IV.4. Алтай и Саяны
(*M*≥3.0)

по данным А-СФ ГС СО РАН (ASRS)

Отв. сост.: Е.В. Лескова.
Сост.: А.Г. Филина, В.Г. Подкорытова, С.С. Шевелёва, О.А. Манушина, Л.А. Подлипская, Е.В. Шевкунова, А.О. Шаталова, Г.А. Денисенко

№	Дата, год	м	д	Время, t_0, ч	мин	с	δt_0, с	Гипоцентр φ, °N	λ, °E	h, км	K_P	Магнитуды ML	M_C	mb	mB	MS OBN	M	Код сети	I
1	2012	1	1	3	13	12.8		51.697	95.990		12.6	4.7	4.8	4.5	4.5		4.7	ASRS	
2	2012	1	1	5	23	57.1		51.739	96.037	5		3.7					3.2	ASRS	
3	2012	1	1	8	41	6.7		51.737	95.936	5		3.8					3.3	ASRS	
4	2012	1	1	11	7	21.7		51.863	96.065		13.0	4.7	5.0				4.9	ASRS	
5	2012	1	1	15	25	29.6		51.791	95.957		11.4	4.2	4.1				4.0	ASRS	
6	2012	1	2	2	30	54.6		51.838	95.911	5	11.7	4.5	4.3	4.2	4.2		4.2	ASRS	
7	2012	1	2	22	29	25.5		51.864	95.916	2	11.0	4.2	3.9				3.8	ASRS	
8	2012	1	3	9	0	8.8		51.735	95.955		11.4	4.4	4.1	3.9	4.0		4.0	ASRS	
9	2012	1	4	13	8	11.2		51.737	96.075		13.0	5.3	5.0	4.8	5.0		4.9	ASRS	
10	2012	1	4	23	58	16.5		51.845	95.888		11.7	4.2	4.1				4.0	ASRS	
11	2012	1	5	4	19	5.5		51.843	95.867		11.4	4.0	4.1				4.0	ASRS	
12	2012	1	6	17	35	4.0		51.799	95.854		11.3	4.0	4.1				4.0	ASRS	
13	2012	1	7	7	19	40.8		51.702	95.927	5		3.6					3.1	ASRS	
14	2012	1	7	19	42	16.6		51.818	95.884	5		3.6					3.1	ASRS	
15	2012	1	8	0	26	20.1		51.841	95.894		11.4	4.4	3.9	3.9	4.2		3.8	ASRS	
16	2012	1	8	3	21	44.7		51.867	95.931		12.2	4.9	4.6	4.6	4.5		4.5	ASRS	
17	2012	1	8	7	27	19.2		50.182	87.689	10	12.0	4.1	4.4				4.3	ASRS	
18	2012	1	8	13	0	23.9		51.728	95.973		11.9	4.4	4.4				4.3	ASRS	
19	2012	1	8	13	28	14.8		51.743	95.953		10.3	3.9	3.5				3.4	ASRS	
20	2012	1	8	14	17	32.2		51.757	95.938		11.7	4.4	4.3	4.1	4.2		4.2	ASRS	
21	2012	1	8	15	57	42.6		51.782	95.908		11.6	4.3	4.2				4.1	ASRS	
22	2012	1	9	0	6	10.2		51.724	95.952		11.2	4.3	4.0				3.9	ASRS	
23	2012	1	9	18	55	28.7		51.668	95.946		13.0	5.3	5.2	4.8	5.0		5.1	ASRS	
24	2012	1	9	19	33	7.1		51.664	95.966		13.0	5.3	5.2	4.8	4.8		5.1	ASRS	
25	2012	1	10	11	4	48.6		51.736	95.931	5		3.7					3.2	ASRS	
26	2012	1	11	1	45	12.8		51.816	95.942	5		4.1					3.7	ASRS	
27	2012	1	11	6	47	5.0		51.841	95.834	5		4.0					3.6	ASRS	
28	2012	1	11	13	50	24.7		51.723	95.962			3.8					3.3	ASRS	
29	2012	1	11	18	3	9.1		51.841	95.894		10.6	4.6	3.7	4.5	4.4		3.6	ASRS	
30	2012	1	11	21	27	35.3		51.740	95.983	5	10.5	4.7	3.5	4.2	4.3		3.4	ASRS	
31	2012	1	12	12	54	23.0		51.857	95.888			3.8					3.3	ASRS	
32	2012	1	12	19	56	29.8		51.751	95.976			4.1					3.7	ASRS	
33	2012	1	13	1	19	38.5		51.844	95.862	5		3.7					3.2	ASRS	
34	2012	1	13	16	8	10.2		51.772	95.951	5		3.7					3.2	ASRS	
35	2012	1	15	7	12	2.7		51.845	95.892	5		3.6					3.1	ASRS	
36	2012	1	16	5	13	37.1		51.740	95.940		12.0	5.4	4.2	5.1	5.2			ASRS	
																4.2	4.2	OBN	
37	2012	1	17	12	31	43.7		51.790	95.937			3.5					3.0	ASRS	
38	2012	1	18	23	26	20.0		51.862	95.883	5	9.8	4.3	3.1	4.1	4.2		3.1	ASRS	
39	2012	1	19	12	11	45.6		51.772	95.998		9.6	3.9	3.1				3.1	ASRS	
40	2012	1	20	9	16	2.4		51.839	95.866	5		3.5					3.0	ASRS	
41	2012	1	21	1	5	5.1		51.843	95.853	5	10.0	3.9	3.5				3.4	ASRS	
42	2012	1	22	0	6	3.7		51.769	95.908	5		4.0					3.6	ASRS	
43	2012	1	22	12	26	42.8		51.810	96.047		9.8	4.3	3.1	4.1	4.0		3.1	ASRS	
44	2012	1	24	10	21	41.3		51.800	95.908	5		3.9					3.4	ASRS	

№	Дата, год	м	д	Время, t_0, ч	мин	с	δt_0, с	Гипоцентр φ, °N	λ, °E	h, км	K_P	Магнитуды ML	M_C	mb	mB	MS OBN	M	Код сети	I
45	2012	1	25	3	21	44.4		51.825	95.877	5	9.6	3.9	3.4				3.3	ASRS	
46	2012	1	25	15	46	46.6		51.608	95.599	5		3.7					3.2	ASRS	
47	2012	1	25	22	37	34.5		51.724	95.901	5		4.2					3.8	ASRS	
48	2012	1	26	3	2	43.3		49.967	88.173	2	10.0	3.8	3.1				3.1	ASRS	
49	2012	1	28	14	43	15.8		51.769	95.619	5		3.6					3.1	ASRS	
50	2012	1	29	2	34	53.9		51.678	95.638	5	9.4	4.1	3.2				3.2	ASRS	
51	2012	1	31	11	17	16.5		50.699	98.016	5	10.1	4.5	3.0	4.1	4.1		3.0	ASRS	
52	2012	2	1	4	37	26.5		51.705	95.742	5	10.5	4.5	3.4				3.3	ASRS	
53	2012	2	1	21	57	41.7		51.873	95.583	10		3.5					3.0	ASRS	
54	2012	2	2	2	39	33.5		51.672	95.694	5		3.6					3.1	ASRS	
55	2012	2	3	22	13	41.3		51.906	95.809	5	10.5	4.2	3.8				3.7	ASRS	
56	2012	2	5	18	52	47.4		51.960	95.778	5	10.4	4.5	3.8	4.3	4.4		3.7	ASRS	
57	2012	2	9	13	24	4.2		54.281	86.149	0	10.8	4.3	3.7				3.6	ASRS	1
58	2012	2	11	3	4	14.5		51.879	95.773	3	9.9	4.2	3.3				3.3	ASRS	
59	2012	2	11	4	22	12.4		51.877	95.786	21		3.7					3.2	ASRS	
60	2012	2	15	6	17	27.5		51.713	96.016	8		3.6					3.1	ASRS	
61	2012	2	18	0	37	20.0		51.749	95.947	12	9.3	4.2					2.5	ASRS	
62	2012	2	20	15	4	48.4		51.835	95.842	12		3.6					3.1	ASRS	
63	2012	2	24	5	26	17.7		51.850	95.603			3.6					3.1	ASRS	
64	2012	2	25	13	14	13.5		51.680	95.955	13	10.5	4.5	4.1				4.0	ASRS	
65	2012	2	26	4	8	25.5		51.823	95.848			3.9					3.4	ASRS	
66	2012	2	26	6	17	17.6		51.737	95.985	14	15.7	6.8	6.3	6.4	7.0			ASRS	2
																6.8	6.8	OBN	
67	2012	2	26	6	23	51.5		51.779	96.071			4.0					3.6	ASRS	
68	2012	2	26	6	24	31.6		51.762	96.069	19		4.2					3.8	ASRS	
69	2012	2	26	6	25	37.9		51.715	95.965	7		4.2					3.8	ASRS	
70	2012	2	26	6	26	29.2		51.717	95.990	17		4.7					4.3	ASRS	
71	2012	2	26	6	26	56.3		51.718	96.103	26		3.8					3.3	ASRS	
72	2012	2	26	6	28	9.5		51.726	96.016	13		3.5					3.0	ASRS	
73	2012	2	26	6	28	34.6		51.726	96.022	13		3.9					3.4	ASRS	
74	2012	2	26	6	29	12.7		51.742	96.071	19		4.7					4.3	ASRS	
75	2012	2	26	6	30	2.8		51.711	96.016	4		3.6					3.1	ASRS	
76	2012	2	26	6	30	18.2		51.719	95.993	18		4.7					4.3	ASRS	
77	2012	2	26	6	31	57.5		51.716	96.041	11		4.2					3.8	ASRS	
78	2012	2	26	6	33	18.0		51.747	96.030	11		4.7					4.3	ASRS	
79	2012	2	26	6	34	19.8		51.788	96.002	16		3.6					3.1	ASRS	
80	2012	2	26	6	34	41.4		51.752	95.930	15		3.5					3.0	ASRS	
81	2012	2	26	6	34	56.9		51.755	96.040	19		4.3					3.9	ASRS	
82	2012	2	26	6	37	17.3		51.699	96.108	13		4.2					3.8	ASRS	
83	2012	2	26	6	38	6.2		51.634	96.034	19		4.3					3.9	ASRS	
84	2012	2	26	6	38	26.1		51.663	96.102	4		3.7					3.2	ASRS	
85	2012	2	26	6	39	3.6		51.652	96.033	19		4.1					3.7	ASRS	
86	2012	2	26	6	39	29.0		51.776	95.949	11		3.5					3.0	ASRS	
87	2012	2	26	6	40	15.1		51.715	95.986	8		3.7					3.2	ASRS	
88	2012	2	26	6	43	51.9		51.697	96.081	6		4.1					3.7	ASRS	
89	2012	2	26	6	45	7.8		51.723	95.993	17		3.5					3.0	ASRS	
90	2012	2	26	6	45	18.1		51.729	95.930	13		4.2					3.8	ASRS	
91	2012	2	26	6	45	54.5		51.761	95.981	2		3.5					3.0	ASRS	
92	2012	2	26	6	46	11.4		51.745	96.025	14		3.6					3.1	ASRS	
93	2012	2	26	6	47	14.6		51.749	96.030	18		4.3					3.9	ASRS	
94	2012	2	26	6	47	34.9		51.673	96.003	12		3.5					3.0	ASRS	
95	2012	2	26	6	47	50.3		51.694	95.921	15		3.9					3.4	ASRS	
96	2012	2	26	6	49	18.7		51.729	95.977	10		4.2					3.8	ASRS	
97	2012	2	26	6	51	31.8		51.654	96.035	20		4.1					3.7	ASRS	
98	2012	2	26	6	51	37.5		51.640	96.067	15		4.5					4.1	ASRS	
99	2012	2	26	6	52	6.6		51.748	96.007	22		3.7					3.2	ASRS	
100	2012	2	26	6	52	37.9		51.754	96.032	10		4.8					4.5	ASRS	
101	2012	2	26	6	55	30.9		51.634	96.030	16		4.1					3.7	ASRS	

[1] Техногенное землетрясение.

[2] Тувинское-II землетрясение. Сарыг-Сеп – 7–8 баллов; Кызыл, Тоора-Хем, Туран – 6 баллов; Усть-Элегест, Эрзин – 5–6 баллов; Арадан, Хову-Аксы – 5 баллов; Саяногорск – 4–5 баллов; Абакан, Иркутск, Нижнеудинск, Черемушки – 4 балла; Братск, Красноярск, Улан-Удэ, Саянск – 3 балла; Новокузнецк – 2–3 балла; Новосибирск, Томск, Междуреченск – 2 балла.

№	Дата, год	м	д	Время, t_0, ч	мин	с	δt_0, с	Гипоцентр φ, °N	λ, °E	h, км	K_P	Магнитуды ML	M_C	mb	mB	MS OBN	M	Код сети	I
102	2012	2	26	6	55	44.8		51.684	96.108			3.5					3.0	ASRS	
103	2012	2	26	6	56	15.7		51.734	95.975	16		4.3					3.9	ASRS	
104	2012	2	26	7	1	45.3		51.712	96.119	17		4.2					3.8	ASRS	
105	2012	2	26	7	2	21.0		51.722	96.008	21		3.6					3.1	ASRS	
106	2012	2	26	7	2	39.3		51.741	96.036	17		4.0					3.6	ASRS	
107	2012	2	26	7	8	30.2		51.731	95.973	15		3.5					3.0	ASRS	
108	2012	2	26	7	10	41.4		51.700	96.038	16		3.6					3.1	ASRS	
109	2012	2	26	7	10	54.6		51.700	96.110	4		3.9					3.4	ASRS	
110	2012	2	26	7	16	38.6		51.707	96.008	17		3.7					3.2	ASRS	
111	2012	2	26	7	20	37.0		51.703	95.912	21		3.7					3.2	ASRS	
112	2012	2	26	7	20	49.7		51.784	95.956	16		3.5					3.0	ASRS	
113	2012	2	26	7	22	30.7		51.709	96.044	16		3.5					3.0	ASRS	
114	2012	2	26	7	26	8.9		51.628	96.079	8		4.0					3.6	ASRS	
115	2012	2	26	7	28	56.2		51.740	95.973	20		3.6					3.1	ASRS	
116	2012	2	26	7	35	34.8		51.684	95.945	22		3.5					3.0	ASRS	
117	2012	2	26	7	38	23.8		51.645	96.040	17		3.7					3.2	ASRS	
118	2012	2	26	7	38	46.2		51.715	96.010	21		3.7					3.2	ASRS	
119	2012	2	26	7	43	22.0		51.761	95.974	21		4.1					3.7	ASRS	
120	2012	2	26	7	44	13.3		51.715	95.971	17		3.7					3.2	ASRS	
121	2012	2	26	7	49	1.8		51.692	96.012	7		4.5					4.1	ASRS	
122	2012	2	26	8	16	57.4		51.730	96.017	10		4.8					4.5	ASRS	
123	2012	2	26	8	18	37.2		51.694	95.947	16		3.8					3.3	ASRS	
124	2012	2	26	8	28	20.7		51.665	96.025	12		4.0					3.6	ASRS	
125	2012	2	26	8	33	35.2		51.789	95.905	20		3.6					3.1	ASRS	
126	2012	2	26	8	43	3.0		51.698	95.967	13	10.3	4.2	3.5				3.4	ASRS	
127	2012	2	26	8	54	14.3		51.725	95.978	17		3.7					3.2	ASRS	
128	2012	2	26	9	8	4.2		51.650	96.050	15		3.5					3.0	ASRS	
129	2012	2	26	9	8	21.1		51.759	95.960	17		3.5					3.0	ASRS	
130	2012	2	26	9	19	45.1		51.683	96.050	12		3.7					3.2	ASRS	
131	2012	2	26	9	23	43.7		51.695	96.070	1		3.6					3.1	ASRS	
132	2012	2	26	9	32	3.8		51.642	96.042	18		4.3					3.9	ASRS	
133	2012	2	26	10	2	24.4		51.771	95.920	17		3.6					3.1	ASRS	
134	2012	2	26	10	5	33.7		51.712	95.997	17		3.6					3.1	ASRS	
135	2012	2	26	10	30	28.5		51.729	96.073	4		3.5					3.0	ASRS	
136	2012	2	26	10	57	18.4		51.651	96.073		10.6	4.4	3.6				3.5	ASRS	
137	2012	2	26	11	7	38.8		51.738	96.098	11		5.5		5.2	5.4			ASRS	
																4.5	4.5	OBN	
138	2012	2	26	11	8	36.2		51.760	96.030	15		3.9					3.4	ASRS	
139	2012	2	26	11	21	36.2		51.718	95.996	18		3.8					3.3	ASRS	
140	2012	2	26	11	27	55.7		51.634	96.023	17		4.5					4.1	ASRS	
141	2012	2	26	11	35	57.3		51.752	96.023	19		4.0					3.6	ASRS	
142	2012	2	26	11	36	1.8		51.711	95.938	4		4.0					3.6	ASRS	
143	2012	2	26	11	46	18.5		51.721	95.883	20		3.8					3.3	ASRS	
144	2012	2	26	11	50	49.0		51.644	96.028	18		5.2		5.0	5.0		4.9	ASRS	
145	2012	2	26	11	52	39.5		51.721	96.011	17		3.9					3.4	ASRS	
146	2012	2	26	11	59	3.4		51.720	95.923	12	14.0	5.9	5.6	5.4	5.4			ASRS	
																4.6	4.6	OBN	
147	2012	2	26	12	31	23.3		51.728	95.948	14	10.5	3.7	3.7				3.6	ASRS	
148	2012	2	26	12	50	21.2		51.742	96.023	17	12.5	4.9	4.7				4.6	ASRS	
149	2012	2	26	13	6	35.4		51.746	95.972	10	13.9	5.5	5.5	4.9	5.1			ASRS	
																4.0	4.0	OBN	
150	2012	2	26	13	17	30.9		51.664	96.016	19	12.8	5.1	4.9	4.8	4.7		4.8	ASRS	
151	2012	2	26	13	44	12.8		51.770	95.984	20		3.9					3.4	ASRS	
152	2012	2	26	13	44	52.2		51.607	96.092	12	13.5	5.2	5.3	4.9	5.0		5.2	ASRS	
153	2012	2	26	15	22	26.1		51.648	96.043	18		3.8					3.3	ASRS	
154	2012	2	26	15	23	25.8		51.638	96.048	16		4.6					4.2	ASRS	
155	2012	2	26	15	26	53.0		51.684	96.049	16		4.1					3.7	ASRS	
156	2012	2	26	15	48	42.3		51.655	96.041	15	10.6	3.6	3.8				3.7	ASRS	
157	2012	2	26	16	15	9.9		51.758	95.960	14		3.5					3.0	ASRS	
158	2012	2	26	16	16	4.8		51.743	96.034	7		3.6					3.1	ASRS	
159	2012	2	26	17	20	18.5		51.754	95.918	13		3.9					3.4	ASRS	
160	2012	2	26	17	21	39.2		51.711	96.094	16	12.5	4.7	4.7				4.6	ASRS	
161	2012	2	26	17	25	34.5		51.665	96.035	17		3.8					3.3	ASRS	
162	2012	2	26	17	29	42.3		51.599	96.036	18		3.6					3.1	ASRS	
163	2012	2	26	17	38	32.2		51.726	96.013	17		4.1					3.7	ASRS	

№	Дата, год	м	д	Время, t_0, ч	мин	с	δt_0, с	Гипоцентр φ, °N	λ, °E	h, км	K_P	Магнитуды ML	M_C	mb	mB	MS OBN	M	Код сети	I
164	2012	2	26	17	53	7.9		51.709	96.028	18		3.7					3.2	ASRS	
165	2012	2	26	18	10	33.3		51.735	96.032	17		4.2					3.8	ASRS	
166	2012	2	26	18	31	3.2		51.715	95.976	14		3.5					3.0	ASRS	
167	2012	2	26	18	34	37.1		51.720	95.940	11		4.2					3.8	ASRS	
168	2012	2	26	19	54	31.3		51.687	95.932	18		4.3					3.9	ASRS	
169	2012	2	26	19	59	27.2		51.633	96.030	18	13.7	5.5	5.4	5.1	5.1		5.3	ASRS	
170	2012	2	26	20	50	52.7		51.635	96.044	16		3.5					3.0	ASRS	
171	2012	2	26	21	1	13.1		51.799	95.941	22		3.7					3.2	ASRS	
172	2012	2	26	21	54	18.3		51.737	96.028	18		3.5					3.0	ASRS	
173	2012	2	26	22	32	53.9		51.753	96.022	17		3.6					3.1	ASRS	
174	2012	2	26	22	51	30.3		51.785	95.917	16		3.6					3.1	ASRS	
175	2012	2	26	23	8	33.3		51.715	95.909	12		3.7					3.2	ASRS	
176	2012	2	26	23	23	48.5		51.745	96.152	1	12.0	4.1	4.5				4.4	ASRS	
177	2012	2	26	23	38	12.9		51.749	96.084	16	11.4	3.7	4.1				4.0	ASRS	
178	2012	2	27	0	41	59.4		51.733	95.976	18		3.5					3.0	ASRS	
179	2012	2	27	0	45	25.0		51.733	95.969	17		3.6					3.1	ASRS	
180	2012	2	27	0	50	27.9		51.645	96.033	19		4.2					3.8	ASRS	
181	2012	2	27	1	12	8.9		47.122	89.193	10		4.6	4.6	4.4			4.5	ASRS	
182	2012	2	27	1	18	12.4		51.719	95.972	18		4.1					3.7	ASRS	
183	2012	2	27	1	41	38.4		51.696	96.031	13		3.7					3.2	ASRS	
184	2012	2	27	2	54	53.0		51.727	96.072	12	13.3	5.2	5.2	4.9	5.0		5.1	ASRS	
185	2012	2	27	3	2	28.4		51.745	96.023	16		4.6					4.2	ASRS	
186	2012	2	27	3	3	48.8		51.693	95.976	18		4.0					3.6	ASRS	
187	2012	2	27	3	10	22.4		51.745	96.026	16		3.7					3.2	ASRS	
188	2012	2	27	3	21	28.9		51.706	96.008	13		3.5					3.0	ASRS	
189	2012	2	27	3	56	36.5		51.744	96.010	17		3.5					3.0	ASRS	
190	2012	2	27	3	58	7.6		51.751	96.022	7		4.0					3.6	ASRS	
191	2012	2	27	4	10	29.4		51.685	96.034	18		3.5					3.0	ASRS	
192	2012	2	27	4	29	59.7		51.671	95.943	23		3.7					3.2	ASRS	
193	2012	2	27	5	5	0.0		51.658	96.002	20		4.4					4.0	ASRS	
194	2012	2	27	6	29	8.9		51.703	95.873	20		3.7					3.2	ASRS	
195	2012	2	27	7	13	9.9		51.625	96.030	3		3.6					3.1	ASRS	
196	2012	2	27	7	31	12.3		51.642	96.039	17		3.7					3.2	ASRS	
197	2012	2	27	8	56	2.7		51.659	96.041	17	12.8	4.8	4.9	4.6	4.7		4.8	ASRS	
198	2012	2	27	10	15	43.2		51.768	95.921	12	11.9	4.2	4.4				4.3	ASRS	
199	2012	2	27	12	2	7.0		51.660	96.047	18		4.1					3.7	ASRS	
200	2012	2	27	12	54	31.8		51.680	96.015	8	11.9	4.9	4.4	4.7	4.8		4.3	ASRS	
201	2012	2	27	13	41	37.8		51.663	96.041	16	9.4	3.6	3.0				3.0	ASRS	
202	2012	2	27	14	24	25.3		51.759	95.983	18		3.5					3.0	ASRS	
203	2012	2	27	14	49	40.2		51.708	96.065	19	11.5	4.0	4.2				4.1	ASRS	
204	2012	2	27	15	28	12.3		51.780	95.918	17		3.5					3.0	ASRS	
205	2012	2	27	16	44	10.1		51.701	95.988	18		3.7					3.2	ASRS	
206	2012	2	27	16	48	58.0		51.718	95.892	8		3.7					3.2	ASRS	
207	2012	2	27	16	57	54.4		51.751	95.958	20		3.6					3.1	ASRS	
208	2012	2	27	18	13	5.2		51.641	96.043	8	11.2	4.1	4.0				3.9	ASRS	
209	2012	2	27	19	39	16.8		51.655	95.988	13	11.4	5.2	4.1	4.9	5.0		4.0	ASRS	
210	2012	2	27	19	41	15.8		51.735	96.044	20		3.6					3.1	ASRS	
211	2012	2	28	1	45	39.9		51.802	95.978	16	10.0	4.3	3.3				3.3	ASRS	
212	2012	2	28	2	43	54.2		51.711	96.060	17	9.4	3.6	3.0				3.0	ASRS	
213	2012	2	28	5	14	56.8		51.772	96.017	14		3.5					3.0	ASRS	
214	2012	2	28	6	11	47.3		51.753	95.932	14		4.0					3.6	ASRS	
215	2012	2	28	6	41	58.1		51.667	96.130	19	8.8	3.7	2.6				2.6	ASRS	
216	2012	2	28	8	26	58.7		51.742	96.016	18		3.5					3.0	ASRS	
217	2012	2	28	9	8	57.8		51.652	96.040	17		3.7					3.2	ASRS	
218	2012	2	28	10	1	48.8		51.692	96.011	3		3.7					3.2	ASRS	
219	2012	2	28	10	45	57.8		51.740	96.015	12		3.5					3.0	ASRS	
220	2012	2	28	15	22	3.6		51.747	95.999	16		4.0					3.6	ASRS	
221	2012	2	28	18	27	19.7		51.787	95.798	8		3.7					3.2	ASRS	
222	2012	2	28	19	47	54.3		51.714	96.049	10		3.6					3.1	ASRS	
223	2012	2	28	21	36	21.5		51.634	95.972	22		3.8					3.3	ASRS	
224	2012	2	28	21	53	4.7		51.738	95.896	17		4.2					3.8	ASRS	
225	2012	2	28	21	58	3.7		51.621	95.943	21		3.8					3.3	ASRS	
226	2012	2	28	22	38	57.5		51.755	96.026	16		3.5					3.0	ASRS	
227	2012	2	29	2	9	40.4		51.682	96.059	15		4.4					4.0	ASRS	
228	2012	2	29	2	39	23.6		51.682	96.015	15		4.4					4.0	ASRS	

№	Дата, год	м	д	Время, t_0, ч	мин	с	δt_0, с	Гипоцентр φ, °N	λ, °E	h, км	K_P	Магнитуды ML	M_C	mb	mB	MS OBN	M	Код сети	I
229	2012	2	29	2	55	15.1		51.714	95.989	14		3.6					3.1	ASRS	
230	2012	2	29	2	55	43.7		51.637	96.086	3		3.8					3.3	ASRS	
231	2012	2	29	5	55	50.4		51.731	95.973	14		3.5					3.0	ASRS	
232	2012	2	29	8	45	33.1		51.744	96.063	16		3.8					3.3	ASRS	
233	2012	2	29	9	31	36.6		51.706	96.023	17		3.6					3.1	ASRS	
234	2012	2	29	12	3	16.9		51.699	96.034	16	13.2	5.0	5.1	4.6	4.7		5.0	ASRS	
235	2012	2	29	12	12	55.2		51.683	96.030	17		3.9					3.4	ASRS	
236	2012	2	29	13	10	46.1		51.743	96.002	16	10.7	3.8	3.8				3.7	ASRS	
237	2012	2	29	14	2	10.7		51.768	95.993	14	10.4	3.6	3.6				3.5	ASRS	
238	2012	2	29	14	20	56.9		51.701	95.949	18		3.7					3.2	ASRS	
239	2012	2	29	20	14	27.9		51.713	95.905	18	11.0	3.9	3.9				3.8	ASRS	
240	2012	2	29	20	19	36.7		51.731	96.007	6	12.3	5.0	4.9	4.7	4.8		4.8	ASRS	
241	2012	2	29	20	53	52.5		51.680	95.979	13	12.0	4.5	4.4				4.3	ASRS	
242	2012	2	29	22	12	54.8		51.654	96.033	19	11.3	4.0	4.1				4.0	ASRS	
243	2012	2	29	23	51	58.8		51.747	96.053	18		3.5					3.0	ASRS	
244	2012	3	1	1	16	35.9		51.643	96.041	18		3.9					3.4	ASRS	
245	2012	3	1	2	55	9.3		51.771	95.953	6	11.1	3.7	3.9				3.8	ASRS	
246	2012	3	1	5	51	40.0		51.655	96.069	10	10.0	4.2	3.4				3.3	ASRS	
247	2012	3	1	7	1	12.8		51.747	96.019	11	10.5	3.6	3.7				3.6	ASRS	
248	2012	3	1	9	23	57.1		51.701	96.087	3	11.0	3.7	4.0				3.9	ASRS	
249	2012	3	1	14	7	46.0		51.781	95.916	7	9.6	4.2	3.1				3.1	ASRS	
250	2012	3	1	14	26	38.8		51.638	96.001	4	9.4	4.1	3.0				3.0	ASRS	
251	2012	3	1	19	46	20.9		51.682	95.960	5	11.4	5.0	4.1	4.7	4.8		4.0	ASRS	
252	2012	3	1	19	55	54.2		51.707	96.086	18		4.3					3.9	ASRS	
253	2012	3	2	1	20	13.9		51.756	95.966	16	9.5	3.6	3.0				3.0	ASRS	
254	2012	3	2	3	40	38.6		51.787	95.926	20		4.0					3.6	ASRS	
255	2012	3	2	5	16	19.2		51.683	96.022	14		3.7					3.2	ASRS	
256	2012	3	2	8	13	1.7		51.784	95.961	12		3.5					3.0	ASRS	
257	2012	3	2	10	19	36.1		51.746	96.055	18		3.5					3.0	ASRS	
258	2012	3	3	2	15	21.7		51.653	96.038	17		3.5					3.0	ASRS	
259	2012	3	3	7	16	31.9		51.717	95.996	14		3.5					3.0	ASRS	
260	2012	3	3	16	8	53.7		51.750	96.008	16	9.0	3.8	2.8				2.8	ASRS	
261	2012	3	3	16	52	28.5		51.783	95.961	15		3.6					3.1	ASRS	
262	2012	3	3	23	22	42.6		51.712	96.037	22	9.4	3.7	3.0				3.0	ASRS	
263	2012	3	4	0	1	20.9		51.685	96.078	5	11.0	4.8	3.9	4.7	4.5		3.8	ASRS	
264	2012	3	4	1	26	30.6		51.784	95.876	13	8.3	3.6	2.4				2.4	ASRS	
265	2012	3	4	8	21	4.9		51.637	96.043	6	10.1	4.1	3.4				3.3	ASRS	
266	2012	3	4	15	59	2.6		51.716	96.055	5	11.4	4.8	4.1	4.4	4.6		4.0	ASRS	
267	2012	3	4	20	46	8.5		51.715	96.016	5		3.5					3.0	ASRS	
268	2012	3	4	21	32	50.0		51.714	96.032	13	10.7	3.9	3.7				3.6	ASRS	
269	2012	3	4	23	33	37.9		51.659	96.040	9	11.7	5.0	4.4	4.8	4.9		4.3	ASRS	
270	2012	3	5	0	13	6.2		51.704	95.979	17		3.8					3.3	ASRS	
271	2012	3	5	2	34	4.5		51.698	96.014	18		3.8					3.3	ASRS	
272	2012	3	5	10	4	5.8		51.723	96.070	6	11.0	4.5	3.9	4.3	4.2		3.8	ASRS	
273	2012	3	5	16	51	22.5		51.685	95.924	11	10.8	3.7	3.8				3.7	ASRS	
274	2012	3	5	20	44	45.6		51.825	95.912	8	11.0	4.0	3.9				3.8	ASRS	
275	2012	3	6	6	49	41.5		51.659	96.092	2	12.4	5.0	4.7				4.6	ASRS	
276	2012	3	6	9	7	19.1		51.661	96.032	16		3.7					3.2	ASRS	
277	2012	3	6	11	47	4.7		51.775	95.993	16		3.6					3.1	ASRS	
278	2012	3	6	12	55	6.5		50.003	88.165	5	9.3	3.7	3.1				3.1	ASRS	
279	2012	3	7	3	12	19.8		51.745	96.020	17		3.6					3.1	ASRS	
280	2012	3	7	3	17	16.3		51.784	95.968	37		3.5					3.0	ASRS	
281	2012	3	7	12	5	1.5		51.763	95.989	3	9.9	3.7	3.3				3.3	ASRS	
282	2012	3	7	14	33	53.3		51.659	96.122	3	13.1	5.5	5.1	4.9	5.1			ASRS	
																4.1	4.1	OBN	
283	2012	3	7	15	5	21.7		51.704	96.111	2	11.3	4.2	4.1				4.0	ASRS	
284	2012	3	7	17	15	24.9		51.717	95.969	3	12.1	4.6	4.5	4.2	4.4		4.4	ASRS	
285	2012	3	7	18	0	21.4		51.734	96.023	6		3.8					3.3	ASRS	
286	2012	3	7	18	0	31.4		51.723	96.064	3		4.5		4.3	4.2		4.1	ASRS	
287	2012	3	8	12	21	18.7		51.787	96.027	4	10.8	3.8	3.8				3.7	ASRS	
288	2012	3	8	15	43	56.2		51.741	95.940	4	11.7	4.3	4.3				4.2	ASRS	
289	2012	3	8	19	19	32.0		51.729	96.083	4	11.2	3.7	3.9				3.8	ASRS	
290	2012	3	9	3	3	59.2		51.729	96.016	5	10.1	4.3	3.4				3.3	ASRS	
291	2012	3	9	13	59	14.0		51.676	96.024	5	10.0	4.2	3.3				3.3	ASRS	
292	2012	3	10	3	54	21.9		51.695	96.031	5	10.1	4.0	3.4				3.3	ASRS	

№	Дата, год	м	д	Время, t_0, ч	мин	с	δt_0, с	Гипоцентр φ, °N	λ, °E	h, км	K_P	Магнитуды ML	M_C	mb	mB	MS OBN	M	Код сети	I
293	2012	3	10	5	22	39.3		51.708	96.021	5	10.4	4.4	3.5	4.4	4.3		3.4	ASRS	
294	2012	3	11	6	59	9.1		51.649	96.037	5	11.8	4.1	4.4				4.3	ASRS	
295	2012	3	11	12	36	33.2		50.164	95.815	9	9.6	4.1	3.2				3.2	ASRS	
296	2012	3	11	14	40	29.8		51.737	95.916	5	10.3	4.4	3.6	4.0	4.1		3.5	ASRS	
297	2012	3	11	17	1	4.2		51.755	95.901	6	10.5	4.6	3.5	4.2	4.3		3.4	ASRS	
298	2012	3	12	4	58	39.9		51.732	95.899	5	10.0	4.2	3.3				3.3	ASRS	
299	2012	3	12	5	59	15.1		51.764	96.008	5		3.5					3.0	ASRS	
300	2012	3	14	2	5	39.5		51.677	95.988	5	11.5	4.2	4.2				4.1	ASRS	
301	2012	3	14	7	37	4.8		51.712	95.890	5	11.5	4.4	4.2				4.1	ASRS	
302	2012	3	14	10	4	21.0		51.733	95.872	5	10.6	4.0	3.7				3.6	ASRS	
303	2012	3	15	0	47	23.3		51.701	95.976	5		3.7					3.2	ASRS	
304	2012	3	15	8	21	9.9		46.353	80.831	20		3.6					3.1	ASRS	
305	2012	3	15	9	53	48.7		51.656	95.964	5	9.8	4.0	3.2				3.2	ASRS	
306	2012	3	15	19	17	4.8		51.809	95.891	5		4.1					3.7	ASRS	
307	2012	3	16	0	25	4.0		51.763	96.050	5	10.8	3.9	3.8				3.7	ASRS	
308	2012	3	16	10	4	8.0		51.623	96.062	5		3.8					3.3	ASRS	
309	2012	3	17	3	22	35.3		51.703	96.011	5	9.6	3.9	3.1				3.1	ASRS	
310	2012	3	17	6	27	19.5		51.733	96.101	5		3.5					3.0	ASRS	
311	2012	3	18	1	29	37.4		51.770	95.964	5	11.0	3.9	3.9				3.8	ASRS	
312	2012	3	18	5	0	6.4		51.726	95.989	5	12.6	5.0	4.8	4.7	4.8		4.7	ASRS	
313	2012	3	18	5	50	30.3		51.730	95.957	5		3.5					3.0	ASRS	
314	2012	3	19	19	31	53.2		51.745	95.869	5		3.6					3.1	ASRS	
315	2012	3	20	12	42	41.7		51.736	95.944	5	12.2	4.6	4.5	4.5	4.4		4.4	ASRS	
316	2012	3	20	20	32	5.5		51.621	95.903	5		3.9					3.4	ASRS	
317	2012	3	20	22	47	44.7		51.740	95.835	5	11.2	4.0	4.0				3.9	ASRS	
318	2012	3	21	15	13	55.0		51.738	95.961	5		3.7					3.2	ASRS	
319	2012	3	21	18	0	25.1		51.731	95.849	5	11.3	5.0	4.4	4.9	4.9		4.3	ASRS	
320	2012	3	23	10	10	13.0		51.648	96.016	5		3.9					3.4	ASRS	
321	2012	3	26	1	50	6.1		51.702	96.057	5	11.0	3.7	3.9				3.8	ASRS	
322	2012	3	26	8	29	36.1		51.756	95.891	5	11.2	3.9	4.0				3.9	ASRS	
323	2012	3	26	16	36	1.8		51.697	96.062	5		3.5					3.0	ASRS	
324	2012	3	26	23	20	16.3		51.700	95.990	5	10.1	4.2	3.5				3.4	ASRS	
325	2012	3	27	10	45	49.8		51.647	96.088	5		3.5					3.0	ASRS	
326	2012	3	28	8	18	14.7		51.716	95.987	5		3.6					3.1	ASRS	
327	2012	3	30	13	38	5.3		51.655	96.125	5	11.4	4.3	4.1				4.0	ASRS	
328	2012	3	31	23	41	44.9		51.682	96.029	10		3.5					3.0	ASRS	
329	2012	4	2	5	41	21.1		51.779	95.889	5		3.5					3.0	ASRS	
330	2012	4	2	10	50	31.2		51.653	96.041	5	11.5	4.6	4.2	4.2	4.2		4.1	ASRS	
331	2012	4	2	12	21	38.5		51.636	96.003	5		3.7					3.2	ASRS	
332	2012	4	4	11	45	56.9		51.886	95.880	5	10.4	3.7	3.6				3.5	ASRS	
333	2012	4	6	4	21	37.5		51.650	96.016	5		3.6					3.1	ASRS	
334	2012	4	7	12	37	56.6		51.680	95.984	5		4.2					3.8	ASRS	
335	2012	4	10	14	24	14.7		51.628	96.006	5	11.4	4.1	4.1				4.0	ASRS	
336	2012	4	11	3	6	37.5		51.679	95.942	5	12.1	4.3	4.5				4.4	ASRS	
337	2012	4	11	3	13	3.1		51.682	95.947	5	11.9	4.2	4.4				4.3	ASRS	
338	2012	4	11	5	16	36.5		51.642	95.960	5	11.2	3.9	4.0				3.9	ASRS	
339	2012	4	12	12	44	18.7		51.681	95.972	5		3.5					3.0	ASRS	
340	2012	4	13	1	35	37.4		50.770	90.552	10	9.3	3.6	3.0				3.0	ASRS	
341	2012	4	14	3	7	38.0		51.662	95.990	5		3.5					3.0	ASRS	
342	2012	4	16	2	18	38.0		54.392	94.893	10	11.7	4.9	4.3	4.3	4.5		4.2	ASRS	
343	2012	4	16	17	4	24.0		51.684	96.046	5	11.0	3.7	3.8				3.7	ASRS	
344	2012	4	16	21	56	1.0		49.415	93.448	15	10.3	3.5	3.5	3.4			3.4	ASRS	
345	2012	4	18	10	58	8.2		50.685	96.319	5		4.0					3.6	ASRS	
346	2012	4	19	21	24	42.2		51.715	95.979	5		3.5					3.0	ASRS	
347	2012	4	21	9	50	26.2		51.757	95.805	5		4.0					3.6	ASRS	
348	2012	4	21	10	59	39.1		53.016	97.272	5	10.5	3.7	3.6				3.5	ASRS	
349	2012	4	22	1	11	26.4		51.851	95.865	5	12.2	4.3	4.6	4.0	4.0		4.5	ASRS	
350	2012	4	26	4	11	1.1		51.713	96.044	5	12.3	4.6	4.6				4.5	ASRS	
351	2012	4	27	4	37	8.5		51.807	96.049	5	10.5	4.1	3.7				3.6	ASRS	
352	2012	4	27	17	40	23.2		53.699	87.922	0	10.8	3.8	3.8				3.7	ASRS	3
353	2012	4	29	3	13	59.5		51.689	95.998		10.5	4.4	3.5	4.1	4.2		3.4	ASRS	
354	2012	4	30	12	27	40.4		49.760	87.903	10	9.1	3.7	2.8				2.8	ASRS	

[3] Техногенное землетрясение.

№	Дата, год	м	д	Время, t_0, ч	мин	с	δt_0, с	Гипоцентр φ, °N	λ, °E	h, км	K_P	Магнитуды ML	M_C	mb	mB	MS OBN	M	Код сети	I
355	2012	5	1	10	30	40.9		49.744	87.948	10	10.1	3.8	3.4				3.3	ASRS	
356	2012	5	1	17	42	54.1		51.749	95.972	5	10.3	4.2	4.1				4.0	ASRS	
357	2012	5	3	9	39	50.4		51.689	95.975	5	10.8	3.7	3.8				3.7	ASRS	
358	2012	5	4	22	33	11.0		50.701	96.762	5		4.1					3.7	ASRS	
359	2012	5	12	14	49	42.4		51.850	95.833	5		3.5					3.0	ASRS	
360	2012	5	13	22	2	12.3		51.836	95.899			3.8					3.3	ASRS	
361	2012	5	14	12	43	49.3		51.714	95.970	5	9.6	4.0	3.0				3.0	ASRS	
362	2012	5	14	16	24	23.3		51.673	96.032		11.2	5.0	4.0	4.5	4.8		3.9	ASRS	
363	2012	5	14	18	26	58.3		51.693	95.966			3.5					3.0	ASRS	
364	2012	5	15	3	9	5.5		51.748	95.957		11.5	4.2	4.2				4.1	ASRS	
365	2012	5	17	11	42	36.4		50.911	86.166	5	9.6	3.7	2.8				2.8	ASRS	
366	2012	5	17	22	23	26.8		51.865	95.872	5		3.5					3.0	ASRS	
367	2012	5	19	15	52	27.5		51.838	95.920	3		3.7					3.2	ASRS	
368	2012	5	20	0	40	20.6		51.884	95.835	17		3.5					3.0	ASRS	
369	2012	5	20	15	59	56.0		51.668	95.981	3	10.2	4.8	3.4	4.2	4.4		3.3	ASRS	
370	2012	5	21	13	48	7.8		51.842	95.888		8.8	3.5	3.0				3.0	ASRS	
371	2012	5	23	7	6	42.2		51.618	95.994	5	9.9	4.1	3.3				3.3	ASRS	
372	2012	5	24	6	18	45.0		51.631	95.901	5		3.5					3.0	ASRS	
373	2012	5	25	17	57	22.5		51.688	96.037		10.8	4.6	3.7	4.3	4.3		3.6	ASRS	
374	2012	5	29	4	14	16.3		50.871	98.201	5		3.7					3.2	ASRS	
375	2012	5	31	5	32	19.4		51.621	95.982	5		3.7					3.2	ASRS	
376	2012	6	6	14	4	16.7		51.719	95.954	5	13.2	6.1	5.1	5.2	5.6			ASRS	
																4.8	4.8	OBN	
377	2012	6	6	16	16	20.3		51.706	96.022	5	13.0	4.8	5.0	4.5	4.7		4.9	ASRS	
378	2012	6	6	22	39	2.5		51.701	96.038	5	11.7	4.4	4.4	4.3	4.3		4.3	ASRS	
379	2012	6	8	14	50	53.8		51.820	95.832	5		3.6					3.1	ASRS	
380	2012	6	8	18	25	15.2		51.903	95.942	3		3.8					3.3	ASRS	
381	2012	6	10	1	29	9.4		49.945	88.141	2	9.0	3.8	3.0				3.0	ASRS	
382	2012	6	14	6	7	20.0		51.788	95.835	5	9.9	4.0	3.6				3.5	ASRS	
383	2012	6	15	19	52	16.7		46.690	84.312	10		4.1					3.7	ASRS	
384	2012	6	27	16	28	39.0		51.798	96.054	10	9.7	4.2	3.2				3.2	ASRS	
385	2012	6	29	22	56	18.5		50.378	86.361	2		3.8					3.3	ASRS	
386	2012	7	9	6	26	46.3		51.821	95.844	5		3.6					3.1	ASRS	
387	2012	7	10	4	49	54.5		50.707	96.619	5	10.3	4.4	3.6	4.5	4.5		3.5	ASRS	
388	2012	7	21	0	15	52.9		50.090	87.870	1	10.4	4.0	3.5				3.4	ASRS	
389	2012	7	23	3	50	50.9		51.750	95.933	5		3.6					3.1	ASRS	
390	2012	7	27	3	58	12.1		51.736	95.947	5	12.1	5.5	4.5	5.2	5.2			ASRS	
																4.3	4.3	OBN	
391	2012	7	27	10	31	58.6		51.810	95.913	5		3.7					3.2	ASRS	
392	2012	7	30	2	43	4.2		51.742	95.717	5		3.5					3.0	ASRS	
393	2012	7	30	22	30	42.6		50.495	87.314	12	13.3	6.1	5.1	6.0	5.7			ASRS	
																4.6	4.6	OBN	
394	2012	7	30	22	52	48.7		50.543	87.329	10		3.6					3.1	ASRS	
395	2012	7	31	0	0	21.8		51.824	95.799	10		3.7					3.2	ASRS	
396	2012	7	31	17	16	43.7		51.739	95.875	5	11.2	3.8	4.0				3.9	ASRS	
397	2012	8	8	23	2	28.5		51.134	97.938	5		4.2					3.8	ASRS	
398	2012	8	8	23	42	16.3		51.384	93.034	5	11.6	4.3	4.2				4.1	ASRS	
399	2012	8	13	15	46	32.6		51.319	90.257	10	9.8	4.1	3.2				3.2	ASRS	
400	2012	8	14	6	16	50.7		51.356	93.069	5	10.3	3.6	3.5				3.4	ASRS	
401	2012	8	16	7	53	1.1		51.759	95.915	5		4.0					3.6	ASRS	
402	2012	8	17	12	4	41.3		51.698	96.032	5	9.8	4.1	3.6				3.5	ASRS	
403	2012	8	18	0	4	32.7		51.714	96.053	5		3.7					3.2	ASRS	
404	2012	8	19	3	1	37.2		50.121	87.839	10		4.1					3.7	ASRS	
405	2012	8	19	4	38	13.5		49.955	88.162	10		3.6					3.1	ASRS	
406	2012	8	19	7	9	48.5		52.041	95.479	5		3.5					3.0	ASRS	
407	2012	8	20	2	35	41.7		50.570	97.243	5		3.8					3.3	ASRS	
408	2012	8	28	7	40	34.0		51.723	96.164	5	12.8	5.6	4.8	5.2	5.1			ASRS	
																4.5	4.5	OBN	
409	2012	8	28	8	56	43.9		51.728	96.037	5		3.5					3.0	ASRS	
410	2012	8	31	9	12	57.3		47.171	86.186	5	10.5	4.3	3.6				3.5	ASRS	
411	2012	9	3	0	59	48.4		51.839	95.814	5	10.0	4.2	3.6				3.5	ASRS	
412	2012	9	3	6	32	21.5		50.759	97.311	5		3.8					3.3	ASRS	
413	2012	9	3	7	52	30.3		51.936	95.796	5	11.5	4.7	4.2				4.1	ASRS	
414	2012	9	5	23	47	42.4		47.169	91.212			3.6					3.1	ASRS	
415	2012	9	7	12	31	28.5		51.875	95.786	5		3.5					3.0	ASRS	

№	Дата, *год*	*м*	*д*	Время, t_0, *ч*	*мин*	*с*	δt_0, *с*	Гипоцентр φ, °N	λ, °E	*h*, *км*	K_P	Магнитуды *ML*	M_C	*mb*	*mB*	*MS* OBN	*M*	Код сети	*I*
416	2012	9	8	9	13	12.5		48.804	85.832	10		3.5					3.0	ASRS	
417	2012	9	10	7	52	33.4		51.953	95.909	5		3.7					3.2	ASRS	
418	2012	9	16	10	4	17.9		52.485	95.209	5		3.8					3.3	ASRS	
419	2012	9	30	7	7	12.0		51.840	95.846	5		4.0					3.6	ASRS	
420	2012	9	30	7	51	53.7		51.856	95.825	5		3.6					3.1	ASRS	
421	2012	10	2	1	42	41.2		49.669	93.116	5		3.9					3.4	ASRS	
422	2012	10	3	14	20	26.3		49.988	87.944		10.0	3.6	3.4				3.3	ASRS	
423	2012	10	3	22	23	25.0		46.945	97.962	30	12.8	6.1	4.9	5.3	5.2			ASRS	
																4.0	4.0	OBN	
424	2012	10	4	10	17	5.4		50.874	93.520	10	10.8	3.8	3.8				3.7	ASRS	
425	2012	10	5	16	52	31.6		51.151	97.689	5		3.5					3.0	ASRS	
426	2012	10	6	5	10	13.9		51.610	95.994	5		3.5					3.0	ASRS	
427	2012	10	7	4	21	38.3		51.716	95.896	5		3.5					3.0	ASRS	
428	2012	10	8	16	9	32.9		50.646	87.355	10	9.8	3.8	3.2				3.2	ASRS	
429	2012	10	9	21	56	43.3		47.272	92.737	5		3.7					3.2	ASRS	
430	2012	10	11	10	41	8.1		51.730	96.035	5	10.5	4.4	3.7				3.6	ASRS	
431	2012	10	12	7	13	31.4		46.384	86.417	10		3.5					3.0	ASRS	
432	2012	10	13	21	31	48.2		51.667	95.938	5	10.8	4.0	3.8				3.7	ASRS	
433	2012	10	15	4	23	21.9		49.730	93.571	5		3.7					3.2	ASRS	
434	2012	10	16	8	40	33.2		51.796	96.075	5	8.6	3.8	2.5				2.5	ASRS	
435	2012	10	18	21	56	29.5		51.675	95.903	5		3.8					3.3	ASRS	
436	2012	10	19	4	4	47.2		51.766	95.968	5		4.0					3.6	ASRS	
437	2012	10	19	13	55	7.1		50.356	91.267	5		3.6					3.1	ASRS	
438	2012	10	20	17	54	36.3		51.442	94.285	5		3.8					3.3	ASRS	
439	2012	10	20	22	46	37.5		49.870	88.184		11.7	5.1	4.0	4.9	5.1		3.9	ASRS	
440	2012	10	23	0	33	57.0		51.815	95.987		10.6	4.2	3.9				3.8	ASRS	
441	2012	10	23	13	12	54.0		51.718	95.945	5	10.5	3.5	3.5				3.4	ASRS	
442	2012	10	27	7	11	23.0		48.735	88.958	10	9.1	3.7	2.7				2.7	ASRS	
443	2012	11	3	9	54	0.7		47.722	82.560	5	10.5	3.6	3.6				3.5	ASRS	
444	2012	11	5	6	14	13.4		51.946	95.874	5		4.3					3.9	ASRS	
445	2012	11	5	20	1	53.5		51.690	96.081	5		3.5					3.0	ASRS	
446	2012	11	6	22	45	48.2		50.037	85.197	10	9.8	4.0	3.2				3.2	ASRS	
447	2012	11	7	10	11	24.5		51.671	96.006	5		3.9					3.4	ASRS	
448	2012	11	9	4	47	32.4		52.406	94.732	5		4.0					3.6	ASRS	
449	2012	11	10	9	24	21.2		50.732	96.253	5	11.4	4.6	4.1	4.6	4.6		4.0	ASRS	
450	2012	11	11	7	26	3.3		51.668	96.018	5		3.7					3.2	ASRS	
451	2012	11	16	9	9	5.7		51.720	95.968	5	10.0	4.0	3.5				3.4	ASRS	
452	2012	11	17	1	57	25.7		49.193	86.933	10		3.7					3.2	ASRS	
453	2012	11	17	3	45	51.5		51.723	95.965	5		3.7					3.2	ASRS	
454	2012	11	24	17	57	48.5		50.201	87.740	10	10.5	4.3	3.5				3.4	ASRS	
455	2012	11	26	5	26	5.8		50.718	96.348			3.8					3.3	ASRS	
456	2012	12	7	18	5	54.6		51.967	95.870	5	9.5	4.0	3.4				3.3	ASRS	
457	2012	12	8	9	20	10.6		50.690	97.109	5		3.5					3.0	ASRS	
458	2012	12	9	23	11	29.3		51.782	96.081	5		4.0					3.6	ASRS	
459	2012	12	15	8	23	16.3		49.847	88.252	10		3.6					3.1	ASRS	
460	2012	12	17	2	25	28.0		50.680	91.303	5	9.0	3.7					2.3	ASRS	
461	2012	12	20	9	29	49.2		51.674	95.996	5	9.8	4.1	3.1				3.1	ASRS	
462	2012	12	26	1	57	49.9		51.796	95.885	5	9.0	3.8	3.2				3.2	ASRS	
463	2012	12	27	2	40	9.6		51.414	93.974	5	10.6	3.7	3.3				3.3	ASRS	
464	2012	12	29	12	50	41.4		51.677	96.051	5		4.0					3.6	ASRS	
465	2012	12	31	19	47	48.1		51.798	95.834	5		3.6					3.1	ASRS	