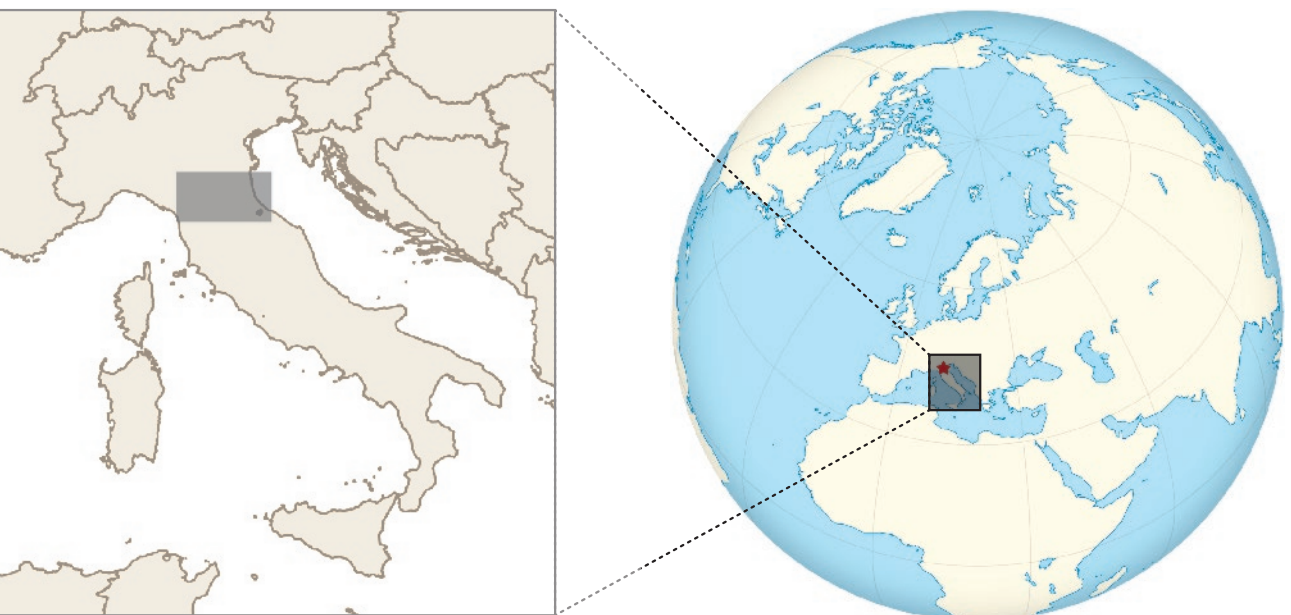


EKCNA



Continental and coastal deposits from the Quaternary

Conoids and alluvial terraces

Ligurian Domain

The Ligurian Domain is referred to the Ligurian-Piedmont Oceanic Basin. It is subdivided in internal and external subdomains, the latter close to the Subligurian Domain.

Internal Ligurian Domain

Ophiolitic terms of oceanic crust, as serpentinites, gabbros and basalts, and the respective sedimentary cover, as ophiolitic breccias, cherts, limestones, shales and turbiditic siliclastic sandstones. Middle Jurassic to the Paleocene.

External Ligurian Domain - Internal succession

Classical Helminthoides calcareous flysch deposits, containing ophiolitic breccias and huge ophiolitic olistostromes. Cretaceous to Middle Eocene in age.

External Ligurian Domain - External succession

Ophiolitic breccias, pelagic limestones and shales, turbidite calcarenites, marlstones and marly limestones. Cretaceous to Middle Eocene in age.

Subligurian Domain

Transitional domain, between the continental Apulia microplate and the oceanic Ligurian Basin.

Shales, limestones and volcanic-bearing turbidite sandstones and conglomerates.

Paleocene to Oligocene in age.

Tuscan Domain

The continental margin of the Apulia microplate.

Cervarola Unit

Shales, limestones and volcanic-bearing turbidite sandstones and conglomerates. Paleocene to Oligocene.

Mt. Modino Unit

Turbiditic sediments deposited during the collisional and post-collisional stages of the Northern Apennines fold-and-thrust belt. Age: middle Eocene-lower Miocene.

Rentella Unit

Pelagic and emipelagic sediments transitioning to foredeep turbiditic sediments. Upper Oligocene-lower Miocene.

Tuscan Nappe

Dolostones, limestones, shales and turbiditic sandstones, non- or only slightly metamorphosed. Late Triassic-earliest Miocene.

Tuscan Metamorphic Unit

Tectonic unit derived from severe deformation and metamorphism of part of the Apulia microplate. Hercynian basement (Cambrian? to Devonian), a meta-siliclastic post-Hercynian succession (late Visian-Permian), a meta-siliclastic-carbonate Group (middle-late Triassic) and an upper carbonate-siliclastic succession (late Triassic - ? earliest Miocene).

Umbro-Marchean-Romagnan Domain

The outermost of the orogenic wedge. They lie below the Tuscan units, are less deformed and non-metamorphic. They consist mainly of calcareous- marly sediments, hemipelagic marls, siliclastic turbidites. Late Triassic-early Messinian.

Calcareous-marly succession. Cretaceous-Miocene

Siliclastic succession of intra-Apennine minor basins and external basins.

Siliclastic succession of internal basins.

Apenninic Epiligurian Succession (pre-evaporitic)

Sedimentary succession that non-conformably covers only the Ligurian Units.

Mainly breccia and turbiditic sandstones deposits of a shallow marine environment.

Oligocene-late Serravalleian.

Miocene-Pleistocene marine deposits of the Tirrenian margin

The deposits mark the Miocene-Pleistocene transgressive-regressive cycles, formed by. They infill typical graben-type basins.

Shallow marine fossiliferous clays, sandstones, conglomerates and bioclastic limestones

Syn- and post-evaporitic Miocene to Pleistocene deposits of the Adriatic margin

Gypsum and clay

Messinian Mediterranean evaporitic phase.

Post-evaporitic: reworked gypsum, gypsarenite, dolomitic limestones, bituminous clays.

Post-evaporitic: conglomerates, sandstones, clays, breccias.

Pliocene-Pleistocene.

Thrust-slices

Thrust-slices with Ligurian affinity

Thrust-slices from arenaceous units

Shear zones and thrust slices with Tuscan affinity

Shear zones with cataclastic dolomite, limestone, gypsum and anhydrite, shales, amphibolites, quartzites.

Shear zones and thrust-slices from Fumalbo Clays and Marmoreto Marls

LEGEND

CORE ZONE

BUFFER ZONE

Fault

Tectonic contact

WORLD GEODETIC SYSTEM 1984
(WGS84, ALSO CALLED EPSG: 4326)

DATA SOURCES
Topography: EU-DEM - GEMS/Copernicus
Geology: GEOLOGIC SURVEY, REGIONE EMILIA-ROMAGNA

SCALE 1:200,000

