Istituto Nazionale di Oceanografia e di Geofisica Sperimentale

SUBSURFACE GEOLOGY AND GEOPHYSICS

STRUTTURA PREPOSTA AL MONITORAGGIO

"SAN POTITO E COTIGNOLA STOCCAGGIO"

"Esecuzione di prove di iniezione nel giacimento BB1 di San Potito finalizzate all'ampliamento della capacità di stoccaggio mediante superamento della originaria pressione statica di fondo"

Terza Relazione trimestrale
Novembre 2025 - Gennaio 2026

OGS Istituto Nazionale di Oceanografia e di Geofisica Sperimentale

GEOPHI Subsurface Geology and Geophysics

STRUTTURA PREPOSTA AL MONITORAGGIO

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La presente relazione rendiconta l'attività della struttura preposta al monitoraggio (SPM) presso la concessione di stoccaggio di gas metano denominata "SAN POTITO & COTIGNOLA STOCCAGGIO", per conto di Stogit Adriatica S.p.A (società del Gruppo Snam, https://www.stogitadriatica.it/), per il periodo compreso tra agosto e ottobre 2025 (seconda relazione trimestrale).

La SPM è composta dall'Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS) e dalla Società Geophi S.r.l.

La relazione consta nell'unione della parte riguardante il monitoraggio sismico, affidato a OGS, e la parte riguardante il monitoraggio delle pressioni di poro e delle deformazioni indotte, affidato a Geophi S.r.l.

Trieste, 9 aprile 2026

OGS Istituto Nazionale di Oceanografia e di Geofisica Sperimentale

GEOPHI Subsurface Geology and Geophysics

STRUTTURA PREPOSTA AL MONITORAGGIO

OGS National Institute of Oceanography and Applied Geophysics

snam

Concessione "San Potito e Cotignola Stoccaggio"
Prove di stoccaggio in sovrappressione nei livelli
BB1-Upper e BB1-Lower del Cluster A

-

Monitoraggio della sismicità

-

IIIª relazione trimestrale

Report
31 Gennaio 2026

Autore:
Denis Sandron, Eduardo Diez Zaldivar, Nikolas Potleca, Maria Adelaide Romano, Mariangela Guidarelli, Marco Romanelli

Direttore: Prof. Matteo Picozzi

MATTEO PICOZZI
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1 INTRODUZIONE

La presente relazione rendiconta l'attività di monitoraggio sismico che l'OGS svolge presso la concessione di stoccaggio di gas metano denominata "SAN POTITO & COTIGNOLA STOCCAGGIO", per conto di Stogit Adriatica S.p.A (società del Gruppo Snam, https://www.stogitadriatica.it/), per il periodo compreso tra novembre 2025 e gennaio 2026 (terza relazione trimestrale).

L'attività di monitoraggio è prevista a seguito dell'approvazione del progetto per condurre prove di stoccaggio in sovrapressione, e secondo gli Indirizzi e Linee Guida (ILG) ministeriali pubblicati in data 24/11/2014 dal gruppo di lavoro istituito presso l'allora Ministero dello Sviluppo Economico (MiSE, 2014) per le attività antropiche potenzialmente in grado di indurre sismicità o deformazioni del suolo nel loro intorno.

Si rimanda alla prima relazione trimestrale per quanto concerne:

- L'inquadramento giuridico e i passaggi più significativi dell'iter burocratico che ha portato all'avvio delle attività delle prove in sovrappressione nel giacimento BB1 di San Potito;
- L'inquadramento dell'area dal punto di vista geologico, della sismicità storica e della pericolosità sismica;
- L'analisi della capacità di detection teorica della microsismicità condotta sui dati di rumore sismico.

2 RETE DI MONITORAGGIO

2.1 La rete di monitoraggio sismica

La rete sismica di San Potito e Cotignola è stata realizzata dalla Solgeo Srl. Una commissione di esperti dell'Università di Bologna ha valutato in modo ampiamente positivo il progetto di realizzazione della rete stessa (Mancini et al., 2018), quest'ultimo descritto in maniera dettagliata rispettivamente in Cocorullo & Russo, 2018 e Di Fronzo, 2018.

La Rete di Monitoraggio Sismico di San Patito (RMSP) è composta da quindici stazioni sismometriche e da una stazione geodetica GNSS permanente. Le stazioni sono indicate con la sigla SP.

Si possono identificare due gruppi di stazioni:

- un nucleo interno composto da 8 stazioni con sensori di corto periodo in foro (SP01, SP02, SP03, SP04, SP05, SP11, SP13 e SP14) che circondano l'area di stoccaggio e ricadono nel Dominio Interno.
- un gruppo esterno composto da 7 stazioni (SP06, SP07, SP08, SP09, SP10, SP12 e SP15) situate a varie distanze tra 10 e 20 km dal nucleo centrale.

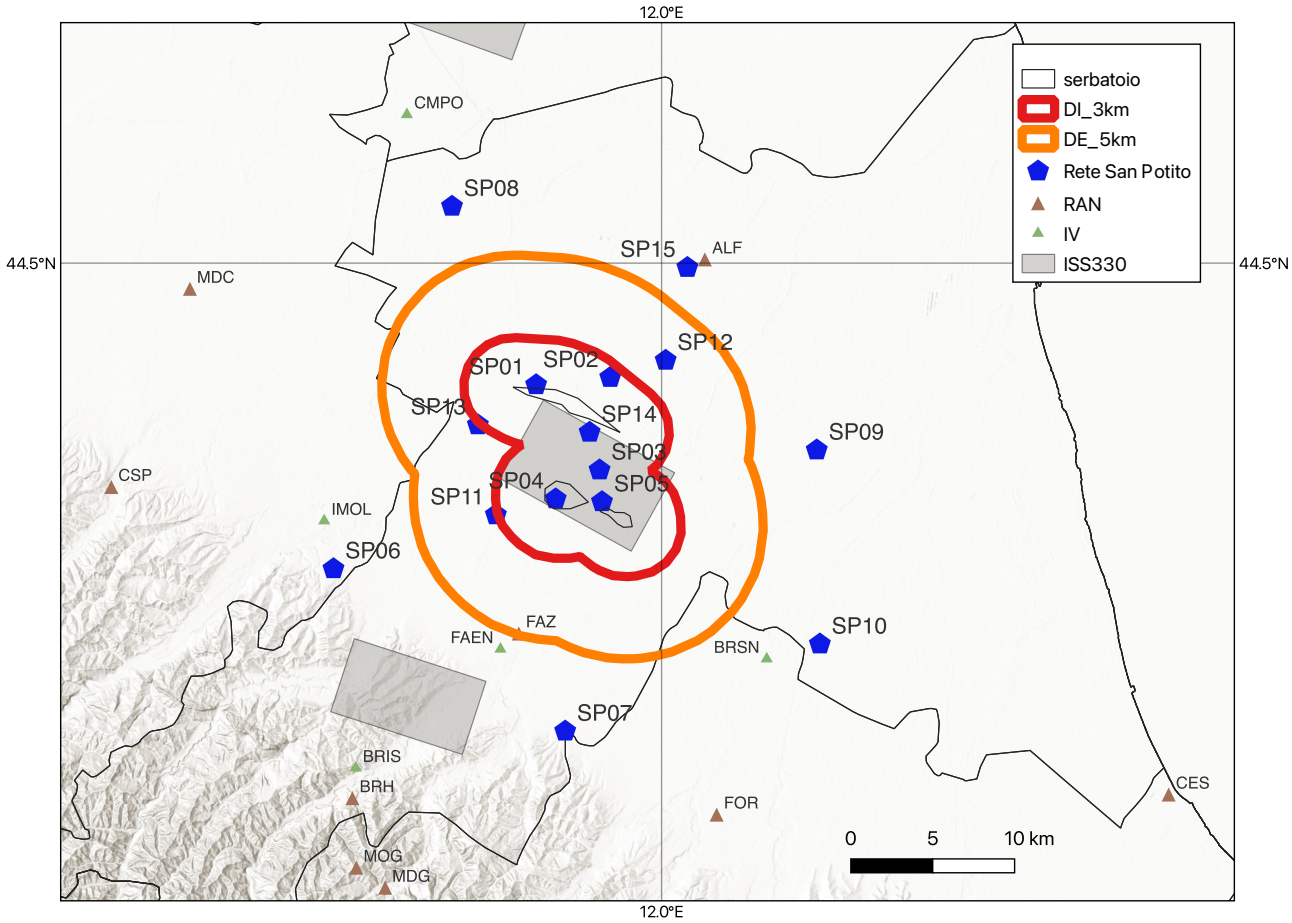


Fig. 2.1– Rete di San Potito (pentagoni blu). In marrone le stazioni della rete accelerometrica nazionale (RAN), in verde quelli della rete INGV (IV).

La Fig. 2.1 mostra la mappa con la posizione delle stazioni e i contorni in superficie delle aree corrispondenti ai Domini di Rilevazione.

A valle dell'evento sismico del 13 gennaio 2026, sono state include nel sistema di monitoraggio anche le stazioni della rete accelerometrica nazionale (RAN, triangoli marrone) e della rete INGV (IV, triangoli verdi), che saranno utilizzate qualora si verificassero nuovi eventi rilevanti nell'area.

Tab. 2.1 Elenco delle stazioni della rete "San Potito e Cotignola" (SP) con: Codice stazione (Sta_Id); tipo di data logger; tipo di strumento (sismometro, SS e accelerometro, SA con relativo numero di serie); parametri geografici (Lat, Lon, profondità, altitudine); data di inizio attività.

Stat_Id	Datalogger	Sensors	Latitude (N)	Longitude (E)	Depth (m)	Elevation (m)	Date on
SP01	SARA SL06-BB	SS08(2233)	44.433748	11.904231	0.5	10	17/12/2018
		---			---		
SP02	SOLGEO DYMAS 24	SS10BH(2637)	44.437697	11.960797		7	10/10/2018
		SA10(2647)			0.5		
SP03	SOLGEO DYMAS 24	SS10BH(2642)	44.387289	11.952630		14	09/10/2018
		SA10(2648)			0.5		
SP04	SOLGEO DYMAS 24	SS10BH(2638)	44.371509	11.919130		17	27/09/2018
		SA10(2645)			0.5		
SP05	SOLGEO DYMAS 24	SS10BH(2639)	44.369958	11.954506		14	27/09/2018
		SA10(2646)			0.5		
SP06	SOLGEO DYMAS 24	SS02(2635)	44.333389	11.749564	0.5	66	23/10/2018
		SA10(2649)			0.5		
SP07	SOLGEO DYMAS 24	SS02(2636)	44.244694	11.926417	0.5	48	20/11/2018
		SA10(2650)			0.5		
SP08	SOLGEO DYMAS 24	SS02(2632)	44.530917	11.840028	0.5	3	24/09/2018
		SA10(1070)			0.5		
SP09	SOLGEO DYMAS 24	SS02(1642)	44.398181	12.118394	0.5	1	24/10/2018
		SA10(2742)			0.5		
SP10	SOLGEO DYMAS 24	SS02(2634)	44.398181	12.120789	0.5	10	21/11/2018
		SA10(2743)			0.5		
SP11	SOLGEO DYMAS 24	SS10BH(2643)	44.362811	11.873497		24	12/10/2018
		SA10(2651)			0.5		
SP12	SOLGEO DYMAS 24	SS02(2630)	44.447058	12.003094	0.5	3	27/09/2018
		SA10(2628)			0.5		
SP13	SOLGEO DYMAS 24	SS10BH(2640)	44.411881	11.859742		14	25/10/2018
		SA10(2744)			0.5		
SP14	SOLGEO DYMAS 24	SS10BH(2170)	44.407844	11.945058		13	21/11/2018
		SA10(2745)			0.5		
SP15	SOLGEO DYMAS 24	SS02(2633)	44.497611	12.019667	0.5	5	25/09/2018
		SA10(2629)			0.5		

Le stazioni sono dotate di strumenti professionali di fabbricazione SARA electronic instruments s.r.l. e SOLGEO. In particolare, i sensori sono il sismometro a banda larga SARA SS08, il sismometro di superficie a corto periodo SARA SS02 e il sismometro da foro SARA SS10BH (https://www.sara.pg.it/).

Per coprire l'intera gamma dinamica e sfruttare le capacità dei data logger, sono stati installati anche gli accelerometri SARA SA10 per registrare forti terremoti in cui il segnale rilevato dai sismometri potrebbe essere saturato in ampiezza. Si tratta di uno strumento di tipo force-balance feedback con una risposta piatta all'accelerazione del suolo da DC a 100 Hz e una risposta di fase stabile all'interno di questa banda passante.

I digitalizzatori sono SOLGEO DYMAS24 e SARA SL06, digitalizzatori multicanale e a 24 bit. Le loro caratteristiche principali sono la robustezza, il basso consumo

energetico e la compatibilità con i protocolli SeedLink e MiniSeed (https://www.solgeo.it).

La Figura 2.2 mostra gli strumenti utilizzati nelle stazioni della rete RMSP.

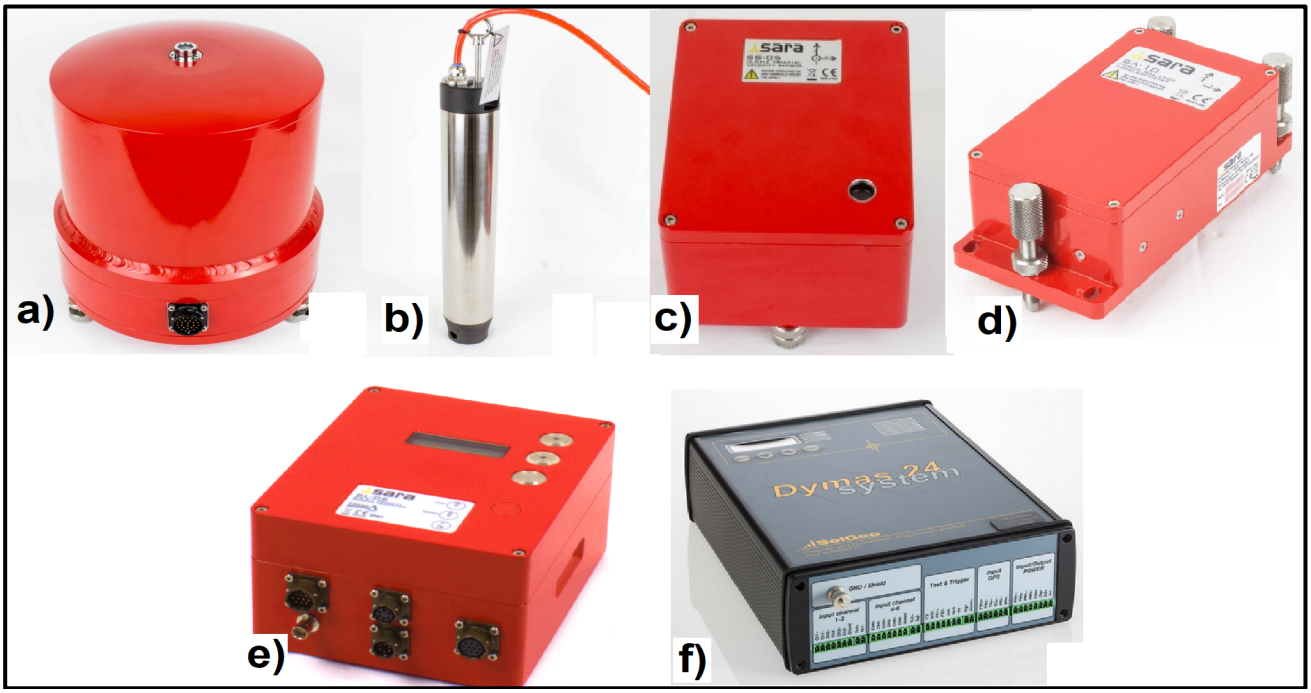


Fig. 2.2– Foto degli strumenti installati nella rete SP: a) sismometro a banda larga SARA SS08; b) sismometro da foro a breve periodo SARA SS10BH; c) sismometro di superficie a breve periodo SARA SS02; d) accelerometro a bilanciamento di forza SARA SA10; e) digitalizzatore SARA SL06; f) digitalizzatore SOLGEO DYMAS24.

I sensori in foro sono stati dotati di un sistema di accoppiamento sviluppato da SARA, che consiste in una lama di acciaio che viene messa in tensione da due flange integrate nel sensore (Figura 2.2b). La tensione della lama viene regolata in modo che il sensore possa scorrere nel tubo con un peso adeguato. Una volta raggiunto il fondo del foro, il peso viene rimosso dall'alto.

La stazione SP01 è caratterizzata da un array di sismometri in pozzo (6 sismometri a corto periodo installati tra i -35 e i -285 m) e un sismometro broadband.

Tutti i canali di acquisizione hanno una frequenza di campionamento pari a 200 Hz. I dati registrati dalle stazioni sono trasmessi direttamente al centro di acquisizione presso la sede OGS di Trieste.

I dati acquisiti vengono archiviati in tempo reale in formato mseed su sistemi di archiviazione di rete ridondanti.

La completa operatività della rete è stata raggiunta nel mese di dicembre 2018.

3 PROCESSAMENTO DATI

Il sistema di acquisizione ed analisi dati in tempo si basa su SeisComP (https://www.seiscomp.de; Helmholtz Centre Potsdam GFZ German Research Centre for Geosciences and gempa GmbH, 2008), un pacchetto software utilizzato in tutto il mondo e ritenuto oramai uno standard globale.

È un software composto da moduli automatici e interattivi. Ogni modulo svolge un compito specifico: i) l'acquisizione dei dati (forme d'onda); ii) l'elaborazione delle forme d'onda per identificare gli arrivi di fase; iii) l'elaborazione dei picking di fase per individuare gli eventi e localizzarli; iv) la fornitura di un'interfaccia utente grafica per la revisione manuale degli eventi e v) l'archiviazione dei dati.

3.1 SeisComP

scrttv (real-time trace view) visualizza in tempo reale i dati delle forme d'onda in formato miniSEED (Fig. 5.1). Inoltre, vengono visualizzati i "picks" automatici di fase sottoforma di linee rosse verticali.

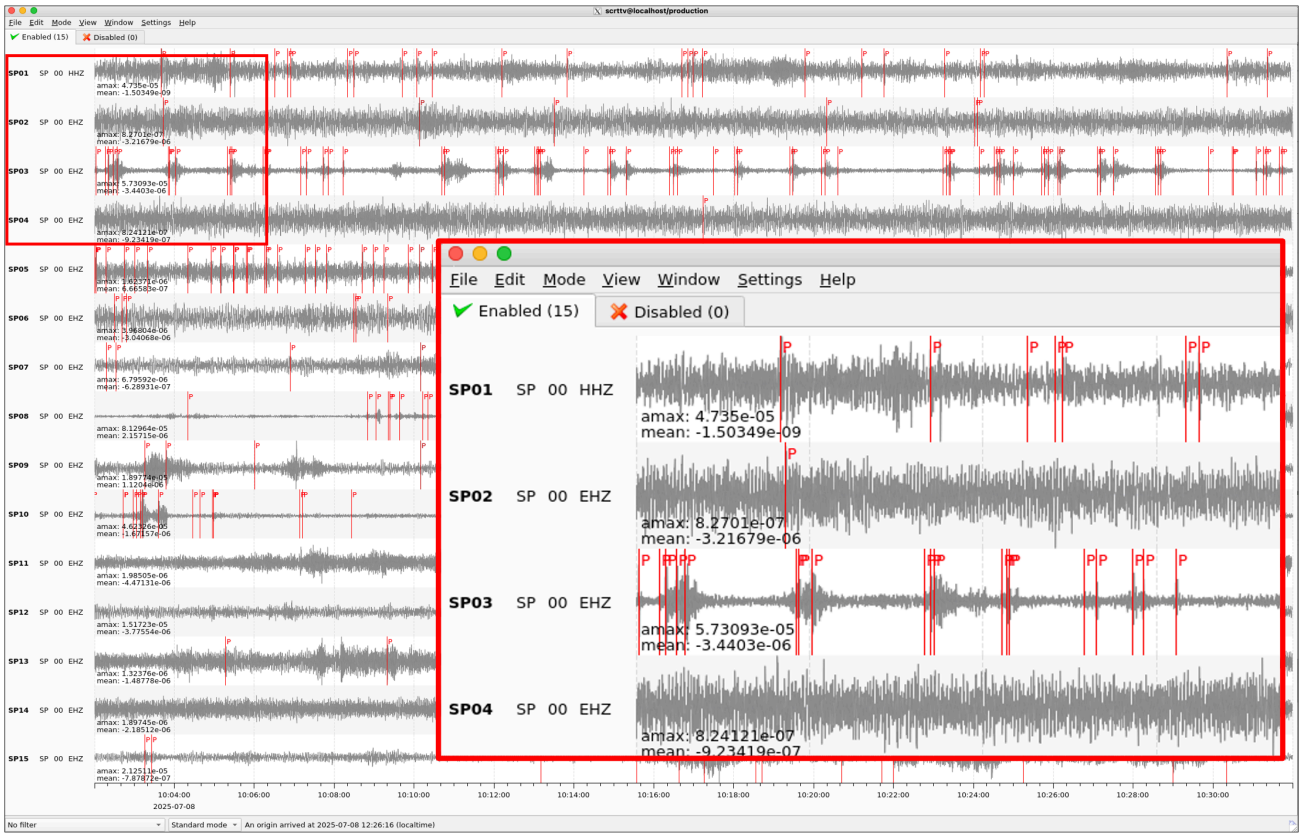


Fig. 3.1 – scrttv. Tracce in continuo e in tempo reale dalle stazioni della rete di San Potito.

scmv (map view) visualizza gli epicentri (automatici) dei terremoti (pallini rossi), lo stato di attivazione delle stazioni (stazioni in nero non sono attive), il livello del moto del suolo (velocità in nm/s) oppure un indice di qualità delle stazioni.

Stazioni lampeggianti in rosso indicano la ricezione di nuovi picks e se un nuovo pick è associato a un evento, il colore lampeggiante passa da rosso a verde.

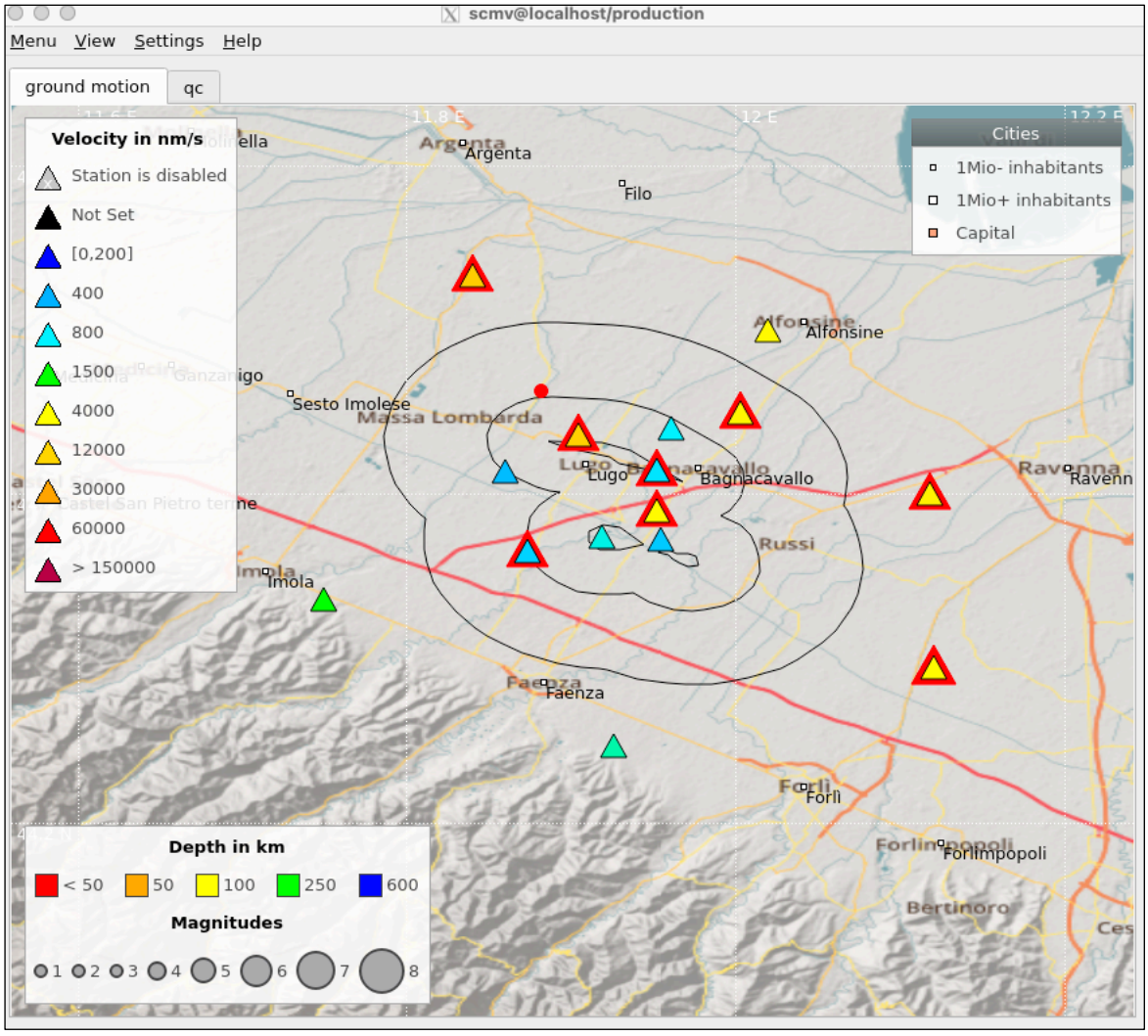


Fig. 3.2 – scmv. I colori delle stazioni sono in funzione del moto del suolo (nm/s, legenda). Stazioni contornate di rosso indicano l’arrivo di pick (sono in fase di trigger). Il pallino rosso indica un evento localizzato.

scolv (origin locator view) è il principale strumento interattivo per rivedere o revisionare le informazioni sull'origine e sull'evento. Fornisce quindi l'intera funzionalità per analizzare i parametri dei terremoti: i) picking di fase e arrivi; ii) posizione dell'ipocentro e tempo origine con l’incertezza; iii) meccanismo focale dalle polarità del primo arrivo; iv) magnitudo.

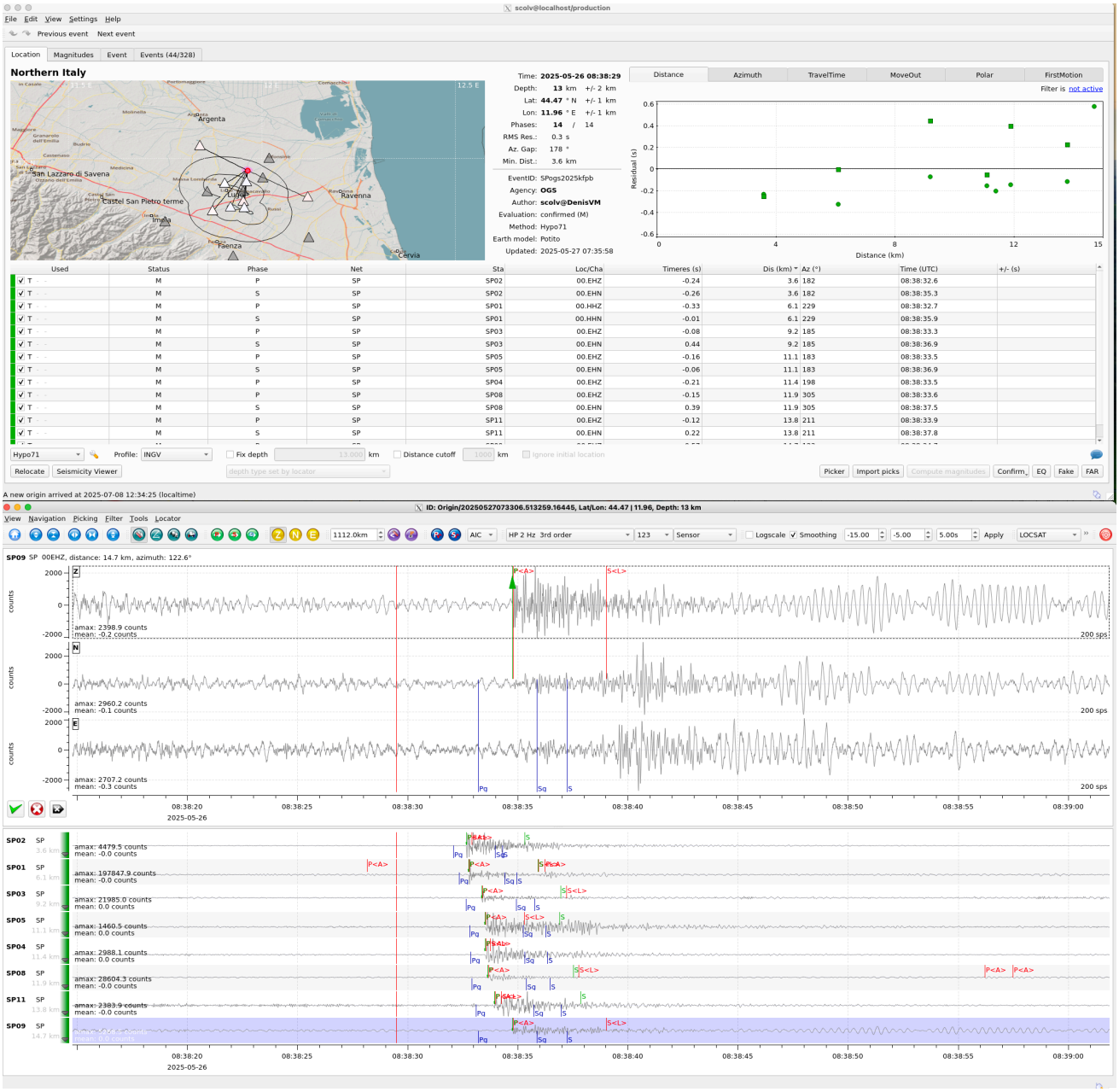


Fig. 3.3 – SeisComP scolv panel.

3.2 Detezione e localizzazione degli eventi

La fase di "detection" avviene attraverso il modulo *scautopick* che ha il compito di filtrare il segnale registrato e implementare l'algoritmo STA/LTA (Short Term Average/Long Term Average) (Trnkoczy, 1999; 2002). Vengono così individuati dei tempi (trigger) in corrispondenza delle anomalie della forma d'onda, sotto forma di variazioni di ampiezza, candidati a essere interpretati come tempi di arrivo della fase P.

I picks, le ampiezze e le caratteristiche associate al segnale vengono forniti come parametri di input ai moduli per la localizzazione della sorgente, come *scautoloc*.

Le localizzazioni automatiche vengono eseguite con il plugin di SeisComP denominato LOCSAT. SeisComP viene fornito con due serie di tabelle dei tempi di percorrenza predefinite (tab, iasp91). La localizzazione automatica è effettuata in tempo reale e si aggiorna mentre vengono identificati nuovi pick sulle tracce in arrivo sullo streaming in real-time: si creano quindi, per ogni evento, diverse origini, e lo stesso software propone quella che ritiene essere la migliore in base a diversi parametri.

L'operatore interviene successivamente ed ha la possibilità di rilocalizzare l'evento modificando o selezionando nuovamente i tempi di arrivo delle fasi sismiche (i.e., i picks) manualmente e assegnandone le incertezze, cambiando il localizzatore e il modello di velocità, escludendo alcune stazioni oppure aggiungendo quelle che non sono state utilizzate nella prima fase perché non avevano pick automatici.

Dopo la revisione dei picking automatici e la loro eventuale modifica, i localizzatori disponibili sono: i) NonLinLoc (Lomax et al., 2000; http://alomax.free.fr/nlloc), ii) FixedHypocenter (localizzatore per il ri-calcolo del tempo origine con ipocentro fisso) e iii) con il tradizionale Hypo71PC (Lee & Lahr, 1975).

Per quest'ultimo sono disponibili diversi modelli crostali, tra cui il modello di velocita' locale per la RMSP che è schematizzato in Tab. 3.1. Per i dettagli sul modo in cui è stato ricavato si rimanda al documento sulla progettazione della rete (Solgeo, Progettazione di una rete di monitoraggio microsismico provvisoria presso l'impianto di stoccaggio gas denominato "San Potito e Cotignola Stoccaggio (Ra)", 2017).

Tab. 3.1 Modello di velocità locale per la RMSP (da Solgeo, Progettazione di una rete di monitoraggio microsismico provvisoria presso l'impianto di stoccaggio gas denominato "San Potito e Cotignola Stoccaggio (Ra)", 2017)

Prof. (km)	Vp (km/s)	Vs (km/s)
0-0.5	2.015	0.877
0.5-1.25	2.014	0.927
1.25-1.5	2.411	1.295
1.5-2	2.607	1.370
2-3	2.928	1.541
3-4	3.322	1.845
4-6	4.080	2.686

6-8	5.030	2.687
8-12	5.713	2.753
12-	6.301	3.107

Per la localizzazione automatica degli eventi, sono utilizzati due ulteriori moduli: scanloc e sceval.

scanloc (https://www.gempa.de/products/scanloc/) potenzia il monitoraggio della sismicità naturale e indotta a distanze epicentrali locali e all'interno di reti sismiche di piccole dimensioni. *scanloc* utilizza un algoritmo di ricerca a cluster per associare i picks a una o più potenziali sorgenti sismiche. Mentre la ricerca dei cluster si basa solo sulle fasi P, in un secondo step vengono associate anche le fasi S. Per fornire una selezione di alta qualità delle fasi S, insieme a *scanloc* è impiegato un nuovo "picker" S. Il picker S permette di identificare le fasi S sulle componenti orizzontali o sulle componenti verticali se le orizzontali non sono disponibili.

sceval (https://www.gempa.de/products/sceval/) discrimina automaticamente i terremoti reali dalle soluzioni false. Il monitoraggio automatico affidabile dei terremoti di bassa magnitudo è una sfida a causa del basso numero di stazioni che li rilevano e della possibile bassa qualità dei rilevamenti di fase disponibili. *sceval* valuta le soluzioni e trova i falsi o li contrassegna come reali se la soluzione rappresenta probabilmente un evento reale. In questo modo i cataloghi di terremoti possono raggiungere un'elevata completezza, una volta ripuliti dai falsi, e gli operatori possono concentrarsi sull'analisi degli eventi più rilevanti.

3.3 Copertura dati

I dati ricevuti dalle stazioni vengono archiviati in un NAS. Viene eseguito un controllo prevalentemente sulla durata giornaliera dei files (86400s +/- 3s) e in Fig. 3.4 viene riportata la percentuale dei files che soddisfano questo parametro per singola stazione complessivamente nel trimestre in esame.

In Fig. 3.5 l'analisi è dettagliata sulla singola mensilità.

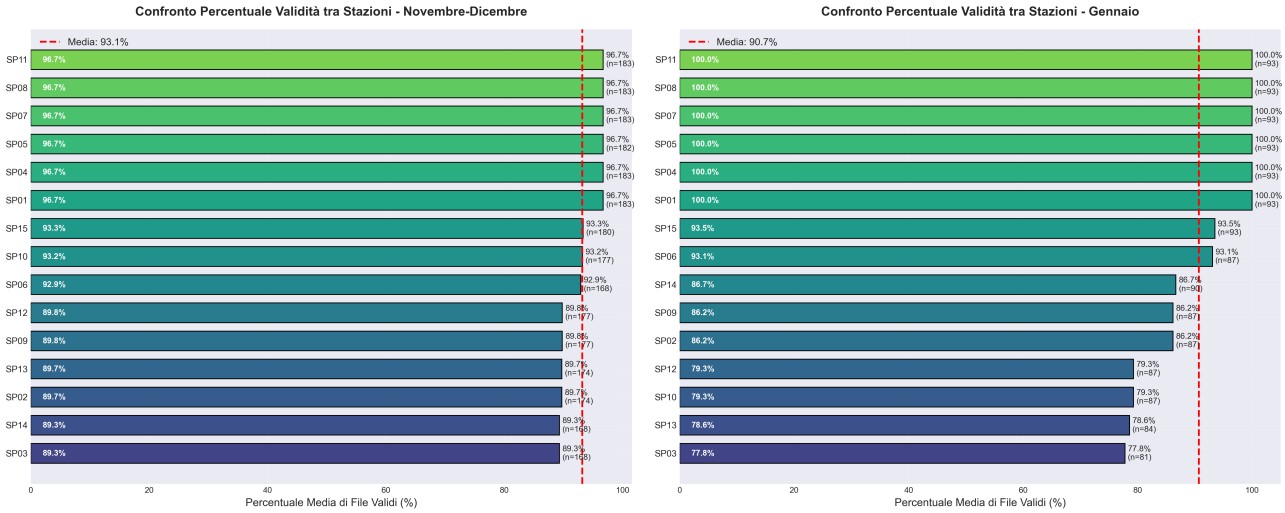


Fig. 3.4 – Percentuale media di files giornalieri ricevuti e archiviati senza gaps per singola stazione nel mese di novembre – dicembre 2025 (a sinistra) e nel mese di gennaio 2026 (a destra).

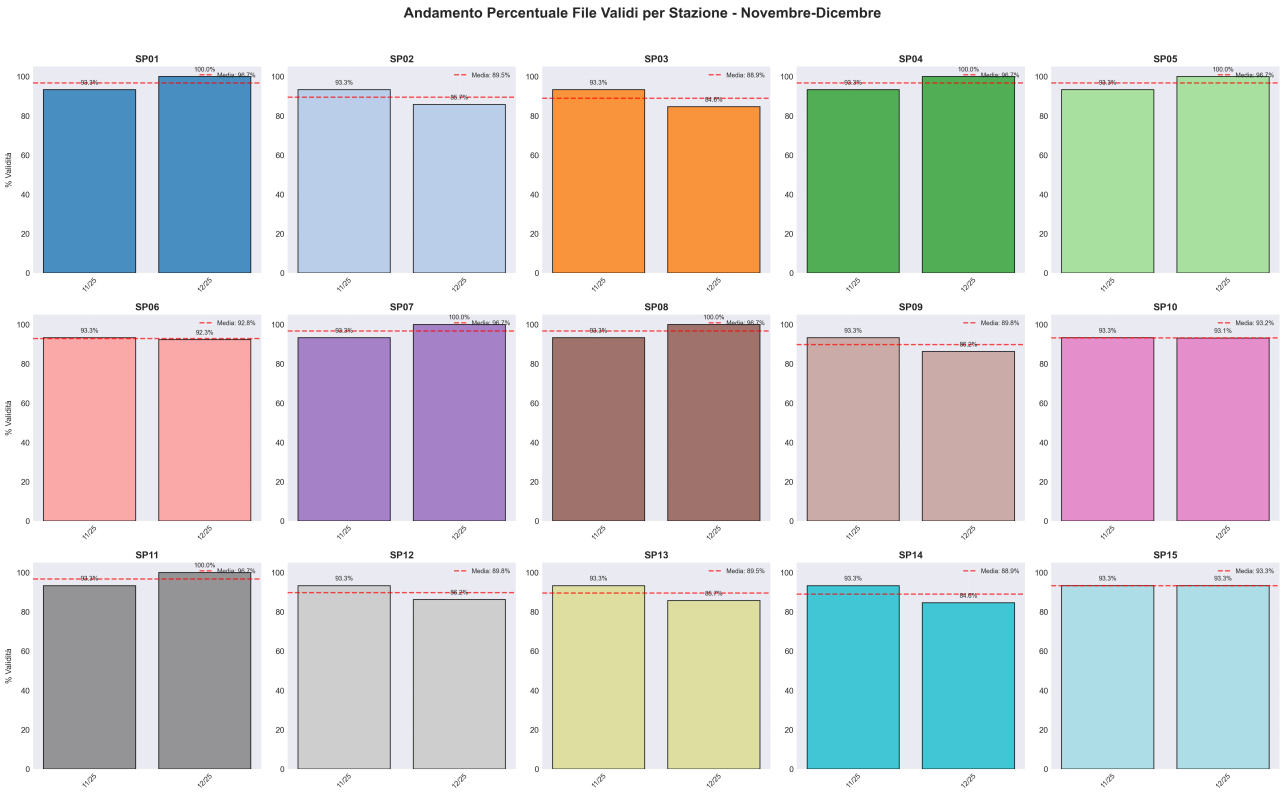


Fig. 3.5 – Percentuale di files giornalieri ricevuti e archiviati suddivisi per stazione e per la singola mensilità (novembre – dicembre).

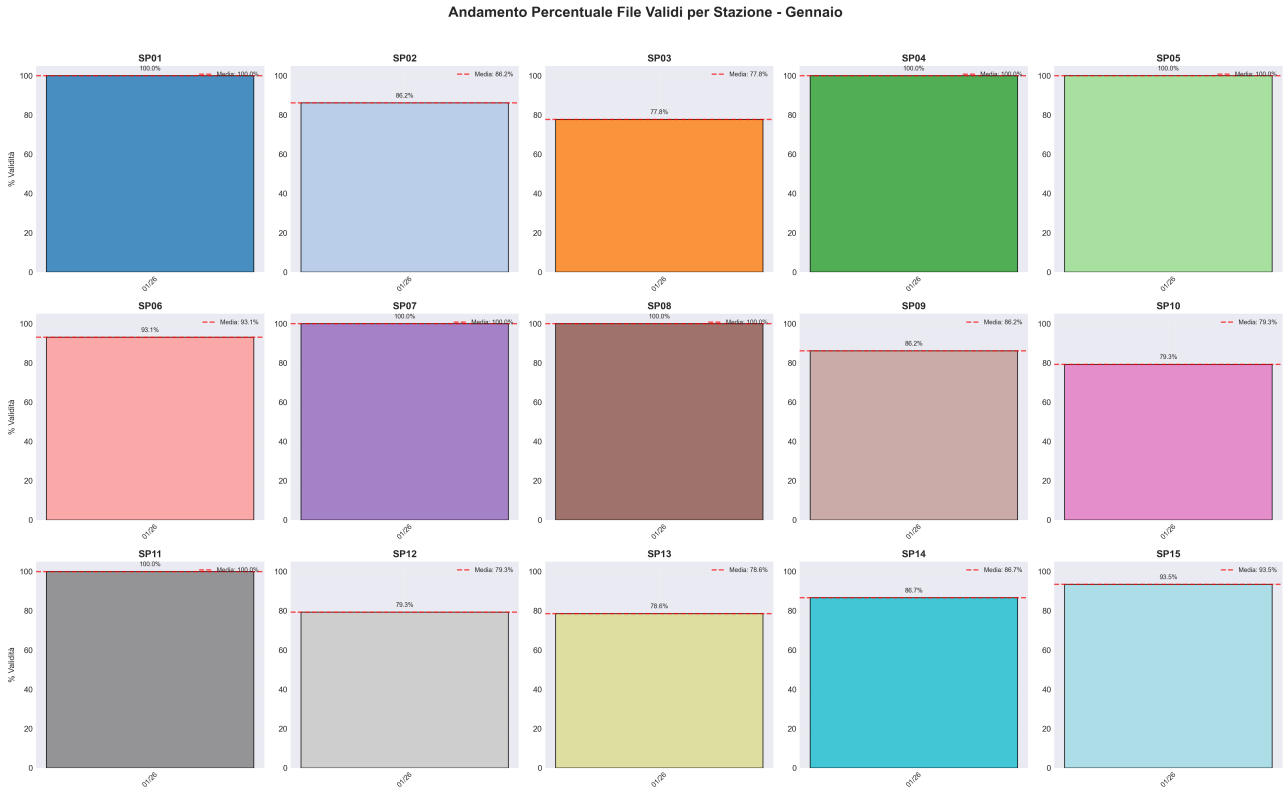


Fig. 3.6 – Percentuale di files giornalieri ricevuti e archiviati suddivisi per stazione e per la singola mensilità di gennaio.

3.4 Rindondanza dei dati

Nell'ottica di garantire la massima "continuità'" nell'acquisizione dei dati, la massima tempestività' nel fronteggiare un eventuale guasto hardware nel server di acquisizione e ridurre al minimo l'eventuale recupero dati, abbiamo proposto a Solgeo, società che si occupa della manutenzione della rete di San Potito, di poter acquisire i dati dalle singole stazioni ad un secondo server presso un'altra sede di OGS.

Tutte le stazioni sono state quindi aggiornate con sim bidirezionali "denattate" M2M con bundle traffico sufficiente per poter gestire la trasmissione dei dati verso tre endpoint: 1 – Solgeo; 2 - OGS 1 (sede di Udine); 3 - OGS 2 (sede Trieste).

La Fig. 3.7 mostra in maniera semplificata il doppio flusso di dati indipendenti dalle stazioni della rete ai due server OGS operativo dal **1° febbraio 2026**.

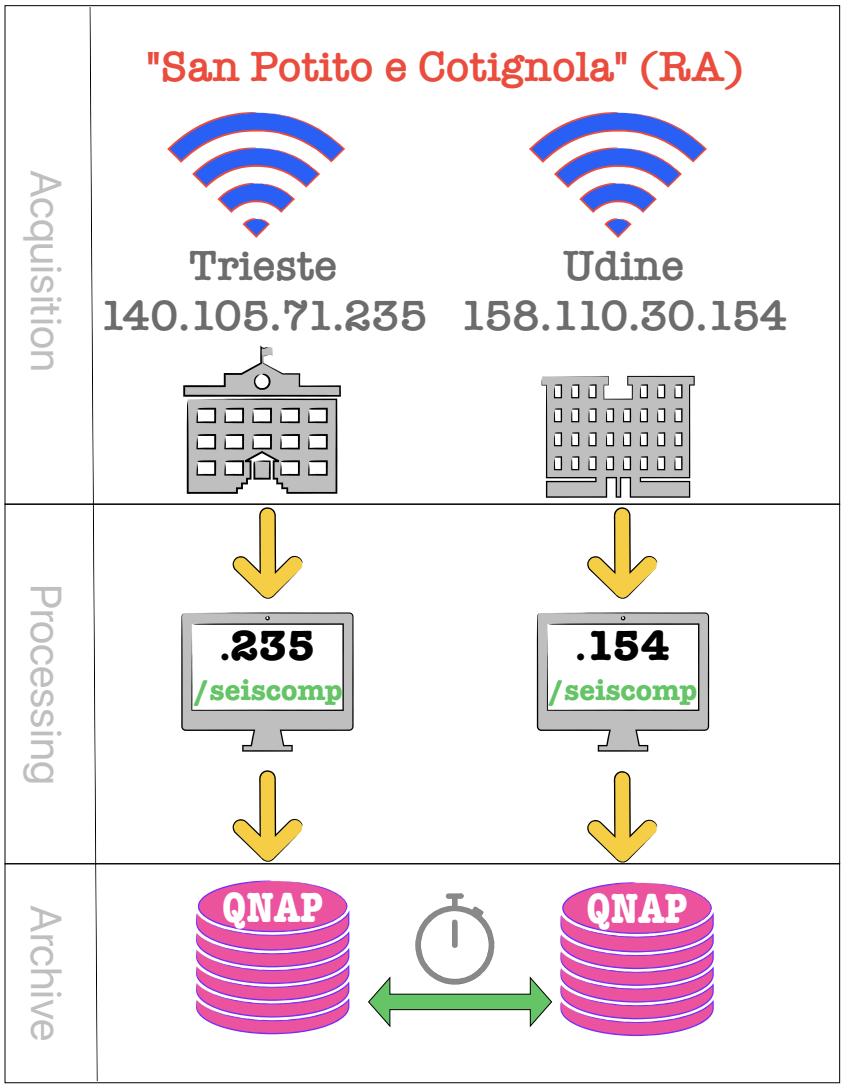


Fig. 3.7 – Flusso di dati parallelo ed indipendente dalle stazioni della rete di San Potito a due server posti in sedi diverse dell'OGS.

4 ATTIVITÀ SISMICA RILEVATA

Sono riportati qui di seguito in mappa (Fig. 4.1) e in tabella (Tab. 4.1) tutti i terremoti registrati dalla rete RMSP che ricadono nell'area di "San Potito e Cotignola Stoccaggio" e in un buffer esterno al Dominio Esteso, dal **31 ottobre 2025 al 31 gennaio 2026**.

La box in Fig. 4.1 racchiude l'area di monitoraggio che si estende oltre il Dominio Esterno della concessione di stoccaggio di gas metano denominata "SAN POTITO & COTIGNOLA STOCCAGGIO" e compresa tra 44.20 – 44.60 gradi di latitudine Nord (i.e., ~ 44 km) e 11.70 – 12.15 gradi di longitudine Ovest (i.e., ~ 36 km), corrispondente ad un'area di ~ 1600 kmq (di seguito "area di monitoraggio").

4.1 Eventi sismici localizzati

Nel trimestre in esame gli eventi sismici localizzati all'interno dell'area di monitoraggio e rivisti da un sismologo sono complessivamente **73** in un intervallo di magnitudo locale compresa tra M **-0.1 e 4.1**.

L'evento più forte, di magnitudo M 4.1, è stato registrato in data 13 gennaio 2026 alle 08:27:56.7 (UTC), 3 km a est di Faenza (provincia di Ravenna). Dopo quasi due minuti, alle ore 08:29:16.0 (UTC) è stato localizzato un secondo evento di magnitudo M 3.9, con epicentro prossimo al precedente. Si è attivata quindi una sequenza sismica che si è protratta sino al giorno 15 gennaio 2026. La profondità ipocentrale dei due eventi è stata di 22 chilometri. Si rimanda al paragrafo 4.2 dedicato all'argomento.

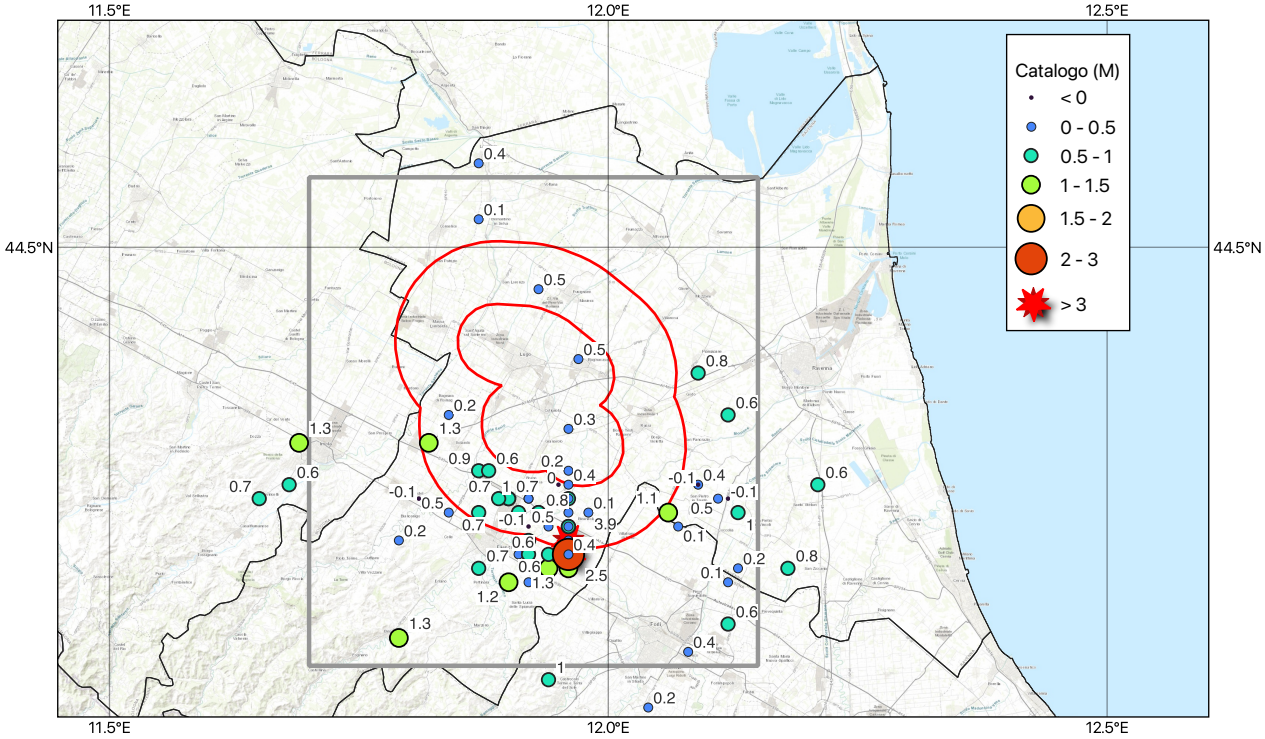


Fig. 4.1 - Eventi sismici registrati dalla rete RMSP che ricadono nell'area di "San Potito e Cotignola Stoccaggio", rivisti da un sismologo. Finestra temporale esaminata: 31 ottobre 2025 - 31 gennaio 2026.

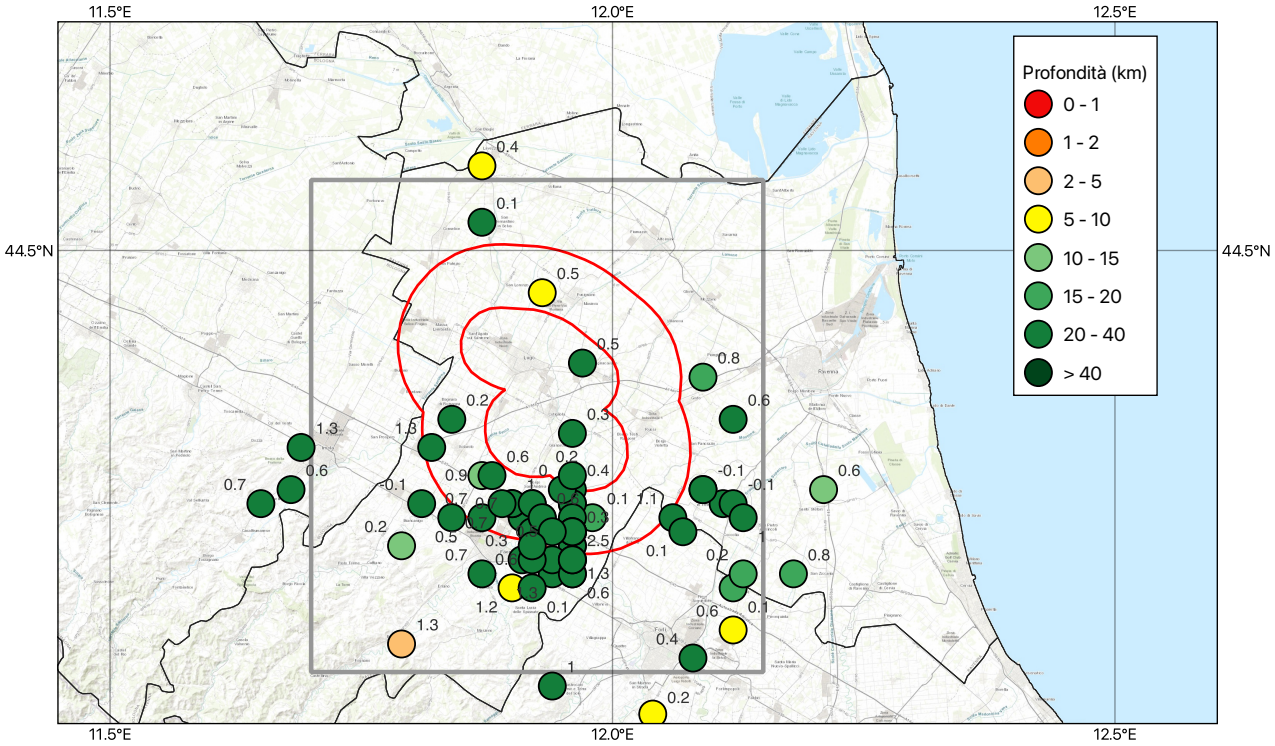


Fig. 4.2 - Eventi sismici registrati dalla rete RMSP che ricadono nell'area di "San Potito e Cotignola Stoccaggio", rivisti da un sismologo e in funzione della profondità ipocentrale. Finestra temporale esaminata: 31 ottobre 2025 - 31 gennaio 2026.

Tab. 4.1 Eventi sismici localizzati e rivisti da un sismologo. Depth: profondità ipocentrale, MAG: magnitudo locale Richter, E. SP01: distanza epicentrale dalla stazione SP01 (Fig. 2.1), H. SP01: distanza hypocentrale dalla stazione SP01 (Fig. 2.1). Finestra temporale esaminata: 31 ottobre 2025 - 31 gennaio 2026.

Date	Time (UTC)	LAT	LON	Depth (km)	MAG	E. SP01 (km)	H. SP01 (km)
24/10/25	23:10:07.3Z	44.47	11.93	8	0.5	5.05	9.46
25/10/25	19:50:17.5Z	44.32	11.96	27	0.7	13.13	30.02
29/10/25	20:12:57.5Z	44	11.93	22	1.6	47.87	52.69
29/10/25	22:16:35.9Z	44.06	11.96	25	1.7	41.42	48.38
06/11/25	22:03:34.4Z	44.31	11.98	18	0.1	14.78	23.29
13/11/25	00:00:33.4Z	44.21	12.08	33	0.4	28.35	43.50
17/11/25	01:28:33.2Z	44.41	12.09	19	0.8	15.25	24.36
17/11/25	01:33:12.4Z	44.38	12.12	21	0.6	18.34	27.88
19/11/25	15:07:46.0Z	44.29	11.79	13	0.2	17.86	22.09
26/11/25	19:07:23.0Z	44.34	11.87	12	0.9	10.29	15.81
26/11/25	19:09:46.6Z	44.26	11.9	9	1.2	18.90	20.94
02/12/25	04:59:06.9Z	44.27	11.87	24	0.7	17.95	29.97
17/12/25	17:59:52.8Z	44.38	11.84	26	0.2	7.32	27.01
17/12/25	19:39:34.5Z	44.37	11.96	27	0.3	8.20	28.22
17/12/25	19:42:23.5Z	44.52	11.87	21	0.1	10.29	23.38
24/12/25	17:47:28.8Z	44.36	11.82	26	1.3	10.05	27.87
24/12/25	17:49:53.4Z	44.31	11.84	26	0.5	14.17	29.61
29/12/25	02:45:44.9Z	44.22	11.79	5	1.3	24.94	25.43
13/01/26	08:27:56.7Z	44.31	11.97	22	4.1	16.28	34.13
13/01/26	08:29:16.0Z	44.30	11.96	22	3.9	17.35	35.52
13/01/26	08:31:37.6Z	44.31	12.06	23	1.1	18.43	29.48

13/01/26	08:35:03.5Z	44.3	11.96	28	0.3	15.22	31.87
13/01/26	08:35:48.1Z	44.31	11.93	34	0.6	13.55	36.60
13/01/26	08:38:33.3Z	44.33	11.96	26	0.4	12.10	28.68
13/01/26	08:56:28.3Z	44.34	11.88	27	0.6	10.13	28.84
13/01/26	08:59:11.5Z	44.32	11.92	25	0.3	12.33	27.88
13/01/26	09:10:08.6Z	44.31	11.91	32	0.6	13.37	34.68
13/01/26	09:13:31.8Z	44.31	11.87	31	0.7	13.55	33.83
13/01/26	09:34:05.9Z	44.32	11.96	28	0.3	13.13	30.92
13/01/26	09:34:50.3Z	44.33	12.21	15	0.6	27.03	30.91
13/01/26	10:13:52.4Z	44.32	11.9	27	1	12.23	29.64
13/01/26	10:36:33.3Z	44.33	12.09	21	0.4	18.75	28.15
13/01/26	10:44:14.0Z	44.32	11.65	22	0.7	23.33	32.07
13/01/26	10:57:45.3Z	44.27	12.18	16	0.8	28.50	32.68
13/01/26	11:20:09.3Z	44.27	11.96	34	0.6	18.42	38.67
13/01/26	11:57:08.7Z	44.3	11.96	28	0.7	15.22	31.87
13/01/26	16:13:24.0Z	44.32	12.11	25	0.5	20.69	32.45
13/01/26	16:15:14.9Z	44.32	11.9	27	0.7	12.23	29.64
13/01/26	16:19:14.6Z	44.29	11.96	24	0.4	16.28	29.00
13/01/26	17:07:46.2Z	44.31	11.96	27	0.3	14.17	30.49
13/01/26	17:34:53.5Z	44.33	11.68	22	0.6	20.72	30.22
13/01/26	20:14:16.3Z	44.26	12.12	19	0.1	25.76	32.01
13/01/26	21:11:45.2,	44.33	12.09	21	-0.1	18.75	28.15
13/01/26	21:54:21.1Z	44.27	11.94	32	1.3	18.07	36.75
13/01/26	22:01:31.8Z	44.27	12.13	19	0.2	25.51	31.81
13/01/26	23:29:25.3Z	44.3	11.96	32	0.3	15.22	35.44
14/01/26	00:32:49.2Z	44.3	12.07	21	0.1	19.79	28.85
14/01/26	01:43:18.6Z	44.28	11.91	29	0.3	16.70	33.46
14/01/26	01:45:19.1Z	44.28	11.94	32	0.6	16.98	36.23
14/01/26	02:14:46.6,	44.33	11.95	22	0	11.81	24.97
14/01/26	02:15:25.4,	44.3	11.92	29	-0.1	14.54	32.44
14/01/26	02:34:24.0Z	44.27	11.96	33	1.3	18.42	37.79
14/01/26	02:39:53.6,	44.32	12.12	22	-0.1	21.34	30.65
14/01/26	03:24:33.2Z	44.32	11.92	32	0.3	12.33	34.29
14/01/26	07:16:16.8Z	44.28	11.96	27	2.5	17.35	32.09
14/01/26	07:21:09.5Z	44.23	12.12	10	0.6	28.30	30.01
14/01/26	07:22:50.6Z	44.28	11.92	33	0.6	16.75	37.01
14/01/26	08:52:19.8Z	44.19	11.94	22	1	26.88	34.73
14/01/26	12:26:35.2Z	44.32	11.89	29	0.7	12.26	31.48
14/01/26	17:26:06.8Z	44.34	11.96	26	0.2	11.09	28.26
14/01/26	20:23:11.5Z	44.31	11.93	32	0.8	13.55	34.75
14/01/26	23:01:24.5Z	44.3	11.96	29	0.8	15.22	32.75
14/01/26	23:14:02.9Z	44.26	11.92	34	0.1	18.97	38.93
15/01/26	01:06:19.4,	44.32	11.81	32	-0.1	14.17	35.00
15/01/26	02:27:57.1Z	44.17	12.04	8	0.2	30.98	32.00
15/01/26	02:56:59.2Z	44.28	11.96	29	0.4	17.35	33.79
15/01/26	03:37:18.2Z	44.3	11.96	26	0.2	15.22	30.13
15/01/26	04:55:05.1Z	44.3	11.94	28	0.5	14.80	31.67
16/01/26	15:42:26.1Z	44.29	11.92	32	0.7	15.65	35.62
17/01/26	17:46:50.6Z	44.31	12.13	22	1	22.63	31.56
24/01/26	04:36:49.0Z	44.42	11.97	25	0.5	5.67	25.63
24/01/26	04:38:01.6Z	44.36	11.69	25	1.3	18.41	31.05
24/01/26	04:38:46.8Z	44.56	11.87	6	0.4	14.65	15.83

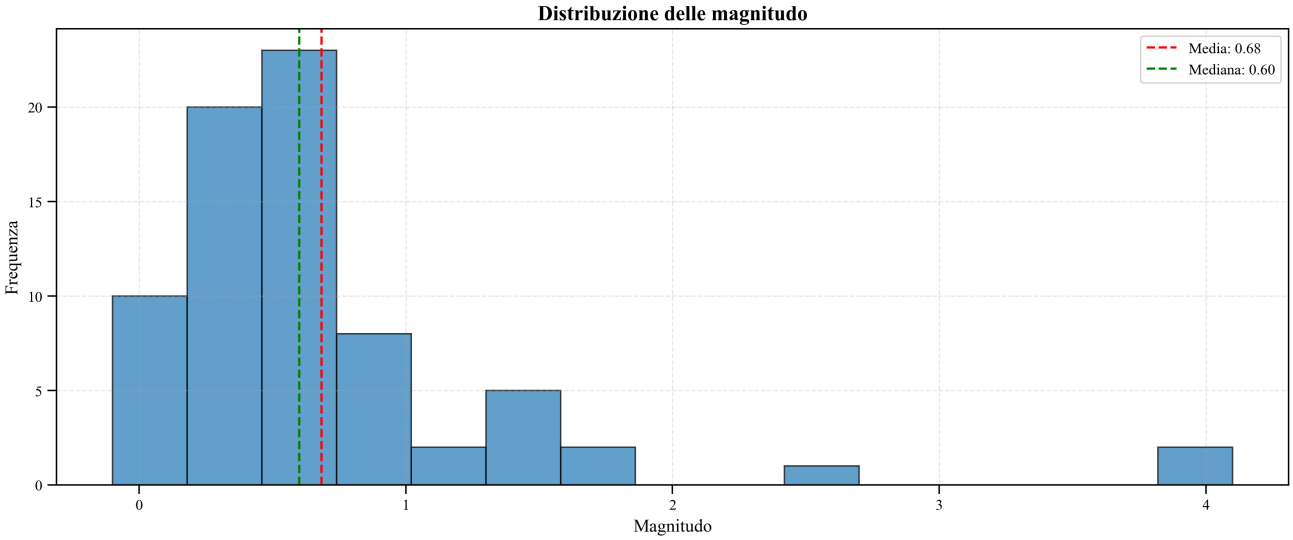


Fig. 4.3 – Distribuzione dei valori della magnitudo del catalogo della rete RMSP. Finestra temporale esaminata: 31 ottobre 2025 - 31 gennaio 2026.

La Fig. 4.3 mostra la distribuzione dei valori di magnitudo per gli eventi registrati mentre Fig. 4.4 la loro suddivisione per classi di profondità ipocentrale.

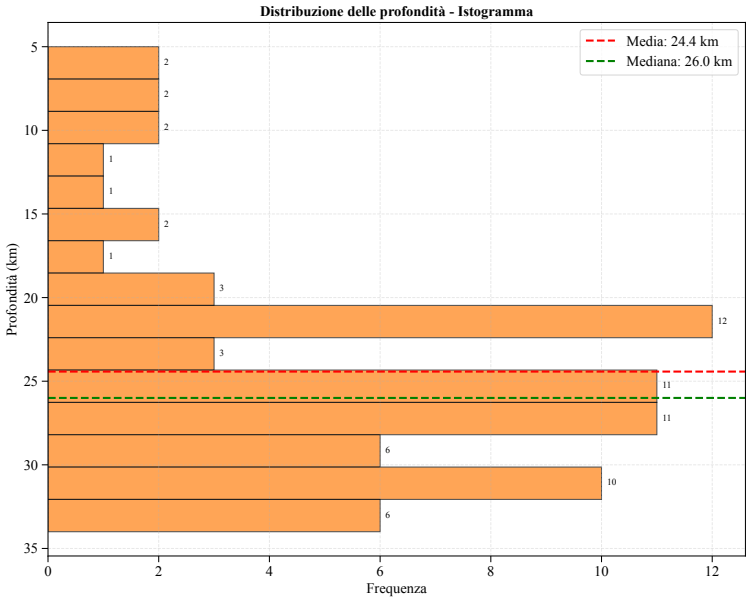


Fig. 4.4 – Distribuzione dei valori della profondità del catalogo della rete RMSP. Finestra temporale esaminata: 31 ottobre 2025 - 31 gennaio 2026.

La Fig. 4.5 mostra l'evoluzione temporale della sismicità registrata. Da una frequenza mensile che si assesta sempre al di sotto dei 10 eventi registrati, si nota il picco di registrazioni a seguito dei due forti eventi del 13 gennaio.

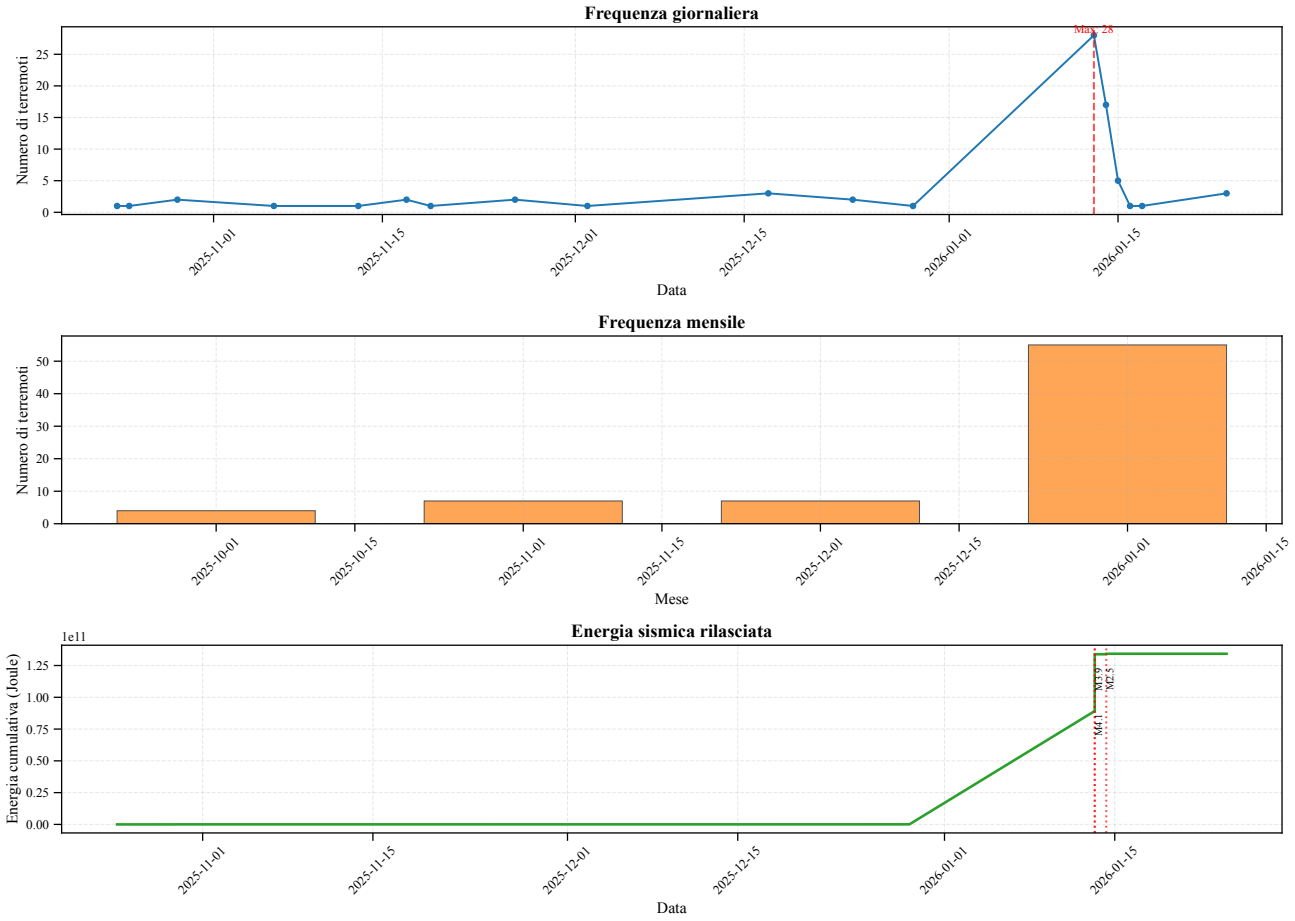


Fig. 4.5 – Analisi temporale della sismicità registrata. Finestra temporale esaminata: 31 ottobre 2025 - 31 gennaio 2026.

È stato applicato DBSCAN (Density-Based Spatial Clustering of Applications with Noise), un metodo di clustering (Ester et al., 1996) basato sulla nozione di densità, per individuare cluster spaziali di terremoti e per identificare sciami sismici o zone attive.

L’algoritmo oltre ad individuare la sequenza del 13 Gennaio 2026, a cui associa 34 eventi, individua un secondo piccolo cluster di 3 eventi ad est della sequenza stessa (Fig. 4.6).

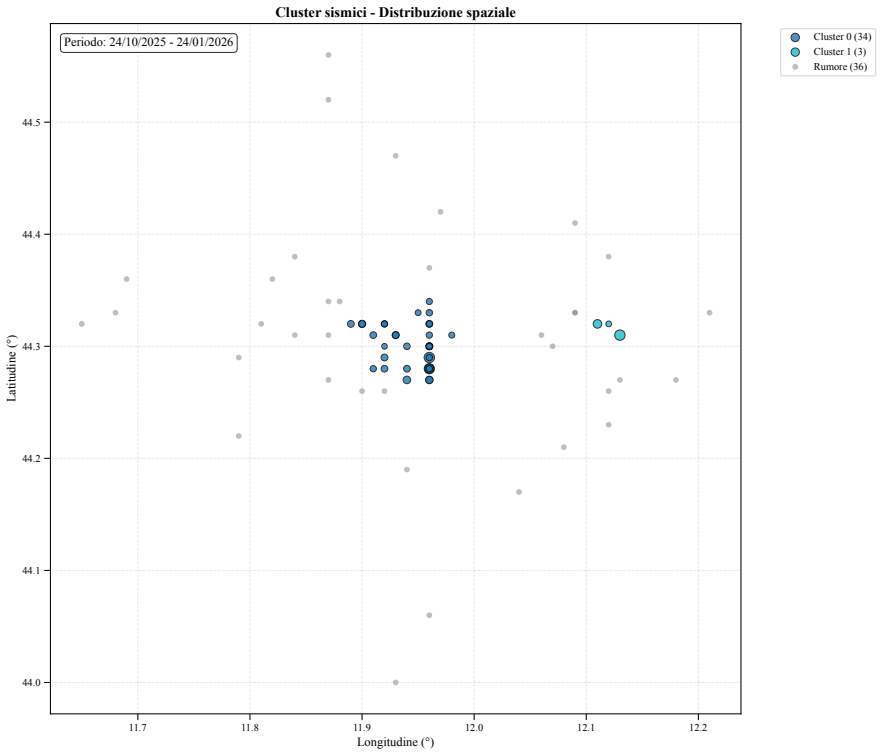


Fig. 4.6 – Cluster sismici identificati da DBSCAN.

In Fig. 4.7 riportiamo una visione tridimensionale della sismicità registrata in relazione alla posizione del reservoir, posizionato ad una profondità di poco inferiore a 2 km, alla proiezione in superficie dei due domini di rilevazione e alla posizione delle stazioni della rete di monitoraggio. Inoltre, entrambi i domini (i.e., Interno, DI, ed Esteso, DE) sono visualizzati anche nella loro estensione in profondità sino a 5 km e 10 km rispettivamente, come "volume cilindrico" la cui superficie laterale segue la curvatura della proiezione in superficie.

Nel periodo in cui è stato svolto il monitoraggio, un solo evento è avvenuto all'interno del Dominio Esteso (evidenziato in nero, Fig. 4.7; Tab. 4.2).

Tab. 4.2 Eventi sismici localizzati e rivisti da un sismologo che ricadono all'interno del Domini Esteso. Depth: profondità ipocentrale, MAG: magnitudo locale Richter, SP01: distanza epicentrale dalla stazione SP01 (Fig. 2.1)*, H. SP01: distanza*

Date	Time	LAT	LON	Depth (km)	MAG	SP01 (km)	H. SP01 (km)
24/10/25	23:10:07.3Z	44.47	11.93	**8**	**0.5**	5.05	9.46

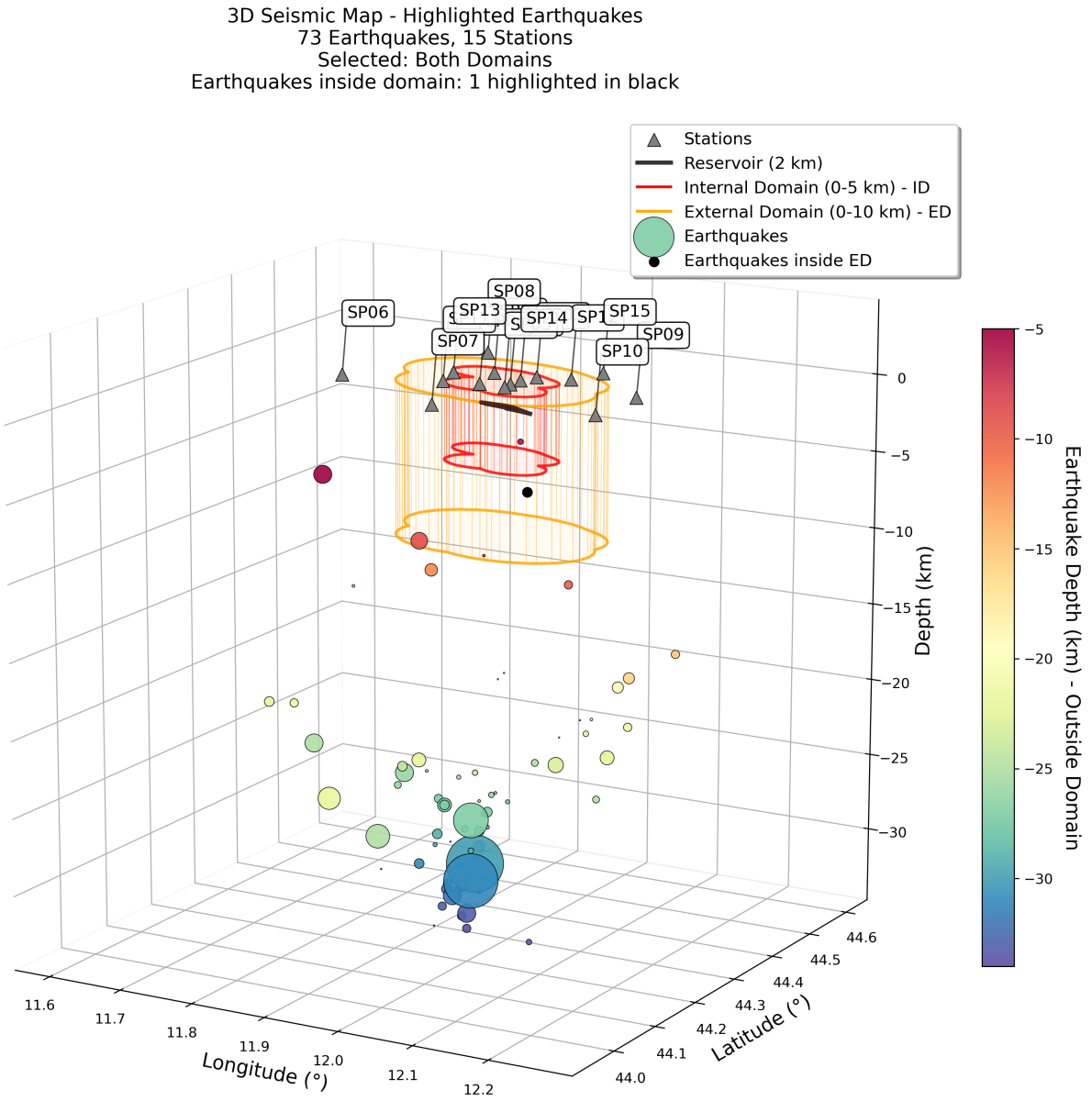


Fig. 4.7 – Distribuzione in 3D degli eventi del catalogo della rete RMSP e sviluppo in profondità dei Domini (Interno ed Esterno) come volume cilindrico la cui superficie laterale segue la curva della proiezione in superficie dello stesso. Finestra temporale esaminata: 31 ottobre 2025 - 31 gennaio 2026.

Nel capitolo 7 del DGOM (Documento di Gestione operativa del Monitoraggio) sono definite le *"Modalità operative di gestione del monitoraggio"*. In particolare, al paragrafo 7.1 (*"Definizione dei livelli di attivazione delle procedure di segnalazione in base ai dati di monitoraggio rilevati"*) viene riportato: "[…] per il monitoraggio sismico di San Potito, si ritiene perciò opportuno fare riferimento ai tre livelli di attivazione suggeriti dagli ILG, ai quali segue l'invio di segnalazioni ad-hoc all'interno del sistema di monitoraggio, al Comitato ed al Concessionario per l'avvio di procedure di valutazione dello stato dei parametri e dei segnali registrati".

Come riportato nel DGOM quindi, e in accordo agli ILG, i livelli sono attivati al raggiungimento dei valori di picco di velocità e accelerazione (rispettivamente indicati con PGV e PGA) misurati dalle stazioni della rete di rilevamento e della magnitudo locale (ML) stimata per gli eventi che si verificano all'interno del Dominio Interno (DI) di San Potito (si riporta per completezza, nel presente documento, la Tabella 4.2 corrisponde alla Tabella 7.1 del DGOM e alla Tabella 4 delle ILG).

Tabella 4.3 - Valori di riferimento per l'invio delle segnalazioni all'interno del sistema di monitoraggio per eventi che si verificano all'interno del Dominio Interno (DI) di San Potito (i.e., Tabella 4 delle ILG).

Livello	Caratteristiche degli eventi	ML	PGA (% g)	PGV (cm/s)
0	Micro-eventi o eventi molto deboli rilevati solo dagli strumenti	ML ≤ 1.5	< 0.5	< 0.4
1	Eventi deboli al di sotto del livello di percezione	1.5 < ML ≤ 2.2	>= 0.5 & < 2.4	>= 0.4 & < 1.9
2	Eventi deboli che possono essere percepiti	2.2 < ML ≤ 3	>= 2.4 & < 6.7	>= 1.9 & < 5.8
3	Eventi moderati o forti che sono percepiti	ML > 3	>= 6.7	>=5.8

L'evento che ricade nel Dominio Esterno rientra quindi nella "gestione ordinaria" del monitoraggio, ovvero corrispondono alla situazione in cui la magnitudo si mantiene al di sotto dei livelli di riferimento adottati e sopra definiti.

Tale quadro si colloca nel Livello di attivazione 0.

4.2 La sequenza del 13 gennaio 2026

Come detto precedentemente, il giorno 13 gennaio 2026 alle 08:27:56 (UTC) si è verificato un evento di magnitudo M4.1 (44.290°, 11.960°) all’interno dell’area di monitoraggio. Tale terremoto ha innescato una sequenza sismica il cui evento maggiore è stato un terremoto di M3.9 avvenuto a distanza di meno di 2 minuti dal principale (alle 08:29:16 UTC). La localizzazione del M3.9 è stimata essere molto simile a quella dell’evento principale (44.280°, 11.960°).

Di seguito si riporta l'analisi condotta per caratterizzare l’evoluzione della sequenza sismica durante il periodo: 13/01/2026 - 16/01/2026. Per tale periodo, si è proceduto all'identificazione e revisione manuale da parte dell’operatore di 51 eventi totali tra tutti quelli proposti dal sistema automatico di localizzazione (SeisComP).

In Fig. 4.8 è riportato l’andamento temporale della sequenza e in Fig. 4.9 in particolare viene evidenziato l’andamento nelle prime 24 ore.

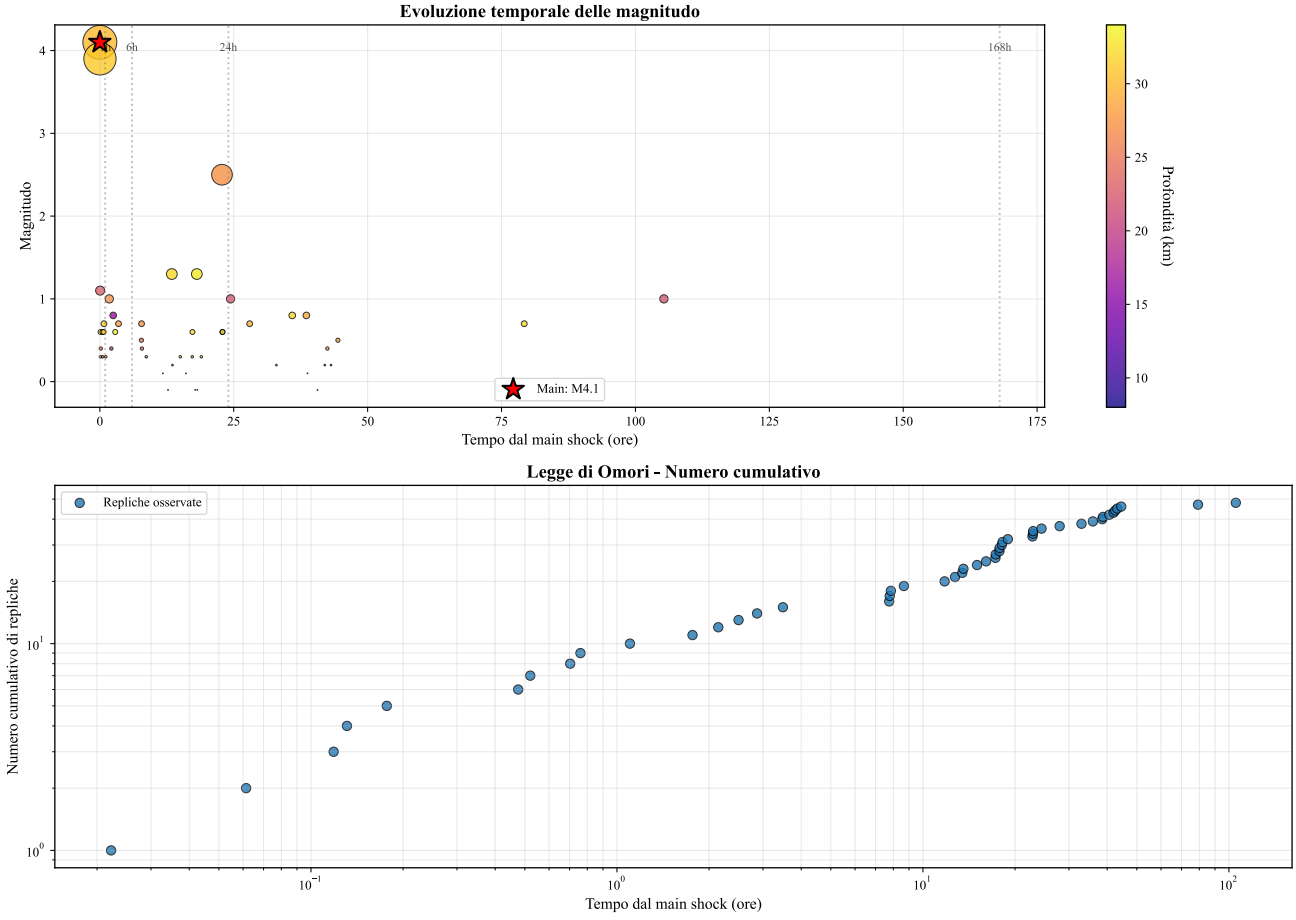


Fig. 4.8 – Andamento temporale della sequenza sismica del 13 gennaio 2026: main shock alle 08:27:56, M4.1.

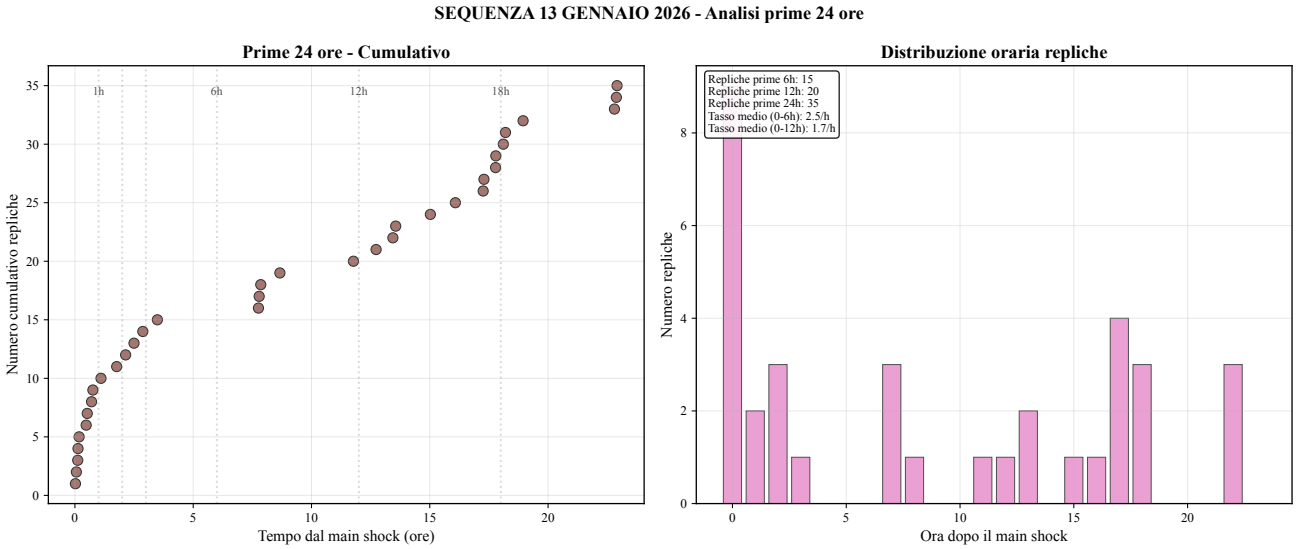


Fig. 4.9 – Andamento temporale della sequenza sismica del 13 gennaio 2026: analisi delle prime 24 ore.

Tabella 4.4 – Sintesi e statistiche della sequenza del 13 gennaio 2026

SINTESI SEQUENZA	STATISTICHE TEMPORALI:
Main shock: M4.1	• Primo aftershock: 0.0009 giorni (0.0 ore)
• Data: 13/01/2026 08:27:56	• Ultimo aftershock: 4.4 giorni dopo
• Repliche totali: 48	• Distribuzione temporale:
• Durata sequenza: 4.4 giorni	- <1h: 9 repliche (18.8%)
• Magnitudo media repliche: 0.60	- 1-24h: 26 repliche (54.2%)
• Magnitudo max repliche: 3.90	- 1-7g: 13 repliche (27.1%)
• Magnitudo min repliche: -0.10	

In Fig. 4.10 sono presentate graficamente alcune analisi statistiche quali: i) la distribuzione della magnitudo delle repliche; ii) la distribuzione delle profondità delle repliche; iii) la magnitudo delle repliche in funzione della profondità e iv) il tasso di occorrenza delle repliche.

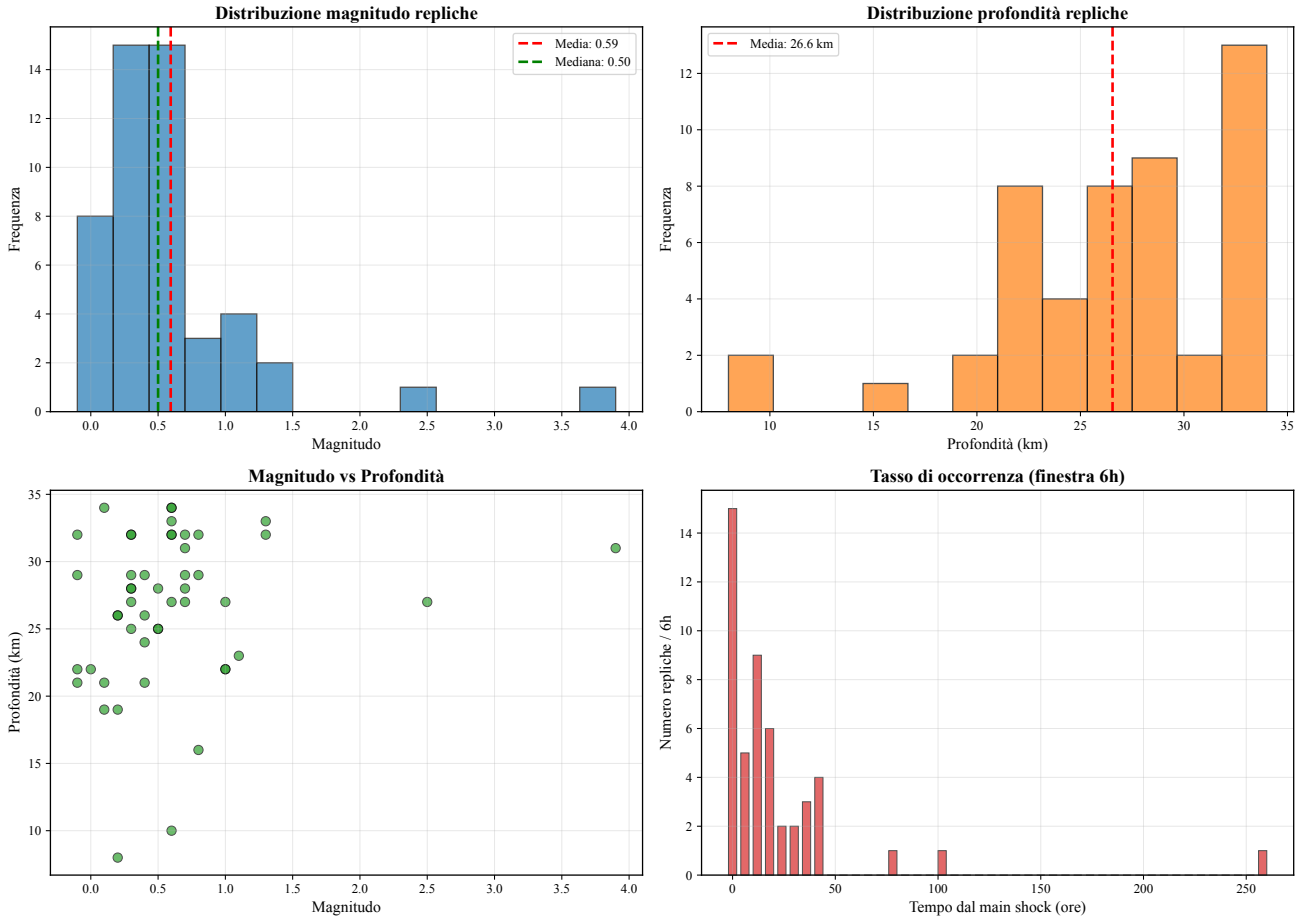


Fig. 4.10 – Sequenza sismica del 13 gennaio: i) la distribuzione della magnitudo delle repliche; ii) la distribuzione delle profondità delle repliche; iii) la magnitudo delle repliche in funzione della profondità e iv) il tasso di occorrenza delle repliche.

In termini della legge di Omori, una cui prima analisi preliminare è riportata nella Fig. 4.11 riassuntiva, la sequenza ha avuto un decadimento normale ($0.8 \leq p \leq 1.2$) tipico per i terremoti tettonici (Utsu, 1961).

Tabella 4.5 – Parametri di Omori

PARAMETRI OMORI:
• Produttività (k): 13.6
• Parametro c: 0.0954 giorni (137.4 minuti)
• Esponente p: 1.000
• Bontà fit (R^2): 0.952

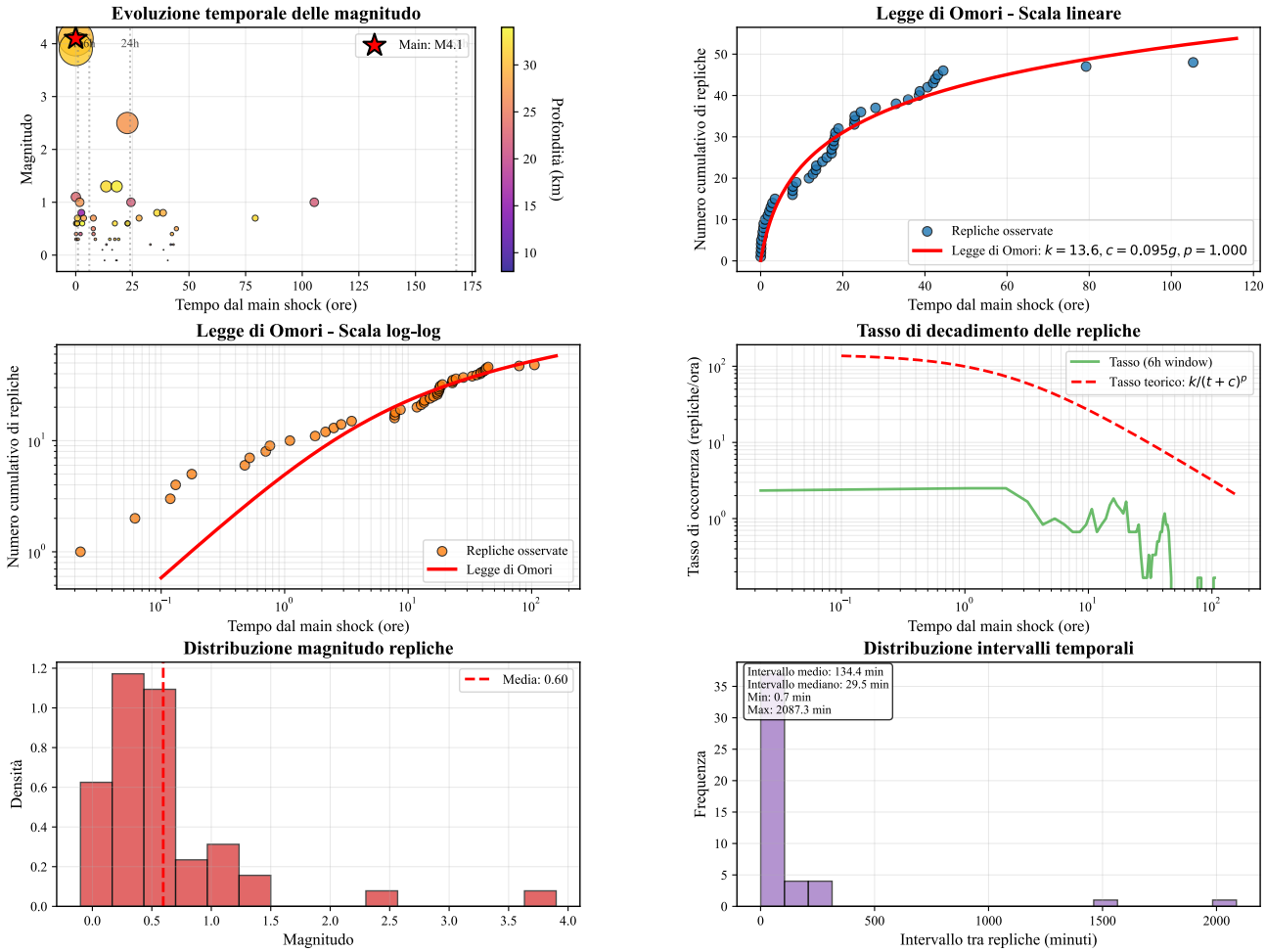


Fig. 4.11 – Analisi statistica della sequenza sismica del 13 gennaio.

4.3 Analisi della sequenza con LOC-FLOW

La sequenza sismica del 13 gennaio 2026 è stata analizzata anche attraverso l'applicazione di LOC-FLOW.

LOC-FLOW (Zhang et al., 2022) è un "flusso di lavoro" [workflow] automatico che include algoritmi di intelligenza artificiale per l'identificazione, la localizzazione e la caratterizzazione dei terremoti attraverso l'elaborazione di registrazioni sismiche in continuo (i.e., dalle forme d'onda grezze ai terremoti localizzati, incluso il calcolo della magnitudo).

LOC-FLOW è stato precedentemente utilizzato e calibrato dal personale di OGS il monitoraggio di un'area di stoccaggio di gas nell'area di Collalto (Sugan et al., 2023). Seppur il workflow non sia stato calibrato esplicitamente per l'area di monitoraggio in oggetto, la sua applicazione nel caso della sequenza del 13 gennaio 2026 ha avuto esito positivo e viene considerato un valido strumento da utilizzare in caso di sequenze sismiche.

Di seguito si riporta un breve sommario del confronto tra i risultati ottenuti dall'applicazione di LOC-FLOW e quelli ottenuti dagli operatori usando SeisComP.

Come riportato nel paragrafo precedente, nel catalogo del periodo in esame sono stati individuati 51 eventi appartenenti alla sequenza (circoli blu in Fig. 4.12). L'algoritmo LOC-FLOW ha analizzato i dati raw a posteriori dei giorni dal 13 al 17 gennaio individuando 52 eventi come "accettabili" in base alla scelta fatta dei parametri di settaggio (triangoli verdi in Fig. 4.12). Per lo stesso periodo, il sistema ha prima identificato e poi scartato 26 eventi (quadrati rossi in Fig. 4.12).

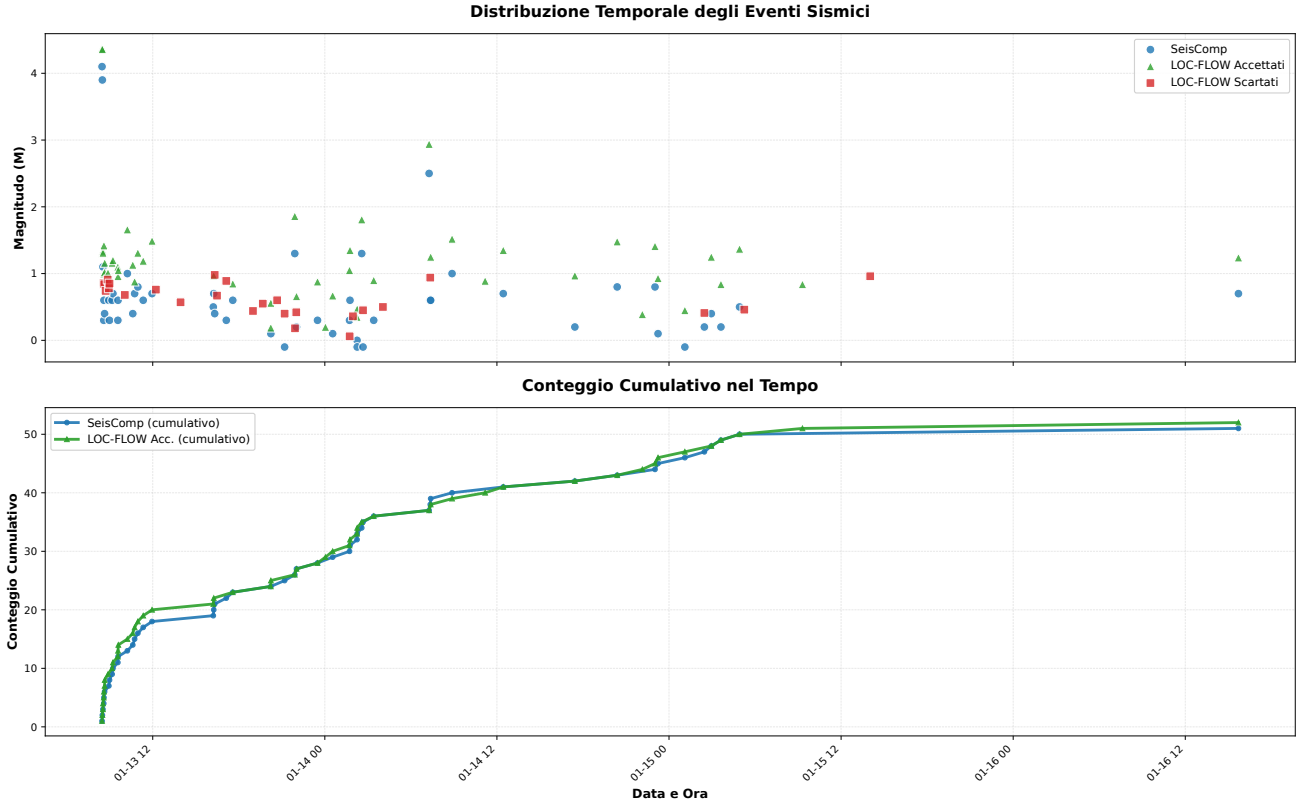
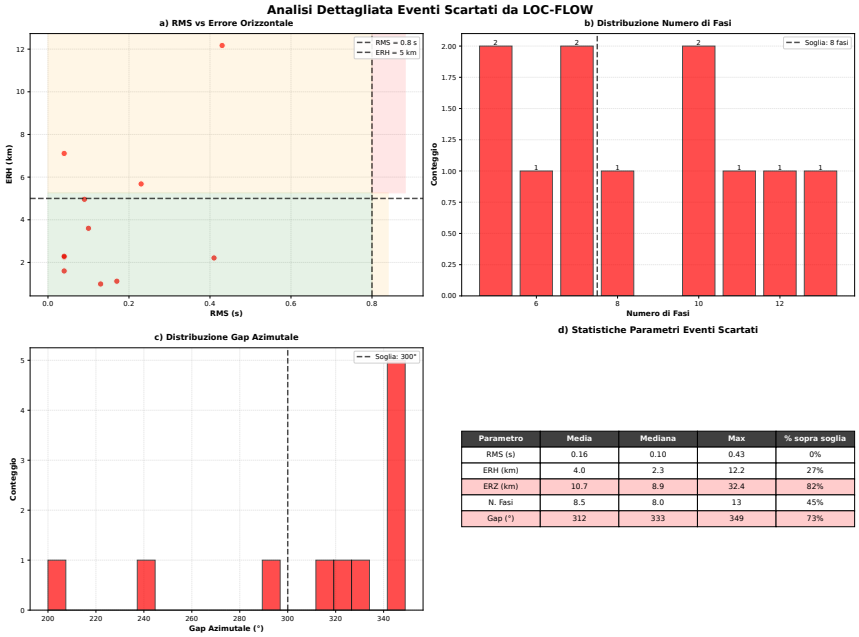


Fig. 4.12 – Andamento temporale della sequenza sismica del 13 gennaio 2026: confronto tra gli eventi localizzati con SeisComP e quelli individuati con LOC-FLOW.



Parametro	Media	Mediana	Max	% sopra soglia
RMS (s)	0.16	0.10	0.43	0%
ERH (km)	4.0	2.3	12.2	27%
ERZ (km)	10.7	8.9	32.4	82%
N. Fasi	8.5	8.0	13	45%
Gap (°)	312	333	349	73%

Fig. 4.13 – Sequenza sismica del 13 gennaio 2026: analisi dettagliata degli eventi scartati da LOC-FLOW.

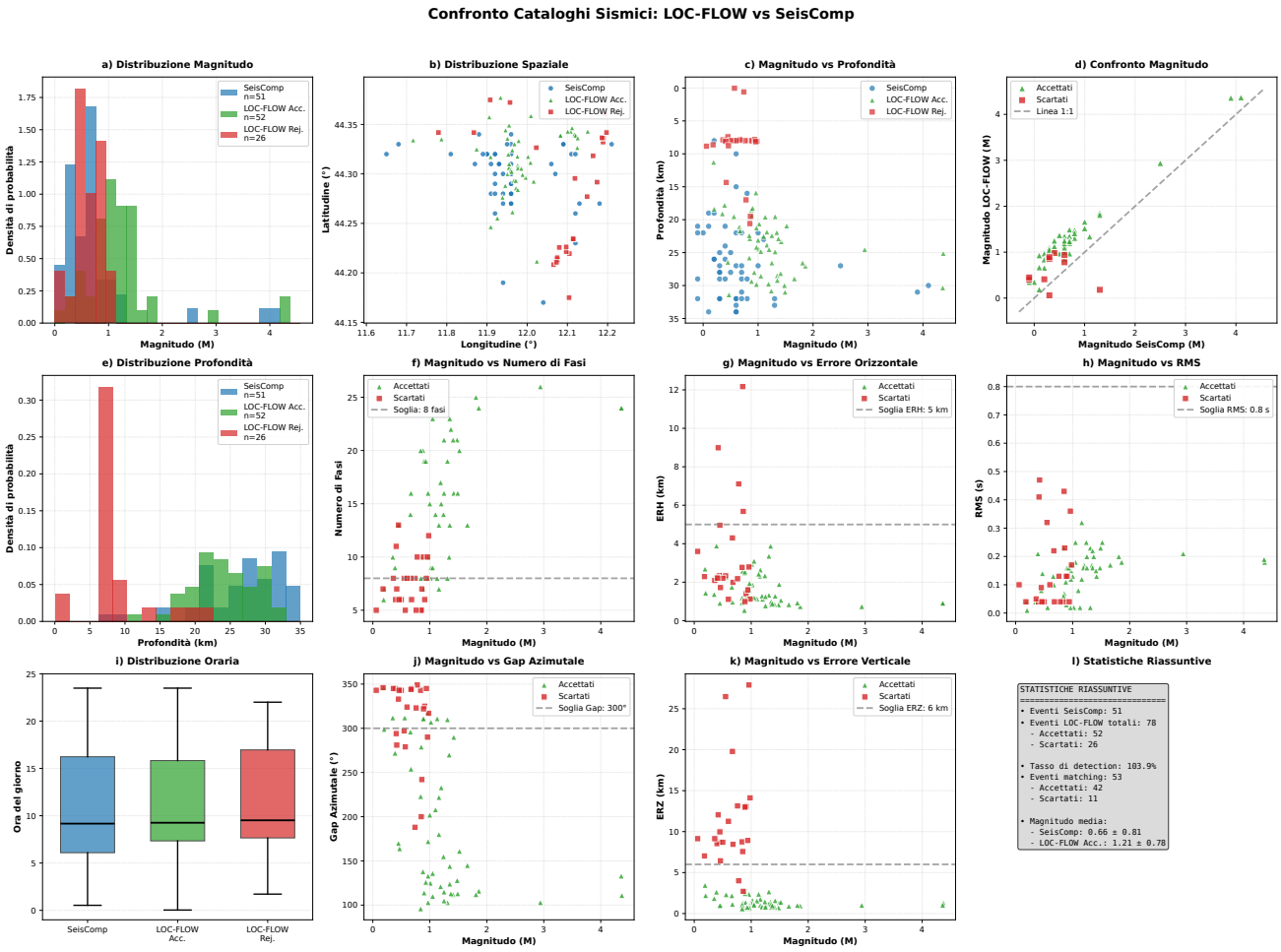


Fig. 4.14 – Sequenza sismica del 13 gennaio 2026: confronto tra i cataloghi di SeisComP e LOC-FLOW.

La scelta dei parametri ipocentrali per la selezione degli eventi rilevati in automatico dal LOC-FLOW è stata: a) RMS < 0.8 s; b) ERH < 5 km; c) ERZ < 6 km; Gap < 300°. Come riportato nella tabella di Fig. 4.13 l'82% degli eventi scartati ha superato la soglia, come evidenziato anche nel pannello k) di Fig. 4.14. Allo stesso modo il 73% degli eventi ha superato la soglia del Gap, vedasi anche il pannello j) di Fig. 4.14. In misura minore (45%) gli eventi scartati hanno un numero di fasi inferiore alla soglia fissata pari a 8 (pannello f) di Fig. 4.14). Altro elemento degno di nota è la concentrazione di una gran parte di eventi scartati a una profondità di poco inferiore ai 10 km (pannello c) di Fig. 4.14) e la loro collocazione geografica prevalentemente a sud dei domini del serbatoio (pannello b) di Fig. 4.14).

4.4 Nota congiunta delle SPM

Durante la sequenza sismica del 13 gennaio 2026, le SPM delle concessioni di "San Potito e Cotignola" (OGS) e "Longanesi" (INGV) si sono confrontate ed hanno realizzato delle analisi in comune per la gestione congiunta del monitoraggio. In tale occasione è stata spedita ai membri dei comitati ai sensi dell'art.5 Accordo quadro per i monitoraggi ai sensi degli ILG e alle concessioni di "Longanesi" e "San Potito e Cotignola" una "**Nota congiunta relativa agli eventi sismici in provincia di Ravenna del 13 gennaio 2026**" che riportiamo di seguito:

[…] "*I 13 gennaio 2026 si sono verificati due terremoti in provincia di Ravenna, entrambi di magnitudo superiore a 4.0. Il primo evento è avvenuto alle ore 08:27 UTC, seguito dal secondo a distanza di meno di due minuti. Entrambi gli eventi risultano localizzati al di fuori del Dominio Esteso (DE) delle aree di monitoraggio di Longanesi e di San Potito – Cotignola Stoccaggio.*

Gli eventi sono stati localizzati sia dalle due SPM (INGV ed OGS, rispettivamente) che dal servizio di sorveglianza sismica che si avvale della Rete Sismica Nazionale (RSN) dell'INGV (https://terremoti.ingv.it/event/44944142 e https://terremoti.ingv.it/event/44944222). La Figura 1 mostra il confronto tra le diverse localizzazioni rispetto ai domini di monitoraggio delle concessioni di (a) Longanesi e (b) San Potito – Cotignola, mentre i parametri delle soluzioni sono riportati nelle Tabelle 1 e 2. A titolo di riferimento, essendo eventi fuori dai domini, è inoltre presentata la soluzione ufficiale della RSN (Tabella 3). In tutte le soluzioni riportate, ***i due eventi risultano esterni al Dominio Esteso di entrambe le concessioni****.*

Le differenze fra le diverse localizzazioni sono nell'ordine di 1 - 2 km per le coordinate orizzontali, 1 km per la profondità, e 0.4 unità per la magnitudo. Tali differenze, che rientrano nei margini di confidenza delle diverse soluzioni, sono principalmente dovute alle incertezze intrinseche al processo di localizzazione dei terremoti, quali, ad esempio, le differenze nella geometria della rete di stazioni utilizzata, nei modelli di velocità adottati e nelle incertezze associate alla stima dei tempi di arrivo delle fasi sismiche impiegate. Una discussione dettagliata sulla natura di queste incertezze e sul loro impatto sulle soluzioni ipocentrali è disponibile in Garcia et al. (2020), Bulletin of the Seismological Society of America, 110, 2423–2440, https://doi.org/10.1785/0120200100."

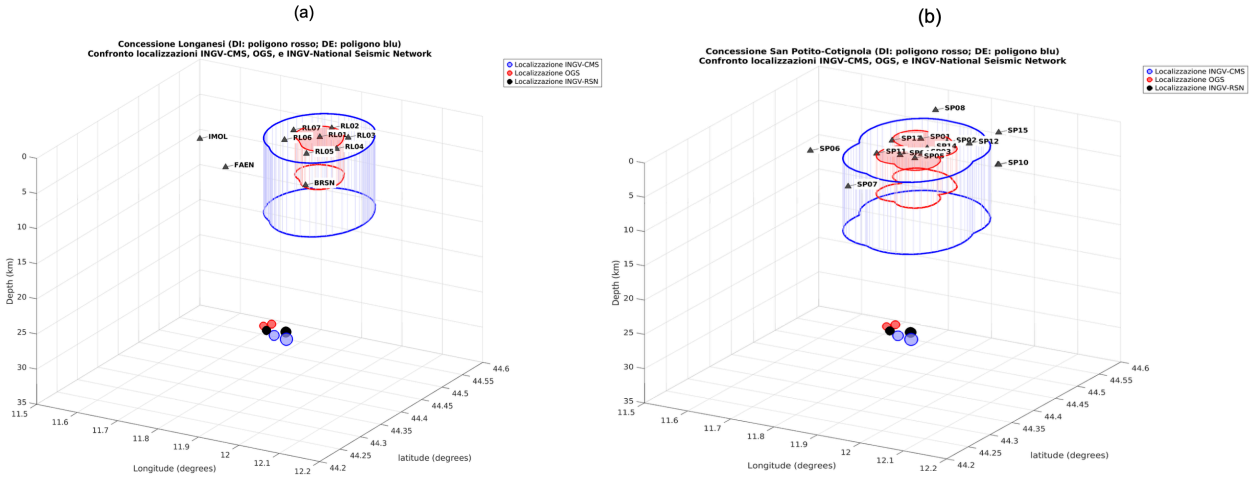


Fig. 4.15 – Localizzazione degli eventi in confronto con i domini di monitoraggio: (a) Concessione Longanesi. (b) Concessione San Potito - Cotignola equenza sismica del 13 gennaio

Tabella 1. Parametri della localizzazione degli eventi - SPM San Potito e Cotignola

Time	Lat.	Lon.	Depth	Magnitude (ML)
2026-01-13T08:27:56.7	44.31	11.97	22.0	4.1
2026-01-13T08:29:16.0	44.30	11.96	22.0	3.9

Tabella 2. Parametri della localizzazione degli eventi - SPM Longanesi

Time	Lat.	Lon.	Depth	Magnitude (ML)
2026-01-13T08:27:57	44.2952	12.0217	23.0	4.5
2026-01-13T08:29:17	44.2988	11.9875	23.0	4.3

Tabella 3. Parametri della localizzazione degli eventi - Servizio Sorveglianza sismica - RSN

Time	Lat.	Lon.	Depth	Magnitude (ML)
2026-01-13T08:27:57	44.3162	11.9993	23.0	4.3
2026-01-13T08:29:17	44.2880	11.9795	22.0	4.1

5 SERVIZI WEB

5.1 Sito WEB

È stato creato un sito web dedicato alla rete di monitoraggio di "SAN POTITO E COTIGNOLA STOCCAGGIO" e raggiungibile all’indirizzo:

https://rete-sanpotito.ogs.it/



Fig. 5.1 – Home page del sito web dedicato alla rete di monitoraggio di "SAN POTITO E COTIGNOLA STOCCAGGIO" (https://rete-sanpotito.ogs.it/)

5.2 WEB Service

Sono state completate la realizzazione e l'implementazione della nuova infrastruttura per rendere disponibile il download dei dati.

Il link all'interfaccia web, la quale costituisce la parte visibile dell'infrastruttura e contiene tutte le istruzioni e i comandi operative per eseguire il download dei dati è: https://nat-scp-srv.ogs.it/

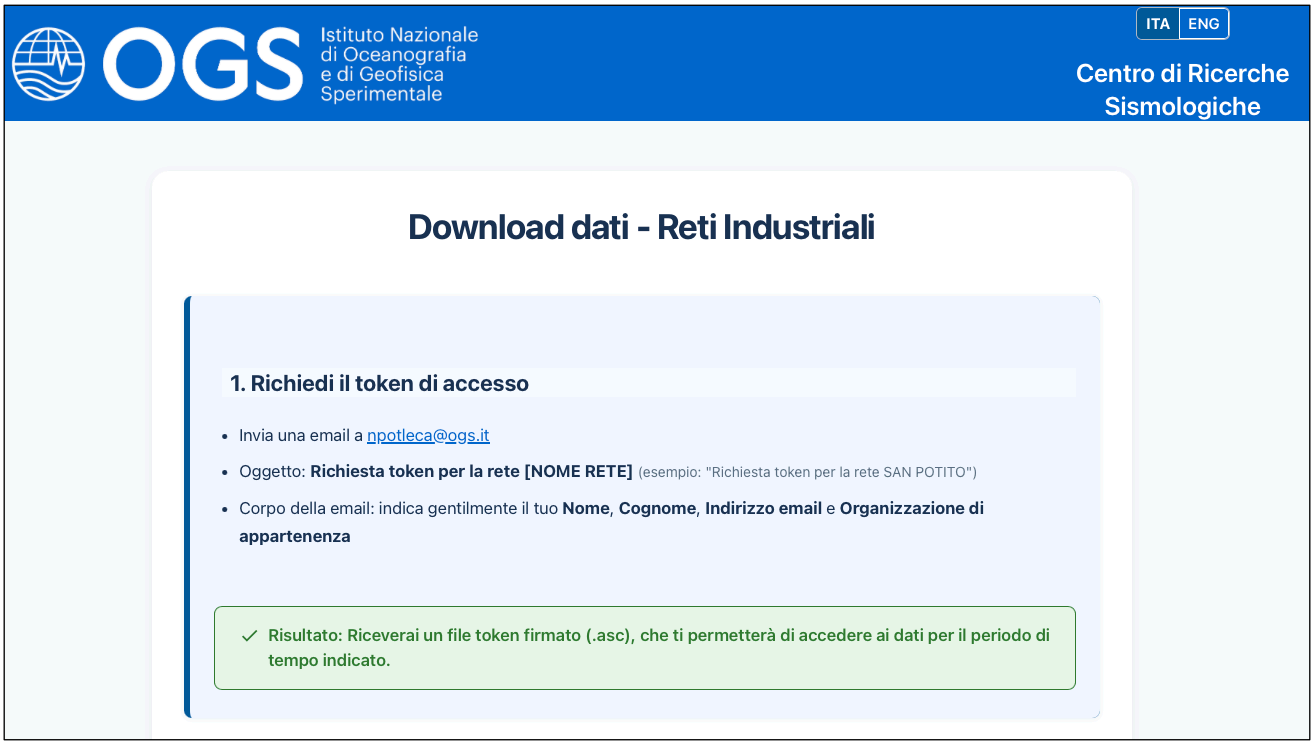


Fig. 5.2 – Home page dell'interfaccia web, la quale costituisce la parte visibile dell'infrastruttura per rendere disponibile il download dei dati della rete di monitoraggio di "SAN POTITO E COTIGNOLA STOCCAGGIO".

L'architettura è pienamente attiva e configurata come segue:

- L'interfaccia web permette di configurare la richiesta e i comandi utili ad eseguire il download dei dati mediante autenticazione con token;
- Le pagine web (ITA/ENG) sono state sviluppate utilizzando il framework Bootstrap Italia per assicurare la conformità con le direttive AgID per i siti della Pubblica Amministrazione, adottando il layout standard OGS;
- La selezione della lingua è possibile tramite gli appositi selettori in alto a destra;
- L'infrastruttura è configurata per funzionare correttamente sia all'interno della rete OGS, sia mediante VPN, sia dall'esterno (connessione propria);
- Al momento è possibile scaricare solo i dati relativi alla rete di San Potito (SP);
- Il selettore dati dell'interfaccia web permette di specificare e selezionare: vincoli temporali, vincoli rete, vincoli canale;
- Nell'interfaccia web è integrato un sistema di feedback che, tramite testi, messaggi informativi e di errore, guida l'utente durante l'esecuzione della procedura;
- I comandi operativi generati dall'interfaccia web sono pronti per essere copiati e utilizzati dall'utente finale;
- Sono implementati specifici controlli sia lato server che lato web per validare le query e per assicurare che vengano eseguite solamente le richieste consentite. Questi includono vincoli operativi come: limiti temporali (cioè download limitati a una sola giornata) e restrizioni alle sole stazioni della rete SP.

Tutta l'infrastruttura è attiva e operativa (sia la parte front-end che back-end).

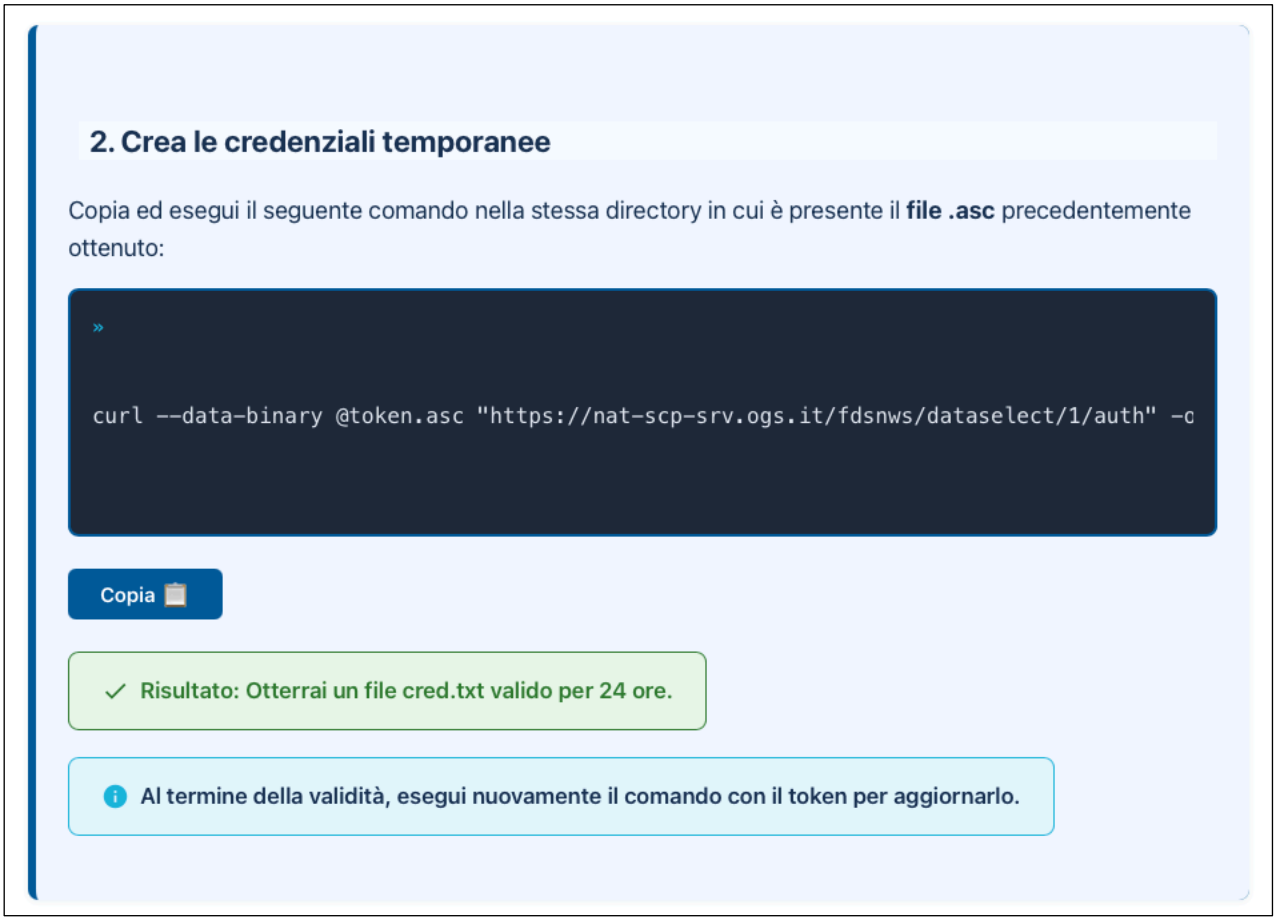


Fig. 5.3 – Home page dell'interfaccia web, la quale costituisce la parte visibile dell'infrastruttura per rendere disponibile il download dei dati della rete di monitoraggio di "SAN POTITO E COTIGNOLA STOCCAGGIO": creazione delle credenziali temporanee.

OGS fornisce i suoi dati tramite un Web Services basato sulle specifiche FDSN (https://www.fdsn.org/webservices/).

Al momento vengono distribuite le informazioni relative ai segnali sismici tramite un servizio web basato sul DataSelect (https://www.fdsn.org/webservices/fdsnws-event-1.2.pdf). Si possono quindi scaricare i dati della forma d'onda, per i canali e le finestre temporali richiesti, in formato MSEED (http://scp-srv.core03.ogs.it:8080/fdsnws/dataselect/1/builder).



Fig. 5.4 - Home page dell’interfaccia web, la quale costituisce la parte visibile dell'infrastruttura per rendere disponibile il download dei dati della rete di monitoraggio di "SAN POTITO E COTIGNOLA STOCCAGGIO": vincoli temporali (a sinistra) e di rete (a destra).

6 CONCLUSIONI

La presente relazione rendiconta l'attività di monitoraggio sismico che l'OGS svolge presso la concessione di stoccaggio di gas metano denominata "SAN POTITO & COTIGNOLA STOCCAGGIO", per conto di Stogit Adriatica S.p.A (società del Gruppo Snam, https://www.stogitadriatica.it/), per il periodo compreso tra novembre 2025 e gennaio 2026.

Gli eventi sismici localizzati e rivisti da un sismologo sono complessivamente 73 in un range di magnitudo compresa tra -0.1 e 4.1.

È stata rilevata una sequenza sismica a partire dal 13 gennaio 2026 alle ore 08:27 UTC con una coppia di eventi di magnitudo M4.1 e M3.9 rispettivamente. Gli eventi sono stati localizzati anche dal servizio di sorveglianza sismica dell'INGV che si avvale della Rete Sismica Nazionale (RSN) e dalla SPM della concessione "Longanesi" (INGV). In tutte le soluzioni riportate, i due eventi risultano esterni al Dominio Esterno di entrambe le concessioni.

Secondo la nostra analisi, la sequenza ha avuto un decadimento normale tipico per i terremoti tettonici.

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9 APPENDICE

Riportiamo qui di seguito la lettura delle fasi per ciascuno dei terremoti del catalogo.

Alert SPogs2025ndpz: determined by 14 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 14 stations used, weight 14):

Northern Italy ML=1.8 2025/07/06 23:27:10.6 44.13 N 11.35 E 55 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/07/06	23:27:22.5	0.0	0.0	-0.2	0.4	55	0.0	1.9	0.0
SP06	SP	25/07/06	23:27:32.4	0.0	0.0	0.2	0.4	55	0.0	1.9	0.0
SP11	SP	25/07/06	23:27:34.2	0.0	0.0	0.1	0.4	58	0.0	1.6	0.0
SP11	SP	25/07/06	23:27:24.1	0.0	0.0	0.3	0.4	58	0.0	1.6	0.0
SP13	SP	25/07/06	23:27:24.2	0.0	0.0	0.1	0.5	52	0.0	1.4	0.0
SP13	SP	25/07/06	23:27:34.6	0.0	0.0	0.1	0.5	52	0.0	1.4	0.0
SP04	SP	25/07/06	23:27:34.5	0.0	0.0	-0.4	0.5	59	0.0	1.4	0.0
SP04	SP	25/07/06	23:27:24.4	0.0	0.0	0.2	0.5	59	0.0	1.4	0.0
SP05	SP	25/07/06	23:27:35.3	0.0	0.0	-0.0	0.5	61	0.0	1.6	0.0
SP05	SP	25/07/06	23:27:24.6	0.0	0.0	0.1	0.5	61	0.0	1.6	0.0
SP01	SP	25/07/06	23:27:24.2	0.0	0.0	-0.4	0.5	53	0.0	3.1	0.0
SP08	SP	25/07/06	23:27:24.9	0.0	0.0	-0.1	0.5	41	0.0	2.7	0.0
SP02	SP	25/07/06	23:27:25.2	0.0	0.0	0.1	0.5	55	0.0	1.6	0.0
SP02	SP	25/07/06	23:27:36.3	0.0	0.0	0.1	0.5	55	0.0	1.6	0.0

RMS-ERR: 0.20

Event created: 2025/07/06 23:27:28
This origin created: 2025/07/16 09:28:36

Alert SPogs2025nhyx: determined by 6 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 6 stations used, weight 6):

Northern Italy ML=1.3 2025/07/09 08:30:17.0 44.25 N 11.93 E 5 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/07/09	08:30:17.3	0.0	0.0	-1.6	0.0	216	0.0	1.5	0.0
SP07	SP	25/07/09	08:30:22.8	0.0	0.0	2.5	0.0	216	0.0	1.5	0.0
SP04	SP	25/07/09	08:30:20.2	0.0	0.0	-1.4	0.1	357	0.0	1.0	0.0
SP04	SP	25/07/09	08:30:27.5	0.0	0.0	2.4	0.1	357	0.0	1.0	0.0
SP06	SP	25/07/09	08:30:26.7	0.0	0.0	0.4	0.2	304	0.0	1.4	0.0
SP06	SP	25/07/09	08:30:19.9	0.0	0.0	-2.4	0.2	304	0.0	1.4	0.0

RMS-ERR: 1.92

Event created: 2025/07/09 08:30:25
This origin created: 2025/07/16 09:34:34

Alert SPogs2025njym: determined by 7 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 7 stations used, weight 7):

Northern Italy ML=0.9 2025/07/10 10:33:20.0 44.58 N 11.96 E 18 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP15	SP	25/07/10	10:33:26.6	0.0	0.0	0.1	0.1	154	0.0	1.1	0.0
SP15	SP	25/07/10	10:33:23.7	0.0	0.0	-0.1	0.1	154	0.0	1.1	0.0
SP12	SP	25/07/10	10:33:24.3	0.0	0.0	-0.0	0.1	168	0.0	1.4	0.0
SP02	SP	25/07/10	10:33:24.3	0.0	0.0	-0.0	0.1	181	0.0	0.5	0.0
SP02	SP	25/07/10	10:33:27.3	0.0	0.0	-0.2	0.1	181	0.0	0.5	0.0
SP14	SP	25/07/10	10:33:28.2	0.0	0.0	0.1	0.2	182	0.0	0.8	0.0
SP14	SP	25/07/10	10:33:24.8	0.0	0.0	0.1	0.2	182	0.0	0.8	0.0

RMS-ERR: 0.10

Event created: 2025/07/10 10:33:26
This origin created: 2025/07/11 12:56:12

Alert SPogs2025npqr: determined by 18 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 18 stations used, weight 18):

Central Italy ML=2.9 2025/07/13 13:25:32.1 43.91 N 11.93 E 18 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/07/13	13:25:38.9	0.0	0.0	-1.6	0.3	360	0.0	3.1	0.0
SP07	SP	25/07/13	13:25:47.4	0.0	0.0	0.3	0.3	360	0.0	3.1	0.0
SP10	SP	25/07/13	13:25:44.6	0.0	0.0	2.9	0.4	20	0.0	3.0	0.0
SP06	SP	25/07/13	13:25:41.7	0.0	0.0	-0.7	0.4	343	0.0	3.1	0.0
SP06	SP	25/07/13	13:25:51.8	0.0	0.0	1.4	0.4	343	0.0	3.1	0.0
SP11	SP	25/07/13	13:25:53.2	0.0	0.0	2.4	0.5	355	0.0	2.7	0.0
SP11	SP	25/07/13	13:25:41.9	0.0	0.0	-0.7	0.5	355	0.0	2.7	0.0
SP05	SP	25/07/13	13:25:51.9	0.0	0.0	0.9	0.5	2	0.0	2.5	0.0
SP05	SP	25/07/13	13:25:41.9	0.0	0.0	-0.8	0.5	2	0.0	2.5	0.0
SP04	SP	25/07/13	13:25:42.1	0.0	0.0	-0.6	0.5	359	0.0	2.5	0.0
SP04	SP	25/07/13	13:25:44.4	0.0	0.0	-6.6	0.5	359	0.0	2.5	0.0
SP03	SP	25/07/13	13:25:44.8	0.0	0.0	1.8	0.5	2	0.0	2.9	0.0
SP14	SP	25/07/13	13:25:43.1	0.0	0.0	-0.3	0.5	2	0.0	2.6	0.0
SP13	SP	25/07/13	13:25:42.8	0.0	0.0	-0.6	0.5	354	0.0	2.6	0.0
SP09	SP	25/07/13	13:25:43.2	0.0	0.0	-0.2	0.5	16	0.0	3.2	0.0
SP02	SP	25/07/13	13:25:43.3	0.0	0.0	-0.5	0.5	3	0.0	2.5	0.0
SP02	SP	25/07/13	13:25:55.1	0.0	0.0	2.0	0.5	3	0.0	2.5	0.0

SP15 SP 25/07/13 13:25:46.0 0.0 0.0 1.0 0.6 6 0.0 2.9 0.0

RMS-ERR: 2.02

Event created: 2025/07/13 13:25:44
This origin created: 2025/07/15 07:08:30

Alert SPogs2025nptc: determined by 15 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 15 stations used, weight 15):

Central Italy ML=2.7 2025/07/13 14:38:53.3 43.75 N 11.98 E 13 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/07/13	14:39:03.6	0.0	0.0	-0.9	0.5	356	0.0	3.2	0.0
SP07	SP	25/07/13	14:39:12.0	0.0	0.0	-1.1	0.5	356	0.0	3.2	0.0
SP10	SP	25/07/13	14:39:14.1	0.0	0.0	-0.7	0.6	11	0.0	0.0	0.0
SP06	SP	25/07/13	14:39:06.3	0.0	0.0	-0.0	0.6	344	0.0	2.9	0.0
SP06	SP	25/07/13	14:39:16.4	0.0	0.0	-0.1	0.6	344	0.0	2.9	0.0
SP11	SP	25/07/13	14:39:06.4	0.0	0.0	-0.2	0.6	353	0.0	2.5	0.0
SP11	SP	25/07/13	14:39:17.2	0.0	0.0	0.3	0.6	353	0.0	2.5	0.0
SP05	SP	25/07/13	14:39:17.6	0.0	0.0	0.7	0.6	358	0.0	2.4	0.0
SP05	SP	25/07/13	14:39:06.5	0.0	0.0	-0.1	0.6	358	0.0	2.4	0.0
SP04	SP	25/07/13	14:39:07.0	0.0	0.0	0.3	0.6	356	0.0	2.4	0.0
SP13	SP	25/07/13	14:39:18.8	0.0	0.0	0.3	0.7	353	0.0	2.4	0.0
SP13	SP	25/07/13	14:39:07.9	0.0	0.0	0.5	0.7	353	0.0	2.4	0.0
SP02	SP	25/07/13	14:39:07.9	0.0	0.0	0.1	0.7	359	0.0	2.3	0.0
SP02	SP	25/07/13	14:39:19.8	0.0	0.0	0.7	0.7	359	0.0	2.3	0.0
SP12	SP	25/07/13	14:39:08.3	0.0	0.0	0.4	0.7	1	0.0	2.7	0.0

RMS-ERR: 0.52

Event created: 2025/07/13 14:39:09
This origin created: 2025/07/16 08:49:20

Alert SPogs2025obhy: determined by 13 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 13 stations used, weight 13):

Central Italy ML=2.6 2025/07/19 22:39:17.5 43.72 N 12.00 E 12 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/07/19	22:39:41.3	0.0	0.0	-0.4	0.6	344	0.0	2.7	0.0
SP06	SP	25/07/19	22:39:31.1	0.0	0.0	0.0	0.6	344	0.0	2.7	0.0
SP11	SP	25/07/19	22:39:42.6	0.0	0.0	0.6	0.6	352	0.0	2.4	0.0
SP11	SP	25/07/19	22:39:31.3	0.0	0.0	0.0	0.6	352	0.0	2.4	0.0
SP05	SP	25/07/19	22:39:31.4	0.0	0.0	0.1	0.7	357	0.0	2.3	0.0
SP05	SP	25/07/19	22:39:41.5	0.0	0.0	-0.6	0.7	357	0.0	2.3	0.0

SP04	SP	25/07/19	22:39:31.4	0.0	0.0	0.0	0.7	355	0.0	2.3	0.0
SP04	SP	25/07/19	22:39:41.9	0.0	0.0	-0.2	0.7	355	0.0	2.3	0.0
SP09	SP	25/07/19	22:39:43.5	0.0	0.0	0.4	0.7	7	0.0	2.8	0.0
SP09	SP	25/07/19	22:39:31.6	0.0	0.0	-0.2	0.7	7	0.0	2.8	0.0
SP13	SP	25/07/19	22:39:32.1	0.0	0.0	-0.1	0.7	352	0.0	2.3	0.0
SP13	SP	25/07/19	22:39:43.8	0.0	0.0	0.2	0.7	352	0.0	2.3	0.0
SP12	SP	25/07/19	22:39:32.9	0.0	0.0	0.2	0.7	0	0.0	2.6	0.0

RMS-ERR: 0.30

Event created: 2025/07/19 22:39:35
This origin created: 2025/07/21 08:35:43

Alert SPogs2025oblt: determined by 16 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 16 stations used, weight 16):

Northern Italy ML=0.8 2025/07/20 00:33:58.7 44.29 N 12.00 E 16 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/07/20	00:34:02.6	0.0	0.0	-0.3	0.1	228	0.0	0.7	0.0
SP07	SP	25/07/20	00:34:06.2	0.0	0.0	0.0	0.1	228	0.0	0.7	0.0
SP05	SP	25/07/20	00:34:06.8	0.0	0.0	0.5	0.1	336	0.0	0.3	0.0
SP05	SP	25/07/20	00:34:02.9	0.0	0.0	-0.1	0.1	336	0.0	0.3	0.0
SP10	SP	25/07/20	00:34:06.6	0.0	0.0	0.2	0.1	91	0.0	1.0	0.0
SP10	SP	25/07/20	00:34:02.5	0.0	0.0	-0.5	0.1	91	0.0	1.0	0.0
SP04	SP	25/07/20	00:34:03.2	0.0	0.0	0.0	0.1	323	0.0	1.1	0.0
SP03	SP	25/07/20	00:34:03.3	0.0	0.0	0.1	0.1	340	0.0	1.0	0.0
SP11	SP	25/07/20	00:34:03.5	0.0	0.0	0.1	0.1	307	0.0	0.3	0.0
SP14	SP	25/07/20	00:34:03.6	0.0	0.0	0.1	0.1	344	0.0	0.3	0.0
SP09	SP	25/07/20	00:34:03.7	0.0	0.0	0.0	0.1	39	0.0	1.0	0.0
SP12	SP	25/07/20	00:34:04.2	0.0	0.0	0.2	0.2	1	0.0	0.9	0.0
SP13	SP	25/07/20	00:34:04.0	0.0	0.0	0.0	0.2	319	0.0	0.4	0.0
SP01	SP	25/07/20	00:34:04.3	0.0	0.0	0.3	0.2	334	0.0	1.5	0.0
SP01	SP	25/07/20	00:34:07.1	0.0	0.0	-1.1	0.2	334	0.0	1.5	0.0
SP06	SP	25/07/20	00:34:04.8	0.0	0.0	0.3	0.2	282	0.0	1.1	0.0

RMS-ERR: 0.36

Event created: 2025/07/20 00:34:05
This origin created: 2025/07/21 08:39:17

Alert SPogs2025ocml: determined by 11 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 11 stations used, weight 11):

Northern Italy ML=0.5 2025/07/20 14:03:33.3 44.32 N 11.92 E 9 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	25/07/20	14:03:35.9	0.0	0.0	-0.4	0.1	359	0.0	0.3	0.0
SP04	SP	25/07/20	14:03:38.9	0.0	0.0	0.1	0.1	359	0.0	0.3	0.0
SP11	SP	25/07/20	14:03:36.1	0.0	0.0	-0.3	0.1	322	0.0	0.4	0.0
SP11	SP	25/07/20	14:03:39.3	0.0	0.0	0.5	0.1	322	0.0	0.4	0.0
SP05	SP	25/07/20	14:03:36.0	0.0	0.0	-0.5	0.1	26	0.0	0.2	0.0
SP05	SP	25/07/20	14:03:38.9	0.0	0.0	0.0	0.1	26	0.0	0.2	0.0
SP07	SP	25/07/20	14:03:37.1	0.0	0.0	0.3	0.1	177	0.0	0.6	0.0
SP13	SP	25/07/20	14:03:36.6	0.0	0.0	-0.7	0.1	335	0.0	0.3	0.0
SP06	SP	25/07/20	14:03:37.6	0.0	0.0	-0.1	0.1	277	0.0	0.7	0.0
SP12	SP	25/07/20	14:03:38.1	0.0	0.0	0.2	0.1	25	0.0	0.9	0.0
SP15	SP	25/07/20	14:03:39.9	0.0	0.0	0.9	0.2	22	0.0	1.1	0.0

RMS-ERR: 0.45

Event created: 2025/07/20 14:03:39
This origin created: 2025/07/21 08:42:18

Alert SPogs2025otkz: determined by 14 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 14 stations used, weight 14):

Northern Italy ML=1.6 2025/07/29 20:38:21.0 44.30 N 11.87 E 4 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP11	SP	25/07/29	20:38:24.7	0.0	0.0	0.8	0.1	1	0.0	1.5	0.0
SP11	SP	25/07/29	20:38:25.1	0.0	0.0	-1.2	0.1	1	0.0	1.5	0.0
SP07	SP	25/07/29	20:38:22.9	0.0	0.0	-1.1	0.1	144	0.0	2.1	0.0
SP04	SP	25/07/29	20:38:25.4	0.0	0.0	1.0	0.1	25	0.0	1.2	0.0
SP05	SP	25/07/29	20:38:25.7	0.0	0.0	0.9	0.1	40	0.0	1.3	0.0
SP06	SP	25/07/29	20:38:23.3	0.0	0.0	-1.5	0.1	292	0.0	2.2	0.0
SP03	SP	25/07/29	20:38:24.1	0.0	0.0	-1.0	0.1	33	0.0	1.6	0.0
SP13	SP	25/07/29	20:38:25.7	0.0	0.0	0.4	0.1	356	0.0	1.3	0.0
SP13	SP	25/07/29	20:38:27.7	0.0	0.0	-1.0	0.1	356	0.0	1.3	0.0
SP14	SP	25/07/29	20:38:27.4	0.0	0.0	1.8	0.1	27	0.0	1.4	0.0
SP02	SP	25/07/29	20:38:26.5	0.0	0.0	0.3	0.2	25	0.0	1.2	0.0
SP12	SP	25/07/29	20:38:27.9	0.0	0.0	1.1	0.2	33	0.0	1.6	0.0
SP09	SP	25/07/29	20:38:28.0	0.0	0.0	0.6	0.2	61	0.0	1.9	0.0
SP09	SP	25/07/29	20:38:31.2	0.0	0.0	-1.1	0.2	61	0.0	1.9	0.0

RMS-ERR: 1.06

Event created: 2025/07/29 20:38:28
This origin created: 2025/08/17 07:05:11

Alert SPogs2025pevd: determined by 6 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 6 stations used, weight 6):

Northern Italy ML=0.4 2025/08/05 02:15:11.7 44.46 N 12.14 E 26 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP09	SP	25/08/05	02:15:17.2	0.0	0.0	-0.1	0.1	195	0.0	0.7	0.0
SP09	SP	25/08/05	02:15:21.6	0.0	0.0	-0.0	0.1	195	0.0	0.7	0.0
SP12	SP	25/08/05	02:15:17.7	0.0	0.0	0.2	0.1	260	0.0	0.6	0.0
SP04	SP	25/08/05	02:15:18.6	0.0	0.0	0.2	0.2	240	0.0	0.3	0.0
SP13	SP	25/08/05	02:15:18.5	0.0	0.0	-0.2	0.2	256	0.0	0.2	0.0
SP08	SP	25/08/05	02:15:18.9	0.0	0.0	-0.0	0.2	287	0.0	0.8	0.0

RMS-ERR: 0.15

Event created: 2025/08/05 02:15:22
This origin created: 2025/09/22 13:34:56

Alert SPogs2025pieg: determined by 5 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 5 stations used, weight 5):

Northern Italy ML=0.1 2025/08/06 22:16:58.0 44.36 N 11.91 E 10 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	25/08/06	22:17:01.2	0.0	0.0	0.4	0.0	53	0.0	0.5	0.0
SP11	SP	25/08/06	22:17:00.6	0.0	0.0	-0.4	0.0	266	0.0	0.7	0.0
SP05	SP	25/08/06	22:17:01.0	0.0	0.0	0.0	0.0	81	0.0	0.5	0.0
SP13	SP	25/08/06	22:17:01.5	0.0	0.0	0.2	0.1	325	0.0	0.3	0.0
SP02	SP	25/08/06	22:17:01.5	0.0	0.0	-0.2	0.1	28	0.0	0.6	0.0

RMS-ERR: 0.27

Event created: 2025/08/06 22:17:04
This origin created: 2025/09/22 13:47:39

Alert SPogs2025pqwq: determined by 9 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 9 stations used, weight 9):

Northern Italy ML=0.6 2025/08/11 16:39:26.8 44.31 N 12.01 E 17 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	25/08/11	16:39:30.9	0.0	0.0	-0.2	0.1	328	0.0	0.7	0.0
SP05	SP	25/08/11	16:39:34.2	0.0	0.0	-0.2	0.1	328	0.0	0.7	0.0
SP07	SP	25/08/11	16:39:31.4	0.0	0.0	0.2	0.1	221	0.0	1.3	0.0
SP04	SP	25/08/11	16:39:31.1	0.0	0.0	-0.1	0.1	315	0.0	0.9	0.0
SP04	SP	25/08/11	16:39:34.7	0.0	0.0	0.0	0.1	315	0.0	0.9	0.0
SP11	SP	25/08/11	16:39:31.5	0.0	0.0	-0.0	0.1	299	0.0	0.7	0.0
SP14	SP	25/08/11	16:39:31.4	0.0	0.0	-0.1	0.1	339	0.0	0.7	0.0

SP02 SP 25/08/11 16:39:31.9 0.0 0.0 0.1 0.1 346 0.0 0.8 0.0
SP02 SP 25/08/11 16:39:36.0 0.0 0.0 0.3 0.1 346 0.0 0.8 0.0

RMS-ERR: 0.16

Event created: 2025/08/11 16:39:33
This origin created: 2025/09/22 13:56:31

Alert SPogs2025puuf: determined by 13 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 13 stations used, weight 13):

Northern Italy ML=0.7 2025/08/13 19:57:50.7 44.33 N 11.91 E 20 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	25/08/13	19:57:55.0	0.0	0.0	-0.2	0.0	7	0.0	0.6	0.0
SP04	SP	25/08/13	19:57:58.3	0.0	0.0	-0.4	0.0	7	0.0	0.6	0.0
SP11	SP	25/08/13	19:57:55.0	0.0	0.0	-0.2	0.0	319	0.0	0.5	0.0
SP05	SP	25/08/13	19:57:55.1	0.0	0.0	-0.1	0.0	38	0.0	0.2	0.0
SP05	SP	25/08/13	19:57:58.6	0.0	0.0	-0.2	0.0	38	0.0	0.2	0.0
SP03	SP	25/08/13	19:57:55.3	0.0	0.0	0.0	0.1	27	0.0	1.1	0.0
SP03	SP	25/08/13	19:57:59.5	0.0	0.0	0.5	0.1	27	0.0	1.1	0.0
SP07	SP	25/08/13	19:57:55.8	0.0	0.0	0.3	0.1	173	0.0	0.6	0.0
SP01	SP	25/08/13	19:57:55.8	0.0	0.0	0.2	0.1	357	0.0	1.6	0.0
SP02	SP	25/08/13	19:57:55.8	0.0	0.0	0.0	0.1	18	0.0	0.2	0.0
SP02	SP	25/08/13	19:57:59.8	0.0	0.0	0.1	0.1	18	0.0	0.2	0.0
SP06	SP	25/08/13	19:57:55.8	0.0	0.0	-0.0	0.1	271	0.0	0.9	0.0
SP06	SP	25/08/13	19:58:00.0	0.0	0.0	0.2	0.1	271	0.0	0.9	0.0

RMS-ERR: 0.24

Event created: 2025/08/13 19:57:57
This origin created: 2025/09/22 14:03:12

Alert SPogs2025pvyx: determined by 9 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 9 stations used, weight 9):

Northern Italy ML=1.3 2025/08/14 11:29:11.8 44.15 N 11.56 E 12 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/14	11:29:18.0	0.0	0.0	-0.2	0.2	36	0.0	1.6	0.0
SP06	SP	25/08/14	11:29:22.5	0.0	0.0	-0.7	0.2	36	0.0	1.6	0.0
SP07	SP	25/08/14	11:29:18.7	0.0	0.0	-0.3	0.3	70	0.0	1.8	0.0
SP07	SP	25/08/14	11:29:24.5	0.0	0.0	-0.2	0.3	70	0.0	1.8	0.0
SP04	SP	25/08/14	11:29:20.2	0.0	0.0	0.1	0.3	49	0.0	1.4	0.0
SP04	SP	25/08/14	11:29:27.4	0.0	0.0	0.8	0.3	49	0.0	1.4	0.0
SP13	SP	25/08/14	11:29:20.2	0.0	0.0	0.1	0.3	39	0.0	1.4	0.0

SP05	SP	25/08/14	11:29:20.5	0.0	0.0	0.1	0.4	52	0.0	1.5	0.0
SP02	SP	25/08/14	11:29:21.6	0.0	0.0	0.3	0.4	45	0.0	1.4	0.0

RMS-ERR: 0.40

Event created: 2025/08/14 11:29:24
This origin created: 2025/09/22 14:08:27

Alert SPogs2025pwar: determined by 8 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 8 stations used, weight 8):

Northern Italy ML=1.2 2025/08/14 12:22:07.2 44.12 N 11.56 E 7 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/14	12:22:13.9	0.0	0.0	-0.2	0.3	31	0.0	1.6	0.0
SP06	SP	25/08/14	12:22:19.4	0.0	0.0	-0.1	0.3	31	0.0	1.6	0.0
SP07	SP	25/08/14	12:22:14.7	0.0	0.0	-0.2	0.3	64	0.0	1.6	0.0
SP07	SP	25/08/14	12:22:20.7	0.0	0.0	-0.1	0.3	64	0.0	1.6	0.0
SP11	SP	25/08/14	12:22:15.8	0.0	0.0	0.2	0.3	42	0.0	1.5	0.0
SP04	SP	25/08/14	12:22:16.2	0.0	0.0	0.0	0.4	45	0.0	1.3	0.0
SP05	SP	25/08/14	12:22:16.6	0.0	0.0	0.0	0.4	48	0.0	1.5	0.0
SP02	SP	25/08/14	12:22:17.7	0.0	0.0	0.3	0.4	42	0.0	1.5	0.0

RMS-ERR: 0.15

Event created: 2025/08/14 12:22:21
This origin created: 2025/09/22 14:14:37

Alert SPogs2025pwfb: determined by 6 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 6 stations used, weight 6):

Northern Italy ML=1.1 2025/08/14 14:35:46.7 44.16 N 11.64 E 5 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/14	14:35:51.2	0.0	0.0	0.0	0.2	25	0.0	1.3	0.0
SP07	SP	25/08/14	14:35:51.8	0.0	0.0	-0.0	0.2	67	0.0	1.2	0.0
SP04	SP	25/08/14	14:35:53.4	0.0	0.0	-0.0	0.3	43	0.0	1.2	0.0
SP13	SP	25/08/14	14:35:53.5	0.0	0.0	-0.0	0.3	32	0.0	1.3	0.0
SP05	SP	25/08/14	14:35:53.8	0.0	0.0	0.0	0.3	47	0.0	1.4	0.0
SP02	SP	25/08/14	14:35:54.9	0.0	0.0	0.0	0.4	40	0.0	1.3	0.0

RMS-ERR: 0.02

Event created: 2025/08/14 14:35:57
This origin created: 2025/09/22 14:16:45

Alert SPogs2025pxdr: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Central Italy ML=1.6 2025/08/15 03:01:44.3 43.95 N 11.35 E 12 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	03:01:53.5	0.0	0.0	-0.4	0.5	36	0.0	2.1	0.0
SP07	SP	25/08/15	03:01:54.2	0.0	0.0	-0.2	0.5	54	0.0	2.0	0.0
SP11	SP	25/08/15	03:01:55.4	0.0	0.0	0.1	0.6	42	0.0	1.7	0.0
SP11	SP	25/08/15	03:02:03.3	0.0	0.0	-0.0	0.6	42	0.0	1.7	0.0
SP04	SP	25/08/15	03:01:55.8	0.0	0.0	0.0	0.6	44	0.0	1.5	0.0
SP13	SP	25/08/15	03:01:55.9	0.0	0.0	0.1	0.6	38	0.0	1.4	0.0
SP05	SP	25/08/15	03:01:56.1	0.0	0.0	0.0	0.6	46	0.0	1.5	0.0
SP12	SP	25/08/15	03:01:57.8	0.0	0.0	0.4	0.7	43	0.0	2.0	0.0

RMS-ERR: 0.20

Event created: 2025/08/15 03:02:08
This origin created: 2025/09/22 14:38:08

Alert SPogs2025pxft: determined by 7 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 7 stations used, weight 7):

Northern Italy ML=0.9 2025/08/15 04:03:45.9 44.12 N 11.59 E 7 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	04:03:52.4	0.0	0.0	-0.2	0.2	28	0.0	1.2	0.0
SP06	SP	25/08/15	04:03:57.8	0.0	0.0	0.0	0.2	28	0.0	1.2	0.0
SP07	SP	25/08/15	04:03:53.1	0.0	0.0	-0.1	0.3	63	0.0	1.2	0.0
SP07	SP	25/08/15	04:03:58.9	0.0	0.0	0.0	0.3	63	0.0	1.2	0.0
SP11	SP	25/08/15	04:03:54.3	0.0	0.0	0.2	0.3	40	0.0	1.1	0.0
SP04	SP	25/08/15	04:03:54.6	0.0	0.0	0.0	0.3	43	0.0	1.1	0.0
SP05	SP	25/08/15	04:03:55.0	0.0	0.0	0.1	0.4	46	0.0	1.1	0.0

RMS-ERR: 0.13

Event created: 2025/08/15 04:03:58
This origin created: 2025/09/22 15:05:58

Alert SPogs2025pxjz: determined by 10 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 10 stations used, weight 10):

Northern Italy ML=1.3 2025/08/15 06:12:59.2 44.10 N 11.57 E 12 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	06:13:05.9	0.0	0.0	-0.3	0.3	30	0.0	1.8	0.0
SP06	SP	25/08/15	06:13:11.1	0.0	0.0	-0.6	0.3	30	0.0	1.8	0.0
SP07	SP	25/08/15	06:13:06.5	0.0	0.0	-0.3	0.3	62	0.0	1.7	0.0
SP07	SP	25/08/15	06:13:12.4	0.0	0.0	-0.2	0.3	62	0.0	1.7	0.0
SP11	SP	25/08/15	06:13:07.7	0.0	0.0	0.1	0.3	40	0.0	1.6	0.0
SP11	SP	25/08/15	06:13:14.8	0.0	0.0	0.8	0.3	40	0.0	1.6	0.0
SP04	SP	25/08/15	06:13:08.1	0.0	0.0	0.1	0.4	43	0.0	1.4	0.0
SP13	SP	25/08/15	06:13:08.1	0.0	0.0	0.0	0.4	34	0.0	1.4	0.0
SP05	SP	25/08/15	06:13:08.5	0.0	0.0	0.1	0.4	46	0.0	1.6	0.0
SP02	SP	25/08/15	06:13:09.6	0.0	0.0	0.4	0.4	40	0.0	1.6	0.0

RMS-ERR: 0.37

Event created: 2025/08/15 06:13:11
This origin created: 2025/09/22 15:11:36

Alert SPogs2025pxko: determined by 7 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 7 stations used, weight 7):

Northern Italy ML=0.1 2025/08/15 06:30:14.5 44.23 N 11.73 E 4 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	06:30:18.5	0.0	0.0	0.0	0.1	8	0.0	0.7	0.0
SP06	SP	25/08/15	06:30:21.6	0.0	0.0	-0.1	0.1	8	0.0	0.7	0.0
SP07	SP	25/08/15	06:30:19.2	0.0	0.0	-0.2	0.1	84	0.0	1.0	0.0
SP11	SP	25/08/15	06:30:20.3	0.0	0.0	0.3	0.2	38	0.0	0.4	0.0
SP04	SP	25/08/15	06:30:20.7	0.0	0.0	0.1	0.2	44	0.0	0.4	0.0
SP13	SP	25/08/15	06:30:20.7	0.0	0.0	-0.1	0.2	27	0.0	0.3	0.0
SP05	SP	25/08/15	06:30:21.1	0.0	0.0	0.1	0.2	49	0.0	0.5	0.0

RMS-ERR: 0.16

Event created: 2025/08/15 06:30:23
This origin created: 2025/09/22 15:13:25

Alert SPogs2025pxnm: determined by 10 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 10 stations used, weight 10):

Northern Italy ML=1.3 2025/08/15 07:59:16.9 44.12 N 11.59 E 5 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	07:59:23.6	0.0	0.0	-0.2	0.2	28	0.0	1.6	0.0
SP06	SP	25/08/15	07:59:29.0	0.0	0.0	-0.3	0.2	28	0.0	1.6	0.0
SP07	SP	25/08/15	07:59:24.2	0.0	0.0	-0.2	0.3	62	0.0	1.6	0.0
SP07	SP	25/08/15	07:59:30.2	0.0	0.0	-0.1	0.3	62	0.0	1.6	0.0

SP11	SP	25/08/15	07:59:25.5	0.0	0.0	0.2	0.3	39	0.0	1.5	0.0
SP11	SP	25/08/15	07:59:32.1	0.0	0.0	0.3	0.3	39	0.0	1.5	0.0
SP04	SP	25/08/15	07:59:25.9	0.0	0.0	0.1	0.3	43	0.0	1.4	0.0
SP13	SP	25/08/15	07:59:25.9	0.0	0.0	-0.0	0.4	33	0.0	1.4	0.0
SP05	SP	25/08/15	07:59:26.2	0.0	0.0	0.0	0.4	46	0.0	1.5	0.0
SP02	SP	25/08/15	07:59:27.4	0.0	0.0	0.2	0.4	40	0.0	1.6	0.0

RMS-ERR: 0.19

Event created: 2025/08/15 07:59:28
This origin created: 2025/09/23 13:08:00

Alert SPogs2025pxns: determined by 12 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 12 stations used, weight 12):

Northern Italy ML=1.8 2025/08/15 08:04:58.6 44.10 N 11.56 E 12 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	08:05:05.2	0.0	0.0	-0.4	0.3	30	0.0	2.3	0.0
SP06	SP	25/08/15	08:05:10.9	0.0	0.0	-0.3	0.3	30	0.0	2.3	0.0
SP07	SP	25/08/15	08:05:05.8	0.0	0.0	-0.4	0.3	62	0.0	2.0	0.0
SP11	SP	25/08/15	08:05:07.1	0.0	0.0	0.1	0.3	41	0.0	2.0	0.0
SP04	SP	25/08/15	08:05:07.5	0.0	0.0	-0.0	0.4	44	0.0	1.7	0.0
SP13	SP	25/08/15	08:05:07.5	0.0	0.0	-0.1	0.4	35	0.0	1.8	0.0
SP05	SP	25/08/15	08:05:07.8	0.0	0.0	0.0	0.4	47	0.0	1.9	0.0
SP05	SP	25/08/15	08:05:15.2	0.0	0.0	0.2	0.4	47	0.0	1.9	0.0
SP14	SP	25/08/15	08:05:08.3	0.0	0.0	-0.0	0.4	42	0.0	1.8	0.0
SP02	SP	25/08/15	08:05:09.0	0.0	0.0	0.3	0.4	41	0.0	1.7	0.0
SP12	SP	25/08/15	08:05:09.5	0.0	0.0	0.3	0.5	43	0.0	2.3	0.0
SP08	SP	25/08/15	08:05:09.9	0.0	0.0	0.6	0.5	25	0.0	2.3	0.0

RMS-ERR: 0.28

Event created: 2025/08/15 08:05:10
This origin created: 2025/09/23 13:14:55

Alert SPogs2025pxnt: determined by 15 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 15 stations used, weight 15):

Northern Italy ML=2.1 2025/08/15 08:05:55.7 44.06 N 11.63 E 12 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/08/15	08:06:02.8	0.0	0.0	-0.2	0.3	49	0.0	2.2	0.0
SP07	SP	25/08/15	08:06:08.9	0.0	0.0	0.2	0.3	49	0.0	2.2	0.0
SP06	SP	25/08/15	08:06:02.2	0.0	0.0	-0.8	0.3	17	0.0	2.6	0.0
SP06	SP	25/08/15	08:06:07.7	0.0	0.0	-1.1	0.3	17	0.0	2.6	0.0

SP11	SP	25/08/15	08:06:04.0	0.0	0.0	-0.1	0.3	30	0.0	2.1	0.0
SP11	SP	25/08/15	08:06:11.1	0.0	0.0	0.3	0.3	30	0.0	2.1	0.0
SP04	SP	25/08/15	08:06:04.4	0.0	0.0	-0.2	0.4	34	0.0	2.0	0.0
SP04	SP	25/08/15	08:06:12.1	0.0	0.0	0.5	0.4	34	0.0	2.0	0.0
SP05	SP	25/08/15	08:06:04.8	0.0	0.0	-0.1	0.4	37	0.0	2.0	0.0
SP13	SP	25/08/15	08:06:04.5	0.0	0.0	-0.4	0.4	25	0.0	2.1	0.0
SP03	SP	25/08/15	08:06:05.2	0.0	0.0	0.1	0.4	35	0.0	2.5	0.0
SP14	SP	25/08/15	08:06:05.3	0.0	0.0	-0.2	0.4	33	0.0	2.1	0.0
SP02	SP	25/08/15	08:06:05.9	0.0	0.0	0.0	0.4	32	0.0	2.0	0.0
SP12	SP	25/08/15	08:06:06.4	0.0	0.0	0.0	0.5	35	0.0	2.5	0.0
SP08	SP	25/08/15	08:06:08.7	0.0	0.0	2.0	0.5	18	0.0	2.5	0.0

RMS-ERR: 0.65

Event created: 2025/08/15 08:06:06
This origin created: 2025/09/23 13:20:16

Alert SPogs2025pxpf: determined by 5 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 5 stations used, weight 5):

Northern Italy ML=0.8 2025/08/15 08:51:31.3 44.13 N 11.60 E 9 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	08:51:37.5	0.0	0.0	-0.2	0.2	28	0.0	0.9	0.0
SP07	SP	25/08/15	08:51:38.2	0.0	0.0	-0.1	0.3	64	0.0	1.2	0.0
SP11	SP	25/08/15	08:51:39.3	0.0	0.0	0.2	0.3	40	0.0	1.1	0.0
SP04	SP	25/08/15	08:51:39.6	0.0	0.0	0.0	0.3	44	0.0	1.3	0.0
SP05	SP	25/08/15	08:51:40.0	0.0	0.0	0.1	0.3	47	0.0	1.3	0.0

RMS-ERR: 0.13

Event created: 2025/08/15 08:51:47
This origin created: 2025/09/23 14:01:38

Alert SPogs2025pxpy: determined by 8 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 8 stations used, weight 8):

Northern Italy ML=1.1 2025/08/15 09:13:37.1 44.11 N 11.57 E 8 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	09:13:43.8	0.0	0.0	-0.2	0.3	30	0.0	1.4	0.0
SP06	SP	25/08/15	09:13:49.3	0.0	0.0	-0.2	0.3	30	0.0	1.4	0.0
SP07	SP	25/08/15	09:13:44.6	0.0	0.0	-0.1	0.3	62	0.0	1.5	0.0
SP07	SP	25/08/15	09:13:50.5	0.0	0.0	-0.1	0.3	62	0.0	1.5	0.0
SP11	SP	25/08/15	09:13:45.8	0.0	0.0	0.2	0.3	41	0.0	1.3	0.0
SP11	SP	25/08/15	09:13:52.4	0.0	0.0	0.3	0.3	41	0.0	1.3	0.0

SP13 SP 25/08/15 09:13:46.2 0.0 0.0 0.0 0.4 35 0.0 1.2 0.0
SP05 SP 25/08/15 09:13:46.5 0.0 0.0 0.1 0.4 47 0.0 1.4 0.0

RMS-ERR: 0.17

Event created: 2025/08/15 09:13:49
This origin created: 2025/09/23 13:58:51

Alert SPogs2025pxqg: determined by 16 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 16 stations used, weight 16):

Northern Italy ML=1.8 2025/08/15 09:22:39.8 44.10 N 11.61 E 3 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	09:22:47.0	0.0	0.0	-0.3	0.3	24	0.0	2.0	0.0
SP06	SP	25/08/15	09:22:52.3	0.0	0.0	-0.8	0.3	24	0.0	2.0	0.0
SP07	SP	25/08/15	09:22:47.6	0.0	0.0	-0.1	0.3	58	0.0	1.9	0.0
SP07	SP	25/08/15	09:22:53.6	0.0	0.0	-0.2	0.3	58	0.0	1.9	0.0
SP11	SP	25/08/15	09:22:48.8	0.0	0.0	0.1	0.3	36	0.0	2.0	0.0
SP11	SP	25/08/15	09:22:55.7	0.0	0.0	0.1	0.3	36	0.0	2.0	0.0
SP04	SP	25/08/15	09:22:49.2	0.0	0.0	0.0	0.3	40	0.0	1.7	0.0
SP04	SP	25/08/15	09:22:56.7	0.0	0.0	0.2	0.3	40	0.0	1.7	0.0
SP13	SP	25/08/15	09:22:49.3	0.0	0.0	-0.1	0.4	30	0.0	1.7	0.0
SP05	SP	25/08/15	09:22:49.6	0.0	0.0	0.1	0.4	43	0.0	1.8	0.0
SP05	SP	25/08/15	09:22:57.1	0.0	0.0	0.1	0.4	43	0.0	1.8	0.0
SP01	SP	25/08/15	09:22:50.1	0.0	0.0	-0.0	0.4	33	0.0	2.8	0.0
SP01	SP	25/08/15	09:22:58.9	0.0	0.0	0.9	0.4	33	0.0	2.8	0.0
SP14	SP	25/08/15	09:22:50.2	0.0	0.0	0.1	0.4	39	0.0	1.8	0.0
SP02	SP	25/08/15	09:22:50.8	0.0	0.0	0.2	0.4	37	0.0	1.7	0.0
SP02	SP	25/08/15	09:22:58.8	0.0	0.0	-0.1	0.4	37	0.0	1.7	0.0

RMS-ERR: 0.33

Event created: 2025/08/15 09:22:52
This origin created: 2025/09/23 14:08:50

Alert SPogs2025pxqq: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Central Italy ML=1.3 2025/08/15 09:35:33.6 43.94 N 11.51 E 12 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/08/15	09:35:42.6	0.0	0.0	0.2	0.4	45	0.0	2.0	0.0
SP07	SP	25/08/15	09:35:48.4	0.0	0.0	-0.3	0.4	45	0.0	2.0	0.0
SP06	SP	25/08/15	09:35:41.9	0.0	0.0	-0.5	0.4	24	0.0	1.9	0.0
SP11	SP	25/08/15	09:35:43.5	0.0	0.0	-0.0	0.5	32	0.0	1.6	0.0

SP11	SP	25/08/15	09:35:51.1	0.0	0.0	0.3	0.5	32	0.0	1.6	0.0
SP04	SP	25/08/15	09:35:44.1	0.0	0.0	0.1	0.5	35	0.0	1.6	0.0
SP13	SP	25/08/15	09:35:44.1	0.0	0.0	-0.1	0.5	28	0.0	1.5	0.0
SP05	SP	25/08/15	09:35:44.5	0.0	0.0	0.3	0.5	37	0.0	1.6	0.0

RMS-ERR: 0.27

Event created: 2025/08/15 09:35:47
This origin created: 2025/09/23 14:11:22

Alert SPogs2025pxup: determined by 9 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 9 stations used, weight 9):

Northern Italy ML=1.6 2025/08/15 11:34:23.5 44.07 N 11.48 E 5 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	11:34:30.6	0.0	0.0	-0.1	0.3	37	0.0	2.1	0.0
SP06	SP	25/08/15	11:34:36.1	0.0	0.0	-0.0	0.3	37	0.0	2.1	0.0
SP11	SP	25/08/15	11:34:39.2	0.0	0.0	0.1	0.4	44	0.0	1.8	0.0
SP11	SP	25/08/15	11:34:32.5	0.0	0.0	-0.0	0.4	44	0.0	1.8	0.0
SP13	SP	25/08/15	11:34:33.0	0.0	0.0	-0.1	0.4	39	0.0	1.5	0.0
SP04	SP	25/08/15	11:34:32.9	0.0	0.0	-0.1	0.4	47	0.0	1.6	0.0
SP05	SP	25/08/15	11:34:33.2	0.0	0.0	-0.1	0.5	49	0.0	1.7	0.0
SP02	SP	25/08/15	11:34:34.4	0.0	0.0	0.2	0.5	44	0.0	1.5	0.0
SP12	SP	25/08/15	11:34:34.8	0.0	0.0	0.2	0.5	45	0.0	2.5	0.0

RMS-ERR: 0.12

Event created: 2025/08/15 11:34:36
This origin created: 2025/09/23 14:13:58

Alert SPogs2025pxvt: determined by 16 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 16 stations used, weight 16):

Northern Italy ML=1.9 2025/08/15 12:09:59.9 44.12 N 11.60 E 5 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	12:10:06.7	0.0	0.0	-0.3	0.2	27	0.0	2.0	0.0
SP06	SP	25/08/15	12:10:12.2	0.0	0.0	-0.3	0.2	27	0.0	2.0	0.0
SP07	SP	25/08/15	12:10:07.3	0.0	0.0	-0.2	0.3	62	0.0	2.0	0.0
SP07	SP	25/08/15	12:10:13.3	0.0	0.0	-0.1	0.3	62	0.0	2.0	0.0
SP11	SP	25/08/15	12:10:08.5	0.0	0.0	0.1	0.3	39	0.0	2.0	0.0
SP11	SP	25/08/15	12:10:15.1	0.0	0.0	0.1	0.3	39	0.0	2.0	0.0
SP04	SP	25/08/15	12:10:08.9	0.0	0.0	-0.0	0.3	42	0.0	1.8	0.0
SP13	SP	25/08/15	12:10:09.0	0.0	0.0	-0.1	0.3	33	0.0	1.8	0.0
SP05	SP	25/08/15	12:10:09.2	0.0	0.0	0.0	0.4	45	0.0	1.9	0.0

SP05	SP	25/08/15	12:10:16.7	0.0	0.0	0.2	0.4	45	0.0	1.9	0.0
SP03	SP	25/08/15	12:10:09.7	0.0	0.0	0.2	0.4	43	0.0	2.3	0.0
SP01	SP	25/08/15	12:10:09.8	0.0	0.0	0.1	0.4	35	0.0	2.7	0.0
SP14	SP	25/08/15	12:10:09.8	0.0	0.0	-0.1	0.4	41	0.0	1.8	0.0
SP02	SP	25/08/15	12:10:10.4	0.0	0.0	0.2	0.4	39	0.0	1.7	0.0
SP12	SP	25/08/15	12:10:10.9	0.0	0.0	0.1	0.4	41	0.0	2.2	0.0
SP08	SP	25/08/15	12:10:11.0	0.0	0.0	0.1	0.4	23	0.0	2.2	0.0

RMS-ERR: 0.15

Event created: 2025/08/15 12:10:12
This origin created: 2025/09/23 14:19:46

Alert SPogs2025pxvy: determined by 17 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 17 stations used, weight 17):

Northern Italy ML=3.3 2025/08/15 12:15:44.9 44.10 N 11.51 E 12 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	12:15:52.2	0.0	0.0	-0.2	0.3	36	0.0	3.8	0.0
SP06	SP	25/08/15	12:15:57.7	0.0	0.0	-0.5	0.3	36	0.0	3.8	0.0
SP07	SP	25/08/15	12:15:52.7	0.0	0.0	-0.5	0.3	64	0.0	3.6	0.0
SP07	SP	25/08/15	12:15:58.8	0.0	0.0	-0.7	0.3	64	0.0	3.6	0.0
SP11	SP	25/08/15	12:15:53.7	0.0	0.0	-0.1	0.4	45	0.0	3.4	0.0
SP11	SP	25/08/15	12:16:00.9	0.0	0.0	0.1	0.4	45	0.0	3.4	0.0
SP04	SP	25/08/15	12:15:54.4	0.0	0.0	0.0	0.4	47	0.0	3.3	0.0
SP04	SP	25/08/15	12:16:02.0	0.0	0.0	0.3	0.4	47	0.0	3.3	0.0
SP13	SP	25/08/15	12:15:54.4	0.0	0.0	0.1	0.4	39	0.0	3.3	0.0
SP05	SP	25/08/15	12:15:54.7	0.0	0.0	0.1	0.4	50	0.0	3.1	0.0
SP03	SP	25/08/15	12:15:55.1	0.0	0.0	0.3	0.4	48	0.0	3.7	0.0
SP03	SP	25/08/15	12:16:03.3	0.0	0.0	0.8	0.4	48	0.0	3.7	0.0
SP14	SP	25/08/15	12:15:55.1	0.0	0.0	0.0	0.4	45	0.0	3.3	0.0
SP14	SP	25/08/15	12:16:02.8	0.0	0.0	-0.3	0.4	45	0.0	3.3	0.0
SP10	SP	25/08/15	12:15:55.8	0.0	0.0	0.1	0.5	66	0.0	3.4	0.0
SP10	SP	25/08/15	12:16:04.3	0.0	0.0	0.2	0.5	66	0.0	3.4	0.0
SP12	SP	25/08/15	12:15:56.3	0.0	0.0	0.3	0.5	45	0.0	3.5	0.0

RMS-ERR: 0.35

Event created: 2025/08/15 12:15:57
This origin created: 2025/09/23 14:25:46

Alert SPogs2025pxwa: determined by 6 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 6 stations used, weight 6):

Northern Italy ML=0.6 2025/08/15 12:17:30.9 44.32 N 11.75 E 5 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	12:17:32.8	0.0	0.0	-0.0	0.0	354	0.0	1.2	0.0
SP11	SP	25/08/15	12:17:34.8	0.0	0.0	0.1	0.1	65	0.0	0.8	0.0
SP13	SP	25/08/15	12:17:35.3	0.0	0.0	0.1	0.1	41	0.0	0.9	0.0
SP04	SP	25/08/15	12:17:35.3	0.0	0.0	-0.1	0.1	68	0.0	0.9	0.0
SP07	SP	25/08/15	12:17:39.8	0.0	0.0	0.0	0.1	122	0.0	0.0	0.0
SP02	SP	25/08/15	12:17:36.7	0.0	0.0	-0.0	0.2	52	0.0	1.1	0.0

RMS-ERR: 0.08

Event created: 2025/08/15 12:17:38
This origin created: 2025/09/23 15:30:14

Alert SPogs2025pxwb: determined by 10 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 10 stations used, weight 10):

Northern Italy ML=1.0 2025/08/15 12:18:06.8 44.16 N 11.57 E 28 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	12:18:19.3	0.0	0.0	-0.3	0.2	37	0.0	0.9	0.0
SP06	SP	25/08/15	12:18:13.9	0.0	0.0	-0.1	0.2	37	0.0	0.9	0.0
SP07	SP	25/08/15	12:18:14.8	0.0	0.0	-0.0	0.3	72	0.0	1.5	0.0
SP07	SP	25/08/15	12:18:20.6	0.0	0.0	-0.4	0.3	72	0.0	1.5	0.0
SP11	SP	25/08/15	12:18:15.8	0.0	0.0	0.6	0.3	47	0.0	1.4	0.0
SP11	SP	25/08/15	12:18:22.9	0.0	0.0	1.2	0.3	47	0.0	1.4	0.0
SP13	SP	25/08/15	12:18:16.2	0.0	0.0	0.6	0.3	40	0.0	1.3	0.0
SP04	SP	25/08/15	12:18:16.2	0.0	0.0	0.5	0.3	50	0.0	1.2	0.0
SP05	SP	25/08/15	12:18:16.5	0.0	0.0	0.6	0.3	53	0.0	1.3	0.0
SP02	SP	25/08/15	12:18:14.0	0.0	0.0	-2.7	0.4	45	0.0	1.6	0.0

RMS-ERR: 1.01

Event created: 2025/08/15 12:18:20
This origin created: 2025/09/23 15:27:56

Alert SPogs2025pxwc: determined by 6 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 6 stations used, weight 6):

Northern Italy ML=0.8 2025/08/15 12:18:41.5 44.15 N 11.61 E 12 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	12:18:47.2	0.0	0.0	-0.3	0.2	29	0.0	0.9	0.0
SP07	SP	25/08/15	12:18:48.0	0.0	0.0	-0.2	0.2	67	0.0	1.0	0.0
SP11	SP	25/08/15	12:18:49.1	0.0	0.0	0.2	0.3	42	0.0	0.9	0.0
SP04	SP	25/08/15	12:18:49.5	0.0	0.0	0.1	0.3	45	0.0	1.1	0.0

SP13 SP 25/08/15 12:18:49.5 0.0 0.0 0.1 0.3 34 0.0 1.5 0.0
SP05 SP 25/08/15 12:18:49.8 0.0 0.0 0.1 0.3 48 0.0 1.1 0.0

RMS-ERR: 0.20

Event created: 2025/08/15 12:18:54
This origin created: 2025/10/16 06:20:02

Alert SPogs2025pxwd: determined by 14 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 14 stations used, weight 14):

Northern Italy ML=1.1 2025/08/15 12:19:33.3 44.20 N 11.75 E 10 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	12:19:37.2	0.0	0.0	-0.6	0.1	359	0.0	1.5	0.0
SP11	SP	25/08/15	12:19:39.0	0.0	0.0	0.2	0.2	29	0.0	1.0	0.0
SP04	SP	25/08/15	12:19:39.4	0.0	0.0	0.1	0.2	36	0.0	0.7	0.0
SP05	SP	25/08/15	12:19:39.8	0.0	0.0	0.3	0.2	41	0.0	0.9	0.0
SP13	SP	25/08/15	12:19:39.5	0.0	0.0	-0.1	0.2	21	0.0	0.8	0.0
SP03	SP	25/08/15	12:19:40.2	0.0	0.0	0.4	0.2	38	0.0	1.5	0.0
SP03	SP	25/08/15	12:19:40.2	0.0	0.0	-4.6	0.2	38	0.0	1.5	0.0
SP14	SP	25/08/15	12:19:40.4	0.0	0.0	0.2	0.3	35	0.0	1.1	0.0
SP01	SP	25/08/15	12:19:40.3	0.0	0.0	0.1	0.3	26	0.0	2.1	0.0
SP02	SP	25/08/15	12:19:41.0	0.0	0.0	0.3	0.3	33	0.0	1.2	0.0
SP02	SP	25/08/15	12:19:49.4	0.0	0.0	3.1	0.3	33	0.0	1.2	0.0
SP10	SP	25/08/15	12:19:41.1	0.0	0.0	0.4	0.3	72	0.0	1.7	0.0
SP12	SP	25/08/15	12:19:41.3	0.0	0.0	0.2	0.3	37	0.0	1.7	0.0
SP08	SP	25/08/15	12:19:41.6	0.0	0.0	-0.1	0.3	11	0.0	2.0	0.0

RMS-ERR: 1.51

Event created: 2025/08/15 12:19:34
This origin created: 2025/09/23 15:22:46

Alert SPogs2025pxwu: determined by 12 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 12 stations used, weight 12):

Northern Italy ML=1.5 2025/08/15 12:41:21.8 44.10 N 11.55 E 13 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	12:41:28.7	0.0	0.0	-0.3	0.3	32	0.0	2.0	0.0
SP06	SP	25/08/15	12:41:33.9	0.0	0.0	-0.7	0.3	32	0.0	2.0	0.0
SP07	SP	25/08/15	12:41:35.3	0.0	0.0	-0.3	0.3	62	0.0	1.7	0.0
SP07	SP	25/08/15	12:41:29.3	0.0	0.0	-0.2	0.3	62	0.0	1.7	0.0
SP11	SP	25/08/15	12:41:30.5	0.0	0.0	0.2	0.4	42	0.0	1.7	0.0
SP04	SP	25/08/15	12:41:37.8	0.0	0.0	-0.1	0.4	44	0.0	1.4	0.0

SP04	SP	25/08/15	12:41:30.9	0.0	0.0	0.1	0.4	44	0.0	1.4	0.0
SP13	SP	25/08/15	12:41:30.9	0.0	0.0	0.1	0.4	36	0.0	1.4	0.0
SP05	SP	25/08/15	12:41:31.2	0.0	0.0	0.1	0.4	47	0.0	1.6	0.0
SP05	SP	25/08/15	12:41:38.6	0.0	0.0	0.2	0.4	47	0.0	1.6	0.0
SP02	SP	25/08/15	12:41:32.4	0.0	0.0	0.4	0.4	41	0.0	1.4	0.0
SP02	SP	25/08/15	12:41:40.5	0.0	0.0	0.5	0.4	41	0.0	1.4	0.0

RMS-ERR: 0.31

Event created: 2025/08/15 12:41:33
This origin created: 2025/09/22 12:27:19

Alert SPogs2025pxxs: determined by 11 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 11 stations used, weight 11):

Northern Italy ML=1.7 2025/08/15 13:08:31.8 44.02 N 11.67 E 21 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/08/15	13:08:45.6	0.0	0.0	-0.1	0.3	39	0.0	1.9	0.0
SP07	SP	25/08/15	13:08:39.7	0.0	0.0	0.1	0.3	39	0.0	1.9	0.0
SP11	SP	25/08/15	13:08:40.9	0.0	0.0	-0.1	0.4	23	0.0	1.8	0.0
SP11	SP	25/08/15	13:08:48.4	0.0	0.0	0.2	0.4	23	0.0	1.8	0.0
SP04	SP	25/08/15	13:08:41.3	0.0	0.0	-0.1	0.4	27	0.0	1.6	0.0
SP04	SP	25/08/15	13:08:49.0	0.0	0.0	0.2	0.4	27	0.0	1.6	0.0
SP05	SP	25/08/15	13:08:41.6	0.0	0.0	0.1	0.4	30	0.0	1.8	0.0
SP05	SP	25/08/15	13:08:48.6	0.0	0.0	-0.5	0.4	30	0.0	1.8	0.0
SP13	SP	25/08/15	13:08:41.3	0.0	0.0	-0.3	0.4	19	0.0	1.5	0.0
SP01	SP	25/08/15	13:08:42.2	0.0	0.0	-0.0	0.4	22	0.0	2.6	0.0
SP12	SP	25/08/15	13:08:43.2	0.0	0.0	0.3	0.5	29	0.0	2.3	0.0

RMS-ERR: 0.23

Event created: 2025/08/15 13:08:43
This origin created: 2025/09/22 12:21:44

Alert SPogs2025pxxw: determined by 10 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 10 stations used, weight 10):

Northern Italy ML=1.4 2025/08/15 13:12:54.6 44.12 N 11.57 E 7 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	13:13:06.7	0.0	0.0	-0.1	0.3	30	0.0	1.8	0.0
SP06	SP	25/08/15	13:13:01.3	0.0	0.0	-0.2	0.3	30	0.0	1.8	0.0
SP07	SP	25/08/15	13:13:02.1	0.0	0.0	-0.1	0.3	63	0.0	1.7	0.0
SP07	SP	25/08/15	13:13:08.0	0.0	0.0	-0.1	0.3	63	0.0	1.7	0.0
SP11	SP	25/08/15	13:13:03.2	0.0	0.0	0.2	0.3	41	0.0	1.6	0.0

SP11	SP	25/08/15	13:13:09.8	0.0	0.0	0.3	0.3	41	0.0	1.6	0.0
SP04	SP	25/08/15	13:13:03.6	0.0	0.0	0.0	0.4	44	0.0	1.4	0.0
SP13	SP	25/08/15	13:13:03.6	0.0	0.0	0.0	0.4	35	0.0	1.5	0.0
SP05	SP	25/08/15	13:13:03.9	0.0	0.0	0.0	0.4	47	0.0	1.5	0.0
SP05	SP	25/08/15	13:13:11.1	0.0	0.0	-0.0	0.4	47	0.0	1.5	0.0

RMS-ERR: 0.14

Event created: 2025/08/15 13:13:06
This origin created: 2025/09/22 12:11:50

Alert SPogs2025pxxy: determined by 13 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 13 stations used, weight 13):

Northern Italy ML=1.7 2025/08/15 13:15:54.4 44.11 N 11.58 E 12 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	13:16:00.7	0.0	0.0	-0.4	0.3	29	0.0	2.0	0.0
SP06	SP	25/08/15	13:16:06.3	0.0	0.0	-0.1	0.3	29	0.0	2.0	0.0
SP07	SP	25/08/15	13:16:01.3	0.0	0.0	-0.3	0.3	62	0.0	1.9	0.0
SP07	SP	25/08/15	13:16:07.4	0.0	0.0	0.1	0.3	62	0.0	1.9	0.0
SP11	SP	25/08/15	13:16:02.6	0.0	0.0	0.1	0.3	40	0.0	2.0	0.0
SP04	SP	25/08/15	13:16:03.0	0.0	0.0	-0.0	0.4	43	0.0	1.7	0.0
SP13	SP	25/08/15	13:16:03.0	0.0	0.0	-0.0	0.4	34	0.0	1.7	0.0
SP05	SP	25/08/15	13:16:03.3	0.0	0.0	0.0	0.4	46	0.0	1.8	0.0
SP05	SP	25/08/15	13:16:10.3	0.0	0.0	0.1	0.4	46	0.0	1.8	0.0
SP01	SP	25/08/15	13:16:03.8	0.0	0.0	0.1	0.4	36	0.0	2.6	0.0
SP14	SP	25/08/15	13:16:04.0	0.0	0.0	0.2	0.4	42	0.0	1.7	0.0
SP02	SP	25/08/15	13:16:04.4	0.0	0.0	0.2	0.4	40	0.0	1.6	0.0
SP12	SP	25/08/15	13:16:04.9	0.0	0.0	0.2	0.4	42	0.0	2.1	0.0

RMS-ERR: 0.19

Event created: 2025/08/15 13:16:05
This origin created: 2025/09/22 12:03:56

Alert SPogs2025pxyx: determined by 18 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 18 stations used, weight 18):

Northern Italy ML=2.3 2025/08/15 13:44:39.1 44.01 N 11.47 E 11 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	13:44:46.5	0.0	0.0	-0.5	0.4	31	0.0	2.9	0.0
SP07	SP	25/08/15	13:44:47.0	0.0	0.0	-0.4	0.4	54	0.0	2.7	0.0
SP07	SP	25/08/15	13:44:53.2	0.0	0.0	-0.3	0.4	54	0.0	2.7	0.0
SP11	SP	25/08/15	13:44:48.1	0.0	0.0	-0.2	0.5	39	0.0	2.4	0.0

SP11	SP	25/08/15	13:44:55.3	0.0	0.0	0.2	0.5	39	0.0	2.4	0.0
SP04	SP	25/08/15	13:44:48.7	0.0	0.0	-0.1	0.5	41	0.0	2.2	0.0
SP04	SP	25/08/15	13:44:56.6	0.0	0.0	0.7	0.5	41	0.0	2.2	0.0
SP13	SP	25/08/15	13:44:48.8	0.0	0.0	-0.1	0.5	34	0.0	2.1	0.0
SP05	SP	25/08/15	13:44:49.1	0.0	0.0	0.0	0.5	44	0.0	2.3	0.0
SP03	SP	25/08/15	13:44:49.5	0.0	0.0	0.2	0.5	42	0.0	2.6	0.0
SP14	SP	25/08/15	13:44:49.6	0.0	0.0	0.0	0.5	40	0.0	2.3	0.0
SP02	SP	25/08/15	13:44:50.0	0.0	0.0	0.0	0.6	39	0.0	2.2	0.0
SP02	SP	25/08/15	13:44:58.6	0.0	0.0	0.6	0.6	39	0.0	2.2	0.0
SP12	SP	25/08/15	13:44:50.6	0.0	0.0	0.1	0.6	41	0.0	2.7	0.0
SP08	SP	25/08/15	13:44:51.0	0.0	0.0	0.5	0.6	27	0.0	2.6	0.0
SP09	SP	25/08/15	13:44:51.4	0.0	0.0	0.5	0.6	50	0.0	2.7	0.0
SP15	SP	25/08/15	13:44:51.1	0.0	0.0	-0.1	0.6	39	0.0	2.5	0.0
SP15	SP	25/08/15	13:44:58.9	0.0	0.0	-1.2	0.6	39	0.0	2.5	0.0

RMS-ERR: 0.44

Event created: 2025/08/15 13:44:51
This origin created: 2025/09/22 11:56:10

Alert SPogs2025pxzu: determined by 9 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 9 stations used, weight 9):

Northern Italy ML=-0.0 2025/08/15 14:11:21.9 44.34 N 11.87 E 4 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP11	SP	25/08/15	14:11:24.3	0.0	0.0	0.7	0.0	15	0.0	0.4	0.0
SP11	SP	25/08/15	14:11:24.6	0.0	0.0	-0.5	0.0	15	0.0	0.4	0.0
SP04	SP	25/08/15	14:11:24.8	0.0	0.0	0.4	0.0	53	0.0	0.2	0.0
SP13	SP	25/08/15	14:11:24.8	0.0	0.0	-0.1	0.1	356	0.0	0.2	0.0
SP05	SP	25/08/15	14:11:25.1	0.0	0.0	0.1	0.1	67	0.0	0.3	0.0
SP03	SP	25/08/15	14:11:24.8	0.0	0.0	-0.3	0.1	55	0.0	1.2	0.0
SP06	SP	25/08/15	14:11:28.1	0.0	0.0	-0.0	0.1	263	0.0	0.0	0.0
SP07	SP	25/08/15	14:11:29.1	0.0	0.0	-0.1	0.1	156	0.0	0.0	0.0
SP02	SP	25/08/15	14:11:26.2	0.0	0.0	0.0	0.1	36	0.0	0.3	0.0

RMS-ERR: 0.34

Event created: 2025/08/15 14:11:27
This origin created: 2025/09/08 12:31:49

Alert SPogs2025pyde: determined by 14 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 14 stations used, weight 14):

Northern Italy ML=1.9 2025/08/15 15:54:27.3 44.05 N 11.50 E 2 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	15:54:34.8	0.0	0.0	0.0	0.3	32	0.0	2.3	0.0
SP06	SP	25/08/15	15:54:40.1	0.0	0.0	-0.1	0.3	32	0.0	2.3	0.0
SP11	SP	25/08/15	15:54:36.7	0.0	0.0	0.2	0.4	40	0.0	1.9	0.0
SP11	SP	25/08/15	15:54:43.4	0.0	0.0	0.2	0.4	40	0.0	1.9	0.0
SP04	SP	25/08/15	15:54:37.1	0.0	0.0	-0.1	0.4	43	0.0	1.7	0.0
SP04	SP	25/08/15	15:54:44.5	0.0	0.0	0.2	0.4	43	0.0	1.7	0.0
SP13	SP	25/08/15	15:54:37.2	0.0	0.0	-0.1	0.4	35	0.0	1.8	0.0
SP05	SP	25/08/15	15:54:37.4	0.0	0.0	-0.1	0.5	45	0.0	2.0	0.0
SP05	SP	25/08/15	15:54:44.7	0.0	0.0	-0.2	0.5	45	0.0	2.0	0.0
SP14	SP	25/08/15	15:54:38.2	0.0	0.0	0.0	0.5	42	0.0	1.9	0.0
SP02	SP	25/08/15	15:54:38.6	0.0	0.0	-0.0	0.5	40	0.0	1.8	0.0
SP02	SP	25/08/15	15:54:46.9	0.0	0.0	0.0	0.5	40	0.0	1.8	0.0
SP12	SP	25/08/15	15:54:39.0	0.0	0.0	-0.1	0.5	42	0.0	2.2	0.0
SP08	SP	25/08/15	15:54:39.2	0.0	0.0	0.1	0.5	27	0.0	2.2	0.0

RMS-ERR: 0.12

Event created: 2025/08/15 15:54:39
This origin created: 2025/09/08 12:26:44

Alert SPogs2025pyxx: determined by 9 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 9 stations used, weight 9):

Northern Italy ML=0.8 2025/08/16 02:22:44.3 44.13 N 11.60 E 7 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/16	02:22:50.6	0.0	0.0	-0.2	0.2	28	0.0	1.1	0.0
SP06	SP	25/08/16	02:22:55.9	0.0	0.0	-0.0	0.2	28	0.0	1.1	0.0
SP07	SP	25/08/16	02:22:57.0	0.0	0.0	0.1	0.3	64	0.0	1.0	0.0
SP07	SP	25/08/16	02:22:51.3	0.0	0.0	-0.2	0.3	64	0.0	1.0	0.0
SP11	SP	25/08/16	02:22:52.5	0.0	0.0	0.2	0.3	40	0.0	1.0	0.0
SP04	SP	25/08/16	02:22:52.8	0.0	0.0	0.0	0.3	43	0.0	0.9	0.0
SP13	SP	25/08/16	02:22:52.9	0.0	0.0	-0.0	0.3	33	0.0	1.0	0.0
SP05	SP	25/08/16	02:22:53.2	0.0	0.0	0.0	0.3	47	0.0	1.0	0.0
SP12	SP	25/08/16	02:22:54.8	0.0	0.0	0.1	0.4	42	0.0	1.8	0.0

RMS-ERR: 0.14

Event created: 2025/08/16 02:22:54
This origin created: 2025/09/08 12:18:46

Alert SPogs2025qnbh: determined by 10 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 10 stations used, weight 10):

Central Italy ML=1.6 2025/08/23 19:59:05.5 43.99 N 11.86 E 17 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP11	SP	25/08/23	19:59:21.4	0.0	0.0	-0.0	0.4	2	0.0	1.6	0.0
SP11	SP	25/08/23	19:59:14.4	0.0	0.0	-0.0	0.4	2	0.0	1.6	0.0
SP04	SP	25/08/23	19:59:14.9	0.0	0.0	0.3	0.4	7	0.0	1.5	0.0
SP04	SP	25/08/23	19:59:22.0	0.0	0.0	0.2	0.4	7	0.0	1.5	0.0
SP05	SP	25/08/23	19:59:21.3	0.0	0.0	-0.5	0.4	11	0.0	1.6	0.0
SP05	SP	25/08/23	19:59:14.6	0.0	0.0	-0.1	0.4	11	0.0	1.6	0.0
SP13	SP	25/08/23	19:59:23.1	0.0	0.0	0.1	0.4	0	0.0	1.4	0.0
SP13	SP	25/08/23	19:59:14.9	0.0	0.0	-0.4	0.4	0	0.0	1.4	0.0
SP09	SP	25/08/23	19:59:16.1	0.0	0.0	0.3	0.4	25	0.0	2.3	0.0
SP12	SP	25/08/23	19:59:16.3	0.0	0.0	0.2	0.5	13	0.0	2.0	0.0

RMS-ERR: 0.27

Event created: 2025/08/23 19:59:18
This origin created: 2025/09/08 12:13:13

Alert SPogs2025qnjy: determined by 14 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 14 stations used, weight 14):

Northern Italy ML=1.5 2025/08/24 00:21:52.4 44.65 N 11.96 E 2 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP08	SP	25/08/24	00:21:57.9	0.0	0.0	-0.1	0.1	217	0.0	2.0	0.0
SP08	SP	25/08/24	00:22:02.4	0.0	0.0	0.1	0.1	217	0.0	2.0	0.0
SP15	SP	25/08/24	00:21:58.4	0.0	0.0	0.2	0.2	164	0.0	1.4	0.0
SP15	SP	25/08/24	00:22:02.4	0.0	0.0	-0.5	0.2	164	0.0	1.4	0.0
SP12	SP	25/08/24	00:21:59.3	0.0	0.0	0.0	0.2	172	0.0	1.5	0.0
SP12	SP	25/08/24	00:22:05.1	0.0	0.0	0.4	0.2	172	0.0	1.5	0.0
SP02	SP	25/08/24	00:21:59.3	0.0	0.0	-0.2	0.2	180	0.0	1.3	0.0
SP01	SP	25/08/24	00:21:59.4	0.0	0.0	-0.2	0.2	191	0.0	2.4	0.0
SP14	SP	25/08/24	00:21:59.8	0.0	0.0	-0.2	0.2	182	0.0	1.4	0.0
SP13	SP	25/08/24	00:21:59.8	0.0	0.0	-0.4	0.2	197	0.0	1.3	0.0
SP04	SP	25/08/24	00:22:00.9	0.0	0.0	0.1	0.3	186	0.0	1.3	0.0
SP11	SP	25/08/24	00:22:01.0	0.0	0.0	-0.1	0.3	193	0.0	1.4	0.0
SP06	SP	25/08/24	00:22:02.6	0.0	0.0	0.4	0.3	206	0.0	2.0	0.0
SP07	SP	25/08/24	00:22:03.9	0.0	0.0	0.6	0.4	184	0.0	2.0	0.0

RMS-ERR: 0.29

Event created: 2025/08/24 00:22:02
This origin created: 2025/09/08 12:08:39

Alert SPogs2025qsvh: determined by 8 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 8 stations used, weight 8):

Northern Italy ML=1.5 2025/08/26 23:46:50.6 44.06 N 11.60 E 12 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/08/26	23:47:04.3	0.0	0.0	0.1	0.3	52	0.0	1.7	0.0
SP07	SP	25/08/26	23:46:58.2	0.0	0.0	-0.1	0.3	52	0.0	1.7	0.0
SP11	SP	25/08/26	23:46:59.3	0.0	0.0	-0.0	0.4	33	0.0	1.4	0.0
SP04	SP	25/08/26	23:46:59.8	0.0	0.0	-0.0	0.4	37	0.0	1.4	0.0
SP13	SP	25/08/26	23:46:59.8	0.0	0.0	-0.2	0.4	28	0.0	1.5	0.0
SP13	SP	25/08/26	23:47:07.2	0.0	0.0	-0.1	0.4	28	0.0	1.5	0.0
SP05	SP	25/08/26	23:47:00.1	0.0	0.0	0.1	0.4	40	0.0	1.5	0.0
SP08	SP	25/08/26	23:47:02.1	0.0	0.0	0.3	0.5	20	0.0	2.1	0.0

RMS-ERR: 0.14

Event created: 2025/08/26 23:47:02
This origin created: 2025/09/22 11:35:29

Alert SPogs2025qswm: determined by 11 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 11 stations used, weight 11):

Northern Italy ML=1.6 2025/08/27 00:22:46.8 44.00 N 11.45 E 11 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/27	00:22:54.7	0.0	0.0	-0.4	0.4	33	0.0	2.2	0.0
SP07	SP	25/08/27	00:23:01.4	0.0	0.0	-0.4	0.4	55	0.0	2.1	0.0
SP07	SP	25/08/27	00:22:55.4	0.0	0.0	-0.0	0.4	55	0.0	2.1	0.0
SP11	SP	25/08/27	00:23:03.2	0.0	0.0	-0.1	0.5	40	0.0	1.5	0.0
SP11	SP	25/08/27	00:22:56.6	0.0	0.0	0.2	0.5	40	0.0	1.5	0.0
SP04	SP	25/08/27	00:23:04.6	0.0	0.0	0.4	0.5	42	0.0	1.6	0.0
SP04	SP	25/08/27	00:22:57.0	0.0	0.0	0.1	0.5	42	0.0	1.6	0.0
SP13	SP	25/08/27	00:23:04.3	0.0	0.0	0.1	0.5	36	0.0	1.6	0.0
SP13	SP	25/08/27	00:22:57.0	0.0	0.0	0.1	0.5	36	0.0	1.6	0.0
SP05	SP	25/08/27	00:23:04.5	0.0	0.0	-0.1	0.5	45	0.0	1.5	0.0
SP05	SP	25/08/27	00:22:57.3	0.0	0.0	0.1	0.5	45	0.0	1.5	0.0

RMS-ERR: 0.22

Event created: 2025/08/27 00:23:00
This origin created: 2025/09/08 10:55:19

Alert SPogs2025qtfg: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=1.0 2025/08/27 04:48:53.9 44.23 N 11.83 E 10 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/08/27	04:48:56.4	0.0	0.0	-0.2	0.1	77	0.0	1.0	0.0
SP06	SP	25/08/27	04:48:57.2	0.0	0.0	-0.1	0.1	333	0.0	1.3	0.0
SP04	SP	25/08/27	04:48:58.0	0.0	0.0	-0.0	0.2	25	0.0	0.6	0.0
SP05	SP	25/08/27	04:48:58.3	0.0	0.0	0.1	0.2	33	0.0	0.6	0.0
SP03	SP	25/08/27	04:48:58.8	0.0	0.0	0.3	0.2	30	0.0	2.2	0.0
SP02	SP	25/08/27	04:48:59.4	0.0	0.0	0.1	0.2	25	0.0	0.7	0.0
SP02	SP	25/08/27	04:49:03.2	0.0	0.0	-0.2	0.2	25	0.0	0.7	0.0
SP12	SP	25/08/27	04:48:59.8	0.0	0.0	0.0	0.3	30	0.0	1.5	0.0

RMS-ERR: 0.14

Event created: 2025/08/27 04:49:01
This origin created: 2025/09/08 07:39:32

Alert SPogs2025rdoe: determined by 15 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 15 stations used, weight 15):

Central Italy ML=2.6 2025/09/01 20:41:24.9 43.91 N 11.60 E 19 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP11	SP	25/09/01	20:41:35.9	0.0	0.0	-0.0	0.5	23	0.0	2.6	0.0
SP11	SP	25/09/01	20:41:44.7	0.0	0.0	0.2	0.5	23	0.0	2.6	0.0
SP04	SP	25/09/01	20:41:36.4	0.0	0.0	0.1	0.5	26	0.0	2.4	0.0
SP05	SP	25/09/01	20:41:36.4	0.0	0.0	-0.1	0.5	29	0.0	2.6	0.0
SP05	SP	25/09/01	20:41:46.1	0.0	0.0	0.5	0.5	29	0.0	2.6	0.0
SP13	SP	25/09/01	20:41:36.6	0.0	0.0	-0.1	0.5	20	0.0	2.6	0.0
SP13	SP	25/09/01	20:41:45.0	0.0	0.0	-0.8	0.5	20	0.0	2.6	0.0
SP10	SP	25/09/01	20:41:36.3	0.0	0.0	-0.4	0.5	45	0.0	2.8	0.0
SP03	SP	25/09/01	20:41:36.8	0.0	0.0	0.1	0.5	28	0.0	3.0	0.0
SP14	SP	25/09/01	20:41:37.1	0.0	0.0	-0.1	0.6	27	0.0	2.5	0.0
SP01	SP	25/09/01	20:41:37.4	0.0	0.0	0.2	0.6	23	0.0	3.4	0.0
SP02	SP	25/09/01	20:41:37.5	0.0	0.0	-0.1	0.6	26	0.0	2.3	0.0
SP12	SP	25/09/01	20:41:38.3	0.0	0.0	0.3	0.6	28	0.0	3.0	0.0
SP09	SP	25/09/01	20:41:38.1	0.0	0.0	0.0	0.6	37	0.0	2.9	0.0
SP08	SP	25/09/01	20:41:38.8	0.0	0.0	0.3	0.6	15	0.0	2.9	0.0

RMS-ERR: 0.30

Event created: 2025/09/02 08:12:46
This origin created: 2025/09/08 10:44:05

Alert SPogs2025rimi: determined by 6 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 6 stations used, weight 6):

Northern Italy ML=2.7 2025/09/04 13:25:17.5 44.34 N 11.34 E 83 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/09/04	13:25:32.9	0.0	0.0	0.0	0.3	90	0.0	2.5	0.0
SP06	SP	25/09/04	13:25:44.9	0.0	0.0	-0.0	0.3	90	0.0	2.5	0.0
SP11	SP	25/09/04	13:25:33.8	0.0	0.0	0.2	0.4	86	0.0	2.6	0.0
SP07	SP	25/09/04	13:25:33.8	0.0	0.0	-0.2	0.4	102	0.0	2.8	0.0
SP05	SP	25/09/04	13:25:34.3	0.0	0.0	0.3	0.4	85	0.0	2.3	0.0
SP02	SP	25/09/04	13:25:33.9	0.0	0.0	-0.3	0.5	77	0.0	2.4	0.0

RMS-ERR: 0.20

Event created: 2025/09/04 13:25:37
This origin created: 2025/09/08 10:39:51

Alert SPogs2025rlev: determined by 17 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 17 stations used, weight 17):

Central Italy ML=2.7 2025/09/06 01:02:53.7 43.96 N 11.82 E 13 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/09/06	01:03:02.7	0.0	0.0	0.1	0.4	353	0.0	2.7	0.0
SP06	SP	25/09/06	01:03:09.6	0.0	0.0	-0.0	0.4	353	0.0	2.7	0.0
SP10	SP	25/09/06	01:03:03.2	0.0	0.0	0.1	0.4	34	0.0	2.9	0.0
SP11	SP	25/09/06	01:03:03.7	0.0	0.0	0.5	0.4	6	0.0	2.4	0.0
SP11	SP	25/09/06	01:03:10.3	0.0	0.0	-0.2	0.4	6	0.0	2.4	0.0
SP04	SP	25/09/06	01:03:10.7	0.0	0.0	-0.2	0.4	10	0.0	2.6	0.0
SP04	SP	25/09/06	01:03:03.5	0.0	0.0	0.1	0.4	10	0.0	2.6	0.0
SP05	SP	25/09/06	01:03:03.0	0.0	0.0	-0.5	0.4	14	0.0	2.7	0.0
SP05	SP	25/09/06	01:03:10.9	0.0	0.0	-0.2	0.4	14	0.0	2.7	0.0
SP03	SP	25/09/06	01:03:03.7	0.0	0.0	-0.0	0.4	13	0.0	2.9	0.0
SP13	SP	25/09/06	01:03:11.9	0.0	0.0	-0.1	0.5	4	0.0	2.3	0.0
SP13	SP	25/09/06	01:03:03.9	0.0	0.0	-0.1	0.5	4	0.0	2.3	0.0
SP14	SP	25/09/06	01:03:03.9	0.0	0.0	-0.3	0.5	12	0.0	2.7	0.0
SP02	SP	25/09/06	01:03:13.9	0.0	0.0	0.7	0.5	12	0.0	2.6	0.0
SP02	SP	25/09/06	01:03:05.1	0.0	0.0	0.5	0.5	12	0.0	2.6	0.0
SP09	SP	25/09/06	01:03:04.4	0.0	0.0	-0.2	0.5	26	0.0	3.0	0.0
SP12	SP	25/09/06	01:03:04.8	0.0	0.0	-0.2	0.5	15	0.0	2.8	0.0

RMS-ERR: 0.31

Event created: 2025/09/06 01:03:06
This origin created: 2025/09/08 10:36:01

Alert SPogs2025rlfh: determined by 5 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 5 stations used, weight 5):

Northern Italy ML=0.1 2025/09/06 01:16:20.3 44.19 N 11.86 E 11 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/09/06	01:16:24.7	0.0	0.0	0.0	0.2	331	0.0	0.6	0.0
SP11	SP	25/09/06	01:16:24.8	0.0	0.0	-0.0	0.2	2	0.0	0.2	0.0
SP04	SP	25/09/06	01:16:25.2	0.0	0.0	0.1	0.2	12	0.0	0.3	0.0
SP04	SP	25/09/06	01:16:28.5	0.0	0.0	0.0	0.2	12	0.0	0.3	0.0
SP05	SP	25/09/06	01:16:25.1	0.0	0.0	-0.1	0.2	19	0.0	0.2	0.0

RMS-ERR: 0.05

Event created: 2025/09/06 01:16:34
This origin created: 2025/09/08 07:49:15

Alert SPogs2025rlfu: determined by 5 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 5 stations used, weight 5):

Northern Italy ML=0.3 2025/09/06 01:31:37.6 44.13 N 11.86 E 18 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/09/06	01:31:42.9	0.0	0.0	0.0	0.2	339	0.0	0.8	0.0
SP11	SP	25/09/06	01:31:43.1	0.0	0.0	-0.1	0.2	3	0.0	0.6	0.0
SP04	SP	25/09/06	01:31:43.4	0.0	0.0	0.1	0.2	11	0.0	0.6	0.0
SP05	SP	25/09/06	01:31:43.3	0.0	0.0	-0.1	0.2	17	0.0	0.5	0.0
SP13	SP	25/09/06	01:31:43.9	0.0	0.0	0.0	0.3	1	0.0	0.7	0.0

RMS-ERR: 0.06

Event created: 2025/09/06 01:31:48
This origin created: 2025/09/17 09:45:18

Alert SPogs2025rliq: determined by 15 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 15 stations used, weight 15):

Northern Italy ML=1.5 2025/09/06 02:57:51.9 44.02 N 11.91 E 15 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP10	SP	25/09/06	02:58:02.2	0.0	0.0	2.5	0.3	30	0.0	1.8	0.0
SP10	SP	25/09/06	02:58:03.9	0.0	0.0	-1.9	0.3	30	0.0	1.8	0.0
SP06	SP	25/09/06	02:57:59.3	0.0	0.0	-0.8	0.3	340	0.0	1.7	0.0
SP06	SP	25/09/06	02:58:06.2	0.0	0.0	-0.2	0.3	340	0.0	1.7	0.0
SP11	SP	25/09/06	02:58:07.0	0.0	0.0	0.3	0.3	356	0.0	1.4	0.0
SP11	SP	25/09/06	02:57:59.7	0.0	0.0	-0.5	0.3	356	0.0	1.4	0.0
SP05	SP	25/09/06	02:57:59.9	0.0	0.0	-0.4	0.3	5	0.0	1.3	0.0
SP05	SP	25/09/06	02:58:07.4	0.0	0.0	0.4	0.3	5	0.0	1.3	0.0
SP04	SP	25/09/06	02:58:00.0	0.0	0.0	-0.4	0.3	1	0.0	1.4	0.0

SP13	SP	25/09/06	02:58:08.5	0.0	0.0	0.3	0.4	355	0.0	1.3	0.0
SP13	SP	25/09/06	02:58:00.6	0.0	0.0	-0.5	0.4	355	0.0	1.3	0.0
SP09	SP	25/09/06	02:58:01.4	0.0	0.0	0.1	0.4	22	0.0	2.2	0.0
SP02	SP	25/09/06	02:58:01.5	0.0	0.0	-0.1	0.4	5	0.0	1.4	0.0
SP02	SP	25/09/06	02:58:10.1	0.0	0.0	1.0	0.4	5	0.0	1.4	0.0
SP12	SP	25/09/06	02:58:02.0	0.0	0.0	0.3	0.4	9	0.0	1.9	0.0

RMS-ERR: 0.93

Event created: 2025/09/06 02:58:03
This origin created: 2025/09/08 10:17:54

Alert SPogs2025rmas: determined by 10 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 10 stations used, weight 10):

Central Italy ML=2.1 2025/09/06 12:05:57.0 43.99 N 11.87 E 12 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/09/06	12:06:05.5	0.0	0.0	-0.1	0.4	346	0.0	2.3	0.0
SP06	SP	25/09/06	12:06:12.4	0.0	0.0	0.1	0.4	346	0.0	2.3	0.0
SP11	SP	25/09/06	12:06:05.9	0.0	0.0	-0.1	0.4	0	0.0	2.1	0.0
SP11	SP	25/09/06	12:06:12.3	0.0	0.0	-0.6	0.4	0	0.0	2.1	0.0
SP04	SP	25/09/06	12:06:06.1	0.0	0.0	-0.0	0.4	5	0.0	2.2	0.0
SP04	SP	25/09/06	12:06:13.6	0.0	0.0	0.4	0.4	5	0.0	2.2	0.0
SP05	SP	25/09/06	12:06:06.1	0.0	0.0	-0.1	0.4	9	0.0	2.4	0.0
SP13	SP	25/09/06	12:06:06.7	0.0	0.0	-0.0	0.4	359	0.0	2.1	0.0
SP13	SP	25/09/06	12:06:14.5	0.0	0.0	0.1	0.4	359	0.0	2.1	0.0
SP02	SP	25/09/06	12:06:07.6	0.0	0.0	0.2	0.5	8	0.0	2.2	0.0

RMS-ERR: 0.24

Event created: 2025/09/06 12:06:09
This origin created: 2025/09/08 10:13:00

Alert SPogs2025rovb: determined by 6 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 6 stations used, weight 6):

Northern Italy ML=0.8 2025/09/08 00:39:27.8 44.12 N 11.66 E 37 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/09/08	00:39:36.3	0.0	0.0	0.1	0.2	17	0.0	1.0	0.0
SP11	SP	25/09/08	00:39:44.0	0.0	0.0	-0.0	0.3	33	0.0	0.9	0.0
SP11	SP	25/09/08	00:39:36.6	0.0	0.0	-0.3	0.3	33	0.0	0.9	0.0
SP04	SP	25/09/08	00:39:37.3	0.0	0.0	-0.0	0.3	37	0.0	1.1	0.0
SP13	SP	25/09/08	00:39:37.5	0.0	0.0	0.1	0.3	26	0.0	0.8	0.0
SP05	SP	25/09/08	00:39:37.7	0.0	0.0	0.3	0.3	41	0.0	1.1	0.0

RMS-ERR: 0.18

Event created: 2025/09/08 00:40:31
This origin created: 2025/09/22 11:30:40

Alert SPogs2025rqel: determined by 4 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 4 stations used, weight 4):

Northern Italy ML=0.6 2025/09/08 18:32:35.9 44.17 N 11.85 E 10 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/09/08	18:32:41.3	0.0	0.0	-0.0	0.2	336	0.0	0.9	0.0
SP11	SP	25/09/08	18:32:41.6	0.0	0.0	-0.0	0.2	5	0.0	0.8	0.0
SP05	SP	25/09/08	18:32:42.0	0.0	0.0	-0.0	0.2	21	0.0	0.7	0.0
SP13	SP	25/09/08	18:32:42.7	0.0	0.0	0.1	0.2	2	0.0	0.7	0.0

RMS-ERR: 0.05

Event created: 2025/09/08 18:32:45
This origin created: 2025/09/17 09:39:53

Alert SPogs2025rqhz: determined by 13 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 13 stations used, weight 13):

Central Italy ML=1.9 2025/09/08 20:18:27.9 43.97 N 11.83 E 13 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/09/08	20:18:36.8	0.0	0.0	-0.0	0.4	351	0.0	2.2	0.0
SP06	SP	25/09/08	20:18:43.7	0.0	0.0	0.0	0.4	351	0.0	2.2	0.0
SP11	SP	25/09/08	20:18:44.3	0.0	0.0	-0.2	0.4	4	0.0	1.9	0.0
SP11	SP	25/09/08	20:18:37.1	0.0	0.0	-0.1	0.4	4	0.0	1.9	0.0
SP04	SP	25/09/08	20:18:37.3	0.0	0.0	-0.1	0.4	9	0.0	1.9	0.0
SP04	SP	25/09/08	20:18:45.0	0.0	0.0	0.1	0.4	9	0.0	1.9	0.0
SP05	SP	25/09/08	20:18:37.4	0.0	0.0	-0.1	0.4	12	0.0	1.9	0.0
SP03	SP	25/09/08	20:18:37.9	0.0	0.0	0.1	0.4	12	0.0	2.4	0.0
SP13	SP	25/09/08	20:18:46.0	0.0	0.0	0.0	0.4	2	0.0	1.7	0.0
SP13	SP	25/09/08	20:18:38.0	0.0	0.0	-0.0	0.4	2	0.0	1.7	0.0
SP14	SP	25/09/08	20:18:38.0	0.0	0.0	-0.2	0.5	11	0.0	1.9	0.0
SP02	SP	25/09/08	20:18:38.8	0.0	0.0	0.2	0.5	11	0.0	1.8	0.0
SP12	SP	25/09/08	20:18:39.2	0.0	0.0	0.3	0.5	14	0.0	2.3	0.0

RMS-ERR: 0.14

Event created: 2025/09/08 20:18:40
This origin created: 2025/09/17 09:37:00

Alert SPogs2025rqsj: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=1.3 2025/09/09 01:33:31.7 44.04 N 12.16 E 7 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP10	SP	25/09/09	01:33:41.2	0.0	0.0	-0.4	0.2	354	0.0	1.4	0.0
SP10	SP	25/09/09	01:33:37.5	0.0	0.0	0.1	0.2	354	0.0	1.4	0.0
SP07	SP	25/09/09	01:33:41.8	0.0	0.0	-0.2	0.3	320	0.0	1.1	0.0
SP07	SP	25/09/09	01:33:37.8	0.0	0.0	0.1	0.3	320	0.0	1.1	0.0
SP09	SP	25/09/09	01:33:46.0	0.0	0.0	0.4	0.4	355	0.0	1.9	0.0
SP09	SP	25/09/09	01:33:39.8	0.0	0.0	0.1	0.4	355	0.0	1.9	0.0
SP04	SP	25/09/09	01:33:39.8	0.0	0.0	-0.2	0.4	332	0.0	1.2	0.0
SP04	SP	25/09/09	01:33:45.7	0.0	0.0	-0.3	0.4	332	0.0	1.2	0.0
SP06	SP	25/09/09	01:33:40.8	0.0	0.0	0.1	0.4	315	0.0	1.6	0.0
SP06	SP	25/09/09	01:33:47.8	0.0	0.0	0.5	0.4	315	0.0	1.6	0.0

RMS-ERR: 0.29

Event created: 2025/09/09 01:33:46
This origin created: 2025/09/17 09:34:04

Alert SPogs2025rrqm: determined by 7 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 7 stations used, weight 7):

Northern Italy ML=0.7 2025/09/09 13:44:29.6 44.41 N 11.98 E 5 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP14	SP	25/09/09	13:44:30.8	0.0	0.0	0.2	0.0	273	0.0	0.9	0.0
SP02	SP	25/09/09	13:44:30.7	0.0	0.0	-0.1	0.0	338	0.0	1.0	0.0
SP12	SP	25/09/09	13:44:30.8	0.0	0.0	-0.1	0.0	29	0.0	1.4	0.0
SP05	SP	25/09/09	13:44:31.0	0.0	0.0	0.0	0.0	200	0.0	0.4	0.0
SP05	SP	25/09/09	13:44:31.9	0.0	0.0	-0.1	0.0	200	0.0	0.4	0.0
SP04	SP	25/09/09	13:44:31.3	0.0	0.0	0.1	0.1	225	0.0	0.6	0.0
SP13	SP	25/09/09	13:44:31.6	0.0	0.0	-0.1	0.1	270	0.0	0.6	0.0

RMS-ERR: 0.10

Event created: 2025/09/09 13:44:33
This origin created: 2025/09/17 08:15:33

Alert SPogs2025rsaj: determined by 11 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 11 stations used, weight 11):

Northern Italy ML=1.3 2025/09/09 18:45:00.7 44.11 N 11.58 E 12 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/09/09	18:45:12.3	0.0	0.0	-0.4	0.3	29	0.0	1.6	0.0
SP06	SP	25/09/09	18:45:07.1	0.0	0.0	-0.4	0.3	29	0.0	1.6	0.0
SP07	SP	25/09/09	18:45:13.6	0.0	0.0	-0.1	0.3	62	0.0	1.6	0.0
SP07	SP	25/09/09	18:45:07.8	0.0	0.0	-0.2	0.3	62	0.0	1.6	0.0
SP11	SP	25/09/09	18:45:09.0	0.0	0.0	0.2	0.3	40	0.0	1.4	0.0
SP04	SP	25/09/09	18:45:16.1	0.0	0.0	0.1	0.4	44	0.0	1.3	0.0
SP04	SP	25/09/09	18:45:09.4	0.0	0.0	0.1	0.4	44	0.0	1.3	0.0
SP13	SP	25/09/09	18:45:09.6	0.0	0.0	0.3	0.4	34	0.0	1.3	0.0
SP13	SP	25/09/09	18:45:16.4	0.0	0.0	0.2	0.4	34	0.0	1.3	0.0
SP05	SP	25/09/09	18:45:09.7	0.0	0.0	0.1	0.4	47	0.0	1.4	0.0
SP05	SP	25/09/09	18:45:16.8	0.0	0.0	0.2	0.4	47	0.0	1.4	0.0

RMS-ERR: 0.24

Event created: 2025/09/09 18:45:12
This origin created: 2025/09/22 10:52:27

Alert SPogs2025rsbl: determined by 11 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 11 stations used, weight 11):

Northern Italy ML=1.8 2025/09/09 19:16:53.4 44.12 N 11.62 E 3 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/09/09	19:17:00.4	0.0	0.0	-0.4	0.2	23	0.0	2.1	0.0
SP07	SP	25/09/09	19:17:01.1	0.0	0.0	-0.0	0.3	59	0.0	1.9	0.0
SP07	SP	25/09/09	19:17:06.9	0.0	0.0	-0.2	0.3	59	0.0	1.9	0.0
SP11	SP	25/09/09	19:17:02.3	0.0	0.0	0.1	0.3	36	0.0	1.8	0.0
SP04	SP	25/09/09	19:17:09.9	0.0	0.0	0.0	0.3	40	0.0	1.7	0.0
SP04	SP	25/09/09	19:17:02.7	0.0	0.0	0.0	0.3	40	0.0	1.7	0.0
SP13	SP	25/09/09	19:17:02.8	0.0	0.0	-0.1	0.3	30	0.0	1.6	0.0
SP05	SP	25/09/09	19:17:03.0	0.0	0.0	0.1	0.3	43	0.0	1.7	0.0
SP02	SP	25/09/09	19:17:04.2	0.0	0.0	0.2	0.4	37	0.0	1.7	0.0
SP02	SP	25/09/09	19:17:12.5	0.0	0.0	0.2	0.4	37	0.0	1.7	0.0
SP12	SP	25/09/09	19:17:04.5	0.0	0.0	0.0	0.4	40	0.0	2.2	0.0

RMS-ERR: 0.18

Event created: 2025/09/09 19:17:06
This origin created: 2025/09/17 09:53:51

Alert SPogs2025rtql: determined by 18 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 18 stations used, weight 18):

Northern Italy ML=2.2 2025/09/10 16:00:07.3 44.13 N 11.65 E 1 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/09/10	16:00:14.2	0.0	0.0	-0.4	0.2	19	0.0	2.4	0.0
SP07	SP	25/09/10	16:00:14.9	0.0	0.0	-0.0	0.2	60	0.0	1.9	0.0
SP07	SP	25/09/10	16:00:20.7	0.0	0.0	-0.2	0.2	60	0.0	1.9	0.0
SP11	SP	25/09/10	16:00:16.1	0.0	0.0	0.2	0.3	34	0.0	2.1	0.0
SP11	SP	25/09/10	16:00:22.7	0.0	0.0	0.0	0.3	34	0.0	2.1	0.0
SP04	SP	25/09/10	16:00:23.8	0.0	0.0	0.2	0.3	38	0.0	2.1	0.0
SP04	SP	25/09/10	16:00:16.5	0.0	0.0	0.0	0.3	38	0.0	2.1	0.0
SP13	SP	25/09/10	16:00:23.7	0.0	0.0	-0.3	0.3	28	0.0	2.0	0.0
SP13	SP	25/09/10	16:00:16.6	0.0	0.0	-0.1	0.3	28	0.0	2.0	0.0
SP05	SP	25/09/10	16:00:16.8	0.0	0.0	0.1	0.3	42	0.0	2.0	0.0
SP05	SP	25/09/10	16:00:24.1	0.0	0.0	-0.0	0.3	42	0.0	2.0	0.0
SP01	SP	25/09/10	16:00:17.3	0.0	0.0	-0.1	0.4	31	0.0	2.9	0.0
SP14	SP	25/09/10	16:00:25.4	0.0	0.0	0.2	0.4	37	0.0	2.0	0.0
SP14	SP	25/09/10	16:00:17.3	0.0	0.0	-0.0	0.4	37	0.0	2.0	0.0
SP02	SP	25/09/10	16:00:26.2	0.0	0.0	0.1	0.4	36	0.0	1.9	0.0
SP02	SP	25/09/10	16:00:17.8	0.0	0.0	-0.0	0.4	36	0.0	1.9	0.0
SP12	SP	25/09/10	16:00:18.4	0.0	0.0	0.1	0.4	38	0.0	2.4	0.0
SP08	SP	25/09/10	16:00:18.8	0.0	0.0	0.2	0.4	18	0.0	2.8	0.0

RMS-ERR: 0.16

Event created: 2025/09/10 16:00:18
This origin created: 2025/09/17 09:18:27

Alert SPogs2025rtwi: determined by 14 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 14 stations used, weight 14):

Northern Italy MLv=1.9 2025/09/10 18:59:13.8 44.13 N 11.62 E 4 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/09/10	18:59:20.2	0.0	0.0	-0.4	0.2	25	0.0	2.1	0.0
SP06	SP	25/09/10	18:59:25.5	0.0	0.0	-0.4	0.2	25	0.0	2.1	0.0
SP07	SP	25/09/10	18:59:26.6	0.0	0.0	-0.2	0.2	63	0.0	1.8	0.0
SP07	SP	25/09/10	18:59:20.9	0.0	0.0	-0.3	0.2	63	0.0	1.8	0.0
SP11	SP	25/09/10	18:59:22.0	0.0	0.0	0.0	0.3	39	0.0	1.9	0.0
SP11	SP	25/09/10	18:59:28.5	0.0	0.0	0.1	0.3	39	0.0	1.9	0.0
SP04	SP	25/09/10	18:59:22.5	0.0	0.0	-0.1	0.3	42	0.0	1.7	0.0
SP04	SP	25/09/10	18:59:29.6	0.0	0.0	0.2	0.3	42	0.0	1.7	0.0
SP05	SP	25/09/10	18:59:22.7	0.0	0.0	-0.1	0.3	46	0.0	1.7	0.0
SP05	SP	25/09/10	18:59:29.9	0.0	0.0	-0.0	0.3	46	0.0	1.7	0.0
SP02	SP	25/09/10	18:59:32.1	0.0	0.0	0.3	0.4	39	0.0	1.7	0.0
SP02	SP	25/09/10	18:59:24.0	0.0	0.0	0.1	0.4	39	0.0	1.7	0.0
SP12	SP	25/09/10	18:59:25.1	0.0	0.0	0.7	0.4	41	0.0	2.4	0.0
SP08	SP	25/09/10	18:59:24.7	0.0	0.0	0.1	0.4	22	0.0	2.5	0.0

RMS-ERR: 0.28

Event created: 2025/09/10 18:59:26
This origin created: 2025/09/17 09:12:59

Alert SPogs2025ruik: determined by 13 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 13 stations used, weight 13):

Northern Italy ML=1.6 2025/09/11 01:05:12.0 44.16 N 11.59 E 3 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/09/11	01:05:18.7	0.0	0.0	-0.1	0.2	33	0.0	1.8	0.0
SP06	SP	25/09/11	01:05:23.8	0.0	0.0	-0.4	0.2	33	0.0	1.8	0.0
SP07	SP	25/09/11	01:05:19.2	0.0	0.0	-0.5	0.3	70	0.0	1.7	0.0
SP11	SP	25/09/11	01:05:20.6	0.0	0.0	0.2	0.3	45	0.0	1.5	0.0
SP11	SP	25/09/11	01:05:27.2	0.0	0.0	0.2	0.3	45	0.0	1.5	0.0
SP04	SP	25/09/11	01:05:21.2	0.0	0.0	0.2	0.3	48	0.0	1.5	0.0
SP04	SP	25/09/11	01:05:27.8	0.0	0.0	-0.2	0.3	48	0.0	1.5	0.0
SP13	SP	25/09/11	01:05:21.0	0.0	0.0	0.0	0.3	37	0.0	1.5	0.0
SP05	SP	25/09/11	01:05:21.2	0.0	0.0	-0.1	0.3	51	0.0	1.5	0.0
SP05	SP	25/09/11	01:05:28.7	0.0	0.0	0.0	0.3	51	0.0	1.5	0.0
SP03	SP	25/09/11	01:05:21.5	0.0	0.0	0.0	0.3	48	0.0	2.2	0.0
SP02	SP	25/09/11	01:05:22.8	0.0	0.0	0.5	0.4	43	0.0	1.6	0.0
SP02	SP	25/09/11	01:05:30.6	0.0	0.0	0.3	0.4	43	0.0	1.6	0.0

RMS-ERR: 0.28

Event created: 2025/09/11 01:05:23
This origin created: 2025/09/17 08:51:41

Alert SPogs2025pxot: determined by 11 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 11 stations used, weight 11):

Northern Italy ML=1.2 2025/08/15 08:36:37.7 44.18 N 11.63 E 2 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/08/15	08:36:44.0	0.0	0.0	0.0	0.2	29	0.0	1.5	0.0
SP06	SP	25/08/15	08:36:48.4	0.0	0.0	-0.6	0.2	29	0.0	1.5	0.0
SP07	SP	25/08/15	08:36:44.6	0.0	0.0	-0.4	0.2	73	0.0	1.2	0.0
SP07	SP	25/08/15	08:36:50.6	0.0	0.0	-0.3	0.2	73	0.0	1.2	0.0
SP11	SP	25/08/15	08:36:45.8	0.0	0.0	0.2	0.3	44	0.0	1.2	0.0
SP04	SP	25/08/15	08:36:46.2	0.0	0.0	0.0	0.3	47	0.0	1.2	0.0
SP04	SP	25/08/15	08:36:53.3	0.0	0.0	0.4	0.3	47	0.0	1.2	0.0
SP13	SP	25/08/15	08:36:46.3	0.0	0.0	0.1	0.3	35	0.0	1.3	0.0
SP05	SP	25/08/15	08:36:46.6	0.0	0.0	0.0	0.3	51	0.0	1.3	0.0

SP05 SP 25/08/15 08:36:53.8 0.0 0.0 0.3 0.3 51 0.0 1.3 0.0
SP02 SP 25/08/15 08:36:47.8 0.0 0.0 0.2 0.4 43 0.0 1.4 0.0

RMS-ERR: 0.29

Event created: 2025/09/23 13:25:38
This origin created: 2025/09/23 13:25:13

Alert SPogs2025szqm: determined by 15 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 15 stations used, weight 15):

Central Italy ML=2.7 2025/09/28 04:22:26.6 43.87 N 11.79 E 10 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/09/28	04:22:35.6	0.0	0.0	-0.3	0.4	15	0.0	2.9	0.0
SP07	SP	25/09/28	04:22:42.1	0.0	0.0	-1.1	0.4	15	0.0	2.9	0.0
SP06	SP	25/09/28	04:22:37.3	0.0	0.0	0.0	0.5	356	0.0	2.8	0.0
SP06	SP	25/09/28	04:22:45.7	0.0	0.0	0.1	0.5	356	0.0	2.8	0.0
SP10	SP	25/09/28	04:22:38.2	0.0	0.0	0.6	0.5	29	0.0	2.7	0.0
SP11	SP	25/09/28	04:22:37.7	0.0	0.0	-0.2	0.5	7	0.0	2.3	0.0
SP11	SP	25/09/28	04:22:47.0	0.0	0.0	0.4	0.5	7	0.0	2.3	0.0
SP04	SP	25/09/28	04:22:37.8	0.0	0.0	-0.3	0.5	11	0.0	2.3	0.0
SP05	SP	25/09/28	04:22:37.9	0.0	0.0	-0.3	0.5	13	0.0	2.4	0.0
SP05	SP	25/09/28	04:22:47.4	0.0	0.0	0.2	0.5	13	0.0	2.4	0.0
SP03	SP	25/09/28	04:22:39.3	0.0	0.0	0.9	0.5	13	0.0	2.7	0.0
SP13	SP	25/09/28	04:22:48.6	0.0	0.0	0.5	0.5	5	0.0	2.3	0.0
SP13	SP	25/09/28	04:22:38.4	0.0	0.0	-0.2	0.5	5	0.0	2.3	0.0
SP01	SP	25/09/28	04:22:39.0	0.0	0.0	-0.1	0.6	8	0.0	3.3	0.0
SP02	SP	25/09/28	04:22:39.4	0.0	0.0	0.0	0.6	12	0.0	2.3	0.0

RMS-ERR: 0.46

Event created: 2025/09/28 04:22:40
This origin created: 2025/10/06 07:22:44

Alert SPogs2025tctv: determined by 14 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 14 stations used, weight 14):

Northern Italy ML=0.4 2025/09/29 21:27:55.8 44.32 N 11.89 E 19 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP11	SP	25/09/29	21:28:00.0	0.0	0.0	-0.2	0.0	343	0.0	0.3	0.0
SP11	SP	25/09/29	21:28:03.5	0.0	0.0	-0.2	0.0	343	0.0	0.3	0.0
SP04	SP	25/09/29	21:28:03.6	0.0	0.0	-0.1	0.1	21	0.0	0.3	0.0
SP04	SP	25/09/29	21:28:00.1	0.0	0.0	-0.2	0.1	21	0.0	0.3	0.0
SP05	SP	25/09/29	21:28:00.2	0.0	0.0	-0.1	0.1	42	0.0	0.1	0.0

SP05	SP	25/09/29	21:28:03.9	0.0	0.0	0.0	0.1	42	0.0	0.1	0.0
SP07	SP	25/09/29	21:28:00.6	0.0	0.0	0.1	0.1	162	0.0	0.7	0.0
SP13	SP	25/09/29	21:28:04.7	0.0	0.0	0.3	0.1	346	0.0	0.1	0.0
SP13	SP	25/09/29	21:28:00.3	0.0	0.0	-0.3	0.1	346	0.0	0.1	0.0
SP06	SP	25/09/29	21:28:00.7	0.0	0.0	-0.0	0.1	278	0.0	0.8	0.0
SP06	SP	25/09/29	21:28:04.7	0.0	0.0	0.2	0.1	278	0.0	0.8	0.0
SP02	SP	25/09/29	21:28:01.1	0.0	0.0	0.1	0.1	23	0.0	0.1	0.0
SP12	SP	25/09/29	21:28:01.7	0.0	0.0	0.5	0.2	32	0.0	0.7	0.0
SP08	SP	25/09/29	21:28:02.1	0.0	0.0	-0.2	0.2	350	0.0	0.7	0.0

RMS-ERR: 0.21

Event created: 2025/09/29 21:28:03
This origin created: 2025/10/10 13:25:26

Alert SPogs2025tnab: determined by 14 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 14 stations used, weight 14):

Northern Italy ML=0.9 2025/10/05 11:58:40.0 44.23 N 11.93 E 18 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/10/05	11:58:44.0	0.0	0.0	-0.1	0.0	353	0.0	1.4	0.0
SP07	SP	25/10/05	11:58:47.6	0.0	0.0	0.2	0.0	353	0.0	1.4	0.0
SP11	SP	25/10/05	11:58:44.8	0.0	0.0	-0.4	0.1	343	0.0	0.9	0.0
SP11	SP	25/10/05	11:58:49.1	0.0	0.0	-0.1	0.1	343	0.0	0.9	0.0
SP05	SP	25/10/05	11:58:44.9	0.0	0.0	-0.2	0.1	8	0.0	0.8	0.0
SP05	SP	25/10/05	11:58:49.1	0.0	0.0	-0.1	0.1	8	0.0	0.8	0.0
SP04	SP	25/10/05	11:58:44.9	0.0	0.0	-0.3	0.1	357	0.0	1.0	0.0
SP04	SP	25/10/05	11:58:49.1	0.0	0.0	-0.1	0.1	357	0.0	1.0	0.0
SP03	SP	25/10/05	11:58:45.5	0.0	0.0	0.0	0.2	7	0.0	1.9	0.0
SP06	SP	25/10/05	11:58:45.3	0.0	0.0	-0.2	0.2	308	0.0	1.7	0.0
SP06	SP	25/10/05	11:58:50.0	0.0	0.0	0.2	0.2	308	0.0	1.7	0.0
SP14	SP	25/10/05	11:58:45.8	0.0	0.0	0.0	0.2	6	0.0	1.1	0.0
SP13	SP	25/10/05	11:58:46.6	0.0	0.0	0.7	0.2	345	0.0	1.1	0.0
SP12	SP	25/10/05	11:58:46.9	0.0	0.0	0.4	0.2	14	0.0	2.2	0.0

RMS-ERR: 0.29

Event created: 2025/10/05 11:58:47
This origin created: 2025/10/06 07:10:13

Alert SPogs2025tnfz: determined by 18 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 18 stations used, weight 18):

Northern Italy ML=1.6 2025/10/05 14:57:52.0 44.27 N 12.03 E 17 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP10	SP	25/10/05	14:57:56.0	0.0	0.0	-0.2	0.1	74	0.0	1.9	0.0
SP10	SP	25/10/05	14:58:00.1	0.0	0.0	0.6	0.1	74	0.0	1.9	0.0
SP07	SP	25/10/05	14:57:56.3	0.0	0.0	-0.1	0.1	249	0.0	1.9	0.0
SP07	SP	25/10/05	14:58:00.0	0.0	0.0	0.2	0.1	249	0.0	1.9	0.0
SP05	SP	25/10/05	14:57:59.6	0.0	0.0	-0.8	0.1	330	0.0	1.1	0.0
SP05	SP	25/10/05	14:57:56.1	0.0	0.0	-0.6	0.1	330	0.0	1.1	0.0
SP03	SP	25/10/05	14:57:56.5	0.0	0.0	-0.5	0.1	333	0.0	1.8	0.0
SP03	SP	25/10/05	14:58:00.8	0.0	0.0	0.0	0.1	333	0.0	1.8	0.0
SP04	SP	25/10/05	14:57:56.5	0.0	0.0	-0.4	0.1	320	0.0	1.1	0.0
SP04	SP	25/10/05	14:58:00.5	0.0	0.0	-0.2	0.1	320	0.0	1.1	0.0
SP11	SP	25/10/05	14:57:57.2	0.0	0.0	-0.0	0.1	308	0.0	1.0	0.0
SP12	SP	25/10/05	14:57:57.3	0.0	0.0	-0.3	0.2	353	0.0	1.8	0.0
SP12	SP	25/10/05	14:58:02.4	0.0	0.0	0.3	0.2	353	0.0	1.8	0.0
SP01	SP	25/10/05	14:57:58.1	0.0	0.0	0.3	0.2	330	0.0	2.7	0.0
SP13	SP	25/10/05	14:57:57.9	0.0	0.0	0.1	0.2	318	0.0	1.0	0.0
SP06	SP	25/10/05	14:57:58.4	0.0	0.0	0.2	0.2	286	0.0	1.7	0.0
SP06	SP	25/10/05	14:58:04.0	0.0	0.0	0.9	0.2	286	0.0	1.7	0.0
SP15	SP	25/10/05	14:57:58.9	0.0	0.0	0.5	0.2	358	0.0	2.1	0.0

RMS-ERR: 0.44

Event created: 2025/10/05 14:57:58
This origin created: 2025/10/06 07:13:52

Alert SPogs2025trqu: determined by 19 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 19 stations used, weight 19):

Northern Italy ML=1.5 2025/10/08 00:58:25.0 44.18 N 11.99 E 19 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/10/08	00:58:29.7	0.0	0.0	0.1	0.1	325	0.0	1.8	0.0
SP07	SP	25/10/08	00:58:33.3	0.0	0.0	-0.1	0.1	325	0.0	1.8	0.0
SP10	SP	25/10/08	00:58:30.3	0.0	0.0	-0.1	0.1	40	0.0	1.4	0.0
SP10	SP	25/10/08	00:58:34.8	0.0	0.0	0.2	0.1	40	0.0	1.4	0.0
SP05	SP	25/10/08	00:58:31.0	0.0	0.0	-0.1	0.2	352	0.0	1.0	0.0
SP05	SP	25/10/08	00:58:35.6	0.0	0.0	-0.2	0.2	352	0.0	1.0	0.0
SP04	SP	25/10/08	00:58:35.8	0.0	0.0	-0.3	0.2	345	0.0	1.0	0.0
SP04	SP	25/10/08	00:58:31.2	0.0	0.0	-0.0	0.2	345	0.0	1.0	0.0
SP11	SP	25/10/08	00:58:36.3	0.0	0.0	0.2	0.2	335	0.0	1.0	0.0
SP11	SP	25/10/08	00:58:31.3	0.0	0.0	0.1	0.2	335	0.0	1.0	0.0
SP03	SP	25/10/08	00:58:31.3	0.0	0.0	-0.0	0.2	353	0.0	1.4	0.0
SP03	SP	25/10/08	00:58:36.6	0.0	0.0	0.2	0.2	353	0.0	1.4	0.0
SP14	SP	25/10/08	00:58:31.7	0.0	0.0	0.0	0.2	353	0.0	1.1	0.0
SP14	SP	25/10/08	00:58:37.0	0.0	0.0	0.0	0.2	353	0.0	1.1	0.0
SP09	SP	25/10/08	00:58:31.7	0.0	0.0	-0.1	0.2	23	0.0	1.6	0.0
SP13	SP	25/10/08	00:58:31.9	0.0	0.0	-0.1	0.3	338	0.0	1.1	0.0
SP02	SP	25/10/08	00:58:37.6	0.0	0.0	-0.1	0.3	355	0.0	1.4	0.0

SP02 SP 25/10/08 00:58:32.3 0.0 0.0 0.2 0.3 355 0.0 1.4 0.0
SP12 SP 25/10/08 00:58:32.3 0.0 0.0 0.1 0.3 2 0.0 1.8 0.0

RMS-ERR: 0.14

Event created: 2025/10/08 00:58:33
This origin created: 2025/10/10 13:17:17

Alert SPogs2026afic: determined by 11 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 11 stations used, weight 11):

Central Italy ML=2.7 2026/01/03 21:46:36.1 43.30 N 12.01 E 9 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/03	21:46:52.9	0.0	0.0	-1.2	0.9	356	0.0	2.8	0.0
SP06	SP	26/01/03	21:47:09.5	0.0	0.0	-0.4	1.1	350	0.0	2.8	0.0
SP06	SP	26/01/03	21:46:55.6	0.0	0.0	-0.0	1.1	350	0.0	2.8	0.0
SP11	SP	26/01/03	21:46:55.7	0.0	0.0	-0.1	1.1	355	0.0	2.3	0.0
SP11	SP	26/01/03	21:47:10.1	0.0	0.0	-0.2	1.1	355	0.0	2.3	0.0
SP05	SP	26/01/03	21:46:55.9	0.0	0.0	0.0	1.1	358	0.0	2.2	0.0
SP05	SP	26/01/03	21:47:10.2	0.0	0.0	-0.3	1.1	358	0.0	2.2	0.0
SP04	SP	26/01/03	21:47:10.4	0.0	0.0	-0.1	1.1	356	0.0	2.3	0.0
SP04	SP	26/01/03	21:46:56.6	0.0	0.0	0.7	1.1	356	0.0	2.3	0.0
SP01	SP	26/01/03	21:47:13.1	0.0	0.0	1.1	1.1	356	0.0	0.0	0.0
SP08	SP	26/01/03	21:46:58.8	0.0	0.0	0.6	1.2	354	0.0	2.8	0.0

RMS-ERR: 0.58

Event created: 2026/01/07 14:50:30
This origin created: 2026/01/07 14:50:04

Alert SPogs2026awou: determined by 24 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 24 stations used, weight 24):

Northern Italy ML=4.1 2026/01/13 08:27:56.7 44.29 N 11.96 E 30 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	08:28:01.9	0.0	0.0	0.1	0.1	205	0.0	3.8	0.0
SP07	SP	26/01/13	08:28:05.8	0.0	0.0	0.3	0.1	205	0.0	3.8	0.0
SP05	SP	26/01/13	08:28:01.3	0.0	0.0	-0.7	0.1	359	0.0	3.5	0.0
SP04	SP	26/01/13	08:28:01.5	0.0	0.0	-0.5	0.1	342	0.0	3.4	0.0
SP04	SP	26/01/13	08:28:05.4	0.0	0.0	-0.5	0.1	342	0.0	3.4	0.0
SP11	SP	26/01/13	08:28:02.0	0.0	0.0	-0.0	0.1	321	0.0	3.4	0.0
SP11	SP	26/01/13	08:28:06.0	0.0	0.0	0.1	0.1	321	0.0	3.4	0.0
SP03	SP	26/01/13	08:28:01.6	0.0	0.0	-0.4	0.1	358	0.0	3.8	0.0
SP03	SP	26/01/13	08:28:05.6	0.0	0.0	-0.4	0.1	358	0.0	3.8	0.0

SP10	SP	26/01/13	08:28:02.0	0.0	0.0	-0.2	0.1	89	0.0	4.2	0.0
SP10	SP	26/01/13	08:28:06.3	0.0	0.0	0.1	0.1	89	0.0	4.2	0.0
SP14	SP	26/01/13	08:28:01.8	0.0	0.0	-0.4	0.1	359	0.0	3.7	0.0
SP14	SP	26/01/13	08:28:05.8	0.0	0.0	-0.5	0.1	359	0.0	3.7	0.0
SP13	SP	26/01/13	08:28:02.4	0.0	0.0	0.0	0.1	330	0.0	3.2	0.0
SP13	SP	26/01/13	08:28:06.9	0.0	0.0	0.4	0.1	330	0.0	3.2	0.0
SP02	SP	26/01/13	08:28:02.3	0.0	0.0	-0.1	0.1	1	0.0	3.6	0.0
SP02	SP	26/01/13	08:28:06.7	0.0	0.0	0.1	0.1	1	0.0	3.6	0.0
SP06	SP	26/01/13	08:28:03.4	0.0	0.0	0.9	0.2	286	0.0	3.5	0.0
SP09	SP	26/01/13	08:28:02.4	0.0	0.0	-0.1	0.2	47	0.0	4.2	0.0
SP09	SP	26/01/13	08:28:07.1	0.0	0.0	0.3	0.2	47	0.0	4.2	0.0
SP12	SP	26/01/13	08:28:02.5	0.0	0.0	-0.0	0.2	12	0.0	4.1	0.0
SP12	SP	26/01/13	08:28:07.4	0.0	0.0	0.7	0.2	12	0.0	4.1	0.0
SP15	SP	26/01/13	08:28:03.0	0.0	0.0	-0.1	0.2	12	0.0	3.8	0.0
SP08	SP	26/01/13	08:28:04.0	0.0	0.0	0.5	0.3	341	0.0	3.9	0.0

RMS-ERR: 0.38

Event created: 2026/01/13 08:28:03
This origin created: 2026/01/13 09:42:18

Alert SPogs2026awov: determined by 25 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 25 stations used, weight 25):

Northern Italy ML=3.9 2026/01/13 08:29:16.0 44.28 N 11.96 E 31 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	08:29:21.4	0.0	0.0	0.3	0.0	214	0.0	3.5	0.0
SP07	SP	26/01/13	08:29:25.2	0.0	0.0	0.2	0.0	214	0.0	3.5	0.0
SP05	SP	26/01/13	08:29:20.8	0.0	0.0	-0.5	0.1	359	0.0	3.2	0.0
SP04	SP	26/01/13	08:29:21.1	0.0	0.0	-0.3	0.1	344	0.0	3.2	0.0
SP04	SP	26/01/13	08:29:24.7	0.0	0.0	-0.7	0.1	344	0.0	3.2	0.0
SP11	SP	26/01/13	08:29:21.5	0.0	0.0	0.0	0.1	325	0.0	3.1	0.0
SP11	SP	26/01/13	08:29:25.5	0.0	0.0	0.1	0.1	325	0.0	3.1	0.0
SP03	SP	26/01/13	08:29:21.1	0.0	0.0	-0.3	0.1	359	0.0	3.5	0.0
SP03	SP	26/01/13	08:29:25.1	0.0	0.0	-0.4	0.1	359	0.0	3.5	0.0
SP10	SP	26/01/13	08:29:21.5	0.0	0.0	-0.1	0.1	83	0.0	3.7	0.0
SP10	SP	26/01/13	08:29:25.8	0.0	0.0	0.2	0.1	83	0.0	3.7	0.0
SP14	SP	26/01/13	08:29:21.3	0.0	0.0	-0.3	0.1	359	0.0	3.3	0.0
SP14	SP	26/01/13	08:29:25.3	0.0	0.0	-0.5	0.1	359	0.0	3.3	0.0
SP13	SP	26/01/13	08:29:22.0	0.0	0.0	0.1	0.2	333	0.0	2.9	0.0
SP13	SP	26/01/13	08:29:26.3	0.0	0.0	0.2	0.2	333	0.0	2.9	0.0
SP02	SP	26/01/13	08:29:21.8	0.0	0.0	-0.1	0.2	1	0.0	3.5	0.0
SP02	SP	26/01/13	08:29:26.2	0.0	0.0	-0.0	0.2	1	0.0	3.5	0.0
SP01	SP	26/01/13	08:29:22.0	0.0	0.0	0.1	0.2	347	0.0	4.3	0.0
SP01	SP	26/01/13	08:29:26.9	0.0	0.0	0.7	0.2	347	0.0	4.3	0.0
SP09	SP	26/01/13	08:29:22.0	0.0	0.0	0.0	0.2	44	0.0	3.9	0.0
SP09	SP	26/01/13	08:29:26.7	0.0	0.0	0.4	0.2	44	0.0	3.9	0.0

SP12	SP	26/01/13	08:29:22.0	0.0	0.0	0.0	0.2	11	0.0	4.0	0.0
SP12	SP	26/01/13	08:29:27.0	0.0	0.0	0.6	0.2	11	0.0	4.0	0.0
SP15	SP	26/01/13	08:29:22.5	0.0	0.0	-0.1	0.2	12	0.0	3.6	0.0
SP08	SP	26/01/13	08:29:23.5	0.0	0.0	0.5	0.3	342	0.0	3.8	0.0

RMS-ERR: 0.34

Event created: 2026/01/13 08:29:24
This origin created: 2026/01/13 08:36:04

Alert SPogs2026awox: determined by 14 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 14 stations used, weight 14):

Northern Italy ML=1.1 2026/01/13 08:31:37.6 44.31 N 12.06 E 23 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP10	SP	26/01/13	08:31:42.1	0.0	0.0	0.3	0.0	110	0.0	1.4	0.0
SP05	SP	26/01/13	08:31:41.4	0.0	0.0	-0.7	0.1	310	0.0	1.2	0.0
SP05	SP	26/01/13	08:31:44.8	0.0	0.0	-0.6	0.1	310	0.0	1.2	0.0
SP07	SP	26/01/13	08:31:42.1	0.0	0.0	-0.1	0.1	236	0.0	1.3	0.0
SP07	SP	26/01/13	08:31:45.9	0.0	0.0	0.3	0.1	236	0.0	1.3	0.0
SP04	SP	26/01/13	08:31:45.4	0.0	0.0	-0.2	0.1	302	0.0	1.0	0.0
SP04	SP	26/01/13	08:31:41.8	0.0	0.0	-0.5	0.1	302	0.0	1.0	0.0
SP14	SP	26/01/13	08:31:42.2	0.0	0.0	-0.2	0.1	324	0.0	1.1	0.0
SP11	SP	26/01/13	08:31:46.2	0.0	0.0	0.1	0.1	292	0.0	1.1	0.0
SP11	SP	26/01/13	08:31:43.1	0.0	0.0	0.6	0.1	292	0.0	1.1	0.0
SP12	SP	26/01/13	08:31:42.6	0.0	0.0	0.1	0.1	344	0.0	1.7	0.0
SP02	SP	26/01/13	08:31:42.6	0.0	0.0	0.0	0.1	332	0.0	1.1	0.0
SP02	SP	26/01/13	08:31:46.8	0.0	0.0	0.7	0.1	332	0.0	1.1	0.0
SP13	SP	26/01/13	08:31:43.0	0.0	0.0	0.2	0.2	306	0.0	1.2	0.0

RMS-ERR: 0.39

Event created: 2026/01/13 08:31:48
This origin created: 2026/01/13 08:57:36

Alert SPogs2026awpa: determined by 11 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 11 stations used, weight 11):

Northern Italy ML=0.3 2026/01/13 08:35:03.5 44.30 N 11.96 E 28 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	08:35:12.1	0.0	0.0	0.1	0.1	205	0.0	0.8	0.0
SP07	SP	26/01/13	08:35:08.7	0.0	0.0	0.2	0.1	205	0.0	0.8	0.0
SP04	SP	26/01/13	08:35:11.9	0.0	0.0	-0.3	0.1	336	0.0	0.5	0.0
SP04	SP	26/01/13	08:35:08.0	0.0	0.0	-0.4	0.1	336	0.0	0.5	0.0

SP11	SP	26/01/13	08:35:08.4	0.0	0.0	-0.1	0.1	314	0.0	0.7	0.0
SP14	SP	26/01/13	08:35:08.8	0.0	0.0	0.1	0.1	356	0.0	0.8	0.0
SP10	SP	26/01/13	08:35:08.4	0.0	0.0	-0.3	0.1	95	0.0	1.1	0.0
SP10	SP	26/01/13	08:35:12.7	0.0	0.0	0.1	0.1	95	0.0	1.1	0.0
SP13	SP	26/01/13	08:35:09.2	0.0	0.0	0.3	0.1	326	0.0	0.5	0.0
SP02	SP	26/01/13	08:35:09.0	0.0	0.0	0.1	0.1	359	0.0	0.6	0.0
SP02	SP	26/01/13	08:35:13.0	0.0	0.0	0.1	0.1	359	0.0	0.6	0.0

RMS-ERR: 0.24

Event created: 2026/01/13 08:35:12
This origin created: 2026/01/13 09:31:12

Alert SPogs2026awpb: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=0.6 2026/01/13 08:35:48.1 44.31 N 11.93 E 34 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	08:35:53.5	0.0	0.0	-0.2	0.1	353	0.0	0.7	0.0
SP04	SP	26/01/13	08:35:57.3	0.0	0.0	-0.5	0.1	353	0.0	0.7	0.0
SP05	SP	26/01/13	08:35:53.2	0.0	0.0	-0.5	0.1	17	0.0	0.5	0.0
SP07	SP	26/01/13	08:35:53.9	0.0	0.0	0.2	0.1	182	0.0	0.8	0.0
SP07	SP	26/01/13	08:35:57.8	0.0	0.0	0.0	0.1	182	0.0	0.8	0.0
SP14	SP	26/01/13	08:35:53.7	0.0	0.0	-0.1	0.1	9	0.0	0.8	0.0
SP13	SP	26/01/13	08:35:54.2	0.0	0.0	0.3	0.1	333	0.0	0.6	0.0
SP02	SP	26/01/13	08:35:54.3	0.0	0.0	0.2	0.1	10	0.0	0.7	0.0
SP02	SP	26/01/13	08:35:58.6	0.0	0.0	0.2	0.1	10	0.0	0.7	0.0
SP06	SP	26/01/13	08:35:58.5	0.0	0.0	0.1	0.1	279	0.0	0.0	0.0
SP09	SP	26/01/13	08:35:59.0	0.0	0.0	0.2	0.2	58	0.0	1.5	0.0
SP09	SP	26/01/13	08:35:54.3	0.0	0.0	0.1	0.2	58	0.0	1.5	0.0

RMS-ERR: 0.27

Event created: 2026/01/13 08:35:55
This origin created: 2026/01/13 09:14:21

Alert SPogs2026awpd: determined by 9 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 9 stations used, weight 9):

Northern Italy ML=0.4 2026/01/13 08:38:33.3 44.33 N 11.96 E 26 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	08:38:37.5	0.0	0.0	-0.5	0.0	358	0.0	0.4	0.0
SP05	SP	26/01/13	08:38:41.0	0.0	0.0	-0.3	0.0	358	0.0	0.4	0.0
SP04	SP	26/01/13	08:38:37.7	0.0	0.0	-0.3	0.0	326	0.0	0.5	0.0

SP04	SP	26/01/13	08:38:41.6	0.0	0.0	0.3	0.0	326	0.0	0.5	0.0
SP11	SP	26/01/13	08:38:38.0	0.0	0.0	0.0	0.1	297	0.0	0.7	0.0
SP07	SP	26/01/13	08:38:41.9	0.0	0.0	0.2	0.1	194	0.0	0.7	0.0
SP07	SP	26/01/13	08:38:38.1	0.0	0.0	-0.1	0.1	194	0.0	0.7	0.0
SP02	SP	26/01/13	08:38:38.5	0.0	0.0	0.2	0.1	2	0.0	0.6	0.0
SP12	SP	26/01/13	08:38:38.7	0.0	0.0	0.3	0.1	16	0.0	1.4	0.0

RMS-ERR: 0.26

Event created: 2026/01/13 08:38:41
This origin created: 2026/01/13 09:17:13

Alert SPogs2026awpt: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.6 2026/01/13 08:56:28.3 44.34 N 11.88 E 27 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	08:56:33.1	0.0	0.0	0.0	0.0	40	0.0	0.5	0.0
SP04	SP	26/01/13	08:56:36.9	0.0	0.0	0.3	0.0	40	0.0	0.5	0.0
SP05	SP	26/01/13	08:56:32.8	0.0	0.0	-0.4	0.1	61	0.0	0.3	0.0
SP05	SP	26/01/13	08:56:36.2	0.0	0.0	-0.4	0.1	61	0.0	0.3	0.0
SP07	SP	26/01/13	08:56:33.5	0.0	0.0	0.1	0.1	162	0.0	0.7	0.0
SP07	SP	26/01/13	08:56:37.1	0.0	0.0	0.0	0.1	162	0.0	0.7	0.0
SP02	SP	26/01/13	08:56:33.5	0.0	0.0	0.0	0.1	30	0.0	0.7	0.0
SP12	SP	26/01/13	08:56:33.9	0.0	0.0	0.2	0.1	39	0.0	1.5	0.0
SP09	SP	26/01/13	08:56:38.6	0.0	0.0	0.2	0.2	71	0.0	1.6	0.0
SP09	SP	26/01/13	08:56:33.9	0.0	0.0	-0.2	0.2	71	0.0	1.6	0.0

RMS-ERR: 0.24

Event created: 2026/01/13 08:56:37
This origin created: 2026/01/13 09:19:49

Alert SPogs2026awpv: determined by 9 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 9 stations used, weight 9):

Northern Italy ML=0.3 2026/01/13 08:59:11.5 44.32 N 11.92 E 25 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	08:59:19.4	0.0	0.0	0.2	0.1	358	0.0	0.5	0.0
SP04	SP	26/01/13	08:59:15.6	0.0	0.0	-0.3	0.1	358	0.0	0.5	0.0
SP05	SP	26/01/13	08:59:15.4	0.0	0.0	-0.6	0.1	25	0.0	0.3	0.0
SP05	SP	26/01/13	08:59:18.8	0.0	0.0	-0.4	0.1	25	0.0	0.3	0.0
SP07	SP	26/01/13	08:59:16.4	0.0	0.0	0.3	0.1	177	0.0	0.8	0.0
SP13	SP	26/01/13	08:59:16.8	0.0	0.0	0.6	0.1	335	0.0	0.5	0.0

SP02 SP 26/01/13 08:59:16.5 0.0 0.0 0.1 0.1 13 0.0 0.6 0.0
SP09 SP 26/01/13 08:59:16.5 0.0 0.0 -0.3 0.2 60 0.0 1.4 0.0
SP09 SP 26/01/13 08:59:21.1 0.0 0.0 0.4 0.2 60 0.0 1.4 0.0

RMS-ERR: 0.38

Event created: 2026/01/13 08:59:19
This origin created: 2026/01/13 09:21:51

Alert SPogs2026awqe: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.6 2026/01/13 09:10:08.6 44.31 N 11.91 E 32 km

Stat Net Date Time Amp Per Res Dist Az mb ML mB
SP11 SP 26/01/13 09:10:14.2 0.0 0.0 0.2 0.1 335 0.0 0.5 0.0
SP04 SP 26/01/13 09:10:14.0 0.0 0.0 -0.1 0.1 7 0.0 0.5 0.0
SP04 SP 26/01/13 09:10:17.8 0.0 0.0 -0.3 0.1 7 0.0 0.5 0.0
SP07 SP 26/01/13 09:10:14.3 0.0 0.0 0.2 0.1 169 0.0 0.8 0.0
SP07 SP 26/01/13 09:10:18.0 0.0 0.0 -0.1 0.1 169 0.0 0.8 0.0
SP05 SP 26/01/13 09:10:13.7 0.0 0.0 -0.4 0.1 29 0.0 0.3 0.0
SP02 SP 26/01/13 09:10:14.7 0.0 0.0 0.3 0.1 16 0.0 0.7 0.0
SP02 SP 26/01/13 09:10:18.9 0.0 0.0 0.2 0.1 16 0.0 0.7 0.0
SP09 SP 26/01/13 09:10:19.4 0.0 0.0 0.1 0.2 59 0.0 1.4 0.0
SP09 SP 26/01/13 09:10:14.8 0.0 0.0 0.0 0.2 59 0.0 1.4 0.0

RMS-ERR: 0.22

Event created: 2026/01/13 09:10:17
This origin created: 2026/01/13 09:24:57

Alert SPogs2026awqh: determined by 11 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 11 stations used, weight 11):

Northern Italy ML=0.7 2026/01/13 09:13:31.8 44.31 N 11.87 E 31 km

Stat Net Date Time Amp Per Res Dist Az mb ML mB
SP04 SP 26/01/13 09:13:40.6 0.0 0.0 -0.3 0.1 31 0.0 0.5 0.0
SP04 SP 26/01/13 09:13:37.0 0.0 0.0 -0.1 0.1 31 0.0 0.5 0.0
SP07 SP 26/01/13 09:13:37.1 0.0 0.0 0.0 0.1 151 0.0 0.8 0.0
SP07 SP 26/01/13 09:13:41.2 0.0 0.0 0.2 0.1 151 0.0 0.8 0.0
SP05 SP 26/01/13 09:13:36.7 0.0 0.0 -0.4 0.1 47 0.0 0.5 0.0
SP14 SP 26/01/13 09:13:37.2 0.0 0.0 -0.1 0.1 31 0.0 1.0 0.0
SP02 SP 26/01/13 09:13:41.9 0.0 0.0 0.3 0.1 27 0.0 0.7 0.0
SP02 SP 26/01/13 09:13:37.8 0.0 0.0 0.3 0.1 27 0.0 0.7 0.0
SP12 SP 26/01/13 09:13:37.9 0.0 0.0 0.2 0.2 35 0.0 1.4 0.0

SP09 SP 26/01/13 09:13:38.0 0.0 0.0 -0.1 0.2 65 0.0 1.5 0.0
SP09 SP 26/01/13 09:13:42.6 0.0 0.0 0.0 0.2 65 0.0 1.5 0.0

RMS-ERR: 0.22

Event created: 2026/01/13 09:13:42
This origin created: 2026/01/13 09:27:19

Alert SPogs2026awqz: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=0.3 2026/01/13 09:34:05.9 44.32 N 11.96 E 28 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	09:34:10.3	0.0	0.0	-0.5	0.1	359	0.0	0.5	0.0
SP04	SP	26/01/13	09:34:14.2	0.0	0.0	-0.2	0.1	335	0.0	0.4	0.0
SP04	SP	26/01/13	09:34:10.6	0.0	0.0	-0.2	0.1	335	0.0	0.4	0.0
SP07	SP	26/01/13	09:34:10.9	0.0	0.0	0.0	0.1	197	0.0	0.8	0.0
SP07	SP	26/01/13	09:34:14.8	0.0	0.0	0.3	0.1	197	0.0	0.8	0.0
SP11	SP	26/01/13	09:34:10.9	0.0	0.0	0.0	0.1	309	0.0	0.6	0.0
SP02	SP	26/01/13	09:34:15.4	0.0	0.0	0.3	0.1	2	0.0	0.7	0.0
SP02	SP	26/01/13	09:34:11.4	0.0	0.0	0.3	0.1	2	0.0	0.7	0.0

RMS-ERR: 0.26

Event created: 2026/01/13 09:34:16
This origin created: 2026/01/13 09:48:00

Alert SPogs2026awra: determined by 6 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 6 stations used, weight 6):

Northern Italy ML=0.6 2026/01/13 09:34:50.3 44.33 N 12.21 E 15 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	09:34:54.9	0.0	0.0	-0.0	0.2	283	0.0	0.6	0.0
SP05	SP	26/01/13	09:34:58.4	0.0	0.0	0.0	0.2	283	0.0	0.6	0.0
SP04	SP	26/01/13	09:34:55.3	0.0	0.0	-0.1	0.2	281	0.0	0.8	0.0
SP04	SP	26/01/13	09:34:59.1	0.0	0.0	0.0	0.2	281	0.0	0.8	0.0
SP07	SP	26/01/13	09:34:59.3	0.0	0.0	-0.0	0.2	247	0.0	1.1	0.0
SP07	SP	26/01/13	09:34:55.6	0.0	0.0	0.1	0.2	247	0.0	1.1	0.0

RMS-ERR: 0.05

Event created: 2026/01/13 09:35:03
This origin created: 2026/01/13 09:55:23

Alert SPogs2026awsh: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=1.0 2026/01/13 10:13:52.4 44.32 N 11.90 E 27 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	10:13:57.1	0.0	0.0	-0.1	0.1	17	0.0	0.6	0.0
SP04	SP	26/01/13	10:14:00.5	0.0	0.0	-0.1	0.1	17	0.0	0.6	0.0
SP05	SP	26/01/13	10:13:56.7	0.0	0.0	-0.5	0.1	38	0.0	0.4	0.0
SP05	SP	26/01/13	10:14:00.2	0.0	0.0	-0.6	0.1	38	0.0	0.4	0.0
SP07	SP	26/01/13	10:14:01.2	0.0	0.0	0.4	0.1	164	0.0	0.8	0.0
SP07	SP	26/01/13	10:13:57.3	0.0	0.0	-0.0	0.1	164	0.0	0.8	0.0
SP01	SP	26/01/13	10:13:57.7	0.0	0.0	0.2	0.1	3	0.0	2.6	0.0
SP02	SP	26/01/13	10:14:01.9	0.0	0.0	0.4	0.1	21	0.0	0.6	0.0
SP02	SP	26/01/13	10:13:57.9	0.0	0.0	0.2	0.1	21	0.0	0.6	0.0
SP12	SP	26/01/13	10:13:58.0	0.0	0.0	0.1	0.2	30	0.0	1.3	0.0
SP09	SP	26/01/13	10:13:57.8	0.0	0.0	-0.4	0.2	63	0.0	1.5	0.0
SP09	SP	26/01/13	10:14:02.6	0.0	0.0	0.3	0.2	63	0.0	1.5	0.0

RMS-ERR: 0.32

Event created: 2026/01/13 10:14:00
This origin created: 2026/01/13 11:36:14

Alert SPogs2026awta: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.4 2026/01/13 10:36:33.3 44.33 N 12.09 E 21 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	10:36:37.3	0.0	0.0	-0.3	0.1	290	0.0	0.5	0.0
SP05	SP	26/01/13	10:36:40.8	0.0	0.0	-0.0	0.1	290	0.0	0.5	0.0
SP04	SP	26/01/13	10:36:41.2	0.0	0.0	0.0	0.1	287	0.0	0.5	0.0
SP04	SP	26/01/13	10:36:37.6	0.0	0.0	-0.2	0.1	287	0.0	0.5	0.0
SP02	SP	26/01/13	10:36:38.5	0.0	0.0	0.5	0.1	318	0.0	0.6	0.0
SP07	SP	26/01/13	10:36:37.9	0.0	0.0	-0.2	0.1	233	0.0	1.0	0.0
SP07	SP	26/01/13	10:36:41.7	0.0	0.0	0.1	0.1	233	0.0	1.0	0.0
SP11	SP	26/01/13	10:36:37.9	0.0	0.0	-0.3	0.2	281	0.0	0.7	0.0
SP13	SP	26/01/13	10:36:38.8	0.0	0.0	0.3	0.2	295	0.0	0.8	0.0
SP06	SP	26/01/13	10:36:39.6	0.0	0.0	0.2	0.2	270	0.0	1.3	0.0

RMS-ERR: 0.25

Event created: 2026/01/13 10:36:40
This origin created: 2026/01/13 11:38:35

Alert SPogs2026awth: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=0.7 2026/01/13 10:44:14.0 44.32 N 11.65 E 22 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	10:44:19.7	0.0	0.0	0.1	0.2	76	0.0	0.7	0.0
SP04	SP	26/01/13	10:44:23.4	0.0	0.0	-0.1	0.2	76	0.0	0.7	0.0
SP07	SP	26/01/13	10:44:20.0	0.0	0.0	0.3	0.2	112	0.0	1.0	0.0
SP07	SP	26/01/13	10:44:23.8	0.0	0.0	-0.1	0.2	112	0.0	1.0	0.0
SP05	SP	26/01/13	10:44:19.4	0.0	0.0	-0.5	0.2	78	0.0	0.8	0.0
SP02	SP	26/01/13	10:44:20.5	0.0	0.0	0.3	0.2	63	0.0	1.0	0.0
SP12	SP	26/01/13	10:44:25.8	0.0	0.0	0.2	0.3	64	0.0	1.8	0.0
SP12	SP	26/01/13	10:44:20.7	0.0	0.0	-0.1	0.3	64	0.0	1.8	0.0

RMS-ERR: 0.25

Event created: 2026/01/13 10:44:24
This origin created: 2026/01/13 11:41:33

Alert SPogs2026awtt: determined by 13 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 13 stations used, weight 13):

Northern Italy ML=0.8 2026/01/13 10:57:45.3 44.27 N 12.18 E 16 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	10:57:50.5	0.0	0.0	0.5	0.2	261	0.0	1.0	0.0
SP05	SP	26/01/13	10:57:49.9	0.0	0.0	-0.2	0.2	301	0.0	0.9	0.0
SP05	SP	26/01/13	10:57:53.4	0.0	0.0	-0.2	0.2	301	0.0	0.9	0.0
SP04	SP	26/01/13	10:57:54.0	0.0	0.0	-0.3	0.2	298	0.0	0.9	0.0
SP04	SP	26/01/13	10:57:50.2	0.0	0.0	-0.2	0.2	298	0.0	0.9	0.0
SP14	SP	26/01/13	10:57:50.4	0.0	0.0	-0.1	0.2	311	0.0	0.9	0.0
SP02	SP	26/01/13	10:57:55.1	0.0	0.0	0.4	0.2	316	0.0	0.8	0.0
SP02	SP	26/01/13	10:57:51.1	0.0	0.0	0.4	0.2	316	0.0	0.8	0.0
SP11	SP	26/01/13	10:57:50.6	0.0	0.0	-0.3	0.2	292	0.0	1.0	0.0
SP11	SP	26/01/13	10:57:54.6	0.0	0.0	-0.3	0.2	292	0.0	1.0	0.0
SP13	SP	26/01/13	10:57:51.3	0.0	0.0	-0.1	0.3	301	0.0	1.1	0.0
SP06	SP	26/01/13	10:57:52.2	0.0	0.0	0.1	0.3	281	0.0	1.9	0.0
SP06	SP	26/01/13	10:57:57.5	0.0	0.0	0.3	0.3	281	0.0	1.9	0.0

RMS-ERR: 0.28

Event created: 2026/01/13 10:57:53
This origin created: 2026/01/13 11:43:59

Alert SPogs2026awum: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=0.6 2026/01/13 11:20:09.3 44.27 N 11.96 E 34 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	11:20:19.0	0.0	0.0	0.0	0.0	224	0.0	0.7	0.0
SP07	SP	26/01/13	11:20:15.2	0.0	0.0	0.3	0.0	224	0.0	0.7	0.0
SP05	SP	26/01/13	11:20:14.5	0.0	0.0	-0.7	0.1	359	0.0	0.4	0.0
SP04	SP	26/01/13	11:20:14.8	0.0	0.0	-0.4	0.1	346	0.0	0.6	0.0
SP11	SP	26/01/13	11:20:15.2	0.0	0.0	-0.0	0.1	328	0.0	0.7	0.0
SP13	SP	26/01/13	11:20:16.1	0.0	0.0	0.5	0.2	334	0.0	0.6	0.0
SP02	SP	26/01/13	11:20:15.7	0.0	0.0	0.1	0.2	1	0.0	0.5	0.0
SP02	SP	26/01/13	11:20:20.0	0.0	0.0	-0.3	0.2	1	0.0	0.5	0.0
SP09	SP	26/01/13	11:20:15.6	0.0	0.0	-0.0	0.2	42	0.0	1.4	0.0
SP09	SP	26/01/13	11:20:20.2	0.0	0.0	-0.1	0.2	42	0.0	1.4	0.0
SP12	SP	26/01/13	11:20:20.9	0.0	0.0	0.5	0.2	11	0.0	1.1	0.0
SP12	SP	26/01/13	11:20:15.8	0.0	0.0	0.1	0.2	11	0.0	1.1	0.0

RMS-ERR: 0.32

Event created: 2026/01/13 11:20:18
This origin created: 2026/01/13 11:46:46

Alert SPogs2026awou: determined by 24 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 24 stations used, weight 24):

Northern Italy ML=4.1 2026/01/13 08:27:56.7 44.29 N 11.96 E 30 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	08:28:01.9	0.0	0.0	0.1	0.1	205	0.0	3.8	0.0
SP07	SP	26/01/13	08:28:05.8	0.0	0.0	0.3	0.1	205	0.0	3.8	0.0
SP05	SP	26/01/13	08:28:01.3	0.0	0.0	-0.7	0.1	359	0.0	3.5	0.0
SP04	SP	26/01/13	08:28:01.5	0.0	0.0	-0.5	0.1	342	0.0	3.4	0.0
SP04	SP	26/01/13	08:28:05.4	0.0	0.0	-0.5	0.1	342	0.0	3.4	0.0
SP11	SP	26/01/13	08:28:02.0	0.0	0.0	-0.0	0.1	321	0.0	3.4	0.0
SP11	SP	26/01/13	08:28:06.0	0.0	0.0	0.1	0.1	321	0.0	3.4	0.0
SP03	SP	26/01/13	08:28:01.6	0.0	0.0	-0.4	0.1	358	0.0	3.8	0.0
SP03	SP	26/01/13	08:28:05.6	0.0	0.0	-0.4	0.1	358	0.0	3.8	0.0
SP10	SP	26/01/13	08:28:02.0	0.0	0.0	-0.2	0.1	89	0.0	4.2	0.0
SP10	SP	26/01/13	08:28:06.3	0.0	0.0	0.1	0.1	89	0.0	4.2	0.0
SP14	SP	26/01/13	08:28:01.8	0.0	0.0	-0.4	0.1	359	0.0	3.7	0.0
SP14	SP	26/01/13	08:28:05.8	0.0	0.0	-0.5	0.1	359	0.0	3.7	0.0
SP13	SP	26/01/13	08:28:02.4	0.0	0.0	0.0	0.1	330	0.0	3.2	0.0
SP13	SP	26/01/13	08:28:06.9	0.0	0.0	0.4	0.1	330	0.0	3.2	0.0
SP02	SP	26/01/13	08:28:02.3	0.0	0.0	-0.1	0.1	1	0.0	3.6	0.0
SP02	SP	26/01/13	08:28:06.7	0.0	0.0	0.1	0.1	1	0.0	3.6	0.0

SP06	SP	26/01/13	08:28:03.4	0.0	0.0	0.9	0.2	286	0.0	3.5	0.0
SP09	SP	26/01/13	08:28:02.4	0.0	0.0	-0.1	0.2	47	0.0	4.2	0.0
SP09	SP	26/01/13	08:28:07.1	0.0	0.0	0.3	0.2	47	0.0	4.2	0.0
SP12	SP	26/01/13	08:28:02.5	0.0	0.0	-0.0	0.2	12	0.0	4.1	0.0
SP12	SP	26/01/13	08:28:07.4	0.0	0.0	0.7	0.2	12	0.0	4.1	0.0
SP15	SP	26/01/13	08:28:03.0	0.0	0.0	-0.1	0.2	12	0.0	3.8	0.0
SP08	SP	26/01/13	08:28:04.0	0.0	0.0	0.5	0.3	341	0.0	3.9	0.0

RMS-ERR: 0.38

Event created: 2026/01/13 08:28:03
This origin created: 2026/01/13 09:42:18

Alert SPogs2026awov: determined by 25 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 25 stations used, weight 25):

Northern Italy ML=3.9 2026/01/13 08:29:16.0 44.28 N 11.96 E 31 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	08:29:21.4	0.0	0.0	0.3	0.0	214	0.0	3.5	0.0
SP07	SP	26/01/13	08:29:25.2	0.0	0.0	0.2	0.0	214	0.0	3.5	0.0
SP05	SP	26/01/13	08:29:20.8	0.0	0.0	-0.5	0.1	359	0.0	3.2	0.0
SP04	SP	26/01/13	08:29:21.1	0.0	0.0	-0.3	0.1	344	0.0	3.2	0.0
SP04	SP	26/01/13	08:29:24.7	0.0	0.0	-0.7	0.1	344	0.0	3.2	0.0
SP11	SP	26/01/13	08:29:21.5	0.0	0.0	0.0	0.1	325	0.0	3.1	0.0
SP11	SP	26/01/13	08:29:25.5	0.0	0.0	0.1	0.1	325	0.0	3.1	0.0
SP03	SP	26/01/13	08:29:21.1	0.0	0.0	-0.3	0.1	359	0.0	3.5	0.0
SP03	SP	26/01/13	08:29:25.1	0.0	0.0	-0.4	0.1	359	0.0	3.5	0.0
SP10	SP	26/01/13	08:29:21.5	0.0	0.0	-0.1	0.1	83	0.0	3.7	0.0
SP10	SP	26/01/13	08:29:25.8	0.0	0.0	0.2	0.1	83	0.0	3.7	0.0
SP14	SP	26/01/13	08:29:21.3	0.0	0.0	-0.3	0.1	359	0.0	3.3	0.0
SP14	SP	26/01/13	08:29:25.3	0.0	0.0	-0.5	0.1	359	0.0	3.3	0.0
SP13	SP	26/01/13	08:29:22.0	0.0	0.0	0.1	0.2	333	0.0	2.9	0.0
SP13	SP	26/01/13	08:29:26.3	0.0	0.0	0.2	0.2	333	0.0	2.9	0.0
SP02	SP	26/01/13	08:29:21.8	0.0	0.0	-0.1	0.2	1	0.0	3.5	0.0
SP02	SP	26/01/13	08:29:26.2	0.0	0.0	-0.0	0.2	1	0.0	3.5	0.0
SP01	SP	26/01/13	08:29:22.0	0.0	0.0	0.1	0.2	347	0.0	4.3	0.0
SP01	SP	26/01/13	08:29:26.9	0.0	0.0	0.7	0.2	347	0.0	4.3	0.0
SP09	SP	26/01/13	08:29:22.0	0.0	0.0	0.0	0.2	44	0.0	3.9	0.0
SP09	SP	26/01/13	08:29:26.7	0.0	0.0	0.4	0.2	44	0.0	3.9	0.0
SP12	SP	26/01/13	08:29:22.0	0.0	0.0	0.0	0.2	11	0.0	4.0	0.0
SP12	SP	26/01/13	08:29:27.0	0.0	0.0	0.6	0.2	11	0.0	4.0	0.0
SP15	SP	26/01/13	08:29:22.5	0.0	0.0	-0.1	0.2	12	0.0	3.6	0.0
SP08	SP	26/01/13	08:29:23.5	0.0	0.0	0.5	0.3	342	0.0	3.8	0.0

RMS-ERR: 0.34

Event created: 2026/01/13 08:29:24

This origin created: 2026/01/13 08:36:04

Alert SPogs2026awox: determined by 14 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 14 stations used, weight 14):

Northern Italy ML=1.1 2026/01/13 08:31:37.6 44.31 N 12.06 E 23 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP10	SP	26/01/13	08:31:42.1	0.0	0.0	0.3	0.0	110	0.0	1.4	0.0
SP05	SP	26/01/13	08:31:41.4	0.0	0.0	-0.7	0.1	310	0.0	1.2	0.0
SP05	SP	26/01/13	08:31:44.8	0.0	0.0	-0.6	0.1	310	0.0	1.2	0.0
SP07	SP	26/01/13	08:31:42.1	0.0	0.0	-0.1	0.1	236	0.0	1.3	0.0
SP07	SP	26/01/13	08:31:45.9	0.0	0.0	0.3	0.1	236	0.0	1.3	0.0
SP04	SP	26/01/13	08:31:45.4	0.0	0.0	-0.2	0.1	302	0.0	1.0	0.0
SP04	SP	26/01/13	08:31:41.8	0.0	0.0	-0.5	0.1	302	0.0	1.0	0.0
SP14	SP	26/01/13	08:31:42.2	0.0	0.0	-0.2	0.1	324	0.0	1.1	0.0
SP11	SP	26/01/13	08:31:46.2	0.0	0.0	0.1	0.1	292	0.0	1.1	0.0
SP11	SP	26/01/13	08:31:43.1	0.0	0.0	0.6	0.1	292	0.0	1.1	0.0
SP12	SP	26/01/13	08:31:42.6	0.0	0.0	0.1	0.1	344	0.0	1.7	0.0
SP02	SP	26/01/13	08:31:42.6	0.0	0.0	0.0	0.1	332	0.0	1.1	0.0
SP02	SP	26/01/13	08:31:46.8	0.0	0.0	0.7	0.1	332	0.0	1.1	0.0
SP13	SP	26/01/13	08:31:43.0	0.0	0.0	0.2	0.2	306	0.0	1.2	0.0

RMS-ERR: 0.39

Event created: 2026/01/13 08:31:48
This origin created: 2026/01/13 08:57:36

Alert SPogs2026awpa: determined by 11 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 11 stations used, weight 11):

Northern Italy ML=0.3 2026/01/13 08:35:03.5 44.30 N 11.96 E 28 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	08:35:12.1	0.0	0.0	0.1	0.1	205	0.0	0.8	0.0
SP07	SP	26/01/13	08:35:08.7	0.0	0.0	0.2	0.1	205	0.0	0.8	0.0
SP04	SP	26/01/13	08:35:11.9	0.0	0.0	-0.3	0.1	336	0.0	0.5	0.0
SP04	SP	26/01/13	08:35:08.0	0.0	0.0	-0.4	0.1	336	0.0	0.5	0.0
SP11	SP	26/01/13	08:35:08.4	0.0	0.0	-0.1	0.1	314	0.0	0.7	0.0
SP14	SP	26/01/13	08:35:08.8	0.0	0.0	0.1	0.1	356	0.0	0.8	0.0
SP10	SP	26/01/13	08:35:08.4	0.0	0.0	-0.3	0.1	95	0.0	1.1	0.0
SP10	SP	26/01/13	08:35:12.7	0.0	0.0	0.1	0.1	95	0.0	1.1	0.0
SP13	SP	26/01/13	08:35:09.2	0.0	0.0	0.3	0.1	326	0.0	0.5	0.0
SP02	SP	26/01/13	08:35:09.0	0.0	0.0	0.1	0.1	359	0.0	0.6	0.0
SP02	SP	26/01/13	08:35:13.0	0.0	0.0	0.1	0.1	359	0.0	0.6	0.0

RMS-ERR: 0.24

Event created: 2026/01/13 08:35:12
This origin created: 2026/01/13 09:31:12

Alert SPogs2026awpb: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=0.6 2026/01/13 08:35:48.1 44.31 N 11.93 E 34 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	08:35:53.5	0.0	0.0	-0.2	0.1	353	0.0	0.7	0.0
SP04	SP	26/01/13	08:35:57.3	0.0	0.0	-0.5	0.1	353	0.0	0.7	0.0
SP05	SP	26/01/13	08:35:53.2	0.0	0.0	-0.5	0.1	17	0.0	0.5	0.0
SP07	SP	26/01/13	08:35:53.9	0.0	0.0	0.2	0.1	182	0.0	0.8	0.0
SP07	SP	26/01/13	08:35:57.8	0.0	0.0	0.0	0.1	182	0.0	0.8	0.0
SP14	SP	26/01/13	08:35:53.7	0.0	0.0	-0.1	0.1	9	0.0	0.8	0.0
SP13	SP	26/01/13	08:35:54.2	0.0	0.0	0.3	0.1	333	0.0	0.6	0.0
SP02	SP	26/01/13	08:35:54.3	0.0	0.0	0.2	0.1	10	0.0	0.7	0.0
SP02	SP	26/01/13	08:35:58.6	0.0	0.0	0.2	0.1	10	0.0	0.7	0.0
SP06	SP	26/01/13	08:35:58.5	0.0	0.0	0.1	0.1	279	0.0	0.0	0.0
SP09	SP	26/01/13	08:35:59.0	0.0	0.0	0.2	0.2	58	0.0	1.5	0.0
SP09	SP	26/01/13	08:35:54.3	0.0	0.0	0.1	0.2	58	0.0	1.5	0.0

RMS-ERR: 0.27

Event created: 2026/01/13 08:35:55
This origin created: 2026/01/13 09:14:21

Alert SPogs2026awpd: determined by 9 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 9 stations used, weight 9):

Northern Italy ML=0.4 2026/01/13 08:38:33.3 44.33 N 11.96 E 26 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	08:38:37.5	0.0	0.0	-0.5	0.0	358	0.0	0.4	0.0
SP05	SP	26/01/13	08:38:41.0	0.0	0.0	-0.3	0.0	358	0.0	0.4	0.0
SP04	SP	26/01/13	08:38:37.7	0.0	0.0	-0.3	0.0	326	0.0	0.5	0.0
SP04	SP	26/01/13	08:38:41.6	0.0	0.0	0.3	0.0	326	0.0	0.5	0.0
SP11	SP	26/01/13	08:38:38.0	0.0	0.0	0.0	0.1	297	0.0	0.7	0.0
SP07	SP	26/01/13	08:38:41.9	0.0	0.0	0.2	0.1	194	0.0	0.7	0.0
SP07	SP	26/01/13	08:38:38.1	0.0	0.0	-0.1	0.1	194	0.0	0.7	0.0
SP02	SP	26/01/13	08:38:38.5	0.0	0.0	0.2	0.1	2	0.0	0.6	0.0
SP12	SP	26/01/13	08:38:38.7	0.0	0.0	0.3	0.1	16	0.0	1.4	0.0

RMS-ERR: 0.26

Event created: 2026/01/13 08:38:41
This origin created: 2026/01/13 09:17:13

Alert SPogs2026awpt: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.6 2026/01/13 08:56:28.3 44.34 N 11.88 E 27 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	08:56:33.1	0.0	0.0	0.0	0.0	40	0.0	0.5	0.0
SP04	SP	26/01/13	08:56:36.9	0.0	0.0	0.3	0.0	40	0.0	0.5	0.0
SP05	SP	26/01/13	08:56:32.8	0.0	0.0	-0.4	0.1	61	0.0	0.3	0.0
SP05	SP	26/01/13	08:56:36.2	0.0	0.0	-0.4	0.1	61	0.0	0.3	0.0
SP07	SP	26/01/13	08:56:33.5	0.0	0.0	0.1	0.1	162	0.0	0.7	0.0
SP07	SP	26/01/13	08:56:37.1	0.0	0.0	0.0	0.1	162	0.0	0.7	0.0
SP02	SP	26/01/13	08:56:33.5	0.0	0.0	0.0	0.1	30	0.0	0.7	0.0
SP12	SP	26/01/13	08:56:33.9	0.0	0.0	0.2	0.1	39	0.0	1.5	0.0
SP09	SP	26/01/13	08:56:38.6	0.0	0.0	0.2	0.2	71	0.0	1.6	0.0
SP09	SP	26/01/13	08:56:33.9	0.0	0.0	-0.2	0.2	71	0.0	1.6	0.0

RMS-ERR: 0.24

Event created: 2026/01/13 08:56:37
This origin created: 2026/01/13 09:19:49

Alert SPogs2026awpv: determined by 9 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 9 stations used, weight 9):

Northern Italy ML=0.3 2026/01/13 08:59:11.5 44.32 N 11.92 E 25 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	08:59:19.4	0.0	0.0	0.2	0.1	358	0.0	0.5	0.0
SP04	SP	26/01/13	08:59:15.6	0.0	0.0	-0.3	0.1	358	0.0	0.5	0.0
SP05	SP	26/01/13	08:59:15.4	0.0	0.0	-0.6	0.1	25	0.0	0.3	0.0
SP05	SP	26/01/13	08:59:18.8	0.0	0.0	-0.4	0.1	25	0.0	0.3	0.0
SP07	SP	26/01/13	08:59:16.4	0.0	0.0	0.3	0.1	177	0.0	0.8	0.0
SP13	SP	26/01/13	08:59:16.8	0.0	0.0	0.6	0.1	335	0.0	0.5	0.0
SP02	SP	26/01/13	08:59:16.5	0.0	0.0	0.1	0.1	13	0.0	0.6	0.0
SP09	SP	26/01/13	08:59:16.5	0.0	0.0	-0.3	0.2	60	0.0	1.4	0.0
SP09	SP	26/01/13	08:59:21.1	0.0	0.0	0.4	0.2	60	0.0	1.4	0.0

RMS-ERR: 0.38

Event created: 2026/01/13 08:59:19
This origin created: 2026/01/13 09:21:51

Alert SPogs2026awqe: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.6 2026/01/13 09:10:08.6 44.31 N 11.91 E 32 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP11	SP	26/01/13	09:10:14.2	0.0	0.0	0.2	0.1	335	0.0	0.5	0.0
SP04	SP	26/01/13	09:10:14.0	0.0	0.0	-0.1	0.1	7	0.0	0.5	0.0
SP04	SP	26/01/13	09:10:17.8	0.0	0.0	-0.3	0.1	7	0.0	0.5	0.0
SP07	SP	26/01/13	09:10:14.3	0.0	0.0	0.2	0.1	169	0.0	0.8	0.0
SP07	SP	26/01/13	09:10:18.0	0.0	0.0	-0.1	0.1	169	0.0	0.8	0.0
SP05	SP	26/01/13	09:10:13.7	0.0	0.0	-0.4	0.1	29	0.0	0.3	0.0
SP02	SP	26/01/13	09:10:14.7	0.0	0.0	0.3	0.1	16	0.0	0.7	0.0
SP02	SP	26/01/13	09:10:18.9	0.0	0.0	0.2	0.1	16	0.0	0.7	0.0
SP09	SP	26/01/13	09:10:19.4	0.0	0.0	0.1	0.2	59	0.0	1.4	0.0
SP09	SP	26/01/13	09:10:14.8	0.0	0.0	0.0	0.2	59	0.0	1.4	0.0

RMS-ERR: 0.22

Event created: 2026/01/13 09:10:17
This origin created: 2026/01/13 09:24:57

Alert SPogs2026awqh: determined by 11 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 11 stations used, weight 11):

Northern Italy ML=0.7 2026/01/13 09:13:31.8 44.31 N 11.87 E 31 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	09:13:40.6	0.0	0.0	-0.3	0.1	31	0.0	0.5	0.0
SP04	SP	26/01/13	09:13:37.0	0.0	0.0	-0.1	0.1	31	0.0	0.5	0.0
SP07	SP	26/01/13	09:13:37.1	0.0	0.0	0.0	0.1	151	0.0	0.8	0.0
SP07	SP	26/01/13	09:13:41.2	0.0	0.0	0.2	0.1	151	0.0	0.8	0.0
SP05	SP	26/01/13	09:13:36.7	0.0	0.0	-0.4	0.1	47	0.0	0.5	0.0
SP14	SP	26/01/13	09:13:37.2	0.0	0.0	-0.1	0.1	31	0.0	1.0	0.0
SP02	SP	26/01/13	09:13:41.9	0.0	0.0	0.3	0.1	27	0.0	0.7	0.0
SP02	SP	26/01/13	09:13:37.8	0.0	0.0	0.3	0.1	27	0.0	0.7	0.0
SP12	SP	26/01/13	09:13:37.9	0.0	0.0	0.2	0.2	35	0.0	1.4	0.0
SP09	SP	26/01/13	09:13:38.0	0.0	0.0	-0.1	0.2	65	0.0	1.5	0.0
SP09	SP	26/01/13	09:13:42.6	0.0	0.0	0.0	0.2	65	0.0	1.5	0.0

RMS-ERR: 0.22

Event created: 2026/01/13 09:13:42
This origin created: 2026/01/13 09:27:19

Alert SPogs2026awqz: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=0.3 2026/01/13 09:34:05.9 44.32 N 11.96 E 28 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	09:34:10.3	0.0	0.0	-0.5	0.1	359	0.0	0.5	0.0
SP04	SP	26/01/13	09:34:14.2	0.0	0.0	-0.2	0.1	335	0.0	0.4	0.0
SP04	SP	26/01/13	09:34:10.6	0.0	0.0	-0.2	0.1	335	0.0	0.4	0.0
SP07	SP	26/01/13	09:34:10.9	0.0	0.0	0.0	0.1	197	0.0	0.8	0.0
SP07	SP	26/01/13	09:34:14.8	0.0	0.0	0.3	0.1	197	0.0	0.8	0.0
SP11	SP	26/01/13	09:34:10.9	0.0	0.0	0.0	0.1	309	0.0	0.6	0.0
SP02	SP	26/01/13	09:34:15.4	0.0	0.0	0.3	0.1	2	0.0	0.7	0.0
SP02	SP	26/01/13	09:34:11.4	0.0	0.0	0.3	0.1	2	0.0	0.7	0.0

RMS-ERR: 0.26

Event created: 2026/01/13 09:34:16
This origin created: 2026/01/13 09:48:00

Alert SPogs2026awra: determined by 6 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 6 stations used, weight 6):

Northern Italy ML=0.6 2026/01/13 09:34:50.3 44.33 N 12.21 E 15 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	09:34:54.9	0.0	0.0	-0.0	0.2	283	0.0	0.6	0.0
SP05	SP	26/01/13	09:34:58.4	0.0	0.0	0.0	0.2	283	0.0	0.6	0.0
SP04	SP	26/01/13	09:34:55.3	0.0	0.0	-0.1	0.2	281	0.0	0.8	0.0
SP04	SP	26/01/13	09:34:59.1	0.0	0.0	0.0	0.2	281	0.0	0.8	0.0
SP07	SP	26/01/13	09:34:59.3	0.0	0.0	-0.0	0.2	247	0.0	1.1	0.0
SP07	SP	26/01/13	09:34:55.6	0.0	0.0	0.1	0.2	247	0.0	1.1	0.0

RMS-ERR: 0.05

Event created: 2026/01/13 09:35:03
This origin created: 2026/01/13 09:55:23

Alert SPogs2026awsh: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=1.0 2026/01/13 10:13:52.4 44.32 N 11.90 E 27 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB

SP04	SP	26/01/13	10:13:57.1	0.0	0.0	-0.1	0.1	17	0.0	0.6	0.0
SP04	SP	26/01/13	10:14:00.5	0.0	0.0	-0.1	0.1	17	0.0	0.6	0.0
SP05	SP	26/01/13	10:13:56.7	0.0	0.0	-0.5	0.1	38	0.0	0.4	0.0
SP05	SP	26/01/13	10:14:00.2	0.0	0.0	-0.6	0.1	38	0.0	0.4	0.0
SP07	SP	26/01/13	10:14:01.2	0.0	0.0	0.4	0.1	164	0.0	0.8	0.0
SP07	SP	26/01/13	10:13:57.3	0.0	0.0	-0.0	0.1	164	0.0	0.8	0.0
SP01	SP	26/01/13	10:13:57.7	0.0	0.0	0.2	0.1	3	0.0	2.6	0.0
SP02	SP	26/01/13	10:14:01.9	0.0	0.0	0.4	0.1	21	0.0	0.6	0.0
SP02	SP	26/01/13	10:13:57.9	0.0	0.0	0.2	0.1	21	0.0	0.6	0.0
SP12	SP	26/01/13	10:13:58.0	0.0	0.0	0.1	0.2	30	0.0	1.3	0.0
SP09	SP	26/01/13	10:13:57.8	0.0	0.0	-0.4	0.2	63	0.0	1.5	0.0
SP09	SP	26/01/13	10:14:02.6	0.0	0.0	0.3	0.2	63	0.0	1.5	0.0

RMS-ERR: 0.32

Event created: 2026/01/13 10:14:00
This origin created: 2026/01/13 11:36:14

Alert SPogs2026awta: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.4 2026/01/13 10:36:33.3 44.33 N 12.09 E 21 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	10:36:37.3	0.0	0.0	-0.3	0.1	290	0.0	0.5	0.0
SP05	SP	26/01/13	10:36:40.8	0.0	0.0	-0.0	0.1	290	0.0	0.5	0.0
SP04	SP	26/01/13	10:36:41.2	0.0	0.0	0.0	0.1	287	0.0	0.5	0.0
SP04	SP	26/01/13	10:36:37.6	0.0	0.0	-0.2	0.1	287	0.0	0.5	0.0
SP02	SP	26/01/13	10:36:38.5	0.0	0.0	0.5	0.1	318	0.0	0.6	0.0
SP07	SP	26/01/13	10:36:37.9	0.0	0.0	-0.2	0.1	233	0.0	1.0	0.0
SP07	SP	26/01/13	10:36:41.7	0.0	0.0	0.1	0.1	233	0.0	1.0	0.0
SP11	SP	26/01/13	10:36:37.9	0.0	0.0	-0.3	0.2	281	0.0	0.7	0.0
SP13	SP	26/01/13	10:36:38.8	0.0	0.0	0.3	0.2	295	0.0	0.8	0.0
SP06	SP	26/01/13	10:36:39.6	0.0	0.0	0.2	0.2	270	0.0	1.3	0.0

RMS-ERR: 0.25

Event created: 2026/01/13 10:36:40
This origin created: 2026/01/13 11:38:35

Alert SPogs2026awth: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=0.7 2026/01/13 10:44:14.0 44.32 N 11.65 E 22 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB

SP04	SP	26/01/13	10:44:19.7	0.0	0.0	0.1	0.2	76	0.0	0.7	0.0
SP04	SP	26/01/13	10:44:23.4	0.0	0.0	-0.1	0.2	76	0.0	0.7	0.0
SP07	SP	26/01/13	10:44:20.0	0.0	0.0	0.3	0.2	112	0.0	1.0	0.0
SP07	SP	26/01/13	10:44:23.8	0.0	0.0	-0.1	0.2	112	0.0	1.0	0.0
SP05	SP	26/01/13	10:44:19.4	0.0	0.0	-0.5	0.2	78	0.0	0.8	0.0
SP02	SP	26/01/13	10:44:20.5	0.0	0.0	0.3	0.2	63	0.0	1.0	0.0
SP12	SP	26/01/13	10:44:25.8	0.0	0.0	0.2	0.3	64	0.0	1.8	0.0
SP12	SP	26/01/13	10:44:20.7	0.0	0.0	-0.1	0.3	64	0.0	1.8	0.0

RMS-ERR: 0.25

Event created: 2026/01/13 10:44:24
This origin created: 2026/01/13 11:41:33

Alert SPogs2026awtt: determined by 13 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 13 stations used, weight 13):

Northern Italy ML=0.8 2026/01/13 10:57:45.3 44.27 N 12.18 E 16 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	10:57:50.5	0.0	0.0	0.5	0.2	261	0.0	1.0	0.0
SP05	SP	26/01/13	10:57:49.9	0.0	0.0	-0.2	0.2	301	0.0	0.9	0.0
SP05	SP	26/01/13	10:57:53.4	0.0	0.0	-0.2	0.2	301	0.0	0.9	0.0
SP04	SP	26/01/13	10:57:54.0	0.0	0.0	-0.3	0.2	298	0.0	0.9	0.0
SP04	SP	26/01/13	10:57:50.2	0.0	0.0	-0.2	0.2	298	0.0	0.9	0.0
SP14	SP	26/01/13	10:57:50.4	0.0	0.0	-0.1	0.2	311	0.0	0.9	0.0
SP02	SP	26/01/13	10:57:55.1	0.0	0.0	0.4	0.2	316	0.0	0.8	0.0
SP02	SP	26/01/13	10:57:51.1	0.0	0.0	0.4	0.2	316	0.0	0.8	0.0
SP11	SP	26/01/13	10:57:50.6	0.0	0.0	-0.3	0.2	292	0.0	1.0	0.0
SP11	SP	26/01/13	10:57:54.6	0.0	0.0	-0.3	0.2	292	0.0	1.0	0.0
SP13	SP	26/01/13	10:57:51.3	0.0	0.0	-0.1	0.3	301	0.0	1.1	0.0
SP06	SP	26/01/13	10:57:52.2	0.0	0.0	0.1	0.3	281	0.0	1.9	0.0
SP06	SP	26/01/13	10:57:57.5	0.0	0.0	0.3	0.3	281	0.0	1.9	0.0

RMS-ERR: 0.28

Event created: 2026/01/13 10:57:53
This origin created: 2026/01/13 11:43:59

Alert SPogs2026awum: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=0.6 2026/01/13 11:20:09.3 44.27 N 11.96 E 34 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	11:20:19.0	0.0	0.0	0.0	0.0	224	0.0	0.7	0.0

SP07	SP	26/01/13	11:20:15.2	0.0	0.0	0.3	0.0	224	0.0	0.7	0.0
SP05	SP	26/01/13	11:20:14.5	0.0	0.0	-0.7	0.1	359	0.0	0.4	0.0
SP04	SP	26/01/13	11:20:14.8	0.0	0.0	-0.4	0.1	346	0.0	0.6	0.0
SP11	SP	26/01/13	11:20:15.2	0.0	0.0	-0.0	0.1	328	0.0	0.7	0.0
SP13	SP	26/01/13	11:20:16.1	0.0	0.0	0.5	0.2	334	0.0	0.6	0.0
SP02	SP	26/01/13	11:20:15.7	0.0	0.0	0.1	0.2	1	0.0	0.5	0.0
SP02	SP	26/01/13	11:20:20.0	0.0	0.0	-0.3	0.2	1	0.0	0.5	0.0
SP09	SP	26/01/13	11:20:15.6	0.0	0.0	-0.0	0.2	42	0.0	1.4	0.0
SP09	SP	26/01/13	11:20:20.2	0.0	0.0	-0.1	0.2	42	0.0	1.4	0.0
SP12	SP	26/01/13	11:20:20.9	0.0	0.0	0.5	0.2	11	0.0	1.1	0.0
SP12	SP	26/01/13	11:20:15.8	0.0	0.0	0.1	0.2	11	0.0	1.1	0.0

RMS-ERR: 0.32

Event created: 2026/01/13 11:20:18
This origin created: 2026/01/13 11:46:46

Alert SPogs2026awvs: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=0.7 2026/01/13 11:57:08.7 44.30 N 11.96 E 28 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	11:57:17.7	0.0	0.0	0.5	0.1	200	0.0	0.9	0.0
SP07	SP	26/01/13	11:57:13.6	0.0	0.0	-0.0	0.1	200	0.0	0.9	0.0
SP05	SP	26/01/13	11:57:13.1	0.0	0.0	-0.6	0.1	359	0.0	0.4	0.0
SP05	SP	26/01/13	11:57:16.6	0.0	0.0	-0.7	0.1	359	0.0	0.4	0.0
SP04	SP	26/01/13	11:57:17.3	0.0	0.0	-0.1	0.1	339	0.0	0.5	0.0
SP04	SP	26/01/13	11:57:13.6	0.0	0.0	-0.1	0.1	339	0.0	0.5	0.0
SP14	SP	26/01/13	11:57:14.1	0.0	0.0	0.2	0.1	359	0.0	0.6	0.0
SP14	SP	26/01/13	11:57:17.6	0.0	0.0	-0.1	0.1	359	0.0	0.6	0.0
SP02	SP	26/01/13	11:57:14.4	0.0	0.0	0.3	0.1	1	0.0	0.5	0.0
SP02	SP	26/01/13	11:57:18.6	0.0	0.0	0.6	0.1	1	0.0	0.5	0.0
SP12	SP	26/01/13	11:57:14.3	0.0	0.0	0.1	0.1	13	0.0	1.1	0.0
SP09	SP	26/01/13	11:57:14.2	0.0	0.0	-0.1	0.2	51	0.0	1.5	0.0

RMS-ERR: 0.34

Event created: 2026/01/13 11:57:16
This origin created: 2026/01/13 12:46:15

Alert SPogs2026axed: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=0.5 2026/01/13 16:13:24.0 44.32 N 12.11 E 25 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	16:13:28.5	0.0	0.0	-0.3	0.1	296	0.0	0.5	0.0
SP05	SP	26/01/13	16:13:32.0	0.0	0.0	-0.5	0.1	296	0.0	0.5	0.0
SP04	SP	26/01/13	16:13:32.6	0.0	0.0	-0.3	0.1	292	0.0	0.5	0.0
SP04	SP	26/01/13	16:13:29.0	0.0	0.0	-0.1	0.1	292	0.0	0.5	0.0
SP07	SP	26/01/13	16:13:29.1	0.0	0.0	-0.0	0.1	242	0.0	1.0	0.0
SP07	SP	26/01/13	16:13:33.0	0.0	0.0	0.1	0.1	242	0.0	1.0	0.0
SP02	SP	26/01/13	16:13:29.6	0.0	0.0	0.3	0.2	319	0.0	0.4	0.0
SP02	SP	26/01/13	16:13:33.7	0.0	0.0	0.6	0.2	319	0.0	0.4	0.0
SP11	SP	26/01/13	16:13:33.3	0.0	0.0	-0.1	0.2	285	0.0	0.7	0.0
SP11	SP	26/01/13	16:13:29.1	0.0	0.0	-0.3	0.2	285	0.0	0.7	0.0
SP06	SP	26/01/13	16:13:35.7	0.0	0.0	0.4	0.3	274	0.0	1.5	0.0
SP06	SP	26/01/13	16:13:30.8	0.0	0.0	0.3	0.3	274	0.0	1.5	0.0

RMS-ERR: 0.32

Event created: 2026/01/13 16:13:33
This origin created: 2026/01/13 16:40:58

Alert SPogs2026axef: determined by 9 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 9 stations used, weight 9):

Northern Italy ML=0.7 2026/01/13 16:15:14.9 44.32 N 11.90 E 27 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	16:15:19.3	0.0	0.0	-0.5	0.1	35	0.0	0.3	0.0
SP05	SP	26/01/13	16:15:22.8	0.0	0.0	-0.5	0.1	35	0.0	0.3	0.0
SP07	SP	26/01/13	16:15:23.6	0.0	0.0	0.3	0.1	167	0.0	0.8	0.0
SP07	SP	26/01/13	16:15:19.9	0.0	0.0	0.1	0.1	167	0.0	0.8	0.0
SP02	SP	26/01/13	16:15:24.4	0.0	0.0	0.3	0.1	19	0.0	0.4	0.0
SP02	SP	26/01/13	16:15:20.4	0.0	0.0	0.2	0.1	19	0.0	0.4	0.0
SP12	SP	26/01/13	16:15:20.6	0.0	0.0	0.2	0.1	29	0.0	1.0	0.0
SP09	SP	26/01/13	16:15:20.4	0.0	0.0	-0.3	0.2	62	0.0	1.3	0.0
SP09	SP	26/01/13	16:15:25.0	0.0	0.0	0.2	0.2	62	0.0	1.3	0.0

RMS-ERR: 0.30

Event created: 2026/01/13 16:15:23
This origin created: 2026/01/13 16:50:51

Alert SPogs2026axei: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=0.4 2026/01/13 16:19:14.6 44.29 N 11.96 E 24 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB

SP07	SP	26/01/13	16:19:19.5	0.0	0.0	0.5	0.1	203	0.0	0.7	0.0
SP05	SP	26/01/13	16:19:18.5	0.0	0.0	-0.5	0.1	359	0.0	0.3	0.0
SP05	SP	26/01/13	16:19:21.9	0.0	0.0	-0.3	0.1	359	0.0	0.3	0.0
SP04	SP	26/01/13	16:19:22.5	0.0	0.0	0.1	0.1	341	0.0	0.4	0.0
SP04	SP	26/01/13	16:19:18.8	0.0	0.0	-0.3	0.1	341	0.0	0.4	0.0
SP02	SP	26/01/13	16:19:19.7	0.0	0.0	0.1	0.1	1	0.0	0.5	0.0
SP02	SP	26/01/13	16:19:23.7	0.0	0.0	0.4	0.1	1	0.0	0.5	0.0
SP12	SP	26/01/13	16:19:19.8	0.0	0.0	0.0	0.2	12	0.0	1.1	0.0

RMS-ERR: 0.34

Event created: 2026/01/13 16:19:26
This origin created: 2026/01/13 16:53:21

Alert SPogs2026axfy: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.3 2026/01/13 17:07:46.2 44.31 N 11.96 E 27 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	17:07:50.6	0.0	0.0	-0.5	0.1	359	0.0	0.1	0.0
SP05	SP	26/01/13	17:07:54.0	0.0	0.0	-0.5	0.1	359	0.0	0.1	0.0
SP04	SP	26/01/13	17:07:54.5	0.0	0.0	-0.0	0.1	336	0.0	0.3	0.0
SP04	SP	26/01/13	17:07:50.9	0.0	0.0	-0.1	0.1	336	0.0	0.3	0.0
SP07	SP	26/01/13	17:07:51.1	0.0	0.0	0.1	0.1	198	0.0	0.7	0.0
SP07	SP	26/01/13	17:07:55.0	0.0	0.0	0.3	0.1	198	0.0	0.7	0.0
SP11	SP	26/01/13	17:07:51.2	0.0	0.0	0.1	0.1	311	0.0	0.5	0.0
SP02	SP	26/01/13	17:07:55.9	0.0	0.0	0.5	0.1	1	0.0	0.3	0.0
SP02	SP	26/01/13	17:07:51.6	0.0	0.0	0.2	0.1	1	0.0	0.3	0.0
SP09	SP	26/01/13	17:07:51.6	0.0	0.0	-0.1	0.1	53	0.0	1.4	0.0

RMS-ERR: 0.31

Event created: 2026/01/13 17:08:04
This origin created: 2026/01/13 17:11:55

Alert SPogs2026axgv: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=0.6 2026/01/13 17:34:53.5 44.33 N 11.68 E 22 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	17:35:02.4	0.0	0.0	-0.0	0.2	77	0.0	0.5	0.0
SP04	SP	26/01/13	17:34:58.7	0.0	0.0	0.0	0.2	77	0.0	0.5	0.0
SP07	SP	26/01/13	17:34:59.0	0.0	0.0	0.1	0.2	116	0.0	1.0	0.0
SP07	SP	26/01/13	17:35:02.9	0.0	0.0	-0.1	0.2	116	0.0	1.0	0.0

SP02	SP	26/01/13	17:34:59.5		0.0	0.0	0.2	0.2	62	0.0	0.6	0.0
SP02	SP	26/01/13	17:35:03.5		0.0	0.0	-0.1	0.2	62	0.0	0.6	0.0
SP12	SP	26/01/13	17:35:04.6		0.0	0.0	0.2	0.3	63	0.0	1.4	0.0
SP12	SP	26/01/13	17:34:59.6		0.0	0.0	-0.2	0.3	63	0.0	1.4	0.0

RMS-ERR: 0.12

Event created: 2026/01/13 17:35:07
This origin created: 2026/01/13 17:58:54

Alert SPogs2026axmc: determined by 7 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 7 stations used, weight 7):

Northern Italy ML=0.1 2026/01/13 20:14:16.3 44.26 N 12.12 E 19 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP10	SP	26/01/13	20:14:19.9	0.0	0.0	0.1	0.0	358	0.0	0.8	0.0
SP05	SP	26/01/13	20:14:24.5	0.0	0.0	-0.1	0.2	313	0.0	0.2	0.0
SP05	SP	26/01/13	20:14:20.9	0.0	0.0	-0.2	0.2	313	0.0	0.2	0.0
SP04	SP	26/01/13	20:14:21.3	0.0	0.0	-0.1	0.2	308	0.0	0.2	0.0
SP04	SP	26/01/13	20:14:25.1	0.0	0.0	0.1	0.2	308	0.0	0.2	0.0
SP11	SP	26/01/13	20:14:21.6	0.0	0.0	-0.1	0.2	301	0.0	0.5	0.0
SP13	SP	26/01/13	20:14:22.5	0.0	0.0	0.3	0.2	310	0.0	0.4	0.0

RMS-ERR: 0.13

Event created: 2026/01/13 20:14:30
This origin created: 2026/01/14 07:17:51

Alert SPogs2026axnz: determined by 6 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 6 stations used, weight 6):

Northern Italy ML=-0.1 2026/01/13 21:11:45.2 44.33 N 12.09 E 21 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	21:11:49.1	0.0	0.0	-0.3	0.1	291	0.0	0.1	0.0
SP05	SP	26/01/13	21:11:52.4	0.0	0.0	-0.1	0.1	291	0.0	0.1	0.0
SP04	SP	26/01/13	21:11:53.2	0.0	0.0	0.2	0.1	288	0.0	0.2	0.0
SP04	SP	26/01/13	21:11:49.4	0.0	0.0	-0.3	0.1	288	0.0	0.2	0.0
SP02	SP	26/01/13	21:11:50.2	0.0	0.0	0.4	0.1	319	0.0	0.0	0.0
SP07	SP	26/01/13	21:11:50.1	0.0	0.0	0.2	0.1	233	0.0	0.7	0.0

RMS-ERR: 0.28

Event created: 2026/01/13 21:12:09
This origin created: 2026/01/14 07:19:50

Alert SPogs2026axpk: determined by 20 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 20 stations used, weight 20):

Northern Italy ML=1.3 2026/01/13 21:54:21.1 44.27 N 11.94 E 32 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	21:54:26.7	0.0	0.0	0.3	0.0	195	0.0	0.9	0.0
SP07	SP	26/01/13	21:54:30.6	0.0	0.0	0.3	0.0	195	0.0	0.9	0.0
SP05	SP	26/01/13	21:54:26.1	0.0	0.0	-0.6	0.1	7	0.0	0.8	0.0
SP04	SP	26/01/13	21:54:26.4	0.0	0.0	-0.3	0.1	353	0.0	1.0	0.0
SP04	SP	26/01/13	21:54:30.1	0.0	0.0	-0.6	0.1	353	0.0	1.0	0.0
SP11	SP	26/01/13	21:54:26.8	0.0	0.0	0.1	0.1	333	0.0	0.9	0.0
SP11	SP	26/01/13	21:54:31.0	0.0	0.0	0.2	0.1	333	0.0	0.9	0.0
SP03	SP	26/01/13	21:54:26.5	0.0	0.0	-0.3	0.1	6	0.0	1.3	0.0
SP03	SP	26/01/13	21:54:30.6	0.0	0.0	-0.4	0.1	6	0.0	1.3	0.0
SP10	SP	26/01/13	21:54:26.9	0.0	0.0	-0.0	0.1	81	0.0	1.3	0.0
SP10	SP	26/01/13	21:54:31.1	0.0	0.0	-0.0	0.1	81	0.0	1.3	0.0
SP14	SP	26/01/13	21:54:26.6	0.0	0.0	-0.3	0.1	5	0.0	0.7	0.0
SP13	SP	26/01/13	21:54:27.2	0.0	0.0	0.2	0.2	338	0.0	0.6	0.0
SP13	SP	26/01/13	21:54:31.7	0.0	0.0	0.3	0.2	338	0.0	0.6	0.0
SP02	SP	26/01/13	21:54:27.2	0.0	0.0	0.0	0.2	6	0.0	0.9	0.0
SP09	SP	26/01/13	21:54:27.2	0.0	0.0	-0.1	0.2	46	0.0	1.4	0.0
SP09	SP	26/01/13	21:54:31.9	0.0	0.0	0.0	0.2	46	0.0	1.4	0.0
SP12	SP	26/01/13	21:54:27.4	0.0	0.0	0.1	0.2	15	0.0	1.2	0.0
SP12	SP	26/01/13	21:54:32.5	0.0	0.0	0.7	0.2	15	0.0	1.2	0.0
SP15	SP	26/01/13	21:54:28.3	0.0	0.0	0.5	0.2	15	0.0	1.2	0.0

RMS-ERR: 0.33

Event created: 2026/01/13 21:54:29
This origin created: 2026/01/14 07:26:24

Alert SPogs2026axpq: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.2 2026/01/13 22:01:31.8 44.27 N 12.13 E 19 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	22:01:36.6	0.0	0.0	0.3	0.1	259	0.0	0.7	0.0
SP05	SP	26/01/13	22:01:36.1	0.0	0.0	-0.3	0.2	308	0.0	0.1	0.0
SP05	SP	26/01/13	22:01:39.6	0.0	0.0	-0.2	0.2	308	0.0	0.1	0.0
SP14	SP	26/01/13	22:01:36.8	0.0	0.0	-0.0	0.2	318	0.0	0.1	0.0
SP11	SP	26/01/13	22:01:40.9	0.0	0.0	-0.1	0.2	297	0.0	0.4	0.0
SP11	SP	26/01/13	22:01:36.8	0.0	0.0	-0.3	0.2	297	0.0	0.4	0.0
SP02	SP	26/01/13	22:01:37.2	0.0	0.0	0.1	0.2	324	0.0	0.1	0.0

SP02	SP	26/01/13	22:01:41.2	0.0	0.0	0.3	0.2	324	0.0	0.1	0.0
SP13	SP	26/01/13	22:01:37.6	0.0	0.0	0.0	0.2	306	0.0	0.4	0.0
SP06	SP	26/01/13	22:01:38.3	0.0	0.0	0.1	0.3	283	0.0	1.2	0.0

RMS-ERR: 0.21

Event created: 2026/01/13 22:02:06
This origin created: 2026/01/14 07:28:27

Alert SPogs2026axsn: determined by 15 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 15 stations used, weight 15):

Northern Italy ML=0.3 2026/01/13 23:29:25.3 44.30 N 11.96 E 32 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	23:29:30.8	0.0	0.0	0.1	0.1	202	0.0	0.4	0.0
SP07	SP	26/01/13	23:29:34.8	0.0	0.0	0.1	0.1	202	0.0	0.4	0.0
SP04	SP	26/01/13	23:29:34.2	0.0	0.0	-0.6	0.1	340	0.0	-0.0	0.0
SP04	SP	26/01/13	23:29:30.5	0.0	0.0	-0.3	0.1	340	0.0	-0.0	0.0
SP11	SP	26/01/13	23:29:30.9	0.0	0.0	0.1	0.1	318	0.0	0.2	0.0
SP14	SP	26/01/13	23:29:30.7	0.0	0.0	-0.3	0.1	359	0.0	0.2	0.0
SP14	SP	26/01/13	23:29:34.6	0.0	0.0	-0.5	0.1	359	0.0	0.2	0.0
SP10	SP	26/01/13	23:29:30.8	0.0	0.0	-0.2	0.1	93	0.0	0.8	0.0
SP13	SP	26/01/13	23:29:35.9	0.0	0.0	0.5	0.1	329	0.0	0.0	0.0
SP13	SP	26/01/13	23:29:31.5	0.0	0.0	0.3	0.1	329	0.0	0.0	0.0
SP02	SP	26/01/13	23:29:31.3	0.0	0.0	0.2	0.1	1	0.0	0.2	0.0
SP02	SP	26/01/13	23:29:35.5	0.0	0.0	0.1	0.1	1	0.0	0.2	0.0
SP12	SP	26/01/13	23:29:31.5	0.0	0.0	0.2	0.2	13	0.0	0.7	0.0
SP09	SP	26/01/13	23:29:36.0	0.0	0.0	0.3	0.2	49	0.0	0.7	0.0
SP09	SP	26/01/13	23:29:31.4	0.0	0.0	0.1	0.2	49	0.0	0.7	0.0

RMS-ERR: 0.30

Event created: 2026/01/13 23:29:38
This origin created: 2026/01/14 07:31:35

Alert SPogs2026axuq: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.1 2026/01/14 00:32:49.2 44.30 N 12.07 E 21 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/14	00:32:53.0	0.0	0.0	-0.4	0.1	313	0.0	0.0	0.0
SP05	SP	26/01/14	00:32:56.4	0.0	0.0	-0.1	0.1	313	0.0	0.0	0.0
SP07	SP	26/01/14	00:32:53.5	0.0	0.0	0.1	0.1	243	0.0	0.6	0.0
SP04	SP	26/01/14	00:32:57.1	0.0	0.0	0.2	0.1	306	0.0	0.2	0.0

SP04	SP	26/01/14	00:32:53.3	0.0	0.0	-0.3	0.1	306	0.0	0.2	0.0
SP11	SP	26/01/14	00:32:53.6	0.0	0.0	-0.3	0.2	296	0.0	0.2	0.0
SP12	SP	26/01/14	00:32:54.2	0.0	0.0	0.3	0.2	343	0.0	0.8	0.0
SP02	SP	26/01/14	00:32:54.2	0.0	0.0	0.2	0.2	332	0.0	0.1	0.0
SP13	SP	26/01/14	00:32:54.4	0.0	0.0	0.0	0.2	308	0.0	0.1	0.0
SP06	SP	26/01/14	00:32:55.2	0.0	0.0	0.3	0.2	279	0.0	0.9	0.0

RMS-ERR: 0.25

Event created: 2026/01/14 00:32:58
This origin created: 2026/01/14 07:52:47

Alert SPogs2026axwy: determined by 14 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 14 stations used, weight 14):

Northern Italy ML=0.3 2026/01/14 01:43:18.6 44.28 N 11.91 E 29 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/14	01:43:23.9	0.0	0.0	0.3	0.0	164	0.0	0.4	0.0
SP11	SP	26/01/14	01:43:23.8	0.0	0.0	0.1	0.1	341	0.0	0.2	0.0
SP04	SP	26/01/14	01:43:27.6	0.0	0.0	-0.0	0.1	4	0.0	0.3	0.0
SP04	SP	26/01/14	01:43:23.6	0.0	0.0	-0.2	0.1	4	0.0	0.3	0.0
SP05	SP	26/01/14	01:43:23.3	0.0	0.0	-0.5	0.1	20	0.0	0.0	0.0
SP14	SP	26/01/14	01:43:27.8	0.0	0.0	-0.4	0.1	13	0.0	0.1	0.0
SP14	SP	26/01/14	01:43:24.0	0.0	0.0	-0.1	0.1	13	0.0	0.1	0.0
SP13	SP	26/01/14	01:43:24.3	0.0	0.0	0.2	0.1	344	0.0	-0.1	0.0
SP10	SP	26/01/14	01:43:23.9	0.0	0.0	-0.3	0.2	87	0.0	0.8	0.0
SP10	SP	26/01/14	01:43:28.4	0.0	0.0	0.0	0.2	87	0.0	0.8	0.0
SP02	SP	26/01/14	01:43:24.4	0.0	0.0	0.1	0.2	13	0.0	0.2	0.0
SP02	SP	26/01/14	01:43:28.5	0.0	0.0	0.0	0.2	13	0.0	0.2	0.0
SP12	SP	26/01/14	01:43:29.3	0.0	0.0	0.5	0.2	22	0.0	0.8	0.0
SP12	SP	26/01/14	01:43:24.6	0.0	0.0	0.1	0.2	22	0.0	0.8	0.0

RMS-ERR: 0.26

Event created: 2026/01/14 01:43:27
This origin created: 2026/01/14 07:55:19

Alert SPogs2026axxa: determined by 19 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 19 stations used, weight 19):

Northern Italy ML=0.6 2026/01/14 01:45:19.1 44.28 N 11.94 E 32 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/14	01:45:24.7	0.0	0.0	0.3	0.0	191	0.0	0.4	0.0
SP05	SP	26/01/14	01:45:24.2	0.0	0.0	-0.5	0.1	8	0.0	0.1	0.0

SP04	SP	26/01/14	01:45:24.5	0.0	0.0	-0.2	0.1	352	0.0	0.4	0.0
SP04	SP	26/01/14	01:45:28.3	0.0	0.0	-0.5	0.1	352	0.0	0.4	0.0
SP11	SP	26/01/14	01:45:29.1	0.0	0.0	0.3	0.1	331	0.0	0.3	0.0
SP11	SP	26/01/14	01:45:24.8	0.0	0.0	0.1	0.1	331	0.0	0.3	0.0
SP03	SP	26/01/14	01:45:28.5	0.0	0.0	-0.4	0.1	6	0.0	0.8	0.0
SP03	SP	26/01/14	01:45:24.6	0.0	0.0	-0.2	0.1	6	0.0	0.8	0.0
SP14	SP	26/01/14	01:45:24.7	0.0	0.0	-0.3	0.1	5	0.0	0.2	0.0
SP10	SP	26/01/14	01:45:24.8	0.0	0.0	-0.1	0.1	85	0.0	1.0	0.0
SP10	SP	26/01/14	01:45:29.2	0.0	0.0	0.0	0.1	85	0.0	1.0	0.0
SP13	SP	26/01/14	01:45:25.3	0.0	0.0	0.2	0.1	337	0.0	0.1	0.0
SP13	SP	26/01/14	01:45:29.7	0.0	0.0	0.4	0.1	337	0.0	0.1	0.0
SP02	SP	26/01/14	01:45:25.3	0.0	0.0	0.1	0.2	6	0.0	0.5	0.0
SP02	SP	26/01/14	01:45:29.3	0.0	0.0	-0.2	0.2	6	0.0	0.5	0.0
SP12	SP	26/01/14	01:45:30.3	0.0	0.0	0.5	0.2	16	0.0	0.8	0.0
SP12	SP	26/01/14	01:45:25.4	0.0	0.0	0.2	0.2	16	0.0	0.8	0.0
SP09	SP	26/01/14	01:45:29.9	0.0	0.0	0.1	0.2	48	0.0	0.8	0.0
SP09	SP	26/01/14	01:45:25.4	0.0	0.0	0.1	0.2	48	0.0	0.8	0.0

RMS-ERR: 0.29

Event created: 2026/01/14 01:45:27
This origin created: 2026/01/14 07:57:53

Alert SPogs2026axxz: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=-0.1 2026/01/14 02:14:46.6 44.33 N 11.95 E 22 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/14	02:14:53.2	0.0	0.0	-0.3	0.0	360	0.0	-0.1	0.0
SP05	SP	26/01/14	02:14:50.9	0.0	0.0	0.3	0.0	360	0.0	-0.1	0.0
SP04	SP	26/01/14	02:14:53.6	0.0	0.0	0.0	0.0	329	0.0	-0.0	0.0
SP04	SP	26/01/14	02:14:49.9	0.0	0.0	-0.7	0.0	329	0.0	-0.0	0.0
SP11	SP	26/01/14	02:14:50.4	0.0	0.0	-0.4	0.1	300	0.0	0.1	0.0
SP07	SP	26/01/14	02:14:51.2	0.0	0.0	0.3	0.1	194	0.0	0.5	0.0
SP07	SP	26/01/14	02:14:54.0	0.0	0.0	0.1	0.1	194	0.0	0.5	0.0
SP13	SP	26/01/14	02:14:51.1	0.0	0.0	0.1	0.1	321	0.0	-0.0	0.0
SP02	SP	26/01/14	02:14:50.9	0.0	0.0	-0.2	0.1	2	0.0	-0.2	0.0
SP02	SP	26/01/14	02:14:54.9	0.0	0.0	0.6	0.1	2	0.0	-0.2	0.0
SP12	SP	26/01/14	02:14:51.0	0.0	0.0	-0.2	0.1	16	0.0	0.5	0.0
SP06	SP	26/01/14	02:14:51.8	0.0	0.0	0.3	0.1	272	0.0	0.6	0.0

RMS-ERR: 0.35

Event created: 2026/01/14 02:14:53
This origin created: 2026/01/14 12:28:17

Alert SPogs2026axya: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=-0.0 2026/01/14 02:15:25.4 44.30 N 11.92 E 29 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/14	02:15:31.0	0.0	0.0	0.6	0.1	176	0.0	0.4	0.0
SP07	SP	26/01/14	02:15:34.1	0.0	0.0	0.0	0.1	176	0.0	0.4	0.0
SP04	SP	26/01/14	02:15:33.8	0.0	0.0	-0.4	0.1	359	0.0	-0.1	0.0
SP04	SP	26/01/14	02:15:30.1	0.0	0.0	-0.3	0.1	359	0.0	-0.1	0.0
SP11	SP	26/01/14	02:15:30.4	0.0	0.0	-0.1	0.1	331	0.0	0.1	0.0
SP13	SP	26/01/14	02:15:30.9	0.0	0.0	0.1	0.1	338	0.0	0.0	0.0
SP02	SP	26/01/14	02:15:30.8	0.0	0.0	-0.1	0.1	12	0.0	-0.1	0.0
SP02	SP	26/01/14	02:15:35.0	0.0	0.0	-0.0	0.1	12	0.0	-0.1	0.0
SP12	SP	26/01/14	02:15:36.0	0.0	0.0	0.8	0.2	22	0.0	0.7	0.0
SP12	SP	26/01/14	02:15:31.0	0.0	0.0	-0.1	0.2	22	0.0	0.7	0.0
SP09	SP	26/01/14	02:15:30.9	0.0	0.0	-0.4	0.2	56	0.0	0.9	0.0
SP09	SP	26/01/14	02:15:35.5	0.0	0.0	-0.1	0.2	56	0.0	0.9	0.0

RMS-ERR: 0.35

Event created: 2026/01/14 02:15:35
This origin created: 2026/01/14 12:31:23

Alert SPogs2026axyq: determined by 20 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 20 stations used, weight 20):

Northern Italy ML=1.3 2026/01/14 02:34:24.0 44.27 N 11.96 E 33 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/14	02:34:29.7	0.0	0.0	0.3	0.0	218	0.0	1.1	0.0
SP07	SP	26/01/14	02:34:33.6	0.0	0.0	0.2	0.0	218	0.0	1.1	0.0
SP05	SP	26/01/14	02:34:29.1	0.0	0.0	-0.6	0.1	359	0.0	1.3	0.0
SP04	SP	26/01/14	02:34:29.4	0.0	0.0	-0.3	0.1	345	0.0	1.2	0.0
SP11	SP	26/01/14	02:34:29.7	0.0	0.0	0.0	0.1	327	0.0	1.0	0.0
SP11	SP	26/01/14	02:34:33.7	0.0	0.0	-0.1	0.1	327	0.0	1.0	0.0
SP03	SP	26/01/14	02:34:29.4	0.0	0.0	-0.3	0.1	359	0.0	1.6	0.0
SP03	SP	26/01/14	02:34:33.4	0.0	0.0	-0.5	0.1	359	0.0	1.6	0.0
SP10	SP	26/01/14	02:34:29.9	0.0	0.0	0.1	0.1	80	0.0	1.1	0.0
SP10	SP	26/01/14	02:34:34.0	0.0	0.0	0.0	0.1	80	0.0	1.1	0.0
SP14	SP	26/01/14	02:34:33.5	0.0	0.0	-0.8	0.1	359	0.0	1.0	0.0
SP14	SP	26/01/14	02:34:29.6	0.0	0.0	-0.3	0.1	359	0.0	1.0	0.0
SP13	SP	26/01/14	02:34:30.2	0.0	0.0	0.2	0.2	334	0.0	0.8	0.0
SP13	SP	26/01/14	02:34:34.7	0.0	0.0	0.3	0.2	334	0.0	0.8	0.0
SP02	SP	26/01/14	02:34:30.1	0.0	0.0	0.0	0.2	1	0.0	1.1	0.0
SP01	SP	26/01/14	02:34:35.2	0.0	0.0	0.6	0.2	347	0.0	2.1	0.0
SP01	SP	26/01/14	02:34:30.4	0.0	0.0	0.3	0.2	347	0.0	2.1	0.0

SP09	SP	26/01/14	02:34:30.2	0.0	0.0	0.0	0.2	43	0.0	1.8	0.0
SP12	SP	26/01/14	02:34:30.3	0.0	0.0	0.1	0.2	11	0.0	1.2	0.0
SP12	SP	26/01/14	02:34:35.4	0.0	0.0	0.6	0.2	11	0.0	1.2	0.0

RMS-ERR: 0.35

Event created: 2026/01/14 02:34:31
This origin created: 2026/01/14 12:38:10

Alert SPogs2026axyv: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=-0.1 2026/01/14 02:39:53.6 44.32 N 12.12 E 22 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/14	02:39:58.0	0.0	0.0	-0.2	0.1	293	0.0	0.1	0.0
SP05	SP	26/01/14	02:40:01.4	0.0	0.0	-0.2	0.1	293	0.0	0.1	0.0
SP04	SP	26/01/14	02:40:02.0	0.0	0.0	-0.0	0.2	290	0.0	0.2	0.0
SP04	SP	26/01/14	02:39:58.3	0.0	0.0	-0.1	0.2	290	0.0	0.2	0.0
SP07	SP	26/01/14	02:39:58.6	0.0	0.0	0.1	0.2	242	0.0	0.5	0.0
SP07	SP	26/01/14	02:40:02.2	0.0	0.0	0.1	0.2	242	0.0	0.5	0.0
SP02	SP	26/01/14	02:39:59.0	0.0	0.0	0.5	0.2	316	0.0	0.1	0.0
SP11	SP	26/01/14	02:40:02.7	0.0	0.0	0.1	0.2	284	0.0	0.3	0.0
SP11	SP	26/01/14	02:39:58.7	0.0	0.0	-0.2	0.2	284	0.0	0.3	0.0
SP13	SP	26/01/14	02:39:59.2	0.0	0.0	-0.0	0.2	296	0.0	0.2	0.0

RMS-ERR: 0.18

Event created: 2026/01/14 02:40:02
This origin created: 2026/01/14 12:43:15

Alert SPogs2026ayah: determined by 13 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 13 stations used, weight 13):

Northern Italy ML=0.3 2026/01/14 03:24:33.2 44.32 N 11.92 E 32 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/14	03:24:42.1	0.0	0.0	-0.3	0.1	359	0.0	0.2	0.0
SP04	SP	26/01/14	03:24:38.3	0.0	0.0	-0.2	0.1	359	0.0	0.2	0.0
SP11	SP	26/01/14	03:24:38.7	0.0	0.0	0.1	0.1	322	0.0	0.2	0.0
SP11	SP	26/01/14	03:24:42.6	0.0	0.0	0.2	0.1	322	0.0	0.2	0.0
SP03	SP	26/01/14	03:24:42.5	0.0	0.0	-0.1	0.1	18	0.0	0.9	0.0
SP03	SP	26/01/14	03:24:38.5	0.0	0.0	-0.1	0.1	18	0.0	0.9	0.0
SP07	SP	26/01/14	03:24:38.8	0.0	0.0	0.2	0.1	177	0.0	0.6	0.0
SP07	SP	26/01/14	03:24:42.5	0.0	0.0	-0.1	0.1	177	0.0	0.6	0.0
SP14	SP	26/01/14	03:24:38.5	0.0	0.0	-0.2	0.1	14	0.0	0.1	0.0

SP02	SP	26/01/14	03:24:43.2	0.0	0.0	0.1	0.1	14	0.0	0.2	0.0
SP02	SP	26/01/14	03:24:39.1	0.0	0.0	0.2	0.1	14	0.0	0.2	0.0
SP12	SP	26/01/14	03:24:39.3	0.0	0.0	0.2	0.1	25	0.0	0.6	0.0
SP09	SP	26/01/14	03:24:39.1	0.0	0.0	-0.1	0.2	61	0.0	1.1	0.0

RMS-ERR: 0.18

Event created: 2026/01/14 03:24:41
This origin created: 2026/01/14 12:46:13

Alert SPogs2026ayhy: determined by 24 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 24 stations used, weight 24):

Northern Italy ML=2.5 2026/01/14 07:16:16.8 44.28 N 11.96 E 27 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/14	07:16:21.8	0.0	0.0	0.2	0.0	215	0.0	2.1	0.0
SP07	SP	26/01/14	07:16:25.6	0.0	0.0	0.5	0.0	215	0.0	2.1	0.0
SP05	SP	26/01/14	07:16:21.2	0.0	0.0	-0.6	0.1	359	0.0	2.0	0.0
SP04	SP	26/01/14	07:16:21.5	0.0	0.0	-0.3	0.1	344	0.0	2.0	0.0
SP04	SP	26/01/14	07:16:25.0	0.0	0.0	-0.5	0.1	344	0.0	2.0	0.0
SP11	SP	26/01/14	07:16:21.9	0.0	0.0	-0.0	0.1	326	0.0	2.0	0.0
SP11	SP	26/01/14	07:16:25.8	0.0	0.0	0.2	0.1	326	0.0	2.0	0.0
SP03	SP	26/01/14	07:16:25.5	0.0	0.0	-0.2	0.1	359	0.0	2.3	0.0
SP03	SP	26/01/14	07:16:21.6	0.0	0.0	-0.4	0.1	359	0.0	2.3	0.0
SP10	SP	26/01/14	07:16:22.0	0.0	0.0	-0.1	0.1	82	0.0	2.4	0.0
SP10	SP	26/01/14	07:16:25.9	0.0	0.0	0.1	0.1	82	0.0	2.4	0.0
SP14	SP	26/01/14	07:16:21.8	0.0	0.0	-0.4	0.1	359	0.0	1.9	0.0
SP14	SP	26/01/14	07:16:25.5	0.0	0.0	-0.6	0.1	359	0.0	1.9	0.0
SP13	SP	26/01/14	07:16:22.3	0.0	0.0	0.0	0.2	333	0.0	1.6	0.0
SP13	SP	26/01/14	07:16:26.8	0.0	0.0	0.5	0.2	333	0.0	1.6	0.0
SP02	SP	26/01/14	07:16:26.6	0.0	0.0	0.1	0.2	1	0.0	1.9	0.0
SP02	SP	26/01/14	07:16:22.3	0.0	0.0	-0.1	0.2	1	0.0	1.9	0.0
SP01	SP	26/01/14	07:16:22.8	0.0	0.0	0.3	0.2	347	0.0	2.9	0.0
SP09	SP	26/01/14	07:16:22.3	0.0	0.0	-0.2	0.2	44	0.0	2.5	0.0
SP09	SP	26/01/14	07:16:26.9	0.0	0.0	0.3	0.2	44	0.0	2.5	0.0
SP12	SP	26/01/14	07:16:22.5	0.0	0.0	-0.0	0.2	11	0.0	2.3	0.0
SP12	SP	26/01/14	07:16:27.3	0.0	0.0	0.5	0.2	11	0.0	2.3	0.0
SP15	SP	26/01/14	07:16:23.5	0.0	0.0	0.3	0.2	12	0.0	2.1	0.0
SP08	SP	26/01/14	07:16:24.2	0.0	0.0	0.5	0.3	342	0.0	2.4	0.0

RMS-ERR: 0.35

Event created: 2026/01/14 07:16:25
This origin created: 2026/01/14 07:41:24

Alert SPogs2026ayic: determined by 7 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 7 stations used, weight 7):

Northern Italy ML=0.6 2026/01/14 07:21:09.5 44.23 N 12.12 E 10 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/14	07:21:14.1	0.0	0.0	0.1	0.2	321	0.0	0.7	0.0
SP05	SP	26/01/14	07:21:17.3	0.0	0.0	-0.0	0.2	321	0.0	0.7	0.0
SP04	SP	26/01/14	07:21:18.0	0.0	0.0	-0.0	0.2	315	0.0	0.7	0.0
SP04	SP	26/01/14	07:21:14.3	0.0	0.0	-0.1	0.2	315	0.0	0.7	0.0
SP12	SP	26/01/14	07:21:15.0	0.0	0.0	-0.1	0.2	340	0.0	1.7	0.0
SP02	SP	26/01/14	07:21:19.3	0.0	0.0	-0.0	0.2	332	0.0	0.9	0.0
SP02	SP	26/01/14	07:21:15.3	0.0	0.0	0.1	0.2	332	0.0	0.9	0.0

RMS-ERR: 0.07

Event created: 2026/01/14 07:21:17
This origin created: 2026/01/14 12:48:33

Alert SPogs2026ayid: determined by 13 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 13 stations used, weight 13):

Northern Italy ML=0.6 2026/01/14 07:22:50.6 44.28 N 11.92 E 33 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/14	07:22:56.4	0.0	0.0	0.3	0.0	172	0.0	0.7	0.0
SP07	SP	26/01/14	07:23:00.2	0.0	0.0	0.1	0.0	172	0.0	0.7	0.0
SP11	SP	26/01/14	07:22:56.4	0.0	0.0	0.1	0.1	338	0.0	0.6	0.0
SP04	SP	26/01/14	07:22:59.8	0.0	0.0	-0.6	0.1	0	0.0	0.7	0.0
SP04	SP	26/01/14	07:22:56.0	0.0	0.0	-0.2	0.1	0	0.0	0.7	0.0
SP05	SP	26/01/14	07:22:55.8	0.0	0.0	-0.5	0.1	17	0.0	0.6	0.0
SP14	SP	26/01/14	07:22:56.6	0.0	0.0	0.0	0.1	11	0.0	1.0	0.0
SP13	SP	26/01/14	07:22:57.0	0.0	0.0	0.4	0.1	342	0.0	0.6	0.0
SP02	SP	26/01/14	07:22:56.8	0.0	0.0	0.1	0.2	11	0.0	0.7	0.0
SP02	SP	26/01/14	07:23:01.0	0.0	0.0	-0.2	0.2	11	0.0	0.7	0.0
SP12	SP	26/01/14	07:23:01.9	0.0	0.0	0.5	0.2	21	0.0	1.4	0.0
SP12	SP	26/01/14	07:22:57.0	0.0	0.0	0.1	0.2	21	0.0	1.4	0.0
SP09	SP	26/01/14	07:22:56.8	0.0	0.0	-0.1	0.2	52	0.0	1.6	0.0

RMS-ERR: 0.30

Event created: 2026/01/14 07:22:58
This origin created: 2026/01/14 12:51:34

Alert SPogs2026aylc: determined by 14 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 14 stations used, weight 14):

Northern Italy ML=1.0 2026/01/14 08:52:19.8 44.19 N 11.94 E 22 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/14	08:52:28.3	0.0	0.0	-0.5	0.2	3	0.0	1.0	0.0
SP05	SP	26/01/14	08:52:24.8	0.0	0.0	-0.2	0.2	3	0.0	1.0	0.0
SP11	SP	26/01/14	08:52:25.4	0.0	0.0	0.4	0.2	344	0.0	1.0	0.0
SP04	SP	26/01/14	08:52:25.1	0.0	0.0	-0.0	0.2	355	0.0	1.0	0.0
SP04	SP	26/01/14	08:52:29.0	0.0	0.0	0.1	0.2	355	0.0	1.0	0.0
SP14	SP	26/01/14	08:52:25.4	0.0	0.0	-0.2	0.2	2	0.0	1.1	0.0
SP13	SP	26/01/14	08:52:25.9	0.0	0.0	0.2	0.2	345	0.0	0.9	0.0
SP13	SP	26/01/14	08:52:30.4	0.0	0.0	0.4	0.2	345	0.0	0.9	0.0
SP09	SP	26/01/14	08:52:26.0	0.0	0.0	0.1	0.2	32	0.0	1.8	0.0
SP09	SP	26/01/14	08:52:30.7	0.0	0.0	0.3	0.2	32	0.0	1.8	0.0
SP02	SP	26/01/14	08:52:30.1	0.0	0.0	-0.4	0.2	3	0.0	1.1	0.0
SP02	SP	26/01/14	08:52:25.8	0.0	0.0	-0.1	0.2	3	0.0	1.1	0.0
SP12	SP	26/01/14	08:52:30.9	0.0	0.0	0.1	0.3	10	0.0	1.7	0.0
SP12	SP	26/01/14	08:52:26.1	0.0	0.0	-0.1	0.3	10	0.0	1.7	0.0

RMS-ERR: 0.26

Event created: 2026/01/14 08:52:28
This origin created: 2026/01/14 12:55:39

Alert SPogs2026ayse: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.7 2026/01/14 12:26:35.2 44.32 N 11.89 E 29 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/14	12:26:43.8	0.0	0.0	-0.1	0.1	20	0.0	0.6	0.0
SP04	SP	26/01/14	12:26:40.2	0.0	0.0	-0.1	0.1	20	0.0	0.6	0.0
SP05	SP	26/01/14	12:26:39.8	0.0	0.0	-0.4	0.1	41	0.0	0.5	0.0
SP05	SP	26/01/14	12:26:43.4	0.0	0.0	-0.6	0.1	41	0.0	0.5	0.0
SP07	SP	26/01/14	12:26:40.4	0.0	0.0	0.1	0.1	161	0.0	0.9	0.0
SP07	SP	26/01/14	12:26:44.4	0.0	0.0	0.3	0.1	161	0.0	0.9	0.0
SP02	SP	26/01/14	12:26:40.9	0.0	0.0	0.2	0.1	22	0.0	0.7	0.0
SP02	SP	26/01/14	12:26:45.2	0.0	0.0	0.5	0.1	22	0.0	0.7	0.0
SP09	SP	26/01/14	12:26:45.7	0.0	0.0	0.2	0.2	64	0.0	1.6	0.0
SP09	SP	26/01/14	12:26:41.0	0.0	0.0	-0.2	0.2	64	0.0	1.6	0.0

RMS-ERR: 0.34

Event created: 2026/01/14 12:26:43
This origin created: 2026/01/14 12:58:44

Alert SPogs2025trqu: determined by 19 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 19 stations used, weight 19):

Northern Italy ML=1.5 2025/10/08 00:58:25.0 44.18 N 11.99 E 19 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/10/08	00:58:29.7	0.0	0.0	0.1	0.1	325	0.0	1.8	0.0
SP07	SP	25/10/08	00:58:33.3	0.0	0.0	-0.1	0.1	325	0.0	1.8	0.0
SP10	SP	25/10/08	00:58:30.3	0.0	0.0	-0.1	0.1	40	0.0	1.4	0.0
SP10	SP	25/10/08	00:58:34.8	0.0	0.0	0.2	0.1	40	0.0	1.4	0.0
SP05	SP	25/10/08	00:58:31.0	0.0	0.0	-0.1	0.2	352	0.0	1.0	0.0
SP05	SP	25/10/08	00:58:35.6	0.0	0.0	-0.2	0.2	352	0.0	1.0	0.0
SP04	SP	25/10/08	00:58:35.8	0.0	0.0	-0.3	0.2	345	0.0	1.0	0.0
SP04	SP	25/10/08	00:58:31.2	0.0	0.0	-0.0	0.2	345	0.0	1.0	0.0
SP11	SP	25/10/08	00:58:36.3	0.0	0.0	0.2	0.2	335	0.0	1.0	0.0
SP11	SP	25/10/08	00:58:31.3	0.0	0.0	0.1	0.2	335	0.0	1.0	0.0
SP03	SP	25/10/08	00:58:31.3	0.0	0.0	-0.0	0.2	353	0.0	1.4	0.0
SP03	SP	25/10/08	00:58:36.6	0.0	0.0	0.2	0.2	353	0.0	1.4	0.0
SP14	SP	25/10/08	00:58:31.7	0.0	0.0	0.0	0.2	353	0.0	1.1	0.0
SP14	SP	25/10/08	00:58:37.0	0.0	0.0	0.0	0.2	353	0.0	1.1	0.0
SP09	SP	25/10/08	00:58:31.7	0.0	0.0	-0.1	0.2	23	0.0	1.6	0.0
SP13	SP	25/10/08	00:58:31.9	0.0	0.0	-0.1	0.3	338	0.0	1.1	0.0
SP02	SP	25/10/08	00:58:37.6	0.0	0.0	-0.1	0.3	355	0.0	1.4	0.0
SP02	SP	25/10/08	00:58:32.3	0.0	0.0	0.2	0.3	355	0.0	1.4	0.0
SP12	SP	25/10/08	00:58:32.3	0.0	0.0	0.1	0.3	2	0.0	1.8	0.0

RMS-ERR: 0.14

Event created: 2025/10/08 00:58:33
This origin created: 2025/10/10 13:17:17

Alert SPogs2025uwot: determined by 5 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 5 stations used, weight 5):

Northern Italy ML=0.5 2025/10/24 23:10:07.3 44.47 N 11.93 E 8 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP02	SP	25/10/24	23:10:09.6	0.0	0.0	0.5	0.0	146	0.0	0.1	0.0
SP02	SP	25/10/24	23:10:10.2	0.0	0.0	-0.2	0.0	146	0.0	0.1	0.0
SP12	SP	25/10/24	23:10:10.9	0.0	0.0	0.1	0.1	114	0.0	0.0	0.0
SP08	SP	25/10/24	23:10:09.6	0.0	0.0	-0.2	0.1	313	0.0	0.9	0.0
SP09	SP	25/10/24	23:10:11.0	0.0	0.0	-0.1	0.2	118	0.0	1.1	0.0

RMS-ERR: 0.25

Event created: 2025/10/24 23:10:13
This origin created: 2025/11/24 09:45:16

Alert SPogs2025uydr: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=0.7 2025/10/25 19:50:17.5 44.32 N 11.96 E 27 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	25/10/25	19:50:21.9	0.0	0.0	-0.3	0.0	358	0.0	0.6	0.0
SP04	SP	25/10/25	19:50:22.4	0.0	0.0	0.2	0.1	330	0.0	0.8	0.0
SP07	SP	25/10/25	19:50:22.2	0.0	0.0	-0.1	0.1	195	0.0	1.2	0.0
SP14	SP	25/10/25	19:50:22.8	0.0	0.0	0.4	0.1	358	0.0	0.7	0.0
SP02	SP	25/10/25	19:50:22.4	0.0	0.0	-0.2	0.1	2	0.0	0.8	0.0
SP12	SP	25/10/25	19:50:22.2	0.0	0.0	-0.5	0.1	15	0.0	1.3	0.0
SP09	SP	25/10/25	19:50:26.8	0.0	0.0	0.1	0.1	58	0.0	0.0	0.0
SP08	SP	25/10/25	19:50:24.1	0.0	0.0	0.3	0.2	338	0.0	1.3	0.0

RMS-ERR: 0.29

Event created: 2025/10/25 19:50:26
This origin created: 2025/11/24 09:57:41

Alert SPogs2025vfml: determined by 11 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 11 stations used, weight 11):

Northern Italy ML=1.6 2025/10/29 20:12:57.5 44.00 N 11.93 E 22 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/10/29	20:13:03.8	0.0	0.0	0.2	0.2	360	0.0	1.4	0.0
SP07	SP	25/10/29	20:13:08.3	0.0	0.0	0.3	0.2	360	0.0	1.4	0.0
SP06	SP	25/10/29	20:13:05.2	0.0	0.0	-0.1	0.4	339	0.0	2.0	0.0
SP06	SP	25/10/29	20:13:11.0	0.0	0.0	-0.0	0.4	339	0.0	2.0	0.0
SP11	SP	25/10/29	20:13:05.1	0.0	0.0	-0.3	0.4	354	0.0	1.9	0.0
SP05	SP	25/10/29	20:13:05.2	0.0	0.0	-0.3	0.4	3	0.0	1.5	0.0
SP04	SP	25/10/29	20:13:05.2	0.0	0.0	-0.4	0.4	359	0.0	1.5	0.0
SP13	SP	25/10/29	20:13:06.6	0.0	0.0	0.4	0.4	353	0.0	1.6	0.0
SP09	SP	25/10/29	20:13:06.5	0.0	0.0	0.2	0.4	19	0.0	2.5	0.0
SP02	SP	25/10/29	20:13:06.1	0.0	0.0	-0.5	0.4	3	0.0	1.6	0.0
SP08	SP	25/10/29	20:13:08.7	0.0	0.0	0.6	0.5	353	0.0	2.4	0.0

RMS-ERR: 0.33

Event created: 2025/10/29 20:13:08
This origin created: 2025/11/24 10:19:20

Alert SPogs2025vfqn: determined by 11 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 11 stations used, weight 11):

Northern Italy ML=1.7 2025/10/29 22:16:35.9 44.06 N 11.96 E 25 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/10/29	22:16:41.7	0.0	0.0	0.1	0.2	353	0.0	1.5	0.0
SP07	SP	25/10/29	22:16:46.2	0.0	0.0	0.4	0.2	353	0.0	1.5	0.0
SP10	SP	25/10/29	22:16:47.2	0.0	0.0	-0.3	0.3	26	0.0	0.0	0.0
SP11	SP	25/10/29	22:16:43.0	0.0	0.0	-0.3	0.3	349	0.0	1.5	0.0
SP11	SP	25/10/29	22:16:48.5	0.0	0.0	-0.2	0.3	349	0.0	1.5	0.0
SP06	SP	25/10/29	22:16:48.7	0.0	0.0	-0.0	0.3	331	0.0	2.1	0.0
SP06	SP	25/10/29	22:16:43.2	0.0	0.0	-0.2	0.3	331	0.0	2.1	0.0
SP04	SP	25/10/29	22:16:48.9	0.0	0.0	0.1	0.3	355	0.0	1.3	0.0
SP04	SP	25/10/29	22:16:43.0	0.0	0.0	-0.3	0.3	355	0.0	1.3	0.0
SP13	SP	25/10/29	22:16:44.2	0.0	0.0	0.1	0.4	349	0.0	1.5	0.0
SP08	SP	25/10/29	22:16:46.4	0.0	0.0	0.6	0.5	350	0.0	2.5	0.0

RMS-ERR: 0.28

Event created: 2025/10/29 22:16:45
This origin created: 2025/11/24 11:32:13

Alert SPogs2025vugc: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=0.1 2025/11/06 22:03:34.4 44.31 N 11.98 E 18 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	25/11/06	22:03:40.4	0.0	0.0	-0.1	0.1	344	0.0	0.0	0.0
SP05	SP	25/11/06	22:03:38.0	0.0	0.0	0.1	0.1	344	0.0	0.0	0.0
SP04	SP	25/11/06	22:03:37.9	0.0	0.0	-0.1	0.1	326	0.0	0.2	0.0
SP04	SP	25/11/06	22:03:40.6	0.0	0.0	0.1	0.1	326	0.0	0.2	0.0
SP14	SP	25/11/06	22:03:38.0	0.0	0.0	-0.2	0.1	350	0.0	0.1	0.0
SP14	SP	25/11/06	22:03:41.0	0.0	0.0	-0.1	0.1	350	0.0	0.1	0.0
SP02	SP	25/11/06	22:03:41.7	0.0	0.0	0.1	0.1	354	0.0	0.2	0.0
SP02	SP	25/11/06	22:03:38.7	0.0	0.0	0.1	0.1	354	0.0	0.2	0.0

RMS-ERR: 0.12

Event created: 2025/11/06 22:03:45
This origin created: 2025/11/24 12:00:31

Alert SPogs2025wfiz: determined by 8 stations, type M

FixedHypocenter solution with earthmodel iasp91 (with start solution, 8 stations used, weight 8):

Northern Italy ML=0.4 2025/11/13 00:00:33.4 44.21 N 12.08 E 33 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP10	SP	25/11/13	00:00:44.2	0.0	0.0	-0.4	0.1	20	0.0	0.8	0.0
SP10	SP	25/11/13	00:00:40.3	0.0	0.0	0.5	0.1	20	0.0	0.8	0.0
SP07	SP	25/11/13	00:00:40.6	0.0	0.0	0.4	0.1	287	0.0	0.5	0.0
SP05	SP	25/11/13	00:00:40.9	0.0	0.0	-0.1	0.2	331	0.0	0.1	0.0
SP04	SP	25/11/13	00:00:40.8	0.0	0.0	-0.4	0.2	325	0.0	0.2	0.0
SP14	SP	25/11/13	00:00:41.3	0.0	0.0	-0.2	0.2	336	0.0	0.2	0.0
SP02	SP	25/11/13	00:00:41.8	0.0	0.0	0.0	0.2	340	0.0	0.3	0.0
SP12	SP	25/11/13	00:00:41.9	0.0	0.0	0.2	0.2	347	0.0	0.9	0.0

RMS-ERR: 0.32

Event created: 2025/11/13 00:00:44
This origin created: 2025/11/24 12:21:10

Alert SPogs2025wmtx: determined by 17 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 17 stations used, weight 17):

Northern Italy ML=0.8 2025/11/17 01:28:33.2 44.41 N 12.09 E 19 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP09	SP	25/11/17	01:28:37.2	0.0	0.0	-0.3	0.0	127	0.0	1.5	0.0
SP09	SP	25/11/17	01:28:40.8	0.0	0.0	0.0	0.0	127	0.0	1.5	0.0
SP12	SP	25/11/17	01:28:41.8	0.0	0.0	0.5	0.1	299	0.0	1.4	0.0
SP12	SP	25/11/17	01:28:37.7	0.0	0.0	-0.0	0.1	299	0.0	1.4	0.0
SP02	SP	25/11/17	01:28:41.7	0.0	0.0	-0.0	0.1	285	0.0	0.5	0.0
SP02	SP	25/11/17	01:28:37.9	0.0	0.0	-0.1	0.1	285	0.0	0.5	0.0
SP14	SP	25/11/17	01:28:37.9	0.0	0.0	-0.1	0.1	270	0.0	0.6	0.0
SP14	SP	25/11/17	01:28:41.7	0.0	0.0	-0.1	0.1	270	0.0	0.6	0.0
SP15	SP	25/11/17	01:28:38.1	0.0	0.0	0.1	0.1	328	0.0	1.5	0.0
SP03	SP	25/11/17	01:28:38.0	0.0	0.0	-0.1	0.1	256	0.0	1.5	0.0
SP05	SP	25/11/17	01:28:37.9	0.0	0.0	-0.2	0.1	247	0.0	0.5	0.0
SP05	SP	25/11/17	01:28:41.5	0.0	0.0	-0.4	0.1	247	0.0	0.5	0.0
SP10	SP	25/11/17	01:28:38.1	0.0	0.0	-0.2	0.1	171	0.0	1.5	0.0
SP10	SP	25/11/17	01:28:42.5	0.0	0.0	0.3	0.1	171	0.0	1.5	0.0
SP04	SP	25/11/17	01:28:38.3	0.0	0.0	-0.1	0.1	252	0.0	0.5	0.0
SP11	SP	25/11/17	01:28:39.4	0.0	0.0	0.6	0.2	253	0.0	0.5	0.0
SP07	SP	25/11/17	01:28:39.7	0.0	0.0	0.2	0.2	216	0.0	1.3	0.0

RMS-ERR: 0.24

Event created: 2025/11/17 01:28:40
This origin created: 2025/11/24 12:38:16

Alert SPogs2025wmub: determined by 12 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 12 stations used, weight 12):

Northern Italy ML=0.6 2025/11/17 01:33:12.4 44.38 N 12.12 E 21 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP09	SP	25/11/17	01:33:20.6	0.0	0.0	0.0	0.0	355	0.0	1.4	0.0
SP09	SP	25/11/17	01:33:16.9	0.0	0.0	-0.0	0.0	355	0.0	1.4	0.0
SP12	SP	25/11/17	01:33:17.5	0.0	0.0	-0.0	0.1	307	0.0	1.5	0.0
SP12	SP	25/11/17	01:33:21.6	0.0	0.0	0.1	0.1	307	0.0	1.5	0.0
SP14	SP	25/11/17	01:33:17.7	0.0	0.0	-0.0	0.1	284	0.0	0.6	0.0
SP14	SP	25/11/17	01:33:21.5	0.0	0.0	-0.4	0.1	284	0.0	0.6	0.0
SP02	SP	25/11/17	01:33:21.6	0.0	0.0	-0.3	0.1	295	0.0	0.6	0.0
SP02	SP	25/11/17	01:33:17.7	0.0	0.0	-0.1	0.1	295	0.0	0.6	0.0
SP15	SP	25/11/17	01:33:22.4	0.0	0.0	0.3	0.1	328	0.0	1.6	0.0
SP15	SP	25/11/17	01:33:17.8	0.0	0.0	-0.0	0.1	328	0.0	1.6	0.0
SP04	SP	25/11/17	01:33:18.1	0.0	0.0	0.1	0.1	265	0.0	0.5	0.0
SP04	SP	25/11/17	01:33:22.7	0.0	0.0	0.4	0.1	265	0.0	0.5	0.0

RMS-ERR: 0.21

Event created: 2025/11/17 01:33:21
This origin created: 2025/11/24 12:40:18

Alert SPogs2025wrly: determined by 7 stations, type M

Hypo71 solution with earthmodel Potito (with start solution, 7 stations used, weight 7):

Northern Italy ML=0.2 2025/11/19 15:07:46.0 44.29 N 11.79 E 13 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP06	SP	25/11/19	15:07:52.2	0.0	0.0	-0.0	0.0	326	0.0	0.0	0.0
SP04	SP	25/11/19	15:07:50.7	0.0	0.0	0.1	0.1	50	0.0	0.6	0.0
SP04	SP	25/11/19	15:07:54.0	0.0	0.0	-0.0	0.1	50	0.0	0.6	0.0
SP05	SP	25/11/19	15:07:54.6	0.0	0.0	-0.0	0.1	57	0.0	0.7	0.0
SP05	SP	25/11/19	15:07:50.9	0.0	0.0	0.0	0.1	57	0.0	0.7	0.0
SP02	SP	25/11/19	15:07:51.6	0.0	0.0	-0.1	0.2	41	0.0	0.7	0.0
SP02	SP	25/11/19	15:07:56.2	0.0	0.0	0.1	0.2	41	0.0	0.7	0.0

RMS-ERR: 0.07

Event created: 2025/11/19 15:07:55
This origin created: 2025/11/24 12:43:10

Alert SPogs2025xeoj: determined by 13 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 13 stations used, weight 13):

Northern Italy ML=0.9 2025/11/26 19:07:23.0 44.34 N 11.87 E 12 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP11	SP	25/11/26	19:07:26.8	0.0	0.0	-0.4	0.0	10	0.0	0.0	0.0
SP04	SP	25/11/26	19:07:27.2	0.0	0.0	-0.3	0.1	46	0.0	1.0	0.0
SP04	SP	25/11/26	19:07:25.7	0.0	0.0	0.1	0.1	46	0.0	1.0	0.0
SP05	SP	25/11/26	19:07:26.5	0.0	0.0	0.7	0.1	61	0.0	1.0	0.0
SP13	SP	25/11/26	19:07:26.0	0.0	0.0	0.2	0.1	356	0.0	0.9	0.0
SP03	SP	25/11/26	19:07:26.3	0.0	0.0	0.4	0.1	50	0.0	1.6	0.0
SP06	SP	25/11/26	19:07:28.5	0.0	0.0	0.3	0.1	269	0.0	1.5	0.0
SP06	SP	25/11/26	19:07:25.4	0.0	0.0	-0.6	0.1	269	0.0	1.5	0.0
SP14	SP	25/11/26	19:07:25.6	0.0	0.0	-0.6	0.1	39	0.0	1.0	0.0
SP02	SP	25/11/26	19:07:29.5	0.0	0.0	0.4	0.1	33	0.0	1.0	0.0
SP02	SP	25/11/26	19:07:26.4	0.0	0.0	-0.1	0.1	33	0.0	1.0	0.0
SP09	SP	25/11/26	19:07:27.7	0.0	0.0	0.1	0.2	71	0.0	1.8	0.0
SP08	SP	25/11/26	19:07:27.6	0.0	0.0	-0.2	0.2	354	0.0	1.7	0.0

RMS-ERR: 0.38

Event created: 2025/11/26 19:07:30
This origin created: 2026/01/01 11:13:27

Alert SPogs2025xeol: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=1.2 2025/11/26 19:09:46.6 44.26 N 11.90 E 9 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/11/26	19:09:50.0	0.0	0.0	0.0	0.0	128	0.0	0.0	0.0
SP11	SP	25/11/26	19:09:49.5	0.0	0.0	-0.1	0.1	348	0.0	1.2	0.0
SP04	SP	25/11/26	19:09:51.8	0.0	0.0	-0.3	0.1	5	0.0	0.0	0.0
SP05	SP	25/11/26	19:09:50.0	0.0	0.0	0.1	0.1	18	0.0	1.1	0.0
SP05	SP	25/11/26	19:09:52.4	0.0	0.0	0.1	0.1	18	0.0	1.1	0.0
SP06	SP	25/11/26	19:09:53.0	0.0	0.0	0.2	0.1	304	0.0	1.6	0.0
SP06	SP	25/11/26	19:09:50.0	0.0	0.0	-0.2	0.1	304	0.0	1.6	0.0
SP15	SP	25/11/26	19:09:52.7	0.0	0.0	0.2	0.3	19	0.0	2.1	0.0

RMS-ERR: 0.19

Event created: 2025/11/26 19:09:53
This origin created: 2026/01/01 11:22:36

Alert SPogs2025xolk: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.7 2025/12/02 04:59:06.9 44.27 N 11.87 E 24 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/12/02	04:59:11.4	0.0	0.0	0.2	0.0	116	0.0	0.8	0.0
SP04	SP	25/12/02	04:59:11.5	0.0	0.0	-0.1	0.1	20	0.0	0.5	0.0
SP04	SP	25/12/02	04:59:15.2	0.0	0.0	0.1	0.1	20	0.0	0.5	0.0
SP05	SP	25/12/02	04:59:15.1	0.0	0.0	-0.1	0.1	31	0.0	0.4	0.0
SP05	SP	25/12/02	04:59:11.5	0.0	0.0	-0.2	0.1	31	0.0	0.4	0.0
SP03	SP	25/12/02	04:59:11.8	0.0	0.0	-0.1	0.1	27	0.0	1.3	0.0
SP10	SP	25/12/02	04:59:12.4	0.0	0.0	-0.0	0.2	82	0.0	1.2	0.0
SP02	SP	25/12/02	04:59:12.4	0.0	0.0	-0.0	0.2	21	0.0	0.4	0.0
SP12	SP	25/12/02	04:59:12.9	0.0	0.0	0.2	0.2	28	0.0	1.7	0.0
SP09	SP	25/12/02	04:59:13.0	0.0	0.0	0.1	0.2	54	0.0	1.4	0.0

RMS-ERR: 0.14

Event created: 2025/12/02 04:59:14
This origin created: 2026/01/01 15:25:50

Alert SPogs2025yqvr: determined by 5 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 5 stations used, weight 5):

Northern Italy ML=0.2 2025/12/17 17:59:52.8 44.38 N 11.84 E 26 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	25/12/17	17:59:57.5	0.0	0.0	0.0	0.1	100	0.0	0.3	0.0
SP04	SP	25/12/17	18:00:00.9	0.0	0.0	-0.0	0.1	100	0.0	0.3	0.0
SP05	SP	25/12/17	18:00:01.2	0.0	0.0	0.0	0.1	98	0.0	0.2	0.0
SP05	SP	25/12/17	17:59:57.6	0.0	0.0	-0.1	0.1	98	0.0	0.2	0.0
SP07	SP	25/12/17	17:59:58.2	0.0	0.0	0.0	0.1	156	0.0	1.1	0.0

RMS-ERR: 0.03

Event created: 2025/12/17 18:00:01
This origin created: 2026/01/01 15:55:26

Alert SPogs2025yqyz: determined by 9 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 9 stations used, weight 9):

Northern Italy ML=0.3 2025/12/17 19:39:34.5 44.37 N 11.96 E 27 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	25/12/17	19:39:42.8	0.0	0.0	0.2	0.0	242	0.0	0.0	0.0
SP05	SP	25/12/17	19:39:39.2	0.0	0.0	-0.0	0.0	242	0.0	0.0	0.0
SP03	SP	25/12/17	19:39:39.3	0.0	0.0	0.1	0.0	331	0.0	1.1	0.0
SP04	SP	25/12/17	19:39:39.0	0.0	0.0	-0.3	0.0	267	0.0	0.2	0.0
SP04	SP	25/12/17	19:39:42.5	0.0	0.0	-0.1	0.0	267	0.0	0.2	0.0
SP11	SP	25/12/17	19:39:39.1	0.0	0.0	-0.3	0.1	261	0.0	0.2	0.0

SP07	SP	25/12/17	19:39:39.9	0.0	0.0	0.1	0.1	192	0.0	0.9	0.0
SP06	SP	25/12/17	19:39:40.6	0.0	0.0	0.5	0.2	255	0.0	0.8	0.0
SP06	SP	25/12/17	19:39:44.0	0.0	0.0	-0.2	0.2	255	0.0	0.8	0.0

RMS-ERR: 0.24

Event created: 2025/12/17 19:39:42
This origin created: 2026/01/01 15:57:32

Alert SPogs2025yqzc: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=0.1 2025/12/17 19:42:23.5 44.52 N 11.87 E 21 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP15	SP	25/12/17	19:42:27.8	0.0	0.0	-0.0	0.1	104	0.0	1.1	0.0
SP04	SP	25/12/17	19:42:28.2	0.0	0.0	-0.1	0.2	168	0.0	0.3	0.0
SP04	SP	25/12/17	19:42:31.9	0.0	0.0	0.1	0.2	168	0.0	0.3	0.0
SP11	SP	25/12/17	19:42:31.7	0.0	0.0	-0.2	0.2	180	0.0	0.6	0.0
SP11	SP	25/12/17	19:42:28.3	0.0	0.0	-0.1	0.2	180	0.0	0.6	0.0
SP05	SP	25/12/17	19:42:28.6	0.0	0.0	0.2	0.2	159	0.0	0.3	0.0
SP05	SP	25/12/17	19:42:32.1	0.0	0.0	0.1	0.2	159	0.0	0.3	0.0
SP06	SP	25/12/17	19:42:33.1	0.0	0.0	0.0	0.2	205	0.0	0.0	0.0

RMS-ERR: 0.11

Event created: 2025/12/17 19:42:32
This origin created: 2026/01/01 16:00:11

Alert SPogs2025zdpv: determined by 13 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 13 stations used, weight 13):

Northern Italy ML=1.3 2025/12/24 17:47:28.8 44.36 N 11.82 E 26 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP11	SP	25/12/24	17:47:33.3	0.0	0.0	-0.1	0.0	93	0.0	1.2	0.0
SP11	SP	25/12/24	17:47:36.8	0.0	0.0	-0.1	0.0	93	0.0	1.2	0.0
SP13	SP	25/12/24	17:47:33.6	0.0	0.0	0.1	0.1	30	0.0	0.9	0.0
SP04	SP	25/12/24	17:47:36.9	0.0	0.0	-0.2	0.1	84	0.0	1.3	0.0
SP04	SP	25/12/24	17:47:33.4	0.0	0.0	-0.2	0.1	84	0.0	1.3	0.0
SP01	SP	25/12/24	17:47:34.2	0.0	0.0	0.5	0.1	41	0.0	2.6	0.0
SP05	SP	25/12/24	17:47:33.5	0.0	0.0	-0.3	0.1	87	0.0	1.0	0.0
SP05	SP	25/12/24	17:47:37.0	0.0	0.0	-0.4	0.1	87	0.0	1.0	0.0
SP03	SP	25/12/24	17:47:37.9	0.0	0.0	0.5	0.1	76	0.0	1.9	0.0
SP03	SP	25/12/24	17:47:33.7	0.0	0.0	-0.1	0.1	76	0.0	1.9	0.0
SP02	SP	25/12/24	17:47:34.2	0.0	0.0	0.2	0.1	54	0.0	1.0	0.0

SP07 SP 25/12/24 17:47:34.1 0.0 0.0 -0.0 0.1 148 0.0 1.6 0.0
SP07 SP 25/12/24 17:47:38.2 0.0 0.0 0.1 0.1 148 0.0 1.6 0.0

RMS-ERR: 0.26

Event created: 2025/12/24 17:47:36
This origin created: 2026/01/01 16:38:30

Alert SPogs2025zdpx: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.5 2025/12/24 17:49:53.4 44.31 N 11.84 E 26 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP11	SP	25/12/24	17:50:01.4	0.0	0.0	0.0	0.1	22	0.0	0.8	0.0
SP11	SP	25/12/24	17:49:57.9	0.0	0.0	-0.1	0.1	22	0.0	0.8	0.0
SP04	SP	25/12/24	17:49:57.9	0.0	0.0	-0.2	0.1	42	0.0	0.9	0.0
SP04	SP	25/12/24	17:50:01.4	0.0	0.0	-0.2	0.1	42	0.0	0.9	0.0
SP07	SP	25/12/24	17:49:58.6	0.0	0.0	0.4	0.1	139	0.0	1.7	0.0
SP05	SP	25/12/24	17:49:58.0	0.0	0.0	-0.2	0.1	54	0.0	1.0	0.0
SP05	SP	25/12/24	17:50:01.6	0.0	0.0	-0.2	0.1	54	0.0	1.0	0.0
SP13	SP	25/12/24	17:49:58.3	0.0	0.0	0.1	0.1	6	0.0	0.9	0.0
SP02	SP	25/12/24	17:50:03.0	0.0	0.0	0.4	0.2	34	0.0	1.1	0.0
SP02	SP	25/12/24	17:49:58.7	0.0	0.0	0.0	0.2	34	0.0	1.1	0.0

RMS-ERR: 0.23

Event created: 2025/12/24 17:50:01
This origin created: 2026/01/01 16:41:27

Alert SPogs2025zlpo: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=1.3 2025/12/29 02:45:44.9 44.22 N 11.79 E 5 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	25/12/29	02:45:46.7	0.0	0.0	-0.6	0.1	73	0.0	1.3	0.0
SP06	SP	25/12/29	02:45:48.0	0.0	0.0	0.2	0.1	346	0.0	1.3	0.0
SP06	SP	25/12/29	02:45:49.5	0.0	0.0	-0.4	0.1	346	0.0	1.3	0.0
SP11	SP	25/12/29	02:45:48.4	0.0	0.0	-0.2	0.2	22	0.0	0.9	0.0
SP04	SP	25/12/29	02:45:48.9	0.0	0.0	-0.2	0.2	31	0.0	0.8	0.0
SP05	SP	25/12/29	02:45:51.5	0.0	0.0	2.2	0.2	37	0.0	0.8	0.0
SP13	SP	25/12/29	02:45:49.1	0.0	0.0	-0.4	0.2	14	0.0	0.7	0.0
SP14	SP	25/12/29	02:45:48.9	0.0	0.0	-1.1	0.2	31	0.0	0.8	0.0
SP12	SP	25/12/29	02:45:50.5	0.0	0.0	-0.6	0.3	33	0.0	1.7	0.0
SP15	SP	25/12/29	02:45:53.3	0.0	0.0	1.1	0.3	30	0.0	2.0	0.0

RMS-ERR: 0.92

Event created: 2025/12/29 02:45:50
This origin created: 2025/12/31 14:31:32

Alert SPogs2026awou: determined by 24 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 24 stations used, weight 24):

Northern Italy ML=4.1 2026/01/13 08:27:56.7 44.29 N 11.96 E 30 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	08:28:01.9	0.0	0.0	0.1	0.1	205	0.0	3.8	0.0
SP07	SP	26/01/13	08:28:05.8	0.0	0.0	0.3	0.1	205	0.0	3.8	0.0
SP05	SP	26/01/13	08:28:01.3	0.0	0.0	-0.7	0.1	359	0.0	3.5	0.0
SP04	SP	26/01/13	08:28:01.5	0.0	0.0	-0.5	0.1	342	0.0	3.4	0.0
SP04	SP	26/01/13	08:28:05.4	0.0	0.0	-0.5	0.1	342	0.0	3.4	0.0
SP11	SP	26/01/13	08:28:02.0	0.0	0.0	-0.0	0.1	321	0.0	3.4	0.0
SP11	SP	26/01/13	08:28:06.0	0.0	0.0	0.1	0.1	321	0.0	3.4	0.0
SP03	SP	26/01/13	08:28:01.6	0.0	0.0	-0.4	0.1	358	0.0	3.8	0.0
SP03	SP	26/01/13	08:28:05.6	0.0	0.0	-0.4	0.1	358	0.0	3.8	0.0
SP10	SP	26/01/13	08:28:02.0	0.0	0.0	-0.2	0.1	89	0.0	4.2	0.0
SP10	SP	26/01/13	08:28:06.3	0.0	0.0	0.1	0.1	89	0.0	4.2	0.0
SP14	SP	26/01/13	08:28:01.8	0.0	0.0	-0.4	0.1	359	0.0	3.7	0.0
SP14	SP	26/01/13	08:28:05.8	0.0	0.0	-0.5	0.1	359	0.0	3.7	0.0
SP13	SP	26/01/13	08:28:02.4	0.0	0.0	0.0	0.1	330	0.0	3.2	0.0
SP13	SP	26/01/13	08:28:06.9	0.0	0.0	0.4	0.1	330	0.0	3.2	0.0
SP02	SP	26/01/13	08:28:02.3	0.0	0.0	-0.1	0.1	1	0.0	3.6	0.0
SP02	SP	26/01/13	08:28:06.7	0.0	0.0	0.1	0.1	1	0.0	3.6	0.0
SP06	SP	26/01/13	08:28:03.4	0.0	0.0	0.9	0.2	286	0.0	3.5	0.0
SP09	SP	26/01/13	08:28:02.4	0.0	0.0	-0.1	0.2	47	0.0	4.2	0.0
SP09	SP	26/01/13	08:28:07.1	0.0	0.0	0.3	0.2	47	0.0	4.2	0.0
SP12	SP	26/01/13	08:28:02.5	0.0	0.0	-0.0	0.2	12	0.0	4.1	0.0
SP12	SP	26/01/13	08:28:07.4	0.0	0.0	0.7	0.2	12	0.0	4.1	0.0
SP15	SP	26/01/13	08:28:03.0	0.0	0.0	-0.1	0.2	12	0.0	3.8	0.0
SP08	SP	26/01/13	08:28:04.0	0.0	0.0	0.5	0.3	341	0.0	3.9	0.0

RMS-ERR: 0.38

Event created: 2026/01/13 08:28:03
This origin created: 2026/01/13 09:42:18

Alert SPogs2026awov: determined by 25 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 25 stations used, weight 25):

Northern Italy ML=3.9 2026/01/13 08:29:16.0 44.28 N 11.96 E 31 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	08:29:21.4	0.0	0.0	0.3	0.0	214	0.0	3.5	0.0
SP07	SP	26/01/13	08:29:25.2	0.0	0.0	0.2	0.0	214	0.0	3.5	0.0
SP05	SP	26/01/13	08:29:20.8	0.0	0.0	-0.5	0.1	359	0.0	3.2	0.0
SP04	SP	26/01/13	08:29:21.1	0.0	0.0	-0.3	0.1	344	0.0	3.2	0.0
SP04	SP	26/01/13	08:29:24.7	0.0	0.0	-0.7	0.1	344	0.0	3.2	0.0
SP11	SP	26/01/13	08:29:21.5	0.0	0.0	0.0	0.1	325	0.0	3.1	0.0
SP11	SP	26/01/13	08:29:25.5	0.0	0.0	0.1	0.1	325	0.0	3.1	0.0
SP03	SP	26/01/13	08:29:21.1	0.0	0.0	-0.3	0.1	359	0.0	3.5	0.0
SP03	SP	26/01/13	08:29:25.1	0.0	0.0	-0.4	0.1	359	0.0	3.5	0.0
SP10	SP	26/01/13	08:29:21.5	0.0	0.0	-0.1	0.1	83	0.0	3.7	0.0
SP10	SP	26/01/13	08:29:25.8	0.0	0.0	0.2	0.1	83	0.0	3.7	0.0
SP14	SP	26/01/13	08:29:21.3	0.0	0.0	-0.3	0.1	359	0.0	3.3	0.0
SP14	SP	26/01/13	08:29:25.3	0.0	0.0	-0.5	0.1	359	0.0	3.3	0.0
SP13	SP	26/01/13	08:29:22.0	0.0	0.0	0.1	0.2	333	0.0	2.9	0.0
SP13	SP	26/01/13	08:29:26.3	0.0	0.0	0.2	0.2	333	0.0	2.9	0.0
SP02	SP	26/01/13	08:29:21.8	0.0	0.0	-0.1	0.2	1	0.0	3.5	0.0
SP02	SP	26/01/13	08:29:26.2	0.0	0.0	-0.0	0.2	1	0.0	3.5	0.0
SP01	SP	26/01/13	08:29:22.0	0.0	0.0	0.1	0.2	347	0.0	4.3	0.0
SP01	SP	26/01/13	08:29:26.9	0.0	0.0	0.7	0.2	347	0.0	4.3	0.0
SP09	SP	26/01/13	08:29:22.0	0.0	0.0	0.0	0.2	44	0.0	3.9	0.0
SP09	SP	26/01/13	08:29:26.7	0.0	0.0	0.4	0.2	44	0.0	3.9	0.0
SP12	SP	26/01/13	08:29:22.0	0.0	0.0	0.0	0.2	11	0.0	4.0	0.0
SP12	SP	26/01/13	08:29:27.0	0.0	0.0	0.6	0.2	11	0.0	4.0	0.0
SP15	SP	26/01/13	08:29:22.5	0.0	0.0	-0.1	0.2	12	0.0	3.6	0.0
SP08	SP	26/01/13	08:29:23.5	0.0	0.0	0.5	0.3	342	0.0	3.8	0.0

RMS-ERR: 0.34

Event created: 2026/01/13 08:29:24
This origin created: 2026/01/13 08:36:04

Alert SPogs2026awox: determined by 14 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 14 stations used, weight 14):

Northern Italy ML=1.1 2026/01/13 08:31:37.6 44.31 N 12.06 E 23 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP10	SP	26/01/13	08:31:42.1	0.0	0.0	0.3	0.0	110	0.0	1.4	0.0
SP05	SP	26/01/13	08:31:41.4	0.0	0.0	-0.7	0.1	310	0.0	1.2	0.0
SP05	SP	26/01/13	08:31:44.8	0.0	0.0	-0.6	0.1	310	0.0	1.2	0.0
SP07	SP	26/01/13	08:31:42.1	0.0	0.0	-0.1	0.1	236	0.0	1.3	0.0
SP07	SP	26/01/13	08:31:45.9	0.0	0.0	0.3	0.1	236	0.0	1.3	0.0
SP04	SP	26/01/13	08:31:45.4	0.0	0.0	-0.2	0.1	302	0.0	1.0	0.0
SP04	SP	26/01/13	08:31:41.8	0.0	0.0	-0.5	0.1	302	0.0	1.0	0.0
SP14	SP	26/01/13	08:31:42.2	0.0	0.0	-0.2	0.1	324	0.0	1.1	0.0
SP11	SP	26/01/13	08:31:46.2	0.0	0.0	0.1	0.1	292	0.0	1.1	0.0

SP11	SP	26/01/13	08:31:43.1	0.0	0.0	0.6	0.1	292	0.0	1.1	0.0
SP12	SP	26/01/13	08:31:42.6	0.0	0.0	0.1	0.1	344	0.0	1.7	0.0
SP02	SP	26/01/13	08:31:42.6	0.0	0.0	0.0	0.1	332	0.0	1.1	0.0
SP02	SP	26/01/13	08:31:46.8	0.0	0.0	0.7	0.1	332	0.0	1.1	0.0
SP13	SP	26/01/13	08:31:43.0	0.0	0.0	0.2	0.2	306	0.0	1.2	0.0

RMS-ERR: 0.39

Event created: 2026/01/13 08:31:48
This origin created: 2026/01/13 08:57:36

Alert SPogs2026awpa: determined by 11 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 11 stations used, weight 11):

Northern Italy ML=0.3 2026/01/13 08:35:03.5 44.30 N 11.96 E 28 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	08:35:12.1	0.0	0.0	0.1	0.1	205	0.0	0.8	0.0
SP07	SP	26/01/13	08:35:08.7	0.0	0.0	0.2	0.1	205	0.0	0.8	0.0
SP04	SP	26/01/13	08:35:11.9	0.0	0.0	-0.3	0.1	336	0.0	0.5	0.0
SP04	SP	26/01/13	08:35:08.0	0.0	0.0	-0.4	0.1	336	0.0	0.5	0.0
SP11	SP	26/01/13	08:35:08.4	0.0	0.0	-0.1	0.1	314	0.0	0.7	0.0
SP14	SP	26/01/13	08:35:08.8	0.0	0.0	0.1	0.1	356	0.0	0.8	0.0
SP10	SP	26/01/13	08:35:08.4	0.0	0.0	-0.3	0.1	95	0.0	1.1	0.0
SP10	SP	26/01/13	08:35:12.7	0.0	0.0	0.1	0.1	95	0.0	1.1	0.0
SP13	SP	26/01/13	08:35:09.2	0.0	0.0	0.3	0.1	326	0.0	0.5	0.0
SP02	SP	26/01/13	08:35:09.0	0.0	0.0	0.1	0.1	359	0.0	0.6	0.0
SP02	SP	26/01/13	08:35:13.0	0.0	0.0	0.1	0.1	359	0.0	0.6	0.0

RMS-ERR: 0.24

Event created: 2026/01/13 08:35:12
This origin created: 2026/01/13 09:31:12

Alert SPogs2026awpb: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=0.6 2026/01/13 08:35:48.1 44.31 N 11.93 E 34 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	08:35:53.5	0.0	0.0	-0.2	0.1	353	0.0	0.7	0.0
SP04	SP	26/01/13	08:35:57.3	0.0	0.0	-0.5	0.1	353	0.0	0.7	0.0
SP05	SP	26/01/13	08:35:53.2	0.0	0.0	-0.5	0.1	17	0.0	0.5	0.0
SP07	SP	26/01/13	08:35:53.9	0.0	0.0	0.2	0.1	182	0.0	0.8	0.0
SP07	SP	26/01/13	08:35:57.8	0.0	0.0	0.0	0.1	182	0.0	0.8	0.0
SP14	SP	26/01/13	08:35:53.7	0.0	0.0	-0.1	0.1	9	0.0	0.8	0.0

SP13	SP	26/01/13	08:35:54.2	0.0	0.0	0.3	0.1	333	0.0	0.6	0.0
SP02	SP	26/01/13	08:35:54.3	0.0	0.0	0.2	0.1	10	0.0	0.7	0.0
SP02	SP	26/01/13	08:35:58.6	0.0	0.0	0.2	0.1	10	0.0	0.7	0.0
SP06	SP	26/01/13	08:35:58.5	0.0	0.0	0.1	0.1	279	0.0	0.0	0.0
SP09	SP	26/01/13	08:35:59.0	0.0	0.0	0.2	0.2	58	0.0	1.5	0.0
SP09	SP	26/01/13	08:35:54.3	0.0	0.0	0.1	0.2	58	0.0	1.5	0.0

RMS-ERR: 0.27

Event created: 2026/01/13 08:35:55
This origin created: 2026/01/13 09:14:21

Alert SPogs2026awpd: determined by 9 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 9 stations used, weight 9):

Northern Italy ML=0.4 2026/01/13 08:38:33.3 44.33 N 11.96 E 26 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	08:38:37.5	0.0	0.0	-0.5	0.0	358	0.0	0.4	0.0
SP05	SP	26/01/13	08:38:41.0	0.0	0.0	-0.3	0.0	358	0.0	0.4	0.0
SP04	SP	26/01/13	08:38:37.7	0.0	0.0	-0.3	0.0	326	0.0	0.5	0.0
SP04	SP	26/01/13	08:38:41.6	0.0	0.0	0.3	0.0	326	0.0	0.5	0.0
SP11	SP	26/01/13	08:38:38.0	0.0	0.0	0.0	0.1	297	0.0	0.7	0.0
SP07	SP	26/01/13	08:38:41.9	0.0	0.0	0.2	0.1	194	0.0	0.7	0.0
SP07	SP	26/01/13	08:38:38.1	0.0	0.0	-0.1	0.1	194	0.0	0.7	0.0
SP02	SP	26/01/13	08:38:38.5	0.0	0.0	0.2	0.1	2	0.0	0.6	0.0
SP12	SP	26/01/13	08:38:38.7	0.0	0.0	0.3	0.1	16	0.0	1.4	0.0

RMS-ERR: 0.26

Event created: 2026/01/13 08:38:41
This origin created: 2026/01/13 09:17:13

Alert SPogs2026awpt: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.6 2026/01/13 08:56:28.3 44.34 N 11.88 E 27 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	08:56:33.1	0.0	0.0	0.0	0.0	40	0.0	0.5	0.0
SP04	SP	26/01/13	08:56:36.9	0.0	0.0	0.3	0.0	40	0.0	0.5	0.0
SP05	SP	26/01/13	08:56:32.8	0.0	0.0	-0.4	0.1	61	0.0	0.3	0.0
SP05	SP	26/01/13	08:56:36.2	0.0	0.0	-0.4	0.1	61	0.0	0.3	0.0
SP07	SP	26/01/13	08:56:33.5	0.0	0.0	0.1	0.1	162	0.0	0.7	0.0
SP07	SP	26/01/13	08:56:37.1	0.0	0.0	0.0	0.1	162	0.0	0.7	0.0
SP02	SP	26/01/13	08:56:33.5	0.0	0.0	0.0	0.1	30	0.0	0.7	0.0

SP12	SP	26/01/13	08:56:33.9	0.0	0.0	0.2	0.1	39	0.0	1.5	0.0
SP09	SP	26/01/13	08:56:38.6	0.0	0.0	0.2	0.2	71	0.0	1.6	0.0
SP09	SP	26/01/13	08:56:33.9	0.0	0.0	-0.2	0.2	71	0.0	1.6	0.0

RMS-ERR: 0.24

Event created: 2026/01/13 08:56:37
This origin created: 2026/01/13 09:19:49

Alert SPogs2026awpv: determined by 9 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 9 stations used, weight 9):

Northern Italy ML=0.3 2026/01/13 08:59:11.5 44.32 N 11.92 E 25 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	08:59:19.4	0.0	0.0	0.2	0.1	358	0.0	0.5	0.0
SP04	SP	26/01/13	08:59:15.6	0.0	0.0	-0.3	0.1	358	0.0	0.5	0.0
SP05	SP	26/01/13	08:59:15.4	0.0	0.0	-0.6	0.1	25	0.0	0.3	0.0
SP05	SP	26/01/13	08:59:18.8	0.0	0.0	-0.4	0.1	25	0.0	0.3	0.0
SP07	SP	26/01/13	08:59:16.4	0.0	0.0	0.3	0.1	177	0.0	0.8	0.0
SP13	SP	26/01/13	08:59:16.8	0.0	0.0	0.6	0.1	335	0.0	0.5	0.0
SP02	SP	26/01/13	08:59:16.5	0.0	0.0	0.1	0.1	13	0.0	0.6	0.0
SP09	SP	26/01/13	08:59:16.5	0.0	0.0	-0.3	0.2	60	0.0	1.4	0.0
SP09	SP	26/01/13	08:59:21.1	0.0	0.0	0.4	0.2	60	0.0	1.4	0.0

RMS-ERR: 0.38

Event created: 2026/01/13 08:59:19
This origin created: 2026/01/13 09:21:51

Alert SPogs2026awqe: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.6 2026/01/13 09:10:08.6 44.31 N 11.91 E 32 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP11	SP	26/01/13	09:10:14.2	0.0	0.0	0.2	0.1	335	0.0	0.5	0.0
SP04	SP	26/01/13	09:10:14.0	0.0	0.0	-0.1	0.1	7	0.0	0.5	0.0
SP04	SP	26/01/13	09:10:17.8	0.0	0.0	-0.3	0.1	7	0.0	0.5	0.0
SP07	SP	26/01/13	09:10:14.3	0.0	0.0	0.2	0.1	169	0.0	0.8	0.0
SP07	SP	26/01/13	09:10:18.0	0.0	0.0	-0.1	0.1	169	0.0	0.8	0.0
SP05	SP	26/01/13	09:10:13.7	0.0	0.0	-0.4	0.1	29	0.0	0.3	0.0
SP02	SP	26/01/13	09:10:14.7	0.0	0.0	0.3	0.1	16	0.0	0.7	0.0
SP02	SP	26/01/13	09:10:18.9	0.0	0.0	0.2	0.1	16	0.0	0.7	0.0
SP09	SP	26/01/13	09:10:19.4	0.0	0.0	0.1	0.2	59	0.0	1.4	0.0
SP09	SP	26/01/13	09:10:14.8	0.0	0.0	0.0	0.2	59	0.0	1.4	0.0

RMS-ERR: 0.22

Event created: 2026/01/13 09:10:17
This origin created: 2026/01/13 09:24:57

Alert SPogs2026awqh: determined by 11 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 11 stations used, weight 11):

Northern Italy ML=0.7 2026/01/13 09:13:31.8 44.31 N 11.87 E 31 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	09:13:40.6	0.0	0.0	-0.3	0.1	31	0.0	0.5	0.0
SP04	SP	26/01/13	09:13:37.0	0.0	0.0	-0.1	0.1	31	0.0	0.5	0.0
SP07	SP	26/01/13	09:13:37.1	0.0	0.0	0.0	0.1	151	0.0	0.8	0.0
SP07	SP	26/01/13	09:13:41.2	0.0	0.0	0.2	0.1	151	0.0	0.8	0.0
SP05	SP	26/01/13	09:13:36.7	0.0	0.0	-0.4	0.1	47	0.0	0.5	0.0
SP14	SP	26/01/13	09:13:37.2	0.0	0.0	-0.1	0.1	31	0.0	1.0	0.0
SP02	SP	26/01/13	09:13:41.9	0.0	0.0	0.3	0.1	27	0.0	0.7	0.0
SP02	SP	26/01/13	09:13:37.8	0.0	0.0	0.3	0.1	27	0.0	0.7	0.0
SP12	SP	26/01/13	09:13:37.9	0.0	0.0	0.2	0.2	35	0.0	1.4	0.0
SP09	SP	26/01/13	09:13:38.0	0.0	0.0	-0.1	0.2	65	0.0	1.5	0.0
SP09	SP	26/01/13	09:13:42.6	0.0	0.0	0.0	0.2	65	0.0	1.5	0.0

RMS-ERR: 0.22

Event created: 2026/01/13 09:13:42
This origin created: 2026/01/13 09:27:19

Alert SPogs2026awqz: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=0.3 2026/01/13 09:34:05.9 44.32 N 11.96 E 28 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	09:34:10.3	0.0	0.0	-0.5	0.1	359	0.0	0.5	0.0
SP04	SP	26/01/13	09:34:14.2	0.0	0.0	-0.2	0.1	335	0.0	0.4	0.0
SP04	SP	26/01/13	09:34:10.6	0.0	0.0	-0.2	0.1	335	0.0	0.4	0.0
SP07	SP	26/01/13	09:34:10.9	0.0	0.0	0.0	0.1	197	0.0	0.8	0.0
SP07	SP	26/01/13	09:34:14.8	0.0	0.0	0.3	0.1	197	0.0	0.8	0.0
SP11	SP	26/01/13	09:34:10.9	0.0	0.0	0.0	0.1	309	0.0	0.6	0.0
SP02	SP	26/01/13	09:34:15.4	0.0	0.0	0.3	0.1	2	0.0	0.7	0.0
SP02	SP	26/01/13	09:34:11.4	0.0	0.0	0.3	0.1	2	0.0	0.7	0.0

RMS-ERR: 0.26

Event created: 2026/01/13 09:34:16
This origin created: 2026/01/13 09:48:00

Alert SPogs2026awra: determined by 6 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 6 stations used, weight 6):

Northern Italy ML=0.6 2026/01/13 09:34:50.3 44.33 N 12.21 E 15 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	09:34:54.9	0.0	0.0	-0.0	0.2	283	0.0	0.6	0.0
SP05	SP	26/01/13	09:34:58.4	0.0	0.0	0.0	0.2	283	0.0	0.6	0.0
SP04	SP	26/01/13	09:34:55.3	0.0	0.0	-0.1	0.2	281	0.0	0.8	0.0
SP04	SP	26/01/13	09:34:59.1	0.0	0.0	0.0	0.2	281	0.0	0.8	0.0
SP07	SP	26/01/13	09:34:59.3	0.0	0.0	-0.0	0.2	247	0.0	1.1	0.0
SP07	SP	26/01/13	09:34:55.6	0.0	0.0	0.1	0.2	247	0.0	1.1	0.0

RMS-ERR: 0.05

Event created: 2026/01/13 09:35:03
This origin created: 2026/01/13 09:55:23

Alert SPogs2026awsh: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=1.0 2026/01/13 10:13:52.4 44.32 N 11.90 E 27 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	10:13:57.1	0.0	0.0	-0.1	0.1	17	0.0	0.6	0.0
SP04	SP	26/01/13	10:14:00.5	0.0	0.0	-0.1	0.1	17	0.0	0.6	0.0
SP05	SP	26/01/13	10:13:56.7	0.0	0.0	-0.5	0.1	38	0.0	0.4	0.0
SP05	SP	26/01/13	10:14:00.2	0.0	0.0	-0.6	0.1	38	0.0	0.4	0.0
SP07	SP	26/01/13	10:14:01.2	0.0	0.0	0.4	0.1	164	0.0	0.8	0.0
SP07	SP	26/01/13	10:13:57.3	0.0	0.0	-0.0	0.1	164	0.0	0.8	0.0
SP01	SP	26/01/13	10:13:57.7	0.0	0.0	0.2	0.1	3	0.0	2.6	0.0
SP02	SP	26/01/13	10:14:01.9	0.0	0.0	0.4	0.1	21	0.0	0.6	0.0
SP02	SP	26/01/13	10:13:57.9	0.0	0.0	0.2	0.1	21	0.0	0.6	0.0
SP12	SP	26/01/13	10:13:58.0	0.0	0.0	0.1	0.2	30	0.0	1.3	0.0
SP09	SP	26/01/13	10:13:57.8	0.0	0.0	-0.4	0.2	63	0.0	1.5	0.0
SP09	SP	26/01/13	10:14:02.6	0.0	0.0	0.3	0.2	63	0.0	1.5	0.0

RMS-ERR: 0.32

Event created: 2026/01/13 10:14:00
This origin created: 2026/01/13 11:36:14

Alert SPogs2026awta: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.4 2026/01/13 10:36:33.3 44.33 N 12.09 E 21 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	10:36:37.3	0.0	0.0	-0.3	0.1	290	0.0	0.5	0.0
SP05	SP	26/01/13	10:36:40.8	0.0	0.0	-0.0	0.1	290	0.0	0.5	0.0
SP04	SP	26/01/13	10:36:41.2	0.0	0.0	0.0	0.1	287	0.0	0.5	0.0
SP04	SP	26/01/13	10:36:37.6	0.0	0.0	-0.2	0.1	287	0.0	0.5	0.0
SP02	SP	26/01/13	10:36:38.5	0.0	0.0	0.5	0.1	318	0.0	0.6	0.0
SP07	SP	26/01/13	10:36:37.9	0.0	0.0	-0.2	0.1	233	0.0	1.0	0.0
SP07	SP	26/01/13	10:36:41.7	0.0	0.0	0.1	0.1	233	0.0	1.0	0.0
SP11	SP	26/01/13	10:36:37.9	0.0	0.0	-0.3	0.2	281	0.0	0.7	0.0
SP13	SP	26/01/13	10:36:38.8	0.0	0.0	0.3	0.2	295	0.0	0.8	0.0
SP06	SP	26/01/13	10:36:39.6	0.0	0.0	0.2	0.2	270	0.0	1.3	0.0

RMS-ERR: 0.25

Event created: 2026/01/13 10:36:40
This origin created: 2026/01/13 11:38:35

Alert SPogs2026awth: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=0.7 2026/01/13 10:44:14.0 44.32 N 11.65 E 22 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	10:44:19.7	0.0	0.0	0.1	0.2	76	0.0	0.7	0.0
SP04	SP	26/01/13	10:44:23.4	0.0	0.0	-0.1	0.2	76	0.0	0.7	0.0
SP07	SP	26/01/13	10:44:20.0	0.0	0.0	0.3	0.2	112	0.0	1.0	0.0
SP07	SP	26/01/13	10:44:23.8	0.0	0.0	-0.1	0.2	112	0.0	1.0	0.0
SP05	SP	26/01/13	10:44:19.4	0.0	0.0	-0.5	0.2	78	0.0	0.8	0.0
SP02	SP	26/01/13	10:44:20.5	0.0	0.0	0.3	0.2	63	0.0	1.0	0.0
SP12	SP	26/01/13	10:44:25.8	0.0	0.0	0.2	0.3	64	0.0	1.8	0.0
SP12	SP	26/01/13	10:44:20.7	0.0	0.0	-0.1	0.3	64	0.0	1.8	0.0

RMS-ERR: 0.25

Event created: 2026/01/13 10:44:24
This origin created: 2026/01/13 11:41:33

Alert SPogs2026awtt: determined by 13 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 13 stations used, weight 13):

Northern Italy ML=0.8 2026/01/13 10:57:45.3 44.27 N 12.18 E 16 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	10:57:50.5	0.0	0.0	0.5	0.2	261	0.0	1.0	0.0
SP05	SP	26/01/13	10:57:49.9	0.0	0.0	-0.2	0.2	301	0.0	0.9	0.0
SP05	SP	26/01/13	10:57:53.4	0.0	0.0	-0.2	0.2	301	0.0	0.9	0.0
SP04	SP	26/01/13	10:57:54.0	0.0	0.0	-0.3	0.2	298	0.0	0.9	0.0
SP04	SP	26/01/13	10:57:50.2	0.0	0.0	-0.2	0.2	298	0.0	0.9	0.0
SP14	SP	26/01/13	10:57:50.4	0.0	0.0	-0.1	0.2	311	0.0	0.9	0.0
SP02	SP	26/01/13	10:57:55.1	0.0	0.0	0.4	0.2	316	0.0	0.8	0.0
SP02	SP	26/01/13	10:57:51.1	0.0	0.0	0.4	0.2	316	0.0	0.8	0.0
SP11	SP	26/01/13	10:57:50.6	0.0	0.0	-0.3	0.2	292	0.0	1.0	0.0
SP11	SP	26/01/13	10:57:54.6	0.0	0.0	-0.3	0.2	292	0.0	1.0	0.0
SP13	SP	26/01/13	10:57:51.3	0.0	0.0	-0.1	0.3	301	0.0	1.1	0.0
SP06	SP	26/01/13	10:57:52.2	0.0	0.0	0.1	0.3	281	0.0	1.9	0.0
SP06	SP	26/01/13	10:57:57.5	0.0	0.0	0.3	0.3	281	0.0	1.9	0.0

RMS-ERR: 0.28

Event created: 2026/01/13 10:57:53
This origin created: 2026/01/13 11:43:59

Alert SPogs2026awum: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=0.6 2026/01/13 11:20:09.3 44.27 N 11.96 E 34 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	11:20:19.0	0.0	0.0	0.0	0.0	224	0.0	0.7	0.0
SP07	SP	26/01/13	11:20:15.2	0.0	0.0	0.3	0.0	224	0.0	0.7	0.0
SP05	SP	26/01/13	11:20:14.5	0.0	0.0	-0.7	0.1	359	0.0	0.4	0.0
SP04	SP	26/01/13	11:20:14.8	0.0	0.0	-0.4	0.1	346	0.0	0.6	0.0
SP11	SP	26/01/13	11:20:15.2	0.0	0.0	-0.0	0.1	328	0.0	0.7	0.0
SP13	SP	26/01/13	11:20:16.1	0.0	0.0	0.5	0.2	334	0.0	0.6	0.0
SP02	SP	26/01/13	11:20:15.7	0.0	0.0	0.1	0.2	1	0.0	0.5	0.0
SP02	SP	26/01/13	11:20:20.0	0.0	0.0	-0.3	0.2	1	0.0	0.5	0.0
SP09	SP	26/01/13	11:20:15.6	0.0	0.0	-0.0	0.2	42	0.0	1.4	0.0
SP09	SP	26/01/13	11:20:20.2	0.0	0.0	-0.1	0.2	42	0.0	1.4	0.0
SP12	SP	26/01/13	11:20:20.9	0.0	0.0	0.5	0.2	11	0.0	1.1	0.0
SP12	SP	26/01/13	11:20:15.8	0.0	0.0	0.1	0.2	11	0.0	1.1	0.0

RMS-ERR: 0.32

Event created: 2026/01/13 11:20:18
This origin created: 2026/01/13 11:46:46

Alert SPogs2026awvs: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=0.7 2026/01/13 11:57:08.7 44.30 N 11.96 E 28 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	11:57:17.7	0.0	0.0	0.5	0.1	200	0.0	0.9	0.0
SP07	SP	26/01/13	11:57:13.6	0.0	0.0	-0.0	0.1	200	0.0	0.9	0.0
SP05	SP	26/01/13	11:57:13.1	0.0	0.0	-0.6	0.1	359	0.0	0.4	0.0
SP05	SP	26/01/13	11:57:16.6	0.0	0.0	-0.7	0.1	359	0.0	0.4	0.0
SP04	SP	26/01/13	11:57:17.3	0.0	0.0	-0.1	0.1	339	0.0	0.5	0.0
SP04	SP	26/01/13	11:57:13.6	0.0	0.0	-0.1	0.1	339	0.0	0.5	0.0
SP14	SP	26/01/13	11:57:14.1	0.0	0.0	0.2	0.1	359	0.0	0.6	0.0
SP14	SP	26/01/13	11:57:17.6	0.0	0.0	-0.1	0.1	359	0.0	0.6	0.0
SP02	SP	26/01/13	11:57:14.4	0.0	0.0	0.3	0.1	1	0.0	0.5	0.0
SP02	SP	26/01/13	11:57:18.6	0.0	0.0	0.6	0.1	1	0.0	0.5	0.0
SP12	SP	26/01/13	11:57:14.3	0.0	0.0	0.1	0.1	13	0.0	1.1	0.0
SP09	SP	26/01/13	11:57:14.2	0.0	0.0	-0.1	0.2	51	0.0	1.5	0.0

RMS-ERR: 0.34

Event created: 2026/01/13 11:57:16
This origin created: 2026/01/13 12:46:15

Alert SPogs2026axed: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=0.5 2026/01/13 16:13:24.0 44.32 N 12.11 E 25 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	16:13:28.5	0.0	0.0	-0.3	0.1	296	0.0	0.5	0.0
SP05	SP	26/01/13	16:13:32.0	0.0	0.0	-0.5	0.1	296	0.0	0.5	0.0
SP04	SP	26/01/13	16:13:32.6	0.0	0.0	-0.3	0.1	292	0.0	0.5	0.0
SP04	SP	26/01/13	16:13:29.0	0.0	0.0	-0.1	0.1	292	0.0	0.5	0.0
SP07	SP	26/01/13	16:13:29.1	0.0	0.0	-0.0	0.1	242	0.0	1.0	0.0
SP07	SP	26/01/13	16:13:33.0	0.0	0.0	0.1	0.1	242	0.0	1.0	0.0
SP02	SP	26/01/13	16:13:29.6	0.0	0.0	0.3	0.2	319	0.0	0.4	0.0
SP02	SP	26/01/13	16:13:33.7	0.0	0.0	0.6	0.2	319	0.0	0.4	0.0
SP11	SP	26/01/13	16:13:33.3	0.0	0.0	-0.1	0.2	285	0.0	0.7	0.0
SP11	SP	26/01/13	16:13:29.1	0.0	0.0	-0.3	0.2	285	0.0	0.7	0.0
SP06	SP	26/01/13	16:13:35.7	0.0	0.0	0.4	0.3	274	0.0	1.5	0.0
SP06	SP	26/01/13	16:13:30.8	0.0	0.0	0.3	0.3	274	0.0	1.5	0.0

RMS-ERR: 0.32

Event created: 2026/01/13 16:13:33
This origin created: 2026/01/13 16:40:58

Alert SPogs2026axef: determined by 9 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 9 stations used, weight 9):

Northern Italy ML=0.7 2026/01/13 16:15:14.9 44.32 N 11.90 E 27 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	16:15:19.3	0.0	0.0	-0.5	0.1	35	0.0	0.3	0.0
SP05	SP	26/01/13	16:15:22.8	0.0	0.0	-0.5	0.1	35	0.0	0.3	0.0
SP07	SP	26/01/13	16:15:23.6	0.0	0.0	0.3	0.1	167	0.0	0.8	0.0
SP07	SP	26/01/13	16:15:19.9	0.0	0.0	0.1	0.1	167	0.0	0.8	0.0
SP02	SP	26/01/13	16:15:24.4	0.0	0.0	0.3	0.1	19	0.0	0.4	0.0
SP02	SP	26/01/13	16:15:20.4	0.0	0.0	0.2	0.1	19	0.0	0.4	0.0
SP12	SP	26/01/13	16:15:20.6	0.0	0.0	0.2	0.1	29	0.0	1.0	0.0
SP09	SP	26/01/13	16:15:20.4	0.0	0.0	-0.3	0.2	62	0.0	1.3	0.0
SP09	SP	26/01/13	16:15:25.0	0.0	0.0	0.2	0.2	62	0.0	1.3	0.0

RMS-ERR: 0.30

Event created: 2026/01/13 16:15:23
This origin created: 2026/01/13 16:50:51

Alert SPogs2026axei: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=0.4 2026/01/13 16:19:14.6 44.29 N 11.96 E 24 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	16:19:19.5	0.0	0.0	0.5	0.1	203	0.0	0.7	0.0
SP05	SP	26/01/13	16:19:18.5	0.0	0.0	-0.5	0.1	359	0.0	0.3	0.0
SP05	SP	26/01/13	16:19:21.9	0.0	0.0	-0.3	0.1	359	0.0	0.3	0.0
SP04	SP	26/01/13	16:19:22.5	0.0	0.0	0.1	0.1	341	0.0	0.4	0.0
SP04	SP	26/01/13	16:19:18.8	0.0	0.0	-0.3	0.1	341	0.0	0.4	0.0
SP02	SP	26/01/13	16:19:19.7	0.0	0.0	0.1	0.1	1	0.0	0.5	0.0
SP02	SP	26/01/13	16:19:23.7	0.0	0.0	0.4	0.1	1	0.0	0.5	0.0
SP12	SP	26/01/13	16:19:19.8	0.0	0.0	0.0	0.2	12	0.0	1.1	0.0

RMS-ERR: 0.34

Event created: 2026/01/13 16:19:26
This origin created: 2026/01/13 16:53:21

Alert SPogs2026axfy: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.3 2026/01/13 17:07:46.2 44.31 N 11.96 E 27 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	17:07:50.6	0.0	0.0	-0.5	0.1	359	0.0	0.1	0.0
SP05	SP	26/01/13	17:07:54.0	0.0	0.0	-0.5	0.1	359	0.0	0.1	0.0
SP04	SP	26/01/13	17:07:54.5	0.0	0.0	-0.0	0.1	336	0.0	0.3	0.0
SP04	SP	26/01/13	17:07:50.9	0.0	0.0	-0.1	0.1	336	0.0	0.3	0.0
SP07	SP	26/01/13	17:07:51.1	0.0	0.0	0.1	0.1	198	0.0	0.7	0.0
SP07	SP	26/01/13	17:07:55.0	0.0	0.0	0.3	0.1	198	0.0	0.7	0.0
SP11	SP	26/01/13	17:07:51.2	0.0	0.0	0.1	0.1	311	0.0	0.5	0.0
SP02	SP	26/01/13	17:07:55.9	0.0	0.0	0.5	0.1	1	0.0	0.3	0.0
SP02	SP	26/01/13	17:07:51.6	0.0	0.0	0.2	0.1	1	0.0	0.3	0.0
SP09	SP	26/01/13	17:07:51.6	0.0	0.0	-0.1	0.1	53	0.0	1.4	0.0

RMS-ERR: 0.31

Event created: 2026/01/13 17:08:04
This origin created: 2026/01/13 17:11:55

Alert SPogs2026axgv: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=0.6 2026/01/13 17:34:53.5 44.33 N 11.68 E 22 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/13	17:35:02.4	0.0	0.0	-0.0	0.2	77	0.0	0.5	0.0
SP04	SP	26/01/13	17:34:58.7	0.0	0.0	0.0	0.2	77	0.0	0.5	0.0
SP07	SP	26/01/13	17:34:59.0	0.0	0.0	0.1	0.2	116	0.0	1.0	0.0
SP07	SP	26/01/13	17:35:02.9	0.0	0.0	-0.1	0.2	116	0.0	1.0	0.0
SP02	SP	26/01/13	17:34:59.5	0.0	0.0	0.2	0.2	62	0.0	0.6	0.0
SP02	SP	26/01/13	17:35:03.5	0.0	0.0	-0.1	0.2	62	0.0	0.6	0.0
SP12	SP	26/01/13	17:35:04.6	0.0	0.0	0.2	0.3	63	0.0	1.4	0.0
SP12	SP	26/01/13	17:34:59.6	0.0	0.0	-0.2	0.3	63	0.0	1.4	0.0

RMS-ERR: 0.12

Event created: 2026/01/13 17:35:07
This origin created: 2026/01/13 17:58:54

Alert SPogs2026axmc: determined by 7 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 7 stations used, weight 7):

Northern Italy ML=0.1 2026/01/13 20:14:16.3 44.26 N 12.12 E 19 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP10	SP	26/01/13	20:14:19.9	0.0	0.0	0.1	0.0	358	0.0	0.8	0.0

SP05	SP	26/01/13	20:14:24.5	0.0	0.0	-0.1	0.2	313	0.0	0.2	0.0
SP05	SP	26/01/13	20:14:20.9	0.0	0.0	-0.2	0.2	313	0.0	0.2	0.0
SP04	SP	26/01/13	20:14:21.3	0.0	0.0	-0.1	0.2	308	0.0	0.2	0.0
SP04	SP	26/01/13	20:14:25.1	0.0	0.0	0.1	0.2	308	0.0	0.2	0.0
SP11	SP	26/01/13	20:14:21.6	0.0	0.0	-0.1	0.2	301	0.0	0.5	0.0
SP13	SP	26/01/13	20:14:22.5	0.0	0.0	0.3	0.2	310	0.0	0.4	0.0

RMS-ERR: 0.13

Event created: 2026/01/13 20:14:30
This origin created: 2026/01/14 07:17:51

Alert SPogs2026axnz: determined by 6 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 6 stations used, weight 6):

Northern Italy ML=-0.1 2026/01/13 21:11:45.2 44.33 N 12.09 E 21 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/13	21:11:49.1	0.0	0.0	-0.3	0.1	291	0.0	0.1	0.0
SP05	SP	26/01/13	21:11:52.4	0.0	0.0	-0.1	0.1	291	0.0	0.1	0.0
SP04	SP	26/01/13	21:11:53.2	0.0	0.0	0.2	0.1	288	0.0	0.2	0.0
SP04	SP	26/01/13	21:11:49.4	0.0	0.0	-0.3	0.1	288	0.0	0.2	0.0
SP02	SP	26/01/13	21:11:50.2	0.0	0.0	0.4	0.1	319	0.0	0.0	0.0
SP07	SP	26/01/13	21:11:50.1	0.0	0.0	0.2	0.1	233	0.0	0.7	0.0

RMS-ERR: 0.28

Event created: 2026/01/13 21:12:09
This origin created: 2026/01/14 07:19:50

Alert SPogs2026axpk: determined by 20 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 20 stations used, weight 20):

Northern Italy ML=1.3 2026/01/13 21:54:21.1 44.27 N 11.94 E 32 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	21:54:26.7	0.0	0.0	0.3	0.0	195	0.0	0.9	0.0
SP07	SP	26/01/13	21:54:30.6	0.0	0.0	0.3	0.0	195	0.0	0.9	0.0
SP05	SP	26/01/13	21:54:26.1	0.0	0.0	-0.6	0.1	7	0.0	0.8	0.0
SP04	SP	26/01/13	21:54:26.4	0.0	0.0	-0.3	0.1	353	0.0	1.0	0.0
SP04	SP	26/01/13	21:54:30.1	0.0	0.0	-0.6	0.1	353	0.0	1.0	0.0
SP11	SP	26/01/13	21:54:26.8	0.0	0.0	0.1	0.1	333	0.0	0.9	0.0
SP11	SP	26/01/13	21:54:31.0	0.0	0.0	0.2	0.1	333	0.0	0.9	0.0
SP03	SP	26/01/13	21:54:26.5	0.0	0.0	-0.3	0.1	6	0.0	1.3	0.0
SP03	SP	26/01/13	21:54:30.6	0.0	0.0	-0.4	0.1	6	0.0	1.3	0.0
SP10	SP	26/01/13	21:54:26.9	0.0	0.0	-0.0	0.1	81	0.0	1.3	0.0

SP10	SP	26/01/13	21:54:31.1	0.0	0.0	-0.0	0.1	81	0.0	1.3 0.0
SP14	SP	26/01/13	21:54:26.6	0.0	0.0	-0.3	0.1	5	0.0	0.7 0.0
SP13	SP	26/01/13	21:54:27.2	0.0	0.0	0.2	0.2	338	0.0	0.6 0.0
SP13	SP	26/01/13	21:54:31.7	0.0	0.0	0.3	0.2	338	0.0	0.6 0.0
SP02	SP	26/01/13	21:54:27.2	0.0	0.0	0.0	0.2	6	0.0	0.9 0.0
SP09	SP	26/01/13	21:54:27.2	0.0	0.0	-0.1	0.2	46	0.0	1.4 0.0
SP09	SP	26/01/13	21:54:31.9	0.0	0.0	0.0	0.2	46	0.0	1.4 0.0
SP12	SP	26/01/13	21:54:27.4	0.0	0.0	0.1	0.2	15	0.0	1.2 0.0
SP12	SP	26/01/13	21:54:32.5	0.0	0.0	0.7	0.2	15	0.0	1.2 0.0
SP15	SP	26/01/13	21:54:28.3	0.0	0.0	0.5	0.2	15	0.0	1.2 0.0

RMS-ERR: 0.33

Event created: 2026/01/13 21:54:29
This origin created: 2026/01/14 07:26:24

Alert SPogs2026axpq: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.2 2026/01/13 22:01:31.8 44.27 N 12.13 E 19 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	22:01:36.6	0.0	0.0	0.3	0.1	259	0.0	0.7	0.0
SP05	SP	26/01/13	22:01:36.1	0.0	0.0	-0.3	0.2	308	0.0	0.1	0.0
SP05	SP	26/01/13	22:01:39.6	0.0	0.0	-0.2	0.2	308	0.0	0.1	0.0
SP14	SP	26/01/13	22:01:36.8	0.0	0.0	-0.0	0.2	318	0.0	0.1	0.0
SP11	SP	26/01/13	22:01:40.9	0.0	0.0	-0.1	0.2	297	0.0	0.4	0.0
SP11	SP	26/01/13	22:01:36.8	0.0	0.0	-0.3	0.2	297	0.0	0.4	0.0
SP02	SP	26/01/13	22:01:37.2	0.0	0.0	0.1	0.2	324	0.0	0.1	0.0
SP02	SP	26/01/13	22:01:41.2	0.0	0.0	0.3	0.2	324	0.0	0.1	0.0
SP13	SP	26/01/13	22:01:37.6	0.0	0.0	0.0	0.2	306	0.0	0.4	0.0
SP06	SP	26/01/13	22:01:38.3	0.0	0.0	0.1	0.3	283	0.0	1.2	0.0

RMS-ERR: 0.21

Event created: 2026/01/13 22:02:06
This origin created: 2026/01/14 07:28:27

Alert SPogs2026axsn: determined by 15 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 15 stations used, weight 15):

Northern Italy ML=0.3 2026/01/13 23:29:25.3 44.30 N 11.96 E 32 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/13	23:29:30.8	0.0	0.0	0.1	0.1	202	0.0	0.4	0.0
SP07	SP	26/01/13	23:29:34.8	0.0	0.0	0.1	0.1	202	0.0	0.4	0.0

SP04	SP	26/01/13	23:29:34.2	0.0	0.0	-0.6	0.1	340	0.0	-0.0	0.0
SP04	SP	26/01/13	23:29:30.5	0.0	0.0	-0.3	0.1	340	0.0	-0.0	0.0
SP11	SP	26/01/13	23:29:30.9	0.0	0.0	0.1	0.1	318	0.0	0.2	0.0
SP14	SP	26/01/13	23:29:30.7	0.0	0.0	-0.3	0.1	359	0.0	0.2	0.0
SP14	SP	26/01/13	23:29:34.6	0.0	0.0	-0.5	0.1	359	0.0	0.2	0.0
SP10	SP	26/01/13	23:29:30.8	0.0	0.0	-0.2	0.1	93	0.0	0.8	0.0
SP13	SP	26/01/13	23:29:35.9	0.0	0.0	0.5	0.1	329	0.0	0.0	0.0
SP13	SP	26/01/13	23:29:31.5	0.0	0.0	0.3	0.1	329	0.0	0.0	0.0
SP02	SP	26/01/13	23:29:31.3	0.0	0.0	0.2	0.1	1	0.0	0.2	0.0
SP02	SP	26/01/13	23:29:35.5	0.0	0.0	0.1	0.1	1	0.0	0.2	0.0
SP12	SP	26/01/13	23:29:31.5	0.0	0.0	0.2	0.2	13	0.0	0.7	0.0
SP09	SP	26/01/13	23:29:36.0	0.0	0.0	0.3	0.2	49	0.0	0.7	0.0
SP09	SP	26/01/13	23:29:31.4	0.0	0.0	0.1	0.2	49	0.0	0.7	0.0

RMS-ERR: 0.30

Event created: 2026/01/13 23:29:38
This origin created: 2026/01/14 07:31:35

Alert SPogs2026axuq: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.1 2026/01/14 00:32:49.2 44.30 N 12.07 E 21 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/14	00:32:53.0	0.0	0.0	-0.4	0.1	313	0.0	0.0	0.0
SP05	SP	26/01/14	00:32:56.4	0.0	0.0	-0.1	0.1	313	0.0	0.0	0.0
SP07	SP	26/01/14	00:32:53.5	0.0	0.0	0.1	0.1	243	0.0	0.6	0.0
SP04	SP	26/01/14	00:32:57.1	0.0	0.0	0.2	0.1	306	0.0	0.2	0.0
SP04	SP	26/01/14	00:32:53.3	0.0	0.0	-0.3	0.1	306	0.0	0.2	0.0
SP11	SP	26/01/14	00:32:53.6	0.0	0.0	-0.3	0.2	296	0.0	0.2	0.0
SP12	SP	26/01/14	00:32:54.2	0.0	0.0	0.3	0.2	343	0.0	0.8	0.0
SP02	SP	26/01/14	00:32:54.2	0.0	0.0	0.2	0.2	332	0.0	0.1	0.0
SP13	SP	26/01/14	00:32:54.4	0.0	0.0	0.0	0.2	308	0.0	0.1	0.0
SP06	SP	26/01/14	00:32:55.2	0.0	0.0	0.3	0.2	279	0.0	0.9	0.0

RMS-ERR: 0.25

Event created: 2026/01/14 00:32:58
This origin created: 2026/01/14 07:52:47

Alert SPogs2026axwy: determined by 14 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 14 stations used, weight 14):

Northern Italy ML=0.3 2026/01/14 01:43:18.6 44.28 N 11.91 E 29 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/14	01:43:23.9	0.0	0.0	0.3	0.0	164	0.0	0.4	0.0
SP11	SP	26/01/14	01:43:23.8	0.0	0.0	0.1	0.1	341	0.0	0.2	0.0
SP04	SP	26/01/14	01:43:27.6	0.0	0.0	-0.0	0.1	4	0.0	0.3	0.0
SP04	SP	26/01/14	01:43:23.6	0.0	0.0	-0.2	0.1	4	0.0	0.3	0.0
SP05	SP	26/01/14	01:43:23.3	0.0	0.0	-0.5	0.1	20	0.0	0.0	0.0
SP14	SP	26/01/14	01:43:27.8	0.0	0.0	-0.4	0.1	13	0.0	0.1	0.0
SP14	SP	26/01/14	01:43:24.0	0.0	0.0	-0.1	0.1	13	0.0	0.1	0.0
SP13	SP	26/01/14	01:43:24.3	0.0	0.0	0.2	0.1	344	0.0	-0.1	0.0
SP10	SP	26/01/14	01:43:23.9	0.0	0.0	-0.3	0.2	87	0.0	0.8	0.0
SP10	SP	26/01/14	01:43:28.4	0.0	0.0	0.0	0.2	87	0.0	0.8	0.0
SP02	SP	26/01/14	01:43:24.4	0.0	0.0	0.1	0.2	13	0.0	0.2	0.0
SP02	SP	26/01/14	01:43:28.5	0.0	0.0	0.0	0.2	13	0.0	0.2	0.0
SP12	SP	26/01/14	01:43:29.3	0.0	0.0	0.5	0.2	22	0.0	0.8	0.0
SP12	SP	26/01/14	01:43:24.6	0.0	0.0	0.1	0.2	22	0.0	0.8	0.0

RMS-ERR: 0.26

Event created: 2026/01/14 01:43:27
This origin created: 2026/01/14 07:55:19

Alert SPogs2026axxa: determined by 19 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 19 stations used, weight 19):

Northern Italy ML=0.6 2026/01/14 01:45:19.1 44.28 N 11.94 E 32 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/14	01:45:24.7	0.0	0.0	0.3	0.0	191	0.0	0.4	0.0
SP05	SP	26/01/14	01:45:24.2	0.0	0.0	-0.5	0.1	8	0.0	0.1	0.0
SP04	SP	26/01/14	01:45:24.5	0.0	0.0	-0.2	0.1	352	0.0	0.4	0.0
SP04	SP	26/01/14	01:45:28.3	0.0	0.0	-0.5	0.1	352	0.0	0.4	0.0
SP11	SP	26/01/14	01:45:29.1	0.0	0.0	0.3	0.1	331	0.0	0.3	0.0
SP11	SP	26/01/14	01:45:24.8	0.0	0.0	0.1	0.1	331	0.0	0.3	0.0
SP03	SP	26/01/14	01:45:28.5	0.0	0.0	-0.4	0.1	6	0.0	0.8	0.0
SP03	SP	26/01/14	01:45:24.6	0.0	0.0	-0.2	0.1	6	0.0	0.8	0.0
SP14	SP	26/01/14	01:45:24.7	0.0	0.0	-0.3	0.1	5	0.0	0.2	0.0
SP10	SP	26/01/14	01:45:24.8	0.0	0.0	-0.1	0.1	85	0.0	1.0	0.0
SP10	SP	26/01/14	01:45:29.2	0.0	0.0	0.0	0.1	85	0.0	1.0	0.0
SP13	SP	26/01/14	01:45:25.3	0.0	0.0	0.2	0.1	337	0.0	0.1	0.0
SP13	SP	26/01/14	01:45:29.7	0.0	0.0	0.4	0.1	337	0.0	0.1	0.0
SP02	SP	26/01/14	01:45:25.3	0.0	0.0	0.1	0.2	6	0.0	0.5	0.0
SP02	SP	26/01/14	01:45:29.3	0.0	0.0	-0.2	0.2	6	0.0	0.5	0.0
SP12	SP	26/01/14	01:45:30.3	0.0	0.0	0.5	0.2	16	0.0	0.8	0.0
SP12	SP	26/01/14	01:45:25.4	0.0	0.0	0.2	0.2	16	0.0	0.8	0.0
SP09	SP	26/01/14	01:45:29.9	0.0	0.0	0.1	0.2	48	0.0	0.8	0.0
SP09	SP	26/01/14	01:45:25.4	0.0	0.0	0.1	0.2	48	0.0	0.8	0.0

RMS-ERR: 0.29

Event created: 2026/01/14 01:45:27
This origin created: 2026/01/14 07:57:53

Alert SPogs2026axxz: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=-0.1 2026/01/14 02:14:46.6 44.33 N 11.95 E 22 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/14	02:14:53.2	0.0	0.0	-0.3	0.0	360	0.0	-0.1	0.0
SP05	SP	26/01/14	02:14:50.9	0.0	0.0	0.3	0.0	360	0.0	-0.1	0.0
SP04	SP	26/01/14	02:14:53.6	0.0	0.0	0.0	0.0	329	0.0	-0.0	0.0
SP04	SP	26/01/14	02:14:49.9	0.0	0.0	-0.7	0.0	329	0.0	-0.0	0.0
SP11	SP	26/01/14	02:14:50.4	0.0	0.0	-0.4	0.1	300	0.0	0.1	0.0
SP07	SP	26/01/14	02:14:51.2	0.0	0.0	0.3	0.1	194	0.0	0.5	0.0
SP07	SP	26/01/14	02:14:54.0	0.0	0.0	0.1	0.1	194	0.0	0.5	0.0
SP13	SP	26/01/14	02:14:51.1	0.0	0.0	0.1	0.1	321	0.0	-0.0	0.0
SP02	SP	26/01/14	02:14:50.9	0.0	0.0	-0.2	0.1	2	0.0	-0.2	0.0
SP02	SP	26/01/14	02:14:54.9	0.0	0.0	0.6	0.1	2	0.0	-0.2	0.0
SP12	SP	26/01/14	02:14:51.0	0.0	0.0	-0.2	0.1	16	0.0	0.5	0.0
SP06	SP	26/01/14	02:14:51.8	0.0	0.0	0.3	0.1	272	0.0	0.6	0.0

RMS-ERR: 0.35

Event created: 2026/01/14 02:14:53
This origin created: 2026/01/14 12:28:17

Alert SPogs2026axya: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=-0.0 2026/01/14 02:15:25.4 44.30 N 11.92 E 29 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/14	02:15:31.0	0.0	0.0	0.6	0.1	176	0.0	0.4	0.0
SP07	SP	26/01/14	02:15:34.1	0.0	0.0	0.0	0.1	176	0.0	0.4	0.0
SP04	SP	26/01/14	02:15:33.8	0.0	0.0	-0.4	0.1	359	0.0	-0.1	0.0
SP04	SP	26/01/14	02:15:30.1	0.0	0.0	-0.3	0.1	359	0.0	-0.1	0.0
SP11	SP	26/01/14	02:15:30.4	0.0	0.0	-0.1	0.1	331	0.0	0.1	0.0
SP13	SP	26/01/14	02:15:30.9	0.0	0.0	0.1	0.1	338	0.0	0.0	0.0
SP02	SP	26/01/14	02:15:30.8	0.0	0.0	-0.1	0.1	12	0.0	-0.1	0.0
SP02	SP	26/01/14	02:15:35.0	0.0	0.0	-0.0	0.1	12	0.0	-0.1	0.0
SP12	SP	26/01/14	02:15:36.0	0.0	0.0	0.8	0.2	22	0.0	0.7	0.0
SP12	SP	26/01/14	02:15:31.0	0.0	0.0	-0.1	0.2	22	0.0	0.7	0.0
SP09	SP	26/01/14	02:15:30.9	0.0	0.0	-0.4	0.2	56	0.0	0.9	0.0
SP09	SP	26/01/14	02:15:35.5	0.0	0.0	-0.1	0.2	56	0.0	0.9	0.0

RMS-ERR: 0.35

Event created: 2026/01/14 02:15:35
This origin created: 2026/01/14 12:31:23

Alert SPogs2026axyq: determined by 20 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 20 stations used, weight 20):

Northern Italy ML=1.3 2026/01/14 02:34:24.0 44.27 N 11.96 E 33 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/14	02:34:29.7	0.0	0.0	0.3	0.0	218	0.0	1.1	0.0
SP07	SP	26/01/14	02:34:33.6	0.0	0.0	0.2	0.0	218	0.0	1.1	0.0
SP05	SP	26/01/14	02:34:29.1	0.0	0.0	-0.6	0.1	359	0.0	1.3	0.0
SP04	SP	26/01/14	02:34:29.4	0.0	0.0	-0.3	0.1	345	0.0	1.2	0.0
SP11	SP	26/01/14	02:34:29.7	0.0	0.0	0.0	0.1	327	0.0	1.0	0.0
SP11	SP	26/01/14	02:34:33.7	0.0	0.0	-0.1	0.1	327	0.0	1.0	0.0
SP03	SP	26/01/14	02:34:29.4	0.0	0.0	-0.3	0.1	359	0.0	1.6	0.0
SP03	SP	26/01/14	02:34:33.4	0.0	0.0	-0.5	0.1	359	0.0	1.6	0.0
SP10	SP	26/01/14	02:34:29.9	0.0	0.0	0.1	0.1	80	0.0	1.1	0.0
SP10	SP	26/01/14	02:34:34.0	0.0	0.0	0.0	0.1	80	0.0	1.1	0.0
SP14	SP	26/01/14	02:34:33.5	0.0	0.0	-0.8	0.1	359	0.0	1.0	0.0
SP14	SP	26/01/14	02:34:29.6	0.0	0.0	-0.3	0.1	359	0.0	1.0	0.0
SP13	SP	26/01/14	02:34:30.2	0.0	0.0	0.2	0.2	334	0.0	0.8	0.0
SP13	SP	26/01/14	02:34:34.7	0.0	0.0	0.3	0.2	334	0.0	0.8	0.0
SP02	SP	26/01/14	02:34:30.1	0.0	0.0	0.0	0.2	1	0.0	1.1	0.0
SP01	SP	26/01/14	02:34:35.2	0.0	0.0	0.6	0.2	347	0.0	2.1	0.0
SP01	SP	26/01/14	02:34:30.4	0.0	0.0	0.3	0.2	347	0.0	2.1	0.0
SP09	SP	26/01/14	02:34:30.2	0.0	0.0	0.0	0.2	43	0.0	1.8	0.0
SP12	SP	26/01/14	02:34:30.3	0.0	0.0	0.1	0.2	11	0.0	1.2	0.0
SP12	SP	26/01/14	02:34:35.4	0.0	0.0	0.6	0.2	11	0.0	1.2	0.0

RMS-ERR: 0.35

Event created: 2026/01/14 02:34:31
This origin created: 2026/01/14 12:38:10

Alert SPogs2026axyv: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=-0.1 2026/01/14 02:39:53.6 44.32 N 12.12 E 22 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/14	02:39:58.0	0.0	0.0	-0.2	0.1	293	0.0	0.1	0.0
SP05	SP	26/01/14	02:40:01.4	0.0	0.0	-0.2	0.1	293	0.0	0.1	0.0

SP04	SP	26/01/14	02:40:02.0	0.0	0.0	-0.0	0.2	290	0.0	0.2	0.0
SP04	SP	26/01/14	02:39:58.3	0.0	0.0	-0.1	0.2	290	0.0	0.2	0.0
SP07	SP	26/01/14	02:39:58.6	0.0	0.0	0.1	0.2	242	0.0	0.5	0.0
SP07	SP	26/01/14	02:40:02.2	0.0	0.0	0.1	0.2	242	0.0	0.5	0.0
SP02	SP	26/01/14	02:39:59.0	0.0	0.0	0.5	0.2	316	0.0	0.1	0.0
SP11	SP	26/01/14	02:40:02.7	0.0	0.0	0.1	0.2	284	0.0	0.3	0.0
SP11	SP	26/01/14	02:39:58.7	0.0	0.0	-0.2	0.2	284	0.0	0.3	0.0
SP13	SP	26/01/14	02:39:59.2	0.0	0.0	-0.0	0.2	296	0.0	0.2	0.0

RMS-ERR: 0.18

Event created: 2026/01/14 02:40:02
This origin created: 2026/01/14 12:43:15

Alert SPogs2026ayah: determined by 13 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 13 stations used, weight 13):

Northern Italy ML=0.3 2026/01/14 03:24:33.2 44.32 N 11.92 E 32 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/14	03:24:42.1	0.0	0.0	-0.3	0.1	359	0.0	0.2	0.0
SP04	SP	26/01/14	03:24:38.3	0.0	0.0	-0.2	0.1	359	0.0	0.2	0.0
SP11	SP	26/01/14	03:24:38.7	0.0	0.0	0.1	0.1	322	0.0	0.2	0.0
SP11	SP	26/01/14	03:24:42.6	0.0	0.0	0.2	0.1	322	0.0	0.2	0.0
SP03	SP	26/01/14	03:24:42.5	0.0	0.0	-0.1	0.1	18	0.0	0.9	0.0
SP03	SP	26/01/14	03:24:38.5	0.0	0.0	-0.1	0.1	18	0.0	0.9	0.0
SP07	SP	26/01/14	03:24:38.8	0.0	0.0	0.2	0.1	177	0.0	0.6	0.0
SP07	SP	26/01/14	03:24:42.5	0.0	0.0	-0.1	0.1	177	0.0	0.6	0.0
SP14	SP	26/01/14	03:24:38.5	0.0	0.0	-0.2	0.1	14	0.0	0.1	0.0
SP02	SP	26/01/14	03:24:43.2	0.0	0.0	0.1	0.1	14	0.0	0.2	0.0
SP02	SP	26/01/14	03:24:39.1	0.0	0.0	0.2	0.1	14	0.0	0.2	0.0
SP12	SP	26/01/14	03:24:39.3	0.0	0.0	0.2	0.1	25	0.0	0.6	0.0
SP09	SP	26/01/14	03:24:39.1	0.0	0.0	-0.1	0.2	61	0.0	1.1	0.0

RMS-ERR: 0.18

Event created: 2026/01/14 03:24:41
This origin created: 2026/01/14 12:46:13

Alert SPogs2026ayhy: determined by 24 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 24 stations used, weight 24):

Northern Italy ML=2.5 2026/01/14 07:16:16.8 44.28 N 11.96 E 27 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/14	07:16:21.8	0.0	0.0	0.2	0.0	215	0.0	2.1	0.0

SP07	SP	26/01/14	07:16:25.6	0.0	0.0	0.5	0.0	215	0.0	2.1	0.0
SP05	SP	26/01/14	07:16:21.2	0.0	0.0	-0.6	0.1	359	0.0	2.0	0.0
SP04	SP	26/01/14	07:16:21.5	0.0	0.0	-0.3	0.1	344	0.0	2.0	0.0
SP04	SP	26/01/14	07:16:25.0	0.0	0.0	-0.5	0.1	344	0.0	2.0	0.0
SP11	SP	26/01/14	07:16:21.9	0.0	0.0	-0.0	0.1	326	0.0	2.0	0.0
SP11	SP	26/01/14	07:16:25.8	0.0	0.0	0.2	0.1	326	0.0	2.0	0.0
SP03	SP	26/01/14	07:16:25.5	0.0	0.0	-0.2	0.1	359	0.0	2.3	0.0
SP03	SP	26/01/14	07:16:21.6	0.0	0.0	-0.4	0.1	359	0.0	2.3	0.0
SP10	SP	26/01/14	07:16:22.0	0.0	0.0	-0.1	0.1	82	0.0	2.4	0.0
SP10	SP	26/01/14	07:16:25.9	0.0	0.0	0.1	0.1	82	0.0	2.4	0.0
SP14	SP	26/01/14	07:16:21.8	0.0	0.0	-0.4	0.1	359	0.0	1.9	0.0
SP14	SP	26/01/14	07:16:25.5	0.0	0.0	-0.6	0.1	359	0.0	1.9	0.0
SP13	SP	26/01/14	07:16:22.3	0.0	0.0	0.0	0.2	333	0.0	1.6	0.0
SP13	SP	26/01/14	07:16:26.8	0.0	0.0	0.5	0.2	333	0.0	1.6	0.0
SP02	SP	26/01/14	07:16:26.6	0.0	0.0	0.1	0.2	1	0.0	1.9	0.0
SP02	SP	26/01/14	07:16:22.3	0.0	0.0	-0.1	0.2	1	0.0	1.9	0.0
SP01	SP	26/01/14	07:16:22.8	0.0	0.0	0.3	0.2	347	0.0	2.9	0.0
SP09	SP	26/01/14	07:16:22.3	0.0	0.0	-0.2	0.2	44	0.0	2.5	0.0
SP09	SP	26/01/14	07:16:26.9	0.0	0.0	0.3	0.2	44	0.0	2.5	0.0
SP12	SP	26/01/14	07:16:22.5	0.0	0.0	-0.0	0.2	11	0.0	2.3	0.0
SP12	SP	26/01/14	07:16:27.3	0.0	0.0	0.5	0.2	11	0.0	2.3	0.0
SP15	SP	26/01/14	07:16:23.5	0.0	0.0	0.3	0.2	12	0.0	2.1	0.0
SP08	SP	26/01/14	07:16:24.2	0.0	0.0	0.5	0.3	342	0.0	2.4	0.0

RMS-ERR: 0.35

Event created: 2026/01/14 07:16:25
This origin created: 2026/01/14 07:41:24

Alert SPogs2026ayic: determined by 7 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 7 stations used, weight 7):

Northern Italy ML=0.6 2026/01/14 07:21:09.5 44.23 N 12.12 E 10 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/14	07:21:14.1	0.0	0.0	0.1	0.2	321	0.0	0.7	0.0
SP05	SP	26/01/14	07:21:17.3	0.0	0.0	-0.0	0.2	321	0.0	0.7	0.0
SP04	SP	26/01/14	07:21:18.0	0.0	0.0	-0.0	0.2	315	0.0	0.7	0.0
SP04	SP	26/01/14	07:21:14.3	0.0	0.0	-0.1	0.2	315	0.0	0.7	0.0
SP12	SP	26/01/14	07:21:15.0	0.0	0.0	-0.1	0.2	340	0.0	1.7	0.0
SP02	SP	26/01/14	07:21:19.3	0.0	0.0	-0.0	0.2	332	0.0	0.9	0.0
SP02	SP	26/01/14	07:21:15.3	0.0	0.0	0.1	0.2	332	0.0	0.9	0.0

RMS-ERR: 0.07

Event created: 2026/01/14 07:21:17
This origin created: 2026/01/14 12:48:33

Alert SPogs2026ayid: determined by 13 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 13 stations used, weight 13):

Northern Italy ML=0.6 2026/01/14 07:22:50.6 44.28 N 11.92 E 33 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/14	07:22:56.4	0.0	0.0	0.3	0.0	172	0.0	0.7	0.0
SP07	SP	26/01/14	07:23:00.2	0.0	0.0	0.1	0.0	172	0.0	0.7	0.0
SP11	SP	26/01/14	07:22:56.4	0.0	0.0	0.1	0.1	338	0.0	0.6	0.0
SP04	SP	26/01/14	07:22:59.8	0.0	0.0	-0.6	0.1	0	0.0	0.7	0.0
SP04	SP	26/01/14	07:22:56.0	0.0	0.0	-0.2	0.1	0	0.0	0.7	0.0
SP05	SP	26/01/14	07:22:55.8	0.0	0.0	-0.5	0.1	17	0.0	0.6	0.0
SP14	SP	26/01/14	07:22:56.6	0.0	0.0	0.0	0.1	11	0.0	1.0	0.0
SP13	SP	26/01/14	07:22:57.0	0.0	0.0	0.4	0.1	342	0.0	0.6	0.0
SP02	SP	26/01/14	07:22:56.8	0.0	0.0	0.1	0.2	11	0.0	0.7	0.0
SP02	SP	26/01/14	07:23:01.0	0.0	0.0	-0.2	0.2	11	0.0	0.7	0.0
SP12	SP	26/01/14	07:23:01.9	0.0	0.0	0.5	0.2	21	0.0	1.4	0.0
SP12	SP	26/01/14	07:22:57.0	0.0	0.0	0.1	0.2	21	0.0	1.4	0.0
SP09	SP	26/01/14	07:22:56.8	0.0	0.0	-0.1	0.2	52	0.0	1.6	0.0

RMS-ERR: 0.30

Event created: 2026/01/14 07:22:58
This origin created: 2026/01/14 12:51:34

Alert SPogs2026aylc: determined by 14 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 14 stations used, weight 14):

Northern Italy ML=1.0 2026/01/14 08:52:19.8 44.19 N 11.94 E 22 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/14	08:52:28.3	0.0	0.0	-0.5	0.2	3	0.0	1.0	0.0
SP05	SP	26/01/14	08:52:24.8	0.0	0.0	-0.2	0.2	3	0.0	1.0	0.0
SP11	SP	26/01/14	08:52:25.4	0.0	0.0	0.4	0.2	344	0.0	1.0	0.0
SP04	SP	26/01/14	08:52:25.1	0.0	0.0	-0.0	0.2	355	0.0	1.0	0.0
SP04	SP	26/01/14	08:52:29.0	0.0	0.0	0.1	0.2	355	0.0	1.0	0.0
SP14	SP	26/01/14	08:52:25.4	0.0	0.0	-0.2	0.2	2	0.0	1.1	0.0
SP13	SP	26/01/14	08:52:25.9	0.0	0.0	0.2	0.2	345	0.0	0.9	0.0
SP13	SP	26/01/14	08:52:30.4	0.0	0.0	0.4	0.2	345	0.0	0.9	0.0
SP09	SP	26/01/14	08:52:26.0	0.0	0.0	0.1	0.2	32	0.0	1.8	0.0
SP09	SP	26/01/14	08:52:30.7	0.0	0.0	0.3	0.2	32	0.0	1.8	0.0
SP02	SP	26/01/14	08:52:30.1	0.0	0.0	-0.4	0.2	3	0.0	1.1	0.0
SP02	SP	26/01/14	08:52:25.8	0.0	0.0	-0.1	0.2	3	0.0	1.1	0.0
SP12	SP	26/01/14	08:52:30.9	0.0	0.0	0.1	0.3	10	0.0	1.7	0.0
SP12	SP	26/01/14	08:52:26.1	0.0	0.0	-0.1	0.3	10	0.0	1.7	0.0

RMS-ERR: 0.26

Event created: 2026/01/14 08:52:28
This origin created: 2026/01/14 12:55:39

Alert SPogs2026ayse: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.7 2026/01/14 12:26:35.2 44.32 N 11.89 E 29 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/14	12:26:43.8	0.0	0.0	-0.1	0.1	20	0.0	0.6	0.0
SP04	SP	26/01/14	12:26:40.2	0.0	0.0	-0.1	0.1	20	0.0	0.6	0.0
SP05	SP	26/01/14	12:26:39.8	0.0	0.0	-0.4	0.1	41	0.0	0.5	0.0
SP05	SP	26/01/14	12:26:43.4	0.0	0.0	-0.6	0.1	41	0.0	0.5	0.0
SP07	SP	26/01/14	12:26:40.4	0.0	0.0	0.1	0.1	161	0.0	0.9	0.0
SP07	SP	26/01/14	12:26:44.4	0.0	0.0	0.3	0.1	161	0.0	0.9	0.0
SP02	SP	26/01/14	12:26:40.9	0.0	0.0	0.2	0.1	22	0.0	0.7	0.0
SP02	SP	26/01/14	12:26:45.2	0.0	0.0	0.5	0.1	22	0.0	0.7	0.0
SP09	SP	26/01/14	12:26:45.7	0.0	0.0	0.2	0.2	64	0.0	1.6	0.0
SP09	SP	26/01/14	12:26:41.0	0.0	0.0	-0.2	0.2	64	0.0	1.6	0.0

RMS-ERR: 0.34

Event created: 2026/01/14 12:26:43
This origin created: 2026/01/14 12:58:44

Alert SPogs2026azcb: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.2 2026/01/14 17:26:06.8 44.34 N 11.96 E 26 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/14	17:26:10.9	0.0	0.0	-0.4	0.0	358	0.0	0.4	0.0
SP05	SP	26/01/14	17:26:14.3	0.0	0.0	-0.4	0.0	358	0.0	0.4	0.0
SP04	SP	26/01/14	17:26:14.8	0.0	0.0	0.1	0.0	322	0.0	0.5	0.0
SP04	SP	26/01/14	17:26:11.1	0.0	0.0	-0.2	0.0	322	0.0	0.5	0.0
SP11	SP	26/01/14	17:26:11.5	0.0	0.0	0.1	0.1	293	0.0	0.5	0.0
SP14	SP	26/01/14	17:26:11.7	0.0	0.0	0.2	0.1	358	0.0	0.4	0.0
SP14	SP	26/01/14	17:26:15.2	0.0	0.0	0.2	0.1	358	0.0	0.4	0.0
SP07	SP	26/01/14	17:26:15.4	0.0	0.0	0.2	0.1	193	0.0	0.9	0.0
SP07	SP	26/01/14	17:26:11.6	0.0	0.0	-0.0	0.1	193	0.0	0.9	0.0
SP02	SP	26/01/14	17:26:12.0	0.0	0.0	0.3	0.1	2	0.0	0.3	0.0

RMS-ERR: 0.24

Event created: 2026/01/14 17:26:14
This origin created: 2026/01/23 10:21:56

Alert SPogs2026azhx: determined by 19 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 19 stations used, weight 19):

Northern Italy ML=0.8 2026/01/14 20:23:11.5 44.31 N 11.93 E 32 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/14	20:23:20.9	0.0	0.0	0.2	0.1	185	0.0	0.9	0.0
SP07	SP	26/01/14	20:23:17.0	0.0	0.0	0.2	0.1	185	0.0	0.9	0.0
SP05	SP	26/01/14	20:23:16.3	0.0	0.0	-0.5	0.1	13	0.0	0.5	0.0
SP04	SP	26/01/14	20:23:16.6	0.0	0.0	-0.2	0.1	350	0.0	0.5	0.0
SP04	SP	26/01/14	20:23:20.2	0.0	0.0	-0.6	0.1	350	0.0	0.5	0.0
SP11	SP	26/01/14	20:23:17.0	0.0	0.0	0.1	0.1	322	0.0	0.3	0.0
SP03	SP	26/01/14	20:23:20.7	0.0	0.0	-0.2	0.1	9	0.0	1.1	0.0
SP03	SP	26/01/14	20:23:16.7	0.0	0.0	-0.2	0.1	9	0.0	1.1	0.0
SP14	SP	26/01/14	20:23:20.6	0.0	0.0	-0.5	0.1	7	0.0	0.6	0.0
SP14	SP	26/01/14	20:23:16.8	0.0	0.0	-0.2	0.1	7	0.0	0.6	0.0
SP13	SP	26/01/14	20:23:21.8	0.0	0.0	0.6	0.1	333	0.0	0.4	0.0
SP13	SP	26/01/14	20:23:17.6	0.0	0.0	0.5	0.1	333	0.0	0.4	0.0
SP02	SP	26/01/14	20:23:17.4	0.0	0.0	0.1	0.1	8	0.0	0.8	0.0
SP02	SP	26/01/14	20:23:21.6	0.0	0.0	0.2	0.1	8	0.0	0.8	0.0
SP10	SP	26/01/14	20:23:17.1	0.0	0.0	-0.2	0.1	96	0.0	1.0	0.0
SP10	SP	26/01/14	20:23:21.5	0.0	0.0	0.0	0.1	96	0.0	1.0	0.0
SP12	SP	26/01/14	20:23:17.6	0.0	0.0	0.2	0.1	19	0.0	0.9	0.0
SP09	SP	26/01/14	20:23:22.2	0.0	0.0	0.4	0.2	55	0.0	1.0	0.0
SP09	SP	26/01/14	20:23:17.6	0.0	0.0	0.1	0.2	55	0.0	1.0	0.0

RMS-ERR: 0.33

Event created: 2026/01/14 20:23:19
This origin created: 2026/01/23 10:36:11

Alert SPogs2026aznc: determined by 21 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 21 stations used, weight 21):

Northern Italy ML=0.8 2026/01/14 23:01:24.5 44.30 N 11.96 E 29 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/14	23:01:29.7	0.0	0.0	0.1	0.1	200	0.0	0.8	0.0
SP07	SP	26/01/14	23:01:33.6	0.0	0.0	0.3	0.1	200	0.0	0.8	0.0
SP05	SP	26/01/14	23:01:32.5	0.0	0.0	-0.8	0.1	359	0.0	0.5	0.0
SP05	SP	26/01/14	23:01:29.1	0.0	0.0	-0.5	0.1	359	0.0	0.5	0.0
SP04	SP	26/01/14	23:01:29.4	0.0	0.0	-0.2	0.1	338	0.0	0.6	0.0
SP04	SP	26/01/14	23:01:33.0	0.0	0.0	-0.3	0.1	338	0.0	0.6	0.0

SP03	SP	26/01/14	23:01:33.4	0.0	0.0	0.0	0.1	358	0.0	1.0	0.0
SP03	SP	26/01/14	23:01:29.5	0.0	0.0	-0.2	0.1	358	0.0	1.0	0.0
SP11	SP	26/01/14	23:01:33.7	0.0	0.0	0.2	0.1	315	0.0	0.5	0.0
SP11	SP	26/01/14	23:01:29.8	0.0	0.0	0.1	0.1	315	0.0	0.5	0.0
SP14	SP	26/01/14	23:01:29.6	0.0	0.0	-0.2	0.1	359	0.0	0.6	0.0
SP14	SP	26/01/14	23:01:33.3	0.0	0.0	-0.4	0.1	359	0.0	0.6	0.0
SP10	SP	26/01/14	23:01:34.0	0.0	0.0	0.1	0.1	96	0.0	1.0	0.0
SP10	SP	26/01/14	23:01:29.8	0.0	0.0	-0.1	0.1	96	0.0	1.0	0.0
SP13	SP	26/01/14	23:01:34.7	0.0	0.0	0.7	0.1	327	0.0	0.2	0.0
SP13	SP	26/01/14	23:01:30.3	0.0	0.0	0.3	0.1	327	0.0	0.2	0.0
SP02	SP	26/01/14	23:01:34.1	0.0	0.0	0.1	0.1	1	0.0	0.7	0.0
SP02	SP	26/01/14	23:01:30.1	0.0	0.0	0.1	0.1	1	0.0	0.7	0.0
SP12	SP	26/01/14	23:01:30.3	0.0	0.0	0.2	0.1	13	0.0	0.9	0.0
SP09	SP	26/01/14	23:01:30.2	0.0	0.0	0.1	0.1	51	0.0	0.9	0.0
SP09	SP	26/01/14	23:01:34.8	0.0	0.0	0.6	0.1	51	0.0	0.9	0.0

RMS-ERR: 0.34

Event created: 2026/01/14 23:01:32
This origin created: 2026/01/23 10:44:19

Alert SPogs2026aznn: determined by 11 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 11 stations used, weight 11):

Northern Italy ML=0.1 2026/01/14 23:14:02.9 44.26 N 11.92 E 34 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/14	23:14:12.6	0.0	0.0	0.0	0.0	164	0.0	0.4	0.0
SP07	SP	26/01/14	23:14:08.7	0.0	0.0	0.2	0.0	164	0.0	0.4	0.0
SP11	SP	26/01/14	23:14:08.8	0.0	0.0	0.0	0.1	342	0.0	0.3	0.0
SP11	SP	26/01/14	23:14:12.9	0.0	0.0	-0.2	0.1	342	0.0	0.3	0.0
SP04	SP	26/01/14	23:14:08.4	0.0	0.0	-0.4	0.1	359	0.0	0.3	0.0
SP14	SP	26/01/14	23:14:08.7	0.0	0.0	-0.4	0.2	8	0.0	0.2	0.0
SP13	SP	26/01/14	23:14:13.7	0.0	0.0	-0.0	0.2	344	0.0	0.1	0.0
SP13	SP	26/01/14	23:14:09.6	0.0	0.0	0.5	0.2	344	0.0	0.1	0.0
SP02	SP	26/01/14	23:14:09.1	0.0	0.0	-0.2	0.2	9	0.0	0.2	0.0
SP12	SP	26/01/14	23:14:14.6	0.0	0.0	0.3	0.2	17	0.0	0.8	0.0
SP12	SP	26/01/14	23:14:09.5	0.0	0.0	0.0	0.2	17	0.0	0.8	0.0

RMS-ERR: 0.27

Event created: 2026/01/14 23:14:11
This origin created: 2026/01/23 10:49:52

Alert SPogs2026azrg: determined by 11 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 11 stations used, weight 11):

Northern Italy ML=-0.1 2026/01/15 01:06:19.4 44.32 N 11.81 E 32 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP11	SP	26/01/15	01:06:29.3	0.0	0.0	0.4	0.1	46	0.0	0.1	0.0
SP11	SP	26/01/15	01:06:25.0	0.0	0.0	0.2	0.1	46	0.0	0.1	0.0
SP04	SP	26/01/15	01:06:24.9	0.0	0.0	-0.2	0.1	57	0.0	0.2	0.0
SP04	SP	26/01/15	01:06:28.4	0.0	0.0	-0.7	0.1	57	0.0	0.2	0.0
SP07	SP	26/01/15	01:06:25.2	0.0	0.0	0.1	0.1	133	0.0	0.5	0.0
SP07	SP	26/01/15	01:06:29.3	0.0	0.0	0.0	0.1	133	0.0	0.5	0.0
SP14	SP	26/01/15	01:06:25.1	0.0	0.0	-0.2	0.1	48	0.0	0.0	0.0
SP02	SP	26/01/15	01:06:25.6	0.0	0.0	0.2	0.2	42	0.0	-0.1	0.0
SP02	SP	26/01/15	01:06:29.8	0.0	0.0	-0.1	0.2	42	0.0	-0.1	0.0
SP12	SP	26/01/15	01:06:30.9	0.0	0.0	0.5	0.2	47	0.0	0.8	0.0
SP12	SP	26/01/15	01:06:25.6	0.0	0.0	-0.1	0.2	47	0.0	0.8	0.0

RMS-ERR: 0.32

Event created: 2026/01/15 01:06:29
This origin created: 2026/01/23 10:52:23

Alert SPogs2026azty: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=0.2 2026/01/15 02:27:57.1 44.17 N 12.04 E 8 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/15	02:28:02.1	0.0	0.0	0.0	0.2	342	0.0	0.1	0.0
SP05	SP	26/01/15	02:28:05.5	0.0	0.0	-0.2	0.2	342	0.0	0.1	0.0
SP04	SP	26/01/15	02:28:06.1	0.0	0.0	-0.1	0.2	336	0.0	0.2	0.0
SP04	SP	26/01/15	02:28:02.7	0.0	0.0	0.3	0.2	336	0.0	0.2	0.0
SP14	SP	26/01/15	02:28:03.0	0.0	0.0	0.1	0.3	345	0.0	0.6	0.0
SP02	SP	26/01/15	02:28:03.3	0.0	0.0	-0.2	0.3	347	0.0	0.5	0.0
SP12	SP	26/01/15	02:28:03.3	0.0	0.0	-0.2	0.3	354	0.0	1.3	0.0
SP12	SP	26/01/15	02:28:08.5	0.0	0.0	0.2	0.3	354	0.0	1.3	0.0

RMS-ERR: 0.20

Event created: 2026/01/15 02:28:07
This origin created: 2026/01/23 10:56:01

Alert SPogs2026azuw: determined by 19 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 19 stations used, weight 19):

Northern Italy ML=0.4 2026/01/15 02:56:59.2 44.28 N 11.96 E 29 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/15	02:57:04.4	0.0	0.0	0.2	0.0	209	0.0	0.3	0.0
SP07	SP	26/01/15	02:57:08.2	0.0	0.0	0.4	0.0	209	0.0	0.3	0.0
SP05	SP	26/01/15	02:57:03.9	0.0	0.0	-0.5	0.1	359	0.0	0.2	0.0
SP05	SP	26/01/15	02:57:07.4	0.0	0.0	-0.8	0.1	359	0.0	0.2	0.0
SP04	SP	26/01/15	02:57:07.9	0.0	0.0	-0.3	0.1	343	0.0	0.3	0.0
SP04	SP	26/01/15	02:57:04.2	0.0	0.0	-0.3	0.1	343	0.0	0.3	0.0
SP11	SP	26/01/15	02:57:04.6	0.0	0.0	0.1	0.1	323	0.0	0.3	0.0
SP11	SP	26/01/15	02:57:08.6	0.0	0.0	0.3	0.1	323	0.0	0.3	0.0
SP03	SP	26/01/15	02:57:04.3	0.0	0.0	-0.2	0.1	359	0.0	0.9	0.0
SP03	SP	26/01/15	02:57:08.3	0.0	0.0	-0.0	0.1	359	0.0	0.9	0.0
SP14	SP	26/01/15	02:57:08.3	0.0	0.0	-0.4	0.1	359	0.0	0.4	0.0
SP14	SP	26/01/15	02:57:04.5	0.0	0.0	-0.1	0.1	359	0.0	0.4	0.0
SP13	SP	26/01/15	02:57:05.2	0.0	0.0	0.3	0.1	332	0.0	0.1	0.0
SP02	SP	26/01/15	02:57:05.0	0.0	0.0	0.1	0.2	1	0.0	0.4	0.0
SP02	SP	26/01/15	02:57:09.3	0.0	0.0	0.2	0.2	1	0.0	0.4	0.0
SP09	SP	26/01/15	02:57:09.5	0.0	0.0	0.3	0.2	45	0.0	1.1	0.0
SP09	SP	26/01/15	02:57:04.9	0.0	0.0	-0.1	0.2	45	0.0	1.1	0.0
SP12	SP	26/01/15	02:57:10.0	0.0	0.0	0.7	0.2	12	0.0	0.8	0.0
SP12	SP	26/01/15	02:57:05.1	0.0	0.0	0.0	0.2	12	0.0	0.8	0.0

RMS-ERR: 0.35

Event created: 2026/01/15 02:57:07
This origin created: 2026/01/23 10:59:42

Alert SPogs2026azwf: determined by 14 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 14 stations used, weight 14):

Northern Italy ML=0.2 2026/01/15 03:37:18.2 44.30 N 11.96 E 26 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/15	03:37:22.9	0.0	0.0	0.1	0.1	202	0.0	0.5	0.0
SP07	SP	26/01/15	03:37:26.6	0.0	0.0	0.4	0.1	202	0.0	0.5	0.0
SP05	SP	26/01/15	03:37:22.3	0.0	0.0	-0.6	0.1	359	0.0	0.3	0.0
SP05	SP	26/01/15	03:37:25.7	0.0	0.0	-0.6	0.1	359	0.0	0.3	0.0
SP04	SP	26/01/15	03:37:26.3	0.0	0.0	-0.1	0.1	340	0.0	0.1	0.0
SP04	SP	26/01/15	03:37:22.6	0.0	0.0	-0.3	0.1	340	0.0	0.1	0.0
SP11	SP	26/01/15	03:37:22.9	0.0	0.0	-0.0	0.1	318	0.0	0.3	0.0
SP10	SP	26/01/15	03:37:22.9	0.0	0.0	-0.3	0.1	93	0.0	0.9	0.0
SP13	SP	26/01/15	03:37:23.8	0.0	0.0	0.5	0.1	329	0.0	0.2	0.0
SP02	SP	26/01/15	03:37:23.4	0.0	0.0	-0.0	0.1	1	0.0	0.1	0.0
SP02	SP	26/01/15	03:37:27.5	0.0	0.0	0.3	0.1	1	0.0	0.1	0.0
SP12	SP	26/01/15	03:37:23.6	0.0	0.0	0.1	0.2	13	0.0	1.0	0.0
SP09	SP	26/01/15	03:37:27.9	0.0	0.0	0.4	0.2	49	0.0	0.9	0.0
SP09	SP	26/01/15	03:37:23.6	0.0	0.0	0.0	0.2	49	0.0	0.9	0.0

RMS-ERR: 0.34

Event created: 2026/01/15 03:37:25
This origin created: 2026/01/23 11:05:16

Alert SPogs2026azyu: determined by 18 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 18 stations used, weight 18):

Northern Italy ML=0.5 2026/01/15 04:55:05.1 44.30 N 11.94 E 28 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/15	04:55:10.1	0.0	0.0	0.1	0.1	189	0.0	0.8	0.0
SP07	SP	26/01/15	04:55:14.0	0.0	0.0	0.4	0.1	189	0.0	0.8	0.0
SP05	SP	26/01/15	04:55:09.5	0.0	0.0	-0.5	0.1	9	0.0	0.3	0.0
SP05	SP	26/01/15	04:55:13.0	0.0	0.0	-0.7	0.1	9	0.0	0.3	0.0
SP04	SP	26/01/15	04:55:13.6	0.0	0.0	-0.1	0.1	348	0.0	0.5	0.0
SP04	SP	26/01/15	04:55:09.8	0.0	0.0	-0.2	0.1	348	0.0	0.5	0.0
SP11	SP	26/01/15	04:55:14.0	0.0	0.0	0.2	0.1	321	0.0	0.5	0.0
SP11	SP	26/01/15	04:55:10.1	0.0	0.0	0.0	0.1	321	0.0	0.5	0.0
SP14	SP	26/01/15	04:55:13.8	0.0	0.0	-0.3	0.1	5	0.0	0.3	0.0
SP14	SP	26/01/15	04:55:10.4	0.0	0.0	0.1	0.1	5	0.0	0.3	0.0
SP13	SP	26/01/15	04:55:11.0	0.0	0.0	0.6	0.1	332	0.0	0.3	0.0
SP10	SP	26/01/15	04:55:10.3	0.0	0.0	-0.2	0.1	95	0.0	1.0	0.0
SP10	SP	26/01/15	04:55:14.5	0.0	0.0	0.0	0.1	95	0.0	1.0	0.0
SP02	SP	26/01/15	04:55:14.9	0.0	0.0	0.4	0.1	6	0.0	0.4	0.0
SP02	SP	26/01/15	04:55:10.6	0.0	0.0	0.0	0.1	6	0.0	0.4	0.0
SP12	SP	26/01/15	04:55:10.7	0.0	0.0	0.1	0.2	18	0.0	1.1	0.0
SP09	SP	26/01/15	04:55:10.7	0.0	0.0	-0.1	0.2	53	0.0	1.1	0.0
SP09	SP	26/01/15	04:55:15.3	0.0	0.0	0.4	0.2	53	0.0	1.1	0.0

RMS-ERR: 0.32

Event created: 2026/01/15 04:55:12
This origin created: 2026/01/23 11:24:27

Alert SPogs2026bcpq: determined by 12 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 12 stations used, weight 12):

Northern Italy ML=0.7 2026/01/16 15:42:26.1 44.29 N 11.92 E 32 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP07	SP	26/01/16	15:42:31.5	0.0	0.0	0.1	0.0	174	0.0	0.7	0.0
SP07	SP	26/01/16	15:42:35.3	0.0	0.0	0.1	0.0	174	0.0	0.7	0.0
SP04	SP	26/01/16	15:42:35.1	0.0	0.0	-0.4	0.1	359	0.0	0.6	0.0
SP04	SP	26/01/16	15:42:31.1	0.0	0.0	-0.4	0.1	359	0.0	0.6	0.0
SP13	SP	26/01/16	15:42:36.5	0.0	0.0	0.4	0.1	341	0.0	0.4	0.0
SP13	SP	26/01/16	15:42:32.0	0.0	0.0	0.2	0.1	341	0.0	0.4	0.0

SP02	SP	26/01/16	15:42:32.0	0.0	0.0	-0.0	0.2	11	0.0	0.6	0.0
SP02	SP	26/01/16	15:42:36.1	0.0	0.0	-0.2	0.2	11	0.0	0.6	0.0
SP12	SP	26/01/16	15:42:32.2	0.0	0.0	0.0	0.2	20	0.0	1.1	0.0
SP12	SP	26/01/16	15:42:37.0	0.0	0.0	0.3	0.2	20	0.0	1.1	0.0
SP09	SP	26/01/16	15:42:36.7	0.0	0.0	-0.1	0.2	51	0.0	1.4	0.0
SP09	SP	26/01/16	15:42:32.2	0.0	0.0	0.0	0.2	51	0.0	1.4	0.0

RMS-ERR: 0.25

Event created: 2026/01/16 15:42:34
This origin created: 2026/01/23 12:32:27

Alert SPogs2026bepg: determined by 15 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 15 stations used, weight 15):

Northern Italy ML=1.0 2026/01/17 17:46:50.6 44.31 N 12.13 E 22 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/17	17:46:54.9	0.0	0.0	-0.3	0.1	296	0.0	0.7	0.0
SP05	SP	26/01/17	17:46:58.3	0.0	0.0	-0.4	0.1	296	0.0	0.7	0.0
SP03	SP	26/01/17	17:46:55.3	0.0	0.0	-0.1	0.1	302	0.0	1.3	0.0
SP03	SP	26/01/17	17:46:59.2	0.0	0.0	0.4	0.1	302	0.0	1.3	0.0
SP07	SP	26/01/17	17:46:59.3	0.0	0.0	0.2	0.2	245	0.0	1.1	0.0
SP07	SP	26/01/17	17:46:55.6	0.0	0.0	0.0	0.2	245	0.0	1.1	0.0
SP04	SP	26/01/17	17:46:58.8	0.0	0.0	-0.3	0.2	292	0.0	0.7	0.0
SP04	SP	26/01/17	17:46:55.4	0.0	0.0	-0.2	0.2	292	0.0	0.7	0.0
SP14	SP	26/01/17	17:46:56.1	0.0	0.0	0.5	0.2	309	0.0	0.9	0.0
SP02	SP	26/01/17	17:46:55.9	0.0	0.0	0.2	0.2	317	0.0	0.9	0.0
SP11	SP	26/01/17	17:46:55.7	0.0	0.0	-0.2	0.2	286	0.0	0.5	0.0
SP11	SP	26/01/17	17:46:59.8	0.0	0.0	0.0	0.2	286	0.0	0.5	0.0
SP13	SP	26/01/17	17:47:00.5	0.0	0.0	0.0	0.2	298	0.0	0.5	0.0
SP13	SP	26/01/17	17:46:56.3	0.0	0.0	-0.0	0.2	298	0.0	0.5	0.0
SP06	SP	26/01/17	17:46:57.2	0.0	0.0	0.1	0.3	275	0.0	1.3	0.0

RMS-ERR: 0.26

Event created: 2026/01/17 17:46:58
This origin created: 2026/01/23 12:45:29

Alert SPogs2026bqjs: determined by 10 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 10 stations used, weight 10):

Northern Italy ML=0.5 2026/01/24 04:36:49.0 44.42 N 11.97 E 25 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP05	SP	26/01/24	04:36:53.6	0.0	0.0	0.1	0.0	191	0.0	0.3	0.0

SP05	SP	26/01/24	04:36:57.0	0.0	0.0	0.2	0.0	191	0.0	0.3	0.0
SP04	SP	26/01/24	04:36:53.4	0.0	0.0	-0.1	0.1	217	0.0	0.3	0.0
SP04	SP	26/01/24	04:36:56.7	0.0	0.0	-0.1	0.1	217	0.0	0.3	0.0
SP11	SP	26/01/24	04:36:53.5	0.0	0.0	-0.2	0.1	231	0.0	0.4	0.0
SP11	SP	26/01/24	04:36:57.0	0.0	0.0	-0.1	0.1	231	0.0	0.4	0.0
SP07	SP	26/01/24	04:36:58.5	0.0	0.0	-0.0	0.2	190	0.0	1.1	0.0
SP07	SP	26/01/24	04:36:54.6	0.0	0.0	0.1	0.2	190	0.0	1.1	0.0
SP06	SP	26/01/24	04:36:54.5	0.0	0.0	0.0	0.2	242	0.0	1.2	0.0
SP06	SP	26/01/24	04:36:58.8	0.0	0.0	0.2	0.2	242	0.0	1.2	0.0

RMS-ERR: 0.12

Event created: 2026/01/24 04:36:57
This origin created: 2026/01/26 09:59:52

Alert SPogs2026bqjt: determined by 11 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 11 stations used, weight 11):

Northern Italy ML=1.3 2026/01/24 04:38:01.6 44.36 N 11.69 E 25 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP11	SP	26/01/24	04:38:10.2	0.0	0.0	-0.1	0.1	89	0.0	0.9	0.0
SP11	SP	26/01/24	04:38:06.8	0.0	0.0	0.1	0.1	89	0.0	0.9	0.0
SP04	SP	26/01/24	04:38:06.7	0.0	0.0	-0.3	0.2	86	0.0	1.0	0.0
SP01	SP	26/01/24	04:38:07.5	0.0	0.0	0.4	0.2	65	0.0	2.3	0.0
SP05	SP	26/01/24	04:38:06.8	0.0	0.0	-0.5	0.2	87	0.0	0.7	0.0
SP07	SP	26/01/24	04:38:07.6	0.0	0.0	0.1	0.2	124	0.0	1.1	0.0
SP07	SP	26/01/24	04:38:11.7	0.0	0.0	-0.1	0.2	124	0.0	1.1	0.0
SP12	SP	26/01/24	04:38:07.9	0.0	0.0	-0.1	0.2	69	0.0	1.7	0.0
SP12	SP	26/01/24	04:38:12.7	0.0	0.0	0.2	0.2	69	0.0	1.7	0.0
SP09	SP	26/01/24	04:38:08.8	0.0	0.0	-0.1	0.3	83	0.0	2.1	0.0
SP09	SP	26/01/24	04:38:14.4	0.0	0.0	0.1	0.3	83	0.0	2.1	0.0

RMS-ERR: 0.23

Event created: 2026/01/24 04:38:10
This origin created: 2026/01/26 10:24:45

Alert SPogs2026bqju: determined by 8 stations, type M

Hypo71 solution with earthmodel INGV (with start solution, 8 stations used, weight 8):

Northern Italy ML=0.4 2026/01/24 04:38:46.8 44.56 N 11.87 E 6 km

Stat	Net	Date	Time	Amp	Per	Res	Dist	Az	mb	ML	mB
SP04	SP	26/01/24	04:38:51.4	0.0	0.0	0.1	0.2	171	0.0	0.6	0.0
SP04	SP	26/01/24	04:38:54.7	0.0	0.0	0.0	0.2	171	0.0	0.6	0.0

SP11	SP	26/01/24	04:38:54.9	0.0	0.0	0.0	0.2	180	0.0	0.6	0.0
SP11	SP	26/01/24	04:38:51.5	0.0	0.0	-0.0	0.2	180	0.0	0.6	0.0
SP05	SP	26/01/24	04:38:51.5	0.0	0.0	0.0	0.2	164	0.0	0.6	0.0
SP05	SP	26/01/24	04:38:54.9	0.0	0.0	-0.1	0.2	164	0.0	0.6	0.0
SP06	SP	26/01/24	04:38:56.6	0.0	0.0	-0.0	0.2	201	0.0	1.5	0.0
SP06	SP	26/01/24	04:38:52.5	0.0	0.0	-0.0	0.2	201	0.0	1.5	0.0

RMS-ERR: 0.03

Event created: 2026/01/24 04:38:55
This origin created: 2026/01/26 10:26:17



SUBSURFACE
GEOLOGY AND
GEOPHYSICS



Concessione "San Potito-Cotignola Stoccaggio"

Prove di stoccaggio in sovrappressione nei livelli BB1-Upper e BB1-Lower del Cluster A

Report di Monitoraggio delle pressioni di poro e delle deformazioni indotte

Aggiornamento al 31 dicembre 2025

Redatto da A. Ponza ed F. L. Guido

verificato da Vincenzo Picotti

Bologna 28 febbraio 2025

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Executive Summary

La presente relazione rendiconta l'attività di monitoraggio delle deformazioni del suolo e delle pressioni di poro che Geophi S.r.l. svolge in qualità di SPM (Società Preposta al Monitoraggio) presso la concessione di stoccaggio di gas metano denominata "SAN POTITO & COTIGNOLA STOCCAGGIO", per conto di Stogit S.p.A., per il periodo compreso tra inizio prove di stoccaggio (aprile 2025) e dicembre 2025 (terza relazione trimestrale). L'attività di monitoraggio è prevista a seguito dell'approvazione del progetto per condurre prove di stoccaggio in sovrapressione, e secondo gli Indirizzi e Linee Guida (ILG) (Capitoli 6 e 7) ministeriali elaborato in data 24/11/2014 dal gruppo di lavoro istituito presso l'allora Ministero dello Sviluppo Economico (MiSE, 2014) per le attività antropiche potenzialmente in grado di indurre sismicità o deformazioni del suolo nel loro intorno.
Il presente report di monitoraggio viene prodotto secondo le procedure tecniche ed i tempi prescritti nel Documento di Gestione Operativa del Monitoraggio ("DGOM") approvato e ratificato in data 20/02/2025 in applicazione dell'art. 3 dell'ACCORDO QUADRO del 23/09/2024 riguardante le "Prove di stoccaggio in sovraprressione nella concessione San potito - Cotignola - livello BB1" sottoscritto tra:

- il Ministero dell'Ambiente e della sicurezza energetica (MASE), Direzione centrale fonti energetiche e titoli abilitativi, in persona del Direttore Generale;
- la Regione Emilia Romagna, Assessorato alla Transizione ecologica, contrasto al cambiamento climatico, ambiente, difesa del suolo e della costa e protezione civile, in persona del Vicepresidente,
- il Comune di Bagnacavallo, in persona del Sindaco pro tempore;
- Il Comune di Lugo, in persona del Sindaco pro tempore;
- l'Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS), in persona del Direttore della Sezione CRS;
- La società Geophi S.r.l., in persona del Responsabile per il monitoraggio e le analisi delle deformazioni superficiali del suolo e per accettazione da Stogit S.p.A., in persona di Titolare della Concessione.

A fine dicembre 2025, la strumentazione installata presso l'impianto del Cluster-A continua ad essere funzionante. Il presente report evidenzia:

- sul Cluster-A sono state evidenziate deformazioni geodetiche mediamente contenute entro i $\approx \pm$ 4 mm (con massimi fino a $\approx +$ 10 e - 11 mm), non correlabili con la fase di iniezione in esame, né in termini di tempo, né di distribuzione nello spazio;
- variazioni di pressioni di poro statiche all'interno delle prescrizioni previste di non superamento del 107% della pressione statica di giacimento originaria.

1 Attività di stoccaggio dal 1 ottobre al 31 dicembre 2025

Cluster-A

Nella concessione di stoccaggio San Potito, Cluster-A, nel periodo di monitoraggio ottobre - dicembre 2025 sono stati iniettati complessivamente ≈ 5.2 MSmc ed erogati ≈ 25.45 MSmc;

- 5.199646 Smc (≈ 5.2 MSmc) sono stati iniettati nel livello BB1upper attraverso i pozzi "SP 1 dirST", "SP A1dir" e "SP A2dir";
- 22.973.421 Smc (≈ 22.98 MSmc) sono stati erogati dal livello BB1upper attraverso i pozzi "SP 1 dirST", "SP A1dir" e "SP A2dir";
- 2.475.374 Smc (≈ 2.47 MSmc) sono stati erogati nel livello BB1lower attraverso il pozzo "SP A2dir".

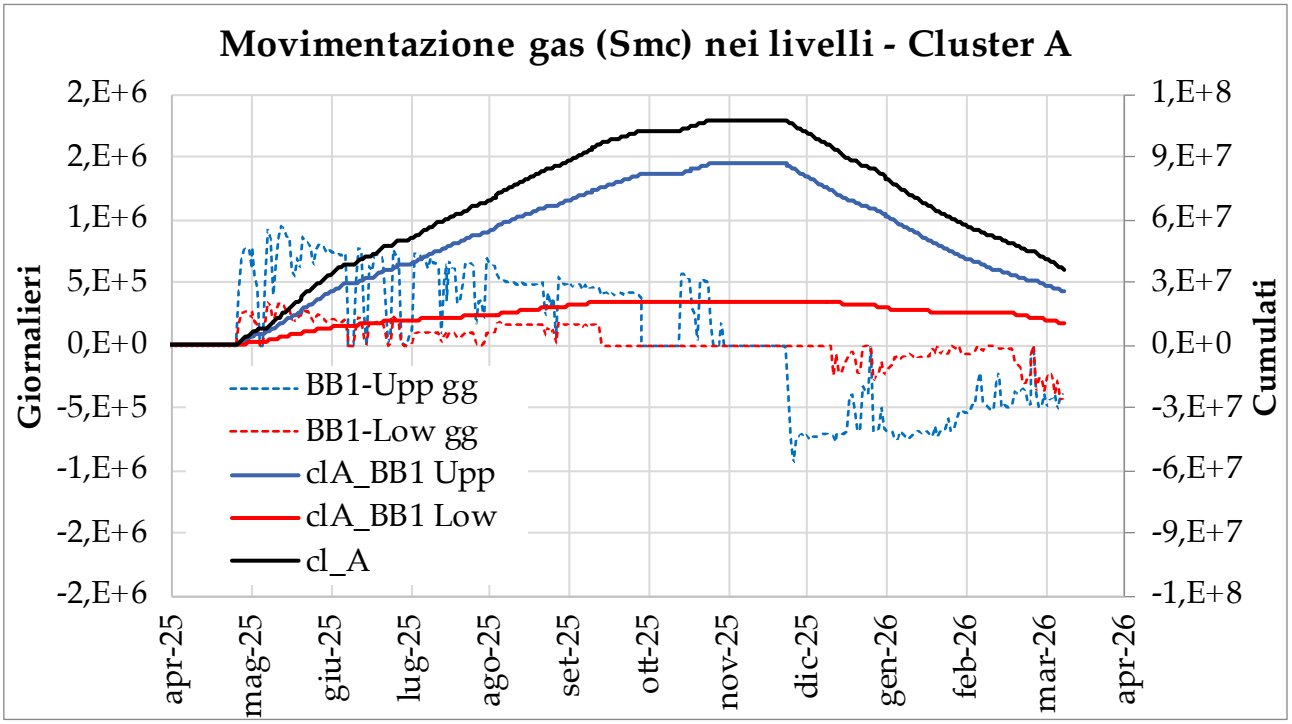


Figura 1.1: Cluster-A. Movimentazione dei volumi di gas in metri cubi standard (Smc): valori giornalieri (linee tratteggiate) con ordinata a sinistra; valori cumulati (linee continue) con ordinata a destra.

2 Analisi GPS, aggiornamento al 31 dicembre 2025

2.1 Rete geodetica a doppia frequenza

La serie temporale delle posizioni delle stazioni a doppia frequenza SP12 ed SP00 è stata aggiornata attraverso l'analisi dei dati giornalieri fino alla data del 31 dicembre 2025 (Day of Year 2025/365). E' stata inoltre aggiornata la serie temporale degli indici di qualità (MP1, MP2) di SP12 ed SP00 fino al doy 2025/365. Le serie temporali delle stazioni analizzate sono state determinate nel sistema di riferimento IGb14 (http://igscb.jpl.nasa.gov/network/refframe.html).

2.1.1 Quality check

I dati RINEX giornalieri delle 2 stazioni sono stati analizzati con il software TEQC (http:// facility.unavco.org/ software/teqc), che rappresenta uno standard internazionale per il trattamento in fase di pre-processamento di dati GPS e per la valutazione della loro qualità. A questo scopo, gli indici principalmente utilizzati sono i seguenti (in parentesi sono indicati i valori riscontrati su stazioni permanenti di buona qualità):

- MP1: root mean square (RMS) dato dai multipath sulla fase L1, ossia dovuto a riflessioni del segnale radio inviato dai satelliti che influiscono sul corretto calcolo della distanza satellite-ricevitore (0.1 - 0.5 m);
- MP2: RMS dato dai multipath sulla fase L2 (0.1 - 0.5 m);
- Cycle Slips (CS): salti di ciclo che occorrono quando il ricevitore perde il tracking dei satelliti in vista (0 - 5000 per intervalli di campionamento a 30 s).

Ricordiamo che prendendo come riferimento la rete IGS dell'International GNSS Service (http:// igscb.jpl.nasa.gov), il 50% delle stazioni IGS ha valori di RMS per MP1 inferiori a 0.4 m e valori di MP2 inferiori a 0.6 m, mentre 2/3 delle stazioni ha valori di MP1 inferiori a 0.5 m e di MP2 inferiori a 0.75 m. Per quanto riguarda i Cycle Slips, più del 50% delle stazioni IGS ha valori inferiori a 5000 e inferiore a 1000 per almeno 2/3 delle stazioni IGS.

In Figura 2.1 è mostrato l'andamento nel tempo dei valori di MP1, MP2 e CS della stazione SP00 fino al 31 dicembre 2025. La serie temporale di 1.7 anni mostra parametri di MP1 e MP2 in linea con i valori indicati dall'IGS per una stazione di buona qualità. Nel trimestre in esame (ottobre - dicembre 2025), MP1 e MP2 si mantengono sotto 0.55 e 050, rispettivamente, fatta eccezione per alcuni picchi.
In Figura 2.2 è mostrato l'andamento dei valori di MP1, MP2 e CS della stazione SP12 durante il suoi primi 7.1 anni di acquisizione. I valori di multipath tra ottobre e dicembre 2025 si mantengono mediamente al di sotto di 0.85 e 0.75 per MP1 e MP2, rispettivamente, fatta eccezione per alcuni picchi. I valori di cycle slips si abbassano regolarmente da 150 a 130 nel trimestre di monitoraggio.

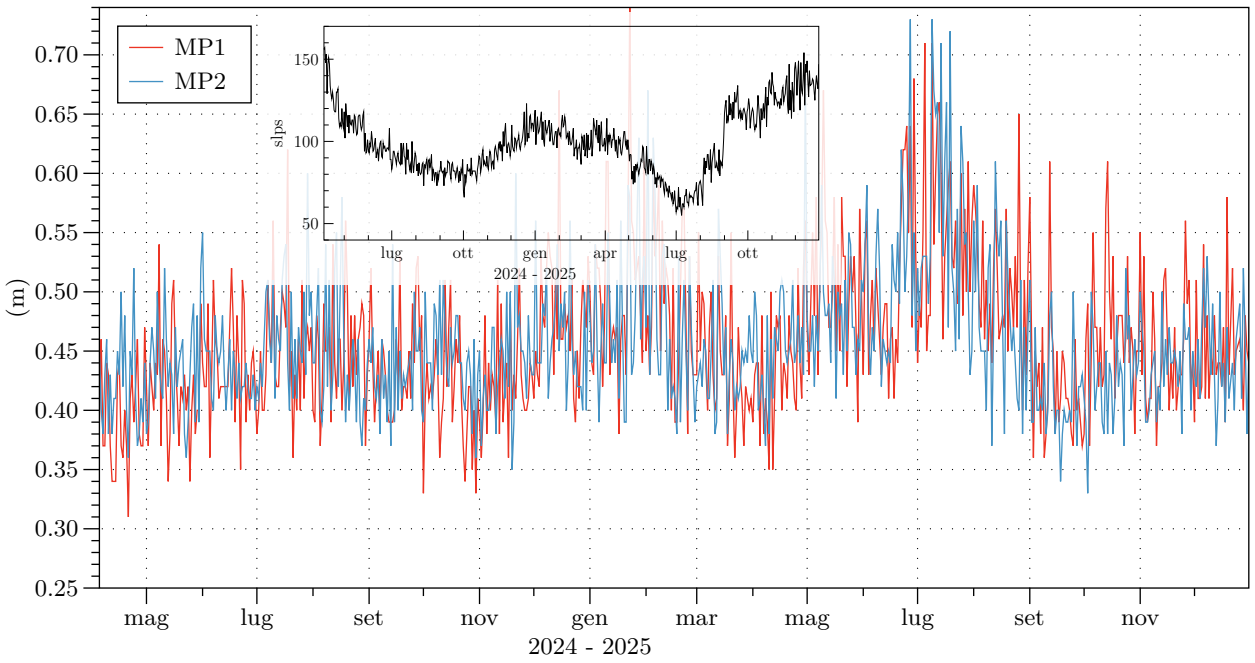


Figura 2.1: Andamento nel tempo dei valori di MP1, MP2 e numero di Cycle Slips della stazione SP00 fino al 31 dicembre 2025.

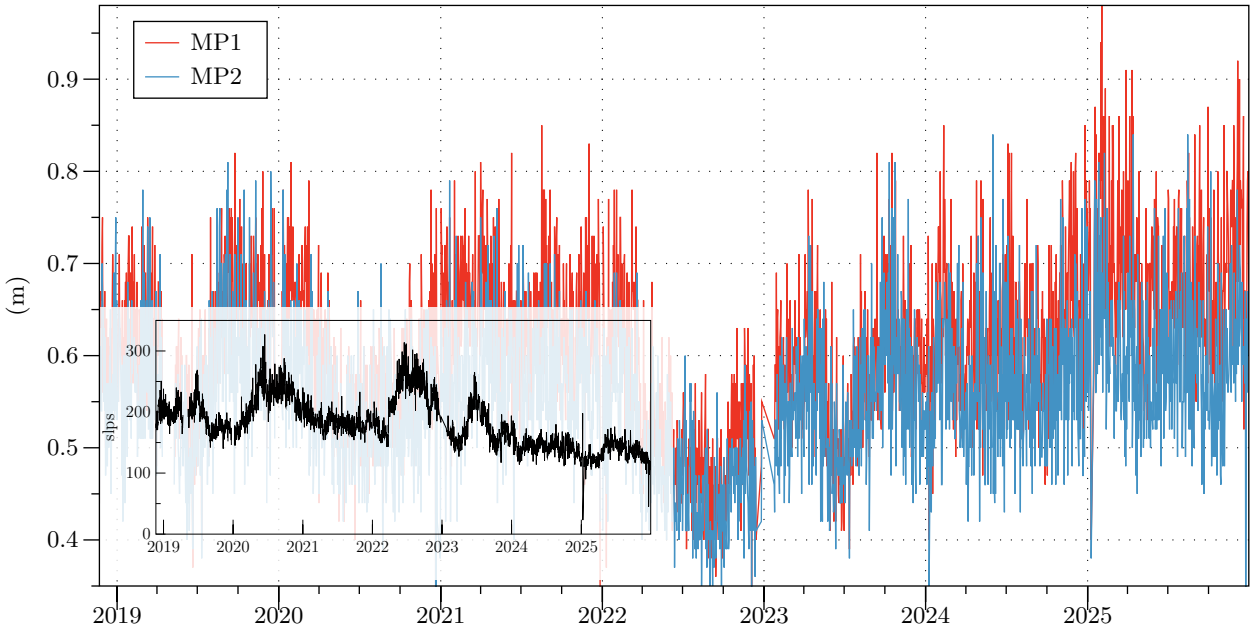


Figura 2.2: Andamento nel tempo dei valori di MP1, MP2 e numero di Cycle Slips della stazione SP12 fino al 31 dicembre 2025.

2.1.2 Analisi dei dati e stima delle posizioni

A partire dal 22 novembre 2018 i dati RINEX giornalieri registrati dalle stazioni SP12 e SP00 sono stati processati con il software scientifico GAMIT versione 10.71 (ultima release, Herring et al., 2010) assieme a quelli registrati da altre 30 stazioni (Fig. 2.3) afferenti a diverse reti GPS/GNSS permanenti in Emilia-Romagna, Italia settentrionale ed Europa, in questo caso al fine di ottenere informazioni relative a punti fuori dalla zona di subsidenza tettonica della Pianura Padana e dell'area pede-Appenninica, nota dalla letteratura scientifica più recente. Successivamente, le soluzioni giornaliere debolmente vincolate, ottenute con il software GAMIT, sono state inquadrate nel sistema di riferimento internazionale IGb14 attraverso il modulo GLOBK del software, utilizzando le stazioni di riferimento IGb14 incluse nella rete (ed es. NOT1, TRO1).

La rete risulta così strutturata con:

Stazioni GNSS disponili entro una distanza di 15 - 60 km (Fig. 2.3 a)

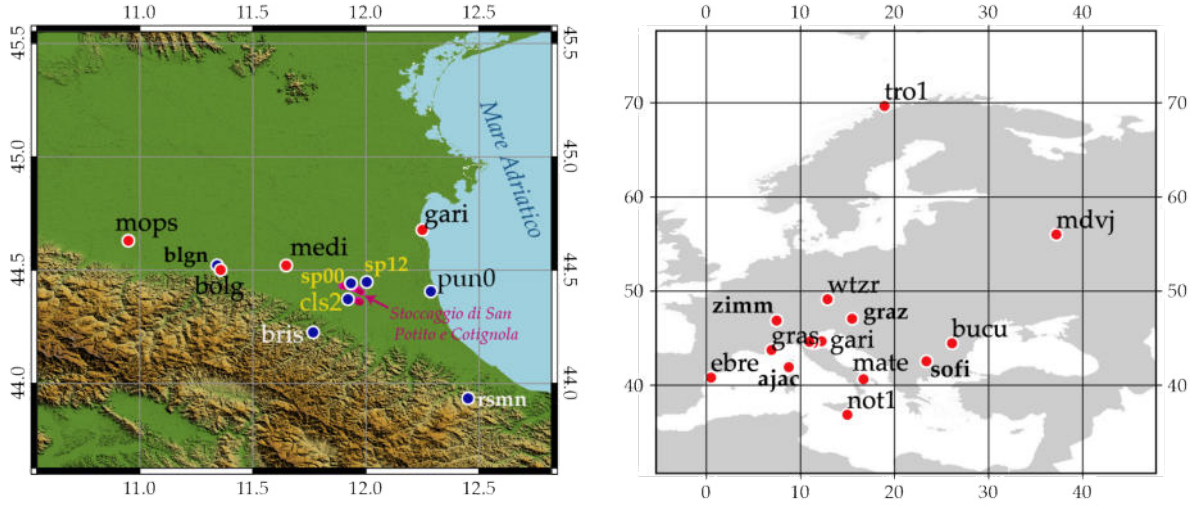


Figura 2.3: Mappa della rete geodetica utilizzata per il processing dei dati e per l'inquadramento nel sistema IGb14 di CLS2 e SP12. Fig. a): rete regionale di stazioni situate attorno al reservoir di San Potito e Cotignola: in rosso le stazioni di riferimento EUREF, in blu le stazioni delle reti RING in Emilia-Romagna. Fig b): stazioni di riferimento europee delle rete EUREF.

- BRIS (Brisighella), BLGN (Bologna) e RSMN (Rep San Marino) della rete RING dell'Istituto Nazionale di Geofisica e Vulcanologia (INGV);
- BOLG (Bologna), GARI (Porto Gabribaldi), MOPS (Modena), MEDI (Medicina) della rete internazionale EUREF (Regional Reference Frame sub-commission for Europe).
- PUN0 (Punta Marina Terme) stazione privata dello stabilimento termale, di cui Geophi analizza i dati per monitoraggio della subsidenza.

Stazioni della rete geodetica internazionale EUREF operative sul territorio italiano ed europeo (Fig 2.3 b)

- MATE (Matera, CS), NOT1 (Noto, CS), AJAC (Ajaccio, Corsica), GRAS (Caussols, Francia), EBRE (Roquetes, Spagna), ZIMM (Zimmerwald, Svizzera), GRAZ (Graz, Austria), WTZR (Baden, Germania), TRO1 (Tromso, Norvegia, CS), MDVJ (Mendeleevo, Russia; CS), BUCU (Bucarest, Romania), SOFI (Sofia, Bulgaria).

La stima delle coordinate della stazione SP12 nel sistema di riferimento IGb14, riportate al 31/12/2025 (decimal year 2025.99726), restituisce:

X: 4461144.50758 (m) Y: 948495.50123 (m) Z: 4443722.06471 (m)

Latitudine: N 44° 26' 49.433497" Longitudine: E 12° 0' 11.057563" Quota: 44.67463 (m) Di seguito sono ripor-

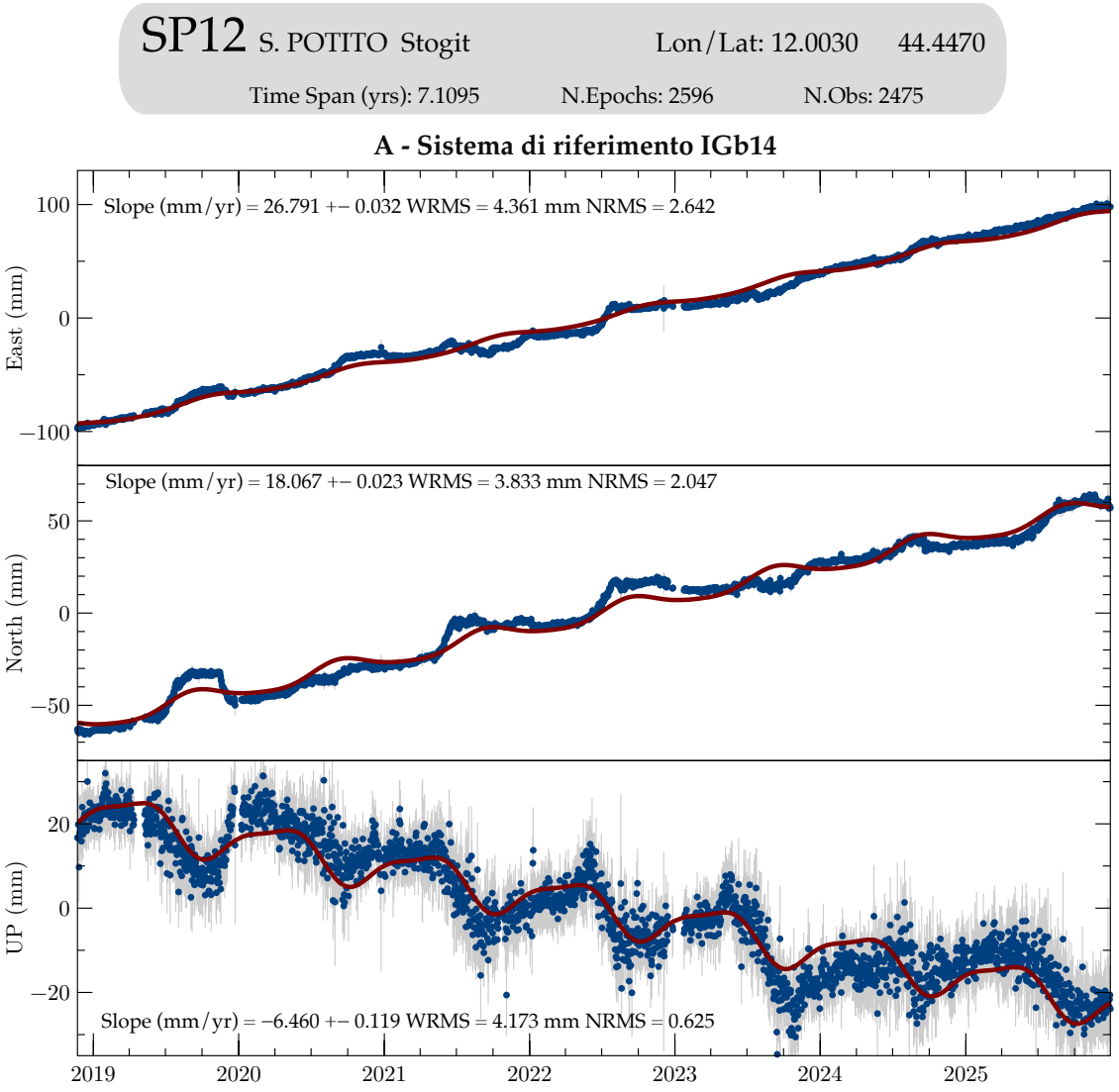


Figura 2.4: Serie temporale delle posizioni della stazione SP12, aggiornata al 31 dicembre 2025, nel sistema di riferimento IGb14. La linea arancio indica il modello ottenuto da una stima dell'andamento lineare e stagionale. Le linee grigie indicano le barre d'errore (2 sigma) delle posizioni giornaliere.

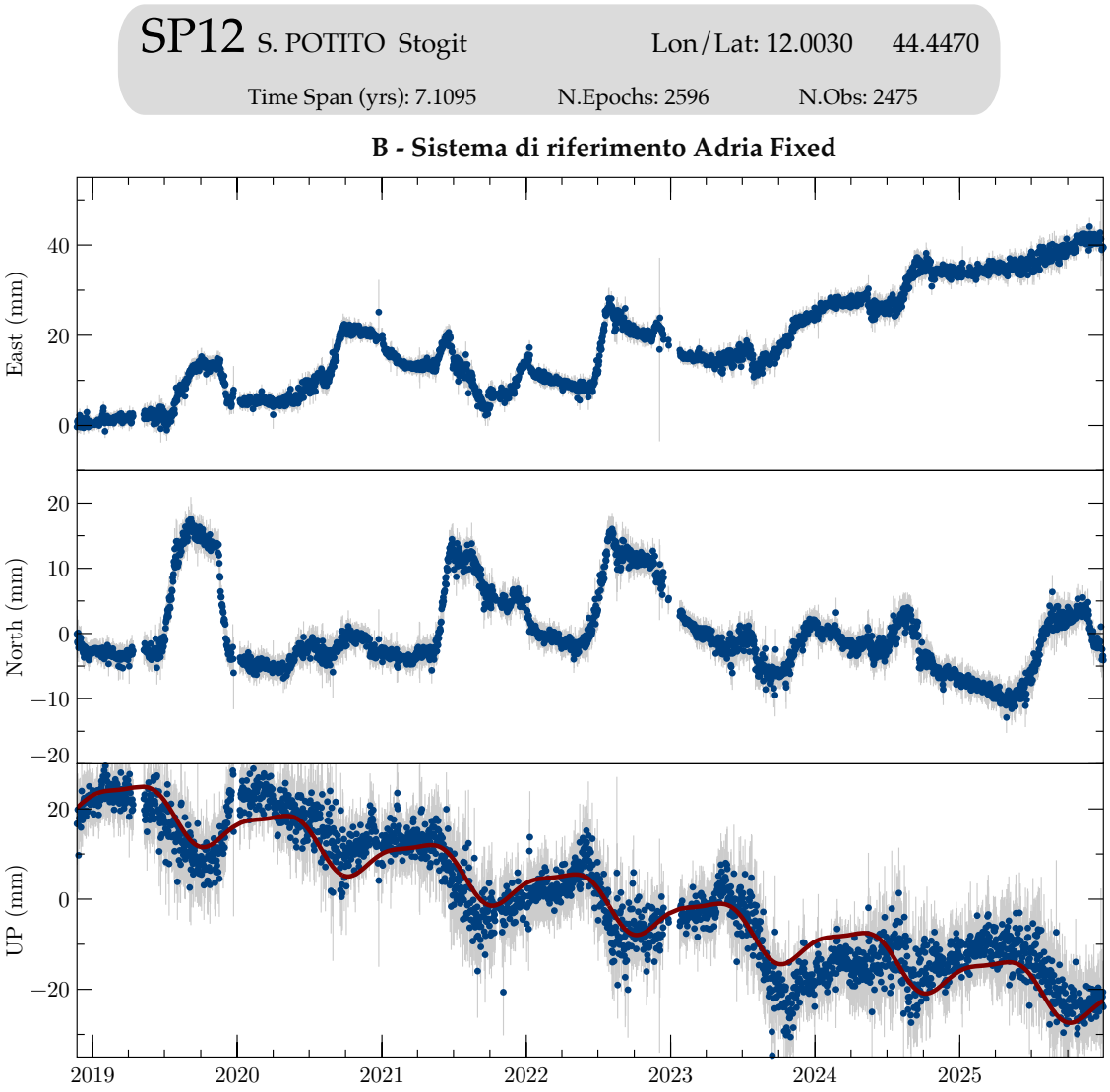


Figura 2.5: Serie temporale delle posizioni della stazione SP12, aggiornata al 31 dicembre 2025, in un sistema di riferimento locale Adria-fixed, ottenuto utilizzando il polo di rotazione della microplacca Adriatica determinato in Serpelloni et al. (2016). Le linee grigie indicano le barre d'errore (2 sigma) delle posizioni giornaliere.

tate le ampiezze (e incertezze associate) delle componenti annuali e semi annuali (in mm) ottenute analizzando la serie temporale di SP12 aggiornata al 31 dicembre 2025:

- Ampiezza Annuale Est: 3.474 ± 0.029 mm; Nord: 6.136 ± 0.026 mm;
- Ampiezza Annuale Up: 5. 241 ± 0.233 mm;
- Ampiezza Semi-Annuale Est: 0.633 ± 0.030 mm; Nord: 1.029 ± 0.042 mm;
- Ampiezza Semi-Annuale Up: 1.333 ± 0.258 mm.

Le velocità stimate per le tre componenti, E, N e Up nel sistema di riferimento IGb14 analizzando la serie temporale aggiornata al 31 dicembre 2025 sono (in mm/anno):

- Velocità Est: 26.791 ± 0.032 (mm/anno);
- Velocità Nord: 18.067 ± 0.023 (mm/anno);
- Velocità Verticale: - 6.460 ± 0.119 (mm/anno).

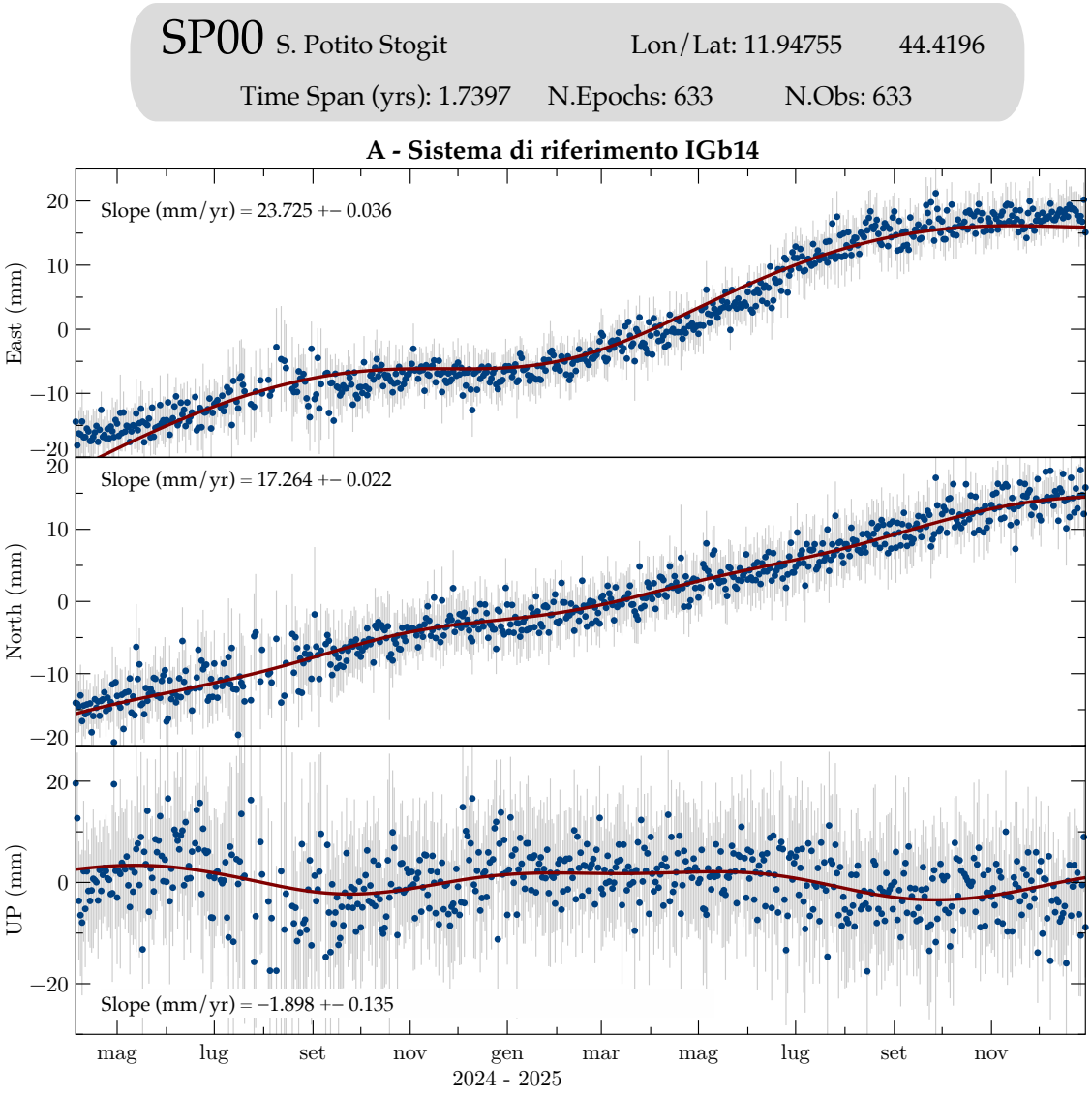
Le incertezze (1 sigma) riportate nelle stime di velocità sono le incertezze formali, ottenute dall'analisi ai minimi quadrati assumendo che il rumore nella serie temporale sia solo di tipo gaussiano.

La stima delle coordinate della stazione SP00 nel sistema di riferimento IGb14, riportate al 31/12/2025 (decimal year 2025.99726), restituisce:

X: 4464161.76683 (m) Y: 944615.87751 (m) Z: 4441552.79094 (m)

Latitudine: N 44° 25' 10.564482" Longitudine: E 11° 56' 51.153999" Quota: 58.83322 (m).

Data che la lunghezza della serie temporale di SP00 (1.7 anni), è ritenuta dalla comunità scientifica non sufficiente per ottenere una stima realistica delle velocità medie di spostamento attese localmente, non vengono qui restituite né le stime delle sue componenti di spostamento, né i valori di velocità.



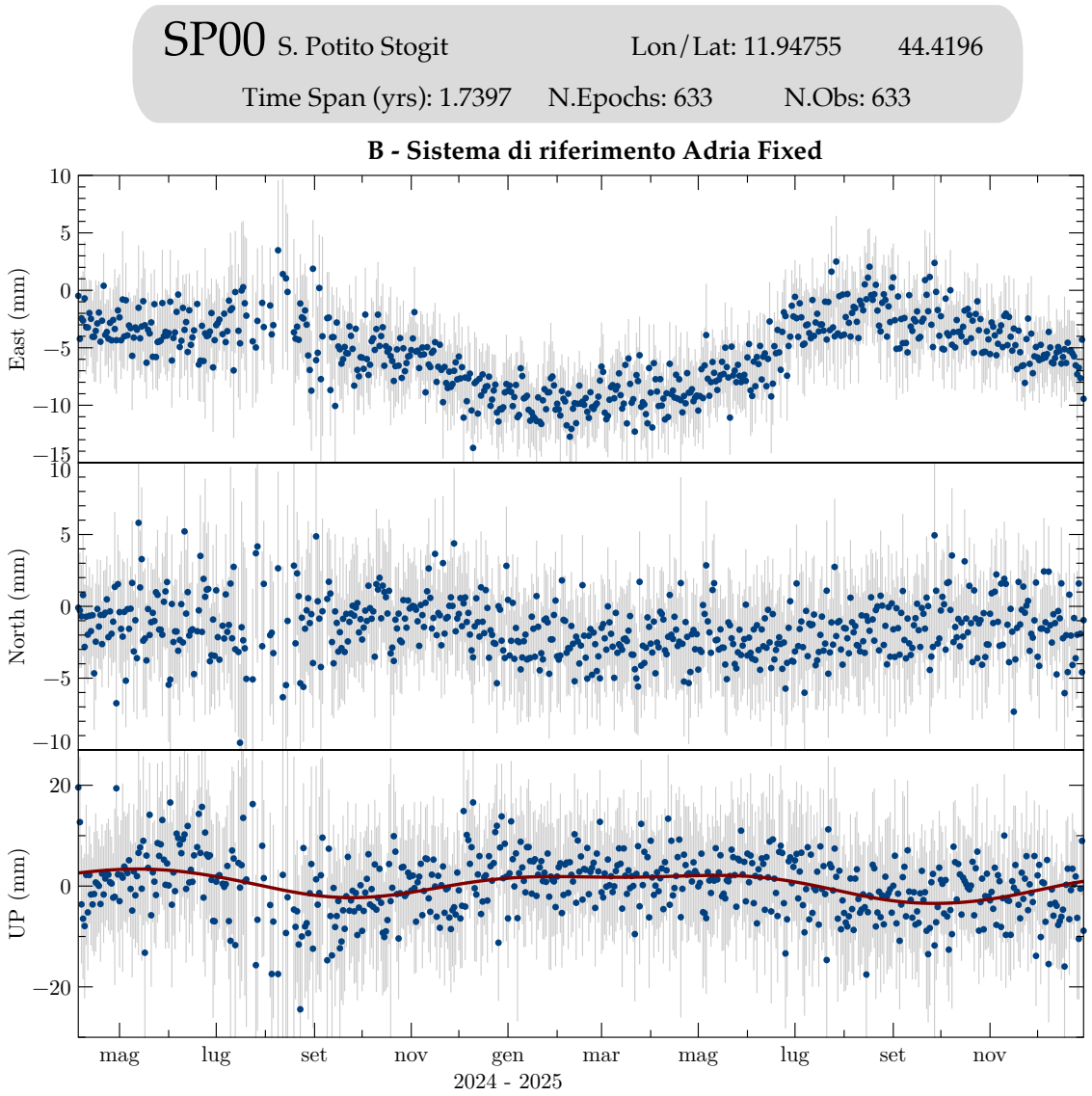


Figura 2.6: Serie temporale delle posizioni della stazione SP00, aggiornata al 31 dicembre 2025, in un sistema di riferimento locale Adria-fixed, ottenuto utilizzando il polo di rotazione della microplacca Adriatica determinato in Serpelloni et al. (2016). Le linee grigie indicano le barre d'errore (2 sigma) delle posizioni giornaliere.

2.2 Rete geodetica a singola frequenza

La rete geodetica locale è costituita da 10 ricevitori GNSS a singola frequenza posizionati nell'intorno dei reservoir di San Potito e Cotignola, e dalle due 2 stazioni GNSS a doppia frequenza SP12 e CLS2, incluse anche nella rete a doppia frequenza descritta al paragrafo 2.1. Come mostrato nella mappa di figura 2.8, le lunghezze delle linee di base tra i ricevitori a singola frequenza e la stazione di riferimento SP12 variano dai 5.5 km di SP02 (la più vicina) ai ≈ 11 km di SP11. I ricevitori GNSS a singola frequenza sono assemblati a partire da schede U-BLOX NEO M8T e collegati ad antenne low cost MOBI GPS L1, per le quali non si effettua una calibrazione assoluta del centro di fase.

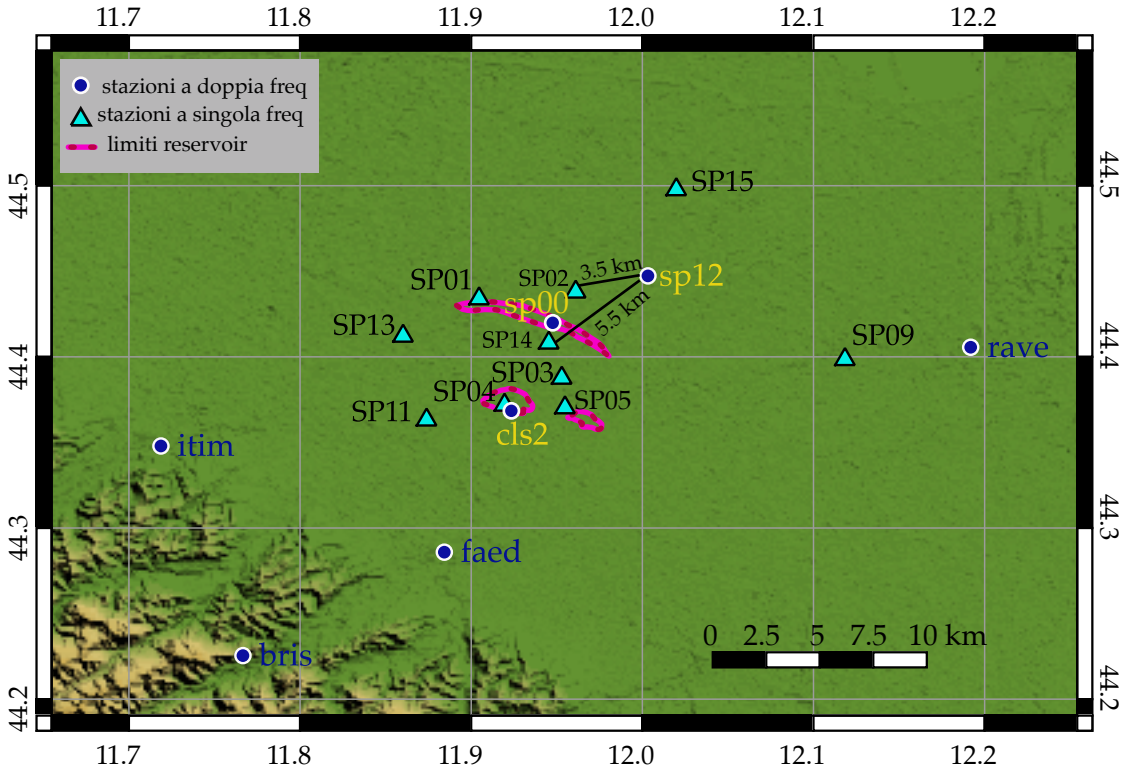


Figura 2.7: Mappa della rete a singola frequenza attorno ai reservoir di San Potito e Cotignola. In azzurro (triangoli) le stazioni Stogit a singola frequenza; in blu le stazioni Stogit a doppia frequenza CLS2, SP00 e SP12 (etichetta gialla) e le stazioni regionali a doppia frequenza più vicine (etichetta blu).

2.2.1 Quality check

I dati RINEX giornalieri di ciascun ricevitore a singola frequenza sono stati analizzati con il software open source G-Nut/Anubis (https://www.pecny.cz/Joomla25/index.php/gnss/sw/anubis) sviluppato presso l'Osservatorio Geodetico Pecny (Dipartimento di Geodesia e Geodinamica del Research Institute of Geodesy, Cartography and Topography), in Repubblica Ceca (Václavovic and Douša, 2016). G-Nut/Anubis è uno strumento da riga di comando in grado di analizzare dati da tutte le costellazioni GNSS disponibili e che forni-

sce un controllo quantitativo e qualitativo completo con il supporto dei messaggi di navigazione GNSS e/o dei prodotti dell'orbita SP3: per il dato RINEX giornaliero il software produce una serie di parametri utili quali indici di qualità (ad es. conteggio delle osservazioni, segnali, banda dei satelliti, salti di clock e cycle-slips, lacune nei dati e piccoli pezzi di dati). L'output di Anubis restituisce una riga di riepilogo generale per tutte le costellazioni osservate e righe di sommario per ciascun tipo di costellazione osservata. In tabella 2.1 viene riportato come esempio l'output relativo al ricevitore SP01 per un giorno di osservazione, con la riga di sommario generale e la riga di riepilogo relativa alla costellazione GPS utilizzata. All'indirizzo (https://www.pecny.cz/Joomla25/index.php/gnss/sw/anubis/anubis-summary) vengono riassunti e spiegati i significati dei parametri contenuti nella tabella. Dai risultati in tabella 2.1 si può comunque evincere come per i dati RINEX a singola frequenza si possano utilizzare come indice di qualità solo le percentuali tra dati attesi ed osservati. In tabella 2.2 vengono invece riassunti, per l'ultimo semestre di monitoraggio (dal 1 aprile

```
# G-Nut/Anubis [2.2.4] compiled: Feb 13 2020 12:11:47 ($Rev: 2554 $)

#====== Summary statistics (v.3)
#TOTSUM First_Epoch_______ Last_Epoch_________ Hours_ Sample MinEle #_Expt #_Have %Ratio o/slps woElev Exp>10 Hav>10 %Rt>10
=TOTSUM 2020-01-04 00:00:00 2020-01-04 23:59:30  23.98  30.00   0.00  30804  28132  91.33  28132    168  24301  24167  99.45

#GNSSUM 2020-01-04 00:00:00 Epoch_Statistics_ Excl_Epochs&Satellites_  CycleSlips/Interruptions_And_Other_Discontinuities Code_Multipath_Me
an_Statistics_Over_All_Signals
#GNSSUM 2020-01-04 00:00:00 ExpEp HavEp UseEp xCoEp xPhEp xCoSv xPhSv  csAll  csEpo  csSat  csSig  nSlp  nJmp  nGap  nPcs   mp1   mp2   mp3
   mpx   mp5   mp6   mp7   mp8
=GPSSUM 2020-01-04 00:00:00  2880  2877     0  2877  2877 28132 28132    169     22    147      0     0     0     0     0     -     -     -
      -     -     -     -     -

#GNSxxx 2020-01-04 00:00:00 nSat ExpObs HavObs %Ratio Exp>10 Hav>10 %Rt>10 wo/Ele  Ele>0  Ele>5 Ele>10 Ele>15 Ele>20 Ele>30 Ele>50 Ele>70
=GPSC1  2020-01-04 00:00:00   30  30804  28132  91.33  24301  24167  99.45    168  27964  26609  24018  21336  18873  14551   7606   2583
=GPSL1  2020-01-04 00:00:00   30  30804  28132  91.33  24301  24167  99.45    168  27964  26609  24018  21336  18873  14551   7606   2583
=GPSD1  2020-01-04 00:00:00   30  30804  28132  91.33  24301  24167  99.45    168  27964  26609  24018  21336  18873  14551   7606   2583
=GPSS1  2020-01-04 00:00:00   30  30804  28132  91.33  24301  24167  99.45    168  27964  26609  24018  21336  18873  14551   7606   2583
```

Tabella 2.1 - Output di esempio di un file di sommario prodotto dal software G.Nut/Anubis relativo ad un RINEX giornaliero della stazione SP01.

al 31 dicembre 2025), il numero di sessioni giornaliere processate per ciascuna stazione, il rapporto tra sessioni processate e attese, il rapporto tra sessioni in cui il software è riuscito a risolvere l'ambiguità, rispetto alle sessioni processate; nell'ultima colonna viene fornito il numero di valori anomali (outliers) che ricadono al di fuori dell'intervallo $\pm\ 3\sigma$ (corrispondenti ad un livello di confidenza del 99%) rispetto alla regressione locale (o regressione mobile) LOESS (*locally estimated scatterplot smoothing*) con finestra di campionamento ad un mese utilizzata per fare il fit delle serie temporali di spostamento.

Stazione	Obs attese	Obs proc	%proc/att	ambfix	%fix/proc	outl rimossi
SP01	92	89	96.74%	89	100.00%	7

Tabella 2.1 - Confronto tra dati attesi e processati e tra dati processati e ad ambiguità risolta per le stazioni della rete a singola frequenza di San Potito e Cotignola nel semestre di monitoraggio aprile - settembre 2025.

2.2.2 Analisi dei dati e stima degli spostamenti

I dati RINEX giornalieri dei ricevitori a singola frequenza e dei 2 ricevitori a doppia frequenza SP12, il ricevitore utilizzato come base "stabile", e SP00 sono stati processati in modalità L1 baseline con il software GAMIT/GLOBK (release 10.71, della precedente 10.70, Herring et al., 2010): le posizioni giornaliere di tutte le stazioni (inclusa SP00) sono state vincolate a 1 cm relativamente alla posizione di SP12, le cui coordinate a-priori, precedentemente stimate attraverso le soluzioni della rete a doppia frequenza inquadrate nel sistema di riferimento IGb14, sono qui state considerate con velocità di spostamento pari a zero. Il moto di SP12, essendo già stato determinato, non è infatti di interesse e può essere assunto pari a zero al fine di non introdurre errori nelle linee di base all'interno della rete locale implementata attorno ai due giacimenti di gas. Inoltre, impostando a zero la velocità per tutte le stazioni nella soluzione, qualsiasi movimento "assoluto" dovuto al moto delle placche diviene comune all'intera rete e non influisce sulla soluzione.

L'operazione sopra descritta consente dunque di:

- operare in un sistema di riferimento locale, senza che gli errori "assoluti" di posizionamento si propaghino significativamente tra le posizioni relative utili per lo studio della rete a singola frequenza;
- inquadrare allo stesso tempo tutta la rete locale nel sistema di riferimento internazionale IGb14, poiché la posizione di SP12, e la sua variazione nel tempo, sono già state determinate in precedenza (analisi e soluzioni della rete a doppia frequenza);
- escludere dalla soluzione di ciascuna stazione la componente di moto assoluto (tettonico).

Le soluzioni giornaliere debolmente vincolate, ottenute con il modulo GAMIT del software, sono state ulteriormente ristrette rispetto alla posizione di SP12 utilizzando il modulo GLOBK del software, vincolando ad 1 mm (rispetto alle proprie coordinate a priori ottenute dalla soluzione a doppia frequenza) la posizione di SP12, rispetto alla quale le posizioni delle altre stazioni sono state calcolate nelle componenti locali Nord, Est e Up, attraverso procedure di sola traslazione in x, y, e z. Le serie temporali così ottenute descrivono dunque lo spostamento nel tempo delle stazioni a singola frequenza lungo le 3 componenti N, E ed UP rispetto a SP12. Gli errori associati alle misure della rete locale hanno valori minimi di $\approx \pm$ 1.5 mm con massimi fino $\pm$ 5.5 mm, che aumentano in maniera proporzionale alla lunghezza della linea di base tra le varie stazioni e SP12.
Dalle serie temporali sono stati rimossi valori anomali (outliers) che ricadono al di fuori dell'intervallo $\pm 3\sigma$ (corrispondenti ad un livello di confidenza del 99%) rispetto alla regressione locale (o regressione mobile) LOESS (*locally estimated scatterplot smoothing*) con finestra di campionamento ad un mese. Tali valori coincidono in prevalenza con giorni in cui i dati delle stazioni risultano essere incompleti.
Il dato che viene presentato nelle figure che seguono corrisponde alle serie temporali delle stazioni a singola frequenza dalle quali sono poi stati rimossi gli spostamenti di SP12 calcolato in un sistema di riferimento Adria

fixed (si veda par. 2.1.2, pp. 17), e dalle quali sono stati anche rimossi gli outliers secondo il criterio appena esposto. La somma degli spostamenti della serie temporale a doppia frequenza di SP12, con gli spostamenti dei rover GNSS a singola frequenza, restituisce gli effettivi spostamenti di ciascun ricevitore, ripuliti dagli spostamenti anomali di SP12; essi risultano più utili per controllare e poi descrivere nel testo il moto effettivo delle stazioni a singola frequenza, ubicate in zone ritenute suscettibili di possibili effetti indotti dalla movimentazione di gas (solo SP01 nel presente report, figs 2.8 e 2.9).

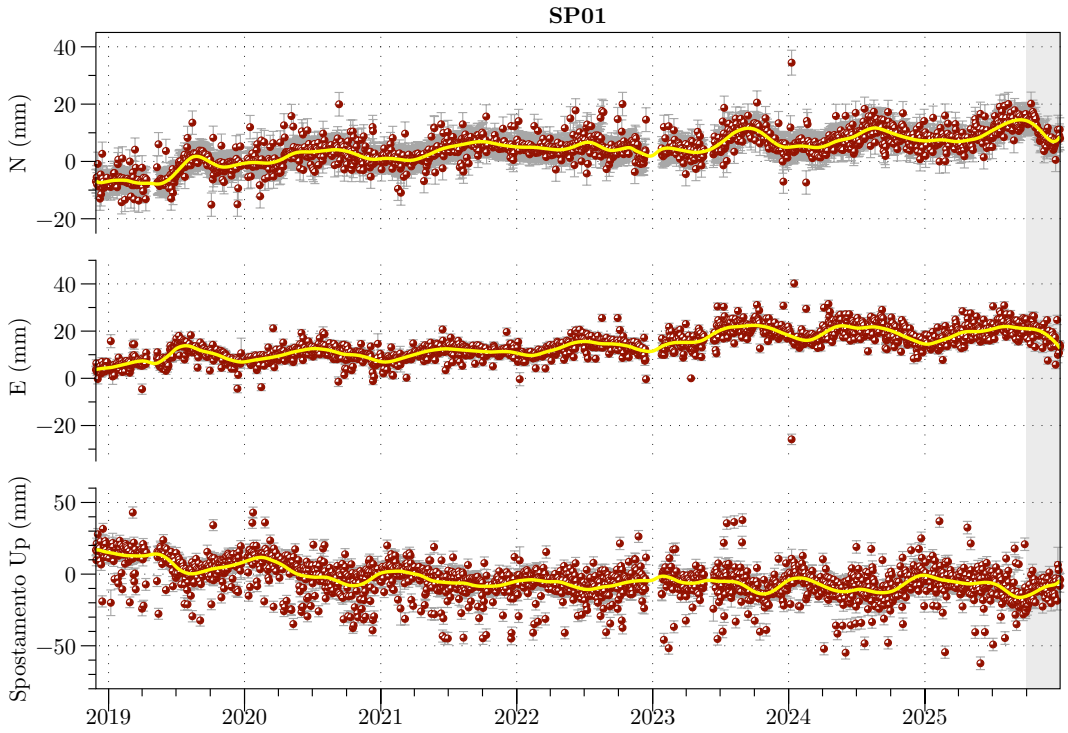


Figura 2.8: Spostamento relativo del ricevitore GNSS SP01 calcolato rispetto a SP12 e successivamente rimosso del moto di quest'ultimo, nelle componenti N, E e UP, aggiornato al 31 dicembre 2025. In giallo la curva di regressione locale LOESS, scelta per fittare la distribuzione degli spostamenti ed usata per eliminare i valori anomali che ricadono fuori dai 3σ.

La stazione SP01 è installata immediatamente all'esterno dell'area di proiezione in superficie del giacimento di San Potito, nella parte nord-occidentale, un'area che dagli studi dei report precedenti (deformazioni analizzate tramite interferometria) non risulta influenzata dallo stoccaggio, ma dalle naturali dilatazioni e compattazioni stagionali del terreno. Nel trimestre in esame (1 ottobre - 31 dicembre 2025), come si vede bene dalle figure 2.8 e 2.9, SP01 si solleva nella componente Up di $\approx +6$ mm.

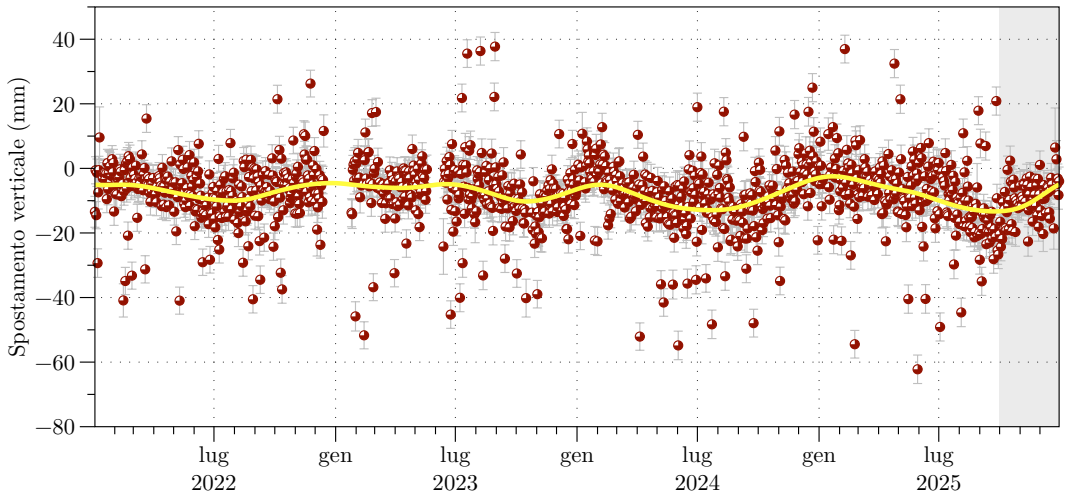


Figura 2.9: Serie temporale dello spostamento del ricevitore GNSS SP01 corretto dal moto di SP12, nelle componente UP, aggiornata al 31 dicembre 2025. In giallo la curva di regressione locale LOESS, scelta per fittare la distribuzione degli spostamenti ed usata per eliminare i valori anomali che ricadono fuori dai 3σ.

3 Analisi delle serie interferometriche sul Cluster-A, in relazione alla movimentazione di gas in esercizio della sovrappressione

Le serie temporali analizzate da TRE ALTAMIRA ed aggiornate al 25/12/25 evidenziano nell'area del giacimento di San Potito la presenza di movimenti differenziali di entità molto limitata, con velocità medie contenute entro pochi mm/anno. Esse sono state ulteriormente elaborate per meglio definire e visualizzare i trend di deformazione nell'intorno dell'impianto di stoccaggio di San Potito, Cluster-A.

La superficie che interpola gli spostamenti verticali subiti dai bersagli radar, durante i 3 mesi della fase di erogazione ottobre - dicembre 2025 nel Cluster-A (≈ 25.45 MSmc, Fig. 3.1), mostra le deformazioni del terreno nell'area del reservoir. La stima della variabile Z (spostamento verticale nel trimestre di erogazione) è stata effettuata in corrispondenza dei nodi di una griglia rettangolare di dimensioni pari a 50 righe x 107 colonne, con nodi distanti 100 m. Dal momento che la variabile non presenta trend, tale stima è stata effettuata ricorrendo alla tecnica del Kriging stazionario, ed utilizzando un modello di semivariogramma gaussiano. Il risultato dell'interpolazione elimina i massimi di deformazione raggiunti dai singoli PS (si vedano figs 3.3 - 3.4), descrivendo una deformazione mediata del terreno, ma sicuramente più omogenea e realistica.

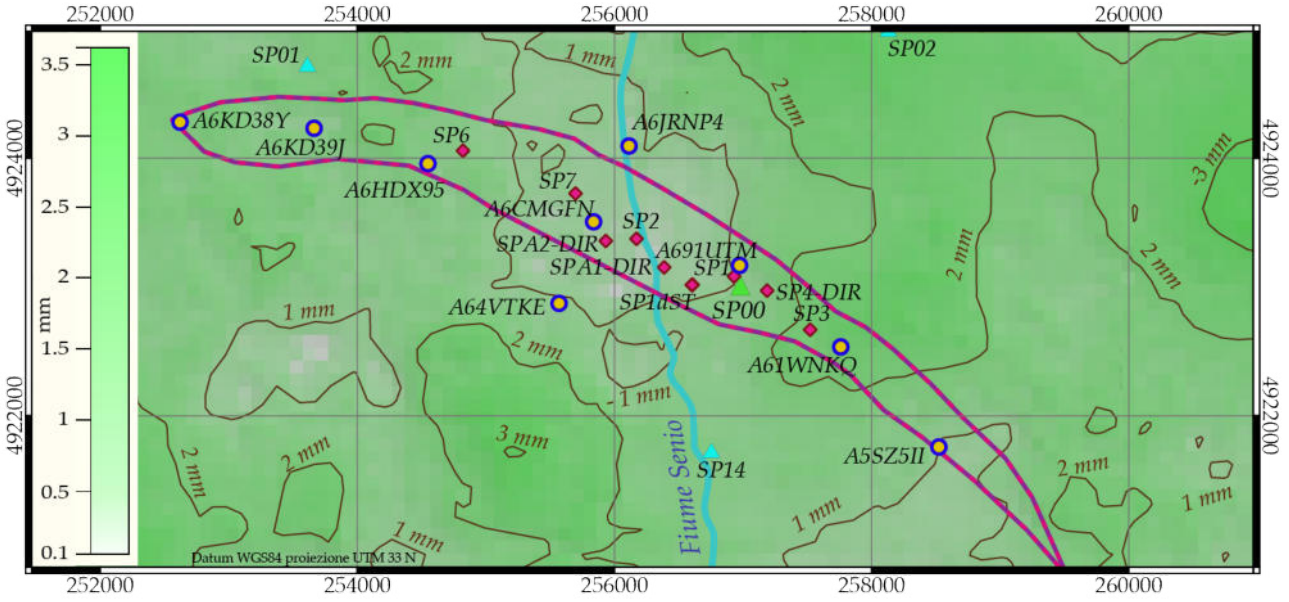


Figura 3.1: Superficie di spostamento verticale ottenuta tramite la serie temporale Sentinel-1: l'interpolazione utilizza lo spostamento cumulato da ogni bersaglio radar durante l'ultima fase di erogazione tra ottobre e dicembre 2025.

Vengono qui di seguito proposte tre tipologie di analisi del dato interferometrico:

1) la proiezione dei valori di spostamento (avvenuti tra l'inizio e la fine di ciascuna delle fasi di iniezione ed erogazione dello stoccaggio) dei 9 bersagli radar scelti come punti di controllo per la modellazione

geomeccanica, proiettati lungo 2 sezioni (CC' e DD' in figura 3.2), che permettono di visualizzare e controllare l'entità delle deformazioni in tutte le aree del reservoir.

2) l'analisi della serie temporali dei PS A6D7W1C, A67UZLD, A6CMGFN, A6DTBN9, A67UZLK, A6CMGFY distribuiti nell'intorno del pozzo direzionato San Potito A2-DIR (cerchio arancio nella mappa di Fig. 3.2 e Fig. 3.5), perforato sulla culminazione strutturale del reservoir di San Potito.

3) la proiezione dei valori di spostamento (avvenuti tra l'inizio e la fine di ciascuna delle fasi di iniezione ed erogazione dello stoccaggio) lungo il profilo CC' di tutti i bersagli radar che, all'interno dell'area di reservoir, sono limitrofi alla traccia del profilo stesso (fig. 3.6).

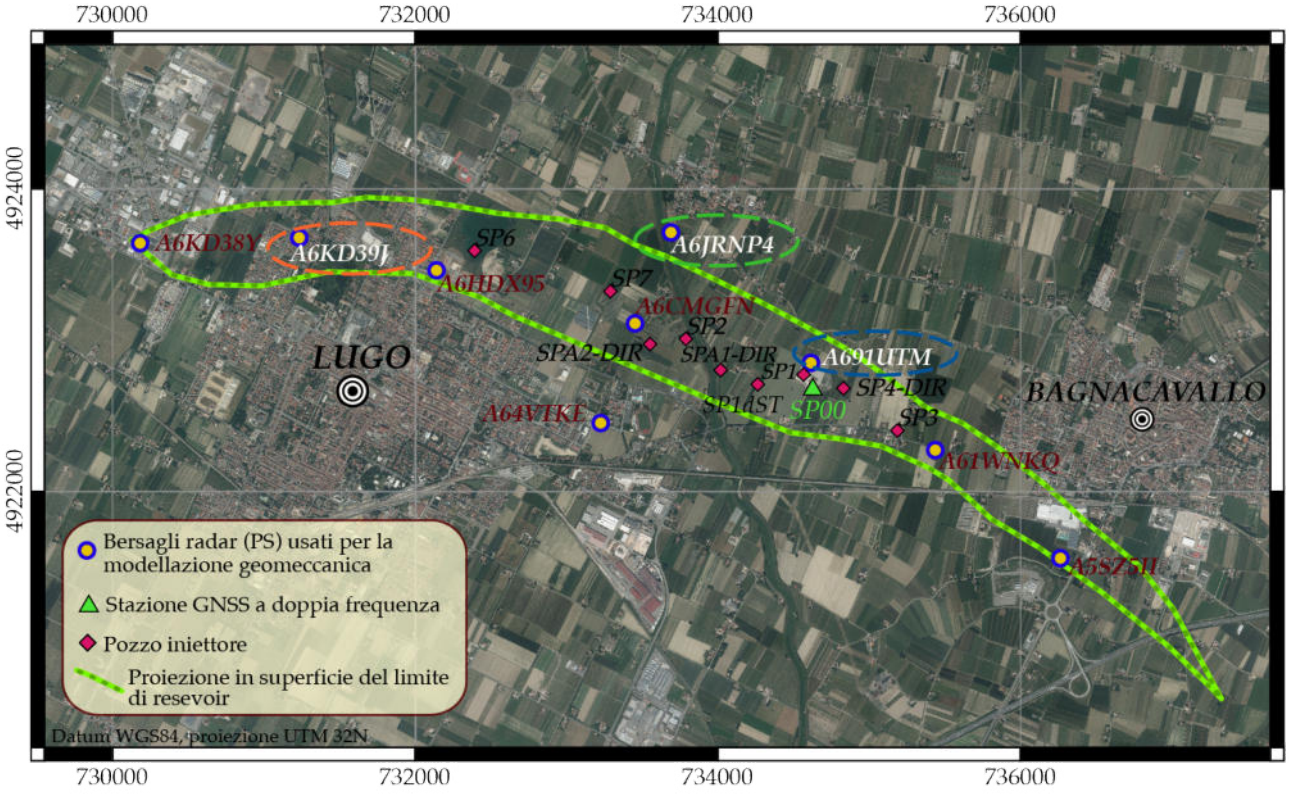


Figura 3.2: Mappa della proiezione in superficie del top del giacimento di San Potito, con la posizione dei fondo pozzo in fucsia; in giallo i bersagli radar della serie Sentinel-1 aggiornata al 25/12/25, i cui spostamenti sono stati proiettati lungo i profili CC' e DD' per creare le figure 3.3 e 3.4: essi sono 9 dei 12 bersagli utilizzati come punti di controllo nella modellizzazione geomeccanica dell'area di San Potito; il cerchio arancio delimita l'area in cui ricadono i bersagli radar analizzati in figura 3.5.

Le figure 3.3 e 3.4 analizzano il comportamento dei 9 bersagli radar scelti come riferimento per la modellazione geomeccanica. Da queste figure si può osservare come, durante le fasi di iniezione ed erogazione analizzate, gli spostamenti dei 9 bersagli radar della serie Sentinel-1 proiettati lungo i profili CC' e DD', abbiano mediamente valori contenuti entro ± 4 mm tra una fase e l'altra, con massimi fino a + 8.7 e - 8.6 mm. In questo trimestre di erogazione si evidenziano il massimo storico individuale di sollevamento (7.1 mm) registrato dal PS A6CMGFN, ed i minimo storico di abbassamento individuale per il PS A61WNKQ (- 3.6 mm). Il PS A6HDX95, posizionato

a ≈ 2070 m lungo il profilo CC', continua comunque ad essere (vedi precedente documento Report-24063MINSP-GEOPH-STOAD-DV01-REV00") quello più stabile, con variazioni di quota topografica contenute tra + 2.6 e - 3 mm avvenute durante ciascuna fase di stoccaggio (+ 0.5 mm in questa fase di erogazione, Fig. 3.3).

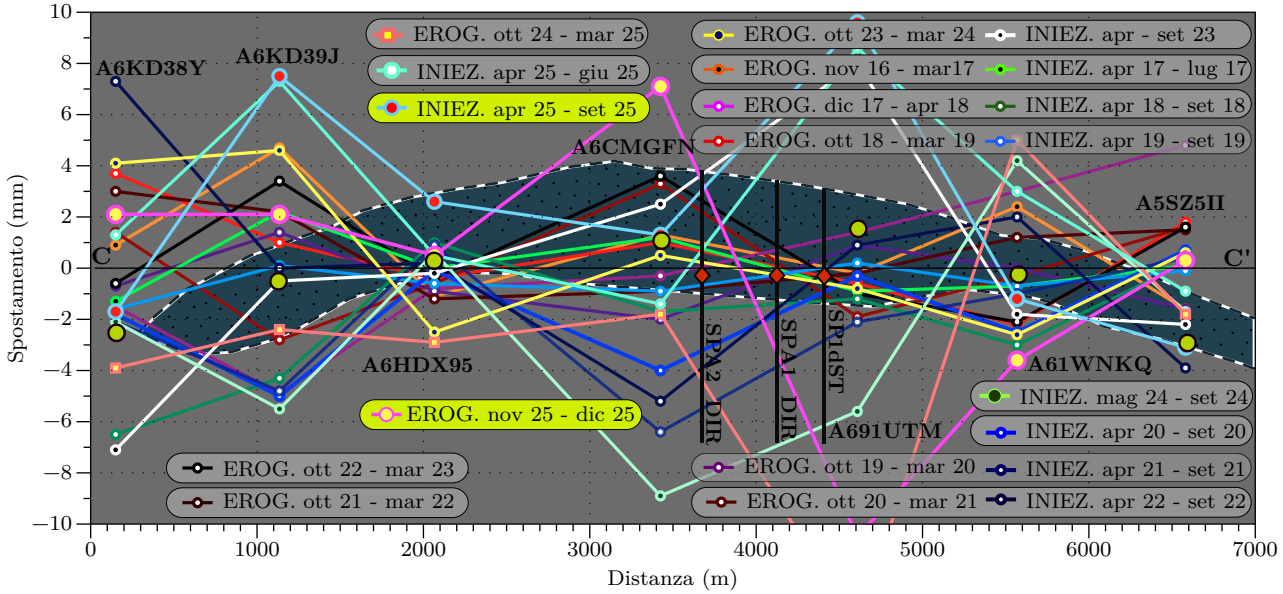


Figura 3.3: Spostamenti di 7 dei 9 bersagli radar di controllo per la modellazione geomeccanica, proiettati lungo la sezione CC' (mappa di Fig. 3.2); in azzurro verde e blu gli spostamenti avvenuti avvenuti durante le fasi di iniezione; in giallo - bordeaux quelli durante le fasi di erogazione: le serie sono riportate a zero all'inizio di ogni fase. Le linee nere localizzano i pozzi San Potito SPA1-DIR e SPA2-DIR e SP1dST. In color ottanio l'area del reservoir messa in pianta per visualizzare la posizione dei 9 bersagli rispetto ad essa: la mappa e la posizione dei bersagli di riferimento (punti giallo/bordeaux) sono ruotate di pochi gradi verso NW per sovrapporre la sezione CC' all'asse delle ascisse della figura.

Il PS A6CMGFN, posto nella porzione più centrale del campo (Figs. 3.3 e 3.4), mostra spostamenti contenuti tra + 7.1 e - 4 mm durante le fasi di iniezione e di erogazione (con il massimo storico di 7.1 mm raggiunto in questa fase di erogazione tra ottobre e dicembre 2025). Tali spostamenti non appaiono però influenzati dall'attività di stoccaggio in maniera univoca, non coincidendo sempre la risposta attesa rispetto al tipo di fase di movimentazione di gas: per esempio durante questo trimestre di monitoraggio, A6CMGFN va in sollevamento di 7.1 mm, in disaccordo con la fase di erogazione. In altri semestri precedenti: aprile - settembre 2021 si era abbassato di - 5 mm in fase di iniezione; semestre ottobre 2022 - marzo 2023 e ottobre 2021 - marzo 2022, si era invece sollevato di + 3.8 e + 3.6 mm, in fase di erogazione).

Anche tutti gli altri PS non mostrano una evidente corrispondenza tra la tipologia di fase di stoccaggio ed il tipo di spostamento avvenuto, con sollevamento e subsidenza che avvengono entrambi sia durante l'erogazione che durante l'iniezione, con entità mediamente comprese tra ± 9 mm.

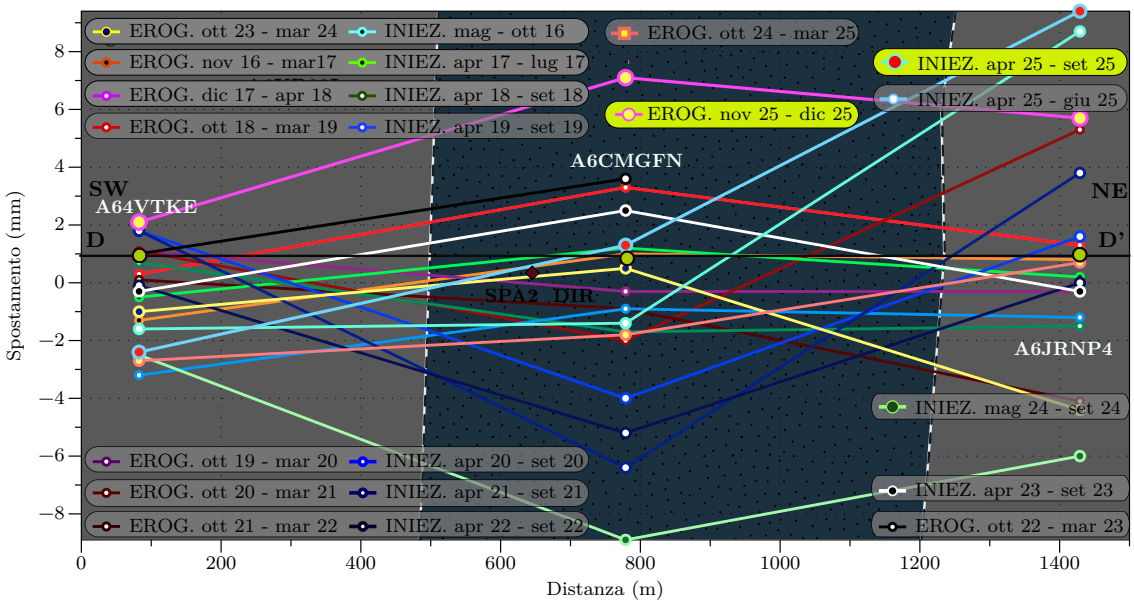


Figura 3.4: Spostamenti di 3 dei 9 bersagli radar di controllo per la modellazione geomeccanica, proiettati lungo la sezione DD' (mappa di Fig. 4.9); in azzurro, verde e blu gli spostamenti avvenuti avvenuti durante le fasi di iniezione; in giallo - bordeaux quelli durante le fasi di erogazione: le serie sono riportate a zero all'inizio di ogni fase. In color ottanio l'area del reservoir messa in pianta per visualizzare la posizione dei 9 bersagli rispetto ad essa: la mappa e la posizione dei bersagli di riferimento (in giallo/bordeaux) sono ruotate di ≈ 70 gradi verso E, per sovrapporre la sezione DD' all'asse delle ascisse della figura.

Osservando l'andamento della serie temporale media dei bersagli radar A6D7W1C, A67UZLD, A6CMGFN, A6DTBN9, A67UZLK, A6CMGFY, i sei PS più adiacenti al pozzo San Potito A2 DIR sulla culminazione strutturale del Cluster-A (Fig. 3.5), si nota un comportamento degli spostamenti per la prima volta quasi in fase con l'iniezione e successiva erogazione di gas nel Cluster-A, tra ottobre e dicembre 2025: essi registrano infatti un sollevamento di 2.5 fino a fine ottobre (termine dell'iniezione) e l'inizio dell'abbassamento a metà novembre, in corrispondenza dell'inizio dell'erogazione di ≈ - 1 mm a fine dicembre.

Osservando nel complesso l'andamento della serie verticale (curva blu di fit in fig. 3.5) si nota una ciclicità abbastanza regolare, più netta fino al 2022, che sembra meglio correlarsi con le variazioni meteo-climatiche stagionali che con i cicli dello stoccaggio. Per provare ad osservare in modo continuo le deformazioni effettive dei PS nell'area del reservoir, si è provato a proiettare lungo il profilo longitudinale CC' gli spostamenti di tutti i PS limitrofi ad esso (fig. 3.6). Come si può notare, in figura vengono mostrate le deformazioni del terreno negli ultimi 2 cicli di erogazione ed iniezione. Lungo l'asse della distanza, tra 3000 e 5000 metri (culminazione strutturale del reservoir), non si notano spostamenti che descrivano una correlazione tra tipologia di ciclo e verso della deformazione: ovvero non si osservano bolle di subsidenza o sollevamento conseguenti rispettivamente alla compattazione durante l'erogazione e alla dilatazione durante l'iniezione.

Nel trimestre in esame, gli spostamenti verticali registrati nell'area di San Potito risultano in generale non correlabili con la movimentazione di gas operata nel giacimento, né in termini spaziali, né temporali. Solo la media degli spostamenti dei PS al centro del giacimento mostra per la prima volta una correlazione tra

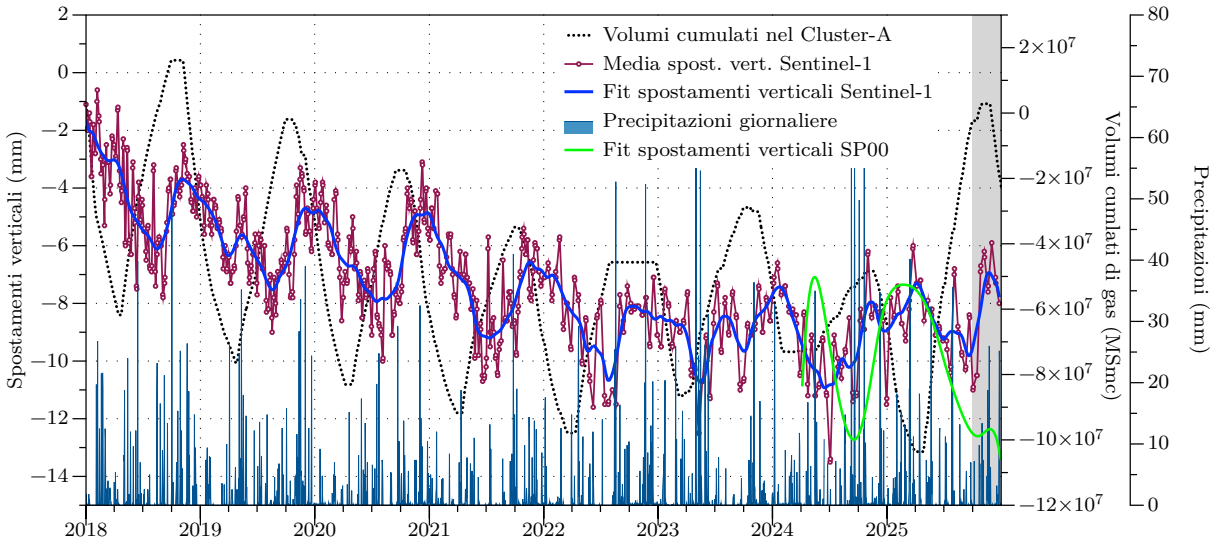


Figura 3.5: Serie temporale di spostamento medio dei sei bersagli radar A6D7W1C, A67UZLD, A6CMGFN, A6DTBN9, A67UZLK, A6CMGFY che circondano il pozzo San Potito A2 DIR (cerchio arancio in figura 3.2), al di sopra della culminazione strutturale del giacimento, in relazione alla movimentazione di gas ed alle precipitazioni; confronto con la stazione GNSS SP00.

spostamenti e fasi dello stoccaggio: tale correlazione risulta però ancora debole sia per l'entità minima degli spostamenti, sia per essere la prima manifestazione, che potrebbe anche essere semplicemente una casualità.

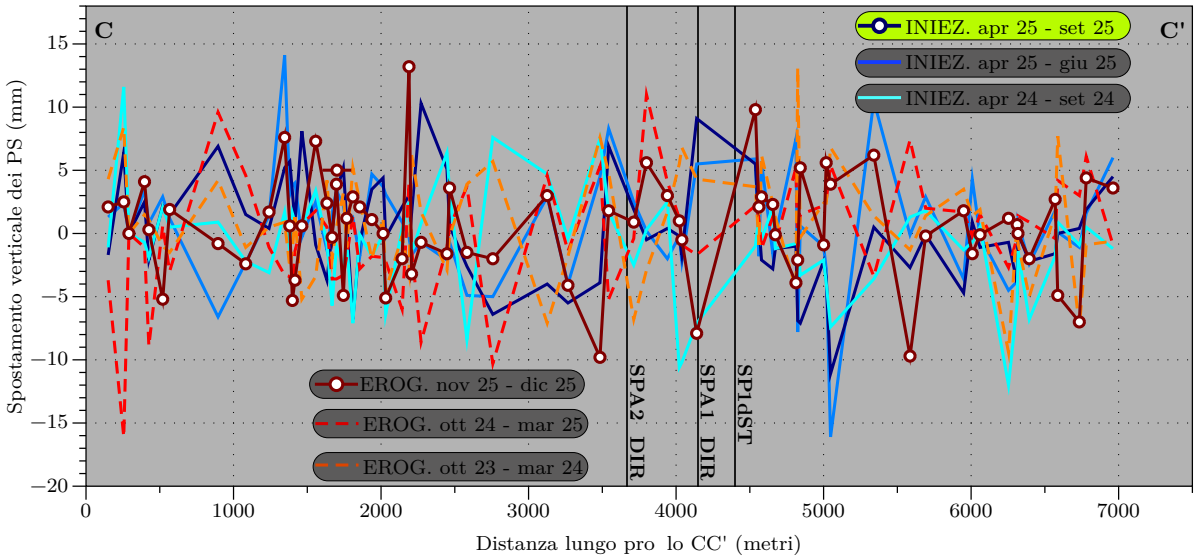


Figura 3.6: Spostamenti di 70 bersagli radar distribuiti nell'area del reservoir, lungo la sezione CC', proiettati lungo di essa (mappa di Fig. 3.2); in ciano e blu gli spostamenti avvenuti avvenuti durante le ultime 2 fasi di iniezione; in arancio e rosso quelli durante le ultime 2 fasi di erogazione: le serie sono riportate a zero all'inizio di ogni fase. Le linee nere localizzano i pozzi San Potito SPA1-DIR, SPA2-DIR e SP1dST.

La componente orizzontale delle serie Sentinel-1 è analizzata nella figura 3.7, nella quale vengono mostrati gli spostamenti medi dei bersagli radar localizzati immediatamente ad ovest ed immediatamente ad est dei tre pozzi di iniezione attivi. Come si può notare, entrambe le medie di spostamento descrivono un movimento

verso ovest, e dunque in fase con la erogazione di gas solo per i punti ad est del centro del giacimento (≈ 3.8 mm verso ovest i PS ad ovest e ≈ 2.7 mm verso ovest i PS ad est). In generale, non si osserva tuttavia una chiara e regolare ciclicità nell'entità e nel verso degli spostamenti delle serie orizzontali, tale da ipotizzare una correlazione con le fasi della movimentazione di gas.

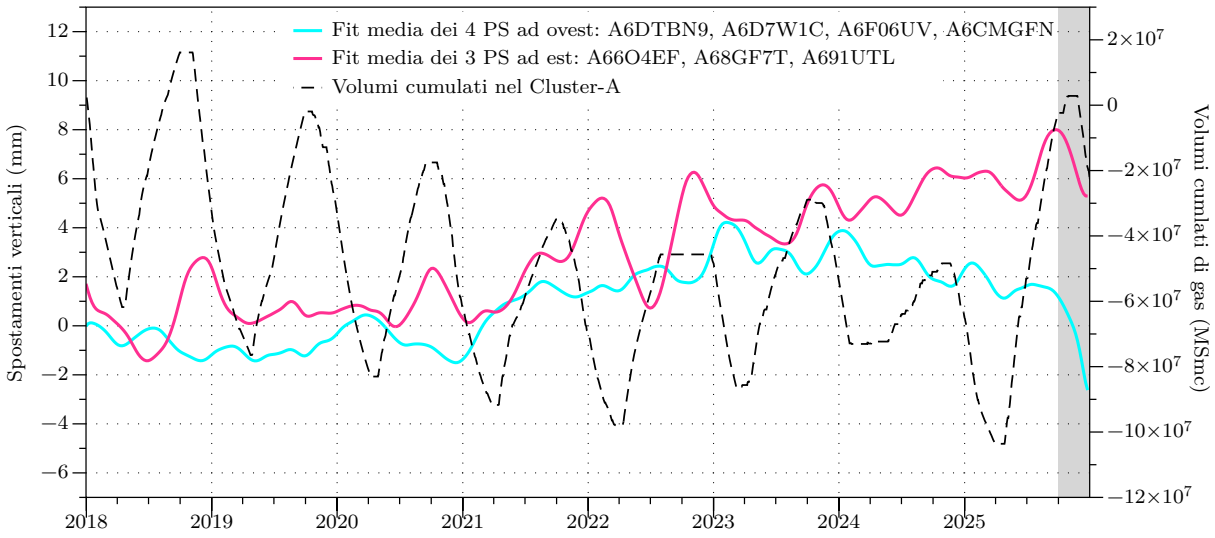


Figura 3.7: Spostamenti orizzontali dei bersagli radar distribuiti immediatamente ad ovest (linea ciano) ed immediatamente ad est (linea fucsia) della culminazione strutturale del reservoir e dei pozzi di iniezione attivi SPA1-DIR, SPA2-DIR e SP1dST, durante l'ultima fase di erogazione ottobre - dicembre 2025.

4 Relazione di GPS e InSAR con la movimentazione di gas

Nel semestre in esame, come già accennato, gli andamenti verticali delle serie GPS della stazione SP00 e la media degli spostamenti verticali dei bersagli radar InSAR individuati sulla culminazione strutturale del reservoir (linee verde e blu in figura 4.1) sembrano per la prima volta spostarsi quasi in fase rispetto ai cambi e al verso delle deformazioni attesi dalle 2 ultime fasi di stoccaggio (iniezione fino a fine ottobre/erogazione del 13 novembre). Le due tecniche di misura continuano ad essere confrontabili per entità delle deformazioni. SP01, che si trova ai margini orientali del campo (linea gialla in figure 4.2) non registra invece questa possibile correlazione e mostra soltanto un sollevamento di *approx* + 6 mm nell'ultimo trimestre.

Nel periodo che va da inizio ottobre al 31 dicembre 2025, la stazione permanente SP00 si abbassa complessivamente di ≈ - 1.4 mm a fine dicembre, ma oscilla salendo di ≈ 0.6 mm fino a fine ottobre (iniezione di ≈ 5.3 Msmc) e scendendo di ≈ - 2 mm, a fronte dell'erogazione di ≈ 25.45 Msmc dal Cluster-A. La media degli spostamenti verticali dei bersagli radar InSAR, localizzati sulla culminazione strutturale del reservoir, descrive nel trimestre una oscillazione che accumula una deformazione di ≈ + 1.7 mm, in fase sia con l'iniezione di gas fino a fine ottobre (+ 2.7 mm), che con l'erogazione da metà novembre (- 1 mm), e in accordo con la serie GPS di SP00 in termini di cambio di fase (fig. 4.1). Il PS A679K0B, situato a ≈ 40 metri da SP00, registra soltanto un sollevamento di ≈ + 2.3 mm.

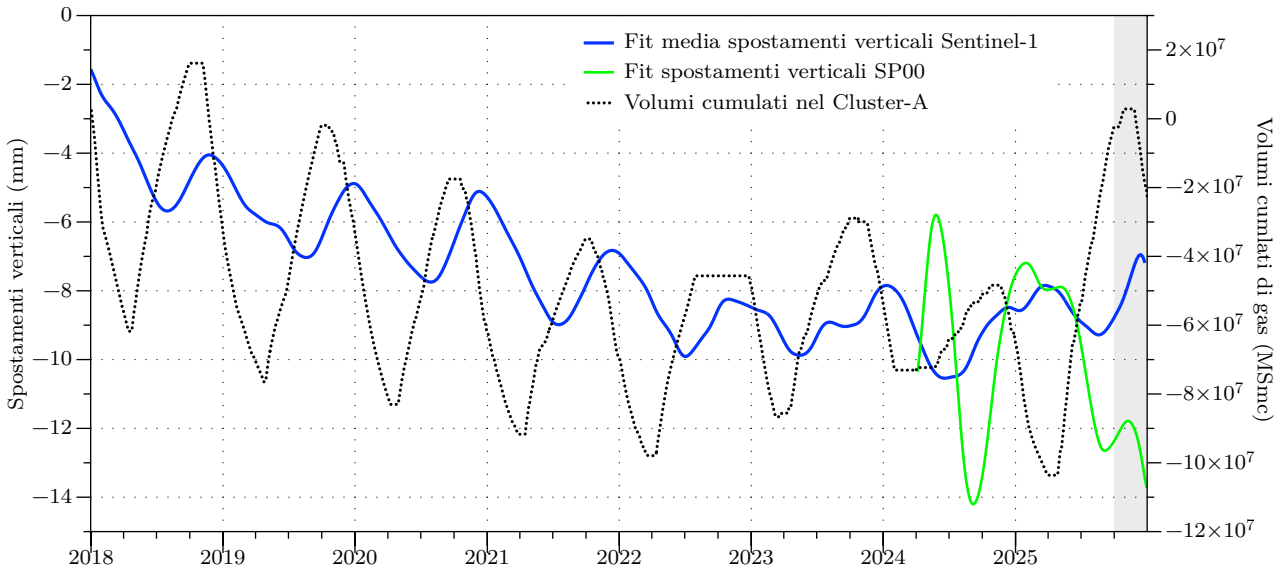


Figura 4.1: Confronto tra la serie temporale degli spostamenti verticali della stazione GPS SP00 e la media degli spostamenti verticali Sentinel-1 dei PS che si trovano sulla culminazione strutturale del reservoir, con la movimentazione di gas nel Cluster-A, al 31 dicembre 2025.

La serie temporale verticale della stazione a singola frequenza SP01, che si trova nell'area nord-occidentale (appena esterna al campo), registra invece un sollevametno medio pari a ≈ + 6 mm nel trimestre di erogazione in esame (Fig. 4.2). Essa mostra da una parte disaccordo con la fase di erogazione di gas nello stoccaggio,

dall'altra accordo sia con le deformazioni registrate dal PS B7EUW5G (posizionato ≈ 49 metri a nord di essa), che dal PS A6QBFBE (posizionato ≈ 220 metri ad est di essa): infatti, B7EUW5G si solleva di ≈ + 16 mm, mentre A6QBFBE di ≈ + 2 mm.

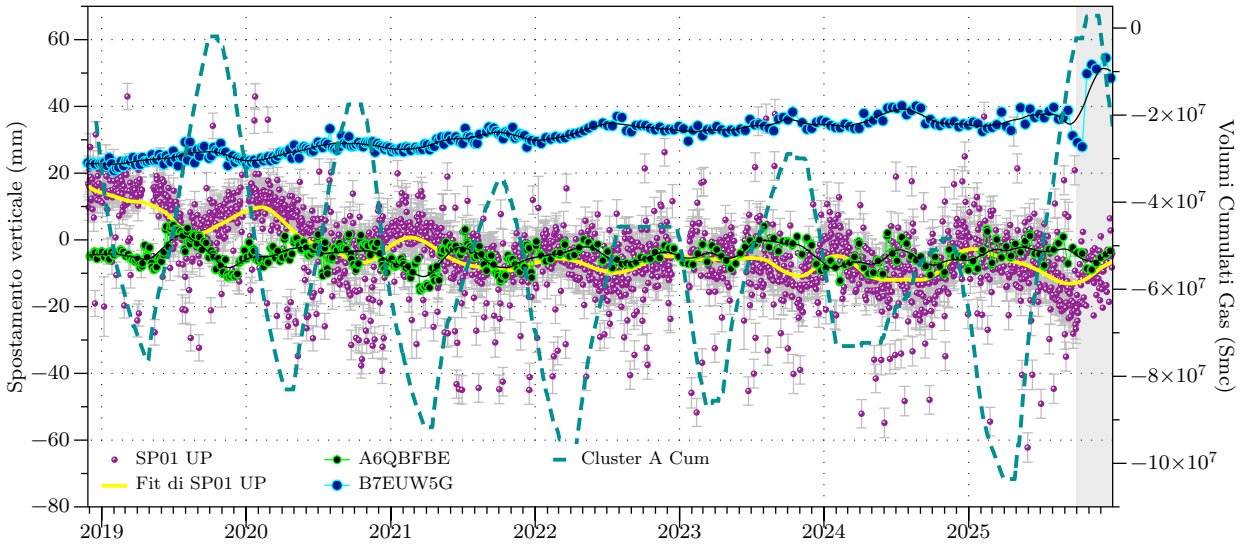


Figura 4.2: Confronto tra la serie temporale delle posizioni della stazione GNSS SP01 (componente verticale, corretta rispetto agli spostamenti di SP12) con la movimentazione di gas nel Cluster-A, con le serie Sentinel-1 ascendente (PS B7EUW5G posizionato a ≈ 49 m da SP01) e verticale (PS A6QBFBE posizionato a ≈ 220 m E di SP01), al 31 dicembre 2025.

Le serie temporali orizzontali di SP00 registrano una deformazione di ≈ 1.1 mm verso sud ed uno spostamento di 3.5 mm verso ovest, non in fase con l'erogazione (curva verde in fig. 4.3). La media degli spostamenti lungo la componente est-ovest dei PS situati nell'area di SP00 (media tra i bersagli radar A66O4EF, A691UTL, A68GF7T, individuati ad est della culminazione strutturale del reservoir) descrive deformazioni di entità confrontabile con il medesimo verso (≈ 2.7 mm verso ovest, linea fucsia in figs. 3.7 e 4.3). Anche la serie temporale orizzontale del PS A679K0B (curva blu in fig. 4.3) descrive nel trimestre uno spostamento verso ovest di ≈ 3.8 mm.

Riassumendo, le serie temporali GPS e InSAR descrivono deformazioni confrontabili tra loro e di entità contenuta entro ± 4 mm, che non risultano ancora correlabili con le fasi della movimentazione di gas nel reservoir; la variabilità nel verso degli spostamenti anche tra PS limitrofi o molto vicini, sembra essere dovuta a fenomeni locali.

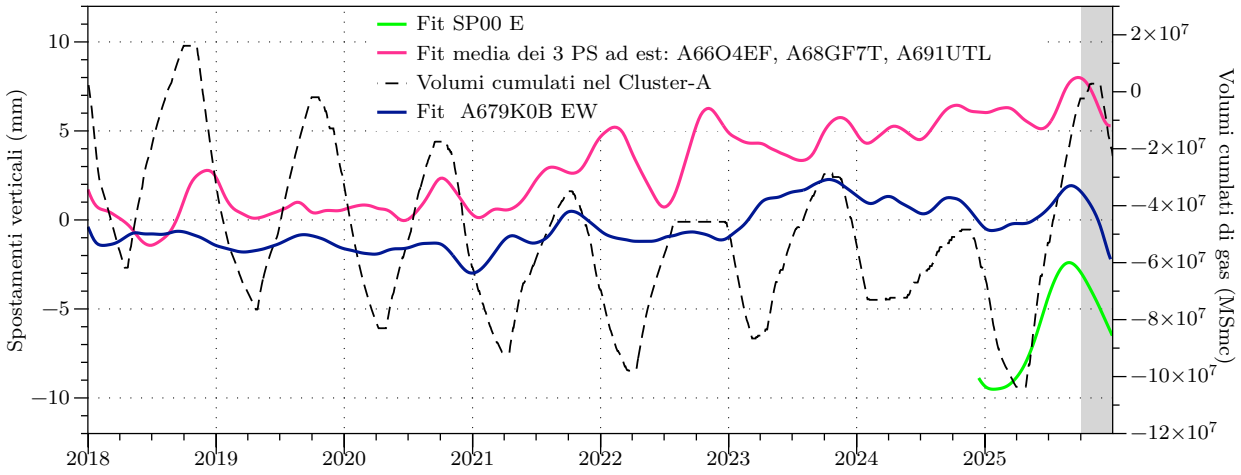


Figura 4.3: Confronto tra la serie temporale GPS degli spostamenti verso est della stazione SP00 e la media degli spostamenti orizzontali Sentinel-1 dei PS che si trovano vicino ad SP00, ad est della culminazione strutturale del reservoir, con la movimentazione di gas nel Cluster-A, al 31 dicembre 2025.

5 Monitoraggio delle pressioni di poro dal 1 ottobre al 31 Dicembre 2025

Cluster-A

Il monitoraggio delle pressioni statiche nel livello di stoccaggio viene eseguito attraverso i pozzi spia “SP 6dir” e “SP 3dir”, al fine di verificare il non superamento dei limiti, fissati al 107% della pressione statica originaria.

Nel corso della campagna di manutenzione 2025 si è constatato il malfunzionamento del sensore dedicato alla lettura della pressione del livello del BB1lower.

Gli interventi in campo hanno confermato che il sensore di fondo del pozzo SP6 (BB1lower) non risulta al momento utilizzabile ai fini del monitoraggio delle pressioni di fondo.

Il sensore permanente è stato rimpiazzato con un memory gauge, per il quale è stato definito un programma temporale di recupero e scarico dei dati (come da "Addendum alle Prove di Stoccaggio").

A seguito dell’estrazione e dello scarico dei dati dal gauge effettuati in data 01.07.2025, nell’andamento della pressione di fondo del pozzo SP6dir livello BB1lower è stata notata una serie di bruschi salti, con improvviso incremento dei valori.

Tale comportamento anomalo del sensore si è già verificato negli anni precedenti ed è attribuibile alla presenza nel tubing di piccoli quantitativi di gas pressurizzato che, migrando verso l’alto, esercitano una pressione addizionale sulla colonna di liquido sovrastante il sensore. Il verificarsi di questo fenomeno è limitato al quantitativo di gas presente nella colonna del pozzo e non è rappresentativo del comportamento del giacimento.

A partire dal 02.07.2025 l’iniezione sul livello BB1lower attraverso la string lunga del pozzo SPTA2dir è stata sospesa, mentre si è proceduto alle operazioni di graduale depressurizzazione del pozzo SP6dir.

La pressione statica di giacimento nel corso dell’iniezione viene calcolata come segue a partire dalle misure eseguite nei pozzi spia, tenendo conto delle indicazioni fornite precedentemente:

- nel livello BB1upper (Fig. 5.1), come media aritmetica delle pressioni riportate al datum delle misure eseguite nei pozzi “SP 3dir” (Upper gauge), “SP 6dir” (Upper gauge), "SP7 Upp-SL" (Stringa Lunga);

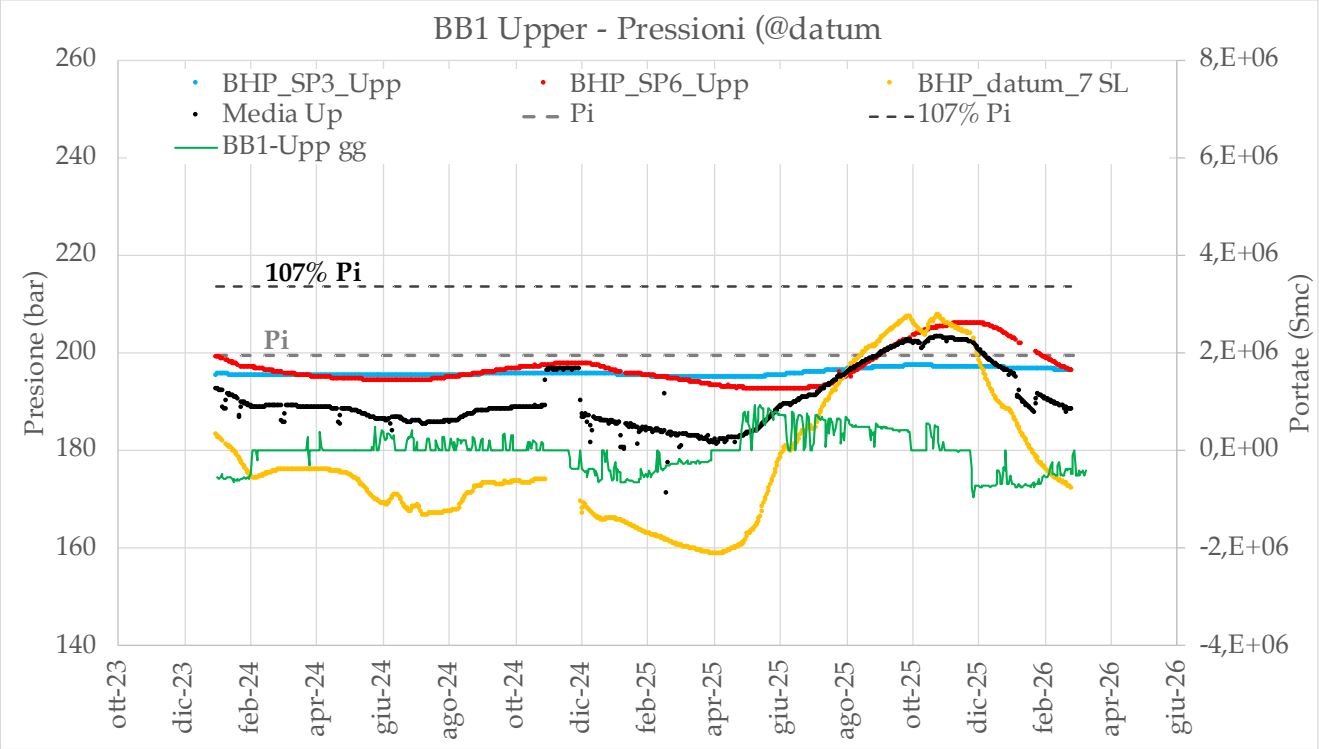


Figura 5.1: Livello BB1upper. Andamento pressioni singoli pozzi e pressione media statica (curva nera); in verde i volumi iniettati nel livello

- nel livello BB1lower (Fig. 5.2), come media aritmetica delle pressioni riportate al datum delle misure eseguita nei pozzi “SP 3dir” (Lower gauge) e “SP 6dir” (Lower gauge) fino al 27.07.2025, “SP 3dir” (Lower gauge) e “SPTA2 dir SL” (pressione di fondo calcolata da pressione statico di testa) a partire dal 28.07.2025 e fino al 31.08.2025.

  Da settembre 2025 sono utilizzabili nuovamente i dati del memory gauge “SP 6dir” (Lower gauge) e sono considerati nella media delle pressioni statiche; pertanto nel trimestre in esame (ottobre-dicembre 2025) le medie del livello BB1lower (Fig. 5.2), rappresentano la media aritmetica delle pressioni riportate al datum delle misure eseguita nei pozzi “SP 3dir” (Lower gauge) e “SP 6dir” (Lower gauge).

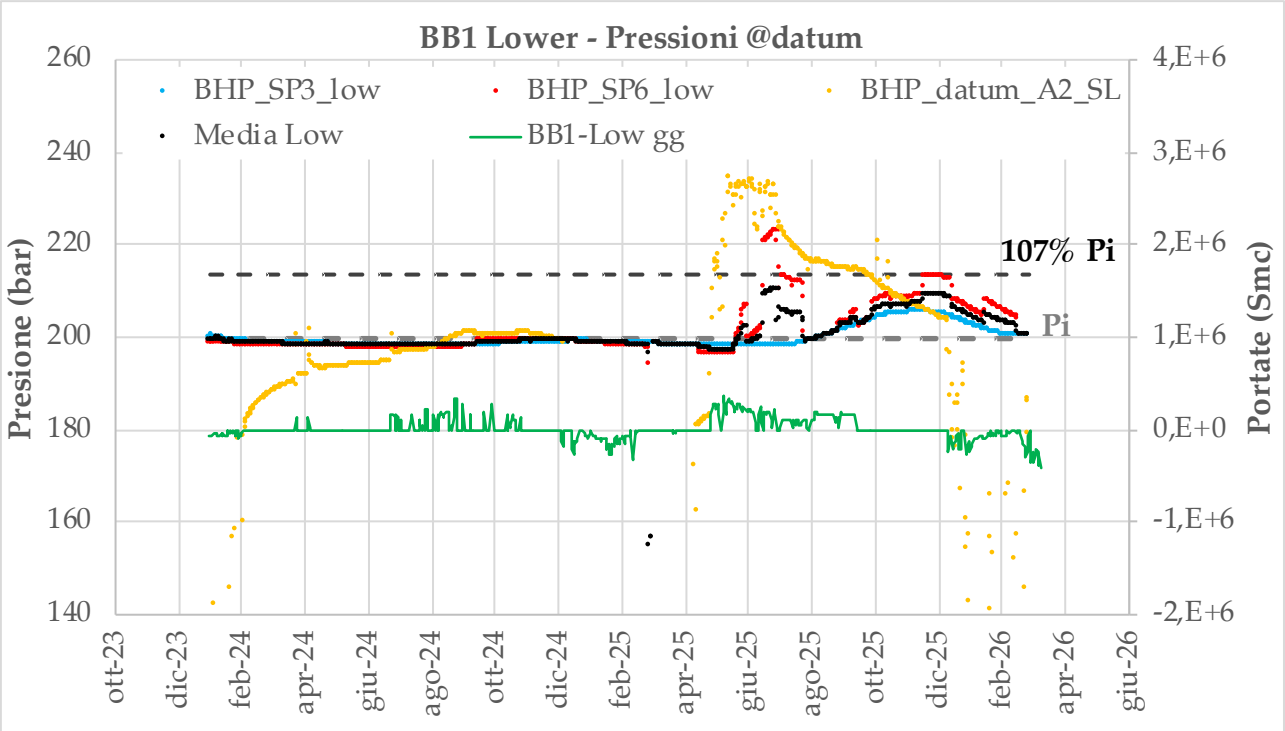


Figura 5.2: Livello BB1lower. Andamento pressioni singoli pozzi e pressione media statica (curva nera); in verde i volumi iniettati nel livello

5.1 Relazioni tra pressioni e volumi nei livelli di stoccaggio

Di seguito vengono fornite due immagini che evidenziano la relazione tra i volumi movimentati e l'andamento delle pressioni statiche medie all'interno dei due livelli di stoccaggio del Cluster-A.

Nel livello BB1upper (Fig. 5.3) , tra ottobre e fine dicembre 2025 la pressione statica media nel livello scende di $\approx$ 10 bar a fronte di $\approx$ 23 MSmc erogati.

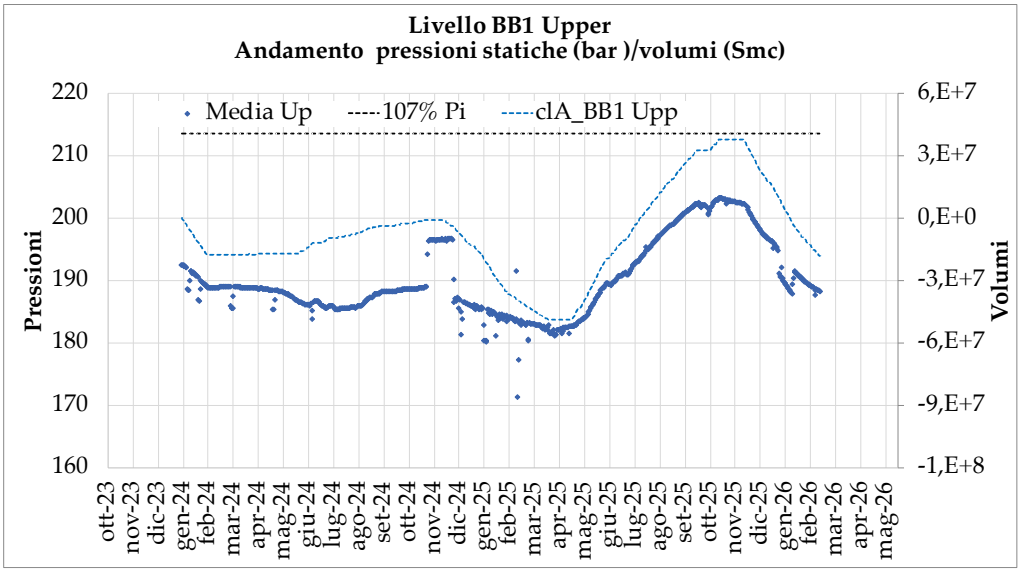


Figura 5.3: Livello BB1upper. Andamento pressione statica media e volumi cumulati da gennaio 2024. In grigio evidenziato il periodo aprile-ottobre 2025.

Nel livello BB1lower (Fig. 5.4) la pressione statica media nel livello scende di $\approx$ 4 bar a fronte di $\approx$ 2.5 MSmc erogati.

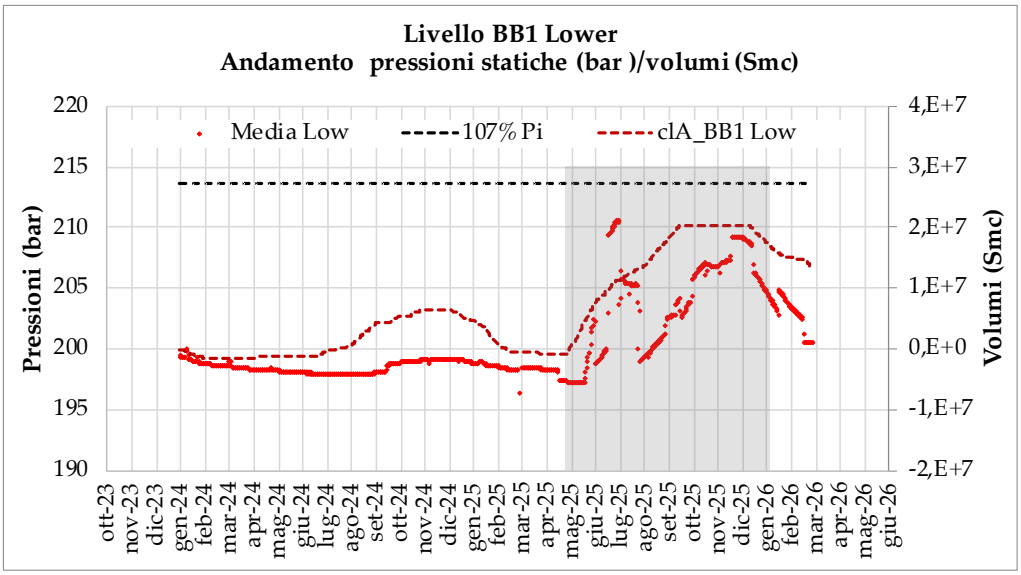


Figura 5.4: Livello BB1lower. Andamento pressione statica media e volumi cumulati da gennaio 2024. In grigio evidenziato il periodo aprile-ottobre 2025.

Questi andamenti sono da ritenersi soltanto indicativi e bisognerà attendere il termine del periodo di iniezione (a riposo) per valutare in maniera esaustiva la risposta delle pressioni statiche alla movimentazione del gas.

Le prescrizioni da rispettare (prot. DVA-DEC-2019-0000075 del 13.03.2019) in termini di pressioni di poro prevedono il non superamento delle pressioni statiche di giacimento del 7% rispetto alla pressione statica originaria. La pressione statica originaria del giacimento BB1 è 203.6 kg/cm^2 (199.7 bar). Il limite non superabile è pertanto fissato a 213.68 bar, per il primo anno di prove di iniezione.

Nel periodo in esame (ottobre - dicembre 2025) le pressioni statiche medie di entrambi i livelli non hanno superato il limite del 107% Pi .

5.2 Relazioni tra pressioni e spostamenti del suolo

Di seguito vengono fornite alcune immagini che indagano la relazione tra le pressioni statiche di giacimento nei livelli l'andamento delle deformazioni del suolo al di sopra del Cluster-A.

In figura 5.6 sono illustrate le deformazioni di alcuni PS riportati in figura 3.1 (A6KD38Y01, A6KD39J01, A6HDX9501, A64VTKE01, A6CMGFN01, A6JRNP401, A691UTM01, A61WNKQ01, A5SZ5II01); non si evidenziano particolari correlazioni con l'andamento delle pressioni ad eccezione del PS A691UTM01, posizionato intorno alla stazione SP00 e del PS A6JRNP401, situato però esternamente alla proiezione verticale del campo.

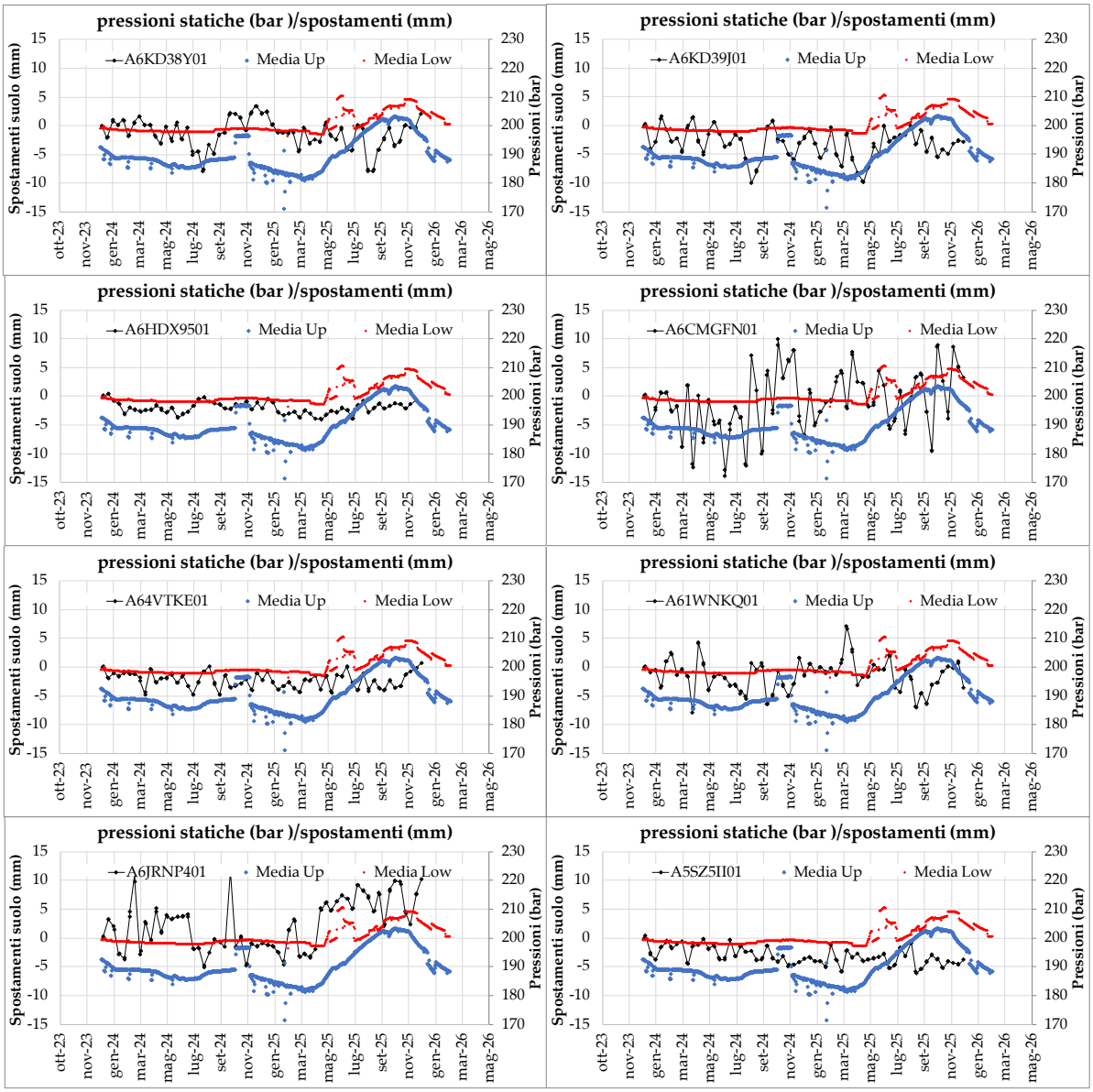


Figura 5.5: Andamento pressioni statiche medie e spostamenti al suolo dei PS in figura 3.1, da gennaio 2024.

In figura 5.7 sono illustrate le deformazioni di un PS riportato in figura 3.1 (A691UTM01, posto intorno a

SP00) che ha evidenziato una migliore correlazione con l'andamento delle pressioni. Il PS mostra un trend di sollevamento di ≈ + 6 mm nel periodo in esame (fino a metà dicembre 2025). Non risulta evidente una correlazione con la successiva fase di erogazione (fine dicembre 2025). Va notato che sussistono oscillazioni di entità simile nell'andamento delle deformazioni calcolate da interferometria SAR anche in periodi precedenti con variazioni di pressione medie statiche molto più contenute di quelle dell'ultimo semestre.

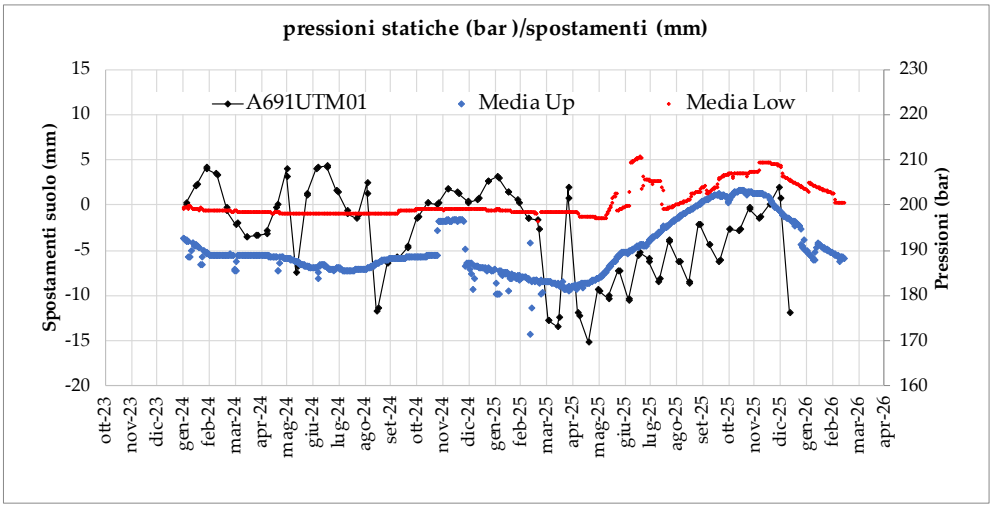


Figura 5.6: Andamento pressioni statiche medie e spostamenti al suolo cumulati da gennaio 2024 del PS all'interno del campo che mostra un andamento correlabile all'andamento delle pressioni.

È stato condotto un raffronto tra le deformazioni osservate nel periodo aprile-dicembre 2025 e quelle predette dal modello geomeccanico ("Modello dei processi geomeccanici derivanti dallo stoccaggio di gas naturale nel campo di San Potito" del 2017", M3E srl): in figura 5.8 é riportata la correlazione tra spostamento verticale e variazione della pressione statica nel giacimento per il PS A691UTM01 e per il bersaglio S12 posto leggermente più a ovest. Gli andamenti osservati e modellati appaiono simili in termini di deformazione relativa, evidenziando sollevamenti del suolo tra ≈ +7 /+8 mm a fronte di una variazione pressione statica media di 20 bar.

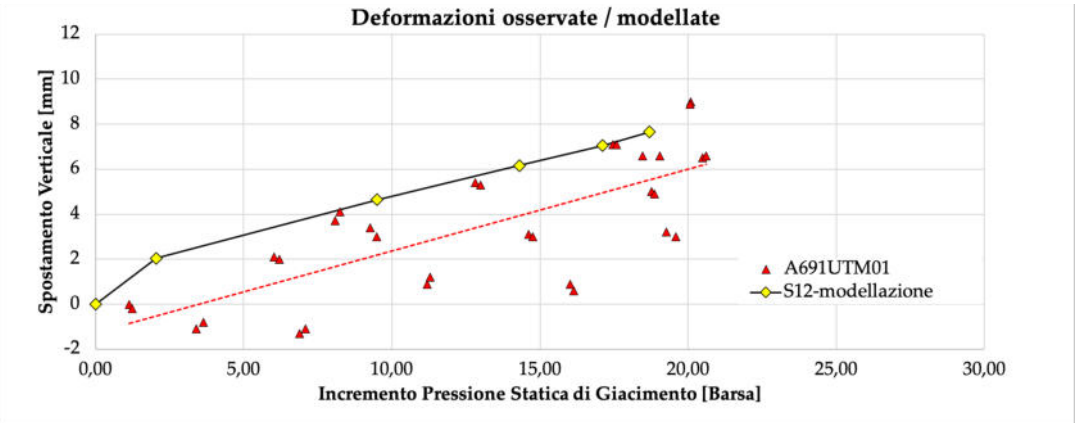


Figura 5.7: Correlazione tra variazione di pressioni statiche medie (livello BB1 Upper) e spostamenti al suolo cumulati per il semestre in esame. Confronto tra osservazioni e modello.

6 Conclusioni

A fine dicembre 2025 la strumentazione installata presso il Cluster-A continua ad essere funzionante.

Nel trimestre in esame (ottobre - dicembre 2025), la pressione statica media del livelli BB1upper e BB1lower è risultata nei limiti imposti del 107% (214 bar) rispetto alla pressione originaria di giacimento (199.7 bar), a fronte di ≈ 5.2 Milioni di Smc iniettati tra il 1 ed il 31 ottobre 2025 e ≈ 25.4 Milioni di Smc erogati dal 13 novembre al 31 dicembre.

Dal 5 aprile 2024 è attiva sul Cluster-A la nuova stazione permanente a tripla frequenza SP00. La stazione SP00, posizionata sul Cluster-A, ha valori di MP1 e MP2 in linea con gli standard IGS di una stazione di buona qualità. La brevità della sua serie temporale (19 mesi) non è ritenuta sufficiente dalla comunità scientifica per ottenere una stima realistica delle velocità medie di spostamento attese localmente; le deformazioni da essa cumulate nel semestre lungo la componente verticale risultano comunque pari a ≈ - 1.4 mm, in accordo con la fase di erogazione.
Le serie temporali delle componenti orizzontali di SP00 descrivono un avvicinamento al centro del giacimento, potenzialmente in accordo con l'attività di erogazione (spostamento di ≈ 3.5 mm verso ovest).
La stazione GNSS SP12 funziona da 7.1 anni ed anche i suoi valori di MP1 e MP2 sono in linea con gli standard IGS di una stazione di buona qualità. La lunghezza della sua serie temporale è ritenuta sufficiente dalla comunità scientifica per ottenere una stima realistica delle velocità medie di spostamento attese localmente: riportiamo la stima della velocità verticale che è pari a ≈ - 6.460 mm/anno.
Le stazioni rover GNSS a singola frequenza sono attive da 7.1 anni: i loro spostamenti GPS, calcolati rispetto a SP12, risultano affetti dai movimenti anomali di quest'ultima avvenuti nei periodi precedenti. Per tale motivo, il moto di SP12 è stato considerato e rimosso dalle serie temporali delle stazioni a singola frequenza, per meglio confrontare i loro spostamenti con gli altri dati di monitoraggio. La serie temporale verticale della stazione rover a singola frequenza SP01, che si trova nell'area nord-occidentale (esterna, ma la più vicina al campo), registra un sollevamento medio pari a ≈ + 6 mm, in contrasto con la fase di erogazione del trimestre in esame.

Le serie temporali di interferometria (aggiornate all'intervallo temporale 30/03/2015 - 25/12/2025, satellite Sentinel-1), evidenziano sul Cluster-A deformazioni geodetiche mediamente contenute entro i ≈ ± 4 mm (con massimi fino a + 9.5 e − 11 mm); tali deformazioni, sia lungo la componente verticale che orizzontale, non sono correlabili con la fase di iniezione in esame, né in termini di tempo, né di distribuzione nello spazio. Sulla culminazione strutturale del reservoir, nei pressi del pozzo SP2DIR, la media degli spostamenti verticali dei bersagli radar descrive, nel trimestre ottobre - dicembre 2025, una oscillazione che per la prima volta sembra essere in fase con l'iniezione durata fino al 30 ottobre e la successiva erogazione a partire da metà novembre (≈ + 2.7 mm a fine ottobre, - 1 mm tra metà novembre e fine dicembre). Tale correlazione risulta da verificare nei prossimi monitoraggi. Lungo la componente orizzontale si allontanano dal centro del reservoir i bersagli

radar ad ovest di esso (3.8 mm verso ovest), mentre si avvicinano quelli ad est (2.7 mm verso ovest); tuttavia, questo secondo tipo di movimento, coerente con la deformazione attesa durante l'erogazione di gas, è avvenuto in passato anche in fase di iniezione o di non movimentazione di gas.

L'analisi delle deformazioni dei PS utilizzati per la modellazione geomeccanica del campo evidenziano scarse e mal distribuite correlazioni tra andamento delle pressioni statiche di giacimento e spostamenti del suolo; i pochi PS che evidenziano una correlazione positiva con la pressione mostrano deformazioni in linea con quelle descritte dal modello geomeccanico.

In generale, le serie temporali GPS e InSAR, sia nella componente verticale che orizzontale, descrivono deformazioni confrontabili tra loro e di entità mediamente contenuta entro $\pm$ 4 mm, che non risultano correlabili con le fasi della movimentazione di gas nel reservoir.

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