

# Modello strutturale italiano alla scala 1:500.000 del CNR

SISTEMA GEODETICO DI RIFERIMENTO  
 WGS84 / UTM ZONA 33 NORD  
 EPSG CODE: 32633

- ## LEGENDA:
- Area di interesse
  - Cavidotto elettrico sottomarino
  - Cavidotto elettrico terrestre
  - Stazione utente
  - Futura Stazione Terna (posizione ipotizzata)

## LEGENDA:

### TYRRHENIAN BASIN

Ocean-type post-orifissal basin of Upper Miocene probably Tortonian-Quaternary age

- 1 Not sampled outcrops of the acoustic basement
- 2 Volcanic rocks with tholeiitic affinities, Quaternary? upper Miocene (Tyrrenian Basaltic Flow Interflow, p.p., Vavilov SM, DSDP 373 A-D/P 650, in the latter case with calc-alkaline affinity)
- 3 Volcanic rocks (undifferentiated ages and affinities), Palaeogene (p.p., undifferentiated ages and calc-alkaline affinity), Anzioch SM
- 4 Shallow-water and deeper-water carbonates (undifferentiated ages, probably Messinico)
- 5 Fine grained siliclastic rocks (undifferentiated age)
- 6 Low- to medium-grade metamorphites (undifferentiated age)

The identified rock units have been mapped as those outcropping in the surrounding and areas

### LONGORBUCCO AND SOUTHERN PELORITAN UNITS

These units, largely outcropping in Sicily and in the Southern Peloritani Mountains, are made up of basement and cover terranes displaying strong affinities with the sequences of the Ionian basins.

- 7 Longobucco Unit  
Graded sandstones, marls and arenaceous conglomerates (Piselli Flynch? Auct.), Upper-Middle Eocene, Jurassic, Cretaceous and Lower Eocene limestones and marls are included as olistoliths and olistolite
- 8 Condensed sequences, globigerinid and Caporinella limestones, radiolarites, nodular limestones and marls, bioclastic limestones Lower Eocene-Liasic Basinal sequences: graded sandstones, calcarenites and marls, Middle Liasic shallow-water limestones, Lower Liasic continental deposits (Vinciguerra? Auct.), Lower Liasic
- 9 Grantes and granodiorites
- 10 Low-grade metamorphites, Subdiagenetic porphyroblasts in the upper part and metabasites in the lower part
- 11 Rocca Nuova Unit  
Limestones and marly limestones, dolomites, red conglomerates, Eocene-Upper Jurassic
- 12 Ali Unit  
Slightly metamorphosed limestones and marls, dolomites and argillites, sandstones and conglomerates, Upper Cretaceous-Lower Liasic?
- 13 S. Marco Unit  
Condensed sequences consisting of marly limestones, nodular limestones and oolitic limestones, Eocene-Liasic
- 14 Mesopelites, quartzites and metakoses, Carboniferous-Silurian?
- 15 Longi-Tarantina Unit  
Graded sandstones, clays and silt marls, with intercalations of conglomerates in middle upper part of the sequence (Piselli Flynch), Lower Oligocene-Middle Eocene
- 16 Basinal sequences consisting of globigerinid limestones and marls, nodular limestones, cherty limestones and marls, dolomites, Eocene-Lower Liasic continental clastic deposits (Piselli Flynch? Auct.), Lower Liasic
- 17 Mesopelites and quartzites with intercalations of porphyroblasts in the upper part, Carboniferous-Silurian?
- 18 LIDO d'ANDRES UNIT  
Condensed sequences consisting of marly limestones, nodular limestones and oolitic limestones, Eocene-Liasic continental clastic deposits (Piselli Flynch? Auct.), Lower Liasic
- 19 Mesopelites and metapsammites, Carboniferous-Silurian?

### M. GENJARDO AND EQUIVALENT UNITS

Units deriving from the deformation of the northern margin of the Sicilian Carbonate Platform and of the southern flank of the Sicilian Basin

- 20 Gelaonic calcarenites, marls and sandy marls, middle Tortonian-uppermost Oligocene
- 21 Marly clays, calcarenites and biogenic limestones, globigerinid limestones, graded calcarenites and lime megabreccias, pelagic cherty limestones, radiolarites and siliceous marlstones, Upper Oligocene-Upper Jurassic
- 22 Pelagic cherty calcarenites and ressedimented bioclastic limestones with basalt intercalations, redopedolized radiolarites, carbonate platform arenaceous limestones, Middle Jurassic-Norian

### FORELAND SEQUENCES AND MAGMATIC ROCKS

Foreland sequences crop out in southern Sicily, in Lampusa, Lampedusa, and Maltese Islands, along the Sicilian Channel and along the flanks of the Carbonate basins in the Sicily Channel. Generally only Tertiary rocks are reported on the map. The Mesozoic sequences are well known on the map and in the literature by exploration drillings, deep-sea and submarine samplings

- 23 Apulian Extension  
Submarine SE extension of the Apulian Foreland
- 24 Netic carbonates (Bassano Gulf of Taranto), Upper Cretaceous
- 25 Eastern Hyblan Mountains and Malta Escarpment, Mesozoic
- 26 Dolomites, opalin, breccias (Malta Escarpment, Mesozoic)
- 27 Volcanics, marls and subordinate reef limestones (Carboniferous-Silurian), Lower Mesozoic-Upper Tortonian
- 28 Biogenic calcarenites (M. Cimici Fm.), Lower Tortonian-Oligocene
- 29 Shallow-water carbonates, globigerinid marls and marly limestones, Middle-Lower Oligocene-Upper Cretaceous
- 30 Rudistid limestones, Upper Cretaceous
- 31 Basic lava flows and hyaloclastites, Upper Cretaceous
- 32 Biotocarenites ("Piselli Fm."), Upper-Middle Miocene
- 33 Pelagic marls and marly limestones with intercalations of volcanic rocks in the uppermost part ("Tirano Fm."), Upper Middle Miocene
- 34 Calcarenites and marls ("Sagusa Fm."), Lower Miocene-Oligocene
- 35 Cherty limestones and subordinate calcarenites (Eocenico Fm.), marls and marly limestones (Piselli Fm.), Eocene-Lower Cretaceous
- 36 Malta Escarpment and Alfeo Seamount  
Basal oolitic calcarenites ("Buccheri Fm."), Tortonian-Triassic
- 37 Pelagic marls and marly limestones with intercalations of volcanic rocks in the uppermost part ("Tirano Fm."), Upper Middle Miocene
- 38 Upper Coralline Limestone and Green Sands, Maltese Islands and Sicily Channel, Lower Tortonian (B. L. L.), Upper Middle Miocene
- 39 Dolomites, opalin, breccias (Malta Escarpment, Mesozoic)
- 40 Reef limestones and calcarenites, Lampedusa Island, Tortonian; calcarenites (Terribile Bank, Miocene?)
- 41 Deep-water limestones with chert nodules, Namless Bank, Malta Basin, lowermost Oligocene? Upper Oligocene
- 42 Shallow-water dolomitic limestones, Lampusa Island, Upper Eocene? Liasic carbonates with Discosciphrina and Lepidocyclina, Terribile Bank, Eocene
- 43 "Sagusa" type pelagic limestones and clays, Sicily Channel and Malta Escarpment, Messinico-Cenozoic

### TECTONIC SYMBOLS

Contacts between groups of tectonic units derived from different paleogeographic domains:

- a) surface; b) sub-surface
- Contacts between single tectonic units derived from the same paleogeographic domain:
- a) surface; b) sub-surface
- Main gravity slides and undetermined tectonic contacts
- Undetermined faults (a) surface; b) sub-surface
- Normal faults (a) surface; b) sub-surface
- Overthrusts and reverse faults (a) surface; b) sub-surface
- Main post-tectonic thrusts (a) surface; b) sub-surface
- Boundary of the allochthonous Apenninic units
- Strike-slip faults
- Axes of anticline (a) surface; b) sub-surface. (Arrow along the axis indicates the plunging of the axis; orthogonal arrow indicates the dip of the axial plane)
- Axes of syncline (a) surface; b) sub-surface

### SUBAERIAL VOLCANIC FEATURES

Caldera rims

Explosive craters

### SUBMARINE VOLCANIC FEATURES

Volcanic edifices: ascertained by sampling

Hydrothermal Fe-Mn products

### REPRESENTATIVE SEISMOSTRATIGRAPHIC SEQUENCES OF SELECTED BASINS

- Well-secting normal
- Transient interval
- Carbonate and/or sulfate evaporitic deposits
- Salt layers
- Acoustic basement

### Monte Garigliano Unit

Graded calcarenites and marls, globigerinid limestones, "Sagusa" type marly limestones, Upper/Middle Oligocene-Liasic

Grasses, amphiboles and micas

### Polla-Coppello Unit (Formazione dorico-krionica?)

Nodularites and siliceous claystones, graded calcarenites and calcarenites, Lower Cretaceous-Middle Liasic

Cherty limestones with pelagic pelecypods, dolomitic calcarenites and dolomitic breccias, marls and micritic upper units of the western Alps

### Castagna Unit

Medium-high grade gneisses and supragneisses, amphibolites, maficites and pegmatites, maficites, HP/LT Alpine overprint

### Bagni Unit

The unit is represented by sequences showing Australopine affinity

### M. Rose, M. Barro, Pizzo Mondello and equivalent units

Gelaonic calcarenites, marls and sandy marls, middle-lower Tortonian-uppermost Oligocene

Marly clays, calcarenites and biogenic limestones, globigerinid limestones, graded calcarenites and megabreccias, pelagic cherty limestones, radiolarites and siliceous marlstones, Upper Oligocene-Upper Liasic

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### Roccapalumba Unit

Sandstones, red marly clays and basalts with blocks of Permian shallow-water limestones (Sicily, Upper/Middle Triassic)

### Judica-Scarpello Unit

Marly clays with intercalations of gelaonic sandstones, Middle Miocene-Upper Oligocene

### Fido Unit

Calcareous marls, radiolarites and shales, breccias and siliceous carbonates, cherty limestones with pelagic pelecypods, Oligocene-Upper Triassic

### TRAPANESE AND SACCENSE UNITS

Carbonate units deriving from the deformation of the Trapanese and Saccense Triassic-Liasic carbonate platform which was dissected and eroded during lower-Middle Liasic and involved in the orogenic transport starting from Middle/Upper Miocene

### INICI-KUMETA and MAgGIAGIARO-S. CALOGERO UNITS

Gelaonic calcarenites, marls and sandy marls, middle-lower Tortonian-uppermost Oligocene

### TRAPANESE AND SACCENSE UNITS

Carbonate units deriving from the deformation of a deep-sea basin penetrating within the Trapanese-Saccense Platform

### M. Rose, M. Barro, Pizzo Mondello and equivalent units

Gelaonic calcarenites, marls and sandy marls, middle-lower Tortonian-uppermost Oligocene

Marly clays, calcarenites and biogenic limestones, globigerinid limestones, graded calcarenites and megabreccias, pelagic cherty limestones, radiolarites and siliceous marlstones, Upper Oligocene-Upper Liasic

### Roccapalumba Unit

Sandstones, red marly clays and basalts with blocks of Permian shallow-water limestones (Sicily, Upper/Middle Triassic)

### Judica-Scarpello Unit

Marly clays with intercalations of gelaonic sandstones, Middle Miocene-Upper Oligocene

### Fido Unit

Calcareous marls, radiolarites and shales, breccias and siliceous carbonates, cherty limestones with pelagic pelecypods, Oligocene-Upper Triassic

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N° COMMESSA  
**Ragusa**

PROGETTO PER LA REALIZZAZIONE DI UNA CENTRALE EOLICA OFFSHORE E OPERE DI CONNESSIONE A TERRA IN PROVINCIA DI SIRACUSA  
 POTENZA INSTALLATA: 945 MW  
 PROGETTO PRELIMINARE

ELABORATO TRACCIATO CAVIDOTTO TERRESTRE SU CARTA GEOLOGICA

SCALA: 1:300000

FORMATO: A1

00 19/05/2023 PRIMA EMISSIONE  
 REV. DATA DESCRIZIONE REVISIONE

TECCONCONSULT REDATTO

NINFEA RINNOVABILI VERIFICA

NINFEA RINNOVABILI APPROVAZIONE

ELABORATO CODICE ELABORATO  
**Tav.20**

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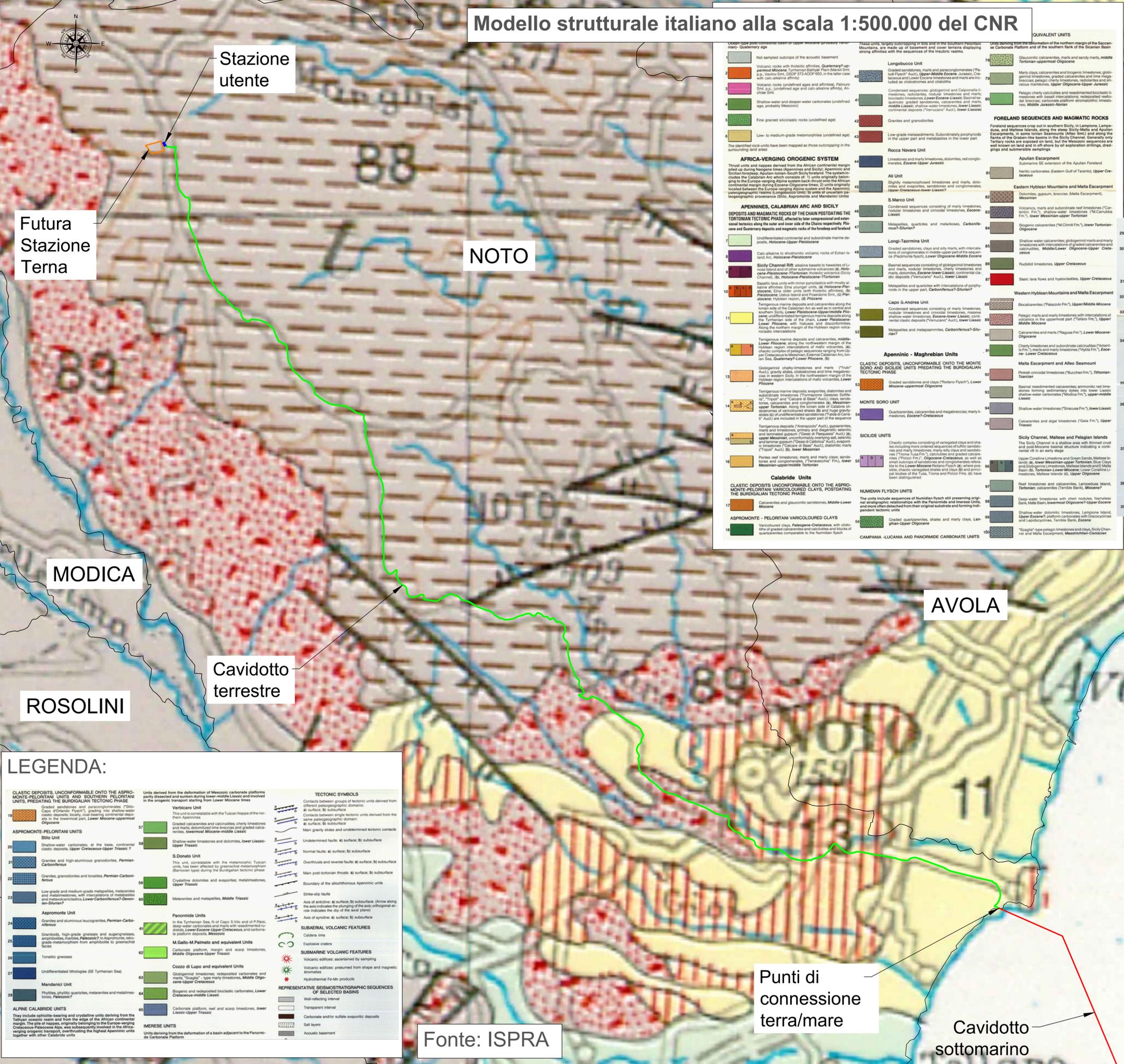
Fonte: ISPRA

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SISTEMA GEODETICO DI RIFERIMENTO

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EPSG CODE: 32633



UNIT	DESCRIPTION	UNIT	DESCRIPTION
1	Not sampled outcrop of the acoustic basement	76	Glauconitic calcarenites, marls and sandy marls, middle Eocene-uppermost Oligocene
2	Volcanic rocks with rhyolitic affinities, Quaternary-uppermost Miocene, Tyrrhenian Basin, Plan-Marsali Dns. p. V. Vado Smt. (DCEP 371 ACQ), the water case with calc-alkaline affinity	77	Marly clays, calcarenites and biogenic limestones, globigerina limestones, graded calcareous sand and fine-grained calcarenites, cherty limestones, radiolites and siliceous marlstones, Upper Oligocene-Upper Jurassic
3	Volcanic rocks (undifferentiated ages and affinities, Pantano Smt. 2), undifferentiated age and calc-alkaline affinity, An-chite Smt.	78	Pelagic cherty calcarenites and reworked bioclastic limestones with basal intercalations, redeposited reworked bioclastic carbonates platform stratiolitic limestones, Middle Jurassic-Neogene
4	Shallow-water and deeper-water carbonates (undifferentiated ages, probably Messinian)		
5	Fine grained siliciclastic rocks (undifferentiated ages)		
6	Low- to medium-grade metamorphites (undifferentiated ages)		

Stazione utente

Futura Stazione Terna

NOTO

MODICA

ROSOLINI

AVOLA

Cavidotto terrestre

Punti di connessione terra/mare

Cavidotto sottomarino

Fonte: ISPRA

## LEGENDA:

- Cavidotto elettrico sottomarino
- Cavidotto elettrico terrestre
- Stazione utente
- Futura Stazione Terna (posizione ipotizzata)

UNIT	DESCRIPTION	UNIT	DESCRIPTION
19	Graded calcarenites and calcarenites, cherty limestones and marls, dolomitic lime breccias and graded calcarenites, lowermost Miocene-middle Liasic	79	Basal reworked calcarenites, ammonoid reef limestones forming sedimentary dunes into lower Liasic shallow-water carbonates (Molica Fm.), upper-middle Liasic
20	Shallow-water carbonates, at the base, continental clastic deposits, Upper Cretaceous-Upper Triassic	80	Cherty limestones and subordinate calcarenites (Fornici Fm.), upper-middle Liasic
21	Granites and high-aluminous granitoides, Permian-Carboniferous	81	Shallow-water limestones (Sircusa Fm.), lower Liasic
22	Granites, granitoides and tonalites, Permian-Carboniferous	82	Calcareous and algal limestones (Gela Fm.), Upper Triassic
23	Low-grade and medium-grade metapelites, metarhyolites and metagabbros, with intercalations of metabasites and metacarbonates, Lower Carboniferous-Devonian-Silurian	83	Deep limestones and calcarenites, Langipane Island, Upper Eocene-Upper Oligocene (Cortina Bas., Moccia F.)
24	Granites and aluminous leucogranites, Permian-Carboniferous	84	Deep-water limestones with chert nodules, Namiesi Dark, Mals Bas., lowermost Oligocene? Upper Eocene
25	Granitoids, high-grade gneisses and augen-gneisses, amphibolites, marbles, Paleozoic? Mesozoic, retro-grade metamorphism from amphibolite to greenschist facies	85	Deep-water dolomitic limestones, Langipane Island, Upper Eocene-Upper Oligocene, with Diapycnites and Lepidocyclinae, Terebinth Bank, Eocene
26	Tonalitic gneisses	86	Shallow-water dolomitic limestones, Langipane Island, Upper Eocene-Upper Oligocene
27	Undifferentiated lithologies (SE Tyrrhenian Sea)	87	"Scaglia"-type pelagic limestones and clays, Sicily Channel and Malta Escarpment, Messinian-Coniacic
28	Mandacini Unit		

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