

Table DR1: 1912 Mürefte earthquake co-seismic slip measurements. DGPS is differential GPS and TS is for total station measurement.

No	Name	1912	Error	Cumul.	Error	Meth.	Lon	Lat	REFERENCE
1	Gaziköy – road 2	3.30	0.30	12.70	1.00	Tape	27.3316	40.7491	This study
2	Gaziköy – road 1	5.00	0.50			Tape	27.3216	40.7405	This study
3	Gaziköy - creek/field 1	2.50	0.30			Tape	27.3153	40.7426	This study
4	Gaziköy - field 2	2.20	0.30			Tape	27.3149	40.7424	This study
5	Güzel - Lstream East	3.18	0.50	17.80	0.50	DGPS	27.2962	40.7405	Altunel et al., (2004)
6	Güzel - pavement	2.60	0.10			DGPS	27.2930	40.7401	Altunel et al., (2004)
7	Güzel - Chanel	1.40	0.12			DGPS	27.2921	40.7398	Altunel et al., (2004)
8	Güzel - wall	3.28	0.15			DGPS	27.2915	40.7396	Altunel et al., (2004)
9	Güzel - Champ	4.22	0.30			DGPS	27.2910	40.7397	Altunel et al., (2004)
10	Güzel - tree limit	4.05	0.20	7.04	0.30	DGPS	27.2896	40.7395	Altunel et al., (2004)
11	Güzel - Stream West	4.00		8.00		DGPS	27.2893	40.7394	Altunel et al., (2004)
12	Güzel - Lstream West	4.00		12.60	0.20	DGPS	27.2884	40.7339	Altunel et al., (2004)
13	Güzel - Stream bed1	2.00	0.30			Tape	27.2853	40.7378	Altunel et al., (2000)
14	Güzel -Stream bed2	2.40	0.30			Tape	27.2850	40.7377	Altunel et al., (2000)
15	Güzel - Stream bed3	5.20	0.30			Tape	27.2833	40.7371	Altunel et al., (2000)
16	Güzel - Stream 8	4.70	0.30	12.10	0.30	DGPS	27.2756	40.7342	Altunel et al., (2004)
17	Güzel - paleostr - East	5.51	0.50	20.00	0.50	DGPS	27.2691	40.7320	Altunel et al., (2004)
18	Güzel - paleostr - West	5.00	0.50	8.40	0.50	DGPS	27.2690	40.7319	Altunel et al., (2004)
19	Mursalli - ridge	4.00		26.00	1.00	Tape	27.2445	40.7253	Altunel et al., (2000)
20	Mursalli - road	3.80	0.20			DGPS	27.2400	40.7245	Altunel et al., (2004)
21	Mursalli - stream	4.60	0.40			Tape	27.2343	40.7235	This study
22	Mursalli - stream	4.50	0.40			Tape	27.2341	40.7234	This study
23	Yayaköy – road East	3.50	0.50			Tape	27.2105	40.7156	This study
24	Yayaköy - Lstream	4.00		12.50	0.50	DGPS	27.1987	40.7128	Altunel et al., (2004)
25	Yayaköy - Stream	3.90	0.30			DGPS	27.1983	40.7128	Altunel et al., (2004)
26	Yayaköy - road	5.00		15.00	0.50	DGPS	27.1982	40.7128	Altunel et al., (2004)
27	Yaya W field	5.00	0.50			Tape	27.1930	40.7116	This study
28	Yayaköy stream	4.50	0.50			Tape	27.1907	40.7109	This study
29	Yörgüç - ridge	5.50		11.00	0.50	Tape	27.1818	40.7094	Altunel et al., (2000)
30	Yörgüç - road	5.00	0.20			Tape	27.1754	40.7088	Altunel et al., (2000)
31	Sofuköy E sagpond	2.50	0.30			Tape	27.0325	40.6664	This study
32	Yeniköy - Field house	5.40	0.20			DGPS	27.0069	40.6546	Altunel et al., (2004)
33	Yeniköy - Field East	5.30		10.60	0.50	DGPS	27.0066	40.6546	Altunel et al., (2004)
34	Yeniköy - Stream East	3.57	0.20	17.10	0.50	DGPS	27.0058	40.6544	Altunel et al., (2004)
35	Yeniköy-Field StrEast	4.08	0.20			DGPS	27.0055	40.6542	Altunel et al., (2004)
36	Yeniköy – tree	3.90	0.10			DGPS	27.0048	40.6542	Altunel et al., (2004)
37	Yeniköy - Stream West	4.28	0.10	35.00	0.50	DGPS	27.0039	40.6539	Altunel et al., (2004)
38	Yeniköy – road	5.20	0.30			DGPS	26.9970	40.6518	Altunel et al., (2004)
39	Yeniköy NNW	4.00	0.20	30.00	0.50	DGPS	26.9860	40.6505	Altunel et al., (2004)
40	W-Yeniköy field	1.70				Tape	26.9782	40.6482	This study
41	W-Yeniköy road	4.00	0.50	15.00	1.00	Tape	26.9710	40.6429	This study
42	W-Yeniköy	4.50	0.20			DGPS	26.9643	40.6429	Altunel et al., (2004)
43	Kavak lake east2	3.20				Tape	26.9508	40.6395	This study
44	Kavak lake east1	1.50				Tape	26.9476	40.6395	This study
45	Kavak - trench	4.50	0.20	9.00	0.20	TS	26.8643	40.6100	Rockwell_etal_2002

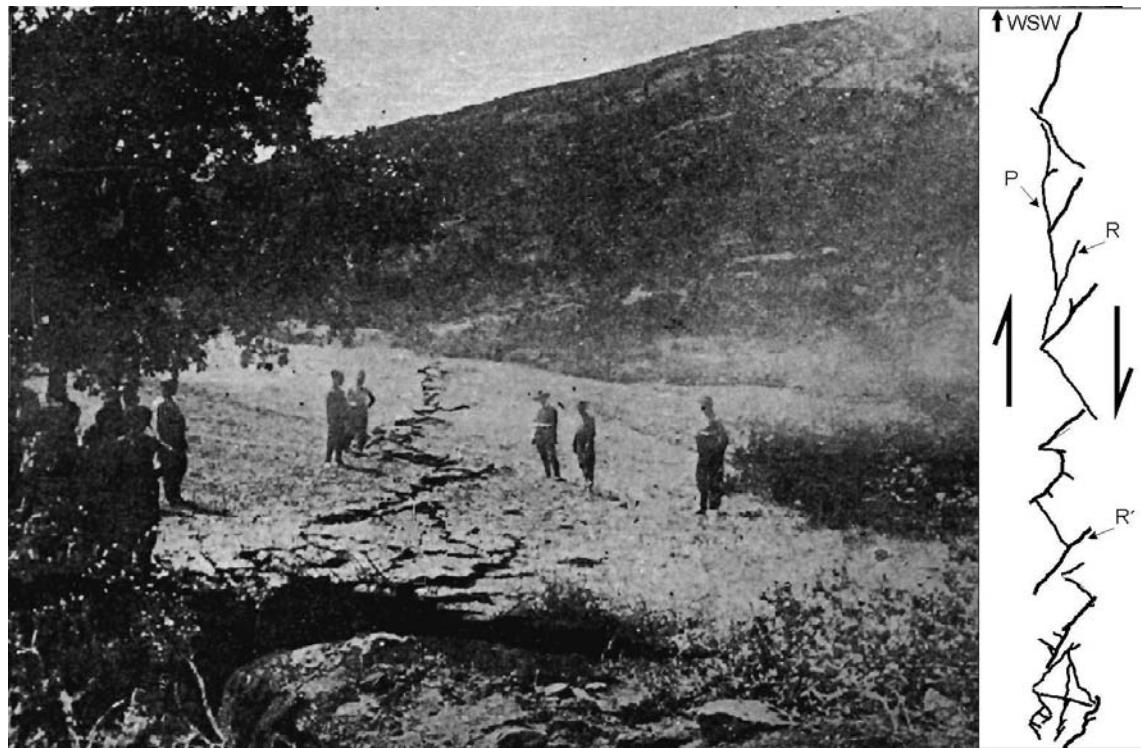


Figure DR1: Surface faulting documented near Mursalli village (Mihailovic, 1927; for location see Fig. 2). The sketch map on the right illustrates the rupture zone geometry where the principle displacement zone and Riedel shear are apparent.

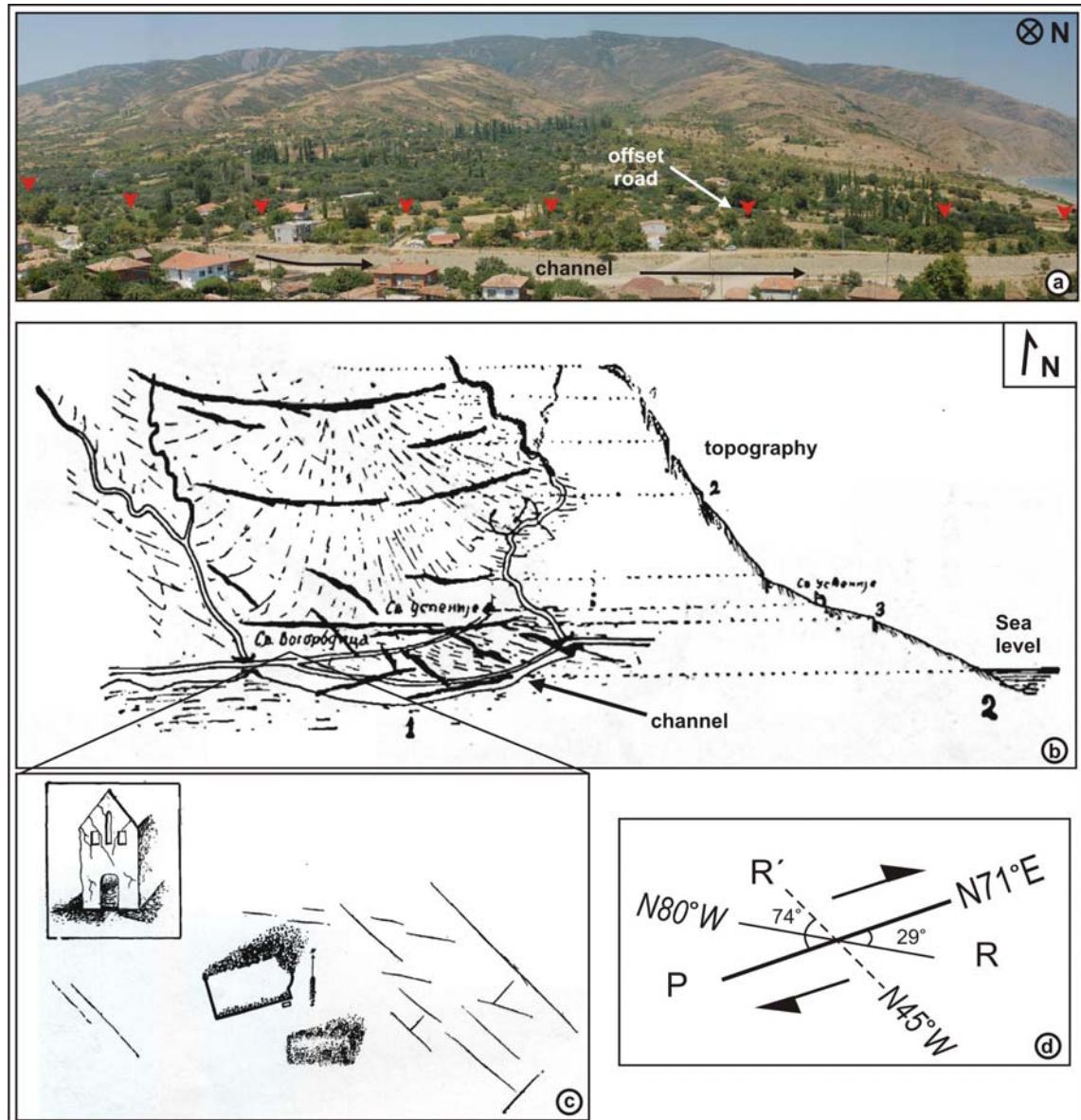


Figure DR2: The upper image shows the eastern most onland section of the Ganos fault, next to the Gaziköy village where we measured 3 to 5 m right lateral displacement (Fig. DR4). Figure b illustrates surface deformation at Gaziköy (Mihailovic, 1927). The E-W trending fractures just north of the channel are in accordance with the principle displacement direction and Riedel shear (Fig. d), while the arc-shaped fractures uphill are most probably secondary structures like tension cracks or slope failure.

The 9 August 1912 earthquake record at Taranto (TA1HD) - ITALY
 Instrument: Wiechert astatic - horizontal component 1

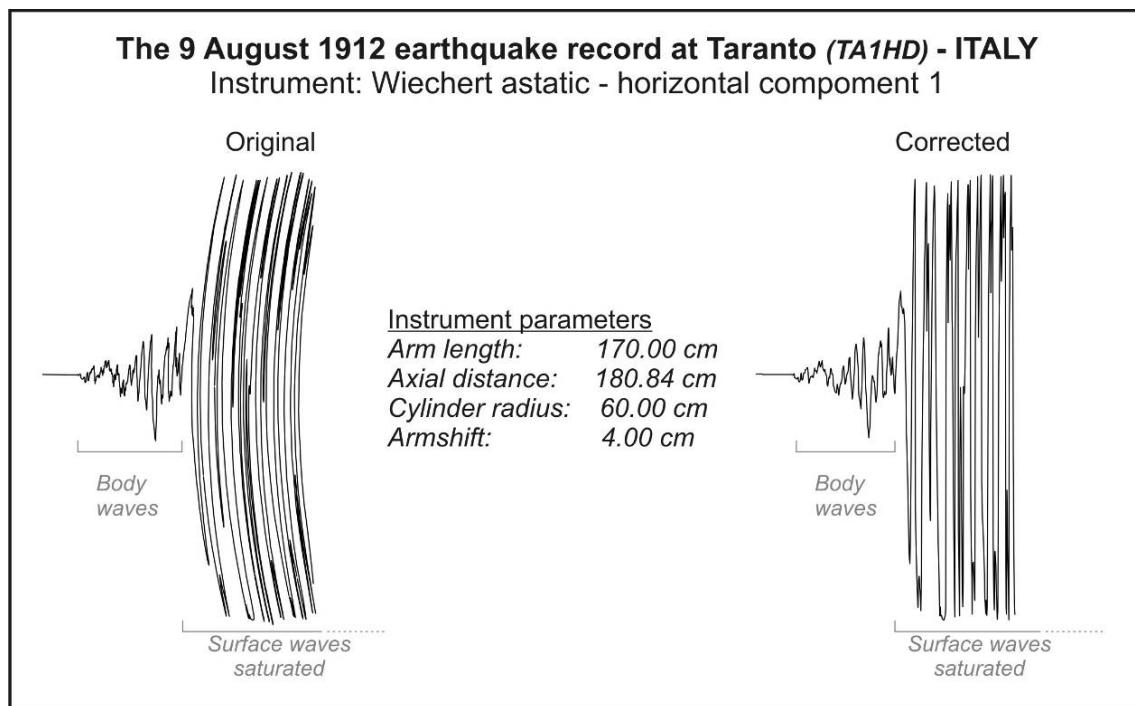


Figure DR3: The digitized waveform of the 9 August 1912 earthquake recorded by Wiechert instrument at Taranto station (Italy). The curved waveform (right), which is a common problem on primitive seismic recording systems, is fixed via TESEO² software using above given parameters.



Figure DR4: Two right-lateral road offsets measured near the Gaziköy village. Left image shows an ancient pavement with $3.3 \text{ m} \pm 0.5 \text{ m}$ co-seismic and $12.5 \text{ m} \pm 1\text{m}$ cumulative displacement (see Figure DR2a for location). The road on Figure b corresponds to $5 \text{ m} \pm 0.5$ right-lateral co-seismic offset.