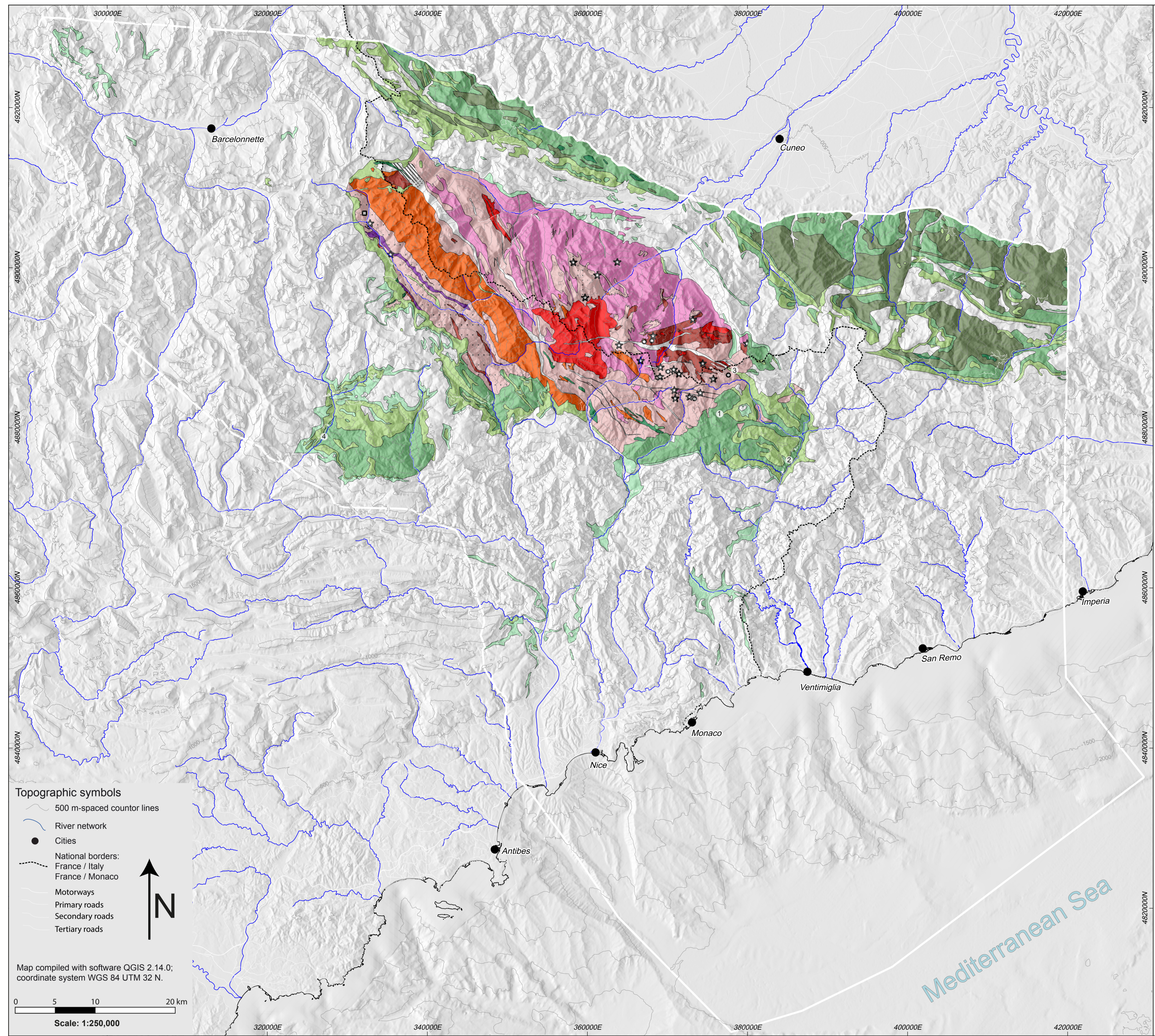


Event 4 -- Post-Variscan lithospheric thinning (299 - 201 Ma)



Legend of tectonic and petrogenetic events

4 -- Post-Variscan lithospheric thinning

Permian to Late Triassic (299 - 201 Ma)

- 4-1 Marlstones, dolostones, gypsum-anhydrite evaporites, and dissolution evaporitic breccias (Late Triassic, transgressive and regressive cycles)
- 4-2 Evaporites, dolostones, and limestones (Middle Triassic, carbonate platforms and basins)
- 4-3 Transgressive quartz-conglomerates, quartzarenites, and pelites (Early Triassic, thinned continental margin)
- 4-4 Conglomerates, sandstones, arkose sandstones, pelites, and schists (Permian, intra-continental basins)
- 4-5 Porphyroids (Permian, intra-continental basins)

3 -- Erosion / dismantling of the Variscan mountain chain

Late Carboniferous (320 - 299 Ma)

- 3-1 Mica-bearing sandstones, conglomerates, quartzites, and carbonaceous schists (late Carboniferous, immature continental basins)

2 -- Variscan collision

Late Devonian to early Carboniferous (375 - 320 Ma)

- 2-1 Granites
- 2-2 Amphibolites
- 2-3 Anatexites with cordierite
- 2-4 Meta-granodiorites
- 2-5 Migmatitic orthogneisses
- 2-6 a. Migmatitic paragneisses; b. Migmatitic meta-greywackes

1 -- Variscan subduction

Early Devonian (400 - 375 Ma)

- 1-1 Serpentinites
- 1-2 Eclogites
- 1-3 Marbles

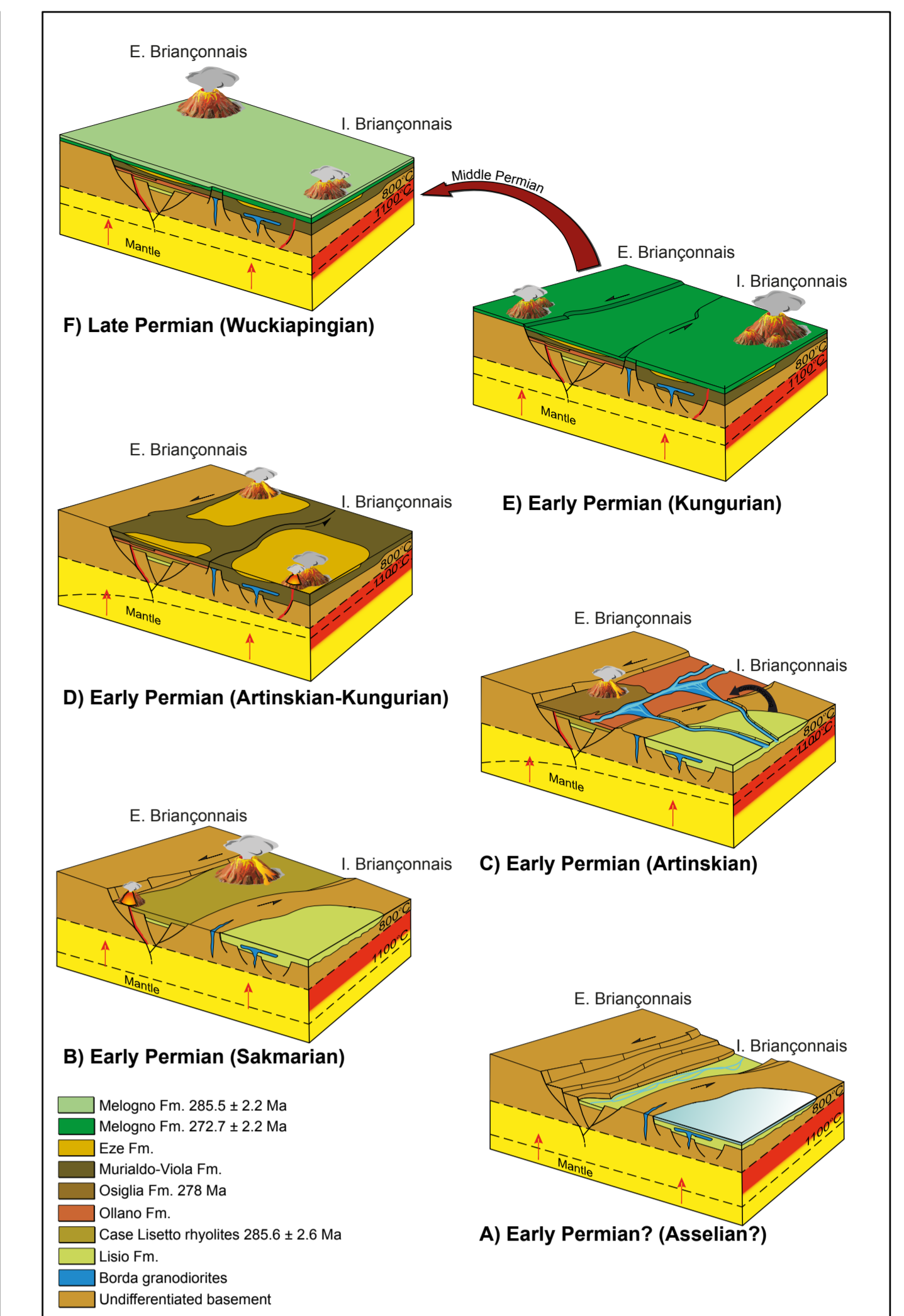


Fig. 5 - Simplified sketch of the palaeoenvironmental-depositional settings for the Palaeozoic succession of the Ligurian Alps (modified from Decarlis et al., 2013).

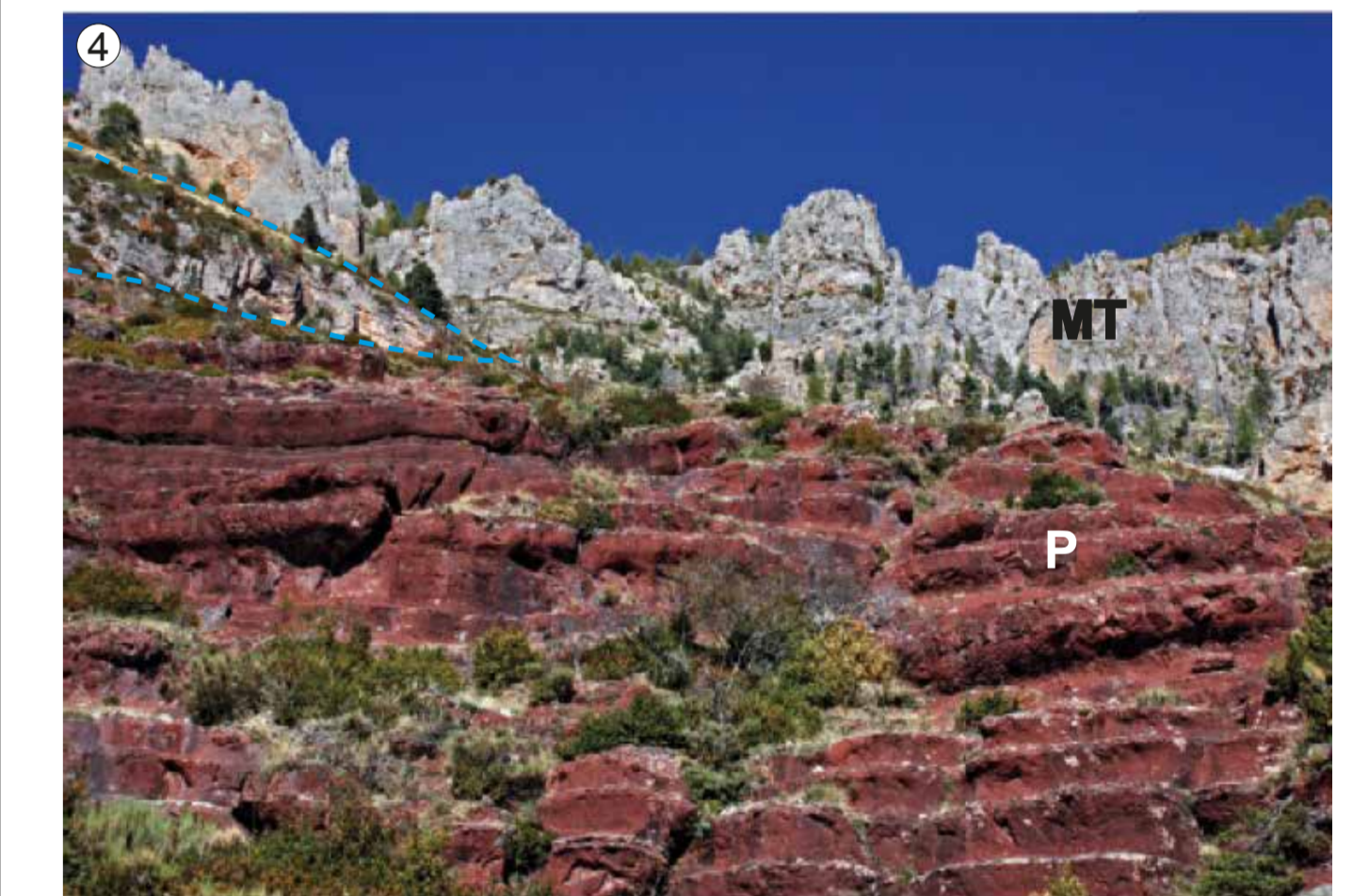


Fig. 4 - Middle Triassic (MT) carbonate sediments overlying Lower Triassic quartzarenites (blue lines) and Permian arenites (P); Gorges de Daluis. Event 4.

Localisation of the area of interest (red polygon) within Europe and across national (France, Italy, and Monaco), regional, and provincial borders.

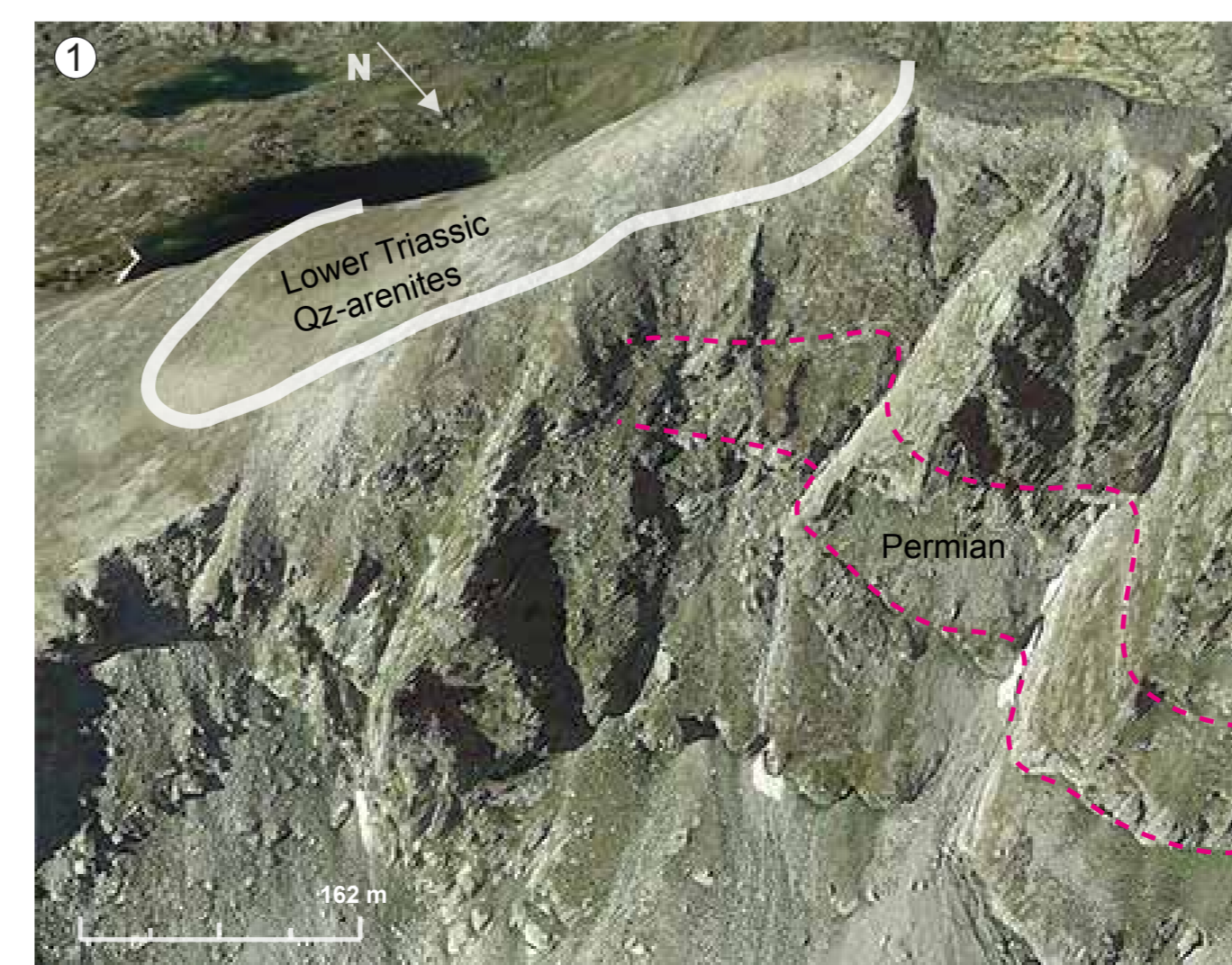
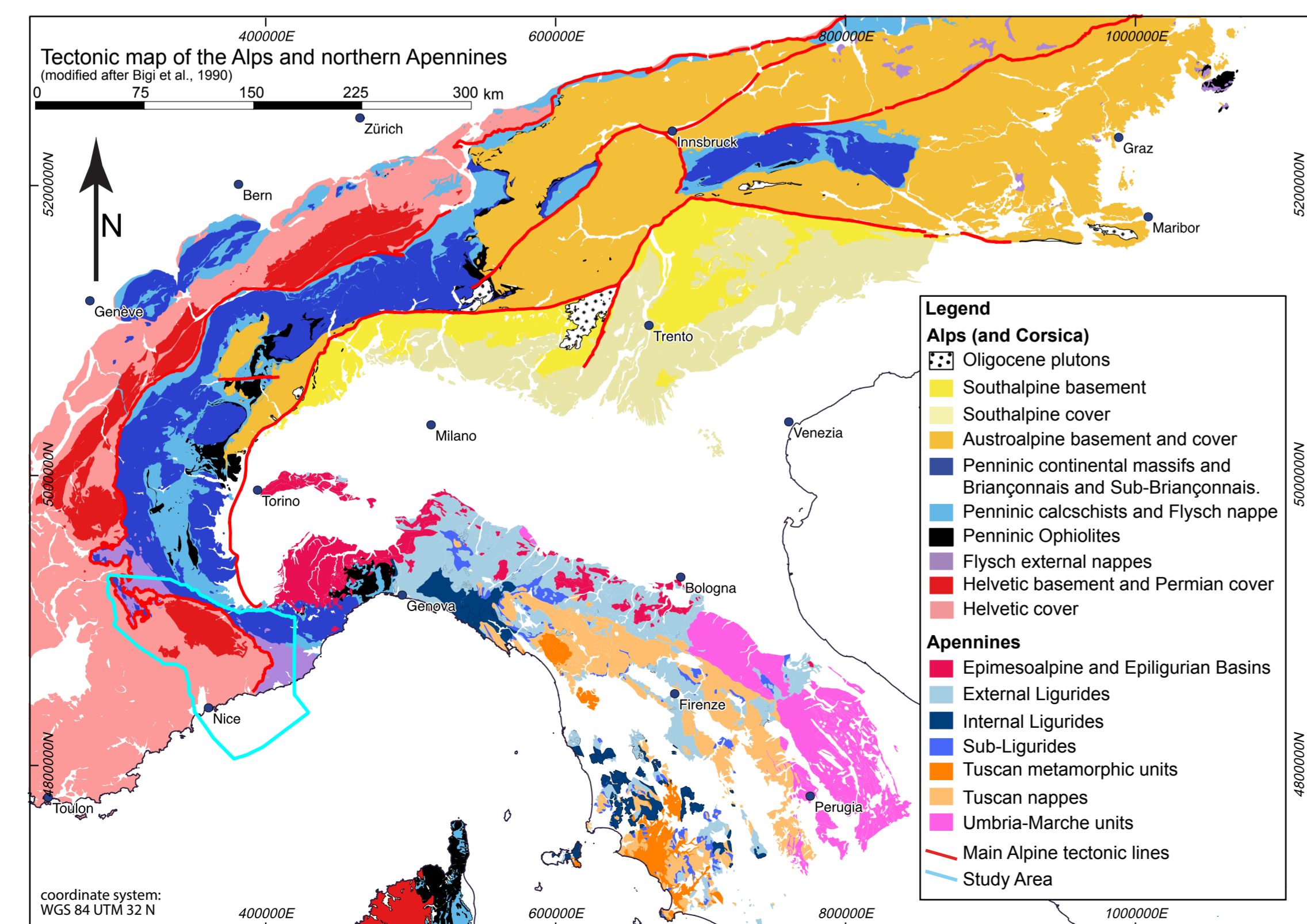
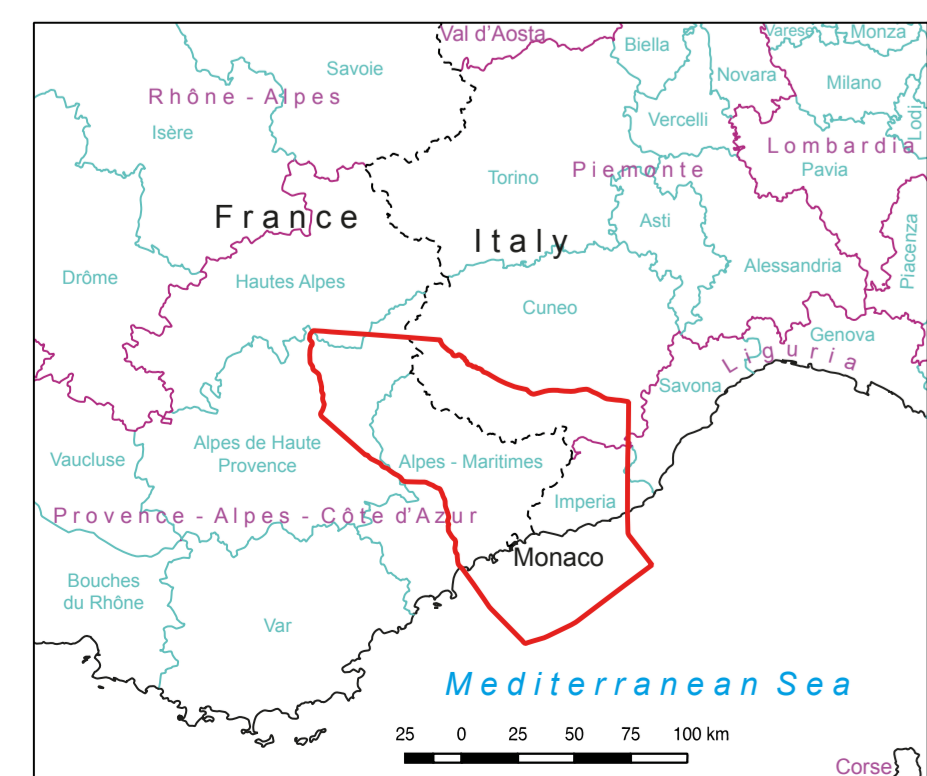
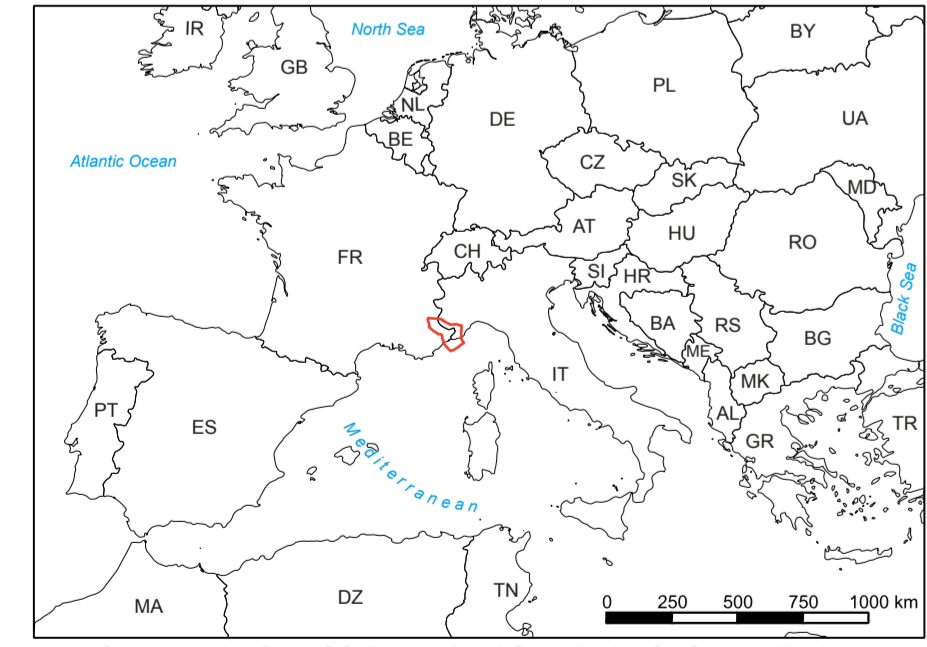


Fig. 1 - Unconformity (white thick line) between Permian sediments and the overlying Lower Triassic quartzarenites; Mont Bégo, Vallée de la Roya. Westward bird eye Google Earth image. Event 4.

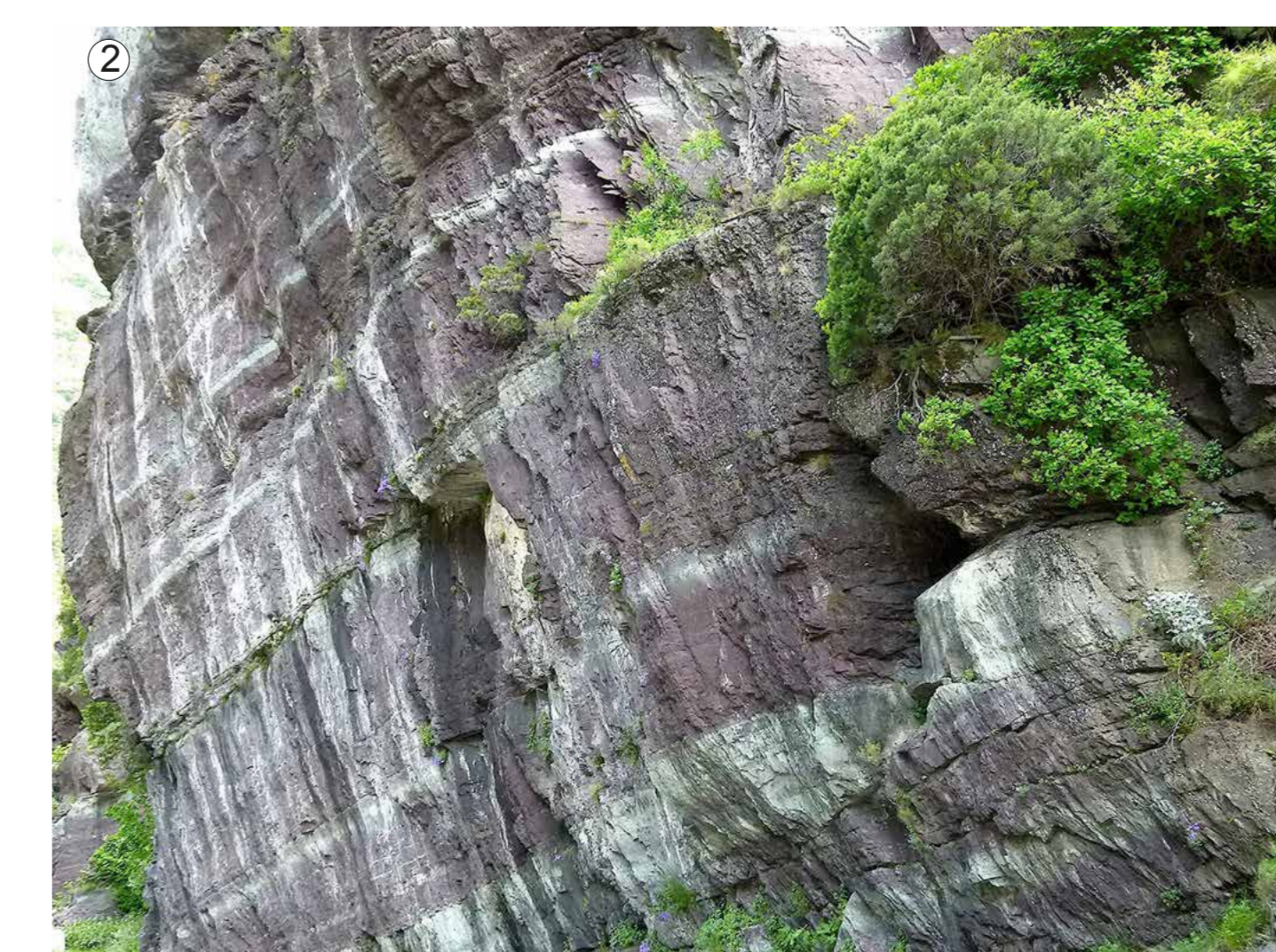


Fig. 2 - The well stratified sequence of continental clastic Permian sediments below the unconformity is cross-cut by a sub-vertical pervasive cleavage; Vallée de la Roya. Event 4.

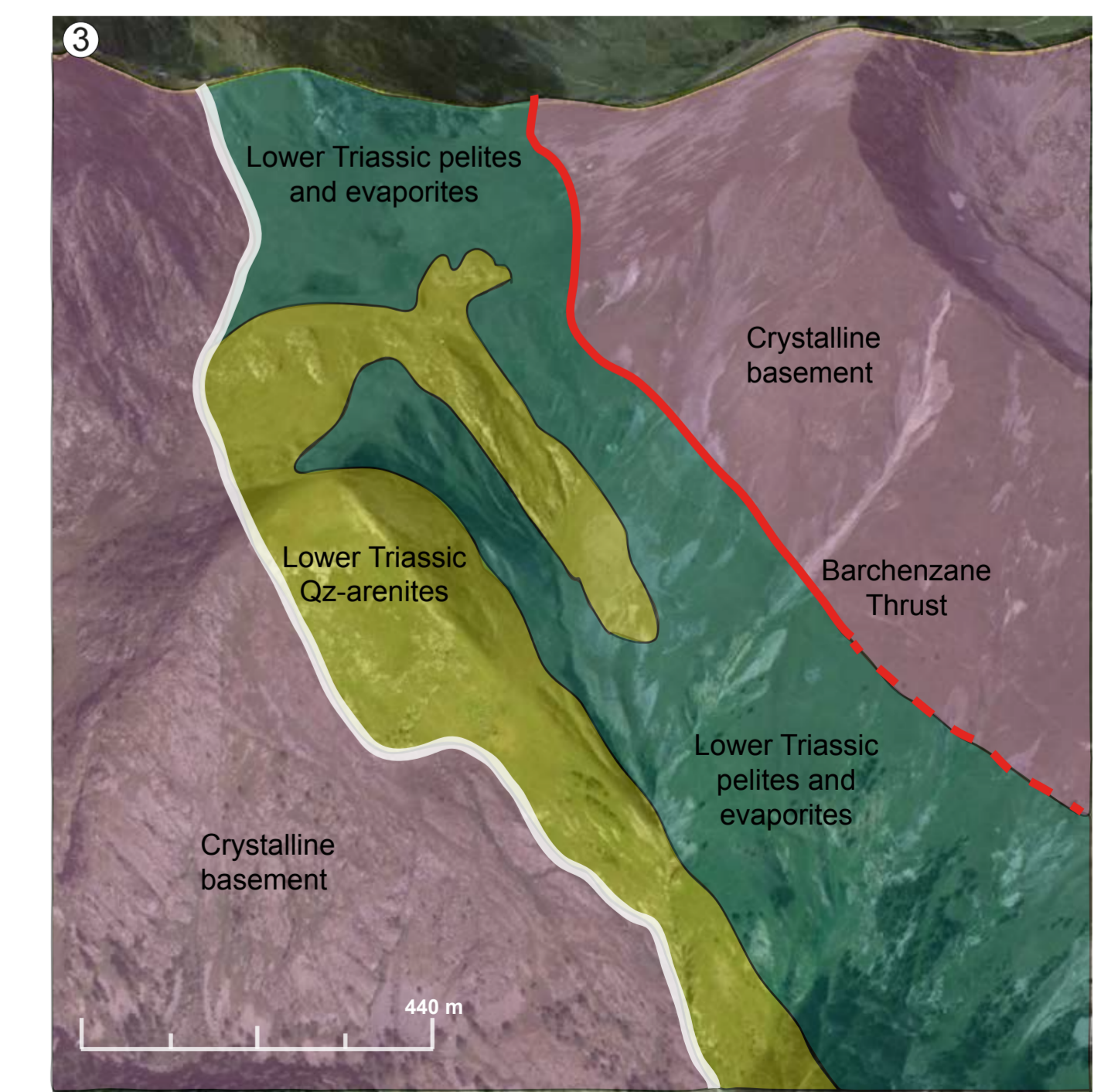


Fig. 3 - Crystalline basement (Ilac) - Lower Triassic (yellow and green) unconformity (white line) and Barchenane thrust fault (red line), Colle del Sabbione, Entraque. Google Earth image. Event 4.