

# Modello strutturale italiano alla scala 1:500.000 del CNR

## LEGENDA:

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

## LEGENDA:

<b>TYRRHENIAN BASIN</b> Ocean-type post-oriflinal basin of Upper Miocene probably Tortonian-Quaternary age Not sampled outcrops of the acoustic basement Volcanic rocks with tholeiitic affinities, Quaternary? upper Pleistocene (Tyrrenian Basaltic Flow Interflow), p.p., Vastivo SM, DSDP 373 ADQP 650, in the latter case with calc-alkaline affinity Volcanic rocks (undifferentiated ages and affinities), Palmyro Smith, p.p., undifferentiated age and calc-alkaline affinity, Anzio SM Shallow-water and deeper-water carbonates (undifferentiated ages, probably Messinian) Fine grained siliclastic rocks (undifferentiated age) Low- to medium-grade metamorphites (undifferentiated age) The identified rock units have been mapped as those outcropping in the surrounding area	<b>LONGOBUCO AND SOUTHERN PELORITAN UNITS</b> 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 region. <b>Longobucco Unit</b> Graded sandstones, marls and arenaceous clastics (Thalys Fm?) Auct., Upper-Middle Eocene, Jurassic, Cretaceous and Lower Cretaceous limestones and marls are included as olistoliths and olistostromas Condensed sequences, glauconitic and Carboniferous limestones, radiolarites, nodular limestones and marls, bioclastic limestones Lower Eocene-Liasic Basinal sequence; graded sandstones, calcarenites and marls, Middle-Liasic shallow-water limestones, Lower Liasic continental deposits ("Crucivero" Auct.), Lower Liasic <b>Rocca Nuova Unit</b> Limestones and marls, limestones, dolomites, red conglomerates, Eocene-Upper Jurassic <b>All Unit</b> Slightly metamorphosed limestones and marls, dolomites and conglomerates, sandstones and conglomerates, Upper-Cretaceous-lower Liasic? <b>S. Marco Unit</b> Condensed sequences consisting of many limestones, nodular limestones and oolitic limestones, Eocene-Liasic <b>M. S. Marco Unit</b> Metapelites, quartzites and metakoses, Carboniferous-Silurian? <b>Longi-Torinella Unit</b> Graded sandstones, clays and silt marls, with intercalations of conglomerates in middle-upper part of the sequence (Piedimonte Trinchia), Lower Oligocene-Middle Eocene Basinal sequences consisting of glauconitic limestones and marls, dolomites, Eocene-lower Liasic continental clastic deposits ("Piedimonte" Auct.), lower Liasic <b>URDO 2. ANZERS UNIT</b> Condensed sequences consisting of many limestones, nodular limestones and oolitic limestones, Eocene-Liasic continental clastic deposits ("Piedimonte" Auct.), lower Liasic Metapelites and metapsammites, Carboniferous-Silurian?	<b>M. GENJARDO AND EQUIVALENT UNITS</b> Units deriving from the deformation of the northern margin of the Sicilian Carbonate Platform and of the southern flank of the Sicilian Basin Glauconitic calcarenites, marls and sandy marls, middle Tortonian-uppermost Oligocene Marly clays, calcarenites and biogenic limestones, glauconitic limestones, graded calcarenites and lime megabreccias, pelagic cherty limestones, radiolarites and siliceous marlstones, Upper Oligocene-Upper Jurassic Pelagic cherty calcarenites and reworked bioclastic limestones with basal intercalations, redopedosed redifossiliferous, carbonate platform arenaceous limestones, Middle Jurassic-Norian <b>FORLAND SEQUENCES AND MAGMATIC ROCKS</b> Foreland sequences crop out in the southern Sicily, in Lampona, Lampedusa, and Maltese Islands, along the Sicilian Channel and Apulian Escarpments, in some cases Sicilian (M. S. Marco) and along the flank of the Carboniferous basins in the Sicily Channel. Generally only Tertiary rocks are reported on land, but Miocene sequences are well known on land and in offshore by exploration drillings, deep-sea and submarine samplings <b>Apulian Escarpment</b> Submarine SE extension of the Apulian Foreland Naticic carbonates (Elastem Gulf of Tarento), Upper Cretaceous <b>Eastern Hyblan Mountains and Malta Escarpment, Messinian</b> Dolomites, gypsum, breccias (Malta Escarpment), Messinian <b>Volcanic, marls and subordinate reef limestones ("Carabon" Fm.), shallow-water dolomites ("M. Canalicchio" Fm.), lower Messinian-upper Tortonian</b> Biogenic calcarenites ("M. Cimici Fm."), lower Tortonian-Upper Miocene Dolomites, gypsum, breccias (Malta Escarpment), Messinian <b>Shallow-water calcarenites, glauconitic marls and marly limestones, Middle-Lower Oligocene-Upper Cretaceous</b> Radiolarite limestones, Upper Cretaceous Basic lava flows and hyaloclastites, Upper Cretaceous <b>Western Hyblan Mountains and Malta Escarpment</b> Biocarbonates ("Pizzolungo" Fm.), Upper-Middle Miocene Pelagic marls and marly limestones with intercalations of volcanic rocks in the uppermost part ("Terra Fm."), Upper Middle Miocene Calcarenites and marls ("Tigau Fm."), Lower Miocene-Oligocene Cherty limestones and subordinate calcarenites ("Eocenico Fm."), marls and many limestones ("Palma Fm."), Eocene-Lower Cretaceous <b>Malta Escarpment and Alto Seamount</b> Basal oolitic calcarenites ("Luchese" Fm.), Tortonian-Triassic Basal reef calcarenites, arenaceous red limestones forming sedimentary dykes into Lower Liasic shallow-water carbonates ("Mio Fm."), upper-middle Liasic Shallow-water limestones ("Sicilian" Fm.), lower Liasic Sandstones and argill. limestones ("Gela Fm."), Upper Triassic <b>Sicily Channel, Maltese and Pelagian Islands</b> The Sicily Channel is a shallow area with bordered crust and post-Miocene basinal structure indicating a continental origin in an early stage Upper Cretaceous Limestone and Green Sands, Maltese Islands; Lower Cretaceous Limestone, Pelagian Islands; and Middle-Liasic Limestone, Maltese Islands and Malta Basin; Lower-Miocene Limestone, Lower Cretaceous Limestone, Maltese Islands (E); Upper Oligocene Reef limestones and calcarenites, Lampedusa Island, Tortonian; calcarenites (Terme Bark), Miocene? Deep-water limestones with chert nodules, Namlessi-Bark, Malta Basin, lowermost Oligocene? Upper Oligocene-Upper Miocene Shallow-water dolomite limestones, Lampona Island, Upper Eocene?; calcarenite limestones with Dolocornaline and Lepidocornaline, Terme Bark, Eocene "Sagittario" type pelagic limestones and clays, Sicily Channel and Malta Escarpment, Messinian-Cenozoic
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<b>Monte Garigliano Unit</b> Gravel and granodiorites, Permian-Carboniferous Gneisses, amphibolites and migmatites <b>Polla-Copanello Unit (Formazione dorica-longirota)</b> Radiolarites 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 <b>Castagna Unit</b> Medium-high grade gneisses and supracrustalites, amphibolites, marbles, pelagites, mafic HP/LT Alpine overprint <b>Bagni Unit</b> The unit is represented by sequences showing Austroalpine affinity <b>M. Rose, M. Barro, Pizzo Mondello and equivalent Units</b> Glauconitic calcarenites, marls and sandy marls, middle-lower Tortonian-uppermost Oligocene Marly clays, calcarenites and biogenic limestones, glauconitic limestones, graded calcarenites and megabreccias; pelagic cherty limestones, radiolarites and siliceous marlstones, Upper Oligocene-Upper Jurassic <b>Malvino and Giglioglio Units</b> The unit is correlated with the Alpe ophiolite-bearing nappes of Ligurian affinity (e.g. the Pizzo Ansoa Nappe) Naticic carbonates (Elastem Gulf of Tarento), Upper Cretaceous <b>Castellan Hyblan Mountains and Malta Escarpment, Messinian</b> Dolomites, gypsum, breccias (Malta Escarpment), Messinian Volcanic, marls and subordinate reef limestones ("Carabon" Fm.), shallow-water dolomites ("M. Canalicchio" Fm.), lower Messinian-upper Tortonian Biogenic calcarenites ("M. 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Calogero Units</b> Glauconitic calcarenites, marls and sandy marls, middle-lower Tortonian-uppermost Oligocene <b>TRAPANESE AND SACCENTE UNITS</b> Carbonate units deriving from the deformation of the Trapanese and Saccente Triassic-Liasic carbonate platform which was dissected and eroded during lower-Miocene and involved in the orogenic transport starting from Middle/Upper Miocene <b>Inici-Kumeta and Maggiorano-S. Calogero Units</b> Glauconitic calcarenites, marls and sandy marls, middle-lower Tortonian-uppermost Oligocene <b>M. Rose, M. 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Progettista: Ing. Paolo Pierangeli

**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**

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PROGETTO PRELIMINARE**

**ELABORATO TRACCIATO CAVIDOTTO TERRESTRE SU CARTA GEOLOGICA**

**SCALA: 1:300000** **FORMATO: A1**

**Tag.20**

00	18/05/2023	PRIMA EMISSIONE	TECCOCONSULT	NINFEA RINNOVABILI	NINFEA RINNOVABILI
REV. DATA		DESCRIZIONE/REVISIONE	REDAITO	VERIFICA	APPROVAZIONE

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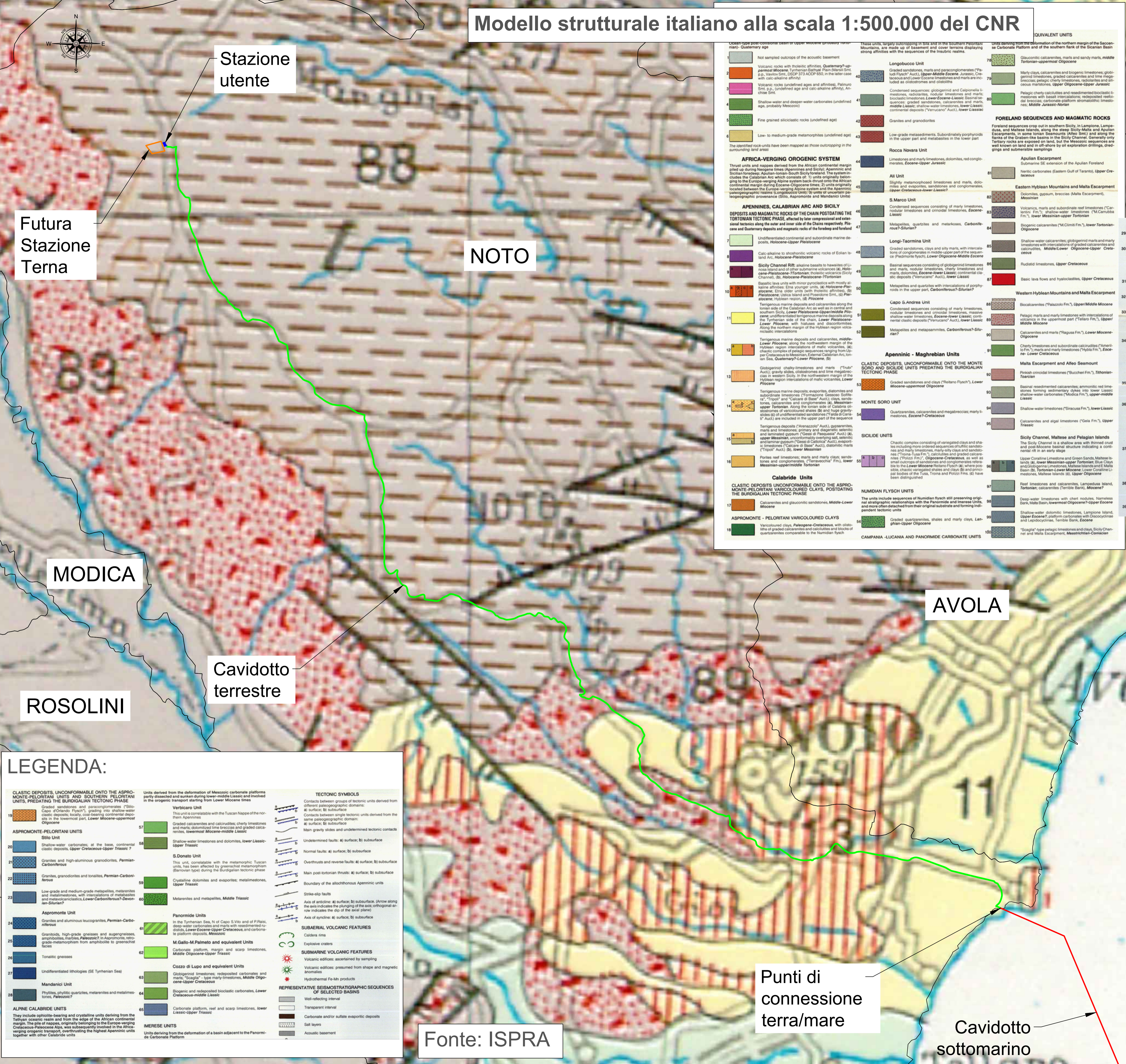
Fonte: ISPRA

# Modello strutturale italiano alla scala 1:500.000 del CNR

SISTEMA GEODETICO DI RIFERIMENTO

WGS84 / UTM ZONA 33 NORD

EPSG CODE: 32633



UNIT	DESCRIPTION	UNIT	DESCRIPTION
1	Not sampled outcrops of the acoustic basement	76	Glauconitic calcarenites, marls and sandy marls, middle Eocene-uppermost Oligocene
2	Volcanic rocks with rhyolitic affinities, Quaternary-Upper Pleistocene (Tympanian Basin, Plan-Matrucci, p. 2, Vado S. G. 271 ACP, etc.), the water case with calc-alkaline affinity	77	Marly clays, calcarenites and biogenic limestones, globigerina limestones, graded calcareous sand and silty marls, cherty limestones, radiolites and siliceous marlstones, Upper Oligocene-Upper Jurassic
3	Volcanic rocks (undifferentiated ages and affinities, Pantano S. G. 272, undifferentiated age and calc-alkaline affinity, Aniche S. G. 273)	78	Pelagic cherty calcarenites and reworked bioclastic limestones with basal intercalations, redeposited radiolites, carbonaceous 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)		

### LEGENDA:

**CLASTIC DEPOSITS, UNCONFORMABLE ONTO THE ASPROMONTE-PELORITAN UNITS AND SOUTHERN PELORITAN UNITS, PRE-DATING THE BURDIGALIAN TECTONIC PHASE**

**ASPRONTE - PELORITAN UNITS**

**Sito Unit**

Shallow-water carbonates, at the base, continental clastic deposits, Upper Cretaceous-Upper Triassic

**S. Donato Unit**

Granites and high-aluminous granitoides, Permian-Carboniferous

Granites, granitoides and tonalites, Permian-Carboniferous

Low-grade and medium-grade metapelites, metarhyolites and metagabbros, with intercalations of metabasites and metacarbonates, Lower Carboniferous-Devonian-Silurian

**Aspromonte Unit**

Granites and aluminous leucogranites, Permian-Carboniferous

Granitoides, high-grade gneisses and augen-gneisses, amphibolites, metabasites, Paleozoic

Tonalitic gneisses

Undifferentiated lithologies (SE Tympanian Sea)

**Mandacini Unit**

Phyllites, phyllitic quartzites, metarhyolites and metapelites, Paleozoic

**ALPINE CALABRIDE UNITS**

They include ophiolite-bearing and crystalline units deriving from the Tethyan oceanic realm and from the edge of the African continental margin. The units are unconformably overlain by the Africa-verging Cretaceous-Paleocene-Alba, which was subsequently involved in the Africa-verging orogenic belt overprinting the highest Apenninic units together with other Calabride units

**TECTONIC SYMBOLS**

Contacts between groups of tectonic units derived from different paleogeographic domains

Contacts between single tectonic units derived from the same paleogeographic domain:

- a) surface; b) subsurface

Normal faults: a) surface; b) subsurface

Overthrusts and reverse faults: a) surface; b) subsurface

Main post-torbanian thrusts: a) surface; b) subsurface

Boundary of the allochthonous Apenninic units

Strike-slip faults

Axis of anticline: a) surface; b) subsurface (Arrow along the axis indicates the plunging of the axis; orthogonal arrow indicates the dip of the axial plane)

Axis of syncline: a) surface; b) subsurface

**SUBAERIAL VOLCANIC FEATURES**

Caldera rims

Explosive craters

**SUBMARINE VOLCANIC FEATURES**

Volcanic edifices: ascertained by sampling

Volcanic edifices: presumed from shape and magnetic anomalies

Hydrothermal Fe-Mn products

**REPRESENTATIVE SEISMOSTRATIGRAPHIC SEQUENCES OF SELECTED BASINS**

Well-reflecting interval

Transparent interval

Carbonate and/or sulfate evaporitic deposits

Gas layers

Acoustic basement

### LEGENDA:

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

**THICKNESS OF THE PLEISTOCENE-QUATERNARY SEQUENCE (ABOVE SEISMIC HORIZON)**

Tymphanian Sea, Gulf of Taranto-Ionian Sea, Gela Basin (in some areas, thickness of the undifferentiated sequence (Two subhorizons) overlying allochthonous chaotic bodies or of the acoustic basement. Red figures and contour lines are isochronous in seconds (2-way travel time))

**ISOBATHS OF THE BASE OF PLEISTOCENE**

Adriatic - Bradanic foredeep, Sicily Channel (black figures and contour lines are isobaths in meters of the base of Pleistocene)

**ISOBATHS OF PRE-PLISTOCENE SAMPLES IN MARINE AREAS WITH MAPPED PLEISTOCENE SOLETS, WITH APPROPRIATE COLOR AND FIGURE OF THE LEGEND**

**DSDP AND ODP SITES**

Borehole number

Thickness in meters

**RADIOMETRIC AGE (my)**

SEA BOTTOM

K/A: field-coded samples

**LAND AREA**

Starting - climax of the volcanic activity (in italic type ages obtained by geological correlations. Red figures are referred to active volcanoes)

Fonte: ISPRA

PROPRONTE

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PROGETTAZIONE

Progettista: Ing. Paolo Pierangeli

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**BayWa.r.e.**

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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  
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ELABORATO

TRACCIATO CAVIDOTTO TERRESTRE SU CARTA GEOLOGICA

ELABORATO

TRACCIATO CAVIDOTTO TERRESTRE SU CARTA GEOLOGICA

SCALA: 1:40000

FORMATO: A1

CODICE ELABORATO

**Tav.20**

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REV. DATA		DESCRIZIONE REVISIONE	REDATTO	VERIFICA	APPROVAZIONE

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