	3.3	
1981	9	19	15	28	45	43.16	27.57	13	3.2	
1981	9	20	9	12	58	42.24	24.93	17	3.4	
1981	9	25	19	50	38	41.72	23.84	13	3.2	
1981	9	30	12	3	0	41.95	23.15	11	3.3	4
1981	10	1	12	10	54	41.88	23.65	12	4.1	5.5
1981	10	14	18	36	39	41.97	23.25	13	3.4	
1981	11	9	13	40	3	41.88	23.7	3	3.4	3.5
1981	11	27	2	54	45	42.52	23.61	3	3.2	
1981	12	7	9	33	47	42.09	24.81	5	3.2	5.5
1982	2	20	4	45	52	41.82	24.34	12	3.7	4.5
1982	3	6	8	59	54	42.67	28.48	20	4.1	
1982	4	27	3	51	48	41.89	23.35	10	3.7	
1982	5	15	4	44	51	42.12	24.27	9	3.5	
1982	6	26	19	47	34	41.87	23.69	12	3.5	
1982	6	30	18	49	6	41.71	23.84	14	3.7	
1982	8	27	9	58	54	43.65	26.21	19	4.4	5.5
1982	8	31	3	45	6	43.16	27.46	10	3.5	5
1982	10	23	18	25	54	42.06	24.83	13	3.8	4.5
1982	12	30	12	11	11	41.88	23.15	7	3.4	
1983	4	24	14	33	7	42.65	22.8	2	3.2	
1983	8	13	2	8	46	41.81	23.18	15	3.5	3.5
1983	8	26	16	15	31	41.03	22.38	11	4.6	
1983	8	28	11	37	50	41.79	23.76	11	3.5	4
1983	9	10	18	40	21	42.17	23.73	10	3.7	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
1983	9	13	20	39	26	41.72	23.77	4	3.2	
1983	11	10	17	28	21	43.11	27.53	4	4.5	6.5
1983	12	21	12	51	26	43.21	26.08	12	3.3	
1983	12	22	14	56	45	42.74	23.33	13	3.9	5
1984	1	23	9	29	25	41.94	23.39	12	4.7	5.5
1984	1	23	10	26	34	41.95	23.35	11	5.2	6
1984	1	23	15	5	29	43.31	25.4	13	3.5	5
1984	1	23	22	42	26	42.06	24.01	15	3.3	4.5
1984	2	14	15	56	9	43.7	27.85	13	3.2	
1984	3	1	12	56	11	42.18	25.43	18	3.3	4
1984	5	28	5	38	51	41.96	23.19	14	3.6	
1984	6	14	14	11	41	43.12	27.51	11	3.3	4
1984	7	3	8	23	4	41.022	22.5	10	3.8	4
1984	8	13	0	8	33	41.78	23.68	5	3.3	
1984	8	31	6	55	49	41.99	24.22	16	3.4	4
1984	9	3	9	19	6	42.18	25.06	14	3.4	
1985	1	5	13	6	33	42.56	22.12	28	4.9	6
1985	2	16	6	33	40	42.05	23.62	10	4.1	5
1985	4	4	21	45	39	42.11	25.84	12	3.4	
1985	6	12	14	5	0	43.11	27.5	12	4.3	6
1985	8	6	14	25	55	42.75	27.91	18	3.2	
1985	9	17	6	53	33	41.93	23	13	3.7	5
1985	9	28	14	50	15	41.58	22.25	7	5.2	7
1985	9	29	0	36	12	41.49	22.33	10	3.4	
1985	10	1	13	21	1	41.56	22.32	5	3.3	
1985	10	1	13	25	2	41.54	22.31	10	3.4	
1985	10	2	2	32	51	41.43	22.24	5	4.0	
1985	11	9	23	19	50	41.26	24.03	17	3.4	
1985	11	9	23	30	43	41.26	23.98	18	5.2	7.5
1985	11	12	16	41	31	42.24	24.88	12	3.2	
1985	11	14	20	59	8	41.96	23.27	8	3.3	
1986	2	21	5	39	56	43.27	26.05	11	5.4	7.5
1986	2	21	6	18	36	43.26	25.97	16	4.4	5.5
1986	2	21	6	20	54	43.23	25.99	18	3.5	
1986	2	21	8	36	38	43.26	26.02	15	3.8	4.5
1986	2	22	3	51	50	41.87	23.71	2	3.2	
1986	3	23	20	50	56	43.06	25.62	12	3.2	
1986	4	10	4	43	11	43.18	26.13	0	3.2	
1986	5	15	16	37	14	41.95	23.13	17	3.9	4.5
1986	5	15	16	45	23	41.95	23.15	18	4.5	5.5
1986	5	25	16	57	30	43.21	26.01	14	3.3	4

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
1986	5	26	15	46	30	43.24	26.03	13	3.2	4
1986	5	26	20	36	2	41.85	25.27	17	3.2	
1986	5	29	6	24	35	41.92	23.17	2	3.6	4.5
1986	6	20	12	26	36	43.25	26.07	10	3.4	4.5
1986	6	30	5	14	1	42.05	22.13	10	3.9	
1986	8	1	14	34	12	43.27	26.06	11	3.4	4.5
1986	8	19	4	5	42	43.19	25.99	13	4.0	
1986	8	29	19	30	18	43.34	26.06	11	3.2	
1986	8	30	19	8	38	41.73	24.27	14	3.4	
1986	9	7	10	47	53	43.23	26.01	13	3.3	4
1986	9	7	10	54	1	43.26	26	12	3.3	5
1986	10	26	13	32	14	41.94	23.15	16	3.3	3.5
1986	11	23	4	34	31	43.25	26.01	9	3.4	4
1986	12	7	14	17	9	43.25	26.02	14	5.6	8
1986	12	7	14	53	26	43.14	26.11	20	4.4	5.5
1986	12	7	15	20	29	43.2	26.04	2	3.3	
1986	12	7	17	26	6	43.22	25.98	14	4.8	6
1986	12	7	17	39	20	43.22	25.98	13	3.2	
1986	12	8	9	31	33	43.3	26.06	13	3.3	
1986	12	8	14	44	28	43.26	26.03	20	4.5	6
1986	12	11	3	52	31	43.24	26.04	15	3.4	
1986	12	12	1	28	48	43.25	26.09	10	3.6	
1986	12	12	19	29	52	43.27	26.05	12	4.6	6
1986	12	14	10	29	49	43.24	26.02	10	3.2	
1986	12	15	0	58	51	43.27	26.03	6	3.4	
1986	12	17	22	1	45	43.28	26.07	14	4.8	6.5
1986	12	18	7	16	16	43.23	26.06	14	4.4	6.5
1986	12	18	17	16	16	43.25	26.07	18	4.5	6.5
1986	12	18	23	39	15	43.25	26.07	11	3.6	
1986	12	23	17	46	0	43.24	26.07	6	3.2	
1987	1	14	6	30	13	43.23	25.97	16	3.3	
1987	1	21	9	54	5	43.26	26.03	15	4.3	6
1987	1	29	21	43	30	43.2	26	10	3.4	
1987	2	4	6	7	58	41.97	23.18	13	3.2	
1987	2	22	3	18	2	42.21	24.93	15	3.8	4
1987	3	13	11	48	36	41.39	23.92	16	3.3	
1987	3	21	6	27	20	43.21	26.13	2	3.2	
1987	3	23	9	5	24	43.88	23.56	4	3.8	5.5
1987	3	29	4	10	7	42.14	25.38	15	4.2	5.5
1987	4	8	1	31	59	42.17	25.14	8	3.2	
1987	4	12	9	0	54	42.54	26.59	16	3.9	5.5

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
1987	5	2	9	5	32	41.92	24.61	11	3.9	5.5
1987	5	2	14	2	33	43.1	27.47	8	4.1	5
1987	5	7	21	14	7	42.54	26.55	10	3.8	4.5
1987	5	11	17	35	3	43.24	25.98	14	4.2	4
1987	5	30	6	59	8	41.66	23.61	11	3.2	
1987	6	3	12	36	58	41.96	22.92	14	3.3	
1987	7	25	9	25	32	43.25	25.99	13	3.4	4
1987	8	3	20	14	20	41.78	23.74	10	3.2	
1987	8	6	8	17	10	43.23	25.89	15	3.2	
1987	9	16	13	1	52	41.14	23.8	5	3.2	
1987	9	19	6	32	54	43.45	27.82	14	3.2	5
1987	9	30	11	49	23	41.78	23.75	10	3.5	
1987	10	19	4	0	35	43.25	25.98	12	3.3	4
1987	11	9	5	23	26	41.77	23.74	5	3.2	
1987	11	25	9	43	57	43.16	26.09	14	3.3	5
1988	3	7	20	24	33	41.78	23.75	13	3.2	4
1988	3	23	18	58	45	41.86	22.77	14	3.3	4.5
1988	4	24	13	44	34	41.98	23.2	15	3.3	
1988	5	9	20	13	5	41.78	23.75	12	3.5	
1988	5	17	13	42	59	41.91	23.56	14	3.3	
1988	5	27	12	58	48	41.74	23.72	18	3.2	
1988	6	21	16	26	28	42.23	24.87	16	3.2	
1988	6	22	15	41	44	41.78	23.73	13	3.3	4
1988	8	18	17	37	43	42.08	24	9	3.2	4
1988	9	2	14	24	25	41.02	25.62	8	3.2	
1988	9	28	6	26	46	41.91	23.04	9	3.4	
1988	9	28	14	42	40	41.76	23.71	20	3.2	
1988	12	23	5	21	13	42.13	25.17	16	3.7	4.5
1989	1	16	8	36	49	42.27	24.76	18	3.2	
1989	1	18	7	14	14	41.6	24.6	8	3.2	
1989	3	6	21	38	15	42.11	24.37	15	3.2	
1989	4	9	20	50	4	41.84	22.89	12	3.5	4
1989	4	10	1	34	3	41.88	22.91	8	3.6	
1989	4	23	23	56	19	41.92	23.57	4	3.2	
1989	6	3	16	37	36	41.96	23.27	12	3.7	
1989	7	8	15	48	18	41.28	23.18	15	3.4	
1989	10	25	15	27	43	43.05	26.7	17	4.4	6
1989	10	25	16	23	44	42.99	26.6	11	3.2	
1989	10	26	5	57	34	42.48	26.26	14	3.2	
1989	11	28	12	30	40	41.95	23	14	3.2	3.5
1989	12	6	13	5	14	42.07	24.83	12	3.4	5.5

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
1989	12	12	6	50	50	41.3	23.37	16	3.2	
1989	12	26	5	56	1	41.96	23.15	15	3.2	
1990	1	2	22	54	35	43.1	27.59	18	3.4	
1990	1	28	10	21	32	42.53	26.26	15	3.2	
1990	1	31	10	16	14	41.41	22.72	13	4.4	4
1990	1	31	19	40	25	41.41	22.71	13	3.3	
1990	2	3	22	50	21	41.44	22.79	0	3.2	
1990	3	3	20	39	25	42.94	27.72	16	3.4	
1990	3	11	17	54	6	41.89	23.31	12	3.4	
1990	3	16	19	21	55	41.42	22.73	10	3.5	
1990	3	22	7	15	49	41.95	23.07	15	3.4	4.5
1990	4	16	17	50	22	42.54	26.1	14	3.2	
1990	6	10	11	36	45	41.27	29.36	14	4.5	
1990	6	12	4	21	19	43.97	26.41	20	4.2	4.5
1990	6	23	14	33	40	41.7	23.79	11	3.2	
1990	7	11	14	54	36	41.94	23.79	12	3.7	
1990	7	12	2	19	54	43.93	24.61	12	3.2	
1990	7	16	7	5	7	41.4	22.72	12	3.4	
1990	7	28	9	28	27	41.94	23.13	19	3.5	
1990	9	10	18	28	10	42.25	25.39	5	3.7	
1990	9	18	22	59	4	41.95	23.14	16	3.5	3.5
1990	11	18	23	21	39	41.5	23.74	15	3.2	
1990	12	5	9	39	15	43.29	26.01	16	3.5	4.5
1990	12	21	6	57	43	41.01	22.3	13	6.1	
1990	12	21	8	0	58	41.03	22.43	14	3.7	
1991	1	16	14	45	28	41.35	23.28	10	3.2	
1991	1	25	3	23	31	42.95	28.07	12	3.2	
1991	2	6	10	45	10	41.93	23	12	3.4	
1991	2	9	8	56	40	42.37	23.62	17	3.8	4.5
1991	2	17	21	49	11	41.44	25.44	12	4.0	4.5
1991	3	15	11	38	46	41.77	22.93	2	3.2	
1991	5	31	11	17	52	41.7	23.83	18	3.7	
1991	6	11	16	16	41	43.3	26.11	7	3.4	
1991	6	17	14	46	35	43.03	22.83	15	3.5	
1991	6	23	19	10	40	41.25	23.38	14	3.3	
1991	6	29	22	27	22	41.87	22.89	13	3.7	
1991	7	3	15	33	14	41.98	23.4	11	3.3	
1991	7	23	11	55	33	41.77	23.09	12	3.8	
1991	8	15	4	58	58	41.02	22.02	15	4.2	
1991	8	22	8	38	49	41.26	23.68	17	3.4	
1991	8	24	20	10	41	41.08	22.08	17	3.6	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
1991	9	8	16	57	18	41.12	22.47	10	3.2	
1991	9	11	9	3	27	42.23	25.46	16	3.4	
1991	9	17	5	25	16	41.96	23.15	16	3.7	
1991	10	1	3	6	31	43.87	26.62	2	3.2	
1991	10	10	6	10	4	42.17	25.09	16	3.3	
1991	10	17	3	12	47	41.15	24	14	3.8	
1991	10	18	3	12	47	41.17	23.99	16	3.8	
1991	10	25	18	5	21	41.27	23.29	11	4.1	
1991	11	8	9	40	22	41.28	23.67	5	3.4	
1992	1	13	5	58	0	43.25	26.01	7	3.5	4.5
1992	1	25	22	34	26	41.79	22.63	5	4.2	
1992	2	21	19	7	9	41.83	22.84	11	3.4	
1992	3	7	12	48	8	41.99	24.27	19	3.4	
1992	4	1	6	9	57	41.15	24.03	6	3.5	
1992	4	6	4	12	45	42.51	25.75	5	3.3	
1992	6	8	2	52	8	42.13	25.43	17	4.2	4.5
1992	6	10	4	5	10	42.33	23.99	13	4.0	
1992	7	7	7	47	3	41.32	22.48	2	3.5	
1992	7	24	4	34	51	41.97	25.57	10	3.3	
1992	8	17	13	23	26	42.52	26.29	8	3.4	
1992	8	24	21	43	47	42.47	24.9	20	4.3	4.5
1992	8	26	18	38	50	41.31	22.73	7	3.2	
1992	9	1	17	39	15	42.55	24.57	18	3.2	
1992	9	29	11	37	3	41.83	22.93	17	3.2	
1992	10	30	13	43	4	42.47	24.06	11	3.2	
1992	11	12	6	24	29	41.84	26.35	13	3.5	4
1992	11	21	22	26	8	43.27	26.87	15	3.3	
1992	11	23	2	19	59	43.2	26.8	4	3.7	4.5
1993	1	5	16	36	57	41.37	22.84	11	3.7	
1993	1	12	18	50	54	42.47	22.21	13	4.2	
1993	1	13	2	3	55	42.53	22.02	6	3.4	
1993	1	14	0	41	26	41.97	23.09	11	3.4	
1993	1	16	7	49	30	41.97	23.03	11	3.4	
1993	1	16	17	32	59	41.98	23.06	10	3.3	
1993	1	17	10	21	34	42.97	25.45	2	3.2	
1993	2	12	2	53	6	41.62	25.21	10	3.8	4.5
1993	3	27	23	47	9	41.15	23.08	12	4.3	4
1993	3	28	0	6	39	41.16	23.02	12	4.1	
1993	4	3	4	52	58	41.82	22.74	10	3.5	
1993	4	11	23	24	37	41.66	24.14	8	3.2	
1993	4	21	16	54	3	43.15	27.56	8	4.3	5.5

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
1993	5	22	5	4	42	41.46	23.12	14	3.7	
1993	5	24	14	14	31	41.86	22.9	20	3.5	
1993	6	10	15	19	3	41.83	22.31	8	3.5	
1993	9	2	2	3	54	41.14	25.92	2	3.3	
1993	9	7	11	56	47	43.16	27.31	20	3.7	
1993	10	11	23	18	5	41.94	23.06	10	3.3	
1993	11	13	19	36	57	41.91	22.71	14	3.3	
1993	12	16	9	22	16	41.53	23.13	11	4.3	5.5
1994	1	7	3	48	17	41.81	22.27	6	3.2	
1994	1	11	1	59	31	41.74	24.2	13	4.0	4
1994	3	21	21	42	26	42.09	23.49	10	4.3	
1994	4	7	20	32	16	41.94	23.14	19	3.3	
1994	4	24	18	17	6	41.63	24.06	17	3.3	
1994	5	23	12	23	17	41.96	23.2	18	4.0	
1994	5	23	12	25	18	41.99	23.29	4	3.6	
1994	5	25	23	46	53	41.91	24.46	11	3.5	
1994	7	15	9	28	29	44.25	26.94	2	3.3	
1994	7	16	3	9	20	41.02	26.96	10	3.4	
1994	8	3	3	52	8	41.94	23.1	10	3.8	
1994	8	23	6	47	48	42.75	28.7	8	3.3	
1994	10	31	1	42	39	42.33	22.04	11	3.8	
1994	11	5	17	29	3	41.12	23.34	12	3.9	
1994	11	5	18	51	13	41.07	23.28	4	3.2	
1994	11	17	23	45	51	42.51	23.63	4	3.3	
1994	11	26	19	22	13	41.79	25.27	13	3.5	
1994	11	29	10	18	41	42.16	25.19	13	3.9	4.5
1995	1	1	16	25	23	42.58	23.38	1	3.3	
1995	1	28	14	18	0	41.84	23.18	18	3.2	
1995	3	20	20	39	7	41.36	22.63	5	3.2	
1995	4	22	8	57	36	41.44	22.72	12	3.2	
1995	5	20	20	9	52	41.09	23.09	5	3.5	
1995	6	28	21	47	37	41.99	23.1	8	3.4	
1995	7	17	11	13	1	42.7	23.16	12	3.5	
1995	7	17	15	24	22	41.81	25.17	11	3.2	
1995	7	17	20	10	30	41.26	25.4	9	3.7	
1995	7	18	20	34	53	41.33	27.4	2	3.2	
1995	7	18	23	29	53	42.61	27.87	5	4.1	4.5
1995	7	20	19	20	8	43.95	26.68	6	3.4	
1995	7	28	2	49	9	43.57	22.21	2	3.7	
1995	8	17	4	38	12	41.96	23.31	5	3.5	
1995	8	20	0	56	31	41.08	27.31	5	3.3	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
1995	8	23	9	27	17	42.02	24.9	5	3.5	
1995	8	29	1	1	3	41.93	24.49	16	3.2	
1995	9	8	3	51	40	41.69	24.03	14	3.4	
1995	12	14	16	25	23	42.61	23.37	10	3.5	
1995	12	28	1	17	34	41.94	23.11	17	3.2	
1996	2	1	17	43	55	41.72	23.81	14	4.5	
1996	2	2	5	11	49	42.76	24	11	3.4	
1996	4	20	19	56	51	42.7	23.58	8	3.9	
1996	6	2	12	46	30	41.29	24.1	11	3.3	
1996	9	25	9	18	53	41.83	22.84	8	3.4	
1996	11	15	0	5	6	42.05	22.46	10	3.2	
1996	11	18	4	19	32	42.03	22.45	12	3.2	
1996	12	29	8	21	51	42.89	29.6	5	3.6	
1997	1	19	4	12	18	42.44	26.14	11	3.4	
1997	3	18	7	57	28	41.64	23.76	19	3.7	
1997	4	2	16	10	39	42.05	26.58	10	3.2	
1997	4	4	8	31	29	41.7	23.82	10	3.8	
1997	4	19	21	0	46	43.42	28.56	18	3.8	
1997	5	6	7	5	56	41.7	23.86	12	3.2	
1997	5	13	19	15	58	41.22	23.71	10	4.0	
1997	6	13	8	20	26	41.24	24.56	9	3.8	
1997	6	13	16	13	10	41.83	23.54	7	3.5	
1997	6	27	8	35	11	42.03	23.49	15	3.5	
1997	7	1	4	27	43	42.02	23.48	2	3.7	
1997	7	1	4	50	33	42.03	23.48	3	3.4	
1997	7	4	8	36	54	42.02	23.46	8	3.2	
1997	7	9	1	21	48	42.03	23.46	18	3.4	
1997	7	14	16	13	35	41.55	24.02	2	3.2	
1997	7	17	3	6	55	41.78	23.72	5	3.7	
1997	7	27	1	22	29	43.68	22.03	10	3.5	
1997	8	5	19	34	2	41.85	23.53	3	3.4	
1997	8	5	19	50	27	41.86	23.54	5	3.5	
1997	8	7	22	38	13	42.11	24.08	13	3.2	
1997	8	8	10	36	16	43.12	27.48	11	4.0	
1997	8	13	10	44	47	42.73	23.14	11	3.5	
1997	8	19	0	48	5	41.82	23.32	8	3.3	
1997	9	22	7	7	18	41.23	23.2	10	3.7	
1997	10	3	0	20	19	42.03	23.52	2	3.3	
1997	10	24	20	55	2	41.66	22.35	3	3.4	
1997	10	29	4	8	17	42.03	23.48	13	3.8	
1997	11	15	9	25	38	42.05	23.48	0	3.2	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
1997	11	15	12	48	52	42.02	23.49	4	3.6	
1997	11	18	22	55	6	42.03	23.48	4	3.7	
1997	11	20	8	46	47	42.02	23.45	6	3.7	
1997	11	25	0	31	50	42.04	23.47	7	3.7	
1997	11	25	0	35	21	42.03	23.47	5	3.2	
1997	11	26	8	46	47	42.02	23.45	6	3.7	
1998	1	1	18	9	5	41.16	24.41	10	3.4	
1998	1	12	3	23	28	41.96	23.23	11	3.3	
1998	1	15	19	1	45	41.99	23.06	5	3.2	
1998	2	4	2	18	12	41.11	23.8	9	3.5	
1998	2	15	12	0	17	41.36	23.71	10	3.8	
1998	3	26	20	38	0	41.29	22.73	4	3.2	
1998	3	28	18	13	22	41.3	22.7	2	3.4	
1998	4	3	13	31	52	42.08	24.06	10	3.3	
1998	4	4	22	47	46	41.3	22.66	4	3.4	
1998	4	6	0	38	27	41.53	27.6	10	4.0	
1998	4	8	19	43	43	41.33	22.74	11	3.5	
1998	4	18	19	59	52	42.2	24.15	8	3.4	
1998	6	5	23	29	45	41.97	23.14	14	3.2	
1998	6	9	22	45	10	41.04	24.4	8	3.2	
1998	7	2	19	48	43	41.74	22.8	2	3.3	
1998	7	3	3	37	17	41.92	23.12	9	4.0	5.5
1998	7	6	18	25	57	41.92	22.05	5	4.2	
1998	7	6	23	10	9	41.93	22.07	11	3.4	
1998	7	9	4	20	37	42.75	23.07	7	3.4	
1998	7	13	18	9	3	41.09	24.4	8	3.4	
1998	7	14	23	0	19	41.96	23.15	12	3.6	
1998	7	28	7	26	39	41.1	23.82	10	3.9	
1998	8	25	5	2	9	41.97	23.21	2	3.2	
1998	9	2	11	39	11	41.02	24.06	6	3.4	
1998	9	2	11	42	46	41.12	24.06	10	3.4	
1998	9	10	16	57	37	41.87	23.53	20	3.2	
1998	10	2	21	22	5	42.13	23.65	3	3.2	
1998	10	26	10	0	0	41.96	23.14	15	3.9	
1998	11	25	23	38	17	41.22	29.91	15	3.4	
1998	12	6	11	4	56	43.29	28.61	13	3.2	
1998	12	10	8	3	56	41.8	22.89	10	3.3	
1998	12	11	15	9	20	42.18	25.291	14	4.7	
1999	1	3	7	33	32	41.89	22.02	9	4.0	
1999	1	11	16	45	37	41.74	22.88	8	3.2	
1999	1	16	12	20	31	42.03	23.46	13	3.5	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
1999	1	16	13	52	20	42.01	23.45	9	3.2	
1999	1	23	5	1	39	42.04	23.49	5	3.8	
1999	3	8	3	37	5	41.72	24.34	9	3.3	
1999	3	29	23	21	9	41.2	24.04	8	3.4	
1999	4	11	21	37	27	41.03	24.43	7	3.4	
1999	4	15	23	4	5	42.13	22.52	10	3.3	
1999	5	3	22	43	45	42.31	23.85	10	3.5	
1999	5	10	22	17	49	41.05	24.38	5	3.3	
1999	8	7	6	46	56	42.02	23.52	5	3.3	
1999	8	18	3	34	28	42.14	23.58	4	3.4	
1999	8	19	13	44	23	42.03	23.52	6	3.5	
1999	8	27	12	45	42	41.3	23.75	8	3.2	
1999	8	29	18	29	57	41.25	27.7	2	3.4	
1999	9	7	5	2	9	41.25	22.7	3	3.7	
1999	9	8	15	35	26	41.01	27.72	13	3.4	
1999	10	26	3	32	17	42.15	23.53	8	3.2	
1999	11	11	16	17	59	41.95	23.15	14	3.4	
1999	11	23	0	47	49	42.1	25.14	13	3.2	
1999	11	30	15	31	49	41.35	23.39	9	3.2	
1999	12	15	23	10	41	41.99	23.08	13	3.5	
2000	1	9	11	49	45	42.99	25.42	9	3.5	
2000	1	26	2	44	22	41.52	24.37	11	3.5	
2000	2	1	10	36	25	41.11	22.73	6	3.8	
2000	2	2	23	5	36	41.82	22.81	9	3.5	
2000	3	2	9	21	1	43.02	25.4	7	3.8	
2000	3	8	13	11	3	43.05	22.7	10	3.7	
2000	4	25	11	43	34	41.7	23.83	15	3.4	
2000	6	1	22	36	31	41.94	23.66	2	3.7	
2000	6	3	5	35	55	41.96	23.32	7	3.5	
2000	6	3	5	52	14	41.93	23.35	2	3.3	
2000	6	3	6	25	32	41.95	23.28	7	3.6	
2000	6	3	23	4	0	41.91	23.32	5	3.3	
2000	6	18	19	20	41	41.2	25.91	14	3.4	
2000	6	20	21	54	33	41.58	23.98	13	3.7	
2000	6	24	6	38	54	41.91	22.99	12	3.4	
2000	7	25	2	52	56	41.99	23.18	10	3.8	
2000	7	29	2	12	13	41.67	24.03	8	3.3	
2000	8	22	13	42	29	41.2	23.24	13	3.9	
2000	8	23	8	11	5	43.03	22.92	20	3.3	
2000	8	28	5	6	46	43.02	25.42	10	3.3	
2000	8	28	5	16	48	42.98	25.41	10	4.2	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
2000	8	28	5	26	0	43	25.41	10	3.5	
2000	9	22	8	48	53	41.63	24.05	15	3.9	
2000	10	13	17	34	7	41.96	23.22	9	3.4	
2000	10	25	23	6	4	42.85	22.91	10	4.0	
2000	10	25	23	7	12	42.86	22.81	10	3.6	
2000	10	26	22	31	43	42.19	25.2	8	3.2	
2000	11	3	17	33	2	41.71	24.68	10	3.4	
2000	11	18	4	1	54	41.85	22.91	15	3.3	
2000	11	29	12	26	14	41.05	23.29	3	3.7	
2000	11	29	13	45	8	41.07	23.29	2	3.6	
2000	12	5	12	38	30	43.11	27.54	6	3.5	
2000	12	6	12	21	18	41.31	23.54	16	3.4	
2000	12	7	14	38	37	41.8	23.8	2	3.2	
2000	12	27	18	31	18	41.95	23.19	8	3.2	
2001	2	7	1	41	43	44.1	25.47	10	3.2	
2001	3	5	14	15	31	42.23	23.32	5	3.8	
2001	3	5	14	16	7	42.22	23.29	10	3.3	
2001	3	24	13	7	43	41.07	28.47	8	3.7	
2001	4	12	22	29	22	42.76	28.11	12	3.9	
2001	4	13	22	29	23	42.78	28.01	15	3.5	
2001	5	23	7	23	4	41.8	22.82	2	3.2	
2001	6	19	20	56	12	43.89	27.54	13	3.3	
2001	7	16	11	51	27	42.74	23.73	11	3.4	
2001	7	26	17	52	2	41.38	23.59	14	3.2	
2001	7	29	20	10	29	43.98	26.7	2	3.3	
2001	8	8	0	58	16	42.55	26.48	15	4.1	5
2001	8	9	1	44	2	42.65	26.39	5	3.8	
2001	8	9	4	0	5	42.54	26.49	16	3.4	
2001	8	12	15	39	56	41.96	23.12	9	3.2	
2001	8	13	14	26	12	42.56	26.48	16	4.8	5
2001	8	15	6	18	52	42.56	26.49	20	3.2	
2001	8	15	19	7	56	41.69	28.23	10	3.3	
2001	8	26	3	38	4	41.89	23.18	20	3.3	
2001	10	3	9	42	11	42.57	26.51	14	3.3	
2002	2	4	19	45	42	42.12	23.39	2	3.2	
2002	2	18	10	19	19	42.03	23.33	10	4.4	5
2002	2	18	10	44	52	42.03	23.31	4	3.5	
2002	2	21	22	50	40	41.25	26.99	20	3.3	
2002	3	8	13	31	26	41.05	23.42	5	3.9	
2002	3	18	17	2	35	42.76	28.1	18	3.5	
2002	3	27	8	28	38	41.13	24.59	9	3.3	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
2002	4	5	13	13	58	42.05	24.83	11	4.6	6
2002	4	5	13	17	0	42.06	24.88	13	3.5	
2002	4	5	14	22	4	42.07	24.84	13	3.4	
2002	4	5	23	22	5	42.06	24.85	2	3.2	
2002	4	6	1	10	57	42.04	24.81	10	4.0	
2002	4	6	5	47	7	42.06	24.83	18	4.1	
2002	4	6	7	48	46	42.05	24.83	8	3.9	
2002	4	6	7	53	5	42.05	24.81	11	3.2	
2002	4	8	4	38	45	42.03	24.83	10	3.4	
2002	4	11	1	45	27	43.13	27.44	12	3.3	
2002	6	12	20	25	37	42.6	23.32	6	3.4	
2002	6	15	20	30	44	41.23	24.09	11	3.2	
2002	7	23	3	27	13	42.9	28.36	20	3.2	
2002	7	31	4	5	51	41.15	22.95	11	4.6	
2002	8	2	9	37	22	44.42	22.02	8	4.2	
2002	8	2	21	44	27	41.13	25.48	13	3.3	4.5
2002	9	3	19	49	28	42.68	23.11	12	3.5	
2002	9	4	20	39	11	41.75	23.8	8	3.8	
2002	9	18	9	9	17	42.19	23.23	8	3.5	
2002	10	18	17	2	35	42.72	28.09	10	3.4	
2002	10	26	16	45	9	41.85	22.82	10	3.4	
2002	11	2	4	51	39	41.66	24.63	12	3.2	
2002	11	13	6	13	1	41.28	23.97	20	3.2	
2002	11	17	3	15	12	41.82	25.47	14	3.3	
2002	11	18	10	54	37	41.81	25.44	14	3.4	
2003	1	14	8	3	8	41.15	24.5	7	3.9	
2003	1	17	18	54	47	41.99	23.25	13	3.2	
2003	1	20	18	8	29	41.97	23.28	2	3.5	
2003	2	8	18	2	33	41.37	23.21	10	3.2	4.5
2003	2	11	0	53	9	41.63	23.41	2	3.2	
2003	3	5	6	39	13	44.37	27.18	12	3.2	
2003	4	29	3	52	29	41.58	22.55	2	3.4	
2003	5	3	21	3	6	41.86	22.95	15	3.5	
2003	5	18	1	49	7	42.69	26.51	11	3.9	
2003	6	9	9	14	43	41.68	23.4	13	4.0	
2003	6	9	9	18	20	41.63	23.39	19	3.2	
2003	6	20	9	11	27	42.5	26.42	15	3.2	
2003	7	7	7	15	21	41.67	24.88	10	3.3	
2003	7	27	22	44	15	42.88	22.16	8	3.9	
2003	7	31	1	0	7	41.8	22.84	10	3.4	
2003	8	15	6	34	19	41.86	22.87	2	3.4	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
2003	8	16	4	54	26	42.42	26.17	12	3.3	
2003	10	30	9	5	37	41.35	23.46	20	3.2	
2003	11	9	17	51	12	41.96	23.22	7	4.0	4.5
2003	11	15	14	11	8	42.09	24.87	13	3.4	
2003	12	10	10	22	52	41.95	23.18	6	3.4	
2003	12	17	23	15	13	43.16	27.45	9	4.8	6.5
2004	2	13	18	54	50	42.26	25.4	9	3.2	
2004	4	9	14	27	50	42.98	22	5	3.9	
2004	4	26	2	10	46	42.14	25.98	15	3.3	
2004	4	26	11	58	12	41.98	23.22	5	3.3	
2004	4	26	13	22	21	41.92	23.23	16	3.8	
2004	5	5	3	44	10	41.65	26.59	14	3.2	
2004	5	10	3	17	40	42.08	24.11	8	3.7	
2004	5	14	11	9	36	43.54	26.45	3	4.1	5
2004	6	7	5	53	3	43.61	28.86	10	3.3	
2004	6	9	14	7	12	41.16	25.11	8	3.4	
2004	6	10	12	45	39	41.42	23.55	11	3.5	
2004	6	12	0	10	34	42.36	22.47	20	3.8	
2004	6	22	4	10	14	41.82	22.43	8	3.2	
2004	6	27	11	54	9	41.95	23.43	9	4.2	4.5
2004	6	27	12	6	59	41.94	23.39	15	3.4	
2004	7	1	23	42	36	41.92	23.31	14	3.3	
2004	8	4	9	3	41	41.67	23.34	16	3.3	
2004	8	7	22	8	22	42.35	22.36	10	3.9	
2004	8	13	23	56	31	41.13	25.1	2	3.3	
2004	8	19	21	45	12	41.83	22.05	10	3.5	
2004	9	10	17	46	4	42.28	24.81	15	4.3	4.5
2004	9	18	3	14	23	44.11	25.49	6	3.3	
2004	11	3	4	18	36	41.96	23.17	16	3.7	
2004	12	14	23	18	47	41.17	24.26	20	3.2	
2005	2	12	17	33	32	42.22	25.08	11	3.5	
2005	2	14	0	35	37	41.94	23.06	18	3.3	
2005	2	14	0	44	2	41.95	23.08	17	3.9	
2005	3	16	21	7	15	41.98	23.25	8	3.3	
2005	3	19	2	21	41	41.36	22.65	9	3.3	
2005	3	19	3	27	12	41.27	22.42	9	3.3	
2005	3	21	3	17	35	41.32	22.6	3	3.2	
2005	4	13	18	52	23	41.36	22.56	1	3.3	
2005	4	24	9	26	18	41.36	22.68	10	3.8	
2005	7	6	23	26	22	41.08	26.72	20	3.2	
2005	7	25	19	41	49	41.88	22.19	10	3.5	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
2005	8	4	7	50	24	41.82	22.86	2	3.2	
2005	9	8	3	1	51	41.95	23.3	2	3.2	
2005	10	16	7	1	12	41.81	22.64	9	3.5	
2005	10	19	8	54	37	41.88	24.05	11	3.7	
2005	10	31	16	54	47	44.1	26.38	20	3.2	
2005	12	3	20	31	43	42.37	23.62	20	3.2	
2006	1	13	21	36	47	41.2	23.09	13	3.4	
2006	1	20	23	9	26	42.69	26.52	13	4.2	
2006	2	4	21	33	22	41.87	22.95	20	4.1	
2006	2	4	22	50	8	43.44	27.6	12	3.2	
2006	2	15	21	50	32	41.88	22.93	13	3.6	
2006	2	16	5	47	22	41.87	22.02	10	3.5	
2006	2	20	17	20	9	41.69	25.48	13	4.7	6
2006	2	20	17	22	55	41.69	25.51	2	3.5	
2006	2	20	17	43	26	41.68	25.46	13	3.4	
2006	2	20	18	29	16	41.64	25.54	14	3.2	
2006	2	21	15	20	59	41.64	25.52	15	3.7	
2006	2	23	18	22	7	42.66	24.73	12	3.2	
2006	2	23	22	1	26	41.71	25.47	12	3.2	
2006	2	24	10	36	40	41.72	25.47	20	3.3	
2006	2	24	13	35	0	41.69	25.49	17	3.4	
2006	3	14	8	6	48	41.7	25.45	12	3.7	
2006	3	14	8	39	4	41.72	25.45	10	3.5	
2006	3	17	0	56	11	42.88	23.46	16	3.2	
2006	4	27	12	38	14	42.57	23.37	2	3.2	
2006	5	3	19	40	34	41.96	23.19	5	3.5	
2006	5	5	19	44	35	41.96	23.18	8	3.4	
2006	5	10	7	29	56	42.97	22.96	10	3.8	
2006	5	10	9	31	6	42.46	26.13	7	3.5	
2006	5	14	5	8	0	41.64	25.52	9	3.2	
2006	6	2	7	20	26	41.98	23.23	8	3.2	
2006	7	15	23	29	6	41.24	25.29	2	3.2	
2006	7	18	7	41	29	41.1	22.72	10	3.2	
2006	7	22	20	2	10	42.24	24.14	20	3.3	
2006	8	1	13	15	28	41.7	25.44	9	3.3	
2006	8	5	5	38	13	41.96	23.2	14	3.3	
2006	8	7	2	44	34	41.95	22.94	15	3.4	
2006	8	13	2	9	55	41.76	23.69	13	3.2	
2006	10	3	14	33	56	41.22	22.4	20	3.4	
2006	11	20	1	2	26	41.86	22.73	7	4.0	
2006	11	22	18	43	25	41.79	22.37	8	3.3	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
2007	2	19	21	34	3	41.06	25.02	1	3.2	
2007	4	10	3	15	50	41.25	25.58	10	3.2	
2007	5	12	13	45	52	42.86	26.74	6	3.4	
2007	7	15	4	57	31	41.28	24	7	3.4	
2007	8	3	19	32	40	41.58	23.63	15	3.7	
2007	8	16	2	31	18	41.06	24.11	5	3.3	
2007	8	18	10	32	3	41.75	22.88	20	3.3	
2007	9	14	19	58	19	41.94	23.15	0	3.5	
2007	9	15	14	40	37	41.94	23.14	10	3.3	
2007	10	4	23	47	40	42.99	22.43	2	3.3	
2007	12	1	20	23	42	41.36	22.73	3	3.2	
2007	12	7	4	40	12	41.78	28.35	7	3.7	
2007	12	10	17	15	15	42.12	25.16	10	3.2	
2008	1	25	10	10	30	42.49	26.11	13	3.4	
2008	1	29	5	29	35	43.26	26	4	3.3	4.5
2008	3	15	21	50	51	42.6	22.43	8	3.4	
2008	3	24	12	46	48	41.98	23.25	2	3.5	
2008	4	15	3	43	10	42.89	25.36	10	4.6	5.5
2008	4	15	18	2	57	42.9	25.34	13	3.2	
2008	4	18	21	12	14	44.12	24.36	9	3.2	
2008	5	6	0	20	57	41.64	23.54	10	3.6	
2008	5	12	10	11	55	43.23	26.07	12	4.5	4.5
2008	6	22	18	43	53	41.95	22.99	20	3.5	
2008	6	23	19	1	48	41.92	23.08	13	3.6	
2008	8	9	3	25	45	42.67	23.38	14	3.4	
2008	8	31	17	22	43	42.4	25.93	6	3.2	
2008	9	2	1	57	26	41.62	24.04	4	3.3	
2008	9	11	20	14	48	41.38	22.39	2	3.3	
2008	10	6	16	40	1	41.09	25.76	5	3.2	
2008	11	5	7	36	54	43.14	27.48	4	4.0	4.5
2008	11	15	20	8	19	42.66	23.33	12	3.6	5
2008	11	16	5	3	4	42.63	23.4	8	3.3	
2008	12	6	9	0	35	41.67	23.94	12	3.6	
2008	12	6	9	23	11	41.67	23.93	13	3.3	
2008	12	24	5	0	44	41.69	23.85	20	3.3	
2009	1	27	21	23	38	41.56	27.99	2	3.3	
2009	2	4	13	31	17	42.59	23.98	17	3.8	
2009	2	5	15	27	21	41.48	27.51	10	3.8	
2009	2	6	13	18	19	41.57	23.48	18	3.2	
2009	2	7	18	39	28	42.84	25.2	2	3.7	
2009	3	9	17	19	0	42.59	27.01	15	3.2	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
2009	4	1	11	15	29	41.81	22.66	20	3.2	
2009	4	1	21	37	55	41.75	22.87	20	3.2	
2009	4	9	6	35	26	41.74	25.26	13	3.6	
2009	4	14	13	21	59	41.79	22.9	11	3.4	
2009	5	4	7	15	42	41.93	23.4	9	3.8	
2009	5	5	16	11	14	41.86	22.06	5	4.1	
2009	5	5	17	39	33	41.85	22.11	7	4.1	
2009	5	6	14	29	16	41.84	22.02	10	3.7	
2009	5	15	10	19	43	41.18	23.15	5	3.2	
2009	5	16	12	3	33	41.09	22.43	1	3.6	
2009	5	18	10	28	49	41.02	25.76	3	3.2	
2009	5	19	16	49	6	42.26	26.2	5	3.3	
2009	5	23	23	22	34	41.3	22.73	5	4.0	
2009	5	24	14	13	35	41.33	22.71	8	3.5	
2009	5	24	14	29	15	41.35	22.71	8	4.4	
2009	5	24	14	30	11	41.26	22.73	2	3.6	
2009	5	24	14	31	0	41.3	22.73	10	3.7	
2009	5	24	14	34	3	41.33	22.73	2	4.2	
2009	5	24	16	17	50	41.32	22.74	5	5.3	5
2009	5	24	16	21	5	41.27	22.72	2	3.3	
2009	5	24	16	23	8	41.33	22.74	5	4.5	
2009	5	24	16	24	32	41.32	22.69	9	3.7	
2009	5	24	16	26	55	41.34	22.71	10	3.4	
2009	5	24	16	28	40	41.28	22.7	12	3.2	
2009	5	24	16	31	55	41.33	22.72	5	3.5	
2009	5	24	16	35	23	41.31	22.71	6	3.6	
2009	5	24	16	39	32	41.31	22.71	12	3.2	
2009	5	24	16	43	56	41.3	22.71	5	3.5	
2009	5	24	16	46	2	41.32	22.7	8	3.2	
2009	5	24	16	58	0	41.32	22.71	8	3.6	
2009	5	24	17	1	44	41.34	22.71	5	3.8	
2009	5	24	17	25	10	41.31	22.7	15	3.6	
2009	5	24	17	26	9	41.33	22.71	8	3.2	
2009	5	24	17	46	27	41.27	22.7	10	3.7	
2009	5	24	18	12	54	41.36	22.71	9	3.7	
2009	5	24	18	23	49	41.27	22.76	5	3.4	
2009	5	24	18	50	17	41.32	22.71	7	4.1	
2009	5	24	18	53	14	41.28	22.72	5	3.6	
2009	5	24	19	15	4	41.3	22.72	0	3.5	
2009	5	24	19	37	6	41.28	22.73	15	4.9	
2009	5	24	19	42	58	41.27	22.73	6	3.6	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
2009	5	24	19	49	21	41.3	22.71	0	3.5	
2009	5	24	19	50	1	41.29	22.73	0	3.7	
2009	5	24	19	53	51	41.26	22.7	0	3.7	
2009	5	24	20	0	16	41.29	22.7	0	3.4	
2009	5	24	20	3	59	41.27	22.71	0	3.4	
2009	5	24	20	4	38	41.26	22.7	0	3.3	
2009	5	24	20	32	37	41.28	22.72	0	3.6	
2009	5	24	20	34	54	41.29	22.69	0	3.4	
2009	5	24	20	36	53	41.32	22.7	0	3.4	
2009	5	24	20	47	0	41.18	22.71	0	3.5	
2009	5	24	20	48	1	41.28	22.69	0	3.3	
2009	5	24	20	54	3	41.31	22.72	0	3.3	
2009	5	24	21	27	25	41.31	22.7	0	3.7	
2009	5	24	21	45	41	41.31	22.71	0	3.7	
2009	5	24	21	48	47	41.31	22.73	0	3.3	
2009	5	24	22	20	10	41.3	22.7	8	3.2	
2009	5	24	22	46	53	41.3	22.69	0	3.6	
2009	5	25	4	10	2	41.33	22.74	6	3.2	
2009	5	25	4	50	3	41.35	22.67	10	3.7	
2009	5	25	7	59	40	41.31	22.67	4	4.2	
2009	5	25	8	1	17	41.28	22.68	0	3.4	
2009	5	25	8	10	17	41.31	22.7	9	3.2	
2009	5	25	9	31	18	41.29	22.76	8	3.4	
2009	5	25	10	38	37	41.28	22.68	9	3.5	
2009	5	25	12	55	28	41.27	22.71	9	3.5	
2009	5	25	20	24	23	41.28	22.7	2	3.3	
2009	5	26	6	33	58	41.31	22.7	5	3.2	
2009	5	26	6	43	47	41.27	22.72	7	3.3	
2009	5	31	22	7	3	43.28	25.95	2	4.4	
2009	6	1	8	3	39	41.27	22.73	5	4.3	
2009	6	1	23	55	20	41.39	22.85	13	3.5	
2009	6	1	23	55	40	41.39	22.84	15	3.8	
2009	6	2	1	8	39	41.28	22.66	20	3.5	
2009	6	3	4	52	26	41.27	22.76	10	3.2	
2009	6	6	21	40	27	41.32	22.72	5	3.8	
2009	6	6	21	40	57	41.28	22.7	8	4.1	
2009	6	6	22	45	29	41.29	22.69	8	3.2	
2009	6	7	8	37	33	41.28	22.7	10	3.2	
2009	6	8	3	19	17	41.3	22.7	8	3.4	
2009	6	13	9	19	29	41.28	22.75	7	3.4	
2009	6	13	10	58	12	41.36	22.68	6	3.8	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
2009	6	15	9	56	44	41.31	22.76	5	4.1	
2009	6	15	10	0	23	41.3	22.7	16	3.5	
2009	6	15	11	24	58	41.31	22.76	7	3.4	
2009	6	17	6	24	49	41.32	22.75	11	3.2	
2009	6	19	4	15	58	41.34	22.86	10	3.6	
2009	6	19	4	49	3	41.37	22.83	2	3.4	
2009	6	20	14	10	40	44.29	25.75	2	4.0	
2009	6	23	0	16	6	41.28	22.71	10	3.5	
2009	6	25	20	17	17	42.57	24.29	15	3.3	
2009	6	26	2	26	28	41.47	24.92	10	3.2	
2009	6	28	20	55	41	41.51	24.94	10	3.4	
2009	7	4	6	0	33	41.32	22.71	2	3.4	
2009	7	4	6	5	48	41.36	22.7	2	3.2	
2009	7	5	10	42	49	41.84	22.19	3	3.3	
2009	7	9	3	31	12	41.91	22.19	4	3.6	
2009	7	19	16	4	23	41.3	22.72	2	3.3	
2009	7	21	3	54	0	41.82	25.1	4	3.7	
2009	7	27	8	39	59	42.05	24.81	8	4.0	5
2009	7	27	10	43	58	42.06	24.83	8	3.8	
2009	7	27	11	37	36	42.06	24.85	3	3.2	
2009	8	5	7	49	0	43.38	28.77	8	5.0	6.5
2009	8	8	0	56	0	41.3	22.75	2	3.5	
2009	8	8	14	28	45	43.43	28.65	10	3.2	
2009	8	24	9	38	6	41.32	22.73	2	3.6	
2009	8	27	3	47	33	41.31	22.76	2	3.4	
2009	9	15	15	33	51	41.29	22.76	2	3.5	
2009	9	20	23	22	37	41.33	22.71	2	3.4	
2009	9	30	19	8	6	41.89	23.64	5	3.2	
2009	10	2	4	47	15	41.45	22.6	4	3.2	
2009	10	5	10	37	9	41.17	23.78	7	3.5	
2009	10	18	16	20	54	41.34	22.75	0	3.8	
2009	10	22	7	50	42	42.69	26.27	3	3.2	
2009	10	28	10	40	42	42.21	26.25	7	3.3	
2009	10	28	11	1	0	42.21	26.24	5	3.2	
2009	10	29	3	21	20	41.69	23.91	14	3.4	
2009	11	16	17	4	33	42.23	26.23	6	3.4	
2009	11	23	0	13	45	43.29	28.29	15	3.7	
2009	11	30	5	48	7	43.43	28.67	14	4.2	5
2009	12	6	17	11	44	43.4	28.73	9	3.5	
2009	12	9	18	14	39	41.97	23.22	2	3.3	
2009	12	18	0	46	34	42.98	22.65	3	3.4	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
2009	12	26	0	29	28	41.29	22.77	2	3.2	
2009	12	26	9	2	39	41.33	22.75	2	3.3	
2010	1	6	7	29	20	41.69	23.56	2	3.3	
2010	1	10	14	59	14	41.96	23.18	14	3.5	
2010	1	11	16	12	35	42.35	23.75	4	3.2	
2010	2	16	4	37	37	42.41	23.81	12	3.2	
2010	2	22	14	2	35	42.25	23.38	6	3.5	
2010	3	29	12	49	41	42.64	26.24	15	3.2	
2010	4	29	14	15	7	41.69	24.02	9	3.8	
2010	5	16	18	3	33	41.85	22.73	2	3.4	
2010	5	27	7	56	0	41.39	22.7	2	3.7	
2010	6	1	7	20	33	41.79	22.31	2	3.8	
2010	6	15	7	31	10	41.23	22.98	0	4.0	
2010	7	3	15	26	51	41.85	24.04	5	3.6	
2010	7	5	21	7	42	41.61	22.54	2	3.4	
2010	7	10	4	33	40	41.7	23.89	10	3.4	
2010	7	15	9	52	11	42.15	23.47	5	3.4	
2010	7	16	15	0	40	41.78	22.38	8	3.5	
2010	8	12	21	57	50	41.87	22.21	15	3.4	
2010	8	18	19	38	51	41.83	22.86	12	3.2	
2010	8	21	2	34	59	42.19	26.26	5	4.0	
2010	9	10	0	43	37	41.87	22.1	3	3.8	
2010	9	10	7	11	44	42.63	23.38	4	3.6	5.5
2010	9	28	15	34	12	41.87	24.01	8	3.2	
2010	10	7	19	51	21	43.16	27.5	2	4.4	6
2010	10	12	10	17	20	42.82	23.03	8	3.4	
2010	10	31	9	41	4	41.71	24.3	5	3.2	
2010	11	3	21	56	55	42.52	23.68	14	3.4	
2010	12	10	20	47	23	41.83	22.25	2	3.2	
2011	1	8	11	20	7	42.22	26.28	8	3.3	
2011	1	14	15	49	48	42.18	25.16	4	3.2	
2011	2	7	10	39	25	41.48	23.14	2	3.4	
2011	2	7	16	22	41	41.51	23.17	2	3.4	
2011	2	28	18	28	3	42.18	25.16	3	3.2	
2011	3	18	6	27	16	41.06	23.38	1	3.4	
2011	3	28	18	4	7	42.24	26.2	7	3.5	4
2011	3	29	2	55	5	41.85	22.15	2	3.2	
2011	3	29	7	28	55	42.02	25.76	10	3.8	4.5
2011	4	18	14	18	0	41.23	22.89	4	3.7	
2011	4	22	21	27	15	43.31	28.68	25	3.4	
2011	5	5	0	17	5	41.21	23.76	2	3.8	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
2011	6	6	2	25	25	42.22	26.24	5	3.5	4.5
2011	6	24	17	44	49	42.22	26.2	4	4.2	
2011	6	24	17	47	33	42.19	26.27	5	3.2	
2011	7	23	7	32	18	41.92	23.19	1	3.4	
2011	8	5	2	16	58	42.22	26.2	9	3.7	
2011	8	20	20	50	4	41.37	22.82	2	3.5	
2011	8	24	19	59	4	43.9	28.2	6	3.8	
2011	9	5	1	32	31	43.68	22.09	10	3.5	
2011	10	6	1	55	51	41.34	22.75	1	3.8	
2011	10	6	1	58	32	41.34	22.76	2	3.8	
2011	10	7	12	33	23	41.32	22.77	0	3.6	4
2011	10	11	19	49	10	43.65	28.32	28	4.0	
2011	10	21	12	26	32	41.66	24.6	7	3.6	
2011	10	30	4	47	17	41.63	24.6	5	3.5	
2011	11	10	22	20	44	41.31	23.65	4	3.2	
2011	11	29	12	20	12	41.47	23.76	13	3.2	
2011	12	18	21	56	26	41.35	22.75	2	3.4	
2012	1	20	22	58	42	41.96	23.38	5	3.8	
2012	2	9	22	34	40	42.2	26.27	10	3.5	
2012	3	7	15	34	23	44.56	25.95	20	3.3	7.5
2012	3	30	20	48	34	42.67	26.3	4	4.1	
2012	5	4	13	20	0	43.07	22.1	1	3.4	
2012	5	10	22	40	29	41.38	25.72	9	3.3	
2012	5	10	22	44	29	41.38	25.72	9	3.3	
2012	5	22	0	0	32	42.57	23.04	14	5.6	
2012	5	22	0	4	53	42.57	22.98	4	4.3	
2012	5	22	0	16	53	42.56	23.08	17	3.2	
2012	5	22	0	43	47	42.58	23.05	10	3.6	
2012	5	22	1	30	50	42.58	23	13	4.8	
2012	5	22	1	34	31	42.53	23.09	10	3.2	
2012	5	22	2	11	6	42.6	22.98	11	3.4	
2012	5	22	2	13	28	42.58	23.07	12	4.3	
2012	5	22	4	9	58	42.57	23.04	2	3.4	
2012	5	22	4	29	11	42.58	23.08	15	3.3	
2012	5	22	17	7	42	42.58	23.04	17	3.5	
2012	5	23	10	57	25	42.54	23.11	11	3.2	
2012	5	23	11	41	8	42.56	23.02	2	3.3	
2012	5	23	21	59	14	42.56	23.09	14	3.9	
2012	5	29	7	23	31	42.58	23.01	8	3.9	
2012	5	30	5	36	23	42.55	23.07	9	3.6	
2012	6	3	20	8	50	42.19	23.96	4	3.7	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
2012	6	16	4	51	2	42.57	23.07	10	3.2	
2012	6	23	8	58	48	41.9	23.27	2	3.6	
2012	7	14	12	52	7	42.57	23.06	8	4.4	
2012	7	22	22	10	51	41.32	22.8	2	3.7	
2012	7	31	0	10	21	42.54	23.1	7	3.4	
2012	8	16	2	11	54	42.57	23.06	10	3.3	
2012	8	19	6	36	14	42.32	22.22	1	3.3	
2012	8	27	16	26	52	41.42	22.52	7	3.8	
2012	9	3	16	54	32	41.41	22.91	4	3.2	
2012	10	4	20	37	16	41.38	24.06	4	3.4	
2012	11	28	15	32	52	41.31	22.4	12	3.6	
2012	12	2	20	11	32	43.02	27.92	13	3.3	
2012	12	3	18	58	39	43.44	28.68	18	4.4	4.5
2013	1	4	1	26	32	41.26	23.1	6	3.3	
2013	2	6	22	45	20	43.33	28.81	2	3.6	
2013	3	19	12	44	33	42.24	29.31	13	4.7	
2013	4	9	6	59	23	42.23	26.24	6	3.4	
2013	4	9	7	3	43	42.27	26.2	4	3.6	
2013	4	9	7	4	9	42.27	26.21	7	3.4	
2013	4	14	14	30	46	42.14	26.29	2	3.2	
2013	4	29	0	8	0	42.23	26.26	5	3.2	
2013	5	8	9	27	46	41.43	23.38	8	3.5	
2013	5	17	13	40	27	42.22	26.25	5	3.8	4
2013	5	28	3	28	33	43.04	29.14	5	3.8	
2013	6	6	11	6	4	41.97	23.11	2	3.2	
2013	7	9	17	12	0	42.22	26.26	10	3.8	5
2013	7	9	18	11	38	42.18	26.28	8	3.8	
2013	7	11	6	29	37	42.18	26.29	5	3.2	
2013	7	27	1	24	26	41.97	23.28	2	3.8	
2013	7	27	1	48	32	41.96	23.28	2	4.0	
2013	7	27	3	17	1	41.97	23.27	2	3.8	
2013	7	27	3	20	10	41.97	23.27	2	3.5	
2013	7	27	3	21	55	41.95	23.24	2	3.9	
2013	7	27	3	51	22	41.96	23.25	6	3.2	
2013	8	9	19	55	17	43.93	26.98	20	3.5	
2013	8	13	6	14	35	43.13	27.45	5	3.9	4.5
2013	8	14	12	52	55	42.99	23.63	12	3.7	
2013	8	28	6	48	50	41.62	24.05	13	3.6	
2013	8	28	8	43	43	41.6	24.05	15	3.6	
2013	8	29	4	6	16	44.06	25.87	20	3.9	
2013	9	8	18	8	1	41.66	23.95	13	3.2	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
2013	9	10	18	56	39	43.01	23.59	10	3.3	
2013	9	10	19	28	49	41.65	25.29	14	3.6	
2013	9	20	10	48	11	41.84	22.86	20	3.2	
2013	9	22	12	27	1	42.39	23.67	15	3.8	
2013	10	14	21	44	7	41.79	22.76	8	3.2	
2013	10	26	11	44	20	43.41	27.69	15	3.3	
2013	11	19	16	50	54	41.62	24.65	17	3.2	
2013	12	10	2	35	38	41.28	22.48	12	3.4	
2014	1	3	11	33	34	41.28	22.74	5	3.4	
2014	1	14	15	44	2	41.91	24.53	17	3.3	
2014	1	16	2	1	10	42.22	26.24	20	3.2	
2014	1	29	5	5	11	41.92	24.54	20	3.6	
2014	1	30	9	23	39	42.41	23.81	11	3.2	
2014	2	5	1	56	44	41.42	28.64	26	3.6	
2014	2	20	15	12	0	41.69	23.83	2	3.5	
2014	2	28	15	35	15	41.14	25.6	8	3.4	
2014	3	4	0	49	12	42.41	23.82	9	3.2	
2014	3	11	18	50	48	43.12	22.04	4	3.7	
2014	3	16	23	44	37	41.15	24.47	12	3.3	
2014	3	28	4	41	45	42.16	23.58	8	3.4	
2014	4	5	3	36	48	41.82	22.83	11	3.4	
2014	4	19	16	2	51	42.17	25.16	13	3.4	
2014	5	26	20	39	12	41.51	24.93	16	3.7	
2014	6	24	19	39	53	43.85	24.51	28	4.3	4
2014	7	8	17	4	28	41.18	23.13	9	3.2	
2014	8	21	4	28	16	41.68	24.23	6	4.1	
2014	10	1	9	47	55	41.1	23.32	10	3.2	
2014	10	5	9	45	2	41.04	24.29	8	3.3	
2014	10	10	20	21	40	42.2	25.28	9	3.4	
2014	11	5	11	0	44	41.84	25.15	11	3.2	
2014	11	7	7	42	9	41.04	23.4	6	3.2	
2014	11	20	12	13	25	41.96	23.17	14	3.4	
2015	1	2	5	50	54	41.21	23.98	9	3.5	
2015	1	14	3	10	54	41.21	25.79	2	3.3	
2015	2	5	6	16	45	42.75	26.08	12	4.2	4
2015	3	24	20	37	50	41.97	23.26	14	3.2	
2015	3	28	17	29	2	41.3	22.69	10	3.8	
2015	3	28	19	0	30	41.3	22.74	15	3.6	
2015	4	2	2	24	10	42.25	26.23	11	3.2	
2015	4	2	2	27	8	42.23	26.24	11	3.5	
2015	4	2	2	28	45	42.21	26.29	14	3.3	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
2015	4	2	2	29	36	42.24	26.24	8	3.2	4.5
2015	4	29	4	40	56	42.18	29.02	20	4.1	
2015	6	7	1	37	47	42.18	25.2	15	3.4	
2015	7	5	4	20	26	41.19	24.89	12	3.4	
2015	7	15	8	30	37	43.34	28.37	28	4.2	
2015	7	16	3	33	42	41.96	23.27	10	3.4	
2015	7	16	10	13	4	42.66	26.29	10	3.4	
2015	7	24	15	42	34	41.33	24.46	10	3.4	
2015	7	28	1	3	47	41.27	24.47	13	3.5	
2015	7	30	9	32	23	42.26	24.88	15	3.2	
2015	8	5	13	53	42	41.78	22.8	7	3.2	
2015	8	16	9	39	5	41.42	22.46	16	3.3	
2015	8	29	12	47	55	41	27.64	10	3.6	
2015	10	5	0	40	13	42.76	23.71	15	3.3	
2015	10	10	17	6	51	41.63	23.8	18	3.2	
2015	10	20	22	40	28	41.6	24.01	12	3.3	4
2015	11	14	20	44	11	43.4	27.27	21	3.3	
2015	11	21	0	42	35	41.16	22.32	2	3.6	
2015	12	4	23	4	16	41.29	24.48	10	3.2	
2015	12	15	1	13	39	42.43	29.52	21	3.8	
2016	1	27	21	31	0	43.35	28.59	13	3.6	
2016	2	2	12	10	45	41.38	22.68	8	3.5	
2016	2	28	11	17	17	41.46	22.84	12	4.1	
2016	3	2	23	44	50	41.28	24.47	13	3.4	
2016	4	1	19	51	12	42.55	25.75	17	3.4	
2016	4	18	6	46	14	42.51	26.03	12	4.3	
2016	5	6	2	46	50	41.78	22.78	12	3.4	5.5
2016	5	13	14	6	12	43.51	29.99	6	3.5	
2016	5	22	8	58	30	41.6	23.27	21	4.5	
2016	5	30	21	52	12	41.15	24.65	10	3.2	
2016	6	19	5	54	18	41.39	23.22	20	3.2	
2016	7	11	22	18	51	41.15	23.76	9	4.0	
2016	7	12	0	1	47	41.14	23.76	9	3.9	
2016	9	18	8	28	13	41.34	23.36	15	3.6	
2016	9	18	10	26	45	41.3	23.33	13	4.0	
2016	9	24	22	4	23	41.83	22.65	2	3.2	
2016	9	29	8	41	32	41.12	23.36	2	3.2	
2016	10	17	13	2	33	41.29	22.7	8	3.8	
2016	11	10	4	40	27	41.47	23.17	16	3.5	6
2016	11	16	7	38	50	41.01	22.79	14	3.7	
2016	11	16	9	15	14	41.01	22.73	19	4.3	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
2016	11	19	1	44	20	41.01	22.76	3	3.5	
2016	11	21	8	42	33	41.02	22.64	6	3.2	
2016	11	22	3	47	31	41.02	22.65	2	3.3	
2016	11	24	1	25	38	41.03	22.75	22	3.8	
2016	11	24	1	56	47	41.91	22.16	13	3.2	
2016	12	15	4	4	39	41.61	23.51	18	3.3	
2017	1	3	22	2	32	43.2	25.83	16	3.8	4.5
2017	3	15	11	20	43	41.95	23.26	13	3.3	3
2017	3	24	17	40	27	42.41	23.52	13	3.2	4.5
2017	4	29	0	7	44	41.34	22.72	3	3.2	
2017	7	29	3	31	39	41.02	22.75	18	3.6	
2017	8	19	13	19	36	43.29	26.08	14	3.2	
2017	8	27	22	12	48	41.06	22.48	10	3.3	
2017	9	14	1	53	18	42.58	23.03	13	3.5	4
2017	10	4	12	53	24	41.83	22.83	10	3.4	
2017	10	19	8	0	47	41.82	22.86	20	3.2	
2017	10	19	8	27	21	41.83	22.9	20	3.4	
2017	11	10	23	51	5	41.04	22.78	2	3.2	
2017	11	11	4	54	5	42.9	23.43	17	4.0	5
2017	11	24	12	12	59	43.33	27.01	13	3.2	
2017	11	24	17	26	50	41.66	24.6	13	3.5	4.5
2017	11	26	19	1	31	42.7	24.4	14	4.1	5
2017	12	7	23	50	14	42.19	25.19	14	3.2	
2017	12	8	4	5	57	41.42	23.4	15	3.9	
2017	12	18	17	51	11	41.66	23.99	20	3.5	
2017	12	29	23	9	19	41.82	22.83	11	3.2	
2018	1	1	22	13	51	41.23	22.85	11	4.3	
2018	1	1	22	16	12	41.23	22.86	12	4.0	
2018	1	1	22	19	12	41.21	22.86	11	3.7	
2018	1	1	23	0	46	41.24	22.86	12	4.0	
2018	1	2	4	24	16	41.18	22.82	9	5.1	5
2018	1	2	4	28	41	41.2	22.79	9	4.0	
2018	1	2	15	40	14	41.22	22.84	11	3.4	
2018	1	2	17	36	33	41.2	22.86	13	4.5	
2018	1	2	19	23	17	41.25	22.88	10	3.2	
2018	1	5	3	6	13	41.29	22.86	7	4.0	
2018	1	5	9	50	54	41.23	22.87	20	3.5	
2018	1	7	12	32	11	41.23	22.86	2	3.2	
2018	1	7	22	57	8	41.23	22.87	12	3.5	
2018	1	16	3	47	55	41.25	22.86	20	3.3	
2018	2	5	9	13	7	41.23	22.88	13	4.4	

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
2018	2	21	23	41	58	42.07	24.91	14	4.7	5
2018	2	22	8	3	42	41.24	22.89	10	3.2	
2018	2	22	23	15	4	42.05	24.89	14	3.8	4
2018	3	7	22	13	38	43.14	27.48	9	3.7	4.5
2018	3	25	15	1	59	41.64	26.79	16	3.7	
2018	4	2	19	23	22	41.2	23.75	12	3.4	
2018	4	10	9	49	22	42.1	29.31	52	3.6	
2018	4	26	0	45	2	42.75	29.88	20	3.6	
2018	5	11	7	26	54	43.14	27.48	6	3.4	4
2018	5	12	6	30	51	42.16	25.17	15	3.5	4
2018	6	6	7	38	40	41.63	23.68	15	3.2	
2018	6	18	9	0	29	41.79	23.74	18	3.5	4
2018	8	2	14	17	37	41.69	23.6	19	4.3	4.5
2018	8	2	15	2	58	41.68	23.62	7	3.3	
2018	8	25	10	3	33	41.94	23.13	15	3.2	
2018	8	30	0	10	40	41.39	22.7	10	3.4	
2018	11	17	12	9	27	41.05	23.44	11	4.1	
2018	11	19	14	35	20	42.49	23.53	15	3.3	
2018	11	30	13	18	43	41.03	23.46	9	3.2	
2019	2	6	5	15	27	41.52	22.91	13	3.4	
2019	2	9	20	59	18	41.23	24.73	9	3.4	
2019	2	27	9	13	35	41.22	23.73	15	3.3	
2019	2	27	16	41	19	41.21	23.74	13	4.0	
2019	3	19	3	30	33	41.13	23.34	11	3.6	
2019	3	25	0	27	53	41.95	23.28	20	3.2	
2019	4	25	1	11	53	41.02	22.69	16	3.2	
2019	4	30	18	22	35	43.16	27.47	5	3.6	4.5
2019	5	24	8	48	13	42.12	25.74	17	3.3	
2019	5	24	17	29	44	41.81	22.81	11	3.3	
2019	6	9	2	26	50	41.79	23.76	10	3.3	
2019	7	15	13	50	19	41.83	22.86	8	3.2	
2019	7	16	19	17	30	41.36	22.71	8	3.4	
2019	8	6	17	56	56	42.53	24.41	20	3.2	3.5
2019	8	10	6	39	40	41.95	26.43	20	3.5	4
2019	9	22	12	13	22	41.63	25.34	13	3.6	4
2019	10	14	7	48	26	41.33	22.66	2	3.2	
2019	10	30	15	50	43	41.79	22.23	10	3.2	
2019	11	28	11	37	50	43.4	28.69	15	3.4	
2019	12	29	17	36	52	41.96	23.47	17	3.8	4
2019	12	30	18	1	40	42.17	23.55	12	4.4	4.5

Catalogue of earthquakes in Bulgaria and the surroundings since 2020

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _W	I ₀ /I _{max}
2020	1	8	7	15	5	41.79	22.24	5	3.1	
2020	3	1	20	10	45	42.95	23.32	15	3.4	4
2020	3	5	6	26	1	41.44	22.64	17	3.2	
2020	3	8	19	45	13	42.96	23.33	15	3.6	4.5
2020	3	27	2	51	59	42.12	24.37	17	3.1	
2020	3	29	10	35	27	41.78	22.25	20	3.6	
2020	4	13	23	56	38	41.55	28.85	32	3.8	
2020	4	15	11	17	4	42.48	26.04	11	3.2	
2020	5	1	11	1	39	42.23	24.87	18	4.6	5.5
2020	5	7	17	9	17	42.25	24.86	14	3.3	4
2020	5	28	20	52	50	41.29	22.65	12	3.6	
2020	6	7	21	32	41	43.28	26.03	7	3.1	4
2020	6	25	5	42	40	41.21	23.55	7	3.6	
2020	7	21	3	25	38	41.35	23.56	12	3.5	
2020	8	5	3	12	60	41.56	25.08	12	3.3	3.5
2020	8	5	10	24	8	42.26	23.89	8	3.3	3.5
2020	8	13	14	44	38	41.84	22.71	5	3.5	
2020	8	19	10	25	59	41.57	28.67	10	3.1	
2020	8	21	10	0	22	42.11	25.71	18	3.9	4
2020	9	1	11	31	22	41.88	22.84	15	3.6	
2020	9	1	17	12	33	43.66	25.76	13	3.6	3.5
2020	9	22	13	30	46	42.6	26.45	12	3.3	
2020	10	4	2	51	17	44.16	26.33	11	3.3	
2020	10	15	13	55	12	41.03	28.9	18	3.2	
2020	11	5	5	46	46	41.01	28.09	6	3.4	
2020	12	7	12	20	7	41.22	23.57	16	3.3	

Catalogue of earthquakes in Bulgaria and the surroundings since 2021

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _w	I ₀ /I _{max}
2021	1	5	23	50	34	43.83	24.71	15	3.8	3.5
2021	1	16	22	6	44	43.28	26.93	17	3.6	4.0
2021	3	17	2	29	5	41.08	25.61	7	3.3	
2021	4	28	3	40	30	41.5	22.92	13	3.3	
2021	5	17	1	17	48	41.85	25.33	15	3.5	3.5
2021	6	2	20	58	46	42.34	23.7	13	3.5	
2021	6	6	16	40	30	41.27	23.67	14	3.5	
2021	8	6	4	56	28	42.31	23	13	3.2	
2021	8	16	9	13	7	43.46	27.75	27	3.3	
2021	9	4	21	33	8	43.31	26.21	8	3.2	
2021	9	4	21	33	45	41.45	22.74	17	3.6	
2021	10	2	12	47	29	41.77	25.1	14	3.4	
2021	10	11	3	49	32	43.16	27.45	8	3.5	3.5
2021	11	18	6	5	51	41.11	24.67	8	3.2	
2021	11	24	21	33	2	42.03	23.97	12	3.2	
2021	11	25	2	14	53	41.41	22.72	15	3.2	
2021	11	25	10	13	34	42.38	23.5	15	3.7	
2021	12	13	5	48	44	41.27	22.76	2	3.2	
2021	12	17	10	49	39	41.89	22.24	14	3.4	

Catalogue of earthquakes in Bulgaria and the surroundings since 2022

Year	Month	Day	Hour	Minute	Second	Latitude (N°)	Longitude (E°)	Depth (km)	M _W	I ₀ /I _{max}
2022	1	16	1	42	42	42.57	22.99	12	3.6	4.0
2022	1	20	18	41	25	41.16	24.41	14	3.3	
2022	1	23	13	31	31	41.22	23.64	7	3.6	
2022	1	24	2	24	54	41.21	23.62	9	3.5	
2022	1	25	2	25	28	41.58	24.02	14	3.8	
2022	1	26	0	35	11	41.69	25.49	17	3.4	
2022	1	30	4	36	34	41.61	24.02	11	3.1	
2022	2	12	23	20	27	42.17	23.65	7	3.4	3.5
2022	3	23	5	48	49	41.21	23.61	10	3.5	
2022	3	30	15	52	32	42.03	23.82	12	3.5	
2022	4	4	10	59	38	43.14	27.49	10	4.2	4.5
2022	4	25	4	36	10	41.87	22.89	7	3.4	
2022	4	25	13	6	16	41.87	22.9	7	3.3	
2022	4	25	16	31	45	41.87	22.9	7	3.8	
2022	4	25	16	55	30	41.87	22.89	7	3.8	
2022	4	25	18	45	1	41.88	22.89	5	3.2	
2022	4	25	20	50	23	41.87	22.88	7	3.2	
2022	4	25	23	22	29	41.88	22.89	8	3.4	
2022	5	7	9	38	43	41.86	22.91	9	3.6	
2022	5	8	21	2	26	41.85	22.97	14	3.1	
2022	5	15	13	58	59	41.08	25.98	12	3.5	
2022	5	17	13	1	3	41.1	26.02	7	3.7	
2022	5	19	11	52	36	41.65	23.82	12	3.4	
2022	6	25	9	32	25	44.18	29.61	10	3.3	
2022	7	17	13	40	9	41.13	22.01	18	3.6	
2022	7	20	8	36	20	41.21	23.24	13	3.1	
2022	7	24	14	56	32	41.07	23.87	12	3.1	
2022	7	25	11	55	44	42.9	22.89	13	3.6	3.5
2022	7	31	0	8	38	41.07	23.87	12	3.2	
2022	8	4	6	28	41	41.78	22.88	14	3.4	
2022	8	8	16	40	19	41.12	23.35	13	3.8	
2022	8	24	5	34	39	41.81	22.81	18	3.3	
2022	8	24	13	3	14	43.2	26.03	7	3.5	
2022	9	5	6	27	15	41.13	24.81	9	3.1	
2022	9	10	22	17	27	41.36	23.43	17	3.1	
2022	10	3	18	28	12	42.88	22.85	10	3.1	
2022	10	7	12	19	58	41.26	22.72	13	3.5	
2022	10	13	1	3	52	42.99	22.04	15	3.1	