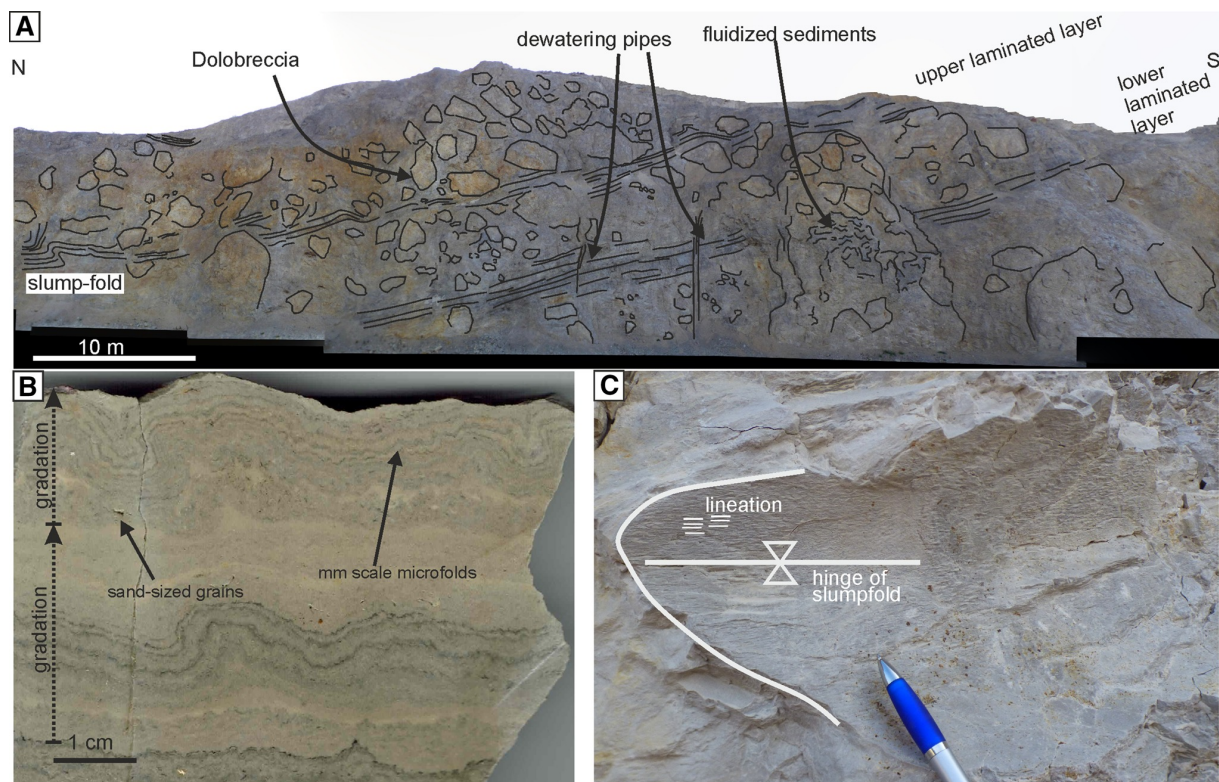


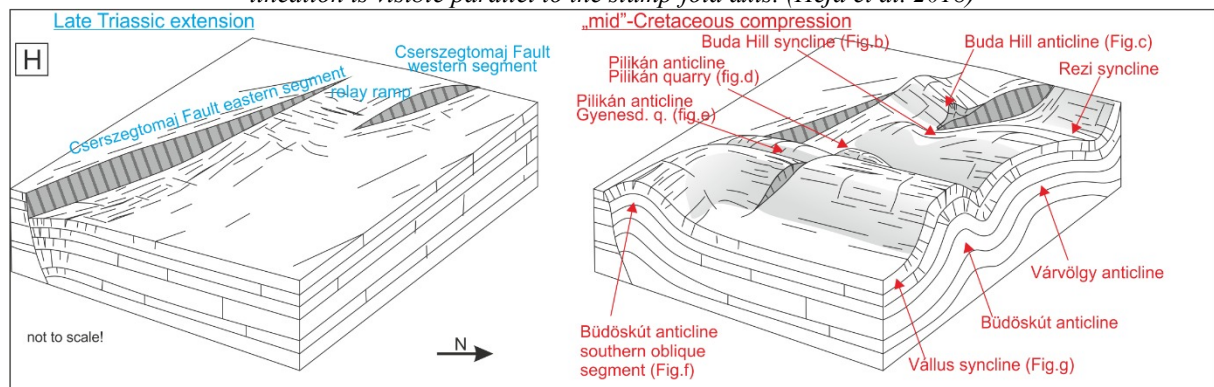
Inheritance of pre-orogenic normal faults in a Cretaceous thrust and fold belt + geomorphologic evolution of the Late Miocene - Pliocene volcanic field on the Balaton Highland

The field trip will focus on two topics: 1) the sedimentologic characteristics of Late Triassic pre-orogenic basins and the behavior of synsedimentary faults during the Cretaceous orogeny; 2) geomorphology and surface evolution of a young volcanic field on the Balaton Highland.

Large quarries exposing talus breccia, slump folds and dewatering pipes connected to basin-bounding normal faults will be visited during the first part of the excursion, then we will turn the focus on the style of orogenic shortening and the influence of the pre-existing structures. Formation of map-scale salients determined by the pre-orogenic faults will be discussed.



Eastern wall of the Csókakő quarry (L1). **a** Dolomitic breccia and two laminated dolomite intercalations. Fluidized zones cross cut the dolomite breccia and layers; **b** cm-scale slump folds with mm scale microfolds; **c** lineation is visible parallel to the slump-fold axis. (Héja et al. 2018)



3D block model on the influence of pre-orogenic normal faults to the geometry of orogenic folding (Héja et al. 2019 in prep)

The main panoramic highlight of the excursion will be the spectacular view on the perfectly shaped volcanos of the Balaton Highland. We will set focus on their geodynamic background, petrology, age, connection to the surrounding co-eval sediments and landscape evolution.



View on the volcanic field from the top of Hegyestű volcano. Lake Balaton is in the left background.

ABOUT

- Day-long excursion
- Transport from Hévíz to Hévíz by midi-bus
- **Costs: 35 Eur**
- Included: transportation, geological guide, picnic lunch with local, domestic food and superb panorama on Lake Balaton, surprise at the end 😊