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**PROGRAMMA OPERATIVO NAZIONALE RICERCA E COMPETITIVITÀ PER LE REGIONI DELLA  
CONVERGENZA - 2007/2013 - CCI: 2007IT161PO006**

**ASSE I “SOSTEGNO AI MUTAMENTI STRUTTURALI”**

**OBIETTIVO OPERATIVO 4.1.1.1. “AREE SCIENTIFICO-TECNOLOGICHE GENERATRICI DI PROCESSI DI  
TRASFORMAZIONE DEL SISTEMA PRODUTTIVO E CREATRICI DI NUOVI SETTORI”**

**AZIONE II: “INTERVENTI DI SOSTEGNO DELLA RICERCA INDUSTRIALE”**

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**PROGETTO PON01\_02710 MASSIMO**

**AMBITO/SETTORE BENI CULTURALI**

**CUP B21C11000550005**

**UNIVERSITÀ DELLA CALABRIA – DIPARTIMENTO DI FISICA**

## **BOLLETTINO**

**DELLA**

**SISMICITÀ DELLA CALABRIA**

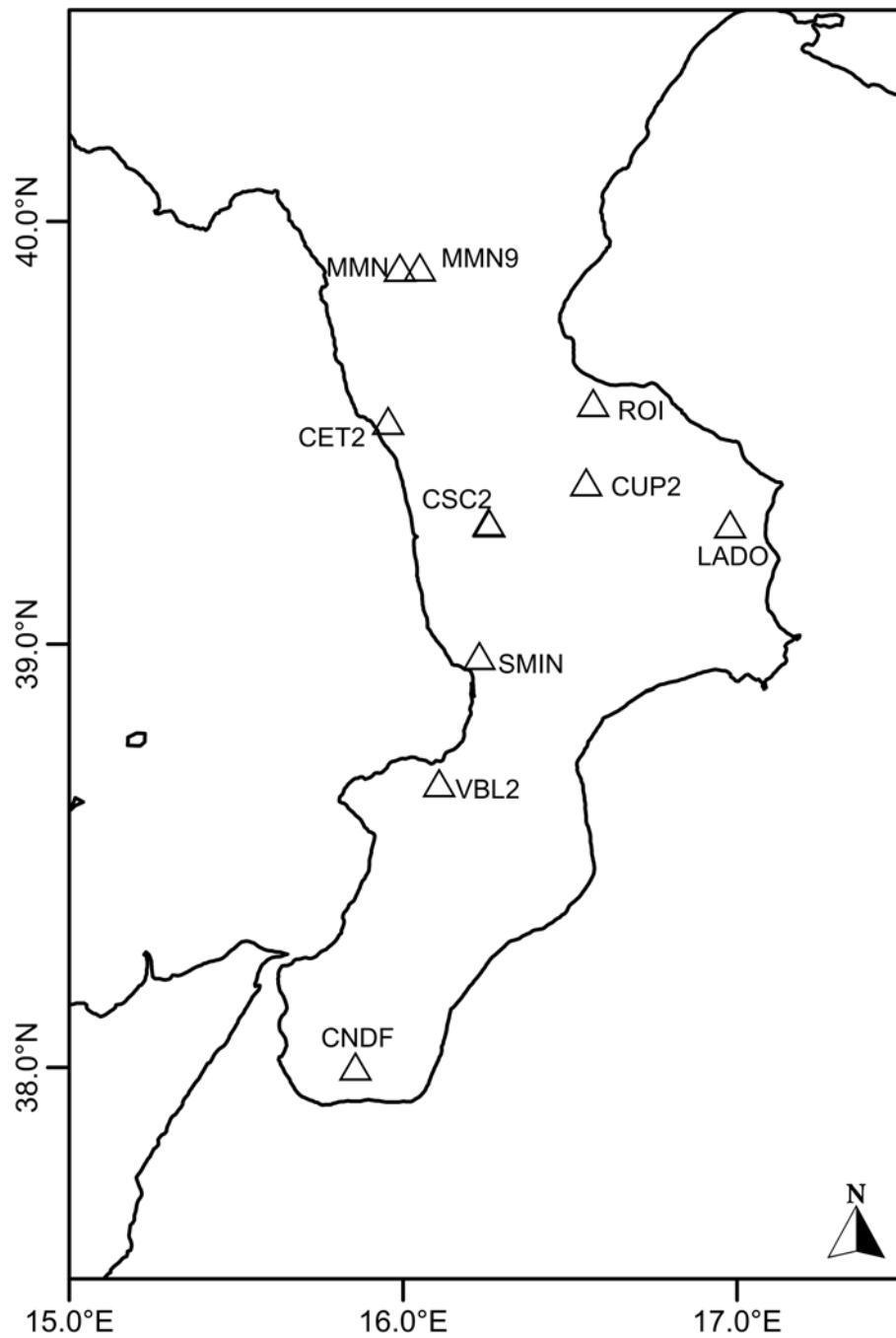
**E**

**DELLE AREE CIRCOSTANTI**

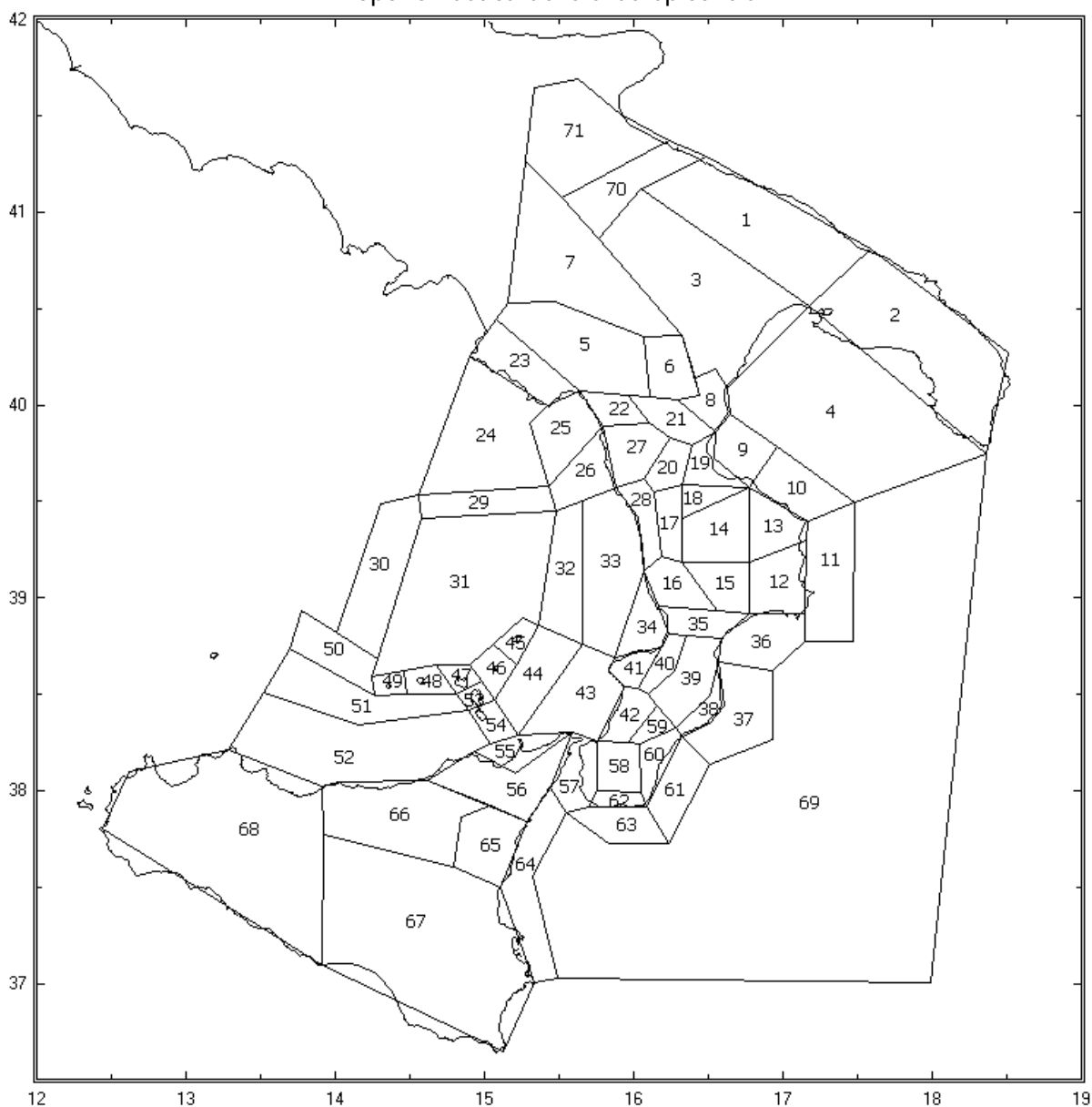
prodotto nell'ambito delle attività dell'O.R. 2.1

Periodo 16-30 Settembre 2013

Distribuzione delle stazioni della Rete Sismica UniCal – Pon MASSIMO



## Toponomastica delle aree epicentrali



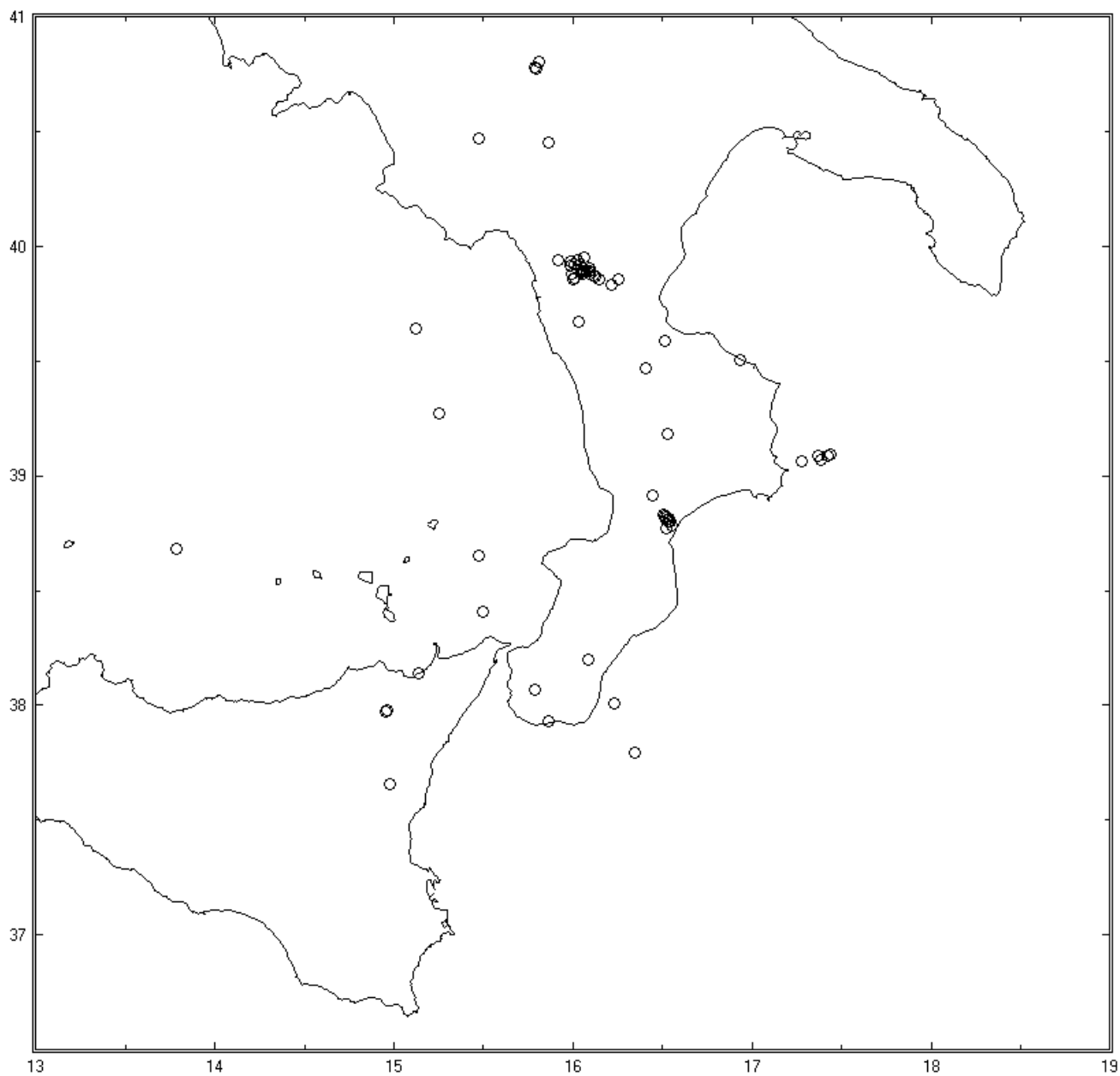
1 Murge	19 Piana di Sibari	37 Offshore Punta Stilo	55 Milazzo
2 Penisola Salentina	20 Valle dell'Esaro	38 Punta Stilo	56 Monti Peloritani
3 Piana del Bradano e del Basento	21 Catena del Pollino	39 Serre centro-settentrionali	57 Stretto di Messina
4 Golfo di Taranto	22 Marate - Rotonda	40 Valle del Mesima	58 Aspromonte
5 Vallo di Diano	23 Cilento	41 Monte Poro	59 Serre meridionali
6 Bacino di Sant'Arcangelo	24 Offshore Cilento	42 Piana di Gioia Tauro	60 Locride
7 Appennino Lucano	25 Golfo di Policastro	43 Bacino di Gioia	61 Offshore Locride
8 Confine calabro-lucano or.	26 Offshore Scalea - Diamante	44 Canyon di Stromboli	62 Aspromonte meridionale
9 Golfo di Sibari	27 Alto Tirreno Cosentino	45 Stromboli	63 Offshore Calabria Meridionale
10 Offshore Cirò	28 Catena Costiera	46 Panarea	64 Coste Sicilia or.
11 Offshore Crotona	29 Vulcani Palinuro ed Entrio	47 Salina	65 Etna
12 Marchesato	30 Vulcano Marsili	48 Filicudi	66 Monti Madonie - Nebrodi
13 Presila Nord-or.	31 Piana Batiale del tirreno	49 Alicudi	67 Sicilia centro-meridionale
14 Sila Grande	32 Scarpata di Paola	50 Seamount Sisifo ed Eolo	68 Sicilia occidentale
15 Sila Piccola	33 Bacino di Paola	51 Bacino di Alicudi	69 Piana batiale ionica
16 Amantea - Monte Reventino	34 Golfo di Sant'Eufemia	52 Bacino di Cefalù	70 Ofanto
17 Valle del Crati	35 Stretta di Catanzaro	53 Lipari	71 Capitanata
18 Sila Greca	36 Golfo di Squillace	54 Vulcano	

Parametri ipocentrali degli eventi localizzati nel periodo di riferimento

Data	Orario		Lat N	LON E	H <sub>0</sub>	m	Δlat	Δlon	ΔH <sub>0</sub>	nr	GAP	sqm	ΔT <sub>0</sub>
aammgg	hhmm	ss.s	°	°	km		km	km	km		°	sec	sec
130916	0250	52.8	39.1824	16.5312	15.4	2.0	0.43	0.52	1.72	23	74	0.30	0.07
130916	2359	5.8	39.6451	15.1192	15.3	1.9	1.70	3.23	4.66	19	210	0.60	0.34
130917	2103	10.9	38.7728	16.5224	5.4	1.4	3.30	3.29	5.34	11	165	0.92	0.62
130917	2256	37.8	40.7774	15.7964	3.3	3.3	0.74	0.78	3.53	65	33	0.79	0.10
130917	2338	49.0	40.7789	15.7907	3.2	3.2	0.54	0.61	3.00	76	33	0.67	0.08
130918	0735	47.4	39.8804	16.0917	3.3	2.0	0.96	0.84	2.24	12	148	0.50	0.16
130918	2341	36.9	38.9143	16.4441	9.9	1.1	0.57	0.65	1.90	16	123	0.33	0.09
130919	0816	49.0	39.8648	16.0097	5.7	1.8	0.52	1.35	1.10	9	177	0.19	0.08
130919	1811	41.5	39.8582	16.1489	8.2	1.8	0.86	0.92	2.30	10	117	0.40	0.13
130919	1924	18.3	37.9290	15.8619	8.6	2.0	1.50	1.06	3.73	23	143	0.64	0.23
130920	0003	0.0	39.9364	15.9866	5.4	2.4	0.55	0.91	2.79	34	90	0.48	0.09
130920	0017	55.2	39.8319	16.2157	4.1	1.3	0.97	0.72	1.95	10	110	0.43	0.14
130920	0625	2.9	39.9534	16.0589	0.0	1.3	0.48	0.48	0.93	10	111	0.21	0.08
130921	1212	19.7	40.4699	15.4735	16.9	2.2	0.55	0.78	2.46	33	102	0.42	0.09
130921	1318	2.1	40.8068	15.8133	3.5	2.9	0.84	0.78	3.41	55	34	0.76	0.11
130921	1517	47.4	37.7926	16.3445	35.4	2.5	1.01	1.39	4.01	48	211	0.51	0.18
130922	0133	2.2	39.8598	16.2514	7.3	1.7	0.74	0.61	1.46	13	138	0.32	0.10
130922	0235	10.0	39.9068	16.0898	6.0	1.8	0.39	0.40	1.01	15	100	0.22	0.06
130922	0343	28.7	39.8712	16.1258	4.5	1.3	0.73	0.69	1.86	12	120	0.41	0.13
130922	0513	1.0	39.9231	16.0364	5.7	1.4	0.68	1.08	1.95	13	124	0.34	0.11
130922	1544	18.1	39.5885	16.5115	25.4	1.3	1.34	1.43	2.29	10	134	0.35	0.16
130922	1740	7.7	39.6709	16.0329	37.3	1.7	0.71	0.90	3.84	19	105	0.49	0.12
130922	2113	42.6	39.8911	16.0740	4.3	1.5	0.66	0.82	2.26	20	93	0.50	0.12
130922	2125	40.0	39.8784	16.0520	2.3	1.3	0.75	1.10	1.89	13	113	0.42	0.14
130923	0847	37.2	38.1390	15.1408	4.9	1.9	1.19	0.81	2.97	21	94	0.66	0.15
130923	1302	20.0	39.8939	16.0585	5.3	1.5	0.90	0.81	2.08	10	149	0.36	0.13
130923	2208	15.8	39.8939	16.0529	0.6	1.0	0.63	0.57	1.14	9	120	0.25	0.10
130924	0755	7.3	38.6512	15.4746	71.5	2.1	1.30	1.54	4.59	33	75	0.57	0.12
130924	0913	24.5	39.4711	16.4078	17.9	1.6	0.90	1.00	2.50	13	80	0.43	0.12
130925	1643	37.0	39.2753	15.2509	318.5	2.8	2.00	2.45	3.82	45	138	0.44	0.10
130926	0043	31.6	39.9413	16.0219	5.4	1.4	0.77	0.95	2.62	19	127	0.45	0.12
130926	0225	37.5	37.6563	14.9789	23.1	2.4	0.63	0.99	3.34	39	69	0.58	0.09
130926	0512	51.8	39.0929	17.4348	0.0	2.4	2.84	2.67	2.81	18	273	0.62	0.47
130926	0707	24.2	39.0720	17.3813	0.0	2.4	1.44	1.79	2.11	23	275	0.47	0.29
130926	0855	44.2	40.4529	15.8639	2.2	2.1	0.56	0.72	2.06	27	76	0.46	0.11
130926	0953	6.9	38.7857	16.5536	32.6	2.0	1.50	2.10	3.64	15	172	0.56	0.22
130926	1029	20.1	38.8039	16.5383	29.9	1.7	1.11	1.39	2.59	14	165	0.40	0.16
130926	1137	52.5	39.0898	17.4197	9.2	3.0	1.09	1.75	3.02	42	243	0.52	0.24
130926	1145	45.0	38.8006	16.5405	27.8	2.2	1.06	1.58	3.18	20	166	0.49	0.17
130926	1209	58.0	39.0643	17.2809	4.3	2.1	1.15	1.42	2.15	24	180	0.48	0.21
130926	1219	56.0	39.0895	17.3681	0.0	2.8	1.82	2.49	4.06	40	183	0.90	0.34
130926	1235	52.9	38.8303	16.5076	32.1	2.4	0.79	1.45	3.08	31	153	0.47	0.12
130926	1254	32.9	38.8097	16.5225	21.7	1.7	1.19	1.37	2.52	17	160	0.43	0.17
130926	1313	11.1	38.8176	16.5188	20.7	1.4	0.98	1.25	2.21	13	158	0.38	0.14
130926	1315	14.5	38.8187	16.5220	30.2	2.1	0.95	1.72	3.35	25	159	0.52	0.15
130926	1402	33.1	38.8157	16.5334	30.5	1.4	1.19	1.96	3.01	13	162	0.46	0.16
130926	1403	45.0	38.8142	16.5338	29.8	1.5	1.00	1.67	3.21	20	163	0.49	0.15
130926	1505	0.6	38.8261	16.5157	25.9	1.9	1.09	1.77	3.87	17	156	0.60	0.17
130926	2135	32.2	39.9230	16.0104	5.2	1.1	0.37	0.48	1.41	19	89	0.24	0.06
130926	2145	1.4	37.9744	14.9567	28.6	2.1	0.65	0.62	2.59	40	57	0.45	0.07
130926	2157	15.7	37.9760	14.9594	31.7	2.1	0.80	0.72	3.03	31	57	0.47	0.08
130926	2200	15.8	37.9736	14.9528	31.7	2.2	0.53	0.58	2.79	48	57	0.43	0.06
130927	0336	15.0	39.8894	16.0458	4.2	0.6	0.87	1.00	1.95	10	141	0.34	0.14
130927	2119	25.6	39.8543	16.0001	0.9	0.9	0.54	0.89	1.60	14	128	0.35	0.10
130928	1912	6.8	39.9143	15.9873	4.4	1.0	0.83	1.45	1.55	10	177	0.27	0.10
130928	2138	29.3	39.8751	16.1144	6.1	1.1	0.90	0.61	1.55	11	120	0.34	0.12
130929	0025	41.0	39.5063	16.9300	19.5	1.6	1.28	2.15	3.33	17	220	0.57	0.32

Data	Orario		Lat N	LON E	H <sub>0</sub>	m	δlat	δlon	δH <sub>0</sub>	nr	GAP	sqm	δT <sub>0</sub>
aammgg	hhmm	ss.s	°	°	km		km	km	km		°	sec	sec
130929	0604	41.2	38.4068	15.4932	118.0	2.3	1.70	2.46	3.31	24	83	0.40	0.10
130929	0755	31.8	38.0110	16.2278	7.7	2.4	1.86	1.61	3.30	35	207	0.73	0.33
130929	1019	1.1	39.9418	15.9168	2.0	1.2	0.89	0.67	1.28	10	156	0.29	0.10
130929	1151	19.4	38.2001	16.0862	114.7	2.0	3.33	4.82	3.41	21	245	0.43	0.37
130929	1224	52.2	39.8960	16.0223	7.1	2.3	0.60	0.73	2.59	33	70	0.45	0.08
130929	1316	33.3	39.8810	15.9967	5.3	1.1	0.60	1.27	0.76	8	172	0.13	0.05
130930	0059	3.0	38.0695	15.7847	9.7	1.7	0.57	0.73	1.23	12	172	0.21	0.10
130930	0329	16.9	38.6821	13.7844	44.4	2.4	1.74	1.15	3.54	17	149	0.44	0.15
130930	1152	23.3	39.8948	16.0916	5.4	1.3	0.67	0.37	0.90	9	97	0.20	0.07

Epicentri localizzati nel periodo di riferimento



# **BOLLETTINO**

1 130916 0250 52.7 - Sila Piccola  
 Lat: 39.18 Lon: 16.53 Prof: 15.4 Km  
 ± 0.43 km ± 0.52 km ± 1.7 km  
 RMS: 0.30s GAP: 74.7° NR: 23

STN	PHASE	MN	SEC	DIST	AZM	RES
CSC2	P	50	58.31	26.27	296.0	-0.018
CSC2	S	51	2.46	26.27	296.0	0.072
SCOI	P	50	58.33	26.52	296.5	-0.029
SCOI	S	51	2.44	26.52	296.5	-0.003
ROI	P	51	2.10	43.36	4.1	0.760
ROI	S	51	7.11	43.36	4.1	-0.496
CET2	P	51	4.85	62.84	307.7	0.297
CET2	S	51	12.97	62.84	307.7	-0.199

2 130916 2359 05.8 - Offshore Cilento  
 Lat: 39.64 Lon: 15.11 Prof: 15.3 Km  
 ± 1.70 km ± 3.23 km ± 4.7 km  
 RMS: 0.60s GAP: 210.4° NR: 19

STN	PHASE	MN	SEC	DIST	AZM	RES
CET2	P	59	17.44	72.92	100.7	-0.083
SCOI	P	59	23.23	105.54	112.3	0.084
SCOI	S	59	36.08	105.54	112.3	0.277

3 130917 2103 10.8 - Serre centro-sett.  
 Lat: 38.77 Lon: 16.52 Prof: 5.4 Km  
 ± 3.30 km ± 3.29 km ± 5.3 km  
 RMS: 0.92s GAP: 165.3° NR: 11

STN	PHASE	MN	SEC	DIST	AZM	RES
CSC2	P	03	22.87	61.43	338.0	0.890
CSC2	S	03	29.27	61.43	338.0	-0.820

4 130917 2256 37.7 - Appennino Lucano  
 Lat: 40.77 Lon: 15.79 Prof: 3.3 Km  
 ± 0.74 km ± 0.78 km ± 3.5 km  
 RMS: 0.79s GAP: 33.7° NR: 65

STN	PHASE	MN	SEC	DIST	AZM	RES
CET2	P	57	1.61	139.29	174.7	0.244
CET2	S	57	19.34	139.29	174.7	0.686
ROI	P	57	4.66	149.17	153.9	0.172
ROI	S	57	23.50	149.17	153.9	-0.552
CSC2	P	57	7.14	170.18	166.8	-0.380
CSC2	S	57	29.56	170.18	166.8	0.252
SCOI	P	57	8.19	169.83	166.8	0.719
SCOI	S	57	29.75	169.83	166.8	0.529
SMIN	P	57	11.17	203.73	169.7	-0.697
CNDF	P	57	24.33	308.04	179.3	0.000
CNDF	S	58	1.73	308.04	179.3	0.000

5 130917 2338 48.9 - Appennino Lucano  
 Lat: 40.77 Lon: 15.79 Prof: 3.2 Km  
 ± 0.54 km ± 0.61 km ± 3.0 km  
 RMS: 0.67s GAP: 33.7° NR: 76

STN	PHASE	MN	SEC	DIST	AZM	RES
CET2	P	39	13.29	139.51	174.5	0.685
CET2	S	39	30.75	139.51	174.5	0.829
ROI	P	39	16.19	149.53	153.7	0.433
ROI	S	39	35.65	149.53	153.7	0.270
CSC2	P	39	17.94	170.45	166.6	-0.830
CSC2	S	39	40.55	170.45	166.6	-0.050
SCOI	P	39	19.07	170.11	166.6	0.355
SCOI	S	39	40.36	170.11	166.6	-0.147
SMIN	P	39	22.28	203.98	169.6	-0.831
CNDF	P	39	35.31	308.21	179.2	0.000
CNDF	S	40	11.42	308.21	179.2	0.000

6 130918 0735 47.4 - Alto Tirreno Cosentino  
 Lat: 39.88 Lon: 16.09 Prof: 3.3 Km  
 ± 0.96 km ± 0.84 km ± 2.2 km  
 RMS: 0.50s GAP: 148.2° NR: 12

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	35	49.34	8.72	277.7	-0.210
MMN	S	35	51.19	8.72	277.7	0.066
CET2	P	35	55.58	40.77	196.9	-0.334

7 130918 2341 36.9 - Stretta di Catanzaro  
 Lat: 38.91 Lon: 16.44 Prof: 9.9 Km  
 ± 0.57 km ± 0.65 km ± 1.9 km  
 RMS: 0.33s GAP: 123.1° NR: 16

STN	PHASE	MN	SEC	DIST	AZM	RES
SMIN	P	41	41.37	19.81	289.1	0.226
SMIN	S	41	44.29	19.81	289.1	0.071

8 130919 0816 49.0 - Alto Tirreno Cosentino  
 Lat: 39.86 Lon: 16.00 Prof: 5.7 Km  
 ± 0.52 km ± 1.35 km ± 1.1 km  
 RMS: 0.19s GAP: 177.4° NR: 9

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	16	50.54	3.32	330.7	0.018
MMN	S	16	51.62	3.32	330.7	0.011
CET2	P	16	56.45	37.60	187.4	0.180
CET2	S	17	1.60	37.60	187.4	0.037

9 130919 1811 41.5 - Alto Tirreno Cosentino  
 Lat: 39.85 Lon: 16.14 Prof: 8.2 Km  
 ± 0.86 km ± 0.92 km ± 2.3 km  
 RMS: 0.40s GAP: 117.4° NR: 10

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	11	44.70	14.01	285.1	-0.133
MMN	S	11	46.80	14.01	285.1	-0.458
CET2	P	11	49.35	40.19	204.6	0.014
CET2	S	11	54.33	40.19	204.6	-0.728

10 130919 1924 18.2 - Aspromonte mer.  
 Lat: 37.92 Lon: 15.86 Prof: 8.6 Km  
 ± 1.50 km ± 1.06 km ± 3.7 km  
 RMS: 0.64s GAP: 143.3° NR: 23

STN	PHASE	MN	SEC	DIST	AZM	RES
CNDF	P	24	20.98	8.25	357.3	0.409
CNDF	S	24	22.72	8.25	357.3	0.458

11 130920 0003 00.0 - Maratea - Rotonda  
 Lat: 39.93 Lon: 15.98 Prof: 5.4 Km  
 ± 0.55 km ± 0.91 km ± 2.8 km  
 RMS: 0.48s GAP: 90.5° NR: 34

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	03	1.63	5.07	176.3	-0.028
MMN	S	03	2.83	5.07	176.3	-0.022
CET2	P	03	8.09	45.34	183.6	-0.509
ROI	P	03	11.66	64.28	129.0	-0.322
ROI	S	03	20.79	64.28	129.0	0.056
SCOI	P	03	14.38	75.49	162.2	0.865
SCOI	S	03	24.29	75.49	162.2	0.901
SMIN	P	03	19.35	108.97	169.1	0.026
SMIN	S	03	33.03	108.97	169.1	-0.419

12 130920 0017 55.1 - Alto Tirreno Cosentino  
 Lat: 39.83 Lon: 16.21 Prof: 4.1 Km  
 ± 0.97 km ± 0.72 km ± 2.0 km  
 RMS: 0.43s GAP: 110.5° NR: 10

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	18	.10	20.34	288.9	0.272
MMN	S	18	3.60	20.34	288.9	0.365
CET2	P	18	2.87	40.43	213.8	-0.655
ROI	P	18	3.95	41.87	133.5	0.056
ROI	S	18	11.08	41.87	133.5	0.803

13 130920 0625 02.9 - Maratea - Rotonda  
 Lat: 39.95 Lon: 16.05 Prof: 0.0 Km  
 ± 0.48 km ± 0.48 km ± 0.9 km  
 RMS: 0.21s GAP: 111.2° NR: 10

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	25	5.00	9.07	220.2	0.056
MMN	S	25	6.28	9.07	220.2	-0.146



**14** 130921 1212 19.6 - Vallo di Diano  
 Lat: 40.46 Lon: 15.47 Prof: 16.9 Km  
 ± 0.55 km ± 0.78 km ± 2.5 km  
 RMS: 0.42s GAP: 102.7° NR: 33

STN	PHASE	MN	SEC	DIST	AZM	RES
CET2	P	12	38.95	112.27	158.9	0.024
CET2	S	12	52.33	112.27	158.9	-0.705
ROI	P	12	44.66	136.71	137.0	0.832
ROI	S	13	2.15	136.71	137.0	0.624

**15** 130921 1318 02.1 - Appennino Lucano  
 Lat: 40.80 Lon: 15.81 Prof: 3.5 Km  
 ± 0.84 km ± 0.78 km ± 3.4 km  
 RMS: 0.76s GAP: 34.5° NR: 55

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	18	21.33	102.81	171.8	0.897
MMN	S	18	34.62	102.81	171.8	0.756
CET2	P	18	26.66	142.41	175.4	0.596
ROI	P	18	29.20	151.48	154.9	0.098
ROI	S	18	49.02	151.48	154.9	0.141

**16** 130921 1517 47.4 - Piana bat. ionica  
 Lat: 37.79 Lon: 16.34 Prof: 35.4 Km  
 ± 1.01 km ± 1.39 km ± 4.0 km  
 RMS: 0.51s GAP: 211.3° NR: 48

STN	PHASE	MN	SEC	DIST	AZM	RES
CNDF	P	17	58.08	48.82	298.7	0.506
CNDF	S	18	4.97	48.82	298.7	-0.032
SMIN	P	18	8.91	131.41	355.5	0.270
CET2	P	18	15.28	195.69	350.1	0.070

**17** 130922 0133 02.2 - Catena del Pollino  
 Lat: 39.85 Lon: 16.25 Prof: 7.3 Km  
 ± 0.74 km ± 0.61 km ± 1.5 km  
 RMS: 0.32s GAP: 138.3° NR: 13

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	33	6.92	22.57	278.9	-0.060
MMN	S	33	10.90	22.57	278.9	0.456
CET2	P	33	10.71	44.71	214.8	-0.214
CET2	S	33	16.82	44.71	214.8	-0.455

**18** 130922 0235 10.0 - Alto Tirreno Cosentino  
 Lat: 39.90 Lon: 16.08 Prof: 6.0 Km  
 ± 0.39 km ± 0.40 km ± 1.0 km  
 RMS: 0.22s GAP: 100.5° NR: 15

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	35	12.33	8.66	258.4	-0.159
MMN	S	35	14.41	8.66	258.4	0.121
CET2	P	35	18.46	43.53	195.6	-0.212
CET2	S	35	24.37	43.53	195.6	-0.628
SMIN	P	35	29.05	104.35	173.5	0.209
SMIN	S	35	43.01	104.35	173.5	0.399

**19** 130922 0343 28.7 - Alto Tirreno Cosentino  
 Lat: 39.87 Lon: 16.12 Prof: 4.5 Km  
 ± 0.73 km ± 0.69 km ± 1.9 km  
 RMS: 0.41s GAP: 120.4° NR: 12

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	43	31.68	11.76	280.8	0.086
MMN	S	43	33.54	11.76	280.8	-0.158
CET2	P	43	36.89	40.75	201.2	-0.186
CET2	S	43	42.50	40.75	201.2	-0.694

**20** 130922 0513 00.9 - Maratea - Rotonda  
 Lat: 39.92 Lon: 16.03 Prof: 5.7 Km  
 ± 0.68 km ± 1.08 km ± 1.9 km  
 RMS: 0.34s GAP: 124.8° NR: 13

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	13	2.77	5.30	227.7	0.119
MMN	S	13	4.01	5.30	227.7	0.118
CET2	P	13	9.44	44.33	189.3	0.086
CET2	S	13	15.05	44.33	189.3	-0.451

**21** 130922 1544 18.1 - Piana di Sibari  
 Lat: 39.58 Lon: 16.51 Prof: 25.4 Km  
 ± 1.34 km ± 1.43 km ± 2.3 km  
 RMS: 0.35s GAP: 134.3° NR: 10

STN	PHASE	MN	SEC	DIST	AZM	RES
ROI	P	44	22.78	5.29	110.3	-0.223
ROI	S	44	26.93	5.29	110.3	0.338
CET2	P	44	27.89	48.32	262.1	0.333
CET2	S	44	33.90	48.32	262.1	-0.576

**22** 130922 1740 07.7 - Alto Tirreno Cosentino  
 Lat: 39.67 Lon: 16.03 Prof: 37.3 Km  
 ± 0.71 km ± 0.90 km ± 3.8 km  
 RMS: 0.49s GAP: 105.0° NR: 19

STN	PHASE	MN	SEC	DIST	AZM	RES
CET2	P	40	14.83	17.15	203.3	0.686
CET2	S	40	19.15	17.15	203.3	0.300
MMN	P	40	15.00	24.68	351.7	-0.038
MMN	S	40	20.11	24.68	351.7	-0.291
ROI	P	40	17.68	47.34	103.4	0.212
ROI	S	40	25.34	47.34	103.4	0.731
SMIN	P	40	22.19	79.30	167.8	0.678

**23** 130922 2113 42.5 - Alto Tirreno Cosentino  
 Lat: 39.89 Lon: 16.07 Prof: 4.3 Km  
 ± 0.66 km ± 0.82 km ± 2.3 km  
 RMS: 0.50s GAP: 93.4° NR: 20

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	13	44.53	7.12	269.9	0.010
MMN	S	13	45.47	7.12	269.9	-0.486
CET2	P	13	50.67	41.51	194.4	-0.403
CET2	S	13	56.34	41.51	194.4	-0.962
SMIN	P	14	2.17	102.80	172.6	0.842
SMIN	S	14	14.90	102.80	172.6	-0.169

**24** 130922 2125 39.9 - Alto Tirreno Cosentino  
 Lat: 39.87 Lon: 16.05 Prof: 2.3 Km  
 ± 0.75 km ± 1.10 km ± 1.9 km  
 RMS: 0.42s GAP: 113.4° NR: 13

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	25	41.38	5.43	284.9	-0.002
MMN	S	25	42.34	5.43	284.9	-0.065
CET2	P	25	47.53	39.70	192.3	-0.160
CET2	S	25	52.97	39.70	192.3	-0.363

**25** 130923 0847 37.2 - Milazzo  
 Lat: 38.13 Lon: 15.14 Prof: 4.9 Km  
 ± 1.19 km ± 0.81 km ± 3.0 km  
 RMS: 0.66s GAP: 94.6° NR: 21

STN	PHASE	MN	SEC	DIST	AZM	RES
CNDF	P	47	47.94	64.64	103.9	-0.962
CNDF	S	47	58.03	64.64	103.9	0.598

**26** 130923 1302 19.9 - Alto Tirreno Cosentino  
 Lat: 39.89 Lon: 16.05 Prof: 5.3 Km  
 ± 0.90 km ± 0.81 km ± 2.1 km  
 RMS: 0.36s GAP: 149.7° NR: 10

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	02	21.60	5.81	266.8	-0.078
MMN	S	02	22.54	5.81	266.8	-0.393
CET2	P	02	27.76	41.50	192.5	-0.108
CET2	S	02	33.20	41.50	192.5	-0.453

**27** 130923 2208 15.7 - Alto Tirreno Cosentino  
 Lat: 39.89 Lon: 16.05 Prof: .6 Km  
 ± 0.63 km ± 0.57 km ± 1.1 km  
 RMS: 0.25s GAP: 120.4° NR: 9

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	08	17.10	5.33	266.5	0.119
MMN	S	08	17.74	5.33	266.5	-0.141
CET2	P	08	23.58	41.40	191.9	-0.424

28 130924 0755 07.3 - Canyon di Stromboli  
 Lat: 38.65 Lon: 15.47 Prof: 71.5 Km  
 ± 1.30 km ± 1.54 km ± 4.6 km  
 RMS: 0.57s GAP: 75.1° NR: 33

STN	PHASE	MN	SEC	DIST	AZM	RES
SMIN	P	55	22.28	74.56	61.6	-0.271
SMIN	S	55	33.17	74.56	61.6	-0.537
CNDF	P	55	23.11	79.32	155.4	0.303
CNDF	S	55	34.76	79.32	155.4	0.608
CET2	P	55	25.64	105.90	23.4	0.533
CET2	S	55	38.85	105.90	23.4	0.715

29 130924 0913 24.4 - Sila Greca  
 Lat: 39.47 Lon: 16.40 Prof: 17.9 Km  
 ± 0.90 km ± 1.00 km ± 2.5 km  
 RMS: 0.43s GAP: 80.0° NR: 13

STN	PHASE	MN	SEC	DIST	AZM	RES
ROI	P	13	28.83	17.82	51.0	-0.456
ROI	S	13	32.40	17.82	51.0	-0.405
CET2	P	13	32.29	39.50	279.4	-0.189
CET2	S	13	37.84	39.50	279.4	-0.495

30 130925 1643 37.0 - Piana batiale del Tirreno  
 Lat: 39.27 Lon: 15.25 Prof: 318.5 Km  
 ± 2.00 km ± 2.45 km ± 3.8 km  
 RMS: 0.44s GAP: 138.6° NR: 45

STN	PHASE	MN	SEC	DIST	AZM	RES
CET2	P	44	18.36	66.82	65.5	0.335
CET2	S	44	47.92	66.82	65.5	-0.123
ROI	P	44	20.98	118.19	74.0	0.464
ROI	S	44	53.10	118.19	74.0	0.743
CNDF	P	44	22.24	150.76	159.9	0.027
CNDF	S	44	55.40	150.76	159.9	0.105

31 130926 0043 31.6 - Maratea - Rotonda  
 Lat: 39.94 Lon: 16.02 Prof: 5.4 Km  
 ± 0.77 km ± 0.95 km ± 2.6 km  
 RMS: 0.45s GAP: 127.0° NR: 19

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	43	33.55	6.20	205.7	0.160
MMN	S	43	34.90	6.20	205.7	0.206
CET2	P	43	40.66	46.16	187.3	0.337
CET2	S	43	46.02	46.16	187.3	-0.681

32 130926 0225 37.5 - Etna  
 Lat: 37.65 Lon: 14.97 Prof: 23.1 Km  
 ± 0.63 km ± 0.99 km ± 3.3 km  
 RMS: 0.58s GAP: 69.7° NR: 39

STN	PHASE	MN	SEC	DIST	AZM	RES
CNDF	P	25	53.45	86.37	64.0	0.252
CNDF	S	26	5.32	86.37	64.0	0.635
CET2	P	26	10.89	224.55	22.7	0.953
CET2	S	26	33.95	224.55	22.7	0.272

33 130926 0512 51.7 - Offshore Crotona  
 Lat: 39.09 Lon: 17.43 Prof: 0.0 Km  
 ± 2.84 km ± 2.67 km ± 2.8 km  
 RMS: 0.62s GAP: 273.9° NR: 18

STN	PHASE	MN	SEC	DIST	AZM	RES
SMIN	P	13	11.26	105.32	262.4	0.150
SMIN	S	13	25.16	105.32	262.4	-0.124
CET2	P	13	16.12	136.53	290.5	0.978
CET2	S	13	31.71	136.53	290.5	-0.557
CNDF	P	13	22.50	183.15	228.4	-0.196

34 130926 0707 24.1 - Offshore Crotona  
 Lat: 39.07 Lon: 17.38 Prof: 0.0 Km  
 ± 1.44 km ± 1.79 km ± 2.1 km  
 RMS: 0.47s GAP: 275.8° NR: 23

STN	PHASE	MN	SEC	DIST	AZM	RES
ROI	P	07	41.38	89.34	307.9	0.203
CSC2	P	07	43.26	99.94	283.4	0.709

CET2 P 07 47.96 133.10 292.1 0.858  
 CET2 S 08 3.40 133.10 292.1 -0.505  
 CNDF P 07 54.33 178.13 228.0 -0.124

35 130926 0855 44.2 - Appennino Lucano  
 Lat: 40.45 Lon: 15.86 Prof: 2.2 Km  
 ± 0.56 km ± 0.72 km ± 2.1 km  
 RMS: 0.46s GAP: 76.5° NR: 27

STN	PHASE	MN	SEC	DIST	AZM	RES
CET2	P	56	3.73	102.89	175.9	0.578

36 130926 0953 06.8 - Serre centro-sett.  
 Lat: 38.78 Lon: 16.55 Prof: 32.6 Km  
 ± 1.50 km ± 2.10 km ± 3.6 km  
 RMS: 0.56s GAP: 172.3° NR: 15

STN	PHASE	MN	SEC	DIST	AZM	RES
CET2	P	53	23.35	97.39	327.9	0.890
CET2	S	53	34.82	97.39	327.9	0.946

37 130926 1029 20.1 - Stretta di Catanzaro  
 Lat: 38.80 Lon: 16.53 Prof: 29.9 Km  
 ± 1.11 km ± 1.39 km ± 2.6 km  
 RMS: 0.40s GAP: 165.7° NR: 14

STN	PHASE	MN	SEC	DIST	AZM	RES
CET2	P	29	36.08	94.98	327.9	0.512
CET2	S	29	47.20	94.98	327.9	0.313

38 130926 1137 52.4 - Offshore Crotona  
 Lat: 39.08 Lon: 17.41 Prof: 9.2 Km  
 ± 1.09 km ± 1.75 km ± 3.0 km  
 RMS: 0.52s GAP: 243.6° NR: 42

STN	PHASE	MN	SEC	DIST	AZM	RES
ROI	P	38	9.37	90.77	305.6	0.314
ROI	S	38	21.63	90.77	305.6	0.443
CSC2	P	38	10.74	102.72	281.9	0.030
SMIN	P	38	10.88	103.98	262.5	-0.080
SCOI	P	38	11.40	102.90	282.0	0.665
CET2	P	38	15.32	135.43	290.8	0.905
CET2	S	38	29.81	135.43	290.8	-0.662
MMN	P	38	18.88	151.73	305.6	0.307
CNDF	P	38	22.31	181.94	228.2	0.447

39 130926 1145 44.9 - Stretta di Catanzaro  
 Lat: 38.80 Lon: 16.54 Prof: 27.8 Km  
 ± 1.06 km ± 1.58 km ± 3.2 km  
 RMS: 0.49s GAP: 166.8° NR: 20

STN	PHASE	MN	SEC	DIST	AZM	RES
CSC2	P	45	56.77	59.21	335.5	0.352
CSC2	S	46	4.64	59.21	335.5	-0.168
ROI	P	46	.88	85.65	1.5	0.204
ROI	S	46	12.75	85.65	1.5	0.566
CET2	P	46	.88	95.39	327.9	0.277
CET2	S	46	12.79	95.39	327.9	0.731

40 130926 1209 57.9 - Offshore Crotona  
 Lat: 39.06 Lon: 17.28 Prof: 4.3 Km  
 ± 1.15 km ± 1.42 km ± 2.2 km  
 RMS: 0.48s GAP: 180.5° NR: 24

STN	PHASE	MN	SEC	DIST	AZM	RES
ROI	P	10	13.62	83.31	312.1	0.290
ROI	S	10	24.91	83.31	312.1	0.323
CET2	P	10	19.85	125.49	294.0	0.675
CET2	S	10	35.21	125.49	294.0	0.499

41 130926 1219 56.0 - Offshore Crotona  
 Lat: 39.08 Lon: 17.36 Prof: 0.0 Km  
 ± 1.82 km ± 2.49 km ± 4.1 km  
 RMS: 0.90s GAP: 183.2° NR: 40

STN	PHASE	MN	SEC	DIST	AZM	RES
ROI	P	20	13.50	87.24	307.4	0.833
CSC2	P	20	14.58	98.38	282.5	0.445



STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	38	32.33	10.73	279.5	0.161
MMN	S	38	34.05	10.73	279.5	-0.202
CET2	P	38	37.75	40.82	199.7	0.262
CET2	S	38	43.13	40.82	199.7	-0.331

**57** 130929 0025 41.0 - Offshore Cirò  
Lat: 39.50 Lon: 16.93 Prof: 19.5 Km  
± 1.28 km ± 2.15 km ± 3.3 km  
RMS: 0.57s GAP: 220.5° NR: 17

STN	PHASE	MN	SEC	DIST	AZM	RES
ROI	P	25	48.08	31.85	282.9	0.001
ROI	S	25	53.94	31.85	282.9	0.704
CET2	P	25	55.70	83.91	271.6	-0.235
CET2	S	26	7.58	83.91	271.6	0.738

**58** 130929 0604 41.2 - Bacino di Gioia  
Lat: 38.40 Lon: 15.49 Prof: 118.0 Km  
± 1.70 km ± 2.46 km ± 3.3 km  
RMS: 0.40s GAP: 83.1° NR: 24

STN	PHASE	MN	SEC	DIST	AZM	RES
CSC2	P	05	4.21	118.05	34.4	-0.146
CSC2	S	05	21.44	118.05	34.4	0.138
CET2	P	05	5.27	130.81	18.1	0.503
CET2	S	05	22.76	130.81	18.1	0.748
ROI	P	05	8.52	159.42	35.9	0.008
ROI	S	05	28.32	159.42	35.9	-0.178

**59** 130929 0755 31.8 - Offshore Locride  
Lat: 38.01 Lon: 16.22 Prof: 7.7 Km  
± 1.86 km ± 1.61 km ± 3.3 km  
RMS: 0.73s GAP: 207.4° NR: 35

STN	PHASE	MN	SEC	DIST	AZM	RES
CNDF	P	55	38.23	32.56	268.6	0.113
CNDF	S	55	42.39	32.56	268.6	-0.314
ROI	P	55	53.49	175.78	9.6	8.003
CET2	P	55	59.21	170.15	352.1	0.249
CET2	S	56	19.64	170.15	352.1	0.832

**60** 130929 1019 01.0 - Maratea - Rotonda  
Lat: 39.94 Lon: 15.91 Prof: 2.0 Km  
± 0.89 km ± 0.67 km ± 1.3 km  
RMS: 0.29s GAP: 156.6° NR: 10

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	19	3.08	8.47	132.0	0.006
MMN	S	19	5.04	8.47	132.0	0.511

**61** 130929 1151 19.4 - Locride  
Lat: 38.20 Lon: 16.08 Prof: 114.7 Km  
± 3.33 km ± 4.82 km ± 3.4 km  
RMS: 0.43s GAP: 245.9° NR: 21

STN	PHASE	MN	SEC	DIST	AZM	RES
CET2	P	51	45.18	147.94	355.7	0.636
CET2	S	52	2.98	147.94	355.7	0.067

**62** 130929 1224 52.2 - Alto Tirreno Cosentino  
Lat: 39.89 Lon: 16.02 Prof: 7.1 Km  
± 0.60 km ± 0.73 km ± 2.6 km  
RMS: 0.45s GAP: 70.0° NR: 33

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	24	53.89	2.76	258.3	-0.007
MMN	S	24	55.07	2.76	258.3	-0.041
CET2	P	25	-.26	41.17	188.3	-0.363
CET2	S	25	5.08	41.17	188.3	-0.780
ROI	P	25	3.98	59.10	127.5	0.679
ROI	S	25	11.19	59.10	127.5	-0.208
SCOI	P	25	5.33	70.29	163.4	0.481
SCOI	S	25	14.89	70.29	163.4	0.810

**63** 130929 1316 33.2 - Alto Tirreno Cosentino  
Lat: 39.88 Lon: 15.99 Prof: 5.3 Km  
± 0.60 km ± 1.27 km ± 0.8 km  
RMS: 0.13s GAP: 172.5° NR: 8

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	16	34.59	1.20	334.5	0.044
MMN	S	16	35.60	1.20	334.5	0.117

**64** 130930 0059 03.0 - Aspromonte  
Lat: 38.06 Lon: 15.78 Prof: 9.7 Km  
± 0.57 km ± 0.73 km ± 1.2 km  
RMS: 0.21s GAP: 172.7° NR: 12

STN	PHASE	MN	SEC	DIST	AZM	RES
CNDF	P	59	5.76	9.72	139.4	0.105
CNDF	S	59	7.35	9.72	139.4	-0.228

**65** 130930 0329 16.8 - Bacino di Alicudi  
Lat: 38.68 Lon: 13.78 Prof: 44.4 Km  
± 1.74 km ± 1.15 km ± 3.5 km  
RMS: 0.44s GAP: 149.4° NR: 17

STN	PHASE	MN	SEC	DIST	AZM	RES
CET2	P	29	46.95	209.94	64.3	0.769
CET2	S	30	8.55	209.94	64.3	0.903
CSC2	P	29	49.00	224.57	73.4	-0.501
CSC2	S	30	12.86	224.57	73.4	-0.537

**66** 130930 1152 23.3 - Alto Tirreno Cosentino  
Lat: 39.89 Lon: 16.09 Prof: 5.4 Km  
± 0.67 km ± 0.37 km ± 0.9 km  
RMS: 0.20s GAP: 97.3° NR: 9

STN	PHASE	MN	SEC	DIST	AZM	RES
MMN	P	52	25.74	8.64	267.2	0.028
MMN	S	52	27.06	8.64	267.2	-0.390