

## V.4. Алтай и Саяны ( $M \geq 2.3$ )

по данным А-СФ ГС СО РАН (ASRS)

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№	Дата,			Время, $t_0$ ,			$\delta t_0$ , с	Гипоцентр						$K_p$	Магнитуды		Код сети	I
	год	м	д	ч	мин	с		$\varphi$ , °N	$\delta\varphi$ , °	$\lambda$ , °E	$\delta\lambda$ , °	$h$ , км	$\delta h$ , км		$M_c$	M		
1	2009	1	5	4	36	16.40	0.24	50.78	0.01	89.45	0.02			8.2		2.3	ASRS	
2	2009	1	9	13	50	48.20	0.28	50.34	0.02	97.74	0.01			11.0	3.5	3.9	ASRS	
3	2009	1	9	14	39	2.90	0.75	47.73	0.03	89.46	0.04			8.2		2.3	ASRS	
4	2009	1	10	19	54	30.10	0.50	49.43	0.02	88.41	0.02			9.9	3.2	3.3	ASRS	
5	2009	1	13	12	22	3.70	0.26	51.27	0.02	98.00	0.01			8.9		2.7	ASRS	
6	2009	1	17	9	6	26.70	0.35	50.27	0.03	97.71	0.02			10.5	3.4	3.6	ASRS	
7	2009	1	20	0	34	44.80	0.30	52.23	0.04	98.31	0.02			8.6		2.6	ASRS	
8	2009	1	21	16	14	9.04	0.07	50.149	0.013	87.774	0.008	11	4	8.3		2.4	ASRS	
9	2009	1	23	16	40	6.80	0.50	50.25	0.03	97.74	0.02			8.2		2.3	ASRS	
10	2009	1	23	21	6	21.80	1.19	46.61	0.05	80.49	0.08			8.2		2.3	ASRS	
11	2009	1	24	15	37	43.83	0.08	49.871	0.011	88.267	0.007	9	2	9.8	3.3	3.2	ASRS	
12	2009	1	26	4	34	8.40	0.40	49.52	0.02	96.98	0.02			8.8		2.7	ASRS	
13	2009	1	26	11	41	22.60	0.60	47.90	0.03	84.22	0.04			8.9	2.8	2.7	ASRS	
14	2009	1	26	12	50	6.70	0.52	47.93	0.02	84.24	0.03			8.8	2.6	2.7	ASRS	
15	2009	1	30	22	31	3.48	0.07	49.853	0.011	88.202	0.007	5	3	9.1	2.8	2.8	ASRS	
16	2009	2	4	17	3	10.60	0.64	48.08	0.03	92.65	0.03			8.2		2.3	ASRS	
17	2009	2	13	23	32	45.50	0.48	46.83	0.02	84.61	0.04			11.3	4.1	4.1	ASRS	
18	2009	2	14	10	16	56.00	0.25	53.03	0.03	96.35	0.02			10.1	2.8	3.4	ASRS	
19	2009	2	15	2	38	57.50	0.71	46.46	0.03	84.59	0.06			8.5		2.5	ASRS	
20	2009	2	17	0	26	56.30	0.73	46.84	0.03	84.61	0.06			10.1	3.6	3.4	ASRS	
21	2009	2	20	2	7	23.00	0.29	52.16	0.03	98.25	0.02			8.6	2.6	2.6	ASRS	
22	2009	2	25	5	55	28.90	0.47	49.56	0.02	88.98	0.02			8.1		2.3	ASRS	
23	2009	2	25	7	31	33.77	0.13	50.211	0.006	87.611	0.004	9	1	9.0	2.7	2.8	ASRS	
24	2009	2	27	1	4	24.80	0.63	46.90	0.03	84.70	0.05			8.3		2.4	ASRS	
25	2009	2	28	22	32	18.60	0.27	49.89	0.01	90.81	0.01			8.3		2.4	ASRS	
26	2009	3	11	12	45	22.59	0.02	50.200	0.027	87.695	0.017	12	2	10.1	3.5	3.4	ASRS	
27	2009	3	20	6	33	10.00	0.21	52.11	0.01	88.89	0.02			9.8	3.2	3.2	ASRS	
28	2009	3	23	18	7	40.90	0.37	50.29	0.03	97.70	0.02			8.3		2.4	ASRS	
29	2009	3	24	11	8	16.10	0.38	54.71	0.02	93.33	0.03			11.6	4.1	4.2	ASRS	1
																3.6	OBN	
30	2009	3	29	1	50	51.77	0.12	50.177	0.007	87.784	0.005	8	3	8.3		2.4	ASRS	
31	2009	3	30	6	30	11.80	0.47	49.43	0.03	96.87	0.02			8.1		2.3	ASRS	
32	2009	4	2	0	55	27.10	0.62	48.17	0.03	90.67	0.04			8.3		2.4	ASRS	
33	2009	4	4	6	41	36.20	0.69	46.77	0.03	83.45	0.06			9.3	2.9	2.9	ASRS	
34	2009	4	4	20	17	9.60	0.34	52.25	0.04	98.25	0.02			8.2		2.3	ASRS	
35	2009	4	7	14	7	24.10	0.25	52.00	0.03	98.60	0.01			9.5	2.9	3.1	ASRS	
36	2009	4	7	21	59	27.10	0.49	51.52	0.03	93.64	0.04			9.9	3.2	3.3	ASRS	
37	2009	4	8	8	53	26.40	1.07	47.81	0.05	89.47	0.06			8.1		2.3	ASRS	
38	2009	4	9	2	33	38.78	0.17	50.125	0.006	87.754	0.004	4	3	8.1		2.3	ASRS	
39	2009	4	14	16	8	2.36	0.10	49.886	0.028	88.263	0.018	8	f	8.8	2.6	2.7	ASRS	
40	2009	4	16	15	23	29.00	0.94	48.44	0.04	86.59	0.04			9.1	2.8	2.8	ASRS	
41	2009	4	17	18	46	4.31	0.13	50.015	0.010	88.861	0.006	5	3	10.3	3.1	3.5	ASRS	
42	2009	4	23	16	3	59.16	0.05	49.944	0.013	87.970	0.008	8	f	8.7	2.5	2.6	ASRS	

<sup>1</sup> Крельское землетрясение. Ж/д станция Крол – 4–4.5 балла; Жайма – 4 балла; Щетинкино, Артемовск, Краснокаменск, Кошурниково, Выежий Лог – 3 балла; Степной Баджей, Орешное, Нарва, Красноярск, Абакан – 2–2.5 балла.

Каталоги землетрясений по различным регионам России

№	Дата,			Время, $t_0$ ,			$\delta t_0$ , с	Гипоцентр						$K_p$	Магнитуды		Код сети	I
	год	м	д	ч	мин	с		$\varphi$ , °N	$\delta\varphi$ , °	$\lambda$ , °E	$\delta\lambda$ , °	$h$ , км	$\delta h$ , км		Ms	M		
43	2009	4	28	15	7	57.10	0.49	51.25	0.02	89.77	0.04			9.1	2.6	2.8	ASRS	
44	2009	4	30	2	34	58.40	0.06	50.023	0.038	87.931	0.025	5	f	8.4		2.4	ASRS	
45	2009	5	1	1	23	49.81	0.12	50.202	0.022	87.543	0.014	5	f	8.3		2.4	ASRS	
46	2009	5	2	8	53	31.70	0.34	50.29	0.03	98.24	0.02			9.7	3.0	3.2	ASRS	
47	2009	5	2	10	47	55.17	0.09	50.130	0.008	87.750	0.005	2	1	9.0	2.8	2.8	ASRS	
48	2009	5	4	0	19	15.42	0.06	49.747	0.014	87.850	0.009	8	f	9.1	2.6	2.8	ASRS	
49	2009	5	4	1	17	16.82	0.06	50.188	0.025	87.661	0.016	10	2	8.4		2.4	ASRS	
50	2009	5	9	19	35	12.20	0.67	49.83	0.03	91.77	0.04			9.3	2.7	2.9	ASRS	
51	2009	5	12	11	45	41.00	0.32	50.65	0.03	97.46	0.02			9.0	2.3	2.8	ASRS	
52	2009	5	12	12	33	50.90	0.29	50.72	0.03	97.46	0.01			10.2	2.9	3.4	ASRS	
53	2009	5	21	6	35	41.48	0.05	50.085	0.008	87.574	0.005	6	2	8.6	2.3	2.6	ASRS	
54	2009	5	21	22	29	14.28	0.07	50.080	0.008	87.568	0.005	5	3	8.9	2.7	2.7	ASRS	
55	2009	5	22	20	20	2.00	1.36	48.26	0.05	98.54	0.07			8.1		2.3	ASRS	
56	2009	5	27	3	33	31.60	0.38	54.12	0.03	97.54	0.02			8.9	2.3	2.7	ASRS	
57	2009	5	30	0	46	18.80	0.62	51.36	0.02	93.07	0.04			8.5		2.5	ASRS	
58	2009	6	2	9	1	24.90	0.27	51.26	0.01	89.63	0.02			8.3		2.4	ASRS	
59	2009	6	2	21	9	59.40	0.82	46.88	0.04	90.06	0.05			9.4	3.0	3.0	ASRS	
60	2009	6	5	3	30	23.10	0.57	49.39	0.02	84.00	0.03			11.2	4.1	4.0	ASRS	
61	2009	6	14	14	28	2.60	0.19	49.785	0.014	88.274	0.009	5	1	8.3		2.4	ASRS	
62	2009	6	17	17	37	37.80	0.23	51.84	0.03	98.18	0.01			9.1		2.8	ASRS	
63	2009	6	23	3	38	26.90	0.74	49.01	0.03	89.62	0.04			8.2		2.3	ASRS	
64	2009	6	25	1	29	29.79	0.16	49.987	0.007	87.846	0.005	8	f	8.8	2.6	2.7	ASRS	
65	2009	7	1	12	37	41.10	0.42	51.12	0.02	91.82	0.03			8.7	2.4	2.6	ASRS	
66	2009	7	5	5	28	13.97	0.13	50.506	0.008	87.381	0.005	5	1	9.0		2.8	ASRS	
67	2009	7	5	5	28	15.32	0.10	50.497	0.011	87.403	0.007	6	1	9.1		2.8	ASRS	
68	2009	7	5	20	36	23.60	0.25	51.06	0.02	97.77	0.01			11.4	3.8	4.1	ASRS	
69	2009	7	9	23	36	49.97	0.08	50.057	0.006	87.561	0.004	5	3	8.4		2.4	ASRS	
70	2009	7	16	18	25	23.00	0.48	50.14	0.02	91.97	0.03			8.5		2.5	ASRS	
71	2009	7	17	7	36	2.30	0.51	49.87	0.02	90.80	0.03			9.6	2.8	3.1	ASRS	
72	2009	7	23	3	41	59.40	0.38	50.65	0.03	97.42	0.02			9.9	2.9	3.3	ASRS	
73	2009	7	24	16	28	51.35	0.11	49.862	0.029	88.246	0.018	5	f	8.1		2.3	ASRS	
74	2009	7	30	18	4	37.90	0.45	49.14	0.02	91.20	0.03			9.0	2.7	2.8	ASRS	
75	2009	8	4	16	20	38.70	0.26	50.66	0.03	96.85	0.01			13.6	5.1	5.3	ASRS	2
76	2009	8	5	23	26	55.40	0.29	50.64	0.02	96.90	0.02			8.2		2.3	ASRS	
77	2009	8	6	3	52	29.56	0.07	50.029	0.013	87.911	0.009	13	3	8.4		2.4	ASRS	
78	2009	8	19	2	26	29.20	0.20	51.02	0.01	88.96	0.02			9.0	2.7	2.8	ASRS	
79	2009	8	19	5	38	26.10	0.42	50.61	0.04	96.83	0.02			8.3		2.4	ASRS	
80	2009	8	20	10	5	19.70	0.28	51.36	0.01	89.18	0.02			11.7	4.0	4.3	ASRS	
81	2009	8	20	17	42	1.70	0.53	50.71	0.02	92.49	0.04			8.4		2.4	ASRS	
82	2009	8	26	8	30	27.20	0.39	50.58	0.02	88.83	0.03			8.1		2.3	ASRS	
83	2009	8	26	17	16	57.50	0.40	51.27	0.02	90.12	0.03			8.5		2.5	ASRS	
84	2009	9	2	9	32	9.92	0.12	50.042	0.011	87.490	0.007	5	3	10.5	3.2	3.6	ASRS	
85	2009	9	3	8	54	48.90	0.30	51.08	0.03	98.44	0.01			8.8	2.8	2.7	ASRS	
86	2009	9	4	11	59	47.10	0.49	50.70	0.04	96.36	0.02			8.4		2.4	ASRS	
87	2009	9	5	20	7	47.30	0.22	52.02	0.01	88.27	0.02			8.7	2.5	2.6	ASRS	
88	2009	9	7	4	32	50.58	0.08	49.886	0.030	88.136	0.019	8	f	8.6	2.5	2.6	ASRS	
89	2009	9	12	4	54	4.00	0.29	52.20	0.04	98.08	0.02			9.1	2.8	2.8	ASRS	
90	2009	9	18	0	9	44.14	0.06	50.163	0.016	87.715	0.010	9	2	10.7	3.5	3.7	ASRS	
91	2009	9	20	10	56	38.50	0.78	49.04	0.04	88.07	0.04			10.6	3.4	3.7	ASRS	
92	2009	9	21	8	31	50.89	0.07	49.852	0.015	88.225	0.010	4	f	8.2		2.3	ASRS	
93	2009	9	23	14	52	17.35	0.08	50.010	0.019	87.873	0.013	11	4	8.6	2.3	2.6	ASRS	
94	2009	9	24	16	2	39.20	1.44	47.18	0.06	81.45	0.09			8.5		2.5	ASRS	
95	2009	9	24	23	2	59.10	0.72	46.72	0.03	90.22	0.05			11.7	4.2	4.3	ASRS	
96	2009	9	26	15	23	23.10	0.57	47.70	0.03	88.97	0.03			11.6	4.0	4.2	ASRS	
97	2009	9	27	7	47	11.34	0.06	50.223	0.010	87.612	0.006	7	2	9.7	3.0	3.2	ASRS	
98	2009	9	27	23	44	13.90	0.34	51.22	0.03	98.51	0.02			8.1		2.3	ASRS	
99	2009	9	30	4	44	30.70	0.29	50.96	0.03	97.72	0.02			9.1	2.6	2.8	ASRS	
100	2009	10	5	23	42	35.35	0.23	50.353	0.010	87.793	0.006	9	2	10.4	3.3	3.6	ASRS	
101	2009	10	22	2	12	51.40	0.36	50.57	0.03	96.87	0.02			8.6		2.6	ASRS	
102	2009	11	1	3	24	30.70	0.07	49.910	0.018	88.601	0.012	14	2	8.3		2.4	ASRS	

<sup>2</sup> Кызыл – 4 балла; Закаменск – 3–4 балла; Иркутск – 2 балла.

№	Дата,			Время, $t_0$ ,			$\delta t_0$ , с	Гипоцентр						$K_p$	Магнитуды		Код сети	I
	год	м	д	ч	мин	с		$\varphi$ , °N	$\delta\varphi$ , °	$\lambda$ , °E	$\delta\lambda$ , °	$h$ , км	$\delta h$ , км		$M_c$	$M$		
103	2009	11	2	8	35	53.10	0.81	47.53	0.04	82.93	0.06			9.8	3.0	3.2	ASRS	
104	2009	11	3	16	20	55.10	0.34	50.29	0.01	90.14	0.02			8.2		2.3	ASRS	
105	2009	11	6	11	11	55.20	0.63	46.85	0.03	90.17	0.04			8.2		2.3	ASRS	
106	2009	11	8	8	35	45.70	0.24	50.75	0.02	97.90	0.01			8.3		2.4	ASRS	
107	2009	11	10	18	20	24.20	0.85	47.60	0.04	82.79	0.07			8.2		2.3	ASRS	
108	2009	11	13	22	18	38.30	0.56	49.35	0.04	97.02	0.02			8.5		2.5	ASRS	
109	2009	11	14	12	20	9.20	0.27	51.13	0.02	98.28	0.01			8.1		2.3	ASRS	
110	2009	11	18	4	7	28.80	0.28	50.59	0.03	96.89	0.01			8.5		2.5	ASRS	
111	2009	11	19	15	39	45.80	0.19	51.55	0.02	97.10	0.01			8.5		2.5	ASRS	
112	2009	11	21	16	26	52.50	0.54	46.83	0.03	83.40	0.05			8.2		2.3	ASRS	
113	2009	11	23	22	52	28.10	0.89	53.84	0.04	77.70	0.07			8.6		2.6	ASRS	
114	2009	11	25	6	13	21.50	1.49	46.70	0.06	89.91	0.11			8.4		2.4	ASRS	
115	2009	12	1	4	20	54.70	0.36	50.89	0.03	97.84	0.02			8.2		2.3	ASRS	
116	2009	12	5	1	45	20.60	0.85	49.13	0.05	98.72	0.03			8.5		2.5	ASRS	
117	2009	12	5	11	44	37.46	0.20	49.811	0.019	88.197	0.012	3	f	8.3		2.4	ASRS	
118	2009	12	5	13	9	55.47	0.11	49.812	0.011	88.197	0.007	2	3	9.7	2.9	3.2	ASRS	
119	2009	12	6	0	8	5.90	0.58	49.65	0.04	97.91	0.02			8.3		2.4	ASRS	
120	2009	12	6	12	32	14.60	0.68	46.89	0.03	82.03	0.06			11.6	3.8	4.2	ASRS	
121	2009	12	14	7	35	29.90	0.52	50.73	0.04	96.40	0.02			8.3		2.4	ASRS	
122	2009	12	21	23	54	31.44	0.17	49.886	0.017	88.073	0.011	4	4	9.1	2.7	2.8	ASRS	
123	2009	12	25	0	51	52.40	0.63	51.93	0.03	95.88	0.05			9.8	3.0	3.2	ASRS	
124	2009	12	27	10	42	16.01	0.07	50.114	0.034	87.790	0.022	6	f	10.7	3.5	3.7	ASRS	