

Station Code

MZ87

Recording Station

Spelonga Chiesa

Network

Temporary network

First compilation

Last update

| Year | Month | Day |
|------|-------|-----|
| 2016 | 10 | 01 |
| 1970 | 01 | 01 |

General Information

Station
photograph



Code

MZ87

Owner

CRS Centro di Ricerche Sismologiche, OGS

Housing

Instrumentation

Geographical Information (1/2)

Location

| | |
|-----------------|----------------------------------------|
| Region | MARCHE |
| Province | Ascoli Piceno |
| City | ARQUATA DEL TRONTO |
| Place / Address | Arquata del Tronto, Frazione Spelonga. |
| ISTAT Code | 044006 |
| Notes | |



Location map
(Italy and Region)

Geographical Information (2/2)

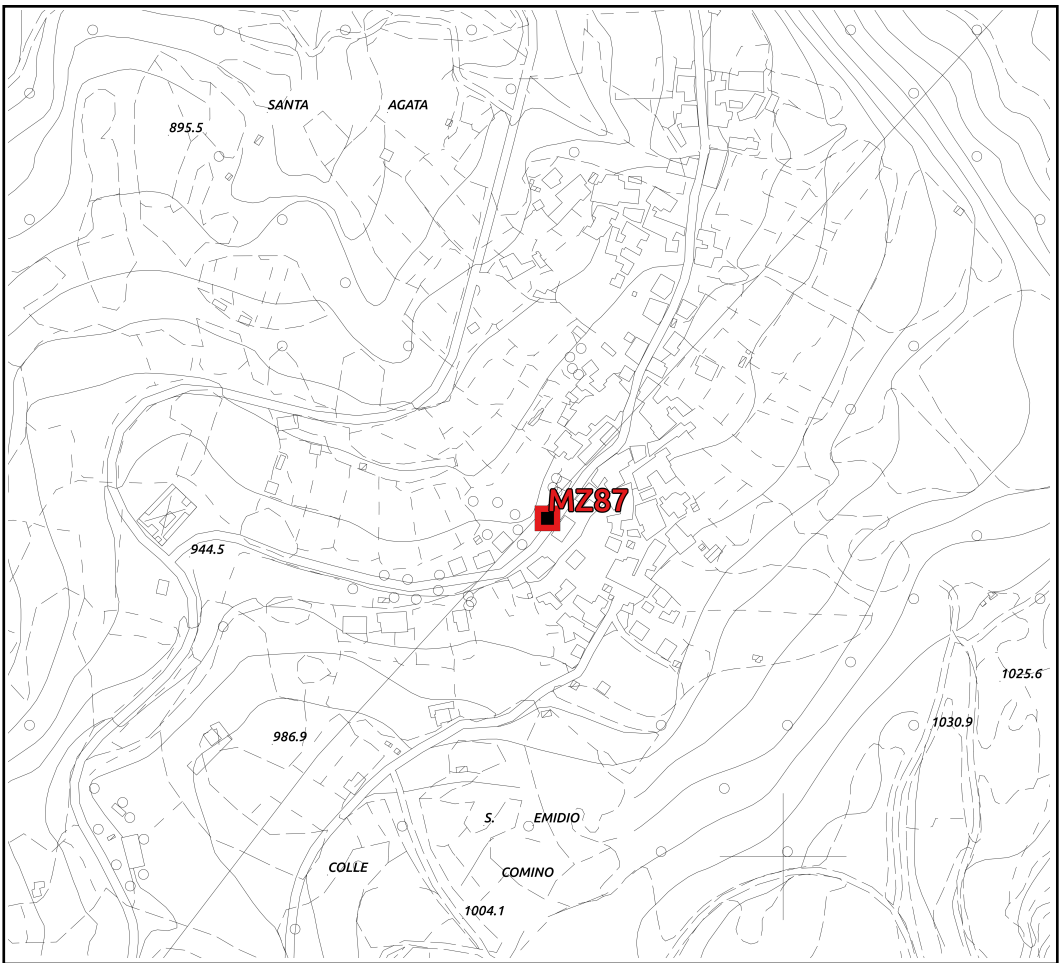
Coordinates

| | Latitude | Longitude |
|----------------------|-----------|-----------|
| Geographic (WGS84) | 42.757200 | 13.299000 |
| Elevation (m a.s.l.) | 952 | |

Cartography

| | Scale | Code |
|----------------------------|----------|----------------|
| Topographic map (I.G.M.I.) | 1:25.000 | null null null |

| | Scale | Element number |
|---------------------------------|-------|----------------|
| Regional technical map (C.T.R.) | | |



I.G.M.I. or C.T.R.
map

Geomorphology

Site morphology

| | | | |
|--------|-----------------|---------------|--------------|
| Plain | Valley (centre) | Valley (edge) | Alluvial fan |
| Saddle | Slope | Edge of scarp | Ridge |

Landslides

☐

Not present

Present

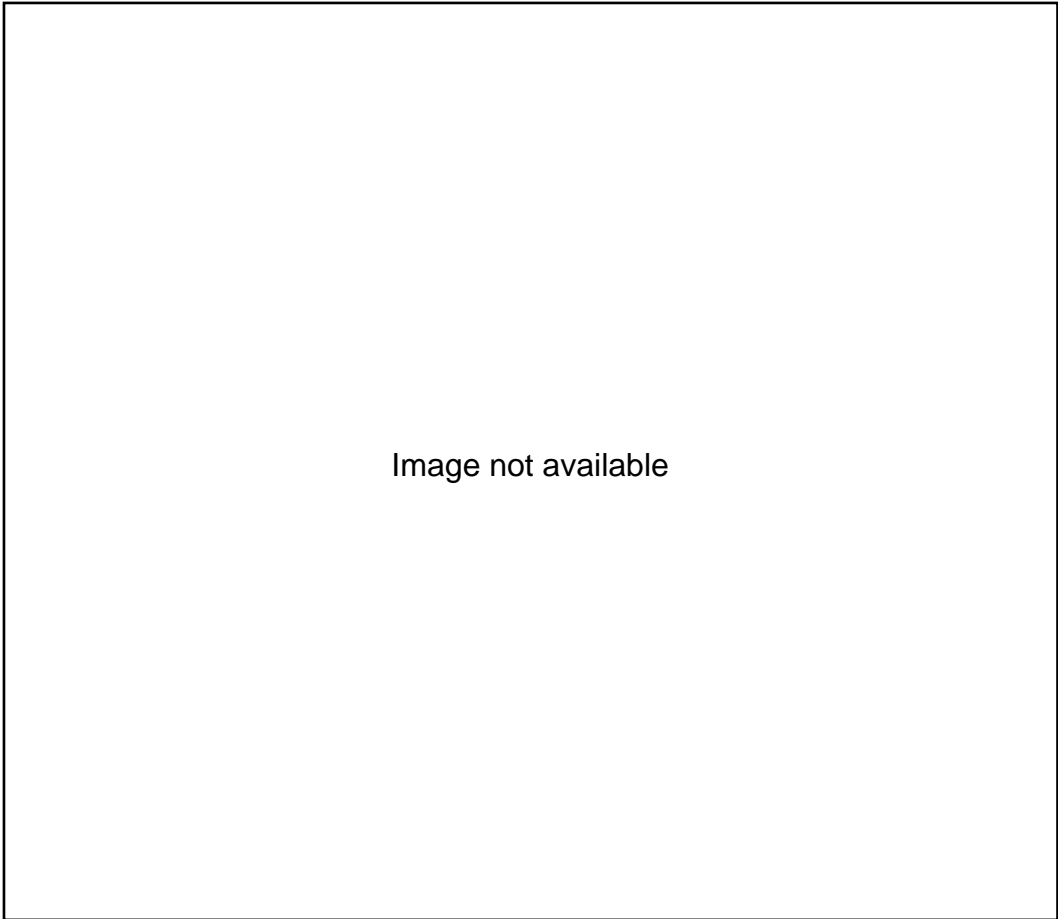
☐

Active or quiescent

☐

Inactive or stabilized

Distance (m)



I.F.F.I. map

Notes

Geology

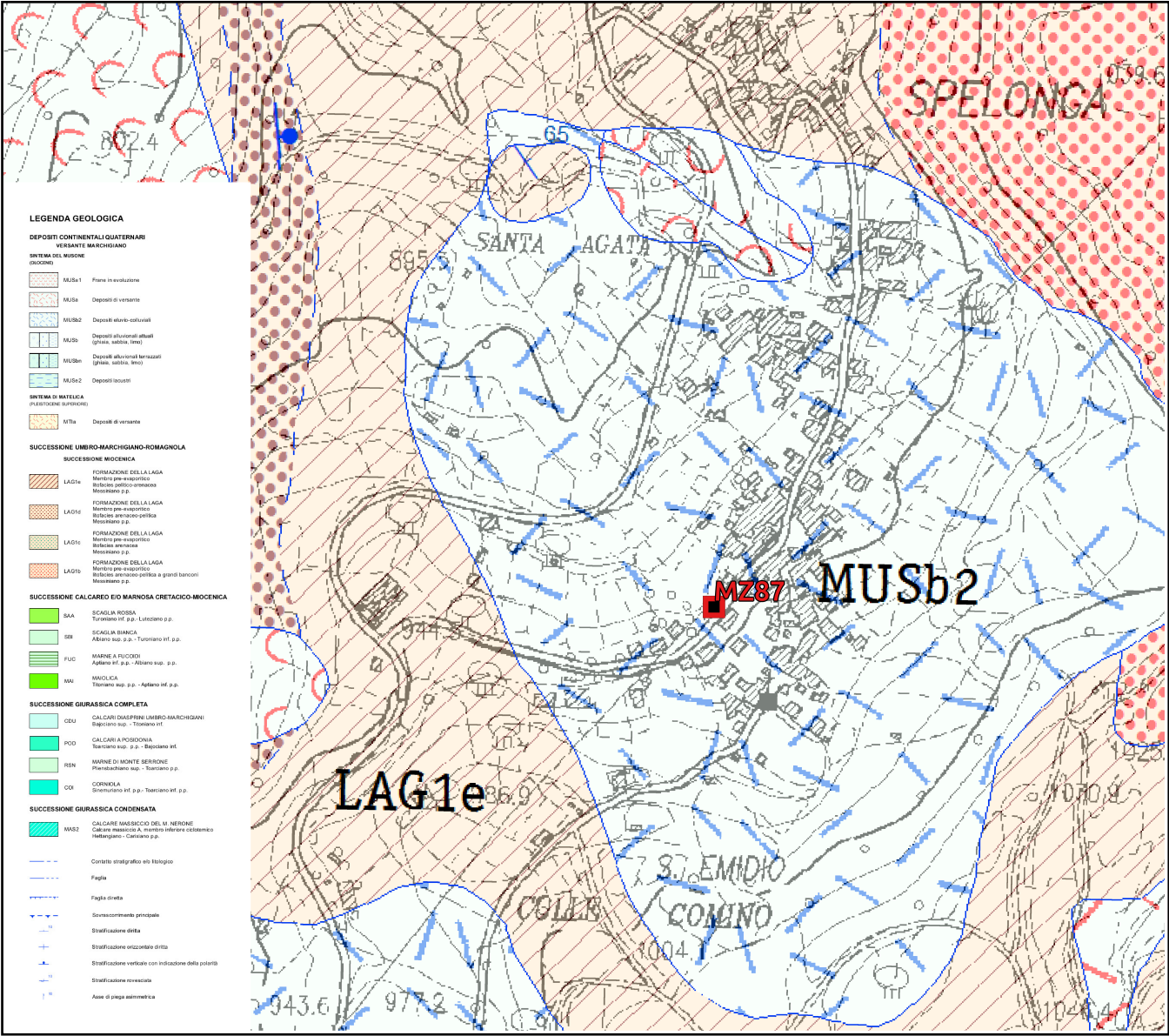
Cartography

Scale

Sheet number

Sheet name

Geological map

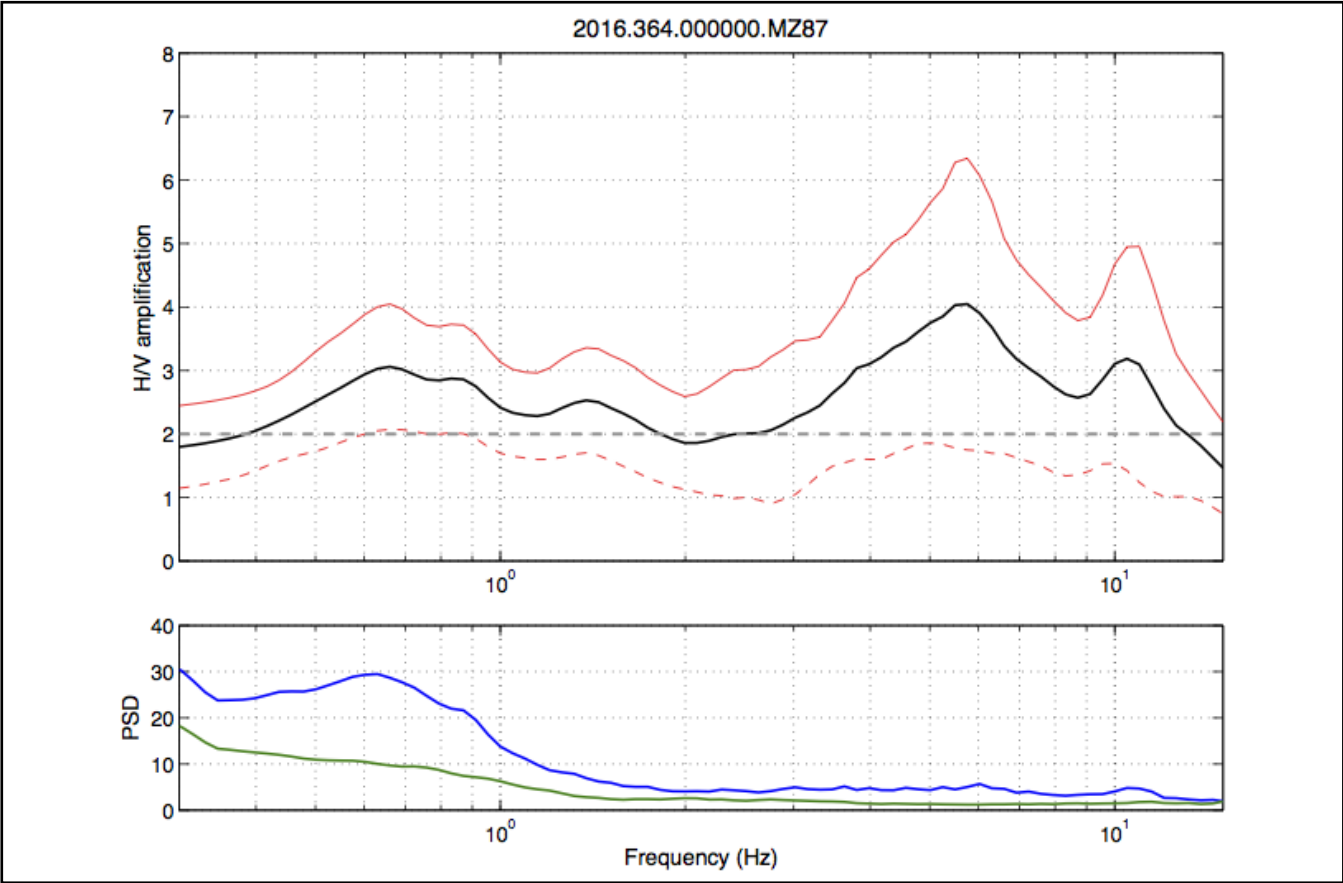



Fault proximity

certain
supposed

Notes

Microtremor H/V spectral ratio



f_o (mt) (Hz) 

Site classification (EC8 – NTC2008)

Lithostratigraphic classification

Estimated

| Method ¹ | Soil class ² | Notes |
|---------------------|-------------------------|-------|
| | | |

| | | |
|--------|-----|-----------------------|
| 1 | GEO | Geological data |
| Legend | EC | Empirical correlation |
| | HV | H/V spectral ratio |

Based on in-situ measurements

| Method ³ | V_{s30} (m/s) | Soil class ² |
|---------------------|-----------------|-------------------------|
| | | |

| | | |
|--------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2 | A | Rock or other rock-like geological formation, including at most 5 m of weaker material at the surface ($V_{s30} > 800$ m/s). |
| Legend | B | Deposits of very dense sand, gravel, or very stiff clay, at least several tens of m in thickness, characterized by a gradual increase of mechanical properties with depth ($V_{s30} = 360\text{--}800$ m/s). |
| | C | Deep deposits of dense or medium dense sand, gravel or stiff clay with thickness from several tens to many hundreds of m ($V_{s30} = 180\text{--}360$ m/s). |
| | D | Deposits of loose-to-medium cohesionless soil (with or without some soft cohesive layers), or of predominantly soft-to-firm cohesive soil ($V_{s30} < 180$ m/s). |
| | E | A soil profile consisting of a surface alluvium layer with V_s values of type C or D and thickness varying between about 5 m and 20 m, underlain by stiffer material with $V_s > 800$ m/s. |

| | | |
|--------|----|---------------|
| 3 | CH | Cross-Hole |
| Legend | DH | Down-Hole |
| | ES | ESAC |
| | FK | FK |
| | MW | MASW |
| | NW | NASW |
| | SH | SH-Refraction |
| | SW | SASW |
| | — | — |

Topography classification

| Topography category ⁴ |
|----------------------------------|
| |

| | | |
|--------|----|--------------------------------------------------------------------------------------------------------------------------|
| 4 | T1 | Flat surface, isolated slopes and cliffs with average slope angle $i \leq 15^\circ$. |
| Legend | T2 | Slopes with average slope angle $i > 15^\circ$. |
| | T3 | Ridges with crest width significantly less than the base width and average slope angle $15^\circ \leq i \leq 30^\circ$. |
| | T4 | Ridges with crest width significantly less than the base width and average slope angle $i > 30^\circ$. |

Synthesis of information

Information relevant to site classification

Notes

| | | |
|-------------------------------------|--|--|
| V_{s30} (m/s) | | |
| Average N_{SPT} to 30m | | |
| Average c_u to 30m (kPa) | | |
| Site class (EC8 – NTC2008) | | |
| Topography category (EC8 – NTC2008) | | |

Geological, geomorphological and geomechanical information

| | | |
|------------|--|--|
| Lithology | | |
| Morphology | | |
| Rock mass | | |

Other information relevant to seismic site response

| | | |
|----------------------------------|--|--|
| Depth to bedrock (m) | | |
| Average V_s to bedrock (m/s) | | |
| f_0 from H/V microtremors (Hz) | | |
| f_0 from H/V earthquakes (Hz) | | |

Distinctive features of site response

| | |
|--|--|
| | |
|--|--|