

## about us

SISMIKO is the operational task force at the Istituto Nazionale di Geofisica e Vulcanologia (INGV) aiming at the rapid deployment of temporary seismic stations in the area hit by a significant earthquake or a seismic sequence causing concern and interest with impact on people.

Decreasing the average distance between the seismic stations improves network detection, accuracy of the earthquake locations, shakemaps and strong motion parameters.

SISMIKO coordinates all INGV groups working on seismic emergencies and involves INGV technicians and researchers from all over Italy, from Milano to Catania, grouped together by common interest technical and scientific issues (Figures 1 and 2).

## what&amp;how:

## rapid deployments, integration into the monitoring system and datasets

Since 2008, 16 temporary networks have been installed in the event of seismic emergencies (Figure 3 and in the adjacent tables). The most important were the emergencies of 2009 (Aquila, No. 15 in Figure 3), 2012 (Po Plain, No. 10) and 2016 (Central Italy, No. 6) during which more than 20 temporary stations were installed. Today, all the data acquired are transmitted and collected in real-time in the Rome INGV office. A dedicated acquisition system named "SISMIKA", has been developed (D'Alena E. et al., 2022, DOI:10.1327). SISMIKA is also used to make data readily available to the INGV seismic surveillance system in Rome and to the scientific community, the latter through the Italy node of the EIDA.



Figure 3 - Map of INGV rapid deployments since 2008. On the map and in the table, we distinguished the emergencies managed by the SISMIKO group, formally established in 2005.

References all articles, conference papers and data sets  
http://sismiko.ingv.it/publications

Emergency No.	Date	Location	Number of stations	Duration	Status	Operator
1	2008-09-15	Central Italy	10	1 year	Active	INGV
2	2008-10-26	Central Italy	10	1 year	Active	INGV
3	2009-01-26	Central Italy	10	1 year	Active	INGV
4	2009-03-24	Central Italy	10	1 year	Active	INGV
5	2009-04-06	Central Italy	10	1 year	Active	INGV
6	2009-05-12	Central Italy	10	1 year	Active	INGV
7	2009-05-29	Central Italy	10	1 year	Active	INGV
8	2009-06-04	Central Italy	10	1 year	Active	INGV
9	2009-06-11	Central Italy	10	1 year	Active	INGV
10	2012-07-29	Po Plain	10	1 year	Active	INGV
11	2012-08-06	Po Plain	10	1 year	Active	INGV
12	2012-08-13	Po Plain	10	1 year	Active	INGV
13	2012-08-20	Po Plain	10	1 year	Active	INGV
14	2012-08-27	Po Plain	10	1 year	Active	INGV
15	2009-09-08	Aquila	10	1 year	Active	INGV
16	2009-09-15	Aquila	10	1 year	Active	INGV
17	2009-09-22	Aquila	10	1 year	Active	INGV
18	2009-09-29	Aquila	10	1 year	Active	INGV
19	2009-10-06	Aquila	10	1 year	Active	INGV
20	2009-10-13	Aquila	10	1 year	Active	INGV
21	2009-10-20	Aquila	10	1 year	Active	INGV
22	2009-10-27	Aquila	10	1 year	Active	INGV
23	2009-11-03	Aquila	10	1 year	Active	INGV
24	2009-11-10	Aquila	10	1 year	Active	INGV
25	2009-11-17	Aquila	10	1 year	Active	INGV
26	2009-11-24	Aquila	10	1 year	Active	INGV
27	2009-12-01	Aquila	10	1 year	Active	INGV
28	2009-12-08	Aquila	10	1 year	Active	INGV
29	2009-12-15	Aquila	10	1 year	Active	INGV
30	2009-12-22	Aquila	10	1 year	Active	INGV
31	2009-12-29	Aquila	10	1 year	Active	INGV
32	2010-01-05	Aquila	10	1 year	Active	INGV
33	2010-01-12	Aquila	10	1 year	Active	INGV
34	2010-01-19	Aquila	10	1 year	Active	INGV
35	2010-01-26	Aquila	10	1 year	Active	INGV
36	2010-02-02	Aquila	10	1 year	Active	INGV
37	2010-02-09	Aquila	10	1 year	Active	INGV
38	2010-02-16	Aquila	10	1 year	Active	INGV
39	2010-02-23	Aquila	10	1 year	Active	INGV
40	2010-03-01	Aquila	10	1 year	Active	INGV
41	2010-03-08	Aquila	10	1 year	Active	INGV
42	2010-03-15	Aquila	10	1 year	Active	INGV
43	2010-03-22	Aquila	10	1 year	Active	INGV
44	2010-03-29	Aquila	10	1 year	Active	INGV
45	2010-04-05	Aquila	10	1 year	Active	INGV
46	2010-04-12	Aquila	10	1 year	Active	INGV
47	2010-04-19	Aquila	10	1 year	Active	INGV
48	2010-04-26	Aquila	10	1 year	Active	INGV
49	2010-05-03	Aquila	10	1 year	Active	INGV
50	2010-05-10	Aquila	10	1 year	Active	INGV
51	2010-05-17	Aquila	10	1 year	Active	INGV
52	2010-05-24	Aquila	10	1 year	Active	INGV
53	2010-05-31	Aquila	10	1 year	Active	INGV
54	2010-06-07	Aquila	10	1 year	Active	INGV
55	2010-06-14	Aquila	10	1 year	Active	INGV
56	2010-06-21	Aquila	10	1 year	Active	INGV
57	2010-06-28	Aquila	10	1 year	Active	INGV
58	2010-07-05	Aquila	10	1 year	Active	INGV
59	2010-07-12	Aquila	10	1 year	Active	INGV
60	2010-07-19	Aquila	10	1 year	Active	INGV
61	2010-07-26	Aquila	10	1 year	Active	INGV
62	2010-08-02	Aquila	10	1 year	Active	INGV
63	2010-08-09	Aquila	10	1 year	Active	INGV
64	2010-08-16	Aquila	10	1 year	Active	INGV
65	2010-08-23	Aquila	10	1 year	Active	INGV
66	2010-08-30	Aquila	10	1 year	Active	INGV
67	2010-09-06	Aquila	10	1 year	Active	INGV
68	2010-09-13	Aquila	10	1 year	Active	INGV
69	2010-09-20	Aquila	10	1 year	Active	INGV
70	2010-09-27	Aquila	10	1 year	Active	INGV
71	2010-10-04	Aquila	10	1 year	Active	INGV
72	2010-10-11	Aquila	10	1 year	Active	INGV
73	2010-10-18	Aquila	10	1 year	Active	INGV
74	2010-10-25	Aquila	10	1 year	Active	INGV
75	2010-11-01	Aquila	10	1 year	Active	INGV
76	2010-11-08	Aquila	10	1 year	Active	INGV
77	2010-11-15	Aquila	10	1 year	Active	INGV
78	2010-11-22	Aquila	10	1 year	Active	INGV
79	2010-11-29	Aquila	10	1 year	Active	INGV
80	2010-12-06	Aquila	10	1 year	Active	INGV
81	2010-12-13	Aquila	10	1 year	Active	INGV
82	2010-12-20	Aquila	10	1 year	Active	INGV
83	2010-12-27	Aquila	10	1 year	Active	INGV
84	2011-01-03	Aquila	10	1 year	Active	INGV
85	2011-01-10	Aquila	10	1 year	Active	INGV
86	2011-01-17	Aquila	10	1 year	Active	INGV
87	2011-01-24	Aquila	10	1 year	Active	INGV
88	2011-01-31	Aquila	10	1 year	Active	INGV
89	2011-02-07	Aquila	10	1 year	Active	INGV
90	2011-02-14	Aquila	10	1 year	Active	INGV
91	2011-02-21	Aquila	10	1 year	Active	INGV
92	2011-02-28	Aquila	10	1 year	Active	INGV
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99	2011-04-17	Aquila	10	1 year	Active	INGV
100	2011-04-24	Aquila	10	1 year	Active	INGV
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116	2011-08-14	Aquila	10	1 year	Active	INGV
117	2011-08-21	Aquila	10	1 year	Active	INGV
118	2011-08-28	Aquila	10	1 year	Active	INGV
119	2011-09-04	Aquila	10	1 year	Active	INGV
120	2011-09-11	Aquila	10	1 year	Active	INGV
121	2011-09-18	Aquila	10	1 year	Active	INGV
122	2011-09-25	Aquila	10	1 year	Active	INGV
123	2011-10-02	Aquila	10	1 year	Active	INGV
124	2011-10-09	Aquila	10	1 year	Active	INGV
125	2011-10-16	Aquila	10	1 year	Active	INGV
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128	2011-11-06	Aquila	10	1 year	Active	INGV
129	2011-11-13	Aquila	10	1 year	Active	INGV
130	2011-11-20	Aquila	10	1 year	Active	INGV
131	2011-11-27	Aquila	10	1 year	Active	INGV
132	2011-12-04	Aquila	10	1 year	Active	INGV
133	2011-12-11	Aquila	10	1 year	Active	INGV
134	2011-12-18	Aquila	10	1 year	Active	INGV
135	2011-12-25	Aquila	10	1 year	Active	INGV
136	2012-01-01	Aquila	10	1 year	Active	INGV
137	2012-01-08	Aquila	10	1 year	Active	INGV
138	2012-01-15	Aquila	10	1 year	Active	INGV
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159	2012-06-11	Aquila	10	1 year	Active	INGV