

Supplementary material

Introduction

The moment tensor inversion parameters of the earthquakes ($M > 3.5$) that occurred in the study area after May 19, 2011, Simav earthquake are determined by using the computer algorithm ISOLA. The parameters

Table S1: Earthquake parameters and moment tensor inversion solutions

Event number	Origin time	Latitude (°)	Longitude (°)	Depth (km)	M	Number of stations	VR	CN	FMVAR	STVAR	Strike 1 (°)	Dip 1 (°)	Rake 1 (°)	Strike 2 (°)	Dip 2 (°)	Rake 2 (°)
1	20040417_03:38:40.40	39.14	29.48	6	4.1	5	0.29	3.9	30	0.1	266	73	-101	118	20	-59
2	20071118_10:48:23.68	38.9567	29.8345	5.4	4.1	8	0.55	8.6	6	0.09	291	85	-84	63	3	-138
3	20080930_07:30:00.83	38.9857	29.8647	5.4	4.6	9	0.64	9.2	6	0.07	274	59	-84	81	32	-100
4	20090915_09:23:47.45	39.0945	29.044	10.2	4	11	0.56	8.7	33	0.09	251	57	-145	140	61	-38
5	20100302_00:43:13.80	39.16	29.02	8	4.4	11	0.52	7.4	8	0.08	291	60	-79	91	32	-107
6	20100302_00:59:43.08	39.1347	29.094	6.4	4.3	9	0.52	8.8	32	0.12	93	41	-95	280	49	-86
7	20110519_19:59:46.80	39.119	29.09	14	4	10	0.67	8.6	7	0.12	254	90	-102	162	12	-2
8	20110519_20:15:22.70	39.12	29.092	16	5.9	7	0.52	4.7	11	0.08	265	68	-109	127	29	-52
9	20110519_21:21:30.40	39.108	29.027	7.7	4.3	12	0.67	6.7	10	0.11	317	67	-70	94	30	-129
10	20110519_21:33:10.80	39.118	29.091	11.3	4.3	11	0.52	9.2	13	0.08	41	19	-174	305	88	-71
11	20110519_22:19:04.50	39.11	28.978	2.3	4	15	0.55	9.9	43	0.57	267	59	-73	55	35	-116
12	20110520_00:13:08.60	39.136	29.1	10.4	4.1	16	0.54	8.9	5	0.16	270	70	-108	113	27	-50
13	20110520_00:58:33.80	39.117	29.089	8.1	4.3	12	0.61	9.2	10	0.13	284	78	-79	62	16	-131
14	20110520_04:00:36.00	39.132	28.986	6.5	4	19	0.59	7.8	5	0.07	302	65	-75	90	29	-119
15	20110520_05:00:36.70	39.118	29.082	6.5	4.2	16	0.52	7.7	18	0.09	302	78	-56	50	36	-159
16	20110521_21:43:08.90	39.102	29.046	6.9	4	15	0.53	6	10	0.1	329	70	-79	120	22	-117
17	20110524_02:55:29.90	39.097	29.011	6.7	4.2	10	0.51	8.7	9	0.07	311	30	-30	67	76	-116
18	20110527_07:43:38.00	39.114	29.093	9.3	4.4	11	0.55	8.4	10	0.1	294	80	-67	48	25	-155
19	20110528_05:47:17.80	39.109	29.026	9.1	4.7	18	0.62	2.9	23	0.16	314	63	-75	104	31	-116

Table S1: continued

Event number	Origin time	Latitude (°)	Longitude (°)	Depth (km)	M	Number of stations	VR	CN	FMVAR	STVAR	Strike 1 (°)	Dip 1 (°)	Rake 1 (°)	Strike 2 (°)	Dip 2 (°)	Rake 2 (°)
20	20110528_18:06:48.20	39.1	29.031	4.4	4	14	0.53	5.6	11	0.09	311	62	-22	52	71	-151
21	20110530_22:03:36.10	39.12	29.008	11.6	4	13	0.51	7.1	6	0.08	263	49	-144	148	63	-47
22	20110604_13:51:06.90	39.111	29.072	8.9	4.1	15	0.58	7.8	6	0.08	272	38	-76	74	54	-101
23	20110605_21:29:13.30	39.143	29.082	10.6	4	16	0.53	4.8	14	0.17	266	81	-98	128	13	-49
24	20110627_21:13:59.30	39.112	29.025	9.2	5	16	0.51	6.4	11	0.09	300	72	-81	94	20	-114
25	20110627_21:28:51.70	39.106	29.035	10.1	4.4	15	0.52	7.7	11	0.1	319	77	-96	165	14	-64
26	20110629_11:40:48.70	39.124	29.005	4.2	4	14	0.57	8.5	12	0.08	240	52	-141	124	60	-45
27	20110703_14:16:29.40	39.115	29.01	6.3	4.1	14	0.52	5.6	16	0.07	215	51	-103	55	41	-75
28	20110713_01:31:50.00	39.112	29.03	4.2	4.3	16	0.52	6.3	12	0.09	341	74	-49	89	43	-157
29	20110719_21:16:53.70	39.115	29.066	6.7	4.1	13	0.54	6.3	9	0.07	300	64	-101	144	28	-68
30	20110825_04:19:24.20	39.137	29.076	10	4.3	19	0.56	8.4	5	0.09	274	76	-80	58	17	-126
31	20120416_12:19:03.40	39.142	29.137	2.5	4	9	0.5	8.9	12	0.08	268	61	-99	107	30	-74
32	20120417_20:45:18.00	39.134	29.1	4.2	4.3	18	0.52	8.6	9	0.09	46	38	-173	310	86	-52
33	20120419_19:52:42.30	39.134	29.141	0.3	4.6	15	0.55	5.7	27	0.14	268	60	-70	51	36	-121
34	20120420_16:39:16.70	39.167	29.085	5.7	4.2	16	0.5	6.2	15	0.07	322	70	-3	53	88	-160
35	20120423_16:14:37.70	39.114	29.138	2	4.2	14	0.46	8.1	19	0.14	144	86	50	50	40	174
36	20120426_22:05:34.80	39.128	29.099	4.3	4.9	16	0.58	8	18	0.12	297	74	-67	60	28	-144
37	20120503_15:20:26.40	39.159	29.11	3	5.1	14	0.54	9.4	28	0.13	90	35	-95	276	55	-87
38	20120503_16:16:04.90	39.103	29.085	0.7	4.4	10	0.51	6.4	11	0.12	297	64	-100	140	28	-69
39	20120503_17:10:10.50	39.134	29.118	7.5	4.4	19	0.62	7.4	6	0.09	269	78	-99	126	15	-54
40	20120503_21:45:17.90	39.141	29.091	10	4.7	13	0.57	9.6	6	0.12	93	28	-93	277	62	-88
41	20120504_02:00:36.50	39.12	29.127	8	4.5	12	0.68	6.2	7	0.11	300	15	-62	92	77	-97
42	20120509_17:49:32.30	39.145	29.135	6.4	4.4	9	0.59	7.9	9	0.1	291	61	-64	65	38	-129
43	20120611_03:49:04.10	39.116	29.147	4	4	7	0.67	7.2	7	0.12	282	79	-87	84	11	-108
44	20120613_06:40:32.50	39.118	29.142	5.3	4.3	7	0.67	2.1	7.4	0.11	277	80	-92	110	11	-77
45	20120619_01:46:14.00	39.129	29.147	10.3	4.9	11	0.66	6.6	26	0.25	294	28	-65	86	64	-103
46	20121030_00:12:36.10	39.108	29.152	14.8	4	8	0.52	8.9	10	0.11	297	38	-72	94	54	-104

Table S1: continued

Event number	Origin time	Latitude (°)	Longitude (°)	Depth (km)	M	Number of stations	VR	CN	FMVAR	STVAR	Strike 1 (°)	Dip 1 (°)	Rake 1 (°)	Strike 2 (°)	Dip 2 (°)	Rake 2 (°)
47	20130529_14:43:31.64	39.143	29.1	4	4.4	16	0.54	7.7	5	0.08	248	44	-123	111	54	-62
48	20130807_05:20:31.81	39.2	29.453	9.5	4.4	12	0.57	7.7	10	0.11	267	68	-124	149	40	-35
49	20140715_12:25:52.46	39.177	29.088	5	4	15	0.44	8.6	5	0.07	237	71	-170	144	80	-19
50	20141126_00:04:47.10	39.336	29.042	5	4.1	21	0.58	8.8	4	0.07	249	50	-148	137	66	-45
51	20141128_02:30:06.80	39.346	29.016	3.9	4.6	10	0.59	6.9	4	0.09	254	41	-147	138	69	-54
52	20150416_15:19:46.71	39.1615	29.103	8.2	3.7	8	0.5	8.5	22	0.16	62	66	168	157	79	25
53	20150922_06:25:05.60	39.1413	29.126	10.1	4.1	11	0.57	9.8	13	0.12	273	31	-74	74	60	-100
54	20150922_07:11:11.30	39.1385	29.109	4.9	4.1	9	0.61	10	8	0.12	266	67	-87	79	24	-96
55	20151013_23:18:10.60	39.1508	29.068	4.6	4.3	9	0.68	9.6	4	0.09	284	59	-100	122	33	-75
56	20151018_03:29:30.76	39.1588	29.1355	9.4	3.7	13	0.63	5.7	4	0.06	250	69	-115	123	32	-41
57	20160319_20:50:29.83	39.1575	29.1133	7.7	3.7	7	0.49	5.1	20	0.09	243	63	-120	115	39	-46
58	20160319_21:01:16.23	39.1562	29.1107	5.9	3.6	7	0.34	4.8	6	0.09	251	63	-126	129	44	-41
59	20160915_18:33:55.68	39.2027	29.0187	5.4	3.8	13	0.54	5.8	8	0.08	63	71	-161	326	72	-20

Column 1. Event number.

Column 3 "Origin Time," yyyyymmdd hh:mm:ss.msec, event time from the revised catalog.

Column 4. "Latitude," degrees, latitude of the earthquake hypocenter from the revised catalog, north of equator.

Column 5. "Longitude," degrees, longitude of earthquake hypocenter from the revised catalog, east of Greenwich.

Column 6. "Depth," km, depth of hypocenter from the revised catalog.

Column 7. "M," magnitude unit, local magnitude of event from the revised catalog.

Column 8. "Number of stations," number of stations used to compute moment tensor inversion result of ISOLA.

Column 9. "VR," variance reduction from moment tensor inversion result of ISOLA.

Column 10. "CN," condition number from moment tensor inversion result of ISOLA.

Column 11. "FMVAR," focal mechanism variability index from moment tensor inversion result of ISOLA.

Column 12. "STVAR," space-time variability index from moment tensor inversion result of ISOLA.

Column 13. "Strike 1," degree, strike of the fault plane from moment tensor inversion result of ISOLA.

Column 14. "Dip 1," degree, dip of the fault plane from moment tensor inversion result of ISOLA.

Column 15. "Rake 1," degree, rake of the fault plane from moment tensor inversion result of ISOLA.

Column 16. "Strike 2," degree, strike of the fault plane from moment tensor inversion result of ISOLA.

Column 17. "Dip 2," degree, dip of the fault plane from moment tensor inversion result of ISOLA.

Column 18. "Rake 2," degree, rake of the fault plane from moment tensor inversion result of ISOLA.