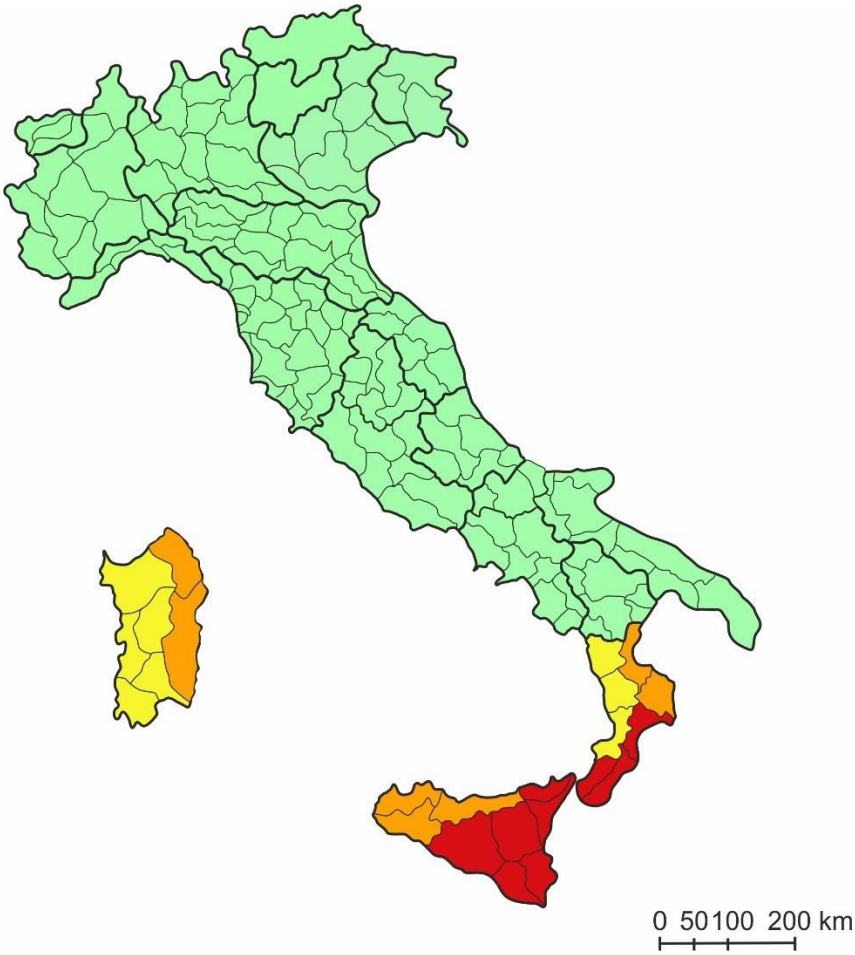
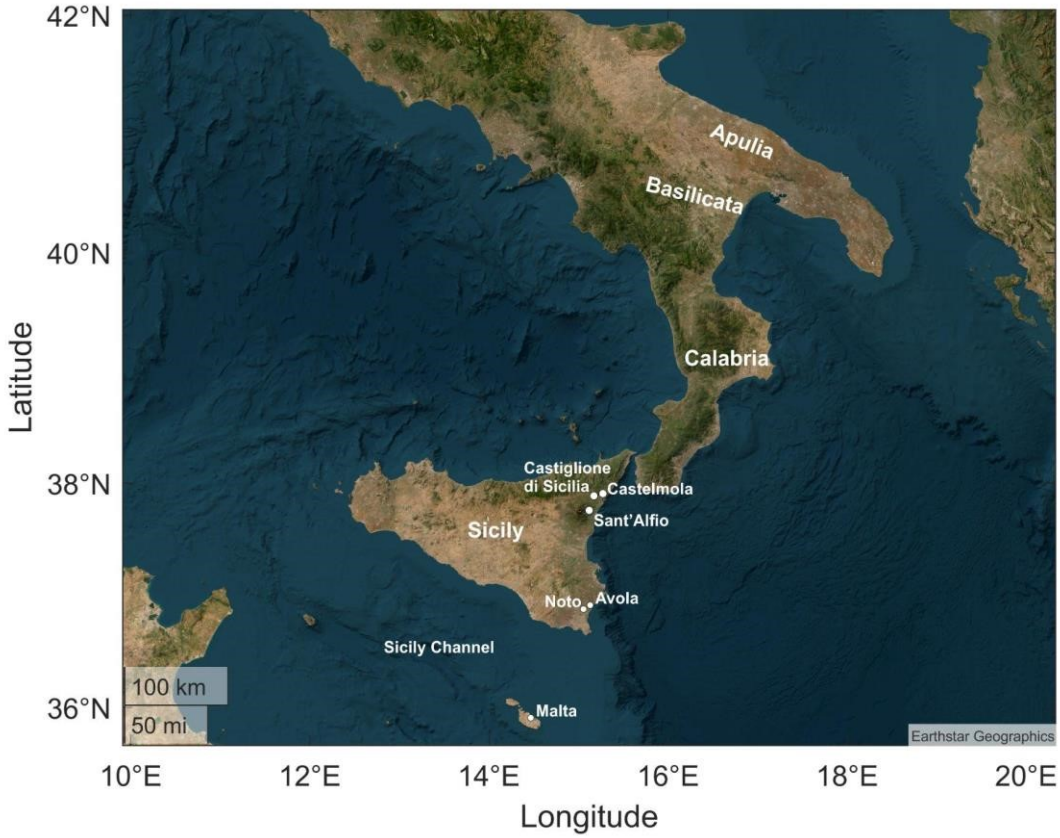
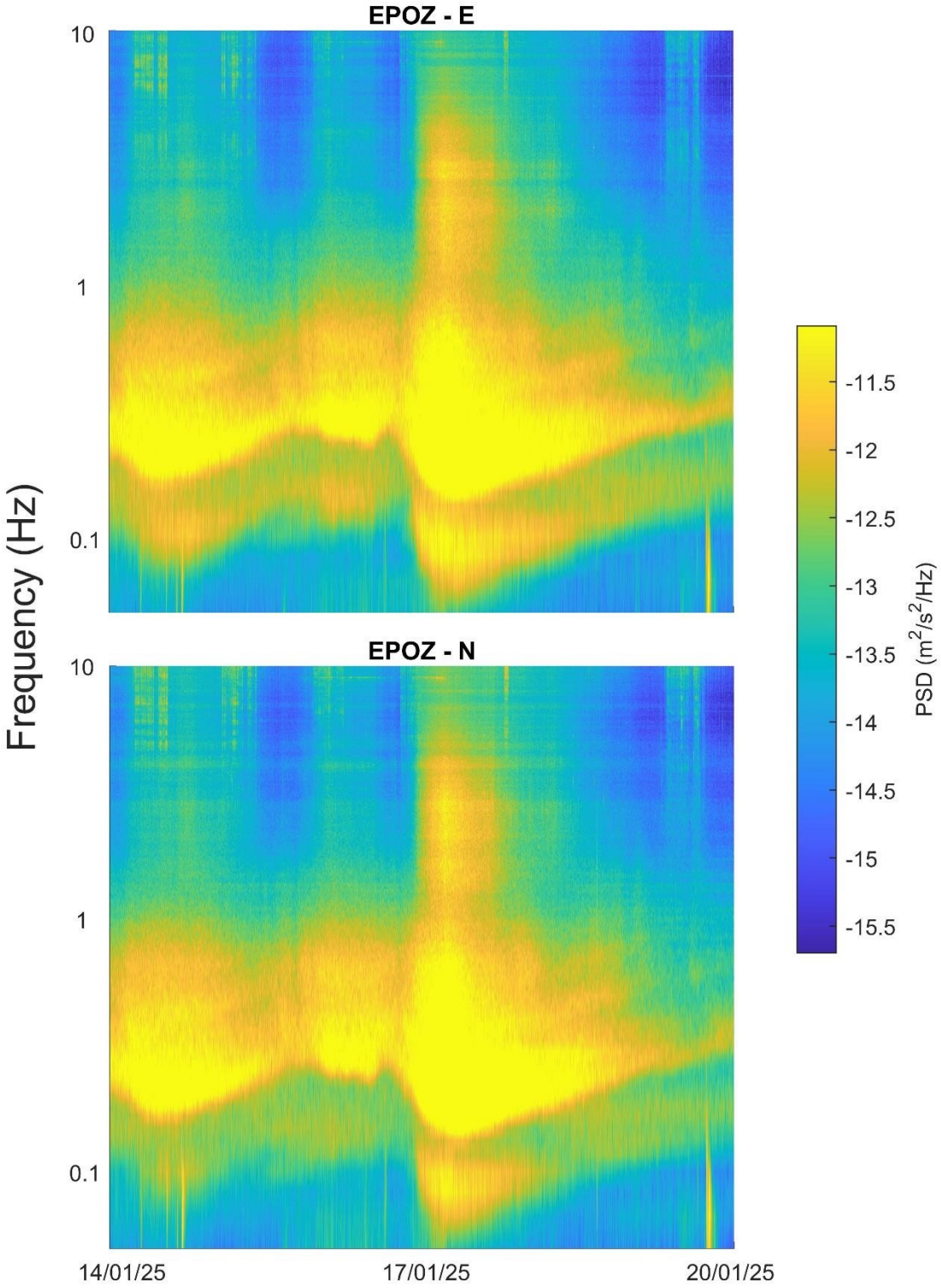
Supplementary Figures



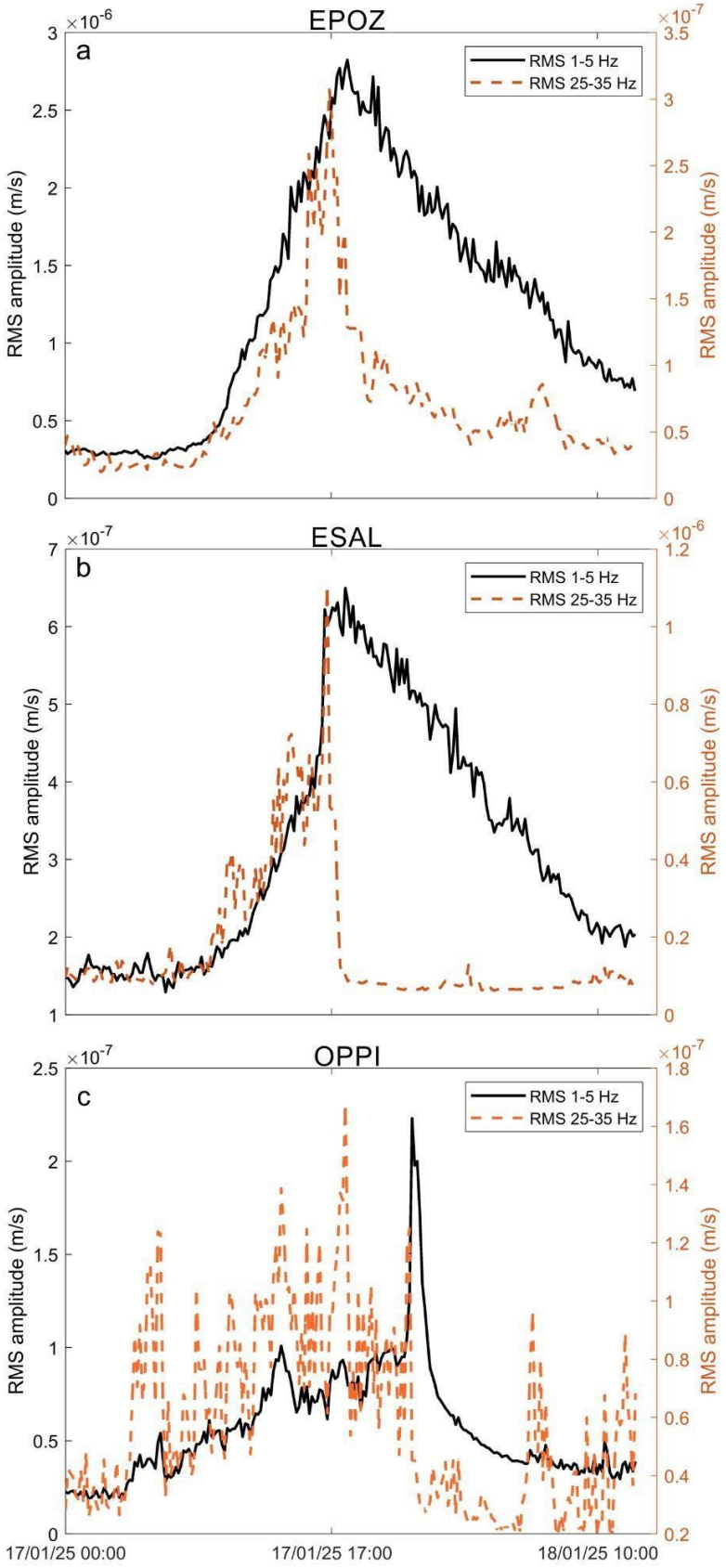
Supplementary Figure 1: Map of the meteorological alert levels issued for 17 January 2025 across Italy by the Italian Civil Protection Department. Each alert zone is coloured according to its alert level: green, no alert, yellow, ordinary criticality; orange, moderate criticality; red, high criticality. In red alert zones, and in some cases also in orange ones, local authorities may adopt preventive public safety measures, such as the closure of schools and public offices. Thin black lines delimit the alert zones and thick lines the regional boundaries. The highest level (red) was issued for most of Sicily and southern Calabria, while orange and yellow alerts affected western Sicily.



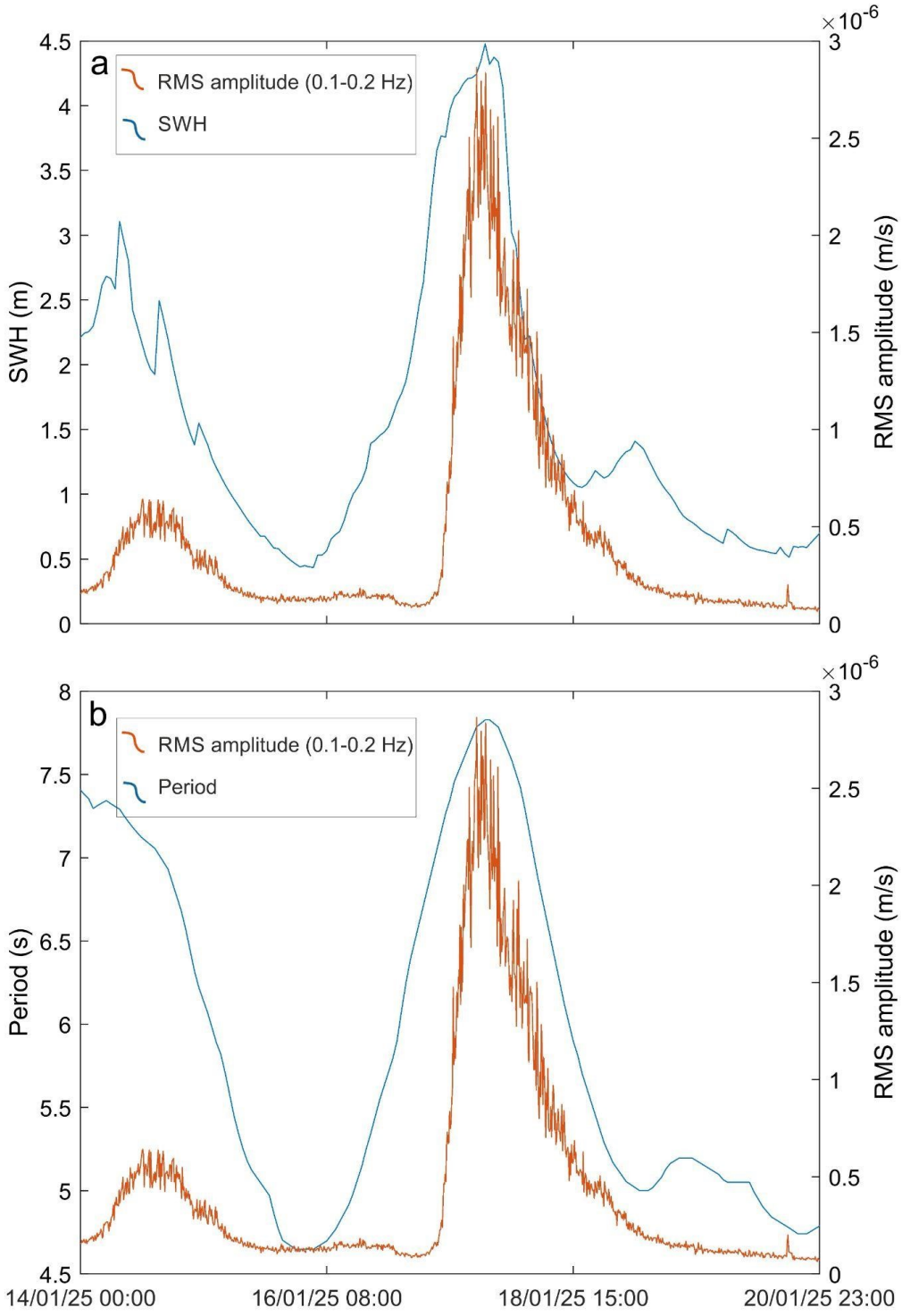
Supplementary Figure 2. Map of the area under study with the location of the place names indicated in the main text. (base image source ©Earthstar Geographic)



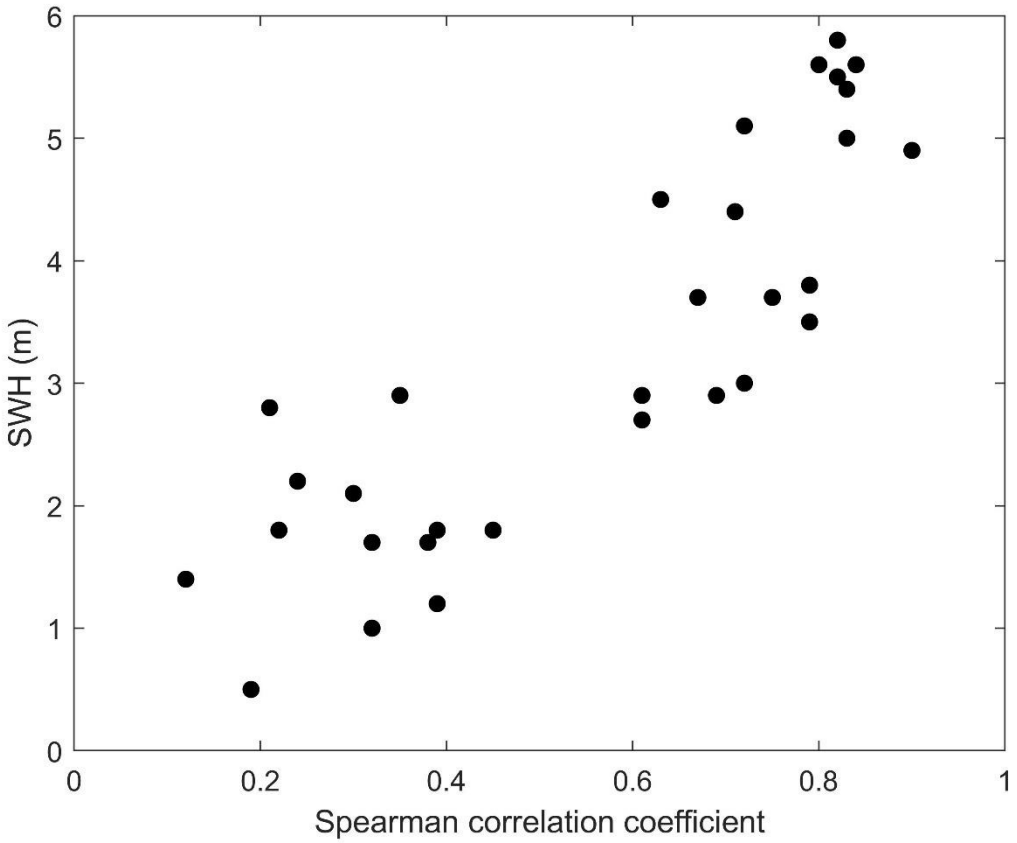
Supplementary Figure 3: Spectrograms of the seismic signal recorded by the horizontal components of the EPOZ seismic station installed close to the Ionian coastline. Colorbar indicate the $\log_{10}$ Power Spectral Density (PSD) of the seismic signal.



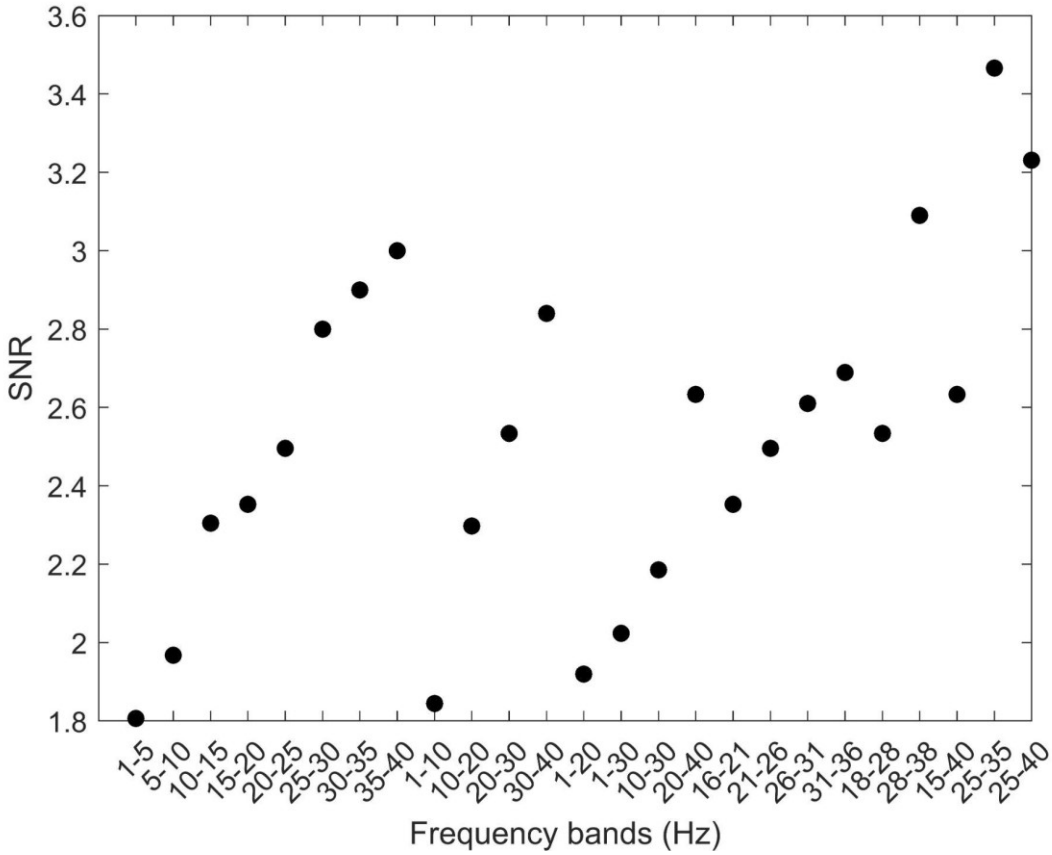
Supplementary Figure 4. Root Mean Square (RMS) amplitude time series recorded in the 1-5 Hz (black lines) and 25-35 Hz (orange dashed lines) for three stations used in this study.



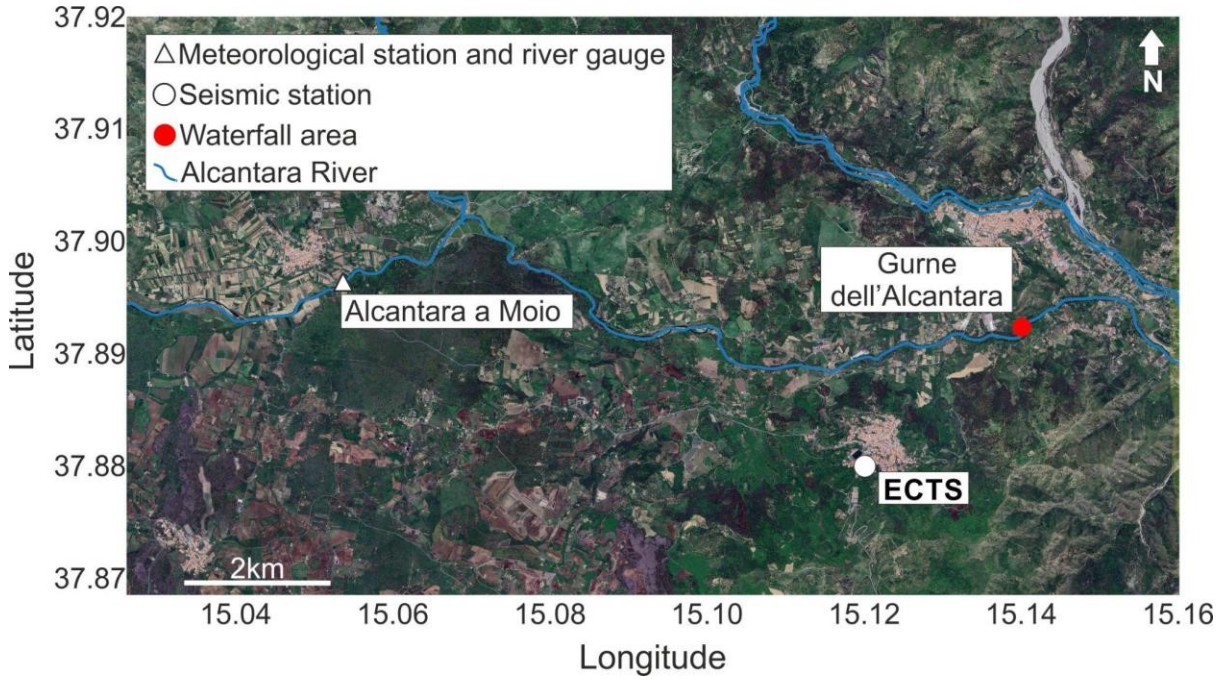
Supplementary Figure 5. Root Mean Square (RMS) amplitude time series recorded in the 0.1-0.2 Hz frequency band by the vertical component of the EPOZ seismic station installed close to the Ionian coastline (orange lines). The light-blue lines show the SWH (**a**) and period (**b**) obtained from hindcast data for the point of coordinates latitude 37.60° and longitude 15.40°.



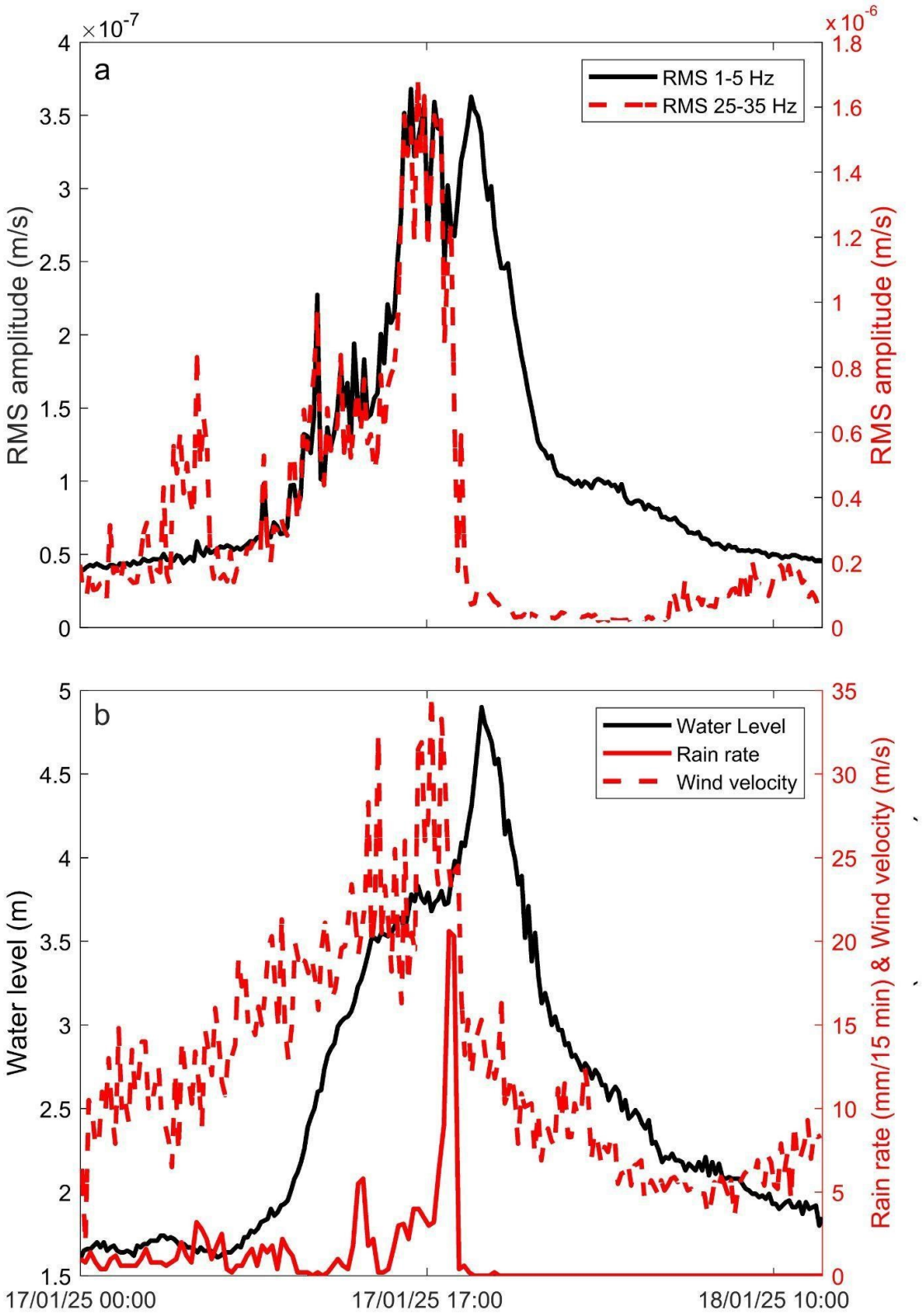
Supplementary Figure 6: Scatterplot showing the Spearman correlation coefficient between the Root Mean Square (RMS) amplitude and the Significant Wave Heights (SWH) time series (x-axis) and the Significant Wave Heights (SWH, y-axis).



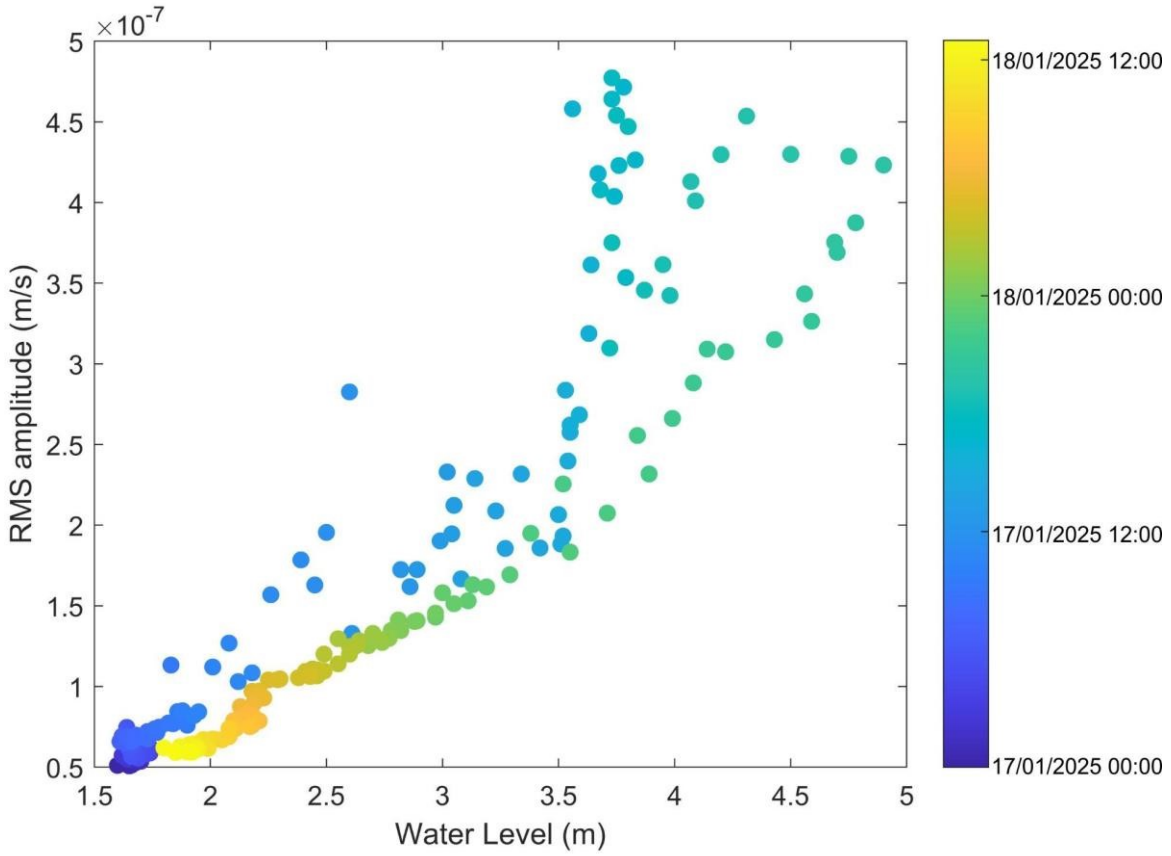
Supplementary Figure 7. Scatter-plot showing the Signal-to-Noise Ratio (SNR) values on the basis of the frequency bands analyzed.



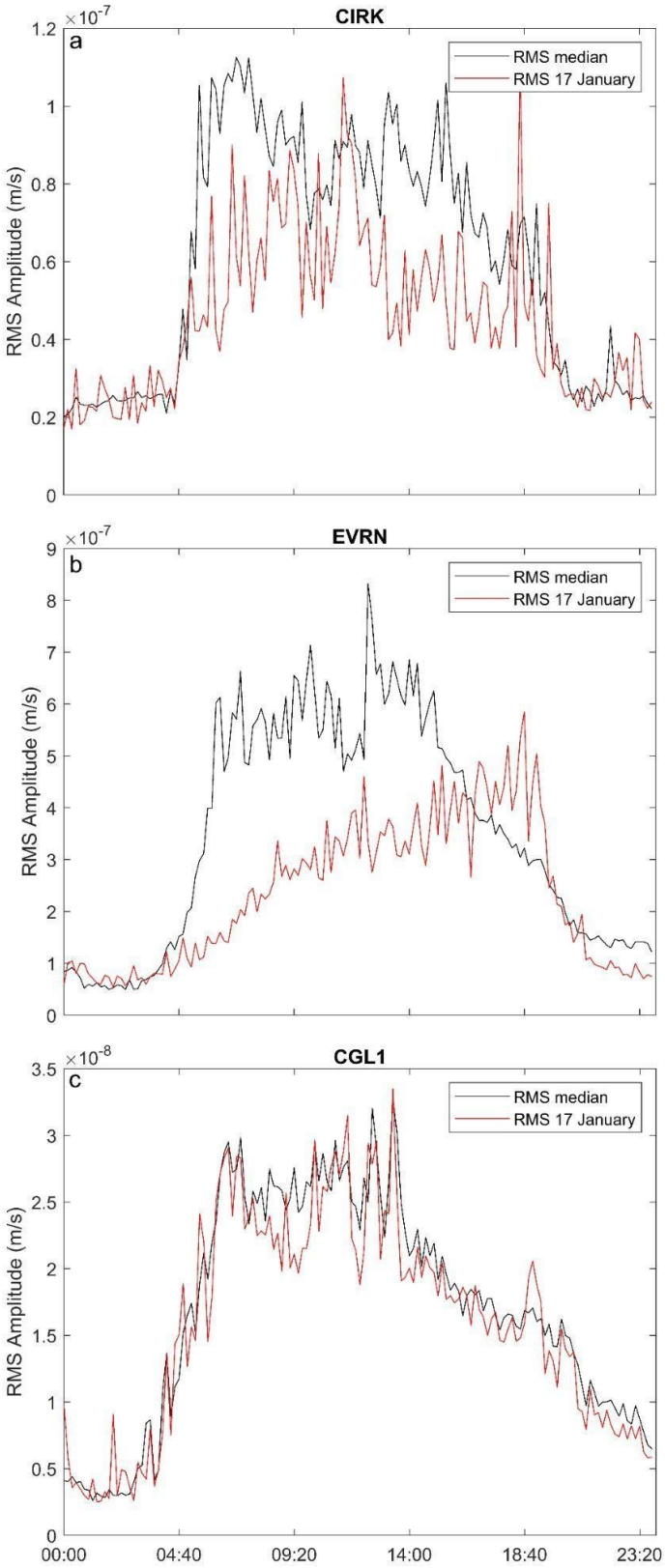
Supplementary Figure 8. Map showing the position of the ECTS seismic station, meteorological station and river gauge used in the detailed analysis about the Alcantara river flood.



Supplementary Figure 9. (a) Root Mean Square (RMS) amplitude time series recorded in the 1-5 Hz (black line) and 25-35 Hz (dashed-red line) frequency bands by the ECTS seismic station; (b) water level (black line), rain rate (red line) and wind velocity (dashed red line) time series recorded during the storm.



Supplementary Figure 10. Cross plot showing the seismic Root Mean Square (RMS) amplitude recorded by ECTS seismic station in the frequency band 1-5 Hz (y-axis) versus the water level (x-axis). The dots' color indicates the time as shown in the colorbar.



Supplementary Figure 11. Median Root Mean Square (RMS) amplitude time series recorded on Fridays from 10 January to 21 March (black lines) and RMS amplitude time series recorded on 17 January (red line) in the 5-25 Hz band for three stations installed respectively in red (EVRN), orange (CIRK) and green (CGL1) alert areas.

58

Name	Latitude (°)	Longitude (°)	Network	Sensor
ACER	40.78	15.94	IV	NANOMETRICS TRILLIUM-40S
ALJA	37.74	13.75	IV	NANOMETRICS TRILLIUM-40S
AMUR	40.90	16.60	IV	NANOMETRICS TRILLIUM-40S
BASIC	38.06	15.06	IV	NANOMETRICS TRILLIUM-120C
BULG	40.07	15.37	IV	NANOMETRICS TRILLIUM-40S
CAPA	41.15	15.81	IV	NANOMETRICS TRILLIUM-120C
CAVT	37.67	12.75	IV	GURALP CMG-3EX
CDRU	40.48	15.30	IV	NANOMETRICS TRILLIUM-40S
CELI	39.40	16.50	IV	NANOMETRICS TRILLIUM-120S
CET2	39.52	15.95	IV	NANOMETRICS TRILLIUM-40S
CGL1	40.64	17.51	OT	NANOMETRICS TRILLIUM-40S
CHCE	38.68	16.41	IY	SARA SS08
CIMI	37.88	13.57	IV	NANOMETRICS TRILLIUM-120C
CIRK	39.38	17.06	IY	SARA SS08
CLTB	37.57	13.21	IV	NANOMETRICS TRILLIUM-360GSN
CNDF	38.00	15.85	IY	SARA SS08
CORL	37.89	13.30	IV	NANOMETRICS TRILLIUM-120S
CPTP	37.40	14.16	IV	GURALP CMG-3T-120S

CRJA	37.80	13.00	IV	GURALP CMG-3EX
CROCE	36.83	14.53	IV	LENNARTZ LE3D-20S
CSLB	37.93	14.05	IV	NANOMETRICS TRILLIUM-120S
CUC	39.99	15.81	MN	STRECKEISEN STS-2-120S
EBDA	37.63	15.12	IV	GURALP CMG-3EX
ECBD	37.78	15.08	IV	NANOMETRICS TRILLIUM-40S
ECHR	37.68	14.91	IV	NANOMETRICS TRILLIUM-40S

59

ECNE	37.76	15.00	IV	NANOMETRICS TRILLIUM-40S
ECPN	37.74	14.98	IV	NANOMETRICS TRILLIUM-40S
ECTS	37.88	15.12	IV	LENNARTZ LE3D-1S
ECZM	37.73	14.90	IV	NANOMETRICS TRILLIUM-40S
EFIU	37.78	15.21	IV	NANOMETRICS TRILLIUM-40S
EMAS	37.57	15.05	IV	GURALP CMG-3EX
EMCN	37.79	15.03	IV	NANOMETRICS TRILLIUM-40S
EMCO	37.92	14.90	IV	GURALP CMG-3EX
EMFO	37.73	15.09	IV	NANOMETRICS TRILLIUM-40S
EMFS	37.71	14.99	IV	NANOMETRICS TRILLIUM-40S
EMNR	37.81	15.02	IV	NANOMETRICS TRILLIUM-40S
EMPL	37.67	14.97	IV	NANOMETRICS TRILLIUM-40S
EMSA	37.49	14.94	IV	GURALP CMG-3T-120S
EMSG	37.82	14.94	IV	NANOMETRICS TRILLIUM-40S
ENIC	37.63	15.02	IV	NANOMETRICS TRILLIUM-40S
EPDN	37.76	15.01	IV	NANOMETRICS TRILLIUM-40S
EPIT	37.81	15.05	IV	NANOMETRICS TRILLIUM-40S

EPLC	37.76	14.98	IV	NANOMETRICS TRILLIUM-40S
EPMN	37.82	15.17	IV	NANOMETRICS TRILLIUM-40S
EPOZ	37.67	15.18	IV	NANOMETRICS TRILLIUM-40S
EPZF	37.82	14.85	IV	NANOMETRICS TRILLIUM-40S
ESAL	37.75	15.13	IV	GURALP CMG-3EX
ESCV	37.74	14.81	IV	NANOMETRICS TRILLIUM-40S
ESLN	37.69	14.97	IV	NANOMETRICS TRILLIUM-40S
ESML	37.61	14.87	IV	NANOMETRICS TRILLIUM-40S
ESPC	37.69	15.02	IV	NANOMETRICS TRILLIUM-40S
ESVO	37.77	14.94	IV	NANOMETRICS TRILLIUM-40S
EVRN	37.68	15.13	IV	LENNARTZ LE3D-20S

60

FAVA	37.32	13.65	IV	NANOMETRICS TRILLIUM-120C
GALF	37.71	14.56	IV	NANOMETRICS TRILLIUM-40S
GIB	37.99	14.02	IV	NANOMETRICS TRILLIUM-120S
GIZZ	38.97	16.20	IV	NANOMETRICS TRILLIUM-40S
GMB1	38.17	15.81	IV	NANOMETRICS TRILLIUM-120C
HAGA	37.28	15.15	IV	NANOMETRICS TRILLIUM-40S
HAVL	36.95	15.12	IV	NANOMETRICS TRILLIUM-40S
HCRL	37.28	15.03	IV	NANOMETRICS TRILLIUM-40S
HLNI	37.34	14.87	IV	NANOMETRICS TRILLIUM-40S
HMDC	36.95	14.78	IV	NANOMETRICS TRILLIUM-40S
HPAC	36.70	15.03	IV	NANOMETRICS TRILLIUM-40S
HSRS	37.09	15.22	IV	GURALP CMG-3EX
HVIT	36.99	14.52	IV	GURALP CMG-3EX
HVZN	37.17	14.71	IV	NANOMETRICS TRILLIUM-40S
IFIL	38.56	14.57	IV	NANOMETRICS TRILLIUM-40S
ILOS	38.44	14.94	IV	NANOMETRICS TRILLIUM-40S

IPAI	36.91	14.72	IV	NANOMETRICS TRILLIUM-120C
IPNR	38.64	15.06	IV	NANOMETRICS TRILLIUM-120C
ISNA	38.55	14.84	IV	NANOMETRICS TRILLIUM-40S
ISPIC	36.78	14.90	IV	LENNARTZ LE3D-5S
IST3	38.79	15.23	IV	NANOMETRICS TRILLIUM-40S
ISTR	38.78	15.19	IV	NANOMETRICS TRILLIUM-40S
IVCR	38.40	14.96	IV	NANOMETRICS TRILLIUM-40S
IVGP	38.39	14.96	IV	NANOMETRICS TRILLIUM-40S
IVLO	38.42	14.96	IV	NANOMETRICS TRILLIUM-120H
IVLT	38.39	14.94	IV	NANOMETRICS TRILLIUM-40S
IVPL	38.37	14.98	IV	NANOMETRICS TRILLIUM-40S
IVUG	38.39	14.98	IV	NANOMETRICS TRILLIUM-40S

61

LEVAN	37.99	12.34	IV	LENNARTZ LE3D-lite-MkIII-1s
LIBRI	38.08	14.92	IV	NANOMETRICS TRILLIUM-120C
LINA	35.87	12.86	IV	NANOMETRICS TRILLIUM-40S
LPDG	35.51	12.63	IV	NANOMETRICS TRILLIUM-40S
LTRZ	40.60	16.81	IV	LENNARTZ LE3D-5S
MARIO	37.95	13.43	IV	NANOMETRICS TRILLIUM-120C
MARS	37.75	12.56	IV	LENNARTZ LE3D-5S
MBFT	37.94	12.95	IV	NANOMETRICS TRILLIUM-120S
MCEL	40.32	15.80	IV	NANOMETRICS TRILLIUM-40S
MCPD	38.11	14.73	IV	NANOMETRICS TRILLIUM-40S
MCT	37.61	13.60	IV	LENNARTZ LE3D-20S

MESG	40.58	17.85	IV	NANOMETRICS TRILLIUM-40S
MFNL	37.79	12.92	IV	GURALP CMG-3EX
MGR	40.13	15.55	IV	NANOMETRICS TRILLIUM-40S
MIGL	40.60	16.44	IV	NANOMETRICS TRILLIUM-40S
MILZ	38.27	15.23	IV	NANOMETRICS TRILLIUM-40S
MMGO	37.66	12.97	IV	GURALP CMG-3EX
MMN	39.89	15.99	IV	NANOMETRICS TRILLIUM-40S
MPAZ	37.95	16.00	IV	NANOMETRICS TRILLIUM-40S
MPNC	38.14	15.35	IV	NANOMETRICS TRILLIUM-40S
MRLC	40.75	15.48	IV	NANOMETRICS TRILLIUM-40S
MRVN	41.06	16.19	IV	NANOMETRICS TRILLIUM-40S
MSDA	35.90	14.48	ML	NANOMETRICS TRILLIUM-120
MSFR	38.03	14.59	IV	NANOMETRICS TRILLIUM-40S
MSRU	38.26	15.50	IV	NANOMETRICS TRILLIUM-40S
MTSN	40.26	15.75	IV	NANOMETRICS TRILLIUM-40S
MTTG	38.00	15.69	IV	NANOMETRICS TRILLIUM-40S

62

MUCR	38.04	14.87	IV	NANOMETRICS TRILLIUM-40S
NOCI	40.78	17.06	IV	NANOMETRICS TRILLIUM-40S
NOV	38.02	15.13	IV	NANOMETRICS TRILLIUM-40S
OPPI	38.26	16.00	IY	SARA SS08
ORI	40.05	16.45	IV	NANOMETRICS TRILLIUM-40S

PALZ	40.94	15.96	IV	NANOMETRICS TRILLIUM-40S
PANTE	36.81	11.99	IV	LENNARTZ LE3D-20S
PETRA	37.83	14.11	IV	NANOMETRICS TRILLIUM-40S
PGEL	36.79	11.97	IV	NANOMETRICS TRILLIUM-40S
PIPA	39.48	16.81	IV	NANOMETRICS TRILLIUM-240
PLAC	38.44	16.43	IV	NANOMETRICS TRILLIUM-40S
PLLN	37.99	14.14	IV	LENNARTZ LE3D-5S
PTRP	40.52	16.06	IV	LENNARTZ LE3D-5S
PZIN	38.81	11.97	IV	NANOMETRICS TRILLIUM-40S
RESU	37.64	14.05	IV	NANOMETRICS TRILLIUM-40S
ROI	39.57	16.56	IY	SARA SS08
SALB	39.87	16.34	IV	NANOMETRICS TRILLIUM-40S
SCIAC	37.51	13.10	IV	LENNARTZ LE3D-20S
SCIAR	37.94	13.75	IV	NANOMETRICS TRILLIUM-120P3
SCIC	36.79	14.67	IV	NANOMETRICS TITAN
SCTE	40.07	18.46	IV	NANOMETRICS TRILLIUM-40S
SELL	38.98	16.62	IV	NANOMETRICS TRILLIUM-20C
SERS	39.03	16.68	IV	NANOMETRICS TRILLIUM-40S
SLCN	40.39	15.63	IV	NANOMETRICS TRILLIUM-40S
SOI	38.07	16.05	IV	LENNARTZ LE3D-5S
SOLUN	38.09	13.53	IV	NANOMETRICS TRILLIUM-120S
SPDC	38.52	16.13	IY	NANOMETRICS TRILLIUM-120C
SPS2	39.29	16.33	IV	NANOMETRICS TRILLIUM-20C
SSY	37.15	15.07	IV	NANOMETRICS TRILLIUM-40S
STR6	38.78	15.21	IV	GURALP CMG-3ESPC-120S
STRA	38.78	15.21	IV	GURALP CMG-3ESPC-120S
STRC	38.79	15.19	IV	GURALP CMG-40T-60S

STRE	38.80	15.21	IV	GURALP CMG-3ESPC-120S
STRG	38.80	15.21	IV	GURALP CMG-40T-60S
TAR1	40.52	17.28	OT	NANOMETRICS TRILLIUM-40S
TDS	39.66	16.3	IV	NANOMETRICS TRILLIUM-120C
USI	38.70	13.17	IV	NANOMETRICS TRILLIUM-40S
VAE	37.46	14.35	MN	STRECKEISEN STS-1H-VBB
VULT	40.95	15.61	IV	NANOMETRICS TRILLIUM-40S
WDD	35.83	14.52	MN	STRECKEISEN STS-2-120S

Supplementary Table 1. List of seismic stations used in this study among their features in terms of position, network and sensor type**.**

N	Name	Latitude (°)	Longitude (°)	Region
1	Bisceglie	41.23	16.49	Apulia
2	Ruffano	39.98	18.24	Apulia
3	Faeto	41.32	15.16	Apulia
4	Sannicandro Garganico	41.83	15.56	Apulia
5	Brindisi	40.64	17.92	Apulia
6	Poggio Imperiale	41.82	15.36	Apulia
7	Maglie	40.12	18.29	Apulia
8	Otranto	40.15	18.48	Apulia
9	Ruvo di Puglia	41.11	16.48	Apulia
10	Grumo Appula	41.01	16.71	Apulia
11	Monticchio Bagni	40.93	15.61	Apulia
12	Taviano	39.98	18.08	Apulia
13	Corato	41.15	16.41	Apulia
14	S. Pietro Vernotico	40.48	18.00	Apulia
15	Nardo	40.17	18.03	Apulia
16	Cerignola	41.26	15.9	Apulia
17	Pietramontecorvino	41.54	15.12	Apulia
18	Ostuni	40.74	17.57	Apulia
19	Fasano	40.83	17.35	Apulia
20	Locorotondo	40.75	17.33	Apulia
21	Foggia Osservatorio	41.46	15.54	Apulia
22	Gioia del Colle	40.8	16.92	Apulia
23	Barletta	41.31	16.27	Apulia
24	Monteleone di Puglia	41.15	15.26	Apulia
25	Minervino Murge	41.07	16.08	Apulia
26	Andria	41.22	16.29	Apulia

27	Polignano a mare	40.99	17.21	Apulia
28	Latiano	40.54	17.71	Apulia
29	Grottaglie	40.54	17.44	Apulia
30	Troia	41.36	15.3	Apulia
31	Turi	40.91	17.02	Apulia
32	Ortanova	41.32	15.7	Apulia
33	Massafra	40.58	17.11	Apulia
34	Casamassima	40.95	16.91	Apulia
35	Andretta	40.92	15.33	Apulia
36	Monte S. Angelo	41.7	15.96	Apulia
37	Lucera	41.51	15.33	Apulia
38	Lavello	41.05	15.79	Apulia
39	Castellaneta	40.63	16.93	Apulia
40	Lizzano	40.39	17.44	Apulia
41	Cassano Murge	40.88	16.77	Apulia
42	Ginosa Marina	40.42	16.88	Apulia
43	Ascoli Satriano	41.2	15.56	Apulia
44	Avetrana	40.34	17.72	Apulia
45	Taranto	40.46	17.25	Apulia
46	Venosa	40.96	15.81	Apulia
47	S. Pancrazio Salentino	40.41	17.83	Apulia
48	Cellino S. Marco	40.47	17.96	Apulia
49	Panni	41.21	15.28	Apulia
50	Anzano di Puglia	41.12	15.28	Apulia
51	Apricena	41.79	15.44	Apulia
52	Deliceto	41.22	15.38	Apulia
53	Quasano	40.96	16.57	Apulia
54	T. Saccione-PreSS 16 ter	41.86	15.12	Apulia

67

55	F. Fortore-Pte. cp 41b(Ripalta)	41.85	15.26	Apulia
56	T. Candelaro-Pte. SS272	41.71	15.5	Apulia
57	Can. Asso	40.18	18.03	Apulia
58	S. Paolo di Civitate	41.74	15.25	Apulia
59	Carlantino	41.59	14.97	Apulia
60	Celenza Valfortore	41.59	14.97	Apulia
61	Volturara Appula	41.5	15.06	Apulia
62	Masseria Modesti	40.98	16.4	Apulia
63	Palagiano	40.57	17.03	Apulia
64	Casalnuovo Monterotaro	41.61	15.1	Apulia
65	Monopoli	40.93	17.31	Apulia
66	Mesagne	40.55	17.79	Apulia
67	Gravina in Puglia	40.82	16.41	Apulia
68	Laterza	40.62	16.8	Apulia
69	Palagianello	40.61	16.97	Apulia
70	F. Lato-Pt. SP14	40.5	16.94	Apulia
71	Diga Locone	41.09	15.99	Apulia
72	Acquaviva delle Fonti	40.89	16.84	Apulia
73	T. Salsola-Pte. SS16	41.56	15.49	Apulia
74	T.Lognone-Pte. SP2	40.47	16.78	Apulia
75	Peschici	41.94	16.01	Apulia
76	Rodi Garganico	41.92	15.88	Apulia
77	Carpino	41.84	15.85	Apulia
78	Statte	40.56	17.2	Apulia
79	Polibasede	40.52	17.28	Apulia
80	Montemesola	40.56	17.33	Apulia
81	Arpinova	41.54	15.61	Apulia
82	Can. S. Maria-Pte. SP12	41.62	15.29	Apulia

83	Terlizzi-depuratore	41.15	16.52	Apulia
84	Molfetta	41.19	16.59	Apulia
85	Masseria Galeone	40.74	17.2	Apulia
86	Le Cesine	40.34	18.33	Apulia
87	Altamura	40.82	16.55	Apulia
88	Bari Idrografico	41.12	16.88	Apulia
89	Biccari	41.39	15.19	Apulia
90	Borgo Liberta	41.18	15.71	Apulia
91	Bosco Umbra	41.81	15.99	Apulia
92	Bovino	41.24	15.32	Apulia
93	Cagnano Varano	41.82	15.77	Apulia
94	Calitri	40.93	15.4	Apulia
95	Canosa di Puglia	41.22	16.06	Apulia
96	Castel del Monte	41.07	16.27	Apulia
97	Castellana Grotte	40.88	17.16	Apulia
98	Castelluccio dei Sauri	41.3	15.47	Apulia
99	Corigliano d'Otranto	40.2	18.25	Apulia
100	Diga T. Celone	41.42	15.43	Apulia
101	Diga T. Osento	41.00	15.5	Apulia
102	F. Ofanto-Samuele di Cafiero	41.26	16.05	Apulia
103	Foggia Ist. Agr.	41.46	15.5	Apulia
104	Forenza	40.86	15.84	Apulia
105	Gallipoli	40.05	17.99	Apulia
106	Ginosa	40.57	16.75	Apulia
107	Lagopesole	40.8	15.73	Apulia
108	Lecce	40.35	18.16	Apulia
109	Lesina	41.86	15.35	Apulia
110	Manfredonia	41.58	15.87	Apulia

111	Martina Franca	40.69	17.34	Apulia
112	Masseria Monteruga	40.34	17.82	Apulia
113	Masseria S. Chiara	41.33	16.13	Apulia
114	Melfi	40.99	15.62	Apulia
115	Mercadante	40.89	16.7	Apulia
116	Mte. Vulture	40.95	15.62	Apulia
117	Montemilone	41.02	15.96	Apulia
118	Montursi	40.76	16.88	Apulia
119	Presicce	39.9	18.26	Apulia
120	Ripacandida	40.91	15.73	Apulia
121	Rocchetta S. Antonio	41.1	15.46	Apulia
122	S. Giorgio Jonico	40.56	17.38	Apulia
123	S. Marco in Lamis	41.71	15.63	Apulia
124	S. Severo	41.69	15.38	Apulia
125	S. Vito dei Normanni	40.65	17.7	Apulia
126	S. Maria di Leuca	39.79	18.35	Apulia
127	S. Angelo dei Lombardi	40.93	15.18	Apulia
128	Savignano Irpino	41.2	15.18	Apulia
129	Spinazzola	40.96	16.09	Apulia
130	Talsano	40.41	17.27	Apulia
131	Teora	40.84	15.24	Apulia
132	T. Atella-SS381	40.86	15.64	Apulia
133	TCervaro-ZIIncoronata	41.4	15.65	Apulia
134	Vieste	41.87	16.15	Apulia
135	Bisaccia	41.00	15.37	Apulia
136	Adelfia	41.00	16.86	Apulia
137	Bari Campus	41.1	16.87	Apulia
138	Bari Osservatorio	41.11	16.87	Apulia

139	Bitonto	41.11	16.69	Apulia
140	Conversano	40.96	17.11	Apulia
141	Giovinazzo	41.18	16.67	Apulia
142	Loconia	41.16	15.94	Apulia
143	Noci	40.79	17.11	Apulia
144	Santeramo in Colle	40.79	16.76	Apulia
145	Ceglie Messapica	40.64	17.51	Apulia
146	Alberona	41.43	15.12	Apulia
147	Candela	41.13	15.51	Apulia
148	Fonte Rosa	41.44	15.81	Apulia
149	Orsara di Puglia	41.28	15.26	Apulia
150	Orto di Zolfo	41.37	15.15	Apulia
151	S. Giovanni Rotondo	41.7	15.7	Apulia
152	S. Agata di Puglia	41.15	15.38	Apulia
153	Tertiveri	41.43	15.2	Apulia
154	Torremaggiore	41.69	15.29	Apulia
155	Vico del Gargano	41.89	15.96	Apulia
156	Volturino	41.47	15.12	Apulia
157	Collepasso	40.07	18.16	Apulia
158	Copertino	40.26	18.05	Apulia
159	Galatina	40.17	18.17	Apulia
160	Melendugno	40.27	18.33	Apulia
161	Minervino di Lecce	40.09	18.41	Apulia
162	Novoli	40.37	18.05	Apulia
163	Vignacastrisi	40.01	18.4	Apulia
164	Pescopagano	40.83	15.38	Apulia
165	S. Fele	40.82	15.54	Apulia
166	Crispiano	40.6	17.23	Apulia

167	Manduria	40.4	17.64	Apulia
168	Mottola	40.63	17.04	Apulia
169	Alessano	39.88	18.32	Apulia
170	Chieuti	41.84	15.16	Apulia
171	Candida	41.34	15.99	Apulia
172	Ugento	39.92	18.16	Apulia
173	Porto Cesareo	40.26	17.89	Apulia
174	Veglie	40.33	17.96	Apulia
175	Torre Chianca	40.45	18.16	Apulia
176	Tuturano	40.54	17.94	Apulia
177	San Michele Salentino	40.6	17.63	Apulia
178	Francavilla Fontana	40.53	17.58	Apulia
179	Rutigliano	41.01	17.00	Apulia
180	Mola di Bari	41.06	17.08	Apulia
181	Triggiano	41.06	16.92	Apulia
182	Maruggio	40.32	17.56	Apulia
183	Stornarella	41.25	15.72	Apulia
184	Mariotto	41.04	16.56	Apulia
185	Baia delle Zagare	41.74	16.14	Apulia
186	Amendola	41.53	15.74	Apulia
187	Diga Marana-Capacciotti	41.15	15.81	Apulia
188	Modugno PC	41.1	16.76	Apulia
189	Tremiti	42.1	15.48	Apulia
190	Abriola Sellata Pierfaone	40.5	15.76	Basilicata
191	Agria Roccanova	40.26	16.22	Basilicata
192	Albano di Lucania	40.58	16.03	Basilicata
193	Anzi	40.52	15.91	Basilicata
194	Avigliano	40.73	15.71	Basilicata

195	Balvano	40.65	15.5	Basilicata
196	BasentoSS106	40.37	16.78	Basilicata
197	Bella S. Antonio Casalini	40.73	15.59	Basilicata
198	Bradano Ponte Colonna	40.74	16.16	Basilicata
199	Bradano SS 106	40.42	16.82	Basilicata
200	Bradano Serramarina	40.475	16.755	Basilicata
201	Bradanoa S. Lucia	40.58	16.58	Basilicata
202	Brienza	40.48	15.64	Basilicata
203	Castelsaraceno	40.16	15.985	Basilicata
204	Castrocucco	39.99	15.8	Basilicata
205	Cavone SS106	40.295	15.8	Basilicata
206	Craco Peschiera	40.37	16.52	Basilicata
207	Episcopia Pizzutello	40.07	16.11	Basilicata
208	F. Melandro S. Angelo Le Fratte	40.54	15.57	Basilicata
209	Ferrandina SP	40.49	16.45	Basilicata
210	Forenza	40.86	15.85	Basilicata
211	Gorgoglione	40.41	1.611	Basilicata
212	Grassano SP	40.63	16.27	Basilicata
213	Grumento Ponte LaMarmora	40.31	15.845	Basilicata
214	GuardiaPerticara	40.375	16.1	Basilicata
215	Irsina	40.75	16.24	Basilicata
216	Lagonegro	40.13	15.76	Basilicata
217	Lagopesole	40.8	15.735	Basilicata
218	Laurenzana	40.46	15.97	Basilicata
219	Lavello	41.05	15.74	Basilicata
220	Lavello ETG	41.05	15.79	Basilicata
221	Maratea Massa	39.98	15.74	Basilicata
222	Marsico Nuovo	40.43	15.73	Basilicata

223	Matera	40.66	15.595	Basilicata
224	Melfi	40.99	15.63	Basilicata
225	Monte Vulture	40.95	15.63	Basilicata
226	Montemilone	41.025	15.965	Basilicata
227	Montescaglioso	40.555	16.7	Basilicata
228	Monticchio Bagni	40.94	15.61	Basilicata
229	Muro Lucano	40.76	15.48	Basilicata
230	Noepoli	40.09	16.33	Basilicata
231	Ofanto Monticchio	40.9	15.5	Basilicata
232	Oppido Lucano	40.76	15.985	Basilicata
233	Palazzo S. Gervasio	40.93	15.97	Basilicata
234	Pescopagano	40.83	15.4	Basilicata
235	Picerno	40.63	15.64	Basilicata
236	Pomaricofrana	40.52	16.55	Basilicata
237	Potenza	40.64	15.8	Basilicata
238	Potenza QA	40.63	15.8	Basilicata
239	Ripacandida	40.92	15.735	Basilicata
240	Roccanova	40.21	16.19	Basilicata
241	Rotonda	39.94	16.05	Basilicata
242	S. Fele	40.82	15.54	Basilicata
243	S. Giuliano	40.64	16.43	Basilicata
244	S. Mauro Forte	40.48	16.25	Basilicata
245	S. Nicola	40.73	15.8	Basilicata
246	Salandra	40.56	16.33	Basilicata
247	Sinni SS106	40.165	16.65	Basilicata
248	Sinni a Valsinni	40.17	16.44	Basilicata
249	Spinoso	40.25	15.98	Basilicata
250	Stigliano	40.4	16.23	Basilicata

251	Terranova di Pollino	39.98	16.3	Basilicata
252	Tito	40.57	15.66	Basilicata
253	Torre Accio	40.39	16.66	Basilicata
254	Tramutola	40.325	15.77	Basilicata
255	Tricarico	40.62	16.14	Basilicata
256	Tursi	40.25	16.47	Basilicata
257	Vaglio di Basilicata	40.67	15.915	Basilicata
258	Venosa	40.96	15.8	Basilicata
259	Venosa ETG	40.96	15.8	Basilicata
260	Vietri SP	40.59	15.52	Basilicata
261	Acate	37.02	14.49	Sicily
262	Aci Castello	37.56	15.14	Sicily
263	Aci San Filippo	37.58	15.14	Sicily
264	Acireale	37.62	15.16	Sicily
265	Adrano Consorzio	37.65	14.79	Sicily
266	Agrigento	37.30	13.58	Sicily
267	Agrigento SR24	37.38	13.45	Sicily
268	Aidone SP14	37-41	14.53	Sicily
269	Albareseda	37.085	15.02	Sicily
270	Alcamo	37.96	12.965	Sicily
271	Alcantara Moio R2	37.89	15.05	Sicily
272	Alcara Li Fusi	38.02	14.71	Sicily
273	Alessandria della Rocca	37.56	13.45	Sicily
274	Ali'	38.02	15.42	Sicily
275	Alia	37.76	13.70	Sicily
276	Alia SP53	37.77	13.75	Sicily
277	Alimena Anfiteatro	37.69	14.11	Sicily
278	Allume	37.99	15.38	Sicily

75

279	Altavilla Milicia	38.02	13.58	Sicily
280	Altolia	38.07	15.44	Sicily
281	Ambola	37.86	14.61	Sicily
282	Anapo a Sannicola R2	37.10	14.95	Sicily
283	Ancipa Diga R2	37.82	14.57	Sicily
284	Aragona	37.40	13.61	Sicily
285	Arancio Diga R2	37.63	13.06	Sicily
286	Assoro	37.625	14.41	Sicily
287	Avola	36.90	15.14	Sicily
288	Azienda Nixima	37.27	14.64	Sicily
289	Azziriolo a Carcilupo	37.86	13.50	Sicily
290	Azziriolo a Vicari	37.84	13.56	Sicily
291	Bagheria	38.06	13.50	Sicily
292	Baida	38.02	12.78	Sicily
293	Barcellona	38.14	15.21	Sicily
294	Barrafranca	37.38	14.19	Sicily
295	Belice Destro a Giacati	37.80	13.06	Sicily
296	Belmonte Mezzagno	38.04	13.36	Sicily
297	Bevaio Castro	37.76	13.29	Sicily
298	Bisacquino	37.70	13.26	Sicily
299	Bisconte	38.19	15.53	Sicily
300	Biviere di Cesaro'	37.95	14.71	Sicily
301	Bivio Manganaro	37.791	13.61	Sicily
302	Borgo Pietro Lupo	37.34	14.62	Sicily
303	Borgo Schiro'	37.87	13.22	Sicily
304	Borgo Schisina	37.94	15.12	Sicily
305	Buturro	37.74	12.82	Sicily
306	Caccamo	37.93	13.655	Sicily

307	Cacchiamo	37.68	14.23	Sicily
308	Calatabiano	37.82	15.22	Sicily
309	Calderari	37.56	14.36	Sicily
310	Caltagirone SP227	37.13	14.47	Sicily
311	Caltagirone_DRPC	37.23	14.50	Sicily
312	Caltanissetta SP42	37.54	13.95	Sicily
313	Calvaruso	38.22	15.45	Sicily
314	Camastra	37.25	13.79	Sicily
315	Cammarata Stazione	37.64	13.66	Sicily
316	Campo Boario	36.79	14.81	Sicily
317	Campobello di Mazara	37.59	12.72	Sicily
318	Campofiorito SS 188c	37.73	13.26	Sicily
319	Cannizzara	36.86	14.84	Sicily
320	Capo d'Orlando Ovest	38.13	14.72	Sicily
321	Carboj a Menfi	37.56	13.01	Sicily
322	Carcarazza	37.67	13.63	Sicily
323	Carlentini Nord	37.29	15.005	Sicily
324	Carlentini SP9	37.22	15.03	Sicily
325	Caronia	38.02	14.45	Sicily
326	Caronia Bosco	37.93	14.57	Sicily
327	Casa Cantoniera	37.69	14.99	Sicily
328	Casa degli Alpini	38.07	15.39	Sicily
329	Casale di Riena	37.73	13.54	Sicily
330	Casalvecchio Siculo	37.95	15.32	Sicily
331	Case Cavallaro	38.03	15.23	Sicily
332	Case Granvilla	37.20	14.77	Sicily
333	Case Mangalaviti	37.96	14.76	Sicily
334	Case Migliardo	38.10	15.24	Sicily

77

335	Case Spinasanta	37.94	13.88	Sicily
336	Cassibile	36.98	15.20	Sicily
337	Castanea delle Furie	38.25	15.52	Sicily
338	Castellammare del Golfo	38.01	12.88	Sicily
339	Castello Diga R2	37.58	13.40	Sicily
340	Castell'Umberto	38.08	14.81	Sicily
341	Castelmola	37.86	15.26	Sicily
342	Casteltermini	37.53	13.641	Sicily
343	Castiglione di Sicilia	37.88	15.11	Sicily
344	Casuto	37.68	14.34	Sicily
345	Catania Barriera	37.54	15.07	Sicily
346	Catania San Giorgio	37488055	15040833	Sicily
347	Catania SP104	37.39	14.95	Sicily
348	Centuripe	37.62	14.73	Sicily
349	Cesaro'	37.84	14.71	Sicily
350	Chinisia-Birgia Birgi	37.89	12.50	Sicily
351	Chiusa Sclafani	37.67	13.27	Sicily
352	Cianciana	37.51	13.43	Sicily
353	Cimia Diga R2	37.18	14.35	Sicily
354	Ciminna	37.89	13.55	Sicily
355	CinqueArchi	37.59	14.14	Sicily
356	Citelli	37.76	15.05	Sicily
357	Colle Chiesa	37.92	14.15	Sicily
358	Collesano	37.92	13.94	Sicily
359	Comiso	36.95	14.60	Sicily
360	Comunelli Diga R2	37.15	14.15	Sicily
361	Contessa Entellina SP44	37.77	13.19	Sicily
362	Contrada Nicoletta	38.00	14.55	Sicily

78

363	Contrada Paradiso	37.23	14.31	Sicily
364	Cotomino	37.235	14.38	Sicily
365	Cozzo su Cola	37.06	15.12	Sicily
366	Cumia	38.17	15.50	Sicily
367	Custonaci	38.08	12.69	Sicily
368	Disueri Diga R2	37.19	14.28	Sicily
369	Don Sturzo-Ogliastro Diga R2	37.44	14.57	Sicily
370	Donnafugata	36.88	14.56	Sicily
371	Enna	37.56	14.26	Sicily
372	Enna SP125	37.44	14.28	Sicily
373	Fanaco Diga R2	37.67	13.55	Sicily
374	Favarotta	37.21	13.91	Sicily
375	Favignana	37.92	12.32	Sicily
376	Ferla	37.12	14.93	Sicily
377	Fermata Bruca	37.94	12.79	Sicily
378	Ficarra SP144	38.10	14.84	Sicily
379	Fiorita	38.05	14.62	Sicily
380	Flascio a Ponte Flascio	37.86	14.88	Sicily
381	Floripotema Passo Cattafi	38.16	15.28	Sicily
382	Fondachelli	37.98	15.17	Sicily
383	Fondachello a Caltavuturo	37.82	13.88	Sicily
384	Forza d'Agro'	37.92	15.32	Sicily
385	Frigintini	36.92	14.82	Sicily
386	Furnari	38.11	15.12	Sicily
387	Galati Mamertino	38.02	14.77	Sicily
388	Gallitello	37.85	12.94	Sicily
389	Gallo d'Oro a Fontanazza	37.49	13.77	Sicily
390	Gammauta Diga	37.68	13.34	Sicily

79

391	Gangi SP14	37.74	14.20	Sicily
392	Ganzaria SP37I	37.29	14.46	Sicily
393	Garcia Diga R2	37.78	13.09	Sicily
394	Gela Cipollina	37.14	14.21	Sicily
395	Gela Priolo	37.085	14.37	Sicily
396	Giampilieri	38.07	15.47	Sicily
397	Giarre	37.72	15.18	Sicily
398	Gibilmanna	37.98	14.02	Sicily
399	Gioiosa Marea	38.17	14.89	Sicily
400	Godrano	37.90	13.43	Sicily
401	Grammichele	37.22	14.63	Sicily
402	Granieri	37.13	14.58	Sicily
403	Graniti	37.88	15.21	Sicily
404	Gratteri	37.96	13.97	Sicily
405	Grisi'	37.95	13.09	Sicily
406	Gualtieri Sicamino'	38.15	15.32	Sicily
407	Il Gelso	37.92	14.42	Sicily
408	Imera Merid.Capodarso	37.49	14.145	Sicily
409	Imera Merid. a Petralia R2	37.80	14.08	Sicily
410	Imera Merid. a Stretto di Licata	37.14	13.91	Sicily
411	Intraleo	37.72	14.915	Sicily
412	Ippari a Scoglitti	36.88	14.47	Sicily
413	Irminio a Plaja Grande	36.78	14.60	Sicily
414	Isnello	37.94	14.01	Sicily
415	Isnello SP54	37.87	14.00	Sicily
416	Isola delle Femmine	38.20	13.24	Sicily
417	Itala	38.04	15.43	Sicily
418	Jato a Fellamonica	37.96	13.13	Sicily

80

419	La Callura	37.37	14.81	Sicily
420	La Margana SP36bis	37.76	13.49	Sicily
421	La Roccella	37.805	14.47	Sicily
422	Lampedusa	35.50	12.62	Sicily
423	Lavinaio	37.63	15.11	Sicily
424	Lentini Diga R2	37.31	14.94	Sicily
425	Leonforte	37.64	14.38	Sicily
426	Letojanni	37.88	15.30	Sicily
427	Licata	37.10	13.93	Sicily
428	Licata SP7	37.15	14.01	Sicily
429	Linera	37.67	15.13	Sicily
430	Magazzolo a Bivona	37.60	13.43	Sicily
431	Maletto	37.83	14.85	Sicily
432	Malvagna	37.91	15.05	Sicily
433	Manali	37.93	13.26	Sicily
434	Mandanici	38.00	15.31	Sicily
435	Maniace	37.85	14.79	Sicily
436	Maniace Alta	37.89	14.77	Sicily
437	Marineo	37.95	13.41	Sicily
438	Marsala	37.81	12.45	Sicily
439	Marsala Strasatti	37.72	12.52	Sicily
440	Mascalucia	37.58	15.03	Sicily
441	Masseria Rossella	37.95	13.35	Sicily
442	Mastrostefano	38.00	14.90	Sicily
443	Mazara SP62	37.76	12.63	Sicily
444	Mazzarino SP13	37.29	14.26	Sicily
445	Melia	37.90	15.27	Sicily
446	Melilli	37.18	15.11	Sicily

81

447	Mendola SP82	37.79	13.43	Sicily
448	Messina Guidari	38.13	15.50	Sicily
449	Messina Istituto Geofisico	38.20	15.55	Sicily
450	Messina San Michele	38.22	15.54	Sicily
451	Messina SP44	38.24	15.55	Sicily
452	Messina SP50Bis	38.12	15.44	Sicily
453	Messina SS113	38.29	15.51	Sicily
454	Milena	37.46	13.73	Sicily
455	Milicia SP16	38.00	13.50	Sicily
456	Milingiana Sottana	37.19	14.08	Sicily
457	Militello Rosmarino	38.05	14.67	Sicily
458	Mineo SP48	37.33	14.53	Sicily
459	Miraglia	37.91	14.65	Sicily
460	Mirto	38.08	14.74	Sicily
461	Misterbianco	37.52	15.005	Sicily
462	Modica	36.89	14.77	Sicily
463	Modione SantaTeresa	37.62	12.80	Sicily
464	Monforte San Giorgio	38.15	15.38	Sicily
465	Monreale Casale	37.84	13.34	Sicily
466	Montagna Grande	37.93	15.19	Sicily
467	Montagnareale	38.13	14.94	Sicily
468	Montalbano Elicona	38.01	15.01	Sicily
469	Montallegro	37.39	13.35	Sicily
470	Monte Centurino	37.99	12.81	Sicily
471	Monte Colla	37.92	14.90	Sicily
472	Montemaggiore Belsito	37.85	13.75	Sicily
473	Monterosso Almo SP11	37.09	14.79	Sicily
474	Motta D'Affermo	37.98	14.30	Sicily

82

475	Motta Sant'Anastasia	37.51	14.95	Sicily
476	Mussomeli SP16	37.61	13.82	Sicily
477	Muxaro SS118	37.48	13.48	Sicily
478	Napola	37.98	12.63	Sicily
479	Naro	37.285	13.78	Sicily
480	Nicoletti Diga R2	37.60	14.34	Sicily
481	Noto SP56	36.78	15.02	Sicily
482	Noto SP80	37.00	15.00	Sicily
483	Noto SP90	36.99	14.88	Sicily
484	Noto_DRPC	36.85	15.00	Sicily
485	Novara SS185	38.03	15.12	Sicily
486	Nunziata	37.76	15.17	Sicily
487	Olivo Diga R2	37.405	14.28	Sicily
488	Paceco Diga R2	37.97	12.57	Sicily
489	Pagliara	37.98	15.34	Sicily
490	Palagonia	37.32	14.75	Sicily
491	Palermo Abela	38.12	13.35	Sicily
492	Palermo Chiavelli	38.07	13.36	Sicily
493	Palermo Partanna	38.18	13.31	Sicily
494	Palermo Zootecnico	38.115	13.29	Sicily
495	Palma alla Foce	37.16	13.74	Sicily
496	Partinico	38.06	13.11	Sicily
497	Partinico_DRPC	37.99	13.00	Sicily
498	Paternò	37.59	14.92	Sicily
499	Pedagaggi	37.19	14.93	Sicily
500	Petralia Sottana	37.80	14.09	Sicily
501	Pettineo SP176	37.92	14.29	Sicily
502	Pezzolo	38.085	15.47	Sicily

83

503	Piano di Leone Diga R2	37.67	13.46	Sicily
504	Piedimonte Etneo	37.80	15.17	Sicily
505	Piraino	38.16	14.86	Sicily
506	Pizzo Rosarello	38.07	15.35	Sicily
507	Polizzi Generosa	37.81	14.01	Sicily
508	Pollina	37.99	14.15	Sicily
509	Poma Diga R2	38.00	13.08	Sicily
510	Ponte Barca Traversa R2	37.53	14.87	Sicily
511	Portella Caterina	37.56	13.32	Sicily
512	Porticella	38.11	14.98	Sicily
513	Pozzallo	36.74	14.84	Sicily
514	Pozzillo Diga R2	37.67	14.60	Sicily
515	Priolo	37.16	15.16	Sicily
516	Prizzi	37.71	13.42	Sicily
517	Prizzi Diga R2	37.72	13.40	Sicily
518	Raffadali	37.40	13.51	Sicily
519	Ragoleto Diga R2	37.12	14.68	Sicily
520	Ragusa	36.93	14.70	Sicily
521	Ragusa SP25	36.82	14.58	Sicily
522	Ramilia	37.39	13.98	Sicily
523	Raspante	37.85	14.24	Sicily
524	Realmonte	37.31	13.46	Sicily
525	Reitano	37.97	14.34	Sicily
526	Resuttano	37.67	14.03	Sicily
527	Riesi_DRPC	37.29	14.07	Sicily
528	Rimiti	37.99	15.26	Sicily
529	Rocca di Caprileone	38.10	14.71	Sicily
530	Rocca Timogna	38.06	15.26	Sicily

84

531	Roccella alla Foce	37.99	13.89	Sicily
532	Rodi'	38.09	15.17	Sicily
533	Rometta	38.16	15.41	Sicily
534	Rosamarina Diga R2	37.95	13.65	Sicily
535	Rosolini	36.82	14.92	Sicily
536	Rubino Diga R2	37.88	12.71	Sicily
537	S. Stefano Quisquina_DRPC	37.62	13.54	Sicily
538	Salice	38.25	15.49	Sicily
539	Salito a Raffe Sutera	37.51	13.78	Sicily
540	Sambuca SS188	37.65	13.18	Sicily
541	San Corrado	36.93	15.06	Sicily
542	San Fratello	38.01	14.59	Sicily
543	San Fratello Forestale	37.95	14.62	Sicily
544	San Giovanni DigaR2	37.30	13.75	Sicily
545	San Gregorio	37.56	15.11	Sicily
546	San Leonea Sant'Anna	37.28	13.57	Sicily
547	San Marco d'Alunzio	38.05	14.72	Sicily
548	San Mauro Castelverde	37.91	14.18	Sicily
549	San Piero Patti	38.05	14.97	Sicily
550	San Placido	38.07	15.48	Sicily
551	San Vito Lo Capo	38.18	12.73	Sicily
552	Santa Domenica Vittoria	37.91	14.95	Sicily
553	Santa Lucia del Mela	38.13	15.28	Sicily
554	Sant'Angelo di Brolo	38.11	14.88	Sicily
555	Santa Rosalia Diga R2	36.96	14.77	Sicily
556	Santo Pietro	37.10	14.49	Sicily
557	Santo Stefano Briga	38.09	15.48	Sicily
558	Santo Stefano di Camastra	38.01	14.35	Sicily

85

559	Saponara	38.19	15.43	Sicily
560	Scaletta Superiore	38.04	15.46	Sicily
561	Scanzano Diga R2	37.92	13.37	Sicily
562	Sciacca SP37	37.56	13.15	Sicily
563	Sciacca_DRPC	37.52	13.06	Sicily
564	Sciaguana Diga R2	37.60	14.59	Sicily
565	Sciara	37.91	13.75	Sicily
566	Scopello	38.06	12.81	Sicily
567	Scordia	37.295	14.82	Sicily
568	Serra di Vito	37.78	14.72	Sicily
569	Serra Merio	37.89	14.38	Sicily
570	Serracanale	37.63	13.62	Sicily
571	Serradifalco	37.44	13.89	Sicily
572	Sferro	37.50	14.79	Sicily
573	Sierra Vento	36.91	15.02	Sicily
574	Simeto a Barca di Biancavilla	37.60	14.82	Sicily
575	Simeto a Ponte Giarretta	37.45	14.91	Sicily
576	Sinagra	38.08	14.84	Sicily
577	Siracusa	37.07	15.28	Sicily
578	Solarino	37.09	15.13	Sicily
579	Sparacollo	37.68	14.66	Sicily
580	Sutera	37.51	13.73	Sicily
581	Tellaro a Villa Tellaro	36.84	15.08	Sicily
582	Timeto a Murmari R2	38.07	14.97	Sicily
583	Torretta	38.12	13.23	Sicily
584	Tortorici Pagliara	37.99	14.84	Sicily
585	Trapani	38.00	12.53	Sicily
586	Trapani SP35	37.87	12.58	Sicily

86

587	Tre Poggi	37.21	14.44	Sicily
588	Trearie	37.92	14.84	Sicily
589	Trigona a Molino Grande	37.25	14.87	Sicily
590	Trinità Diga R2	37.69	12.75	Sicily
591	TripiSP115	38.01	15.05	Sicily
592	Troina	37.78	14.60	Sicily
593	Troin a Maccarrone	37.74	14.58	Sicily
594	Troina SS575	37.73	14.70	Sicily
595	Tudia	37.66	13.96	Sicily
596	Turolifi	37.55	14.10	Sicily
597	Valguarnera Caropepe	37.49	14.38	Sicily
598	Valledolmo	37.74	13.83	Sicily
599	Vallone di Muffoletto	37.92	13.15	Sicily
600	Vanasco	37.25	14.20	Sicily
601	Venetico	38.21	15.37	Sicily
602	Ventimiglia di Sicilia	37.92	13.56	Sicily
603	Viagrande	37.61	15.10	Sicily
604	Vicari	37.82	13.575	Sicily
605	Villa Ruggero	37.69	12.90	Sicily
606	Villa Vela	36.95	15.02	Sicily
607	Villafrati	37.90	13.484	Sicily
608	Villarosa Diga R2	37.57	14.20	Sicily
609	Villasmundo	37.25	15.08	Sicily
610	Vita	37.865	12.82	Sicily
611	Xireni	37.75	13.98	Sicily
612	Acri	39.5	16.4	Calabria
613	Albi	39.02	16.59	Calabria
614	Albidona	39.92	16.46	Calabria

87

615	Altilia	39.12	16.25	Calabria
616	Amantea	39.14	16.08	Calabria
617	Antonimina	38.26	16.18	Calabria
618	Antonimina Canolo Nuovo	38.31	16.12	Calabria
619	Ardore Superiore	38.2	16.15	Calabria
620	Arena Raevo F2	38.56	16.21	Calabria
621	Bagnara Calabra	38.28	15.81	Calabria
622	Belsito	39.17	16.28	Calabria
623	Belvedere Marittimo	39.64	15.84	Calabria
624	Borgia Roccelletta	38.81	16.59	Calabria
625	Botricello	38.94	16.85	Calabria
626	BovaSuperiore	38.00	15.93	Calabria
627	Bova Superiore Frana	37.95	15.92	Calabria
628	Bovalino Marina	38.15	16.18	Calabria
629	Camigliatello Monte Curcio	39.32	16.42	Calabria
630	Campotenese	39.85	16.09	Calabria
631	Capo Spartivento Raevo F2	37.93	16.05	Calabria
632	CapoVaticano	38.62	15.83	Calabria
633	Cardeto	38.1	15.8	Calabria
634	Cardeto Liddu	38.07	15.8	Calabria
635	Cariati Marina	39.505	16.94	Calabria
636	Cassano Jonico	397.8	16.32	Calabria
637	Castrovillari	39.765	16.25	Calabria
638	Castrovillari Camerata	39.73	16.27	Calabria
639	Catanzaro	38.91	16.59	Calabria
640	Catanzaro Jano	38.95	16.58	Calabria
641	Cecita	39.4	16.54	Calabria
642	Cenadi Serralta	38.75	16.37	Calabria

88

643	Cerchiara di Calabria	39.86	16.38	Calabria
644	Cetraro Superiore	39.51	15.95	Calabria
645	Chiaravalle Centrale	38.67	16.41	Calabria
646	Cirò Marina Punta Alice	39.41	17.11	Calabria
647	Cittanova	38.35	16.1	Calabria
648	Corigliano Calabro	39.59	16.52	Calabria
649	Cortale	38.83	16.4	Calabria
650	Cosenza	39.29	16.26	Calabria
651	Cosenza 118 Raevo F1	39.31	16.235	Calabria
652	Cotronei	39.16	16.78	Calabria
653	Cropalati	39.515	16.72	Calabria
654	Cropani	38.97	16.78	Calabria
655	Crotone	39.09	17.13	Calabria
656	Crotone Papanice	39.07	17.03	Calabria
657	Crotone Salica	39.01	17.13	Calabria
658	Crucoli	39.42	17.00	Calabria
659	Cutro	39.04	17.01	Calabria
660	Decollatura	39.07	16.335	Calabria
661	Dinami San Pietro di Carida	38.55	16.12	Calabria
662	Domanico	39.22	16.2	Calabria
663	Fabrizia	38.49	16.3	Calabria
664	Fabrizia Cassari	38.44	16.29	Calabria
665	Feroleto Antico	38.97	16.4	Calabria
666	Filadelfia	18.79	16.29	Calabria
667	Fitterizzi	39.52	16.14	Calabria
668	Gambarie	38.17	15.82	Calabria
669	Giffone	38.44	16.15	Calabria
670	Gimigliano	38.97	16.54	Calabria

89

671	Gimigliano Corbino	38.95	16.565	Calabria
672	Gioia Tauro Budello	38.43	15.9	Calabria
673	Gioiosa Ionica	38.3	16.33	Calabria
674	Isola Capo Rizzuto Campolongo	38.94	17.01	Calabria
675	Joppolo	38.59	15.905	Calabria
676	Locri	38.24	16.27	Calabria
677	Longobucco	39.45	16.61	Calabria
678	Lungro	39.74	16.12	Calabria
679	Maida Licciardi	38.895	16.34	Calabria
680	Maierato	38.71	16.19	Calabria
681	Mammola Limina	38.37	16.19	Calabria
682	Martirano Raevo F1	39.08	16.25	Calabria
683	Mileto	38.63	16.07	Calabria
684	Molochio	38.31	16.03	Calabria
685	Monasterace Punta Stilo	38.44	16.57	Calabria
686	Mongiana	38.52	16.32	Calabria
687	Montalto Uffugo	39.4	16.13	Calabria
688	Montebello Ionico Raevo F2	37.98	15.73	Calabria
689	Mormannometeo	39.885	15.99	Calabria
690	Motta San Giovanni Allai	38.03	15.75	Calabria
691	Nicastro Bella	38.985	16.3	Calabria
692	Nocelle Arvo	39.24	16.54	Calabria
693	Oriolo	40.05	16.45	Calabria
694	Palermiti	38.75	16.45	Calabria
695	Palmi	38.37	15.86	Calabria
696	Paola	39.36	16.05	Calabria
697	Papasidero	39.87	15.91	Calabria
698	Parenti	39.16	16.41	Calabria

90

699	Petilia Policastro Meteo	39.11	16.77	Calabria
700	Petilia Policastro Pagliarelle	39.14	16.75	Calabria
701	Petrona	39.04	16.76	Calabria
702	Pizzoni	38.62	16.25	Calabria
703	Plati	38.22	16.045	Calabria
704	Polistena	38.41	16.07	Calabria
705	Reggio Calabria	38.11	15.65	Calabria
706	Reggio Calabria Arasi	38.14	15.74	Calabria
707	Reggio Calabria Catona	38.19	15.64	Calabria
708	Reggio Calabria Pietrastorta	38.12	15.69	Calabria
709	Reggio Calabria Rosario	38.04	15.72	Calabria
710	Reggio Calabria Scaccioti	38.15	15.7	Calabria
711	Rizziconi	38.41	15.97	Calabria
712	Rizziconi Ponte Vecchio	38.38	15.91	Calabria
713	Roccabernarda Serrarossa	39.07	16.89	Calabria
714	Roccaforte del Greco	38.05	15.89	Calabria
715	Roccella Ionica	38.32	16.4	Calabria
716	Rogliano	39.18	16.325	Calabria
717	Rosarno	38.5	15.99	Calabria
718	Roseto Capo Spulico	39.99	16.6	Calabria
719	Rossano	39.58	16.64	Calabria
720	San Luca	38.15	16.065	Calabria
721	San Mauro Marchesato	39.1	16.93	Calabria
722	San Nicola da Crissa	38.66	16.3	Calabria
723	San Nicola dell'Alto	39.29	16.97	Calabria
724	San Pietro in Guarano	39.345	16.31	Calabria
725	San Sosti	39.66	16.03	Calabria
726	Sant’Agata del Bianco	38.1	16.085	Calabria

91

727	Sant'Alessio in Aspromonte	38.17	15.75	Calabria
728	Santa Caterina dello Ionio	38.54	16.51	Calabria
729	Santa Cristina d'Aspromonte	38.26	16.96	Calabria
730	Savelli	39.31	16.77	Calabria
731	Scilla	38.25	15.7	Calabria
732	Scilla Monte Scrisi	38.235	15.715	Calabria
733	Scilla Piano delle Aquile	38.25	15.75	Calabria
734	Scilla Solano	38.25	15.8	Calabria
735	Scilla Tagli	38.26	15.77	Calabria
736	Sellia Superiore	38.985	16.62	Calabria
737	Serra San Bruno	38.565	16.32	Calabria
738	Sibari	39.71	16.5	Calabria
739	Sinopoli	38.26	15.88	Calabria
740	Soverato Marina	38.69	16.54	Calabria
741	Soveria Simeri	38.95	16.675	Calabria
742	Staiti	38.00	16.04	Calabria
743	Stignano	38.425	16.47	Calabria
744	Tarsia Raevo F1	39.625	16.28	Calabria
745	Taurianova	38.35	16.01	Calabria
746	Taverna Ciricilla	39.14	16.53	Calabria
747	Tiriolo	38.94	16.51	Calabria
748	Torano Scalo	39.49	16.21	Calabria
749	Tortora	39.94	15.77	Calabria
750	Vibo Marina	38.72	16.12	Calabria
751	Vibo Valentia	38.68	16.11	Calabria
752	Vibo Valentia Longobardi	38.7	16.12	Calabria
753	Villapiana Scalo	39.8	16.48	Calabria
754	Zungri	38.65	15.98	Calabria

92 2 **Supplementary table 2.** List of meteorological stations used in this study among their features 3
93 in term of position and region of installation.

Station Name	Alert zone	Total rain (mm)	Peak rain (mm/h)	Peak wind (km/h)	Max SWH (m)	Cordinate sea	Wave Per (s)	Peak of the storm
Sicily (17/01/2025)								
San Piero Patti	A	48.8*	14.3*	28	2.15	38.26 14.98	6.77	17-20
Gibilmanna	B	25.8	11.6	79.2	3.24	38.19 13.99	8.39	15-18
San Vito Lo Capo	C	24.3	10.1	68.8	4.12	38.29 12.74	9.22	14-17
Sciacca	D	35.0	9.4	/	2.99	37.34 13.03	9.96	15-19
Camastra	E	59.6	13.5	/	5.96	36.89 16.83	10.55	15-19
Pozzallo	F	19.6	3.4	/	4.41	36.58 14.85	10.15	17-19
Giarre	G	75.1	17.1	/	5.52	37.70 15.40	10.55	16-20
Catania SP104	H	30.4	6.4	/	5.58	37.45 15.42	10.82	17-19
Messina SP50Bis	I	39.1	11.3	35	1.85	38.14 15.58	11.83	18-22
Calabria (17-18/01/2025)								
Belvedere Marittimo	1	9.0	3.8	/	0.84	39.64 15.61	4.51	01-03
Nicastro Bella	2	8.0	2.8	/	0.75	38.98 16.06	3.70	22-02
Sinopoli	3	93.0	17.4	/	0.81	38.30 15.72	4.98	19-22
Rossano	4	47.8	19.0	/	3.07	39.61 17.17	10.46	00-06
Isola di Capo Rizzuto	5	27.2	6.2	/	3.63	38.86 17.45	10.40	22-05
San Luca	6	51.0	17.6	/	5.56	38.08 16.30	10.91	19-22
Apulia								
Lesina	A	12.4	2.6	/	0.92	42.07 15.36	4.80	09-16
Foggia Istituto Agrario	B	5.8	2.4	/		/	/	7-14
Monopoli	C	8.7	3.9	/	0.78	40.98 17.40	4.73	15-20

Porto Cesareo	D	18.4	7.1	/	1.98	40.22 17.81	9.64	20-02
Massafra	E	29.7	10.1	/	1.97	40.46 17.10	9.62	14-20
Cassano Murge	F	52.4	13.2	/		/	/	13-19
Minervino Murge	G	24.2	5.2	/		/	/	13-19
Faeto	H	14.6	4.6	/		/	/	12-19
Torremaggiore	I	8.4	2.8	/		/	/	18-22
Basilicata								
Melfi	A1	0	0	/		/	/	/
Vietri SP	A2	36.2	14.0	/		/	/	7-14
Albano Di Lucania	B	116	29	/		/	/	6-12
Marsico Nuovo	C	32	11	/		/	/	04-09
Maratea a Massa	D	15.2	5	/	0.5	39.97 15.64	5.59	01-07
Sinni 106	E1	176.2	66.8	/	2.18	40.10 16.75	10.34	5-15
Craco Peschiera	E2	136.0	39.0	/		/	/	4-14

Supplementary Table 3. Subset of meteorological stations installed in each alert zone in Sicily, Calabria, Basilicata, and Apulia, together with the main meteorological and marine parameters recorded during the investigated storm events. For each station, total accumulated rainfall, peak rainfall intensity, peak wind speed, Significant Wave Heights (SWH), sea coordinates, wave period, and the time window of the storm peak are reported, "/" denotes unavailable measurements.

Name Station	Latitude	Longitude	Correlation Coefficient	SWH Max	Time of the Climax
WDD	35.51	14.52	0.72	5.1	17/01 13:00
CROCE	36.83	14.53	0.71	4.4	17/01 13:00
HAVL	36.96	15.12	0.82	5.5	17/01 16:00
HAGA	37.28	15.50	0.83	5.4	17/01 16:00
FAVA	37.32	13.66	0.67	3.7	17/01 13:00
SCIAC	37.51	13.10	0.63	4.5	17/01 12:00
EPOZ	37.67	15.18	0.84	5.6	17/01 18:00
MARS	37.75	12.56	0.79	3.5	17/01 12:00
EFIU	37.78	15.21	0.83	5.4	17/01 19:00
SCIAR	37.94	13.74	0.72	3.0	17/01 15:00
MPAZ	37.95	16.00	0.82	5.8	17/01 20:00
GIB	37.99	14.02	0.61	2.9	17/01 17:00
LEVAN	37.99	12.34	0.75	3.7	17/01 16:00
PLLN	37.99	14.14	0.61	2.7	17/01 17:00
MTTG	38.00	15.69	0.21	2.8	17/01 20:00
MSFR	38.03	14.59	0.45	1.8	17/01 18:00
SOI	38.07	16.05	0.80	5.6	17/01 21:00
MCPD	38.11	14.73	0.30	2.1	17/01 18:00
MSRU	38.26	15.50	0.32	1.7	17/01 17:00
IVLO	38.42	14.73	0.35	2.9	17/01 18:00
MILZ	38.27	15.23	0.24	2.2	17/01 17:00
PLAC	38.45	16.44	0.83	5.0	17/01 22:00
CHCE	38.68	16.41	0.90	4.9	17/01 23:00

GIZZ	38.97	16.20	0.39	1.2	17/01 20:00
CIRK	39.39	17.06	0.79	3.8	18/01 10:00
PIPA	39.48	16.81	0.39	1.8	18/01 06:00
CET2	39.53	15.95	0.32	1.0	18/01 03:00
ROI	39.57	16.57	0.38	1.7	18/01 06:00
CUC	39.99	15.81	0.19	0.5	18/01 03:00
BULG	40.08	15.38	0.22	1.8	18:01 03:00
TAR1	40.52	17.28	0.69	2.9	18/01 14:00
MESG	40.59	17.85	0.12	1.4	17/01 06:00

Supplementary Table 4. Subset of seismic stations installed in coastal areas, together with their coordinates (latitude and longitude), SWH, and the time of the storm climax. For each station, the Spearman correlation coefficient between the RMS seismic amplitude and the SWH time series is also reported, highlighting the relationship between SWH and seismic noise in the microseism band during the investigated storm events.