

17 Pre - Palaeosols across the Northern Apennines: insights into the Late Quaternary dynamics of an active orogen.

Excursion Leaders: Anna Andreetta (Univ Firenze), Marco Benvenuti (Univ. Firenze), Daniele Maestrelli (CNR, IGG, Firenze), Stefano Carnicelli (Univ Firenze) e Federico Sani (Univ Firenze)

Proposed Excursion Dates: From Sunday July 9th to Thursday July 12th 2023

Draft Itinerary: Firenze – Reggio Emilia – Firenze – Baratti – Firenze

Definitive cost per head: € 700

Accommodation arrangements: Hotel

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Description

The Northern Apennines chain is an active orogen developed in a continental collisional setting. During the Quaternary active tectonics, climate fluctuations, and sea-level change left a clear imprinting on the regional geomorphology and the surface geology. Examination of stratigraphically correlated palaeosols within alluvial and coastal clastic successions occurring on both sides of the chain, i.e. on the active front (Northern slope) and the back-arc area (Tuscany), provide fine detail to reconstructions of the orogen dynamic during the Quaternary. Examples of dated and correlated palaeosols within their, morpho-structural, stratigraphic and sedimentological context, will be presented and discussed on the Northern side of the chain (Ghiardo plateau, in picture) and in the coastal Tuscany (Baratti gulf).



Flatirons on the outcropping Pede-Apennine Thrust Front (PTF) frame deformed Late Pleistocene terrace threads (left); Upper Pleistocene coastal deposits with intervening palaeosols at Baratti (right)