

PRELIMINARY REPORT

KÜTAHYA-SİMAV EARTHQUAKE ML=5.4 (WESTERN TURKEY)



REPUBLIC OF TURKEY
PRIME MINISTRY
DISASTER AND EMERGENCY MANAGEMENT PRESIDENCY
EARTHQUAKE DEPARTMENT

KÜTAHYA-SİMAV EARTHQUAKE (WESTERN TURKEY) ML=5.4

An earthquake with magnitude $M_I=5.4$ occurred at local time 18:20 on May, 03, 2012. Epicentral coordinates of the earthquake was determined as 39.1292 N - 29.1022 E with focal depth 10.09 km. After this earthquake, 206 earthquakes were determined with magnitude range 1.5 – 4.7 in first fifteen hours (Fig.1)(Table-1). This earthquake was also felt in neighbour provinces, Manisa, İzmir and Afyonkarahisar. It didn't caused loss of life and damage.

Focal Mechanism Solutions performed by considering first motion direction of P wave of $M_I=5.4$ and $M_I=4.5$ earthquakes are emerged from normal faulting (Fig.2).

This region is effected by Gediz-Emet Fault Zone, Simav Fault Zone, Kütahya Fault Zone and Naşa Fault Zone. Kütahya has been exposed to destructive earthquakes during the historical times. Destructive earthquakes that occurred in the last century are given as; 2011 $M_I=5.7$ Simav, 2009 $M_I=4.8$, 1970 $M=7.2$ Gediz, 1970 $M=5.9$ Çavdarhisar, 1944 $M=6.2$ Şaphane, 1928 $M=6.2$ Emet earthquakes (Fig.3).

May 03, 2012 Kütahya-Simav Earthquake was recorded by accelerometers at 27 different locations within National Strong Ground Motion Observation Network operated by Earthquake Department at Disaster and Emergency Management Presidency of Turkey. Peak ground acceleration values recorded at Simav station which is located at nearest distance (about 11 km) to epicenter of this earthquake are 242 gal in NS direction, 159 gal in EW direction and 78 gal in up- down direction (Fig.4, Table 2).

Earthquake activity of this region (and all of Turkey) has been observed in Disaster and Emergency Management Presidency, Earthquake Department Data Center Ankara 7 days/24 hours with 205 Seismic station and 371 accelerometer. Obtained results are shared with public, press and relevant authorized.

For your information.

www.deprem.gov.tr
www.afad.gov.tr



REPUBLIC OF TURKEY
PRIME MINISTRY
DISASTER AND EMERGENCY
MANAGEMENT PRESIDENCY
EARTHQUAKE DEPARTMENT

KÜTAHYA-SİMAV EARTHQUAKE (WESTERN TURKEY) ML=5.4

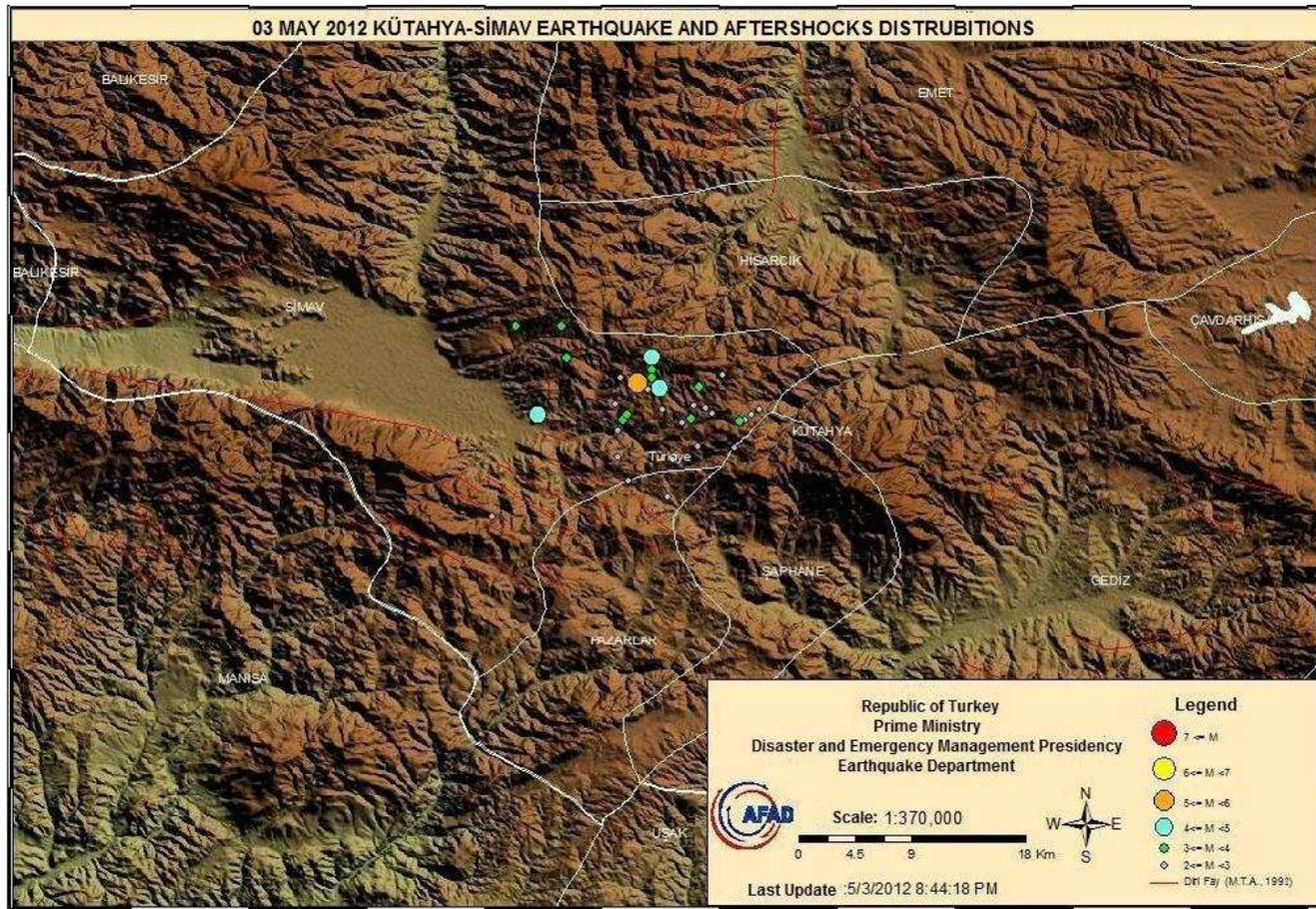


Figure 1: May, 03,2012 Kütahya-Simav Earthquake and aftershocks distributions (first two hours)

www.deprem.gov.tr
www.afad.gov.tr



REPUBLIC OF TURKEY
PRIME MINISTRY
DISASTER AND EMERGENCY
MANAGEMENT PRESIDENCY
EARTHQUAKE DEPARTMENT

KÜTAHYA-SİMAV EARTHQUAKE (WESTERN TURKEY) ML=5.4

No	Date (UTC)	Latitude	Longitude	Depth	Magnitude (MI)	City	Town
1	03.05.2012 15:20	39.1245	29.11	10.59	5.4	KÜTAHYA	SİMAV
2	03.05.2012 15:24	39.0997	29.1493	6.99	3.7	KÜTAHYA	SİMAV
3	03.05.2012 15:25	39.102	29.1025	7.03	3.1	KÜTAHYA	SİMAV
4	03.05.2012 15:25	39.1205	29.1262	6.99	4	KÜTAHYA	SİMAV
5	03.05.2012 15:28	39.106	29.1283	7.01	2.9	KÜTAHYA	SİMAV
6	03.05.2012 15:28	39.066	29.1037	7	3.6	KÜTAHYA	SİMAV
7	03.05.2012 15:30	39.1288	29.0978	6.97	2.7	KÜTAHYA	SİMAV
8	03.05.2012 15:36	39.0302	29.0055	7.08	2.9	KÜTAHYA	SİMAV
9	03.05.2012 15:37	39.166	29.0555	6.35	3	KÜTAHYA	SİMAV
10	03.05.2012 15:40	39.1422	29.0592	6.33	3.4	KÜTAHYA	SİMAV
11	03.05.2012 15:40	39.166	29.0227	6.45	3.8	KÜTAHYA	SİMAV
12	03.05.2012 15:47	39.1198	29.1183	6.99	2.9	KÜTAHYA	SİMAV
13	03.05.2012 15:52	39.0732	29.1367	7	2.9	KÜTAHYA	SİMAV
14	03.05.2012 15:54	39.1072	29.1593	7	2.4	KÜTAHYA	SİMAV
15	03.05.2012 15:55	39.0438	29.1323	6.94	2.5	KÜTAHYA	PAZARLAR
16	03.05.2012 15:58	39.1085	29.1503	7.03	2.7	KÜTAHYA	SİMAV
17	03.05.2012 15:59	39.1302	29.1713	7	2.6	KÜTAHYA	SİMAV
18	03.05.2012 16:00	39.097	29.1837	6.92	3.4	KÜTAHYA	SİMAV
19	03.05.2012 16:05	39.0987	29.0997	6.89	3.2	KÜTAHYA	SİMAV
20	03.05.2012 16:07	39.125	29.1225	7	3.5	KÜTAHYA	SİMAV
21	03.05.2012 16:16	39.1018	29.039	25.41	4.5	KÜTAHYA	SİMAV
22	03.05.2012 16:19	39.1342	29.1208	7.71	3.3	KÜTAHYA	SİMAV
23	03.05.2012 16:23	39.0962	29.142	7	2.4	KÜTAHYA	SİMAV
24	03.05.2012 16:25	39.0913	29.0967	7	2	KÜTAHYA	SİMAV
25	03.05.2012 16:26	39.1223	29.1543	6.92	3.2	KÜTAHYA	SİMAV
26	03.05.2012 16:27	39.1095	29.0947	6.98	2.9	KÜTAHYA	SİMAV
27	03.05.2012 16:29	39.0785	29.1802	6.99	2.3	KÜTAHYA	SAPHANE
28	03.05.2012 16:29	39.1178	29.1375	6.98	3	KÜTAHYA	SİMAV
29	03.05.2012 16:31	39.11	29.1177	6.96	2.7	KÜTAHYA	SİMAV
30	03.05.2012 16:34	39.0988	29.1488	4.73	3.1	KÜTAHYA	SİMAV
31	03.05.2012 16:39	39.1118	29.145	6.98	3.1	KÜTAHYA	SİMAV
32	03.05.2012 16:47	39.103	29.1638	7	2.9	KÜTAHYA	SİMAV
33	03.05.2012 16:52	39.055	29.1035	6.99	2.3	KÜTAHYA	PAZARLAR
34	03.05.2012 17:00	39.0793	29.154	7	2.6	KÜTAHYA	SİMAV
35	03.05.2012 17:04	39.103	29.1032	7	1.9	KÜTAHYA	SİMAV
36	03.05.2012 17:05	39.0997	29.1328	7	2.2	KÜTAHYA	SİMAV

No	Date (UTC)	Latitude	Longitude	Depth	Magnitude (MI)	City	Town
37	03.05.2012 17:07	39.0682	29.0795	7.06	2.5	KÜTAHYA	SİMAV
38	03.05.2012 17:08	39.0515	29.1203	7	2.3	KÜTAHYA	PAZARLAR
39	03.05.2012 17:10	39.1435	29.121	34.81	4.4	KÜTAHYA	SİMAV
40	03.05.2012 17:17	39.132	29.1242	7.01	3.3	KÜTAHYA	SİMAV
41	03.05.2012 17:26	39.0793	29.1188	7.01	2	KÜTAHYA	SİMAV
42	03.05.2012 17:30	39.1032	29.1792	7	2	KÜTAHYA	SİMAV
43	03.05.2012 17:31	39.0808	29.1448	7	2	KÜTAHYA	SİMAV
44	03.05.2012 17:34	39.0965	29.1673	7	2.5	KÜTAHYA	SİMAV
45	03.05.2012 17:34	39.1178	29.105	7	2.8	KÜTAHYA	SİMAV
46	03.05.2012 17:38	39.1183	29.1083	7.02	2.8	KÜTAHYA	SİMAV
47	03.05.2012 17:39	39.0765	29.1275	7	2.2	KÜTAHYA	SİMAV
48	03.05.2012 17:43	39.1068	29.1415	7.2	3.4	KÜTAHYA	SİMAV
49	03.05.2012 17:45	39.0435	29.1748	7.02	2.7	KÜTAHYA	SAPHANE
50	03.05.2012 17:47	39.0995	29.0875	6.92	2.7	KÜTAHYA	SİMAV
51	03.05.2012 17:51	39.1208	29.1072	7	2.9	KÜTAHYA	SİMAV
52	03.05.2012 17:56	39.0642	29.0923	7	2.3	KÜTAHYA	SİMAV
53	03.05.2012 17:58	39.0925	29.0967	7.34	2.4	KÜTAHYA	SİMAV
54	03.05.2012 18:05	39.1168	29.1282	6.98	3.1	KÜTAHYA	SİMAV
55	03.05.2012 18:08	39.1288	29.1685	7.03	2.7	KÜTAHYA	SİMAV
56	03.05.2012 18:10	39.0972	29.1123	16.79	3.5	KÜTAHYA	SİMAV
57	03.05.2012 18:15	39.1235	29.0768	5.95	3	KÜTAHYA	SİMAV
58	03.05.2012 18:19	39.1153	29.1718	7	2.2	KÜTAHYA	SİMAV
59	03.05.2012 18:25	39.1243	29.1673	6.96	2.5	KÜTAHYA	SİMAV
60	03.05.2012 18:29	39.1112	29.0997	6.98	3.1	KÜTAHYA	SİMAV
61	03.05.2012 18:32	39.1225	29.1345	7	3.7	KÜTAHYA	SİMAV
62	03.05.2012 18:35	39.0898	29.1538	7	2	KÜTAHYA	SİMAV
63	03.05.2012 19:00	39.0503	29.1463	7.05	2.3	KÜTAHYA	PAZARLAR
64	03.05.2012 19:05	39.0765	29.0817	7	2.5	KÜTAHYA	SİMAV
65	03.05.2012 19:10	39.1127	29.1082	18.92	3	KÜTAHYA	SİMAV
66	03.05.2012 19:14	39.1412	29.1013	7	2.6	KÜTAHYA	SİMAV
67	03.05.2012 19:17	39.0535	29.1188	7.02	2.3	KÜTAHYA	PAZARLAR
68	03.05.2012 19:21	39.085	29.1087	6.95	2.8	KÜTAHYA	SİMAV
69	03.05.2012 19:25	39.0942	29.1928	6.74	2.4	KÜTAHYA	SİMAV
70	03.05.2012 19:32	39.0888	29.1465	7	2.3	KÜTAHYA	SİMAV
71	03.05.2012 19:34	39.1348	29.1095	7	3.1	KÜTAHYA	SİMAV
72	03.05.2012 19:38	39.12	29.161	7	1.9	KÜTAHYA	SİMAV

Table 1: May, 03, 2012 Kütahya-Simav earthquake and aftershocks list

www.deprem.gov.tr
www.afad.gov.tr



REPUBLIC OF TURKEY
PRIME MINISTRY
DISASTER AND EMERGENCY
MANAGEMENT PRESIDENCY
EARTHQUAKE DEPARTMENT

KÜTAHYA-SİMAV EARTHQUAKE (WESTERN TURKEY) ML=5.4

No	Date (UTC)	Latitude	Longitude	Depth	Magnitude (MI)	City	Town
73	03.05.2012 19:42	39.0453	29.1057	7	2	KÜTAHYA	PAZARLAR
74	03.05.2012 19:44	39.1278	29.1282	6.98	3.2	KÜTAHYA	SİMAV
75	03.05.2012 19:48	39.0947	29.1082	7.14	3	KÜTAHYA	SİMAV
76	03.05.2012 20:00	39.0958	29.1718	6.99	2.6	KÜTAHYA	SİMAV
77	03.05.2012 20:01	39.0977	29.1012	7	2	KÜTAHYA	SİMAV
78	03.05.2012 20:02	39.106	29.1852	7	2.2	KÜTAHYA	SİMAV
79	03.05.2012 20:03	39.0867	29.1822	7	2.5	KÜTAHYA	SİMAV
80	03.05.2012 20:09	39.0485	29.1077	7	1.9	KÜTAHYA	PAZARLAR
81	03.05.2012 20:10	39.0752	29.0873	7	2.4	KÜTAHYA	SİMAV
82	03.05.2012 20:13	39.0738	29.1242	7	2.2	KÜTAHYA	SİMAV
83	03.05.2012 20:20	39.115	29.121	6.99	3	KÜTAHYA	SİMAV
84	03.05.2012 20:24	39.104	29.0828	6.99	3.2	KÜTAHYA	SİMAV
85	03.05.2012 20:28	39.1232	29.134	6.05	3.3	KÜTAHYA	SİMAV
86	03.05.2012 20:30	39.0983	29.1693	7.01	2.2	KÜTAHYA	SİMAV
87	03.05.2012 20:32	39.094	29.0918	7	2.1	KÜTAHYA	SİMAV
88	03.05.2012 20:36	38.8788	29.1588	7.01	2.5	KÜTAHYA	SAPHANE
89	03.05.2012 20:44	39.1105	29.0908	7.03	3.7	KÜTAHYA	SİMAV
90	03.05.2012 20:52	39.0967	29.0885	11.81	2.4	KÜTAHYA	SİMAV
91	03.05.2012 20:53	39.1007	29.1008	7	1.7	KÜTAHYA	SİMAV
92	03.05.2012 20:54	39.1233	29.1658	7	1.8	KÜTAHYA	SİMAV
93	03.05.2012 20:56	39.116	29.1283	6.96	1.8	KÜTAHYA	SİMAV
94	03.05.2012 21:02	39.0745	29.2288	7	2	KÜTAHYA	SAPHANE
95	03.05.2012 21:07	39.0797	29.1862	7.02	2	KÜTAHYA	SAPHANE
96	03.05.2012 21:12	39.09	29.1412	7.01	2.4	KÜTAHYA	SİMAV
97	03.05.2012 21:12	39.0903	29.1158	6.98	2.1	KÜTAHYA	SİMAV
98	03.05.2012 21:16	39.0817	29.1765	7	1.8	KÜTAHYA	SİMAV
99	03.05.2012 21:19	39.0732	29.1133	7	1.8	KÜTAHYA	SİMAV
100	03.05.2012 21:19	39.0358	29.1057	6.95	3.1	KÜTAHYA	PAZARLAR
101	03.05.2012 21:25	39.0772	29.0968	7	2.2	KÜTAHYA	SİMAV
102	03.05.2012 21:26	38.856	29.1415	7	2	KÜTAHYA	GEDİZ
103	03.05.2012 21:33	39.1008	29.161	7.04	2.1	KÜTAHYA	SİMAV
104	03.05.2012 21:35	39.0892	29.1213	8.84	2.6	KÜTAHYA	SİMAV
105	03.05.2012 21:42	39.0908	29.0907	6.95	2.7	KÜTAHYA	SİMAV
106	03.05.2012 21:43	39.1193	29.0658	7	2.2	KÜTAHYA	SİMAV
107	03.05.2012 21:45	39.1387	29.1082	25.53	4.7	KÜTAHYA	SİMAV
108	03.05.2012 21:49	39.1063	29.1405	6.95	2.7	KÜTAHYA	SİMAV

No	Date (UTC)	Latitude	Longitude	Depth	Magnitude (MI)	City	Town
109	03.05.2012 21:55	39.133	29.1193	6.99	2.4	KÜTAHYA	SİMAV
110	03.05.2012 21:57	39.1322	29.1247	7	2.2	KÜTAHYA	SİMAV
111	03.05.2012 21:59	39.0498	29.1067	7	2.1	KÜTAHYA	PAZARLAR
112	03.05.2012 22:07	39.1128	29.0812	7	2.5	KÜTAHYA	SİMAV
113	03.05.2012 22:13	39.103	29.131	6.47	2.6	KÜTAHYA	SİMAV
114	03.05.2012 22:17	39.0898	29.1048	5	3.3	KÜTAHYA	SİMAV
115	03.05.2012 22:26	39.0685	29.0907	6.96	2.1	KÜTAHYA	SİMAV
116	03.05.2012 22:38	39.1063	29.1172	7	2.8	KÜTAHYA	SİMAV
117	03.05.2012 22:39	39.0565	29.1173	7	1.8	KÜTAHYA	PAZARLAR
118	03.05.2012 22:43	39.0962	29.1508	7	2	KÜTAHYA	SİMAV
119	03.05.2012 22:44	39.0917	29.095	7	1.7	KÜTAHYA	SİMAV
120	03.05.2012 22:48	39.0528	29.1218	7	1.9	KÜTAHYA	PAZARLAR
121	03.05.2012 22:51	39.0975	29.1445	6.98	2	KÜTAHYA	SİMAV
122	03.05.2012 23:16	39.1023	29.1098	7	2.7	KÜTAHYA	SİMAV
123	03.05.2012 23:18	39.0997	29.1445	7	2.4	KÜTAHYA	SİMAV
124	03.05.2012 23:22	39.0737	29.1228	7	1.8	KÜTAHYA	SİMAV
125	03.05.2012 23:22	39.0997	29.0658	6.96	3	KÜTAHYA	SİMAV
126	03.05.2012 23:28	39.1058	29.1395	7	1.9	KÜTAHYA	SİMAV
127	03.05.2012 23:29	39.123	29.1833	7	2.8	KÜTAHYA	SİMAV
128	03.05.2012 23:40	39.1252	29.0877	6.97	2.6	KÜTAHYA	SİMAV
129	03.05.2012 23:45	39.1197	29.1773	7	2.3	KÜTAHYA	SİMAV
130	03.05.2012 23:47	39.0847	29.0905	7	1.8	KÜTAHYA	SİMAV
131	03.05.2012 23:48	39.1132	29.1252	7	1.9	KÜTAHYA	SİMAV
132	03.05.2012 23:48	39.0463	29.188	7	1.8	KÜTAHYA	SAPHANE
133	04.05.2012 00:02	39.0882	29.108	7.92	3.3	KÜTAHYA	SİMAV
134	04.05.2012 00:07	39.0993	29.1088	7	2.6	KÜTAHYA	SİMAV
135	04.05.2012 00:08	39.0905	29.118	7.01	2.3	KÜTAHYA	SİMAV
136	04.05.2012 00:16	39.1077	29.1023	6.73	2.2	KÜTAHYA	SİMAV
137	04.05.2012 00:18	39.06	29.1315	7	1.9	KÜTAHYA	PAZARLAR
138	04.05.2012 00:19	39.0153	29.1002	7	1.7	KÜTAHYA	PAZARLAR
139	04.05.2012 00:26	39.1027	29.1607	7.02	2.8	KÜTAHYA	SİMAV
140	04.05.2012 00:32	39.0987	29.1222	6.95	2	KÜTAHYA	SİMAV
141	04.05.2012 00:35	39.0582	29.1827	7	1.8	KÜTAHYA	SAPHANE
142	04.05.2012 00:38	39.0603	29.1035	7	1.8	KÜTAHYA	SİMAV
143	04.05.2012 00:41	39.1145	29.1023	7	2.9	KÜTAHYA	SİMAV
144	04.05.2012 00:46	39.118	29.1117	6.97	2.3	KÜTAHYA	SİMAV

Table 1: May, 03, 2012 Kütahya-Simav earthquake and aftershocks list

www.deprem.gov.tr
www.afad.gov.tr



REPUBLIC OF TURKEY
PRIME MINISTRY
DISASTER AND EMERGENCY
MANAGEMENT PRESIDENCY
EARTHQUAKE DEPARTMENT

KÜTAHYA-SİMAV EARTHQUAKE (WESTERN TURKEY) ML=5.4

No	Date (UTC)	Latitude	Longitude	Depth	Magnitude (M)	City	Town
145	04.05.2012 00:49	39.0953	29.1753	6.96	2.3	KÜTAHYA	SİMAV
146	04.05.2012 00:52	39.1205	29.0902	7.01	2.6	KÜTAHYA	SİMAV
147	04.05.2012 00:54	39.0883	29.1047	7	1.9	KÜTAHYA	SİMAV
148	04.05.2012 00:54	39.0593	29.1272	7	1.9	KÜTAHYA	PAZARLAR
149	04.05.2012 00:55	39.0965	29.1208	6.98	2.1	KÜTAHYA	SİMAV
150	04.05.2012 01:01	39.09	29.163	7	2.7	KÜTAHYA	SİMAV
151	04.05.2012 01:04	39.0992	29.103	10.6	3	KÜTAHYA	SİMAV
152	04.05.2012 01:08	39.0883	29.1265	6.99	2.4	KÜTAHYA	SİMAV
153	04.05.2012 01:10	39.0987	29.1122	7	2.9	KÜTAHYA	SİMAV
154	04.05.2012 01:15	39.0903	29.0862	7	1.9	KÜTAHYA	SİMAV
155	04.05.2012 01:23	39.0923	29.1162	7	2.4	KÜTAHYA	SİMAV
156	04.05.2012 01:25	39.0985	29.1245	9	3	KÜTAHYA	SİMAV
157	04.05.2012 01:35	39.1182	29.1242	7	2.7	KÜTAHYA	SİMAV
158	04.05.2012 01:39	39.0472	29.0372	7.15	2.6	KÜTAHYA	SİMAV
159	04.05.2012 01:42	39.107	29.1353	7	2.6	KÜTAHYA	SİMAV
160	04.05.2012 01:48	39.118	29.107	7.61	3	KÜTAHYA	SİMAV
161	04.05.2012 01:49	39.093	29.105	7.28	2.9	KÜTAHYA	SİMAV
162	04.05.2012 02:00	39.1117	29.1393	6.98	4.5	KÜTAHYA	SİMAV
163	04.05.2012 02:04	39.0805	29.142	6.99	1.8	KÜTAHYA	SİMAV
164	04.05.2012 02:05	39.1287	29.1297	7	1.9	KÜTAHYA	SİMAV
165	04.05.2012 02:07	39.1045	29.1135	7.84	2.7	KÜTAHYA	SİMAV
166	04.05.2012 02:12	39.0608	29.141	7	1.9	KÜTAHYA	PAZARLAR
167	04.05.2012 02:15	39.089	29.1312	7	3.2	KÜTAHYA	SİMAV
168	04.05.2012 02:26	39.0925	29.0928	7.01	2.6	KÜTAHYA	SİMAV
169	04.05.2012 02:28	39.0723	29.0962	7	1.7	KÜTAHYA	SİMAV
170	04.05.2012 02:29	39.0637	29.1333	7	1.5	KÜTAHYA	SİMAV
171	04.05.2012 02:29	39.1013	29.135	7.04	2.3	KÜTAHYA	SİMAV
172	04.05.2012 02:31	39.0847	29.1297	6.95	2.2	KÜTAHYA	SİMAV
173	04.05.2012 02:32	39.1147	29.1908	7	1.7	KÜTAHYA	SİMAV
174	04.05.2012 02:40	39.1018	29.1705	7.01	2.5	KÜTAHYA	SİMAV
175	04.05.2012 02:42	39.124	29.1058	7	2.3	KÜTAHYA	SİMAV
176	04.05.2012 02:47	39.107	29.1682	7	1.7	KÜTAHYA	SİMAV
177	04.05.2012 02:48	39.1187	29.1045	7	1.8	KÜTAHYA	SİMAV
178	04.05.2012 02:50	39.0767	29.1253	7	1.7	KÜTAHYA	SİMAV
179	04.05.2012 02:51	39.084	29.1312	4.87	1.9	KÜTAHYA	SİMAV
180	04.05.2012 02:53	39.0967	29.1397	7.02	3.1	KÜTAHYA	SİMAV

No	Date (UTC)	Latitude	Longitude	Depth	Magnitude (M)	City	Town
181	04.05.2012 02:55	39.1113	29.1208	10.07	2.7	KÜTAHYA	SİMAV
182	04.05.2012 02:58	39.1315	29.1283	7	1.8	KÜTAHYA	SİMAV
183	04.05.2012 02:59	39.0955	29.1395	7	1.5	KÜTAHYA	SİMAV
184	04.05.2012 03:01	39.1073	29.1227	7	1.5	KÜTAHYA	SİMAV
185	04.05.2012 03:04	39.0823	29.1128	7	2	KÜTAHYA	SİMAV
186	04.05.2012 03:09	39.1065	29.1595	7	2.5	KÜTAHYA	SİMAV
187	04.05.2012 03:12	39.0735	29.1315	7	2.1	KÜTAHYA	SİMAV
188	04.05.2012 03:13	39.0568	29.1342	7.01	2	KÜTAHYA	PAZARLAR
189	04.05.2012 03:17	39.1083	29.1473	7.05	2.6	KÜTAHYA	SİMAV
190	04.05.2012 03:22	39.0898	29.1125	6.95	1.9	KÜTAHYA	SİMAV
191	04.05.2012 03:26	39.1117	29.1557	7.01	2.4	KÜTAHYA	SİMAV
192	04.05.2012 03:27	39.0782	29.1013	6.95	1.7	KÜTAHYA	SİMAV
193	04.05.2012 03:42	39.0768	29.1407	7.01	1.9	KÜTAHYA	SİMAV
194	04.05.2012 03:46	39.1002	29.0882	6.91	2	KÜTAHYA	SİMAV
195	04.05.2012 03:50	38.971	29.2098	7	1.8	KÜTAHYA	SAPHANE
196	04.05.2012 04:03	39.0928	29.1545	6.97	2.1	KÜTAHYA	SİMAV
197	04.05.2012 04:04	39.0505	29.1673	7	1.6	KÜTAHYA	SAPHANE
198	04.05.2012 04:05	39.0873	29.1115	7.01	2.9	KÜTAHYA	SİMAV
199	04.05.2012 04:28	39.0865	29.1655	2.55	3.2	KÜTAHYA	SİMAV
200	04.05.2012 04:31	39.0807	29.1377	7	2.3	KÜTAHYA	SİMAV
201	04.05.2012 04:53	39.1135	29.1063	7	1.8	KÜTAHYA	SİMAV
202	04.05.2012 05:02	39.1082	29.1265	7	1.8	KÜTAHYA	SİMAV
203	04.05.2012 05:11	39.062	29.1045	7	2.3	KÜTAHYA	SİMAV
204	04.05.2012 05:12	39.1093	29.1452	7	2.1	KÜTAHYA	SİMAV
205	04.05.2012 05:23	39.0855	29.1608	7.01	2.4	KÜTAHYA	SİMAV
206	04.05.2012 05:30	39.1048	29.1237	6.59	3.5	KÜTAHYA	SİMAV

Table 1: May, 03, 2012 Kütahya-Simav earthquake and aftershocks list

www.deprem.gov.tr
www.afad.gov.tr



REPUBLIC OF TURKEY
PRIME MINISTRY
DISASTER AND EMERGENCY
MANAGEMENT PRESIDENCY
EARTHQUAKE DEPARTMENT

KÜTAHYA-SİMAV EARTHQUAKE (WESTERN TURKEY) ML=5.4

DATE	LOCAL TIME	MI	FOCAL MECHANISM SOLUTIONS (ACCORDING TO P WAVE FIRST MOTION)
03.05.2012	18:20	5.4	
03.05.2012	19:16	4.5	

Figure 2: Focal mechanism solutions (according to P wave first motion)

KÜTAHYA-SİMAV EARTHQUAKE (WESTERN TURKEY) ML=5.4

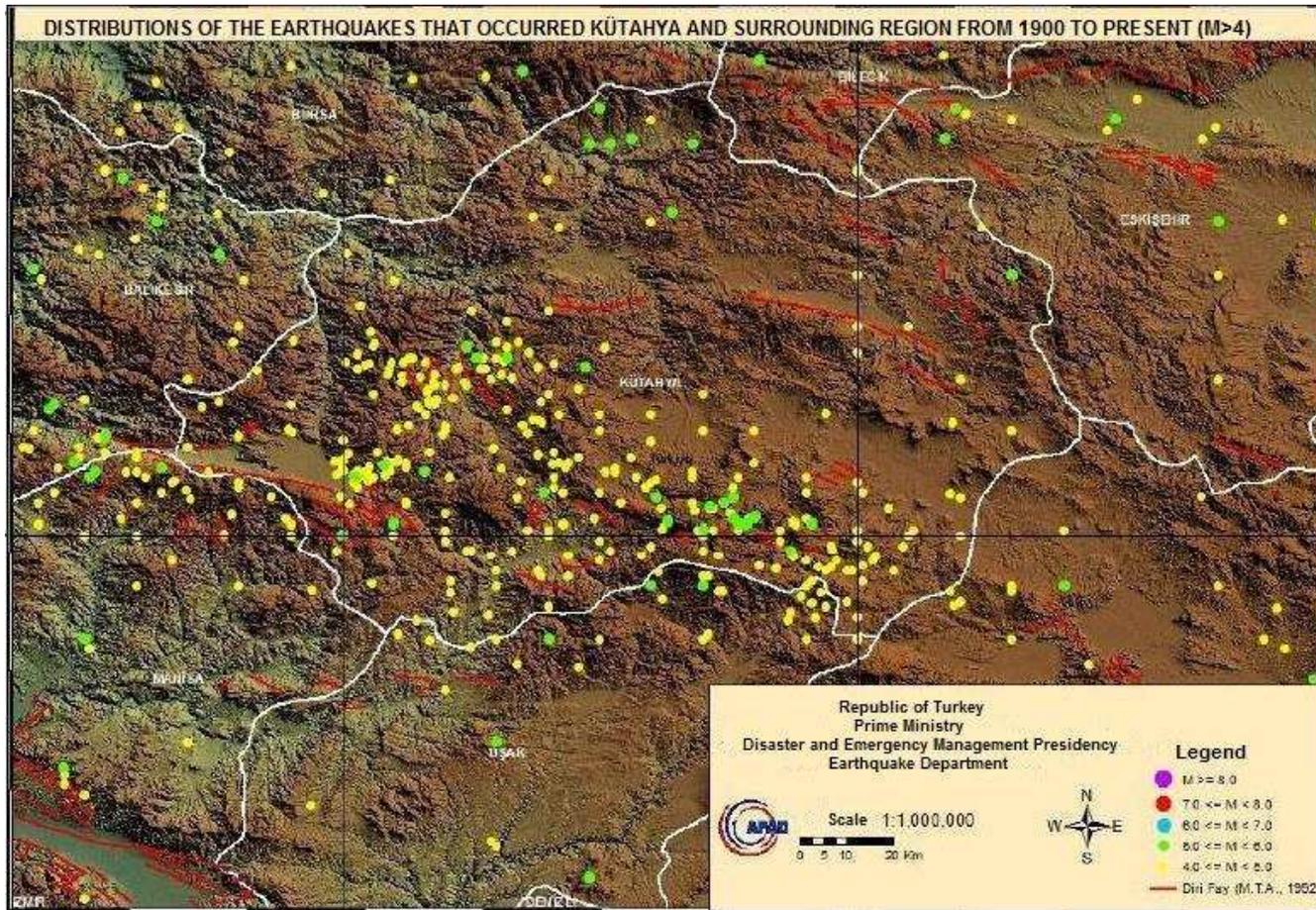


Figure 3: Distributions of the earthquakes that occurred Kütahya and Surrounding Region

www.deprem.gov.tr
www.afad.gov.tr



REPUBLIC OF TURKEY
PRIME MINISTRY
DISASTER AND EMERGENCY
MANAGEMENT PRESIDENCY
EARTHQUAKE DEPARTMENT

KÜTAHYA-SİMAV EARTHQUAKE (WESTERN TURKEY) ML=5.4

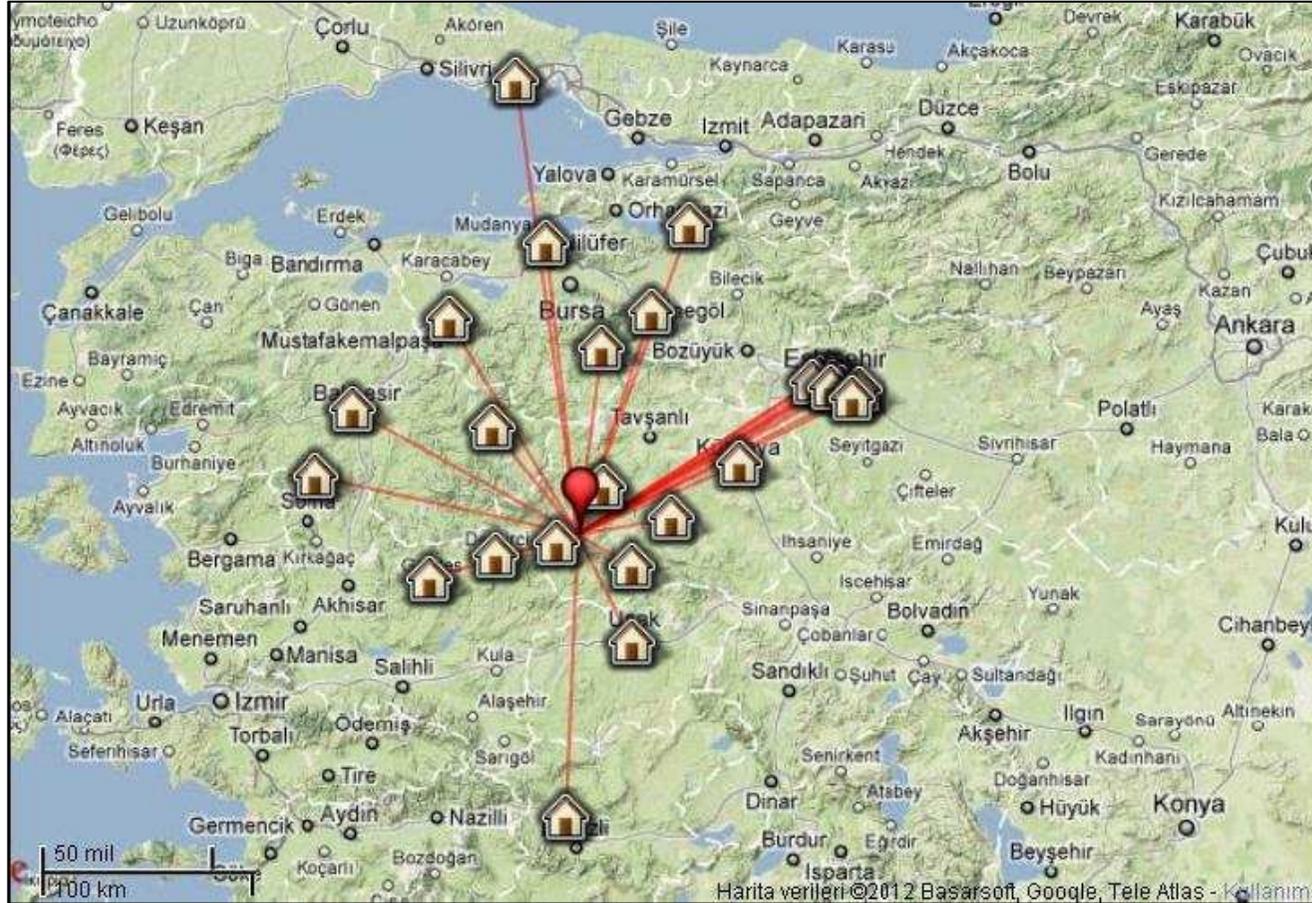


Figure 4: Distribution of the strong motion stations that recorded Kütahya-Simav Earthquake

www.deprem.gov.tr
www.afad.gov.tr



REPUBLIC OF TURKEY
PRIME MINISTRY
DISASTER AND EMERGENCY
MANAGEMENT PRESIDENCY
EARTHQUAKE DEPARTMENT

KÜTAHYA-SİMAV EARTHQUAKE (WESTERN TURKEY) ML=5.4

STATION			Latitude	Longitude	Height (m)	EQUIPMENT TYPE	ACCELERATION VALUE (gal)			Distance of Station to Epicenter R(epi) km	V ₅₃₀ (m/sn)	Station
No	CITY	TOWN					KG	DB	Düşey			
1	Kütahya	SİMAV	39.09282	28.97848	828	CMG-5TD	242.12	159.35	77.96	11	259	4305
2	Kütahya	GEDİZ	38.99478	29.40040	735	CMG-5TD	51.93	65.21	35.36	30	343	4304
3	Manisa	Demirci	39.03503	28.64812	853	CMG-5TD	58.33	58.25	26.11	41	336	4504
4	Manisa	GORDES	38.93984	28.28364	670	CMG-5TD	3.31	3.76	2.89	74	629	4505
5	Bursa	Keles	39.91509	29.23167	1060	CMG-5TD	5.01	3.76	2.48	88	401	1613
6	Balıkesir	Dursunbey	39.57798	28.63232	649	CMG-5TD	3.27	2.38	2.56	64	561	1009
7	Eskişehir	MERKEZ	39.77133	30.40170		CMG-5TD	1.4	1	1.01	132		2612
8	Eskişehir	MERKEZ	39.79357	30.53970		CMG-5TD	1.95	1.95	0.85	143		2613
9	Eskişehir	MERKEZ	39.74031	30.65213		CMG-5TD	1.37	1.24	0.61	149		2615
10	Balıkesir	SAVASTEPE	39.38041	27.65438	284	CMG-5TD	1.66	2.21	1.03	128		1016
11	Kütahya	MERKEZ	39.42779	29.99155	932	CMG-5TD	8.73	6.77	3.12	83	267	4301
12	Eskişehir	MERKEZ	39.75347	30.55575		CMG-5TD	0.87	1.06	0.37	142		2614
13	Bursa	İNEGÖL	40.06708	29.50882	304	CMG-5TD	3.02	5.1	1.86	110	252	1610
14	Bursa	MUDANYA	40.35095	28.92815	34	CMG-5TD	3.76	3.25	1.2	137		1618
15	Balıkesir	Merkez	39.65499	27.86204	158	CMG-5TD	4.31	3.12	1.62	121	456	1003
16	Denizli	ASAGISAMLI	37.91337	29.03804	156	CMG-5TD	2.47	2.04	0.94	135		2009
17	Eskişehir	MERKEZ_YUNUSEMRE	39.78929	30.49728	804	CMG-5TD	1.33	1.2	0.54	140	326	2602
18	Eskişehir	MERKEZ_KIRMIZITOPRAK	39.77329	30.51008	770	CMG-5TD	1.6	2.28	0.64	140	296	2604
19	Eskişehir	MERKEZ_BATIKENT	39.78828	30.44295		CMG-5TD	2.27	2.08	1.15	136		2611
20	Eskişehir	MERKEZ	39.70630	30.61889		CMG-5TD	1.2	0.82	0.53	145		2616
21	Eskişehir	MERKEZ_DUMLUPINAR	39.74866	30.49579	833	CMG-5TD	1.83	2.72	1.1	138	346	2606
22	İstanbul	KUCUK CEKMECE	41.02651	28.75884	57	CMG-5TD	1.17	0.85	0.42	213	283	3409
23	Kütahya	CAVDARHISAR	39.19639	29.61972	1022	SMACH	13	11.5	5.5	45		4308
24	Kütahya	EMET	39.33546	29.24982	853	CMG-5TD	16.57	19.96	13.16	26	304	4303
25	Bursa	İZNIK	40.42923	29.71682	95	CMG-5TD	2.4	1.55	1.02	154	251	1611
26	Bursa	M. Kemal Paşa	40.03471	28.39392	41	CMG-5TD	5.74	8.38	3.8	117	265	1614
27	Uşak	MERKEZ	38.67128	29.40401	920	Grünlip cmg5td	15.89	14.5	6.84	57	285	6401

Table 2: Acceleration values for Kütahya-Simav earthquake

www.deprem.gov.tr
www.afad.gov.tr



REPUBLIC OF TURKEY
 PRIME MINISTRY
 DISASTER AND EMERGENCY
 MANAGEMENT PRESIDENCY
 EARTHQUAKE DEPARTMENT

KÜTAHYA-SİMAV EARTHQUAKE (WESTERN TURKEY) ML=5.4

References

- Prime Ministry, AFAD, Earthquake Department (DDA). <http://www.deprem.gov.tr/>
- Şaroğlu F., Emre Ö. and Kuşçu İ. (1992). Active Fault Map of Turkey, scale: 1:1,000,000, General Directorate of Mineral Research and Exploration, Ankara.

www.deprem.gov.tr
www.afad.gov.tr



REPUBLIC OF TURKEY
PRIME MINISTRY
DISASTER AND EMERGENCY
MANAGEMENT PRESIDENCY
EARTHQUAKE DEPARTMENT