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RESULTS & INTERPRETATION

Tectonic history of the Pese-Apennine thrust belt (adapted from Gunderson et al., 2014). The study section is located in the lowermost Pese-Apennine thrust sheet, where the boundary between external and internal deformation is best exposed. The section consists of unconsolidated fluvial deposits and a glacial-interglacial sequence of lacustrine-marine sediments, with the top of the oldest marine deposits (1e) strikingly exposed in the study section. The section is divided into 30 subunits, each of which is characterized by a distinct lithologic sequence (mud-soil-gravel; soil-loess-gravel) (modified from Gunderson et al., 2018, Tectonics).

IMPLICATIONS

Exogenic vs. Autogenic Signal Preservation

Despite autogenic processes-driven lithology, Milankovitch-scale exogenic climate signal survived autogenic "shredding" and is encoded in the rock magnetic properties of the sediments in the study section. In contrast, lithologic changes in deposits directly above the study section are due to glacial-interglacial cycling between 550 ka and 150 ka (unit 19) limited deposition) constrained by 

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