

Eastern Sicily Field Trip Proposal

Centuripe Thrust Top Basin and Monte Judica thrust system.

The outcrops lie c. 25 km West of Catania, accessed via the A19 motorway

Topics:

Centuripe Basin:

Basinal clays and brecciated clays

Messinian “evaporitic carbonate” (Calcare di Base)

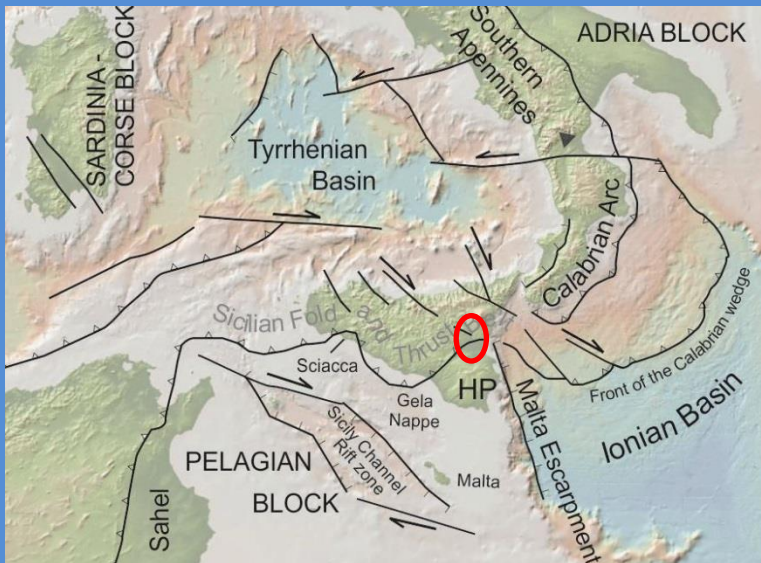
Pliocene shallow water sandstones – growth strata on thrust top basin

Mt. Judica area

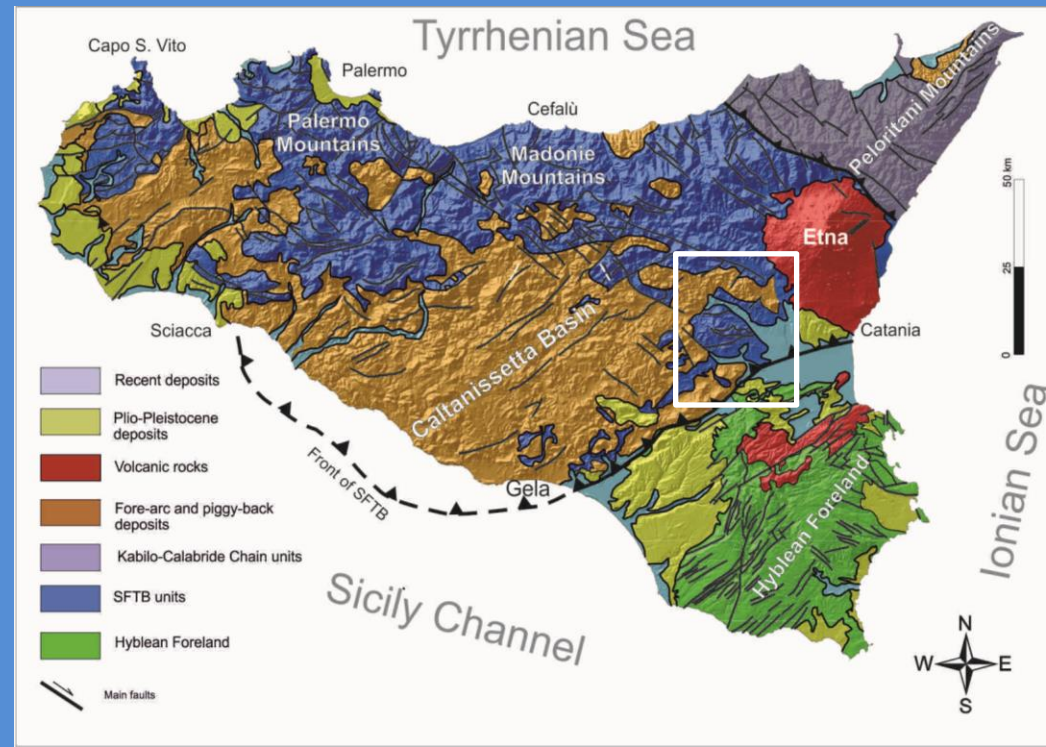
Basinal Mesozoic facies into Tertiary

Tectonic structures in limestones and radiolarites

Glauconitic Miocene sandstones



Position of the outcrops in the Sicilian Fold and Thrust Belt



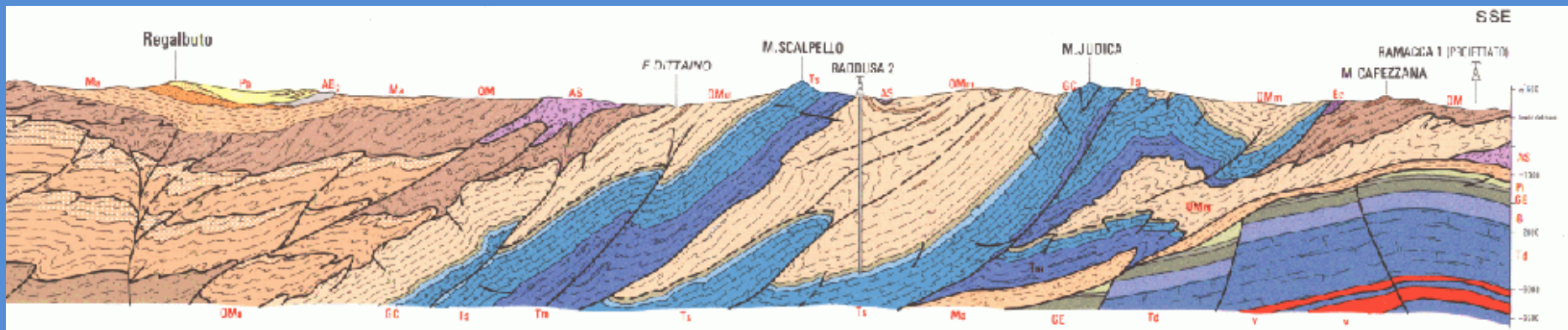
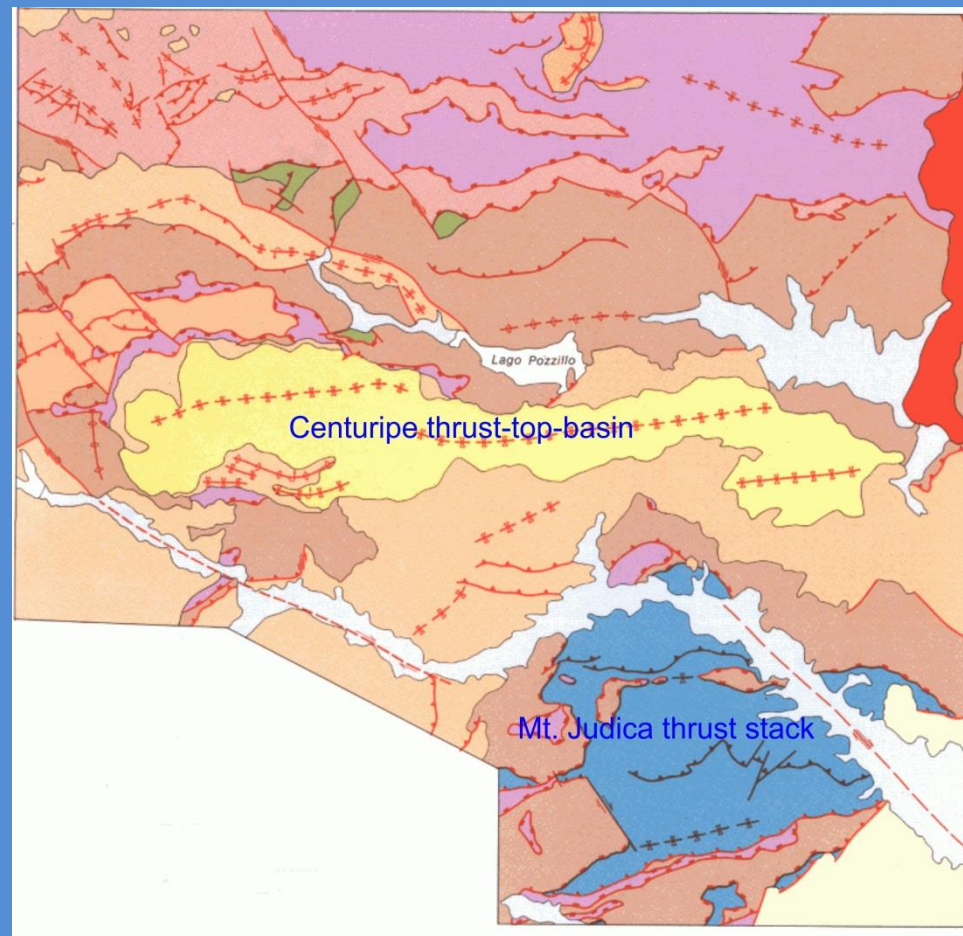
Structural outlines

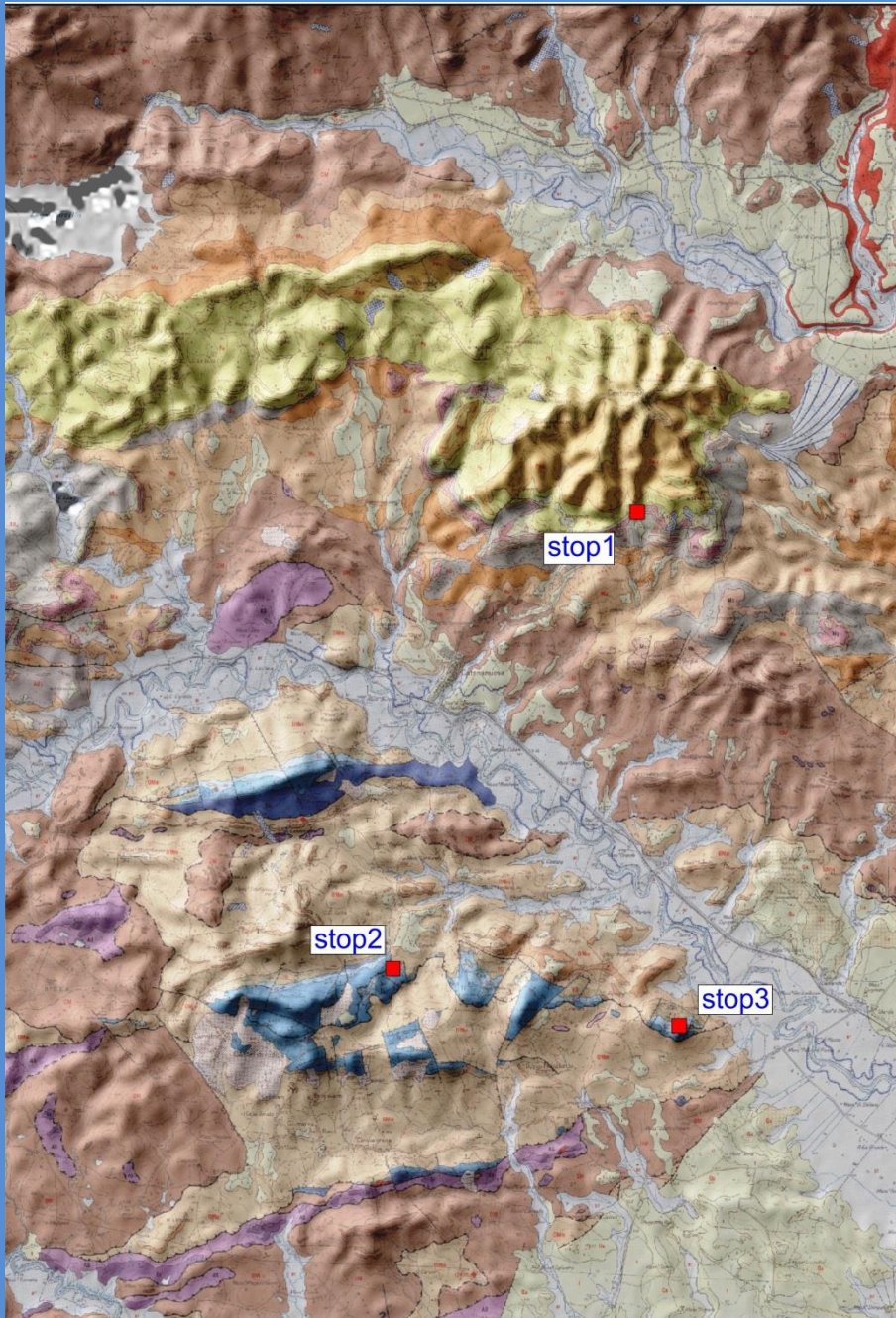
Centuripe Basin

The Centuripe is one of several thrust-top basins of central Sicily. It is characterized by a shallowing upwards Tortonian to Pliocene sequence with clear growth folding shown by the top sandstones. The outcrops provide an introduction to this thrust-top succession.

Mt. Judica area

The outcrops lie within imbricate thrust slices (the Monte Judica thrust system) that form part of the collisional front. These units have been emplaced over Lower Pliocene and older sediments of the Hyblean foreland. These latter has reached by wells (e.g. Ramacca-1) and outcrop to the south-east.





Goals

Centuripe Basin – Stop1

Basinal clays and brecciated clays
Messinian “evaporitic carbonate” (Calcare di Base)
Pliocene shallow water sandstones – growth strata on thrust top basin
Fracture pattern

Mt. Judica thrust stack- Stop2

Hammering the fractured basinal Mesozoic succession and its Miocene cover (glaucconitic sandstones)

Mt. Judica thrust stack- Stop3

Exploring the Mt. Judica Unit deformation style:

- Fold interference
- Joints
- Structural rotations
- Panoramic view of the Sicilian Chain-Foredeep-Foreland system