1 Earthquake List

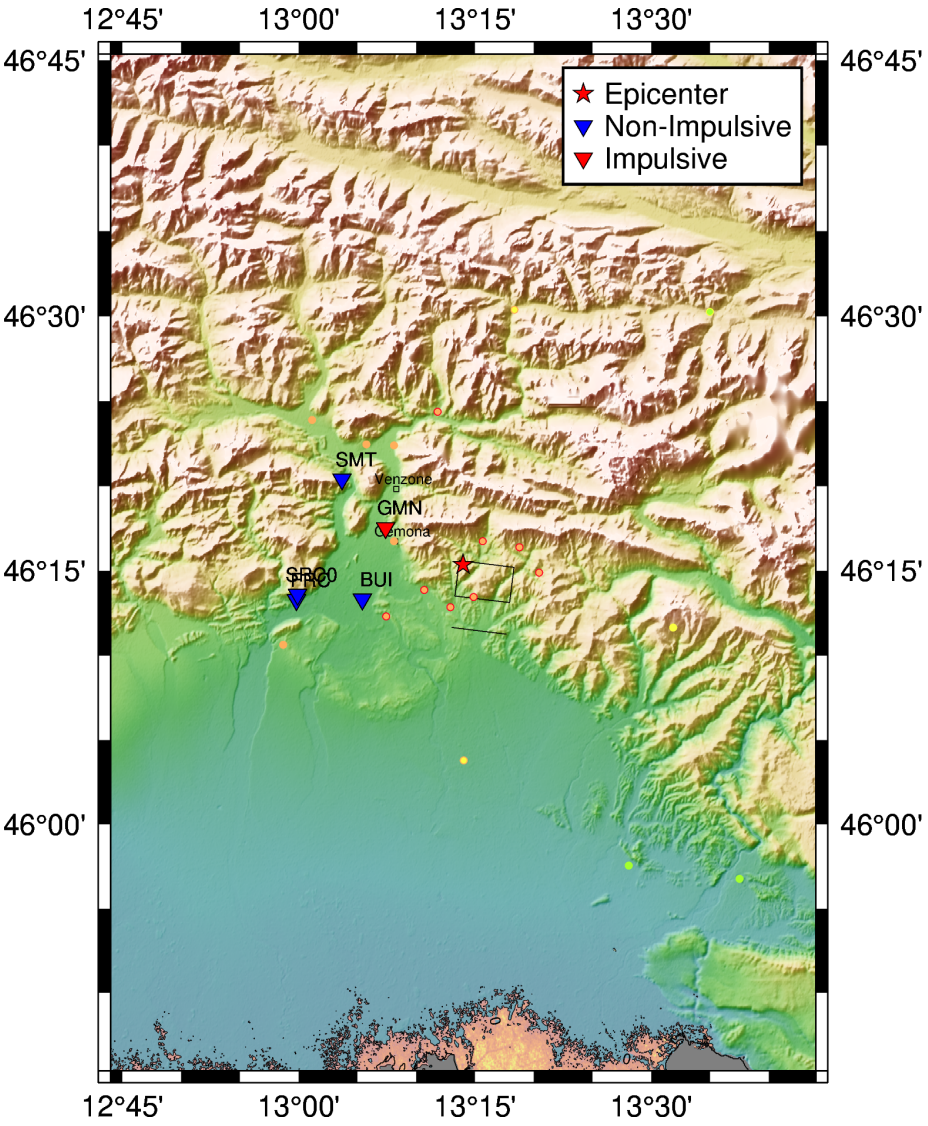
ITACA_ID	Date	Event name	Latitude	Longitude	Depth [Km]	ML	MW	Strike	Dip	Rake
IT-1976-0002	1976-05-06 20:00:12	FRIULI_1ST_SHOCK	46.262	13.3	5.7	6.4	6.4	290	30	105
IT-1976-0005	1976-05-09 00:53:44	FRIULI	46.213	13.323	13.3	5.5	5.1	310	50	119
IT-1976-0007	1976-05-11 22:44:00	NORTHERN_ITALY	46.234	13.054	12.3	5.3	5	283	35	123
IT-1976-0017	1976-06-17 14:28:47	NORTHERN_ITALY	46.15	12.891	9.5	4.5	5.2	305	60	139
IT-1976-0024	1976-09-11 16:31:10	FRIULI	46.275	13.198	9.8	5.5	5.2	271	38	116
IT-1976-0025	1976-09-11 16:35:01	FRIULI	46.256	13.233	4.3	5.8	5.6	277	30	90
IT-1976-0027	1976-09-15 03:15:18	FRIULI_2ND_SHOCK	46.285	13.203	6.8	6.1	5.9	274	35	90
IT-1976-0030	1976-09-15 09:21:18	FRIULI_3RD_SHOCK	46.3	13.174	11.3	6	6	276	35	110
IT-1977-0008	1977-09-16 23:48:07	NORTHERN_ITALY	46.283	13.019	10.8	5.3	5.3	291	35	119
IT-1978-0002	1978-03-11 19:20:43	SOUTHERN_ITALY	37.979	16.184	5	5.3	5.2			
IT-1978-0004	1978-04-15 23:33:47	PATTI_GULF	38.27	15.11	22	5.5	6	147	83	180
IT-1979-0009	1979-09-19 21:35:37	NORCIA	42.8	13.04	6	5.5	5.8	183	28	-7
IT-1980-0003	1980-02-28 21:04:40	CENTRAL_ITALY	42.8	12.967	12	4.8	5			
IT-1980-0012	1980-11-23 18:34:53	IRPINIA	40.76	15.31	15	6.5	6.9	315	60	-90
IT-1980-0019	1980-11-24 00:24:00	SOUTHERN_ITALY	40.811	15.268	13		5			
IT-1980-0020	1980-11-24 03:03:54	SOUTHERN_ITALY	40.861	15.374	9	4.5	5			
IT-1980-0022	1980-11-25 17:06:44	SOUTHERN_ITALY	40.609	15.462	18		5			
IT-1981-0001	1981-01-16 00:37:45	SOUTHERN_ITALY	40.8378	15.4407	10.47	4.6	5.2			
IT-1982-0002	1982-03-21 09:44:00	SOUTHERN_ITALY	39.7043	15.6385	18.9	5				
IT-1983-0005	1983-11-09 16:29:52	NORTHERN_ITALY	44.6487	10.3665	28.1	5	5			
IT-1984-0002	1984-04-29 05:03:00	GUBBIO	43.21	12.57	5.97	5.2	5.6	130	20	-90
IT-1984-0004	1984-05-07 17:49:43	LAZIO_ABRUZZO	41.7	13.86	20.5	5.9	5.9	152	50	-96
IT-1984-0005	1984-05-11 10:41:48	LAZIO_ABRUZZO	41.78	13.89	12.1	5.7	5.5	317	49	-103
IT-1990-0001	1990-05-05 07:21:19	POTENZA	40.682	15.848	10	5.2	5.8			
IT-1990-0003	1990-12-13 00:24:26	SICILY	37.195	15.468	5	5.6	5.6			
IT-1991-0003	1991-05-26 12:26:01	SOUTHERN_ITALY	40.675	15.805	5	4.3	5.1			
IT-1995-0003	1995-09-30 10:14:34	SOUTHERN_ITALY	41.803	15.903	22.111	4.6	5.2			
FR-1996-0020	1996-07-15 00:13:28	SWITZERLAND	46.0236	6.0129	3.8	4.5	5.3			
IT-1996-0003	1996-10-15 09:56:00	NORTHERN_ITALY	44.797	10.662	5	4.9	5.4			
IT-1997-0004	1997-09-26 00:33:11	UMBRIA_MARCHE_1ST_SHOCK	43.023	12.892	5.7	5.6	5.7	148	40	-83
IT-1997-0006	1997-09-26 09:40:24	UMBRIA_MARCHE_2ND_SHOCK	43.031	12.862	5.7	5.8	6	152	40	-90
IT-1997-0062	1997-10-03 08:55:20	CENTRAL_ITALY	43.038	12.848	4.8	5	5.2	141	43	-74
IT-1997-0091	1997-10-06 23:24:51	CENTRAL_ITALY	43.023	12.849	5.5	5.4	5.4	170	40	-80
IT-1997-0128	1997-10-12 11:08:35	CENTRAL_ITALY	42.924	12.952	4.8	5.1	5.2	154	51	-82
IT-1997-0137	1997-10-14 15:23:09	UMBRIA_MARCHE_3RD_SHOCK	42.929	12.93	6	5.5	5.6	144	40	-100
IT-1998-0028	1998-03-21 16:45:09	CENTRAL_ITALY	42.978	12.906	5	4.6	5			
IT-1998-0050	1998-03-26 16:26:17	CENTRAL_ITALY	43.175	12.86	47.818		5.3			
IT-1998-0054	1998-04-03 07:26:36	CENTRAL_ITALY	43.177	12.786	9.649	4.9	5.1			
SI-1998-0010	1998-04-12 10:55:31	BOVEC	46.2506	13.6661	5.1	5.7	5.7			
IT-1998-0103	1998-09-09 11:28:00	SOUTHERN_ITALY	39.979	16.026	7.434	5.5	5.6			
IT-2001-0032	2001-07-17 15:06:14	NORTHERN_ITALY	46.626	11.049	3.487	5.3	4.8			
IT-2002-0024	2002-09-06 01:21:28	SICILY	38.381	13.701	5	5.6	5.8	251	53	112
IT-2002-0045	2002-10-31 10:33:00	MOLISE_1ST_SHOCK	41.696	14.928	10	5.4	5.7	267	82	-157
IT-2002-0047	2002-11-01 15:09:02	MOLISE_2ND_SHOCK	41.719	14.841	10	5.3	5.7	261	86	-165
IT-2003-0019	2003-03-29 17:42:13	ADRIATIC_SEA	43.1345	15.3393	7.8878	5.3	5.5			
IT-2003-0048	2003-09-14 21:42:53	NORTHERN_ITALY	44.255	11.38	8.33	5	5.3	94	53	107
IT-2004-0084	2004-05-05 13:39:41	SICILY	38.52	14.901	255.291	5.3	5.4			
IT-2004-0109	2004-07-12 13:04:04	AUSTRIA	46.3222	13.6571	4.101	4.9	5.16			
IT-2004-0181	2004-11-24 22:59:38	GARDA_LAKE	45.685	10.521	5.444	5.2	5			
IT-2004-0182	2004-11-25 06:21:15	ADRIATIC_SEA	43.1894	15.3594	0.218	4.9	5.3			
IT-2006-0272	2006-10-26 14:28:36	SICILY	38.658	15.495	220.7	5.7	5.8			
IT-2007-0115	2007-07-04 23:55:32	SICILY	38.831	15.265	279.3	4.9	5.2			
IT-2008-0003	2008-12-17 21:57:42	SOUTHERN_ITALY	39.168	15.586	269.4	5.1	5.2			
IT-2008-0004	2008-12-23 15:24:21	NORTHERN_ITALY	44.544	10.345	22.9	5.2	5.5			
IT-2009-0009	2009-04-06 01:32:40	L_AQUILA	42.342	13.38	8.3	5.9	6.1	140	50	-90
IT-2009-0032	2009-04-06 02:37:04	CENTRAL_ITALY	42.36	13.328	8.7	4.6	5.1	128	55	-122
IT-2009-0084	2009-04-06 23:15:36	CENTRAL_ITALY	42.463	13.385	9.7	5	5.1	132	50	-109
IT-2009-0095	2009-04-07 09:26:28	CENTRAL_ITALY	42.336	13.387	9.6	4.8	5.1	128	54	-111
IT-2009-0102	2009-04-07 17:47:37	CENTRAL_ITALY	42.303	13.486	17.1	5.4	5.5	105	53	-134
IT-2009-0121	2009-04-09 00:52:59	CENTRAL_ITALY	42.489	13.351	11	5.1	5.4	136	46	-99
IT-2009-0140	2009-04-09 19:38:16	CENTRAL_ITALY	42.504	13.35	9.3	5	5.2	132	46	-97
IT-2009-0174	2009-04-13 21:14:24	CENTRAL_ITALY	42.498	13.377	9	5	5	133	54	-104
EMSC-20101103_0000077	2010-11-03 18:13:10	TYRRHENIAN_SEA	40.0305	13.2575	469.1419	5.1	5.21			
EMSC-20110707_0000048	2011-07-07 19:21:47	WESTERN_MEDITERRANEAN_SEA	42.0875	7.593	8.9571	4.5	5.12			
IT-2012-0002	2012-01-25 08:06:37	NORTHERN_ITALY	44.871	10.51	29	5	5			
IT-2012-0004	2012-01-27 14:53:12	NORTHERN_ITALY	44.523	10.009	72.4	5.2	5			
IT-2012-0008	2012-05-20 02:03:50	EMILIA_1ST_SHOCK	44.8955	11.2635	9.5	5.9	6.1	114	40	90
IT-2012-0068	2012-05-20 02:07:28	NORTHERN_ITALY	44.8737	11.2703	6.1	5				
IT-2012-0009	2012-05-20 03:02:47	NORTHERN_ITALY	44.8597	11.152	9.1	5	5.1	103	27	89
IT-2012-0006	2012-05-20 13:18:01	NORTHERN_ITALY	44.8135	11.4407	3.35	5.1	5.2	100	37	64
IT-2012-0011	2012-05-29 07:00:02	EMILIA_2ND_SHOCK	44.8417	11.0657	8.07	5.8	6	95	60	90
IT-2012-0066	2012-05-29 08:25:51	NORTHERN_ITALY	44.8647	10.9475	7.87	5	4.7	105	21	94
IT-2012-0010	2012-05-29 10:55:56	NORTHERN_ITALY	44.8652	10.9795	4.35	5.3	5.5	112	32	101
IT-2012-0076	2012-05-29 11:00:01	MODENA	44.8558	10.941	8.68	5	4.9	90	38	66
IT-2012-0032	2012-05-29 11:00:22	NORTHERN_ITALY	44.866	10.9763	7.2	5.1	5.5	111	51	97
IT-2012-0012	2012-06-03 19:20:43	NORTHERN_ITALY	44.886	10.9502	8.66	5.1	4.9	92	16	37
IT-2012-0061	2012-10-25 23:05:24	COSENZA	39.8747	16.0158	9.7	5				
IT-2013-0005	2013-06-21 10:33:56	NORTHERN_ITALY	44.1308	10.1357	7	5.2	5.1			
EMSC-20131118_0000035	2013-11-18 07:58:41	NORTHWESTERN_BALKAN_PENINSULA	43.6766	16.8623	9.704	4.8	4.39			
EMSC-20131229_0000030	2013-12-29 06:54:57	NORTHWESTERN_BALKAN_PENINSULA	43.0937	17.2425	10	4.4	4.2			
IT-2013-0019	2013-12-29 17:08:43	CASERTA	41.3952	14.4342	20.4	5	5			
EMSC-20140405_0000052	2014-04-05 10:24:44	SOUTHERN_ITALY	38.766	17.2525	75.2	5	4.7			
EMSC-20160824_0000006	2016-08-24 01:36:32	CENTRAL_ITALY	42.6983	13.2335	8.1	6	6	156	50	-85
EMSC-20160824_0000013	2016-08-24 02:33:29	CENTRAL_ITALY	42.7922	13.1507	8	5.4	5.3	135	47	-98
EMSC-20161026_0000077	2016-10-26 17:10:36	CENTRAL_ITALY	42.8747	13.1243	8.1	5.4	5.4	161	38	-90
EMSC-20161026_0000095	2016-10-26 19:18:06	CENTRAL_ITALY	42.9087	13.1288	7.5	5.9	5.9	159	47	-75
EMSC-20161028_0000138	2016-10-28 20:02:49	TYRRHENIAN_SEA	39.3581	13.5229	460.1445	5.8	5.79			
EMSC-20161030_0000029	2016-10-30 06:40:18	CENTRAL_ITALY	42.8322	13.1107	9.2	6.1	6.5	151	47	-95
EMSC-20170118_0000027	2017-01-18 09:25:42	CENTRAL_ITALY	42.545	13.2768	10	5.4	5.1	153	32	-88
EMSC-20170118_0000034	2017-01-18 10:14:12	CENTRAL_ITALY	42.531	13.2838	9.6	5.4	5.5	161	51	-86
EMSC-20170118_0000037	2017-01-18 10:25:26	CENTRAL_ITALY	42.5033	13.277	9.4	5.3	5.4	140	35	-89
EMSC-20170118_0000119	2017-01-18 13:33:37	CENTRAL_ITALY	42.4733	13.2747	9.5	5.1	5	188	30	-39
EMSC-20180816_0000090	2018-08-16 18:19:06	SOUTHERN_ITALY	41.8742	14.8648	19.6	5.2	5.1			

Table S1: Event List

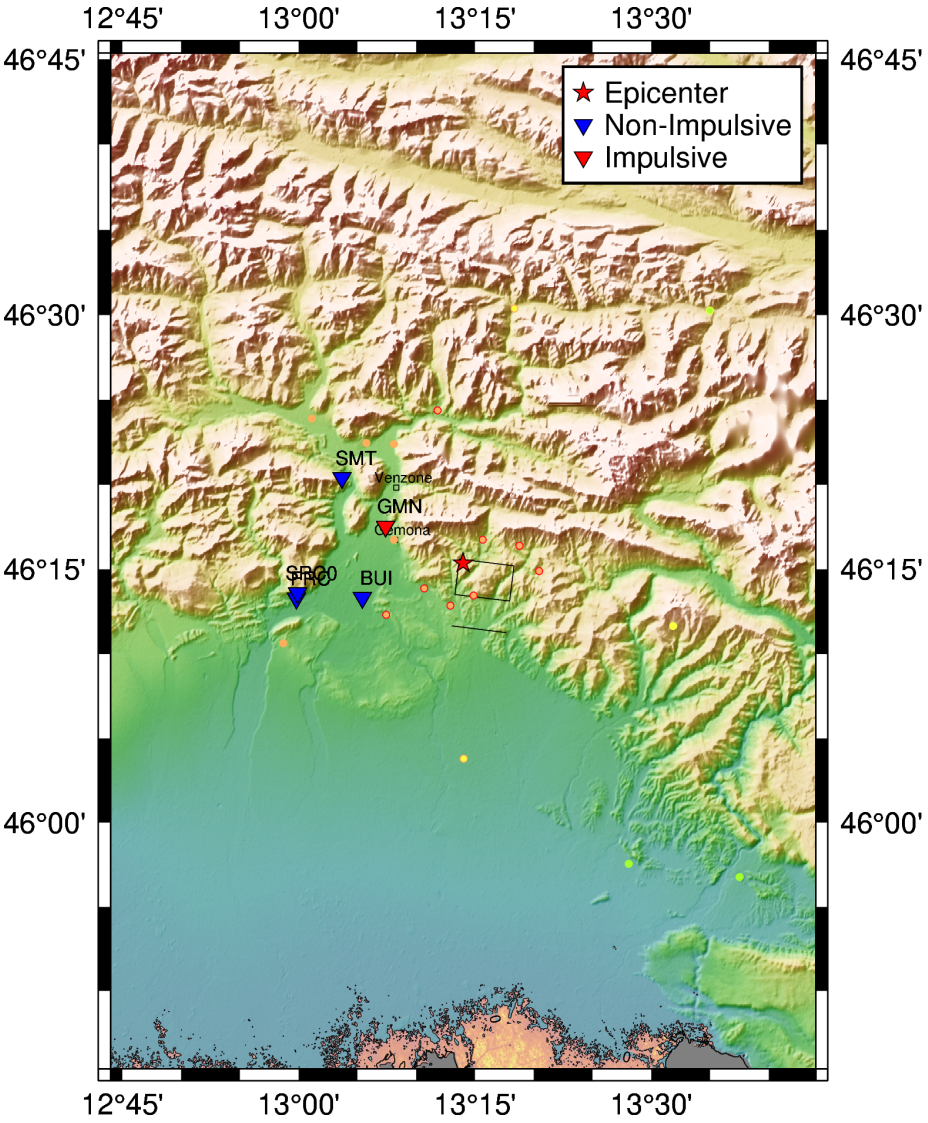
2 Impulsive Earthquakes

2.1 IT-1976-0025

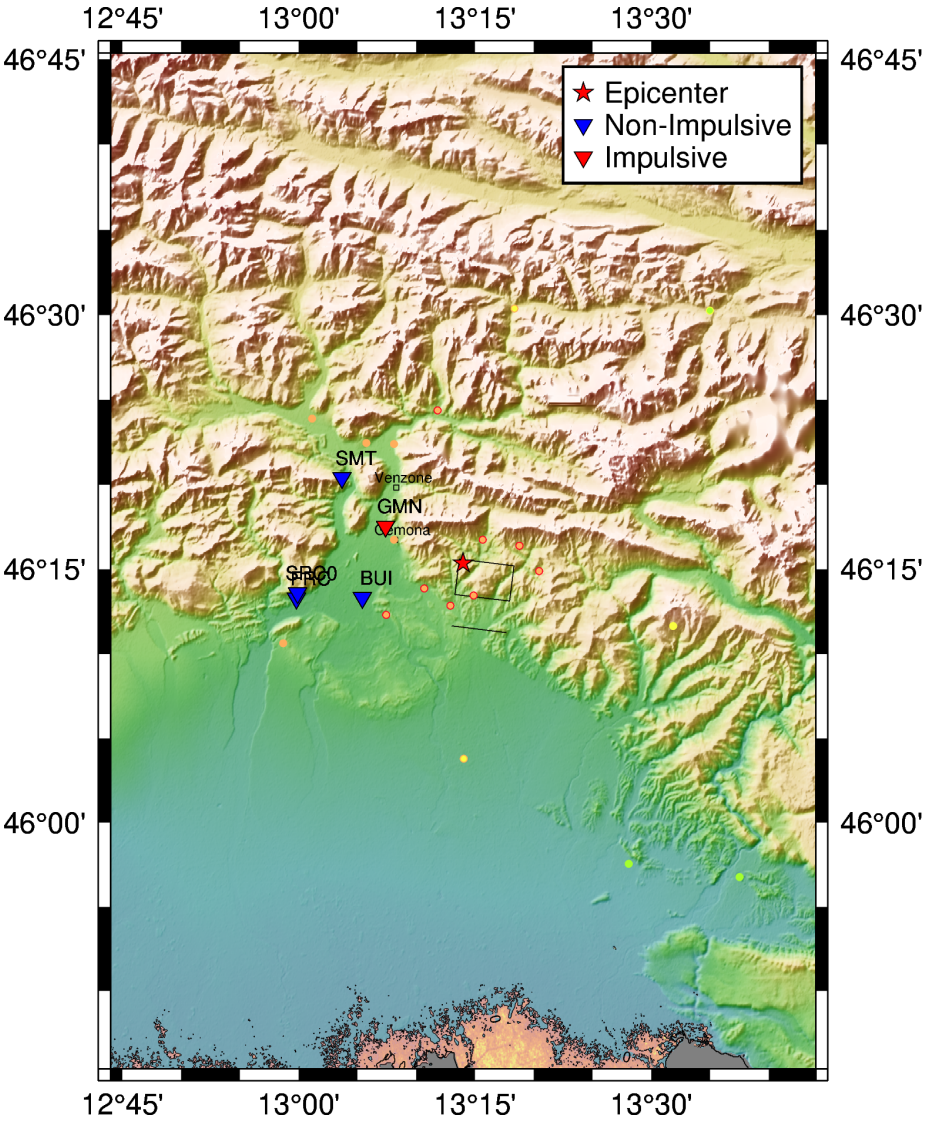
2.1.1 Shahi and Baker (2014)



2.1.2 Chang et al. (2016)

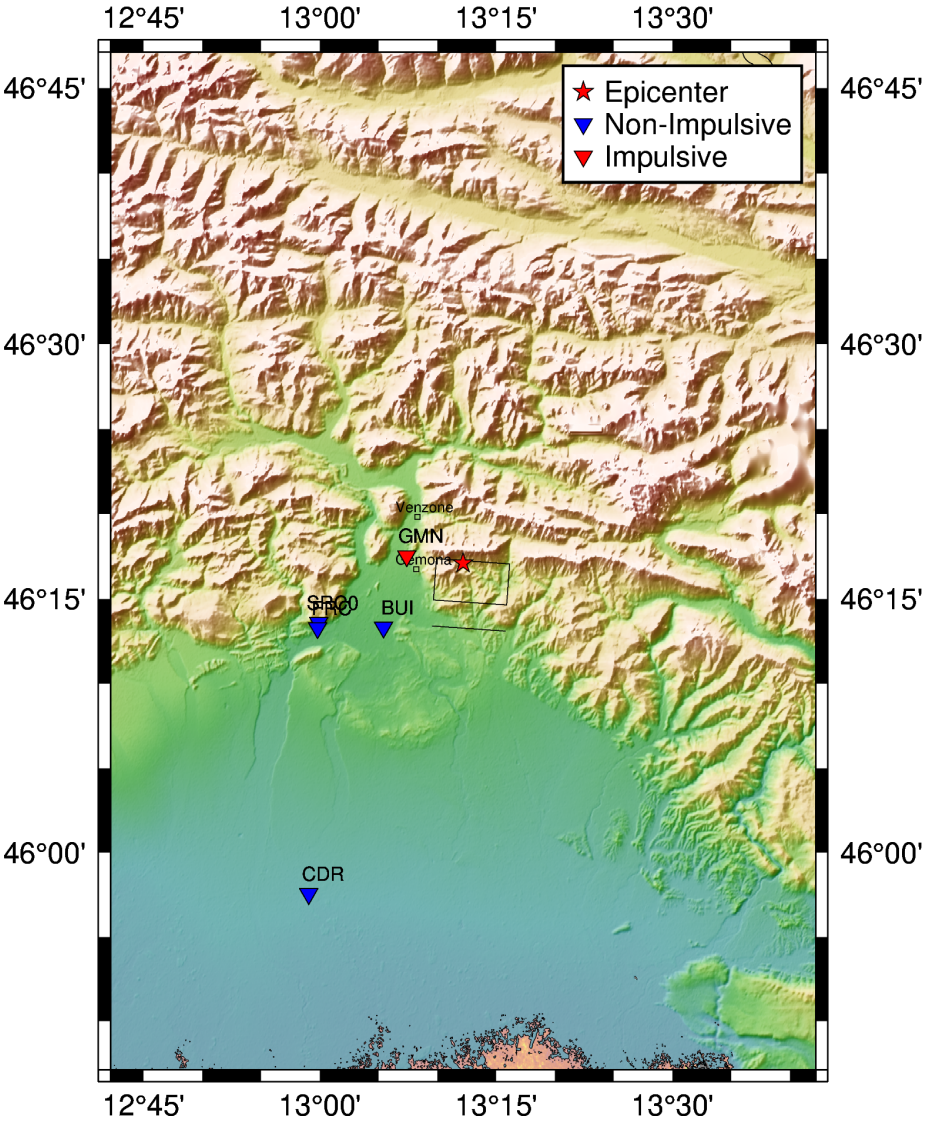


2.1.3 Ertuncay and Costa

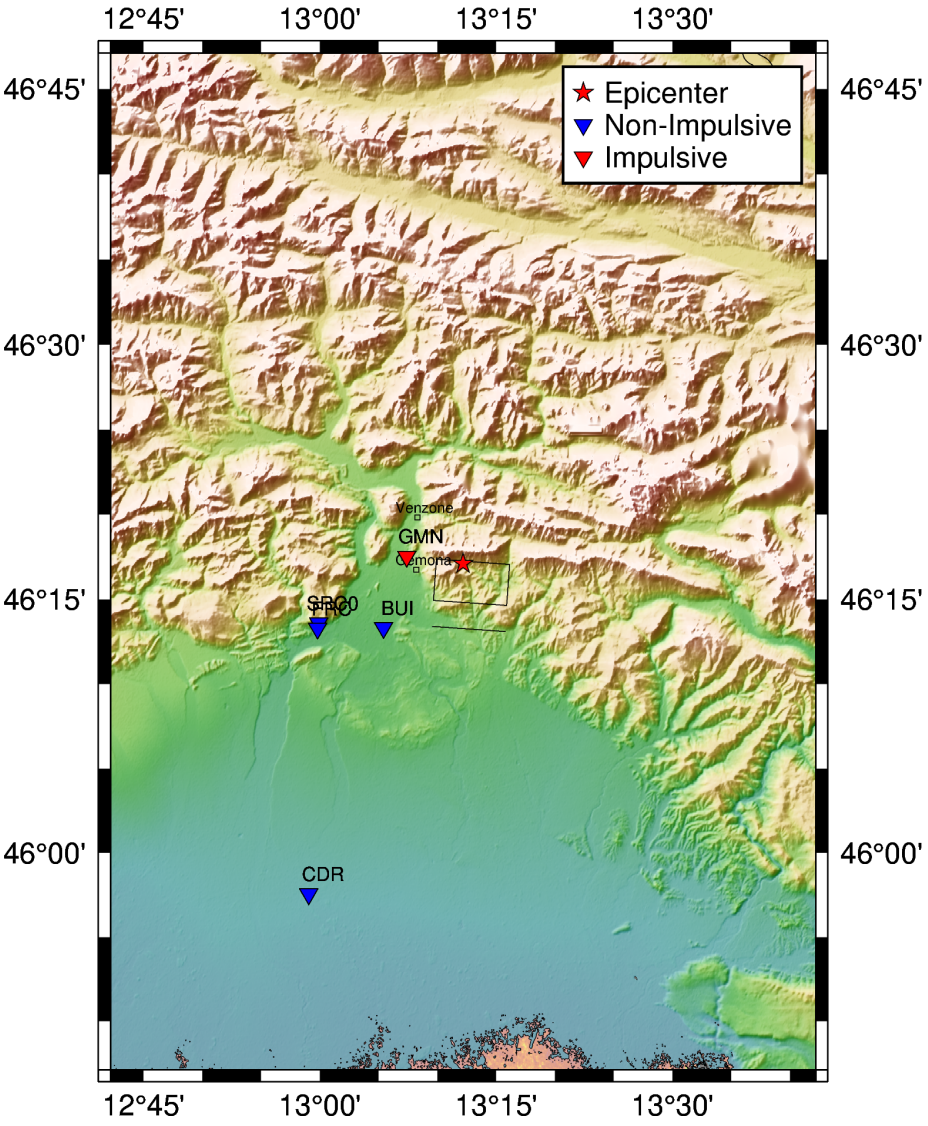


2.2 IT-1976-0027

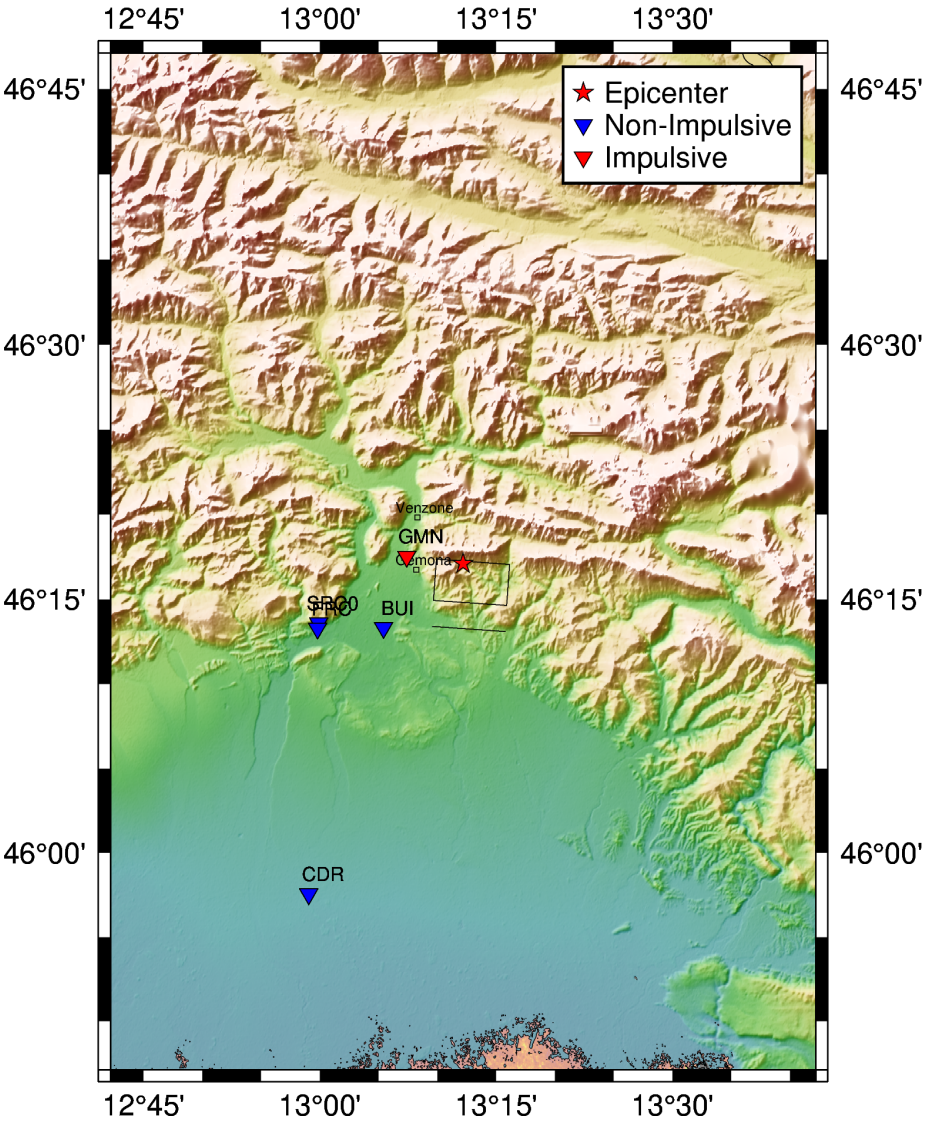
2.2.1 Shahi and Baker (2014)



2.2.2 Chang et al. (2016)

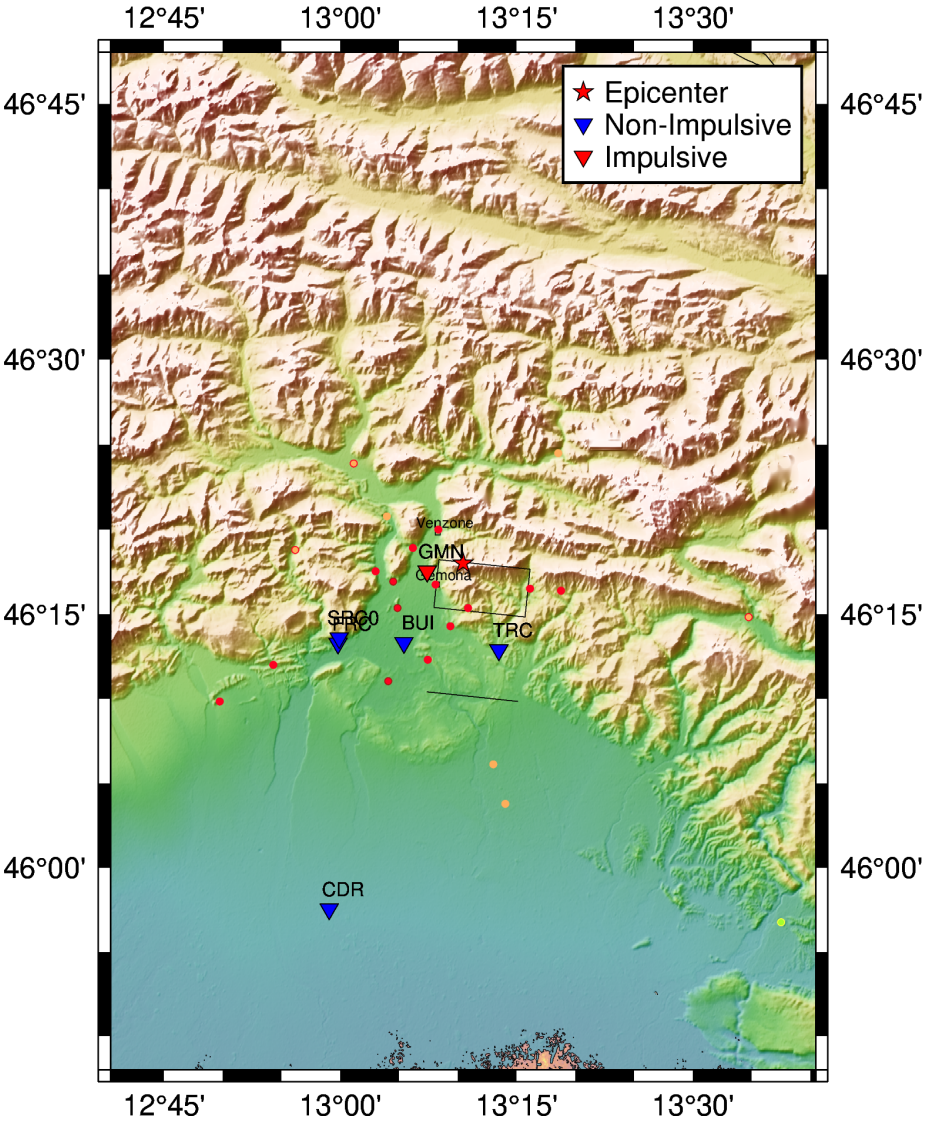


2.2.3 Ertuncay and Costa

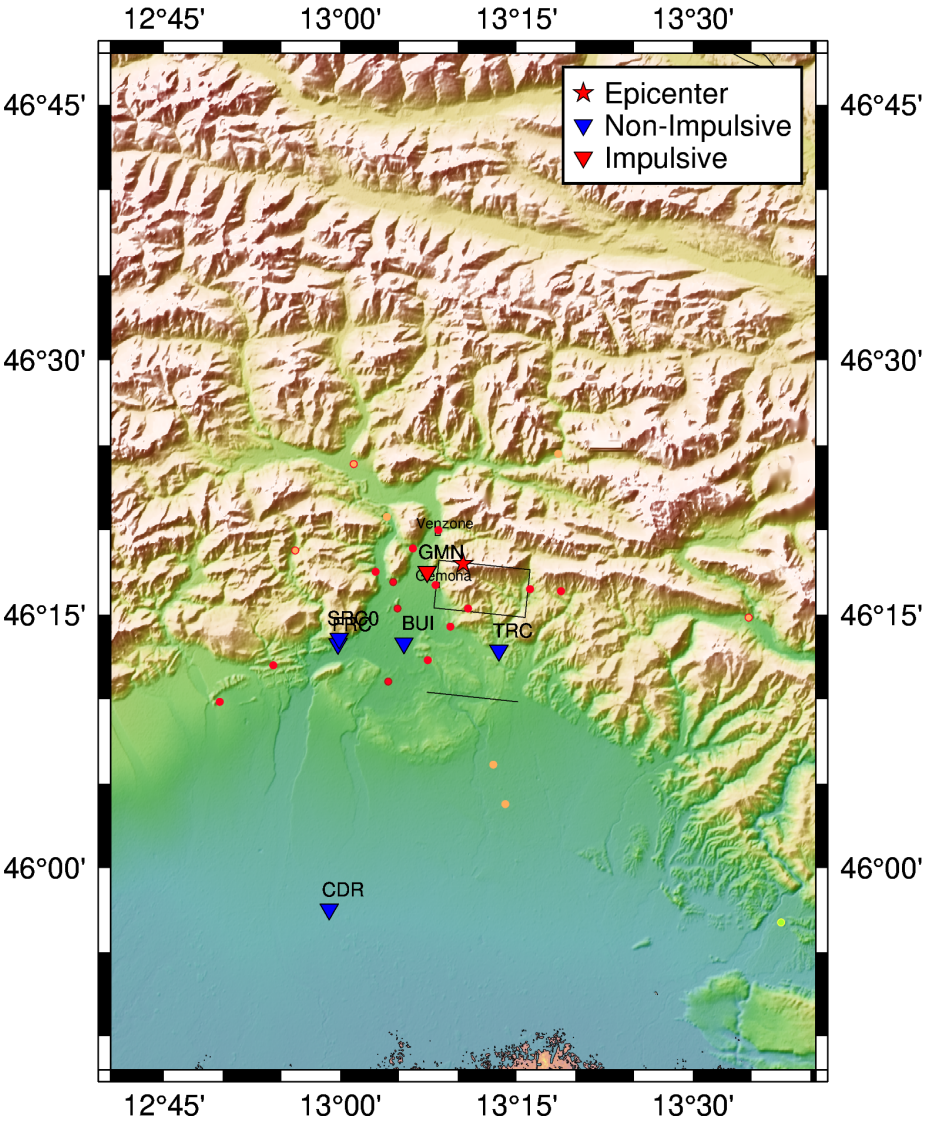


2.3 IT-1976-0030

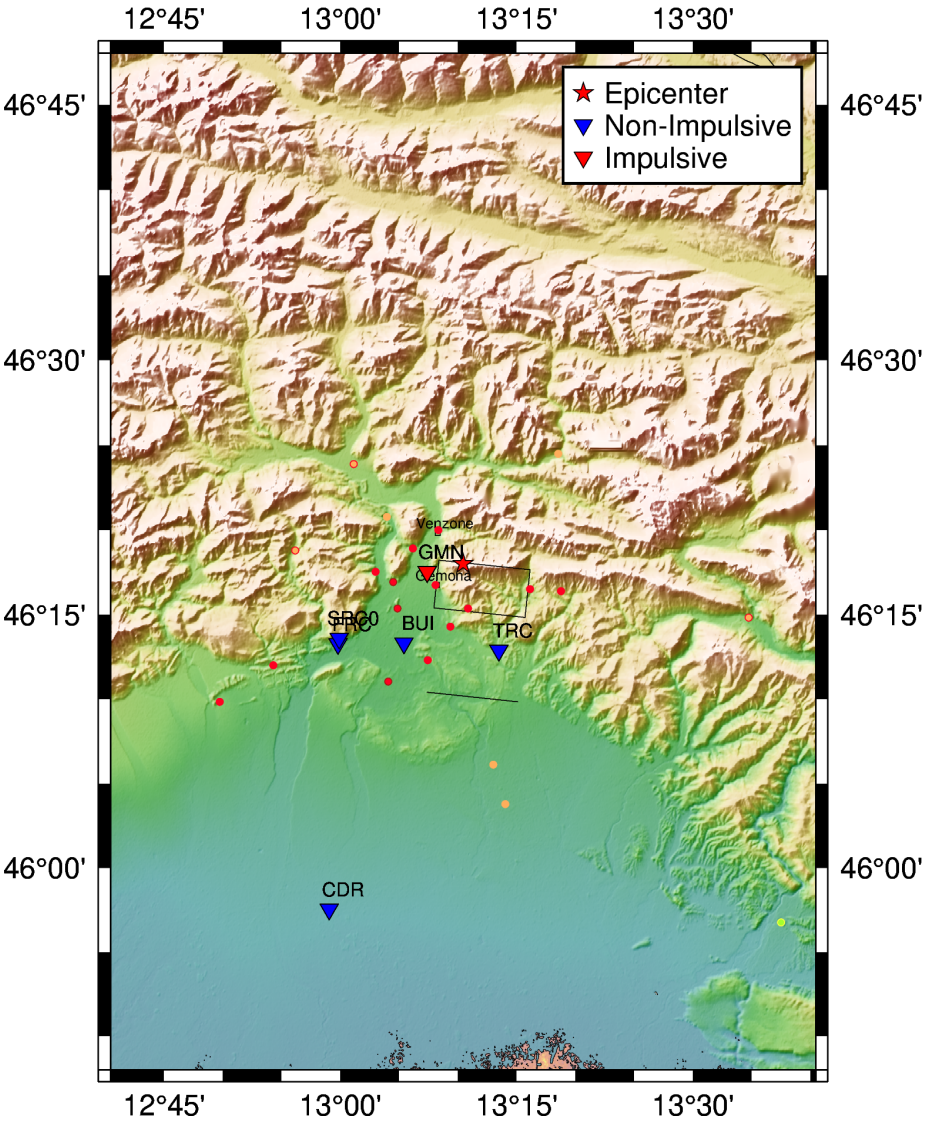
2.3.1 Shahi and Baker (2014)



2.3.2 Chang et al. (2016)

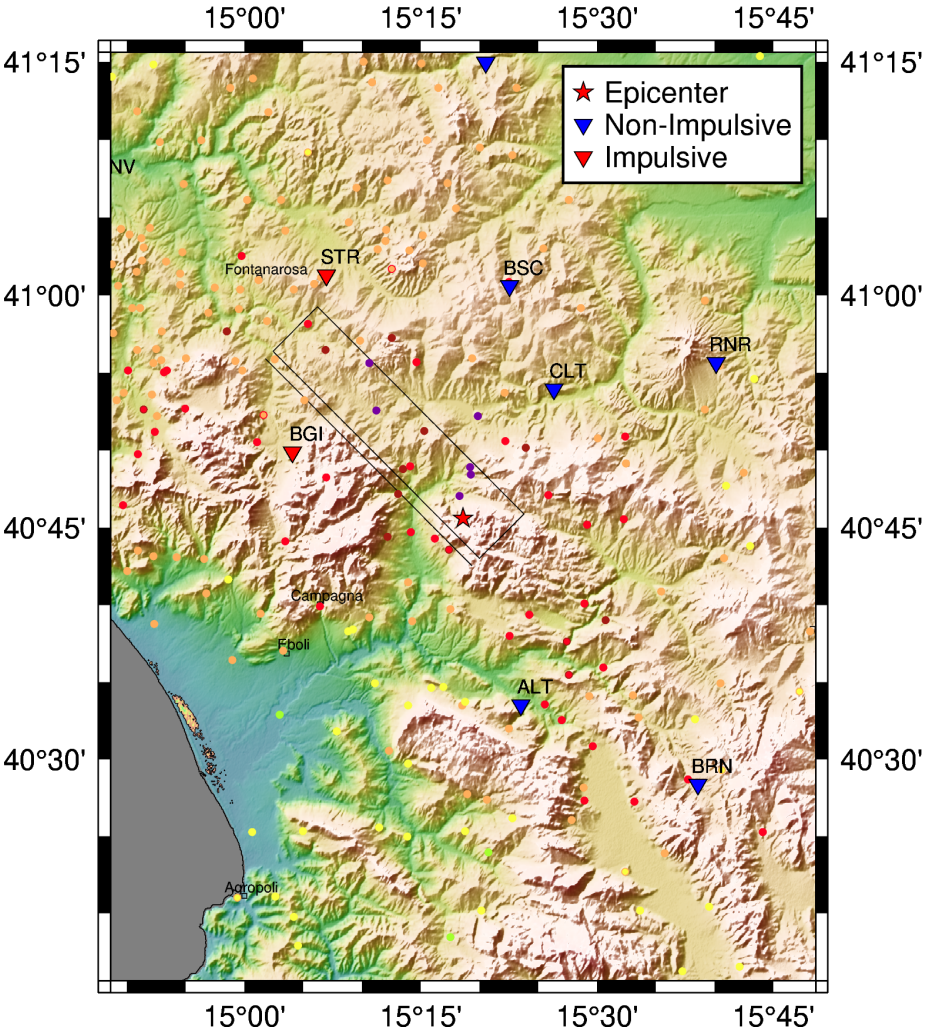


2.3.3 Ertuncay and Costa

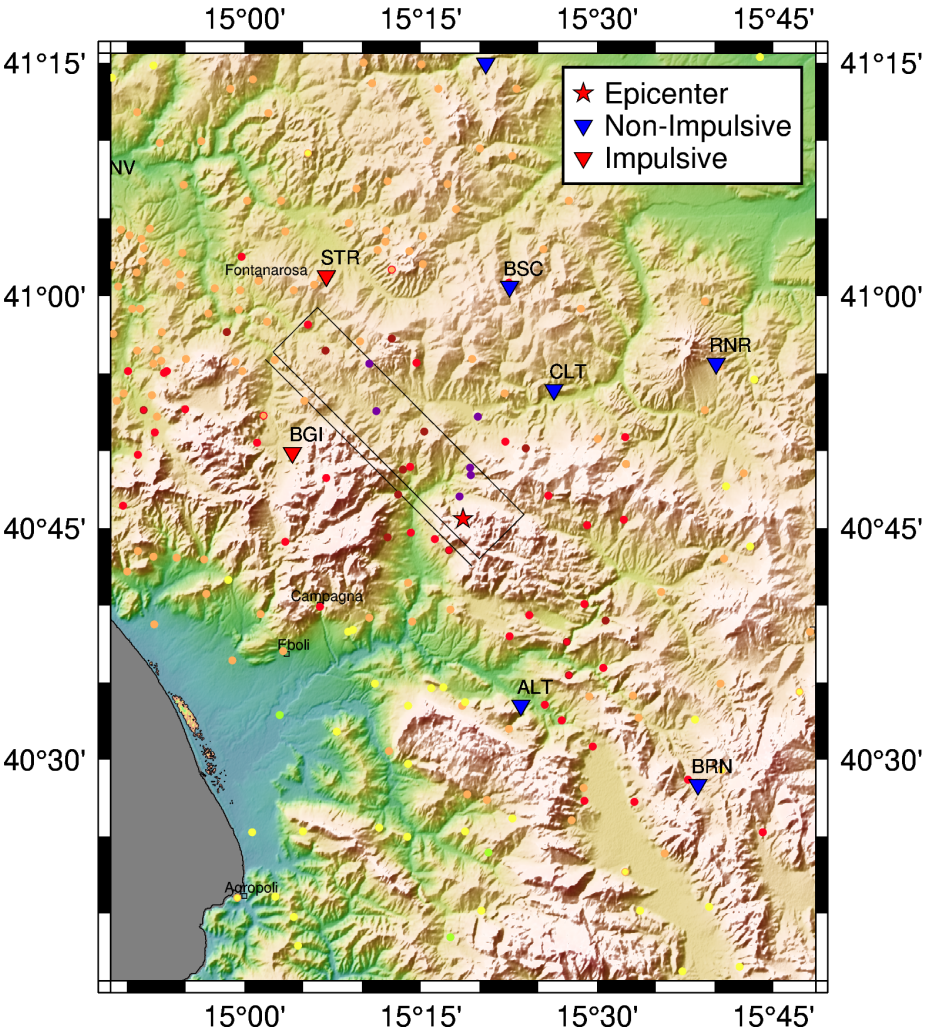


2.4 IT-1980-0012

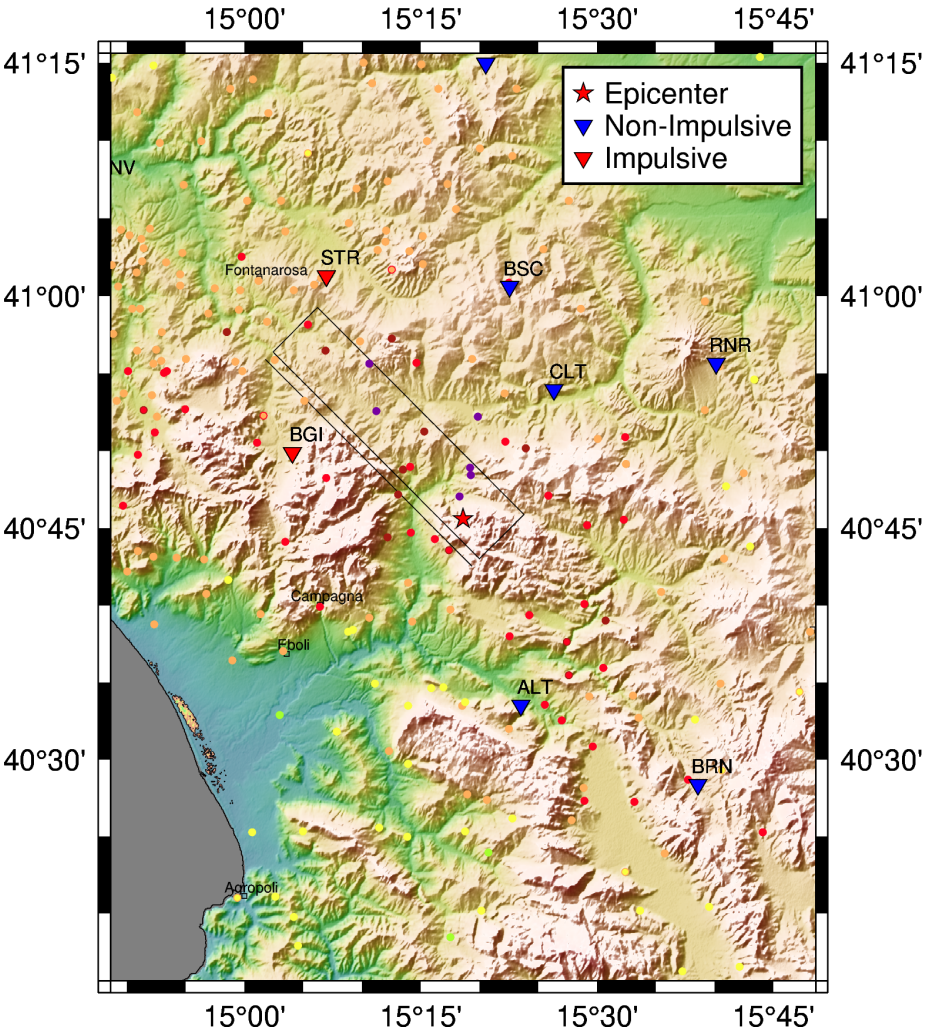
2.4.1 Shahi and Baker (2014)



2.4.2 Chang et al. (2016)

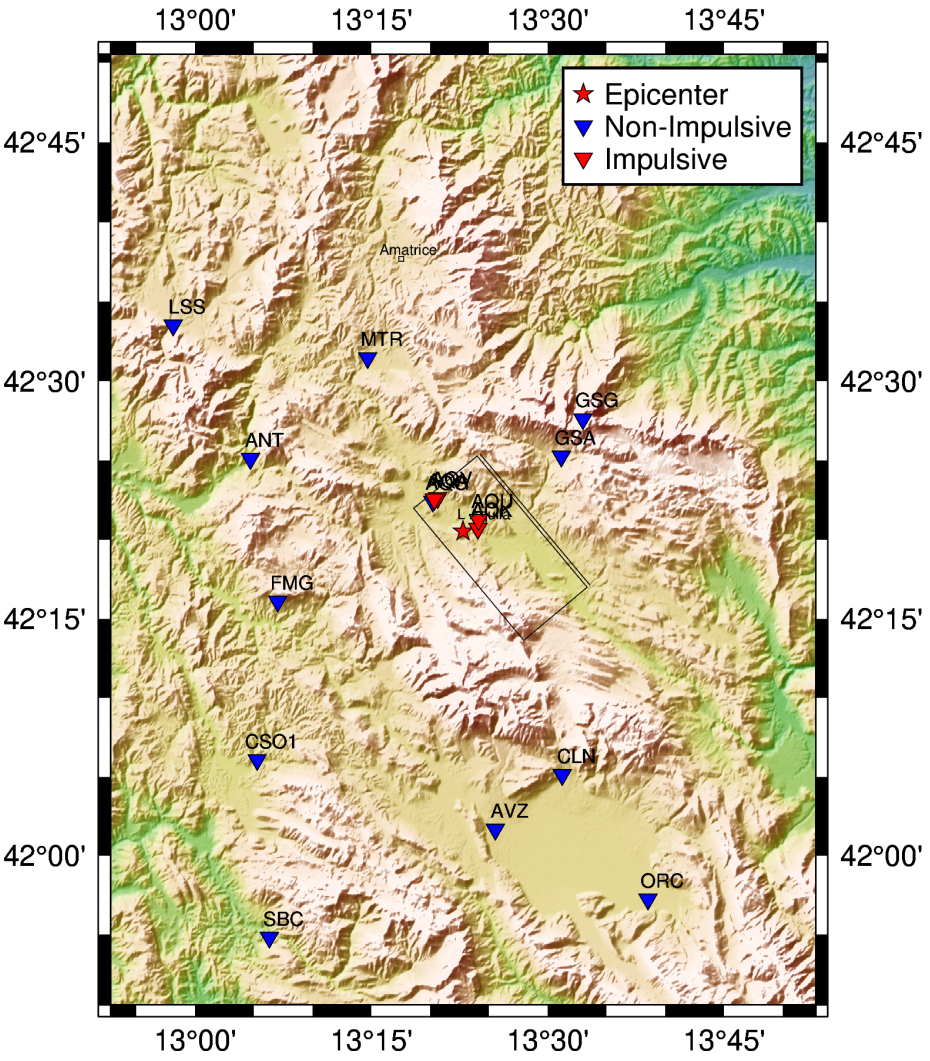


2.4.3 Ertuncay and Costa

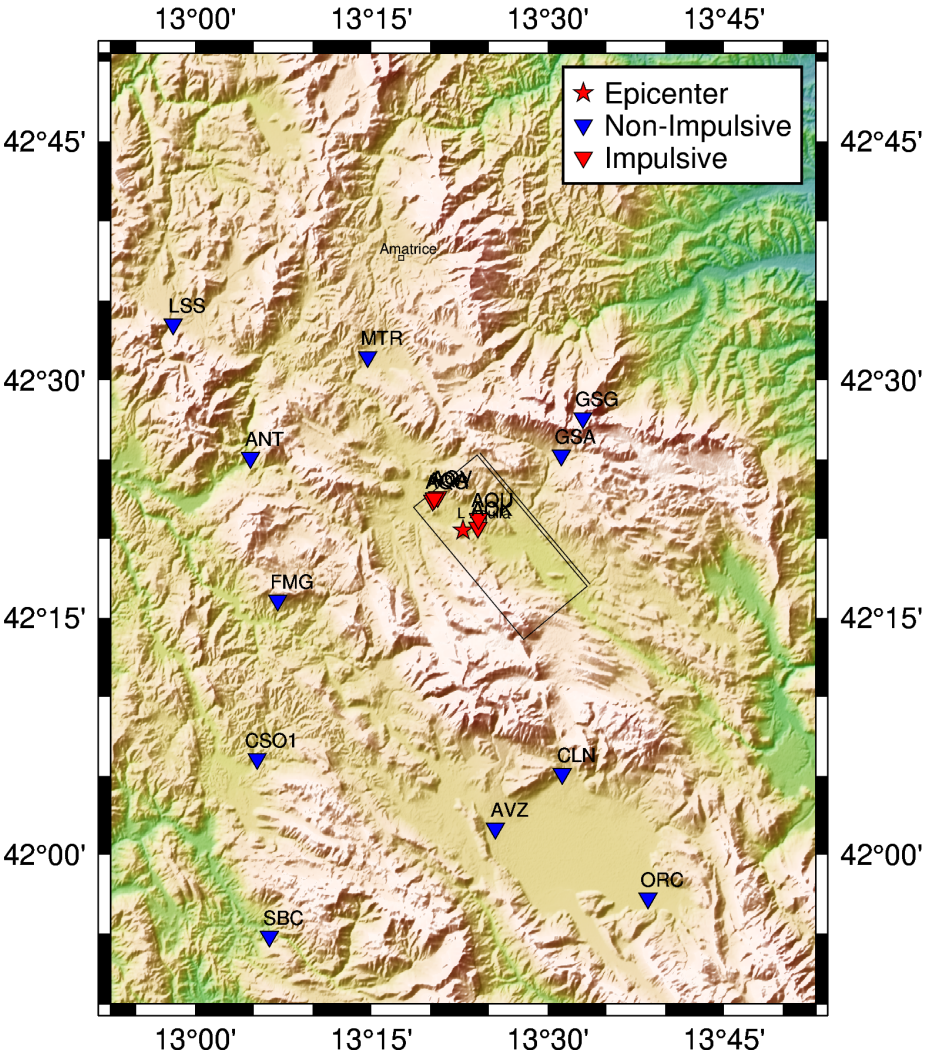


2.5 IT-2009-0009

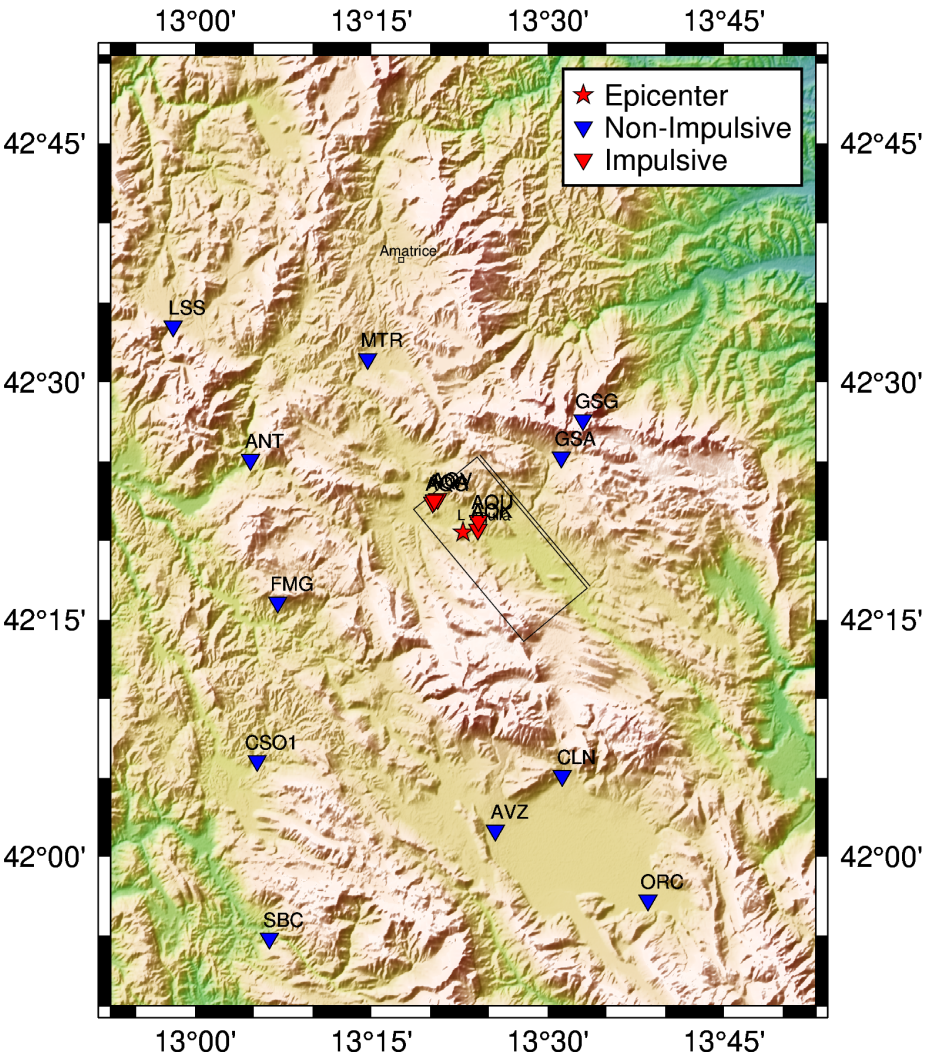
2.5.1 Shahi and Baker (2014)



2.5.2 Chang et al. (2016)

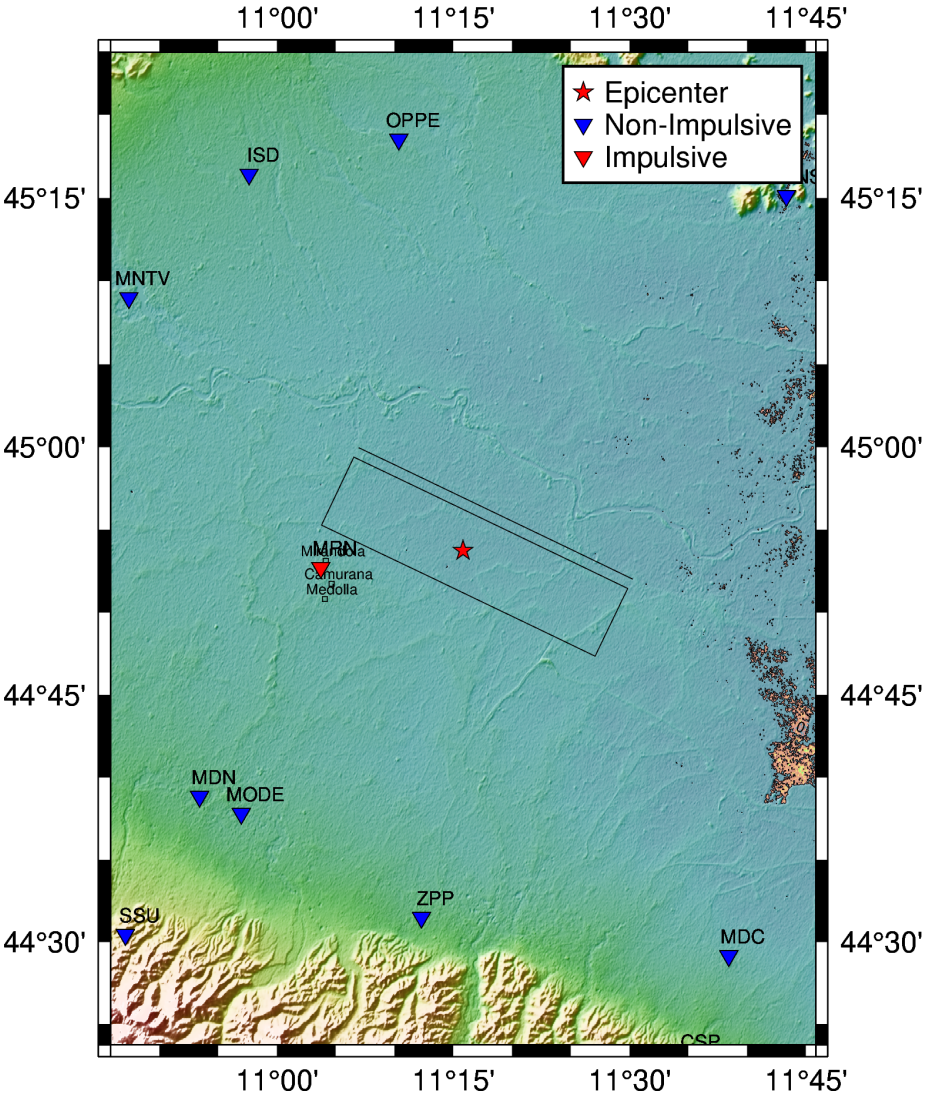


2.5.3 Ertuncay and Costa

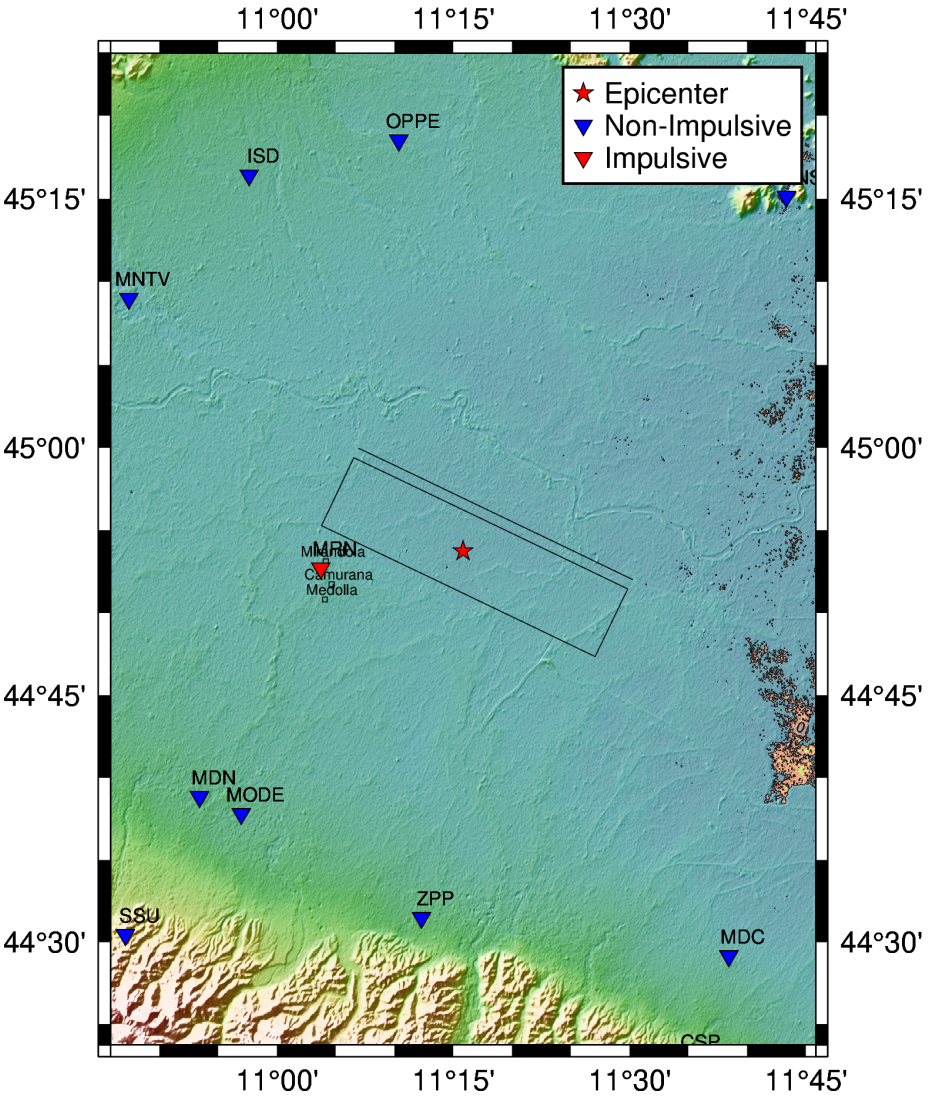


2.6 IT-2012-0008

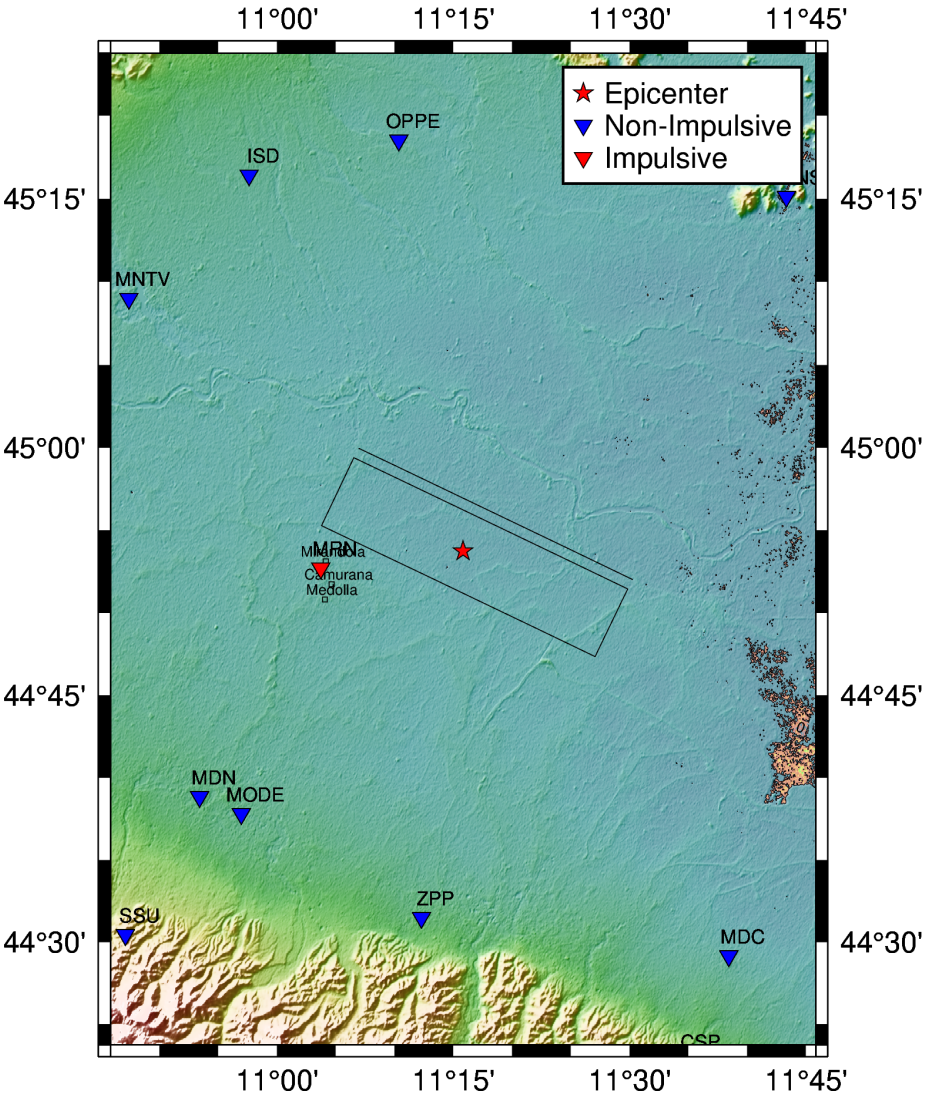
2.6.1 Shahi and Baker (2014)



2.6.2 Chang et al. (2016)

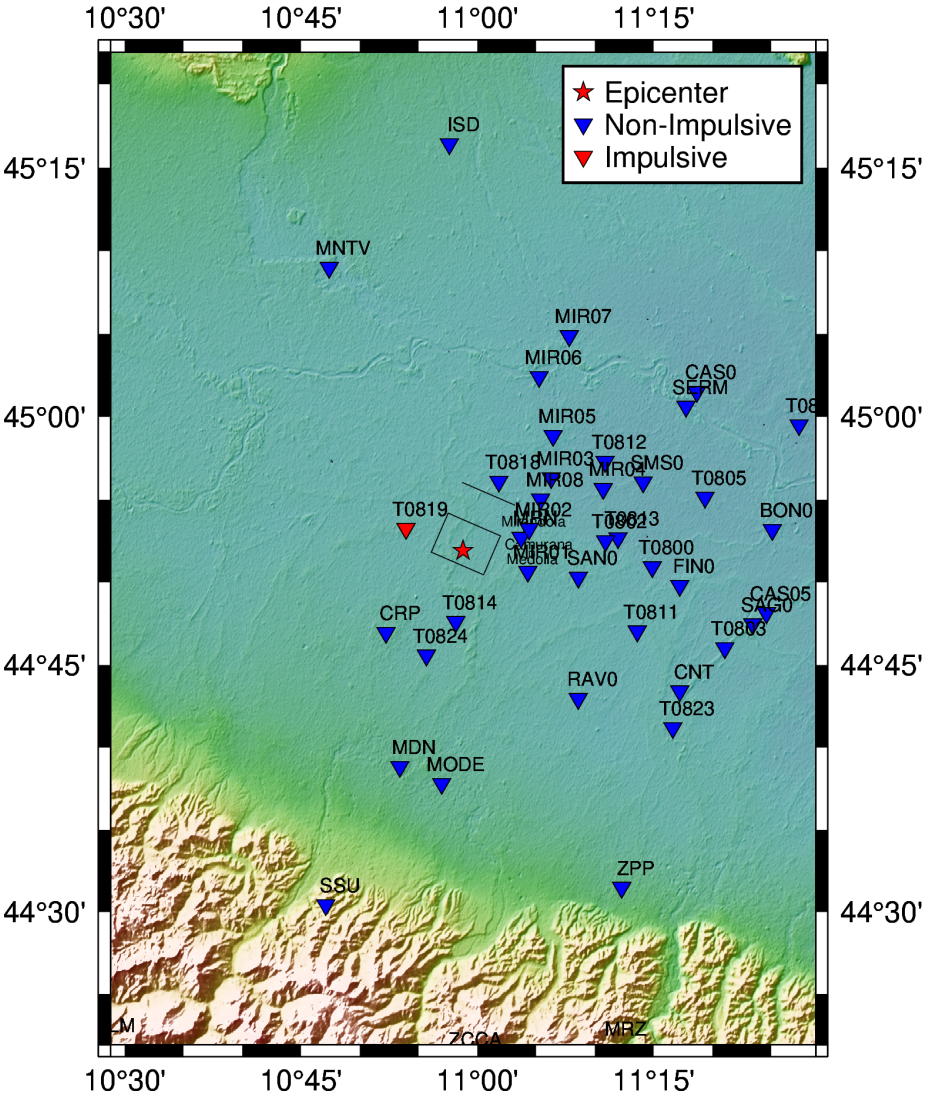


2.6.3 Ertuncay and Costa

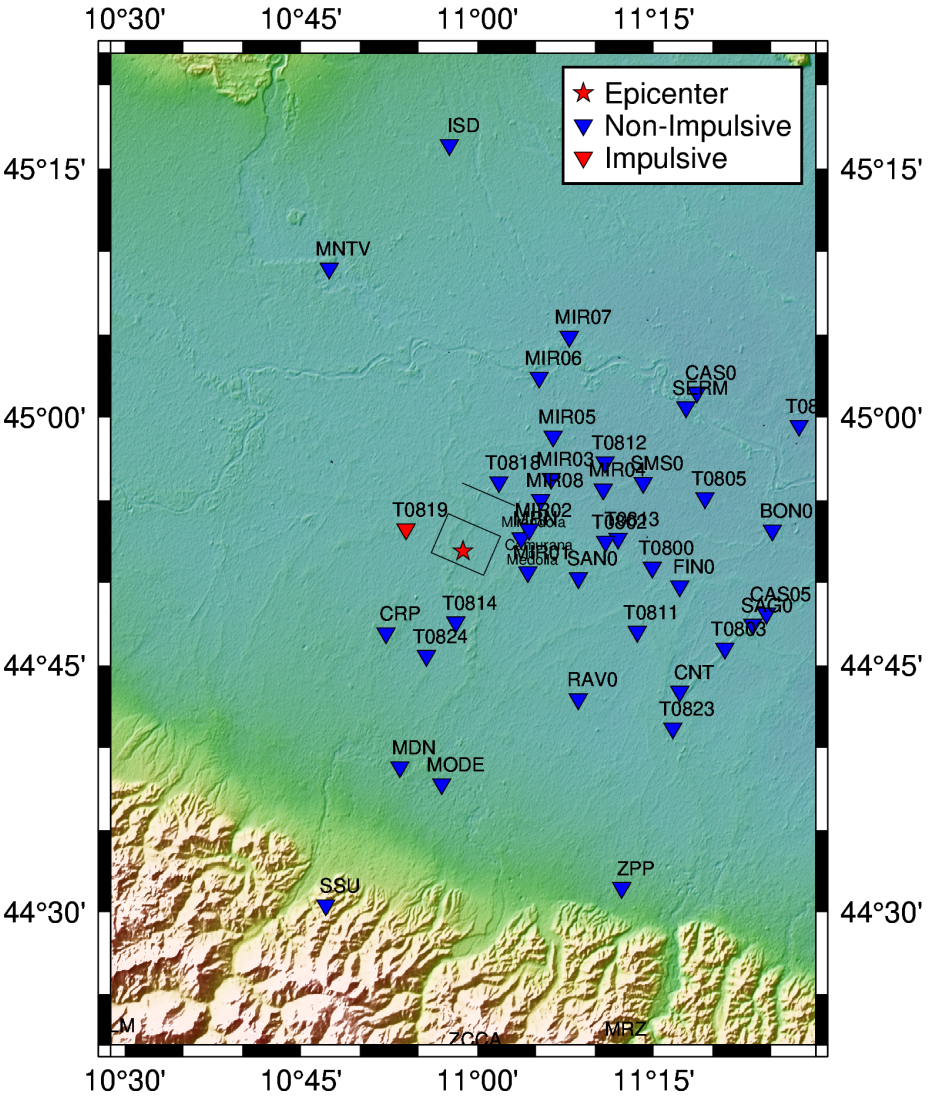


2.7 IT-2012-0010

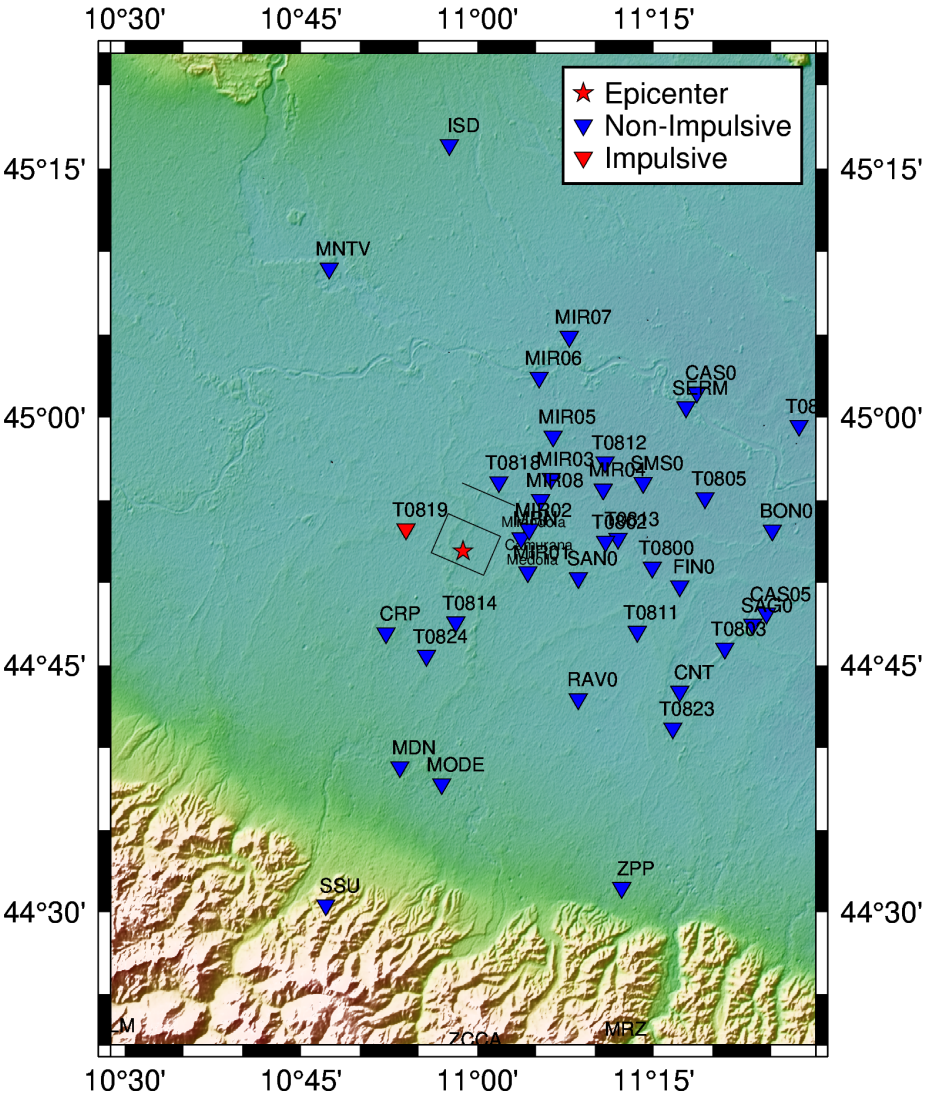
2.7.1 Shahi and Baker (2014)



2.7.2 Chang et al. (2016)

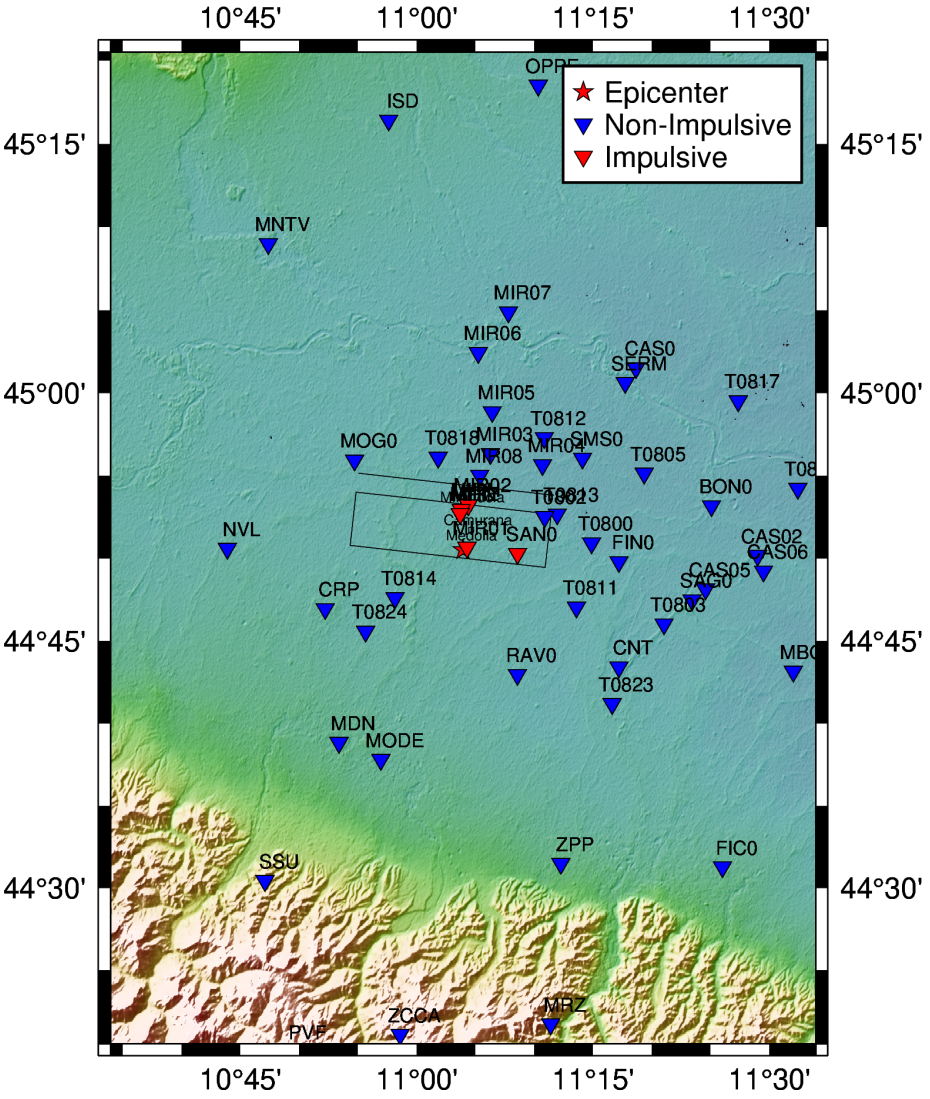


2.7.3 Ertuncay and Costa

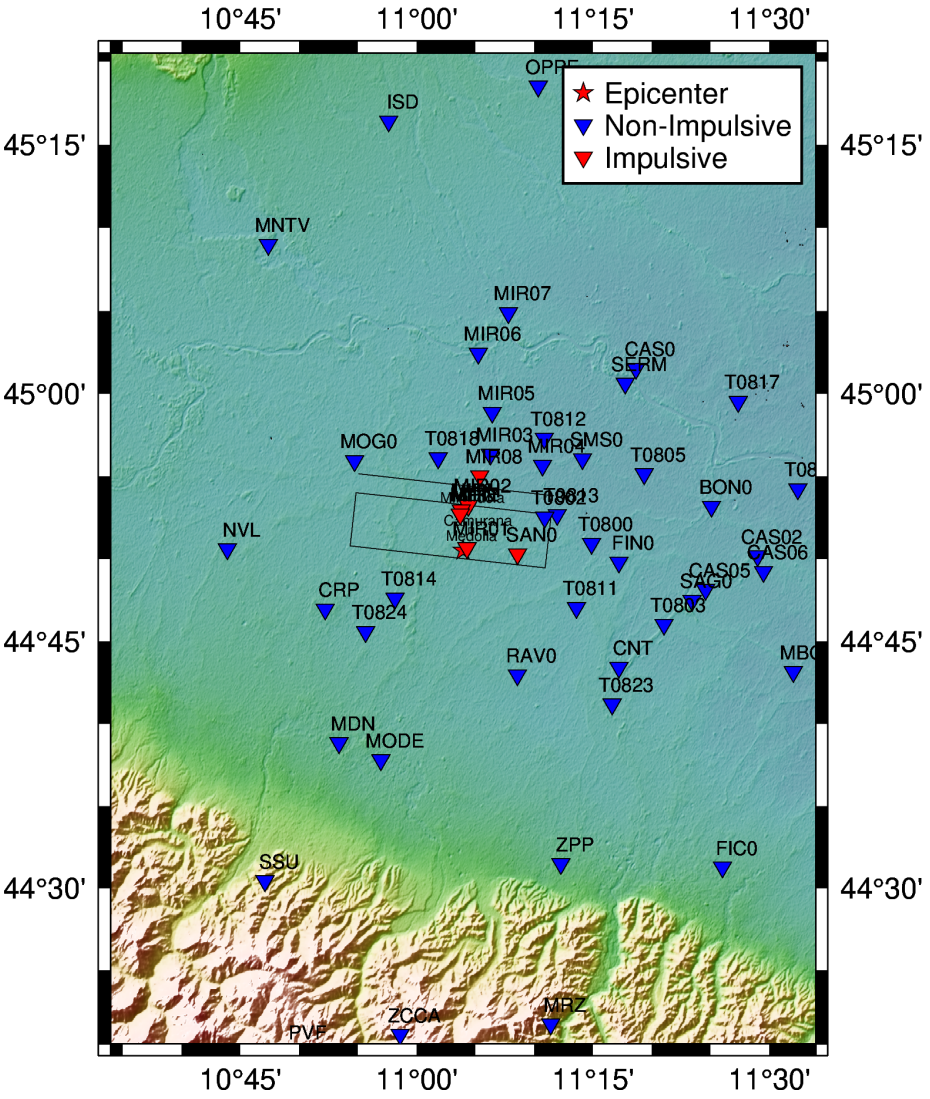


2.8 IT-2012-0011

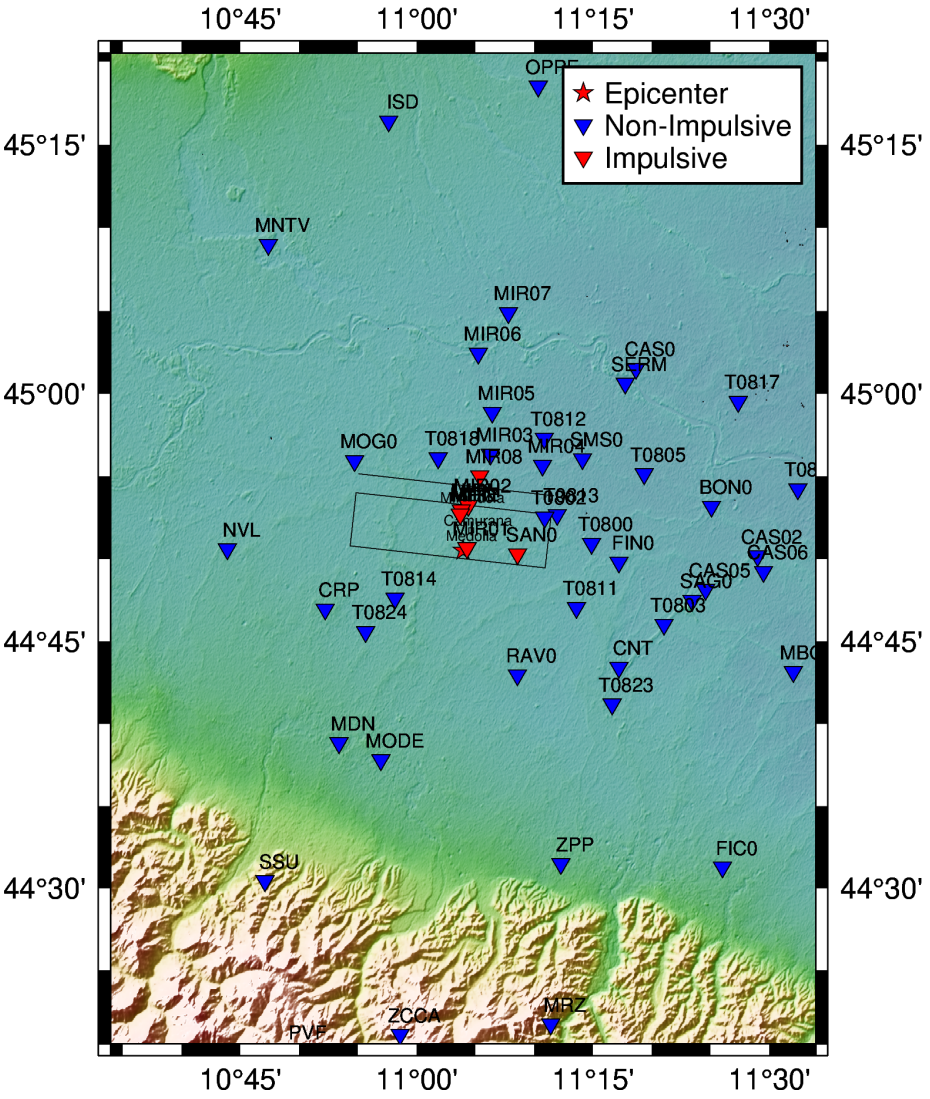
2.8.1 Shahi and Baker (2014)



2.8.2 Chang et al. (2016)

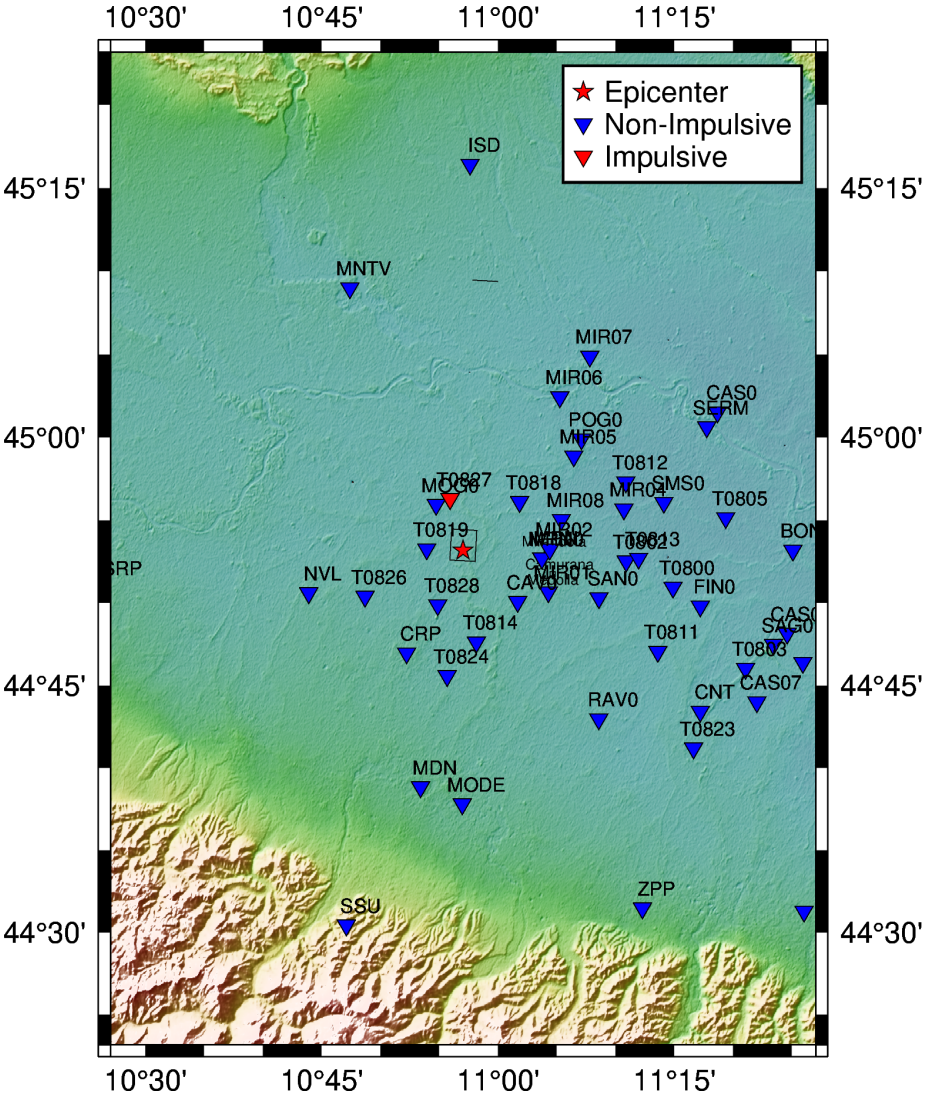


2.8.3 Ertuncay and Costa

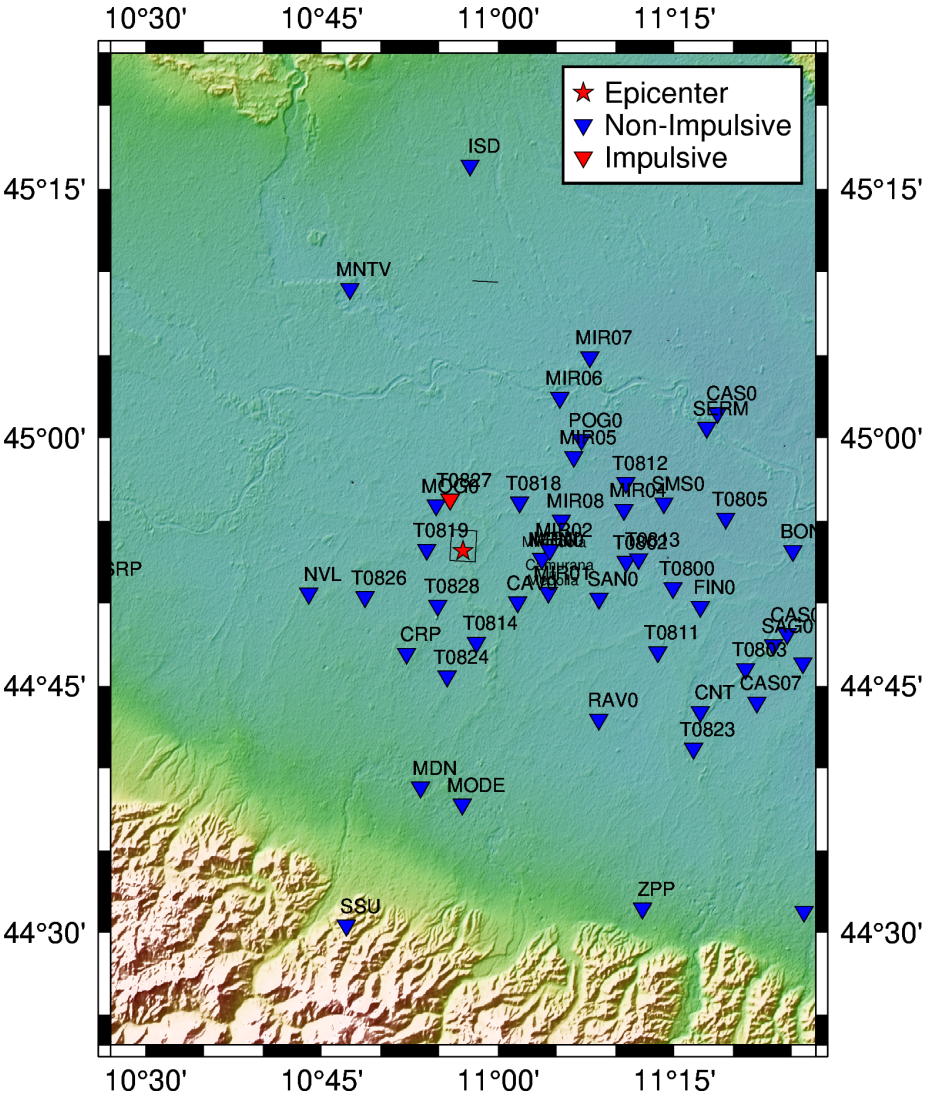


2.9 IT-2012-0012

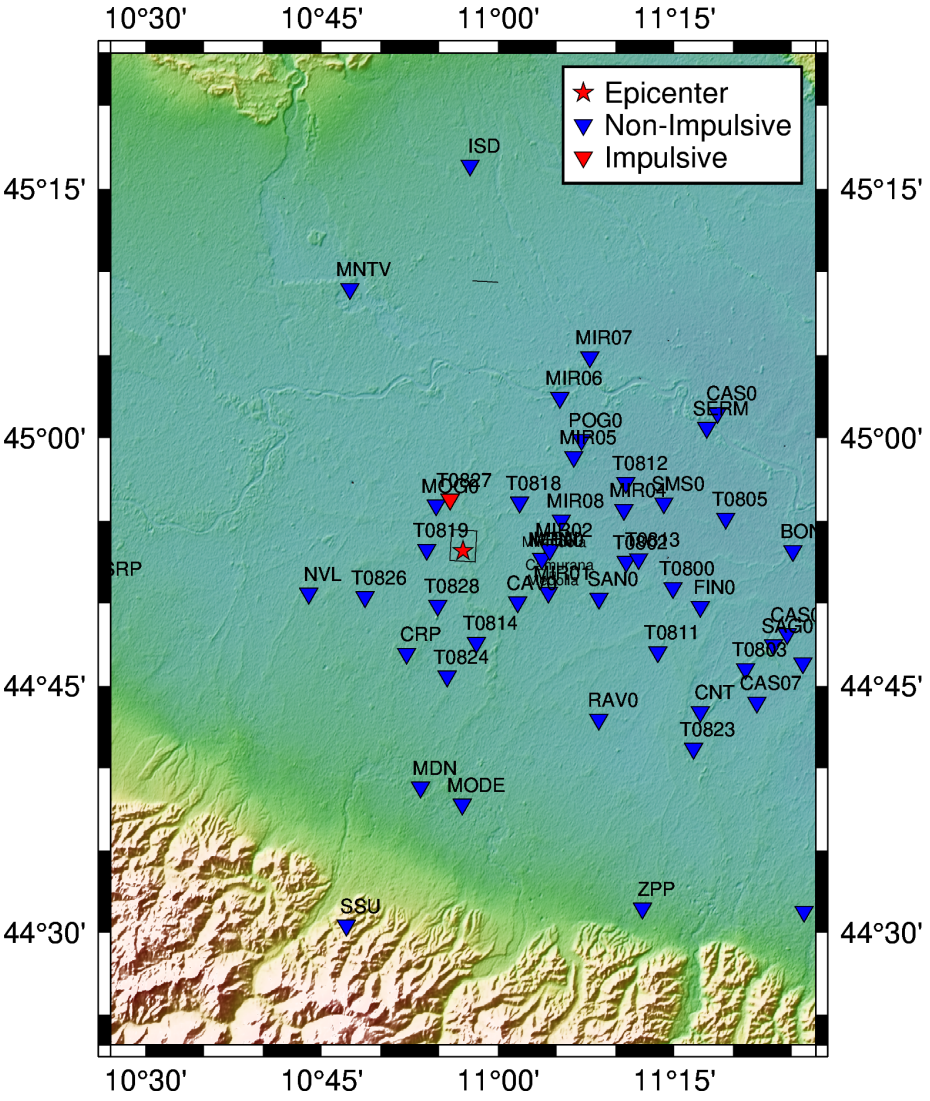
2.9.1 Shahi and Baker (2014)



2.9.2 Chang et al. (2016)

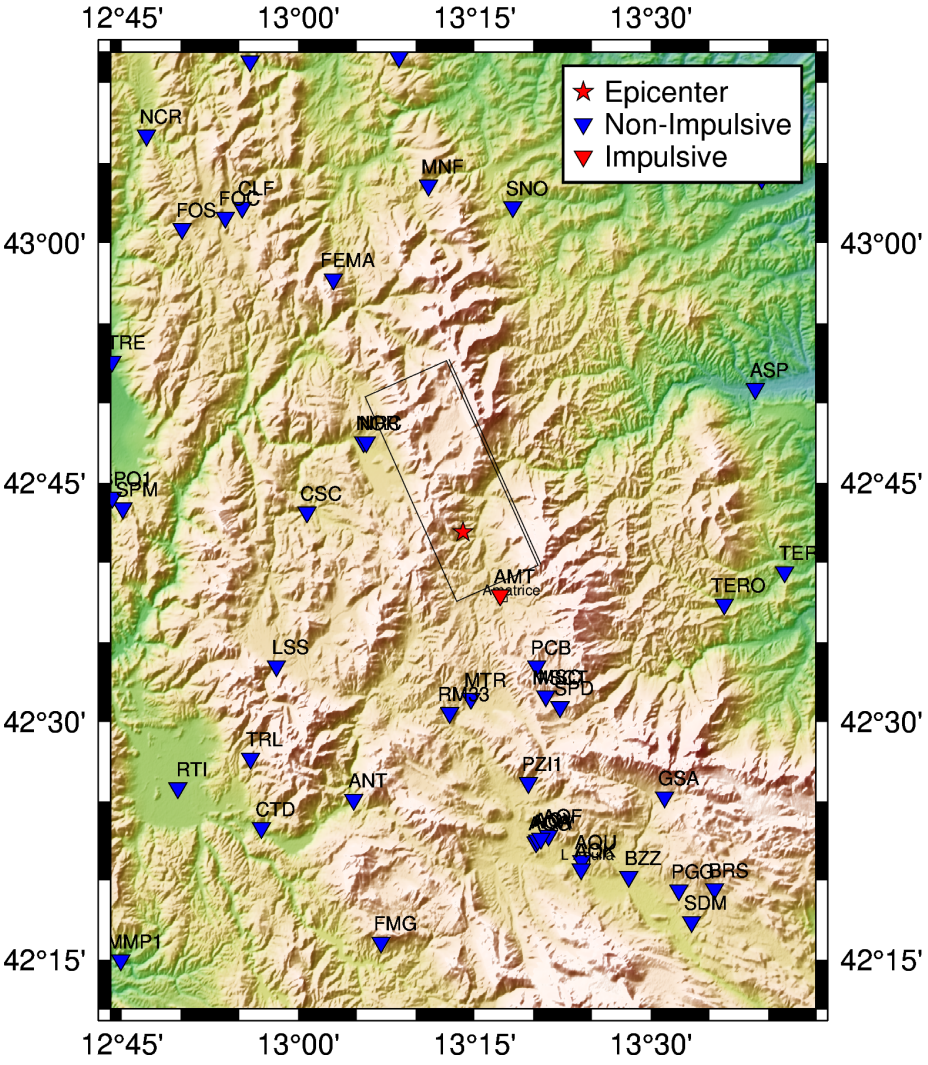


2.9.3 Ertuncay and Costa

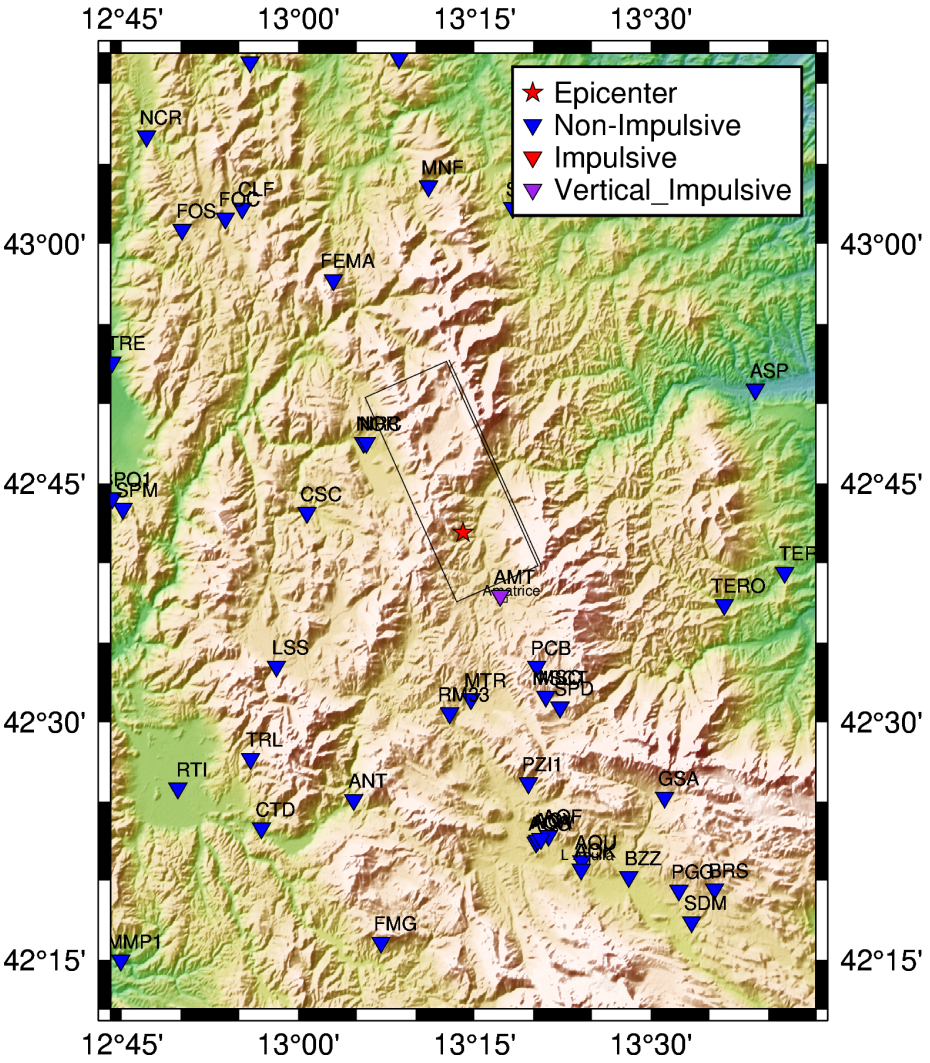


2.10 EMSC-20160824_0000006

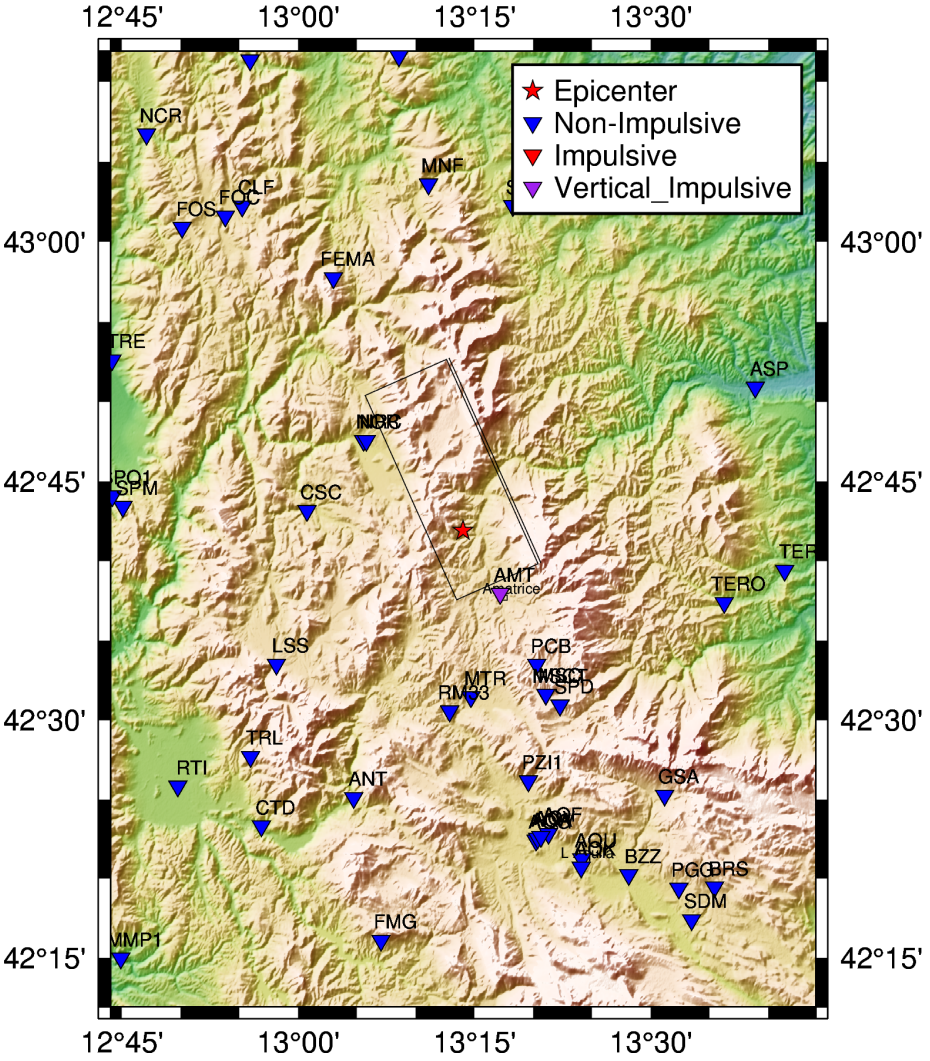
2.10.1 Shahi and Baker (2014)



2.10.2 Chang et al. (2016)

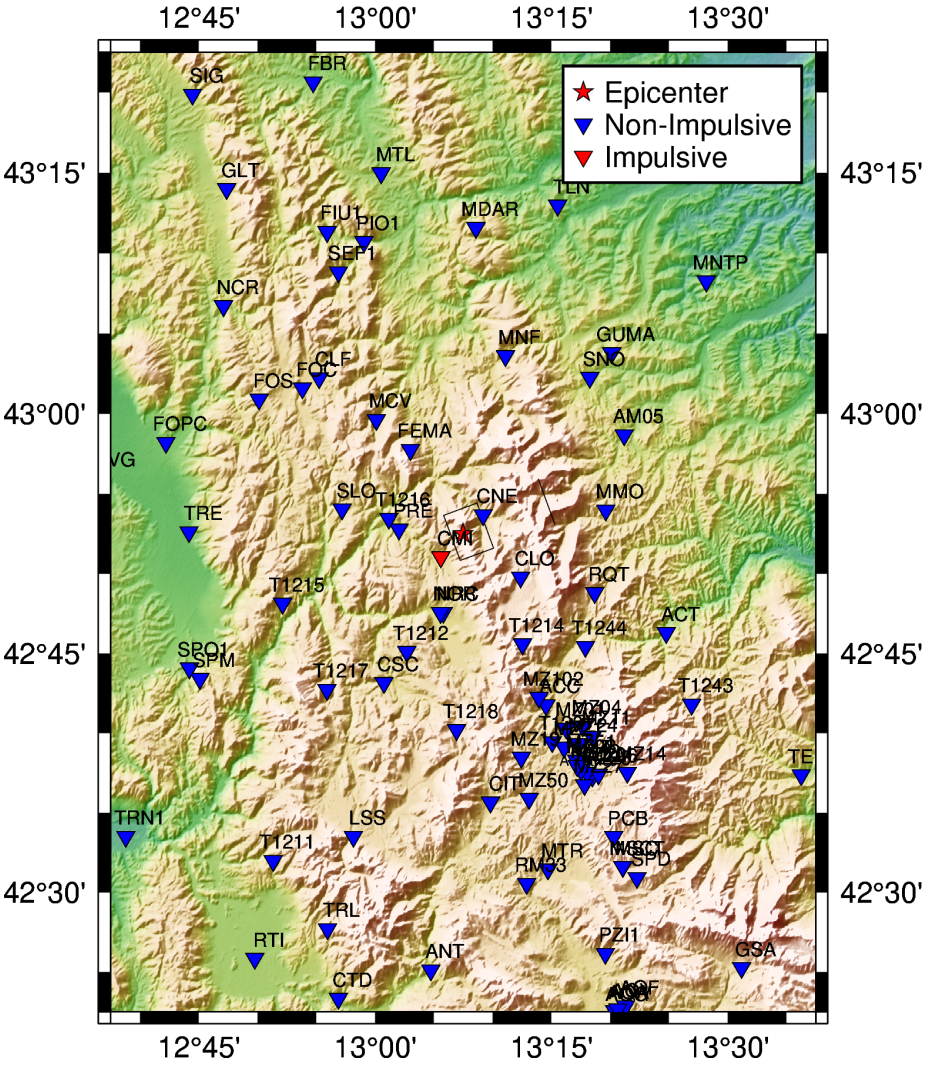


2.10.3 Ertuncay and Costa

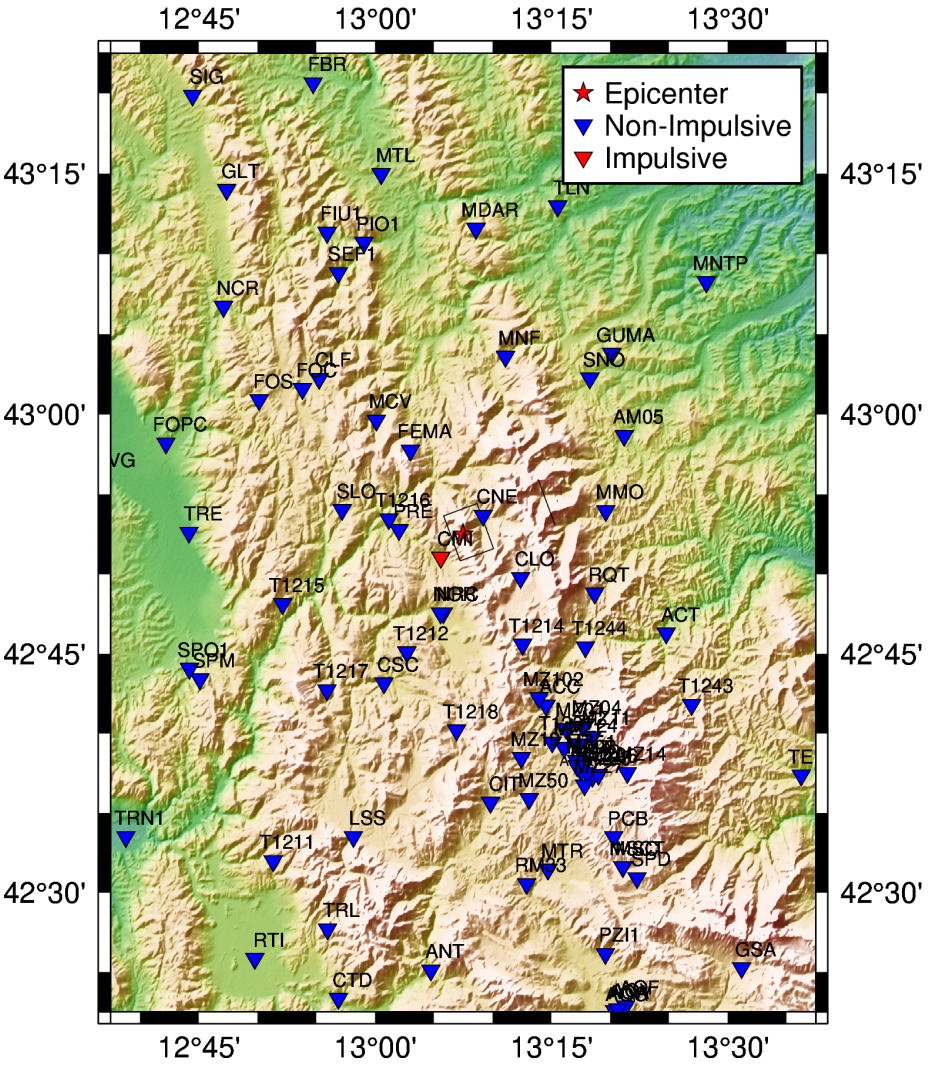


2.11 EMSC-20161026_0000077

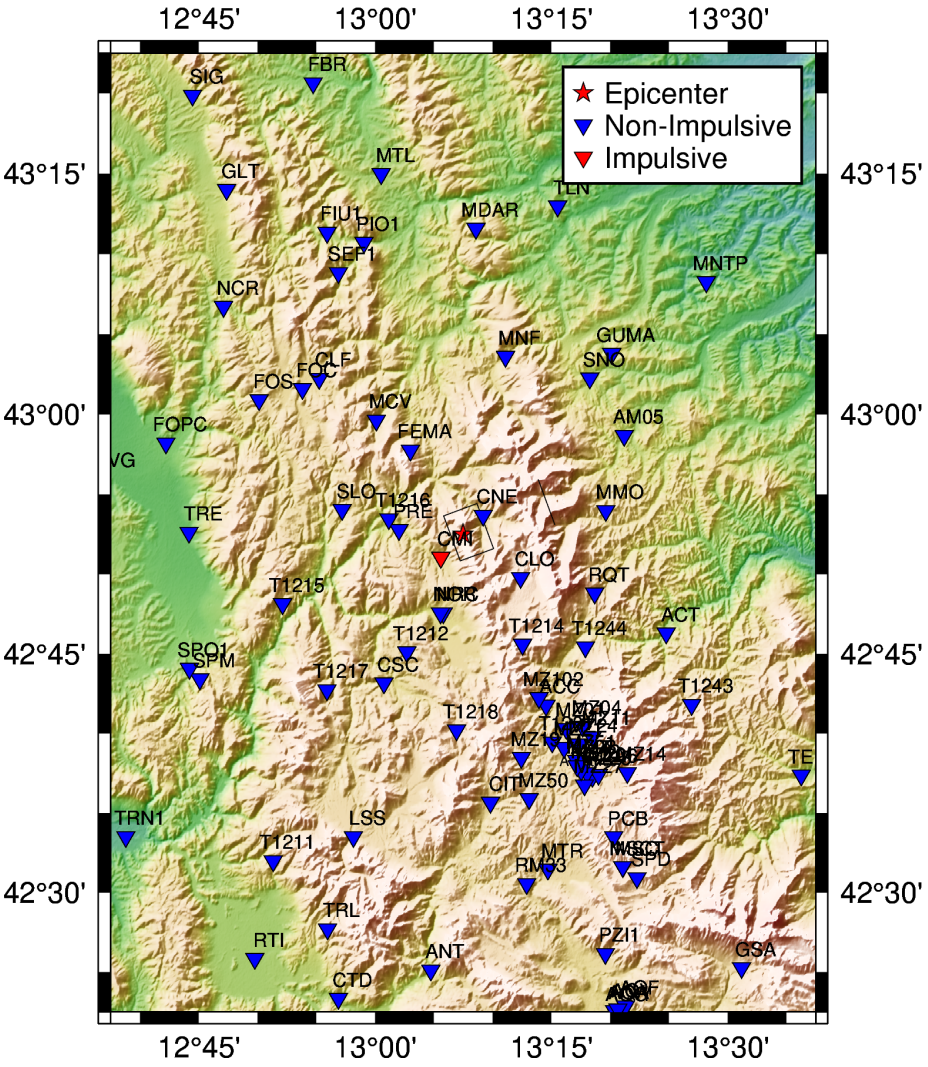
2.11.1 Shahi and Baker (2014)



2.11.2 Chang et al. (2016)

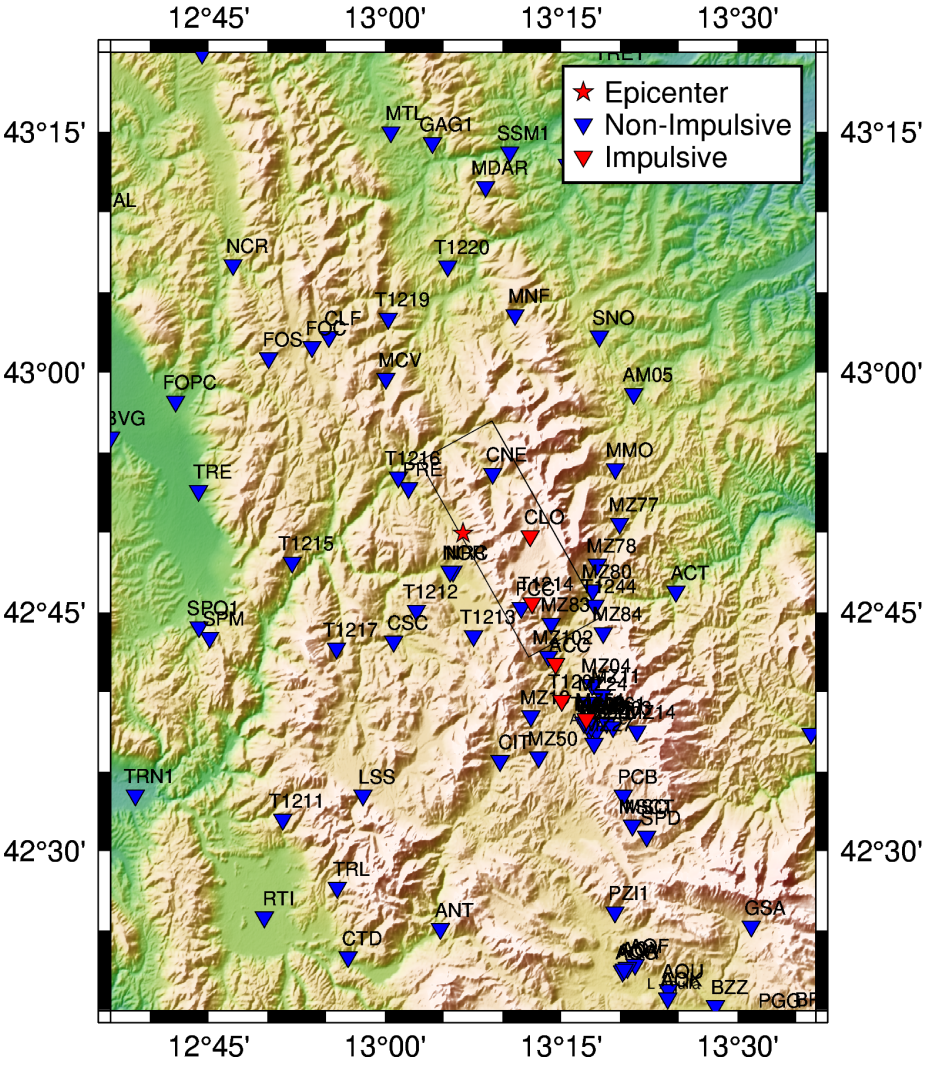


2.11.3 Ertuncay and Costa

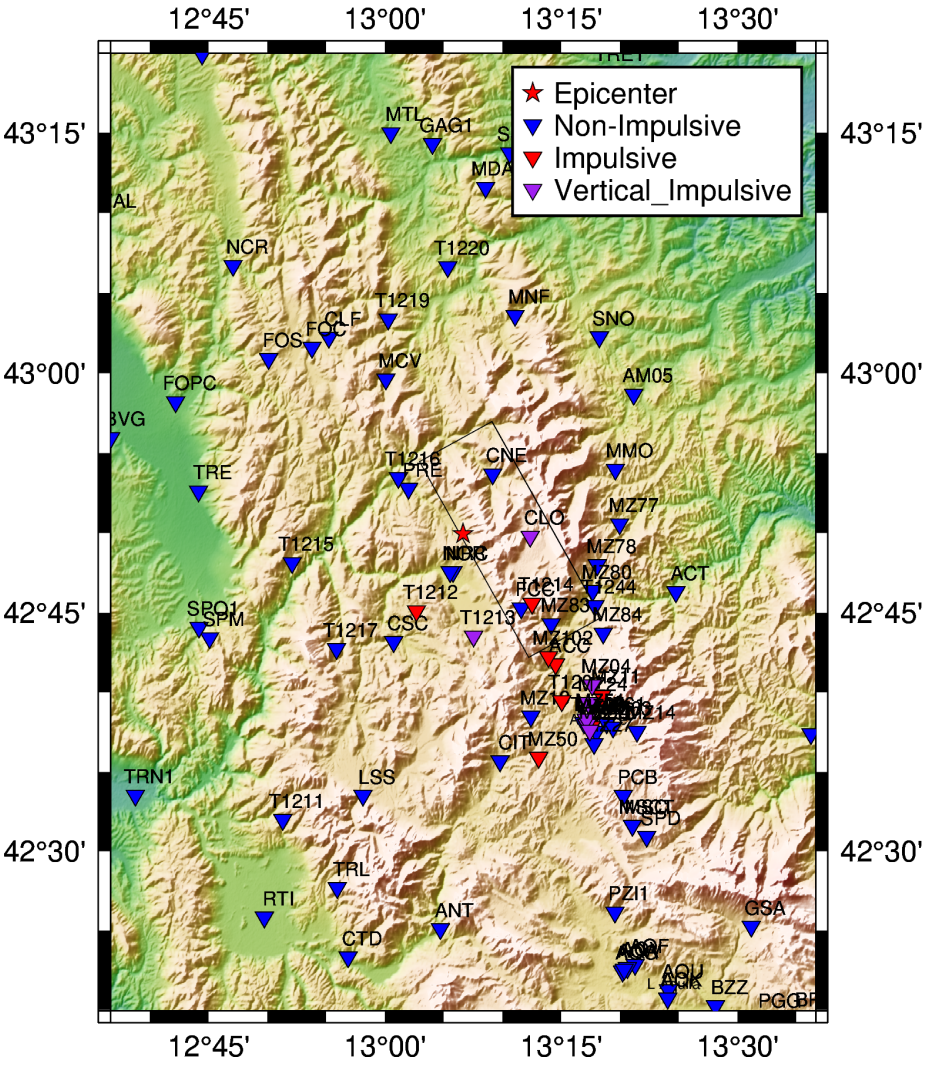
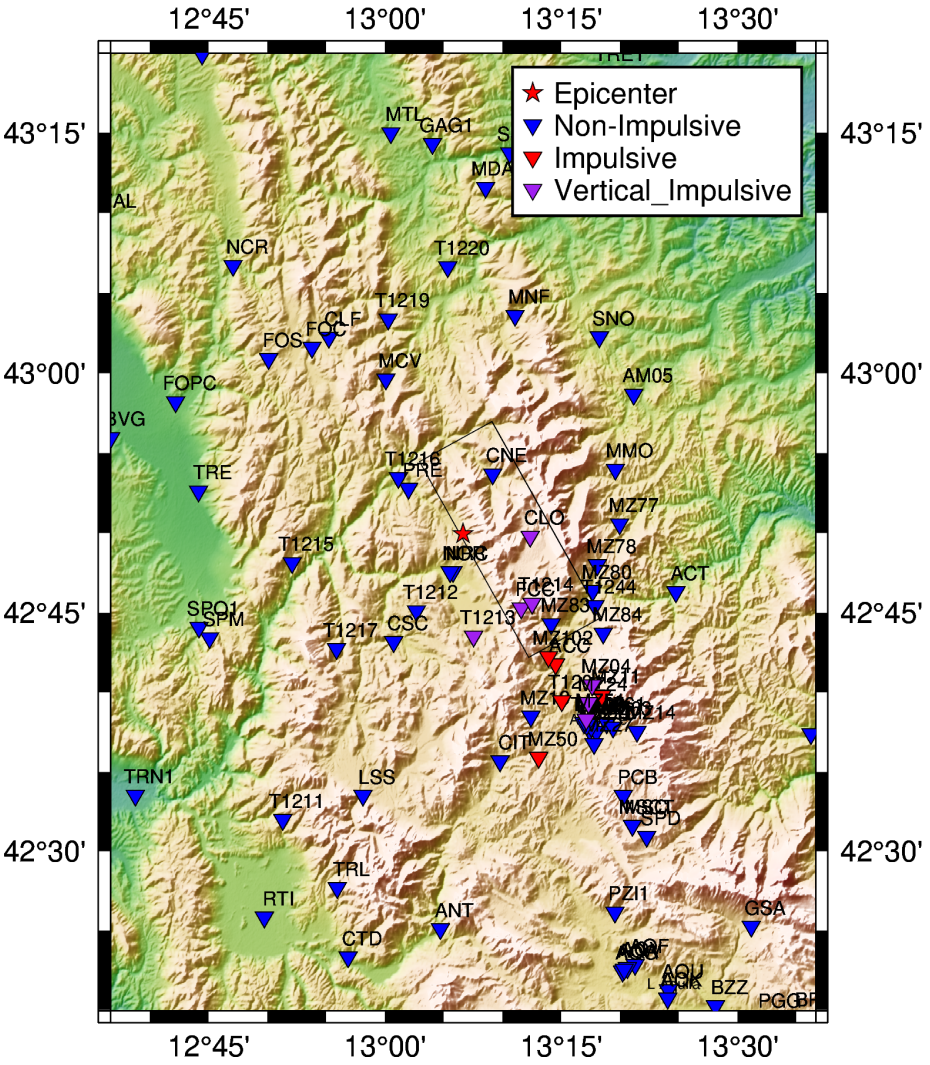


2.12 EMSC-20161030_0000029

2.12.1 Shahi and Baker (2014)



2.12.2 Chang et al. (2016)



2.12.3 Ertuncay and Costa (2019)