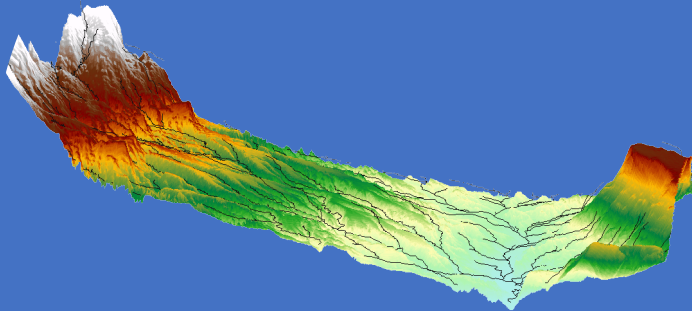




Sharing not
permitted

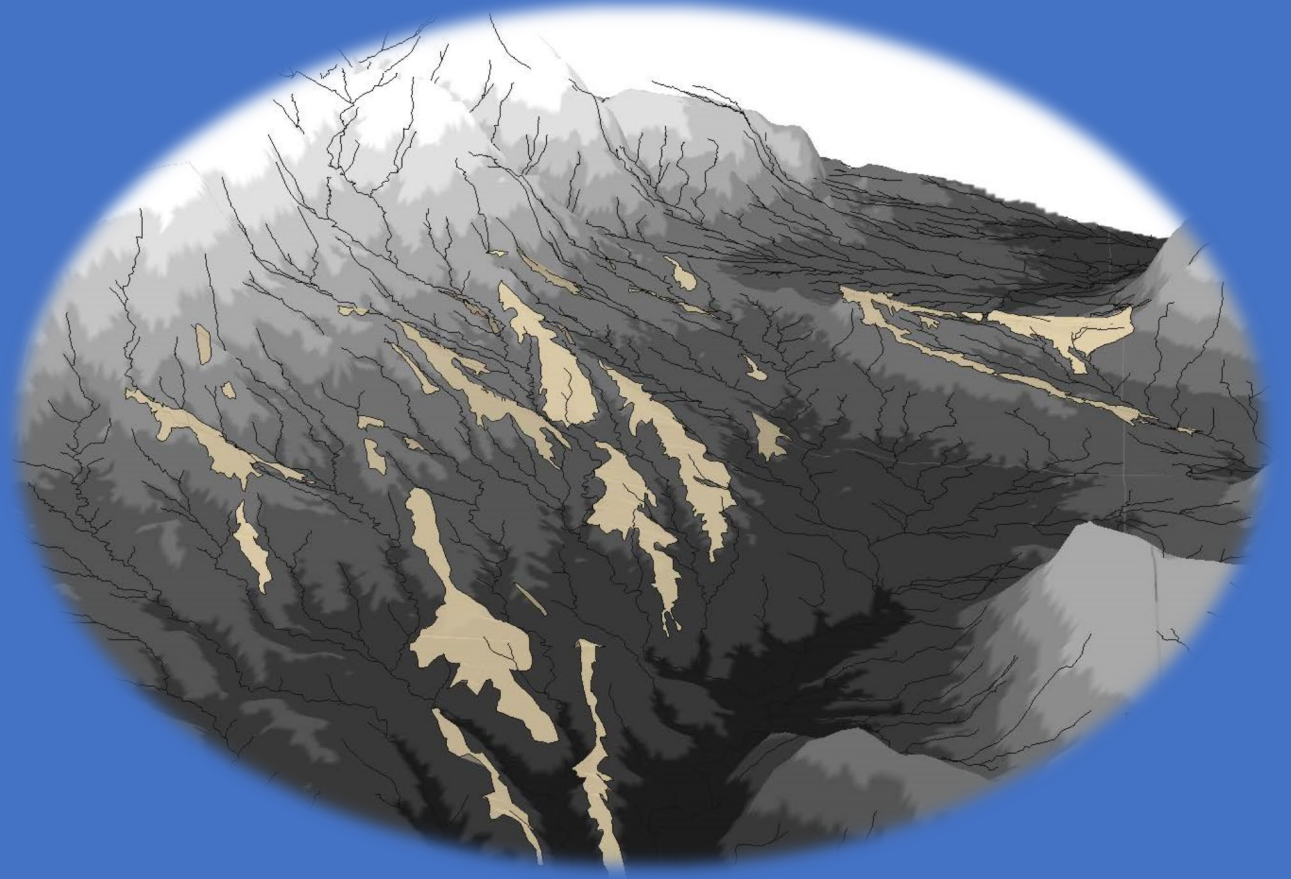
The influence of structural control in erosion-sedimentation dynamics and morphology of a badland topography

Selçuk Aksay*, J.M. Schoorl, A. Veldkamp, T. Demir, S. Aytaç, D. Maddy



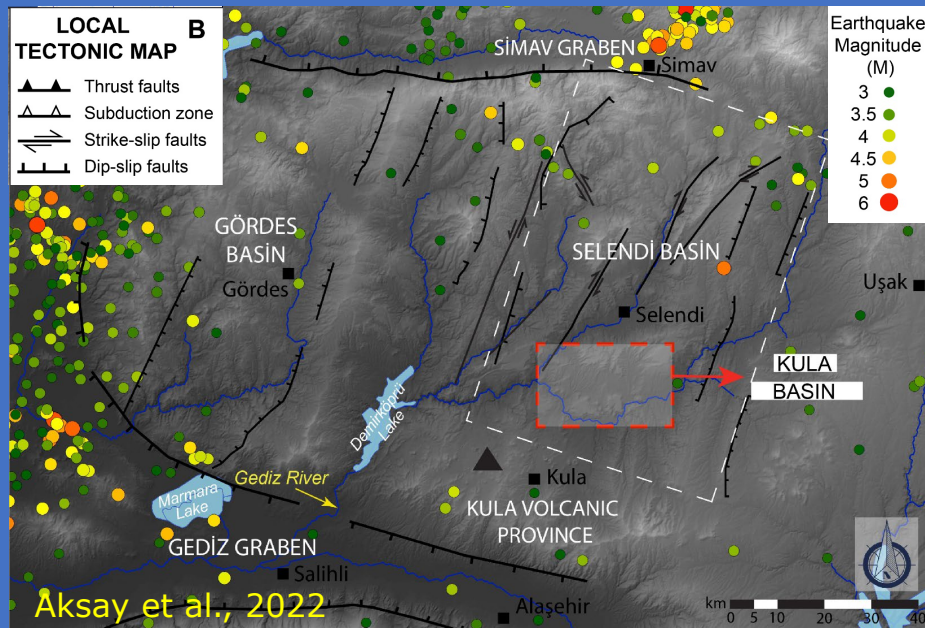
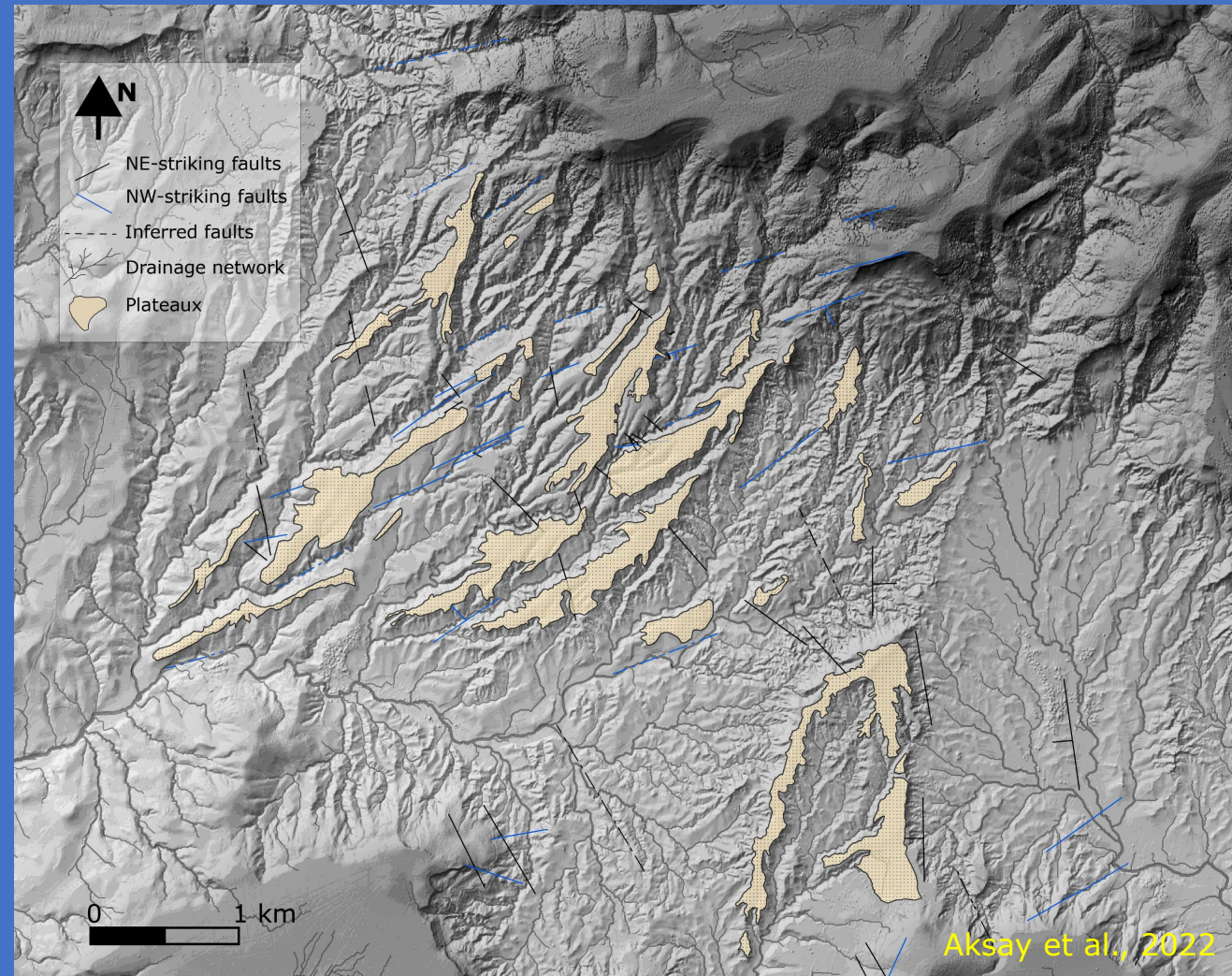
Outline

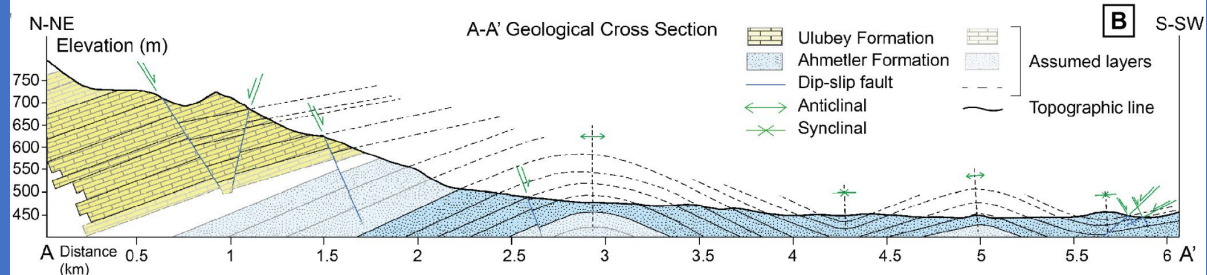
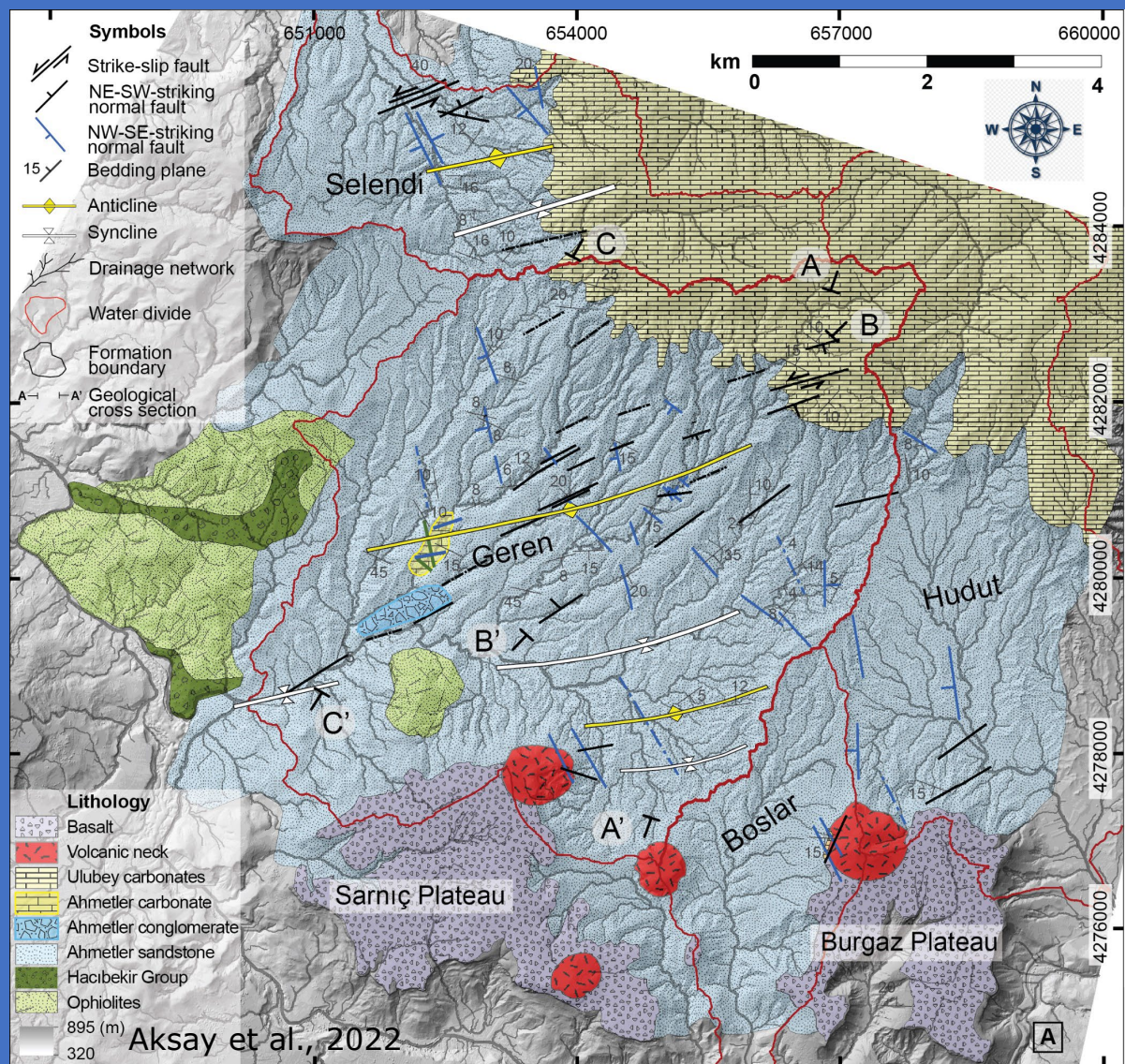
- Study area
- Structural and geological mapping
- Morphometric analysis: *SLk*-index
- Topographic position and age control
- Discussion & Conclusions



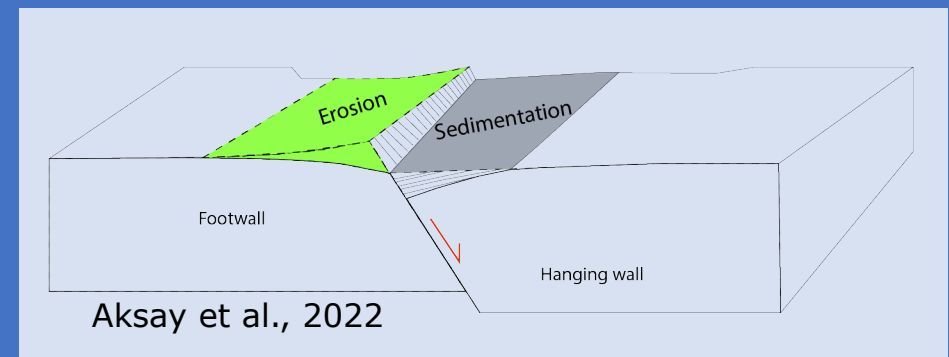
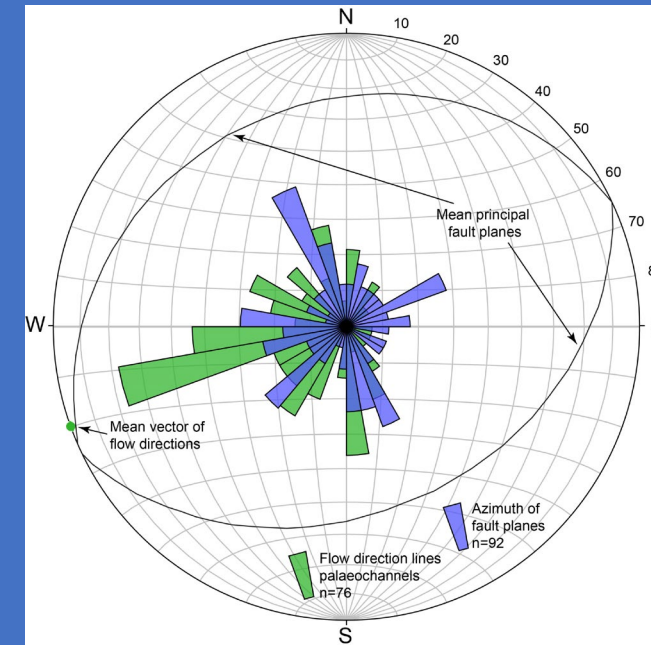


Study area: western Turkey

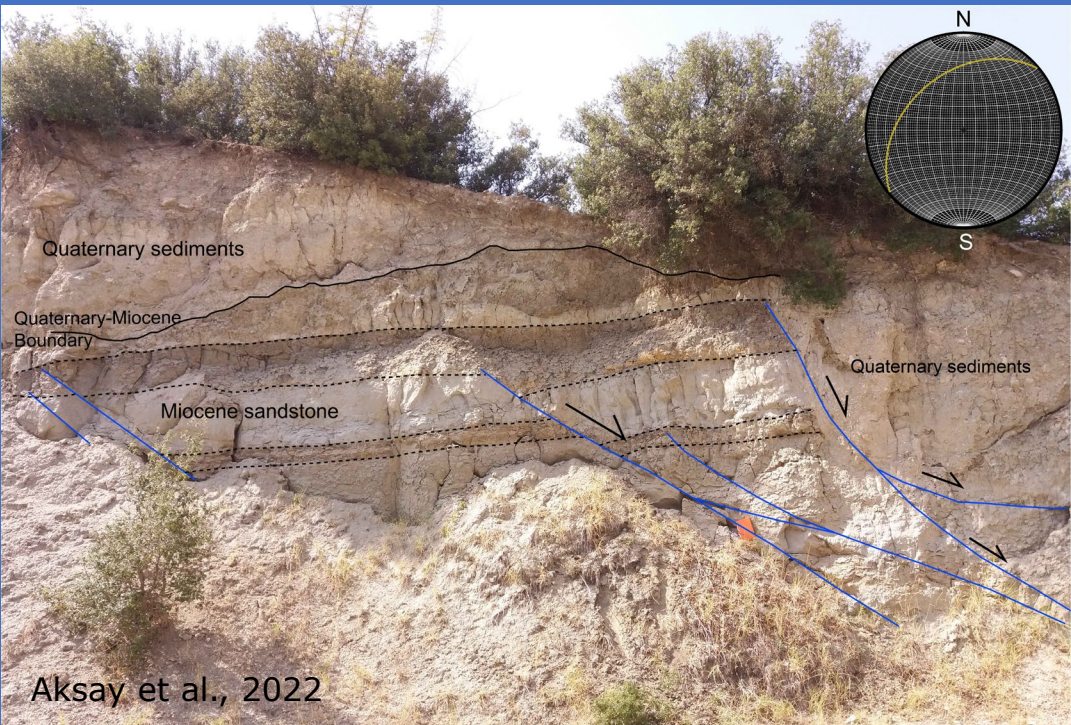
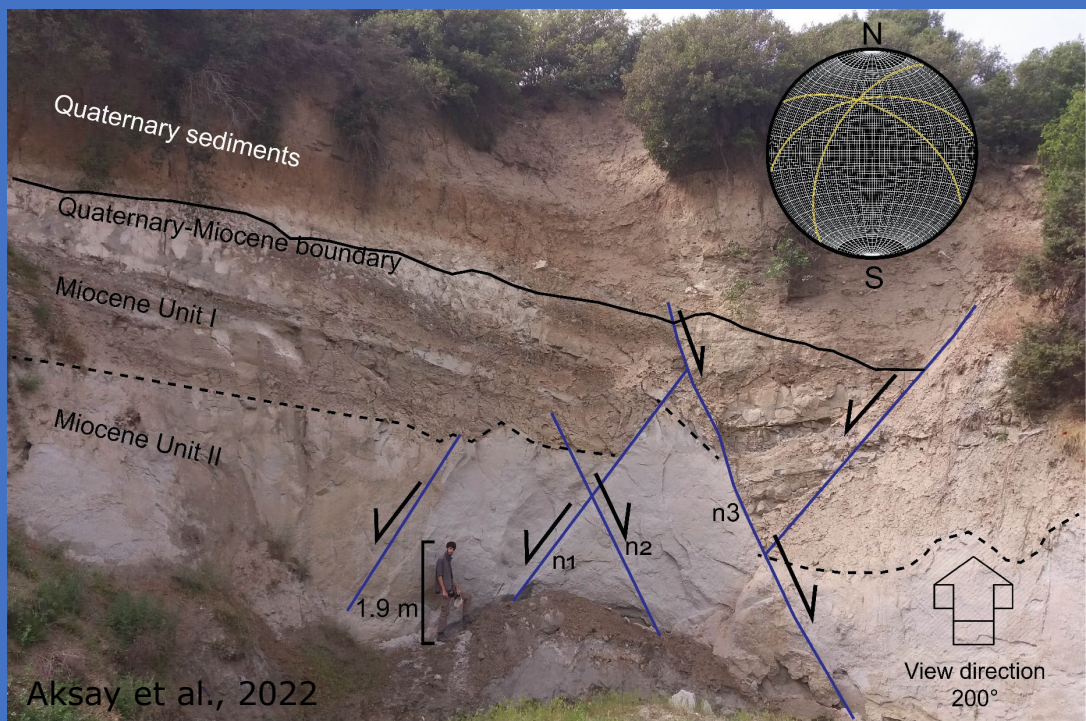




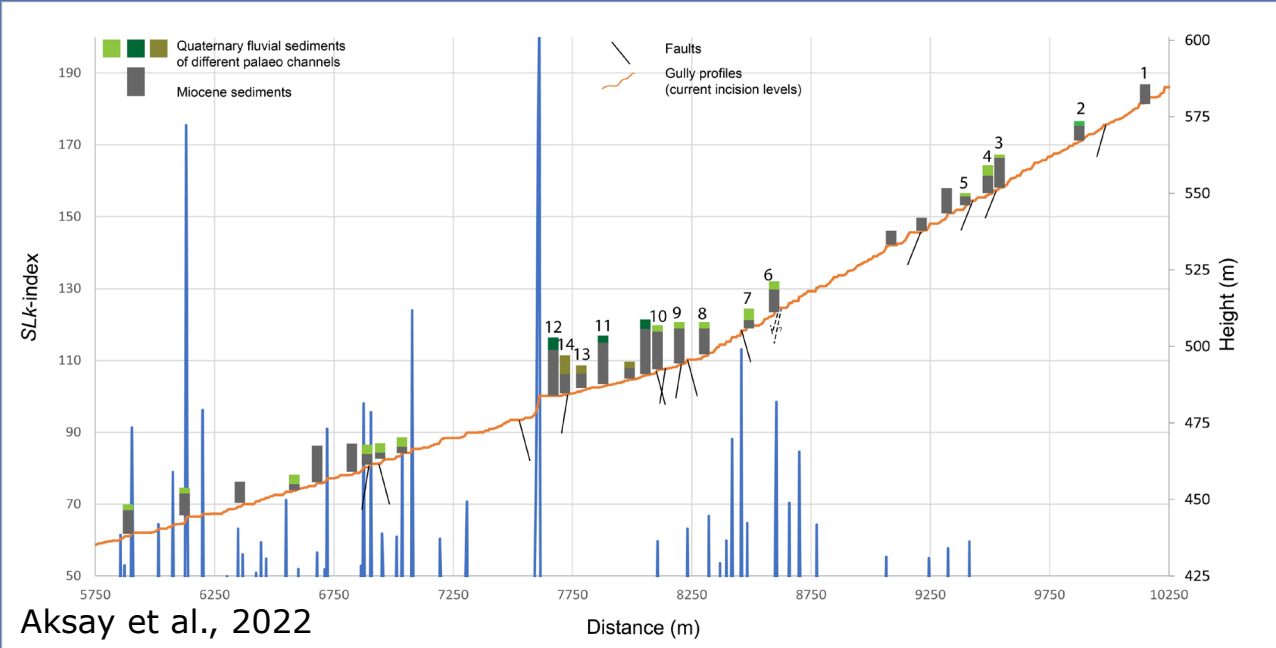
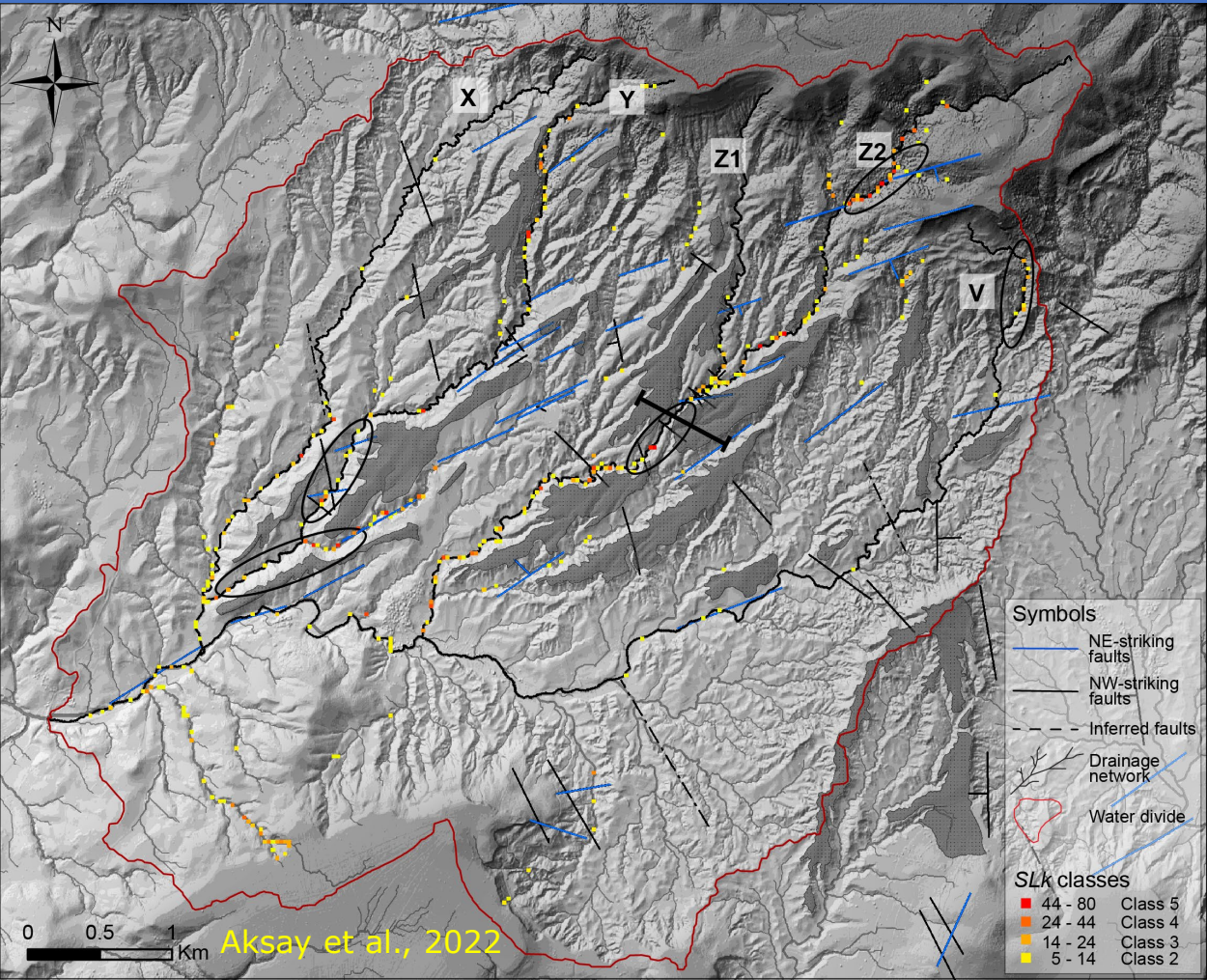
Structural and geological mapping



Impressions from the fieldwork

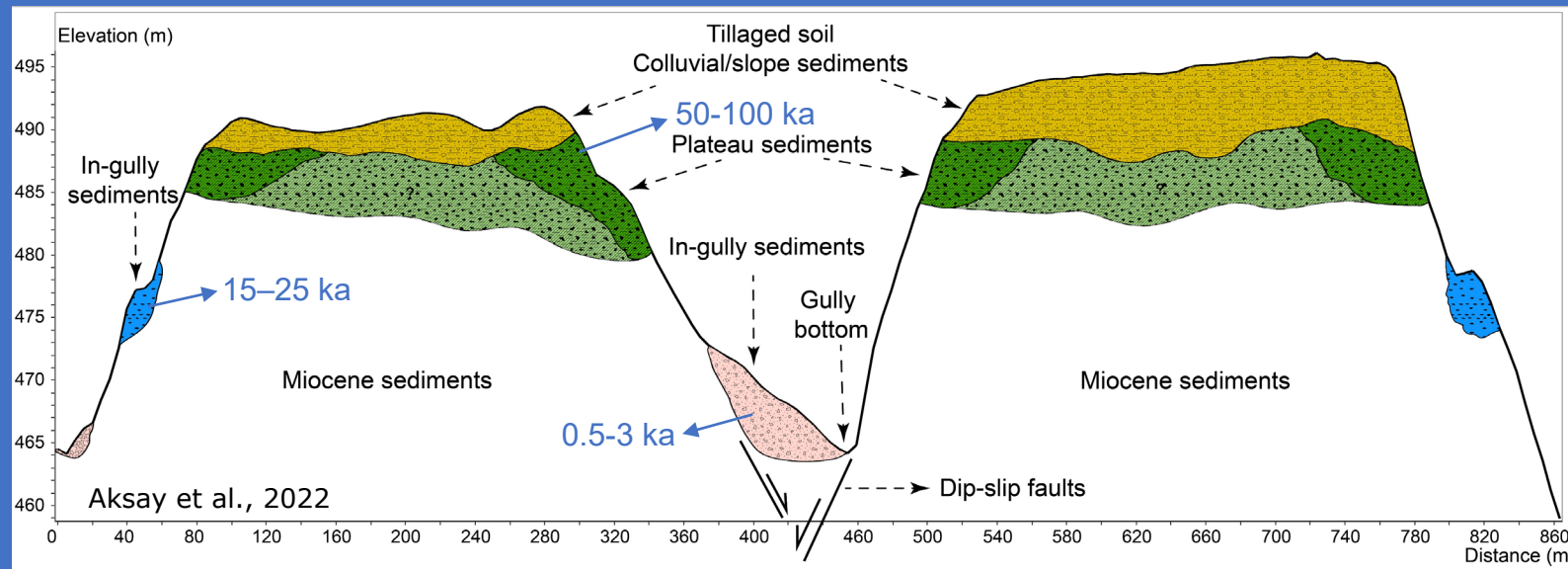


Morphometric analysis: SLk-indices



Morphological expression of sedimentation

Geochronology:
OSL and radiocarbon dating



OSL dating in
collaboration with:

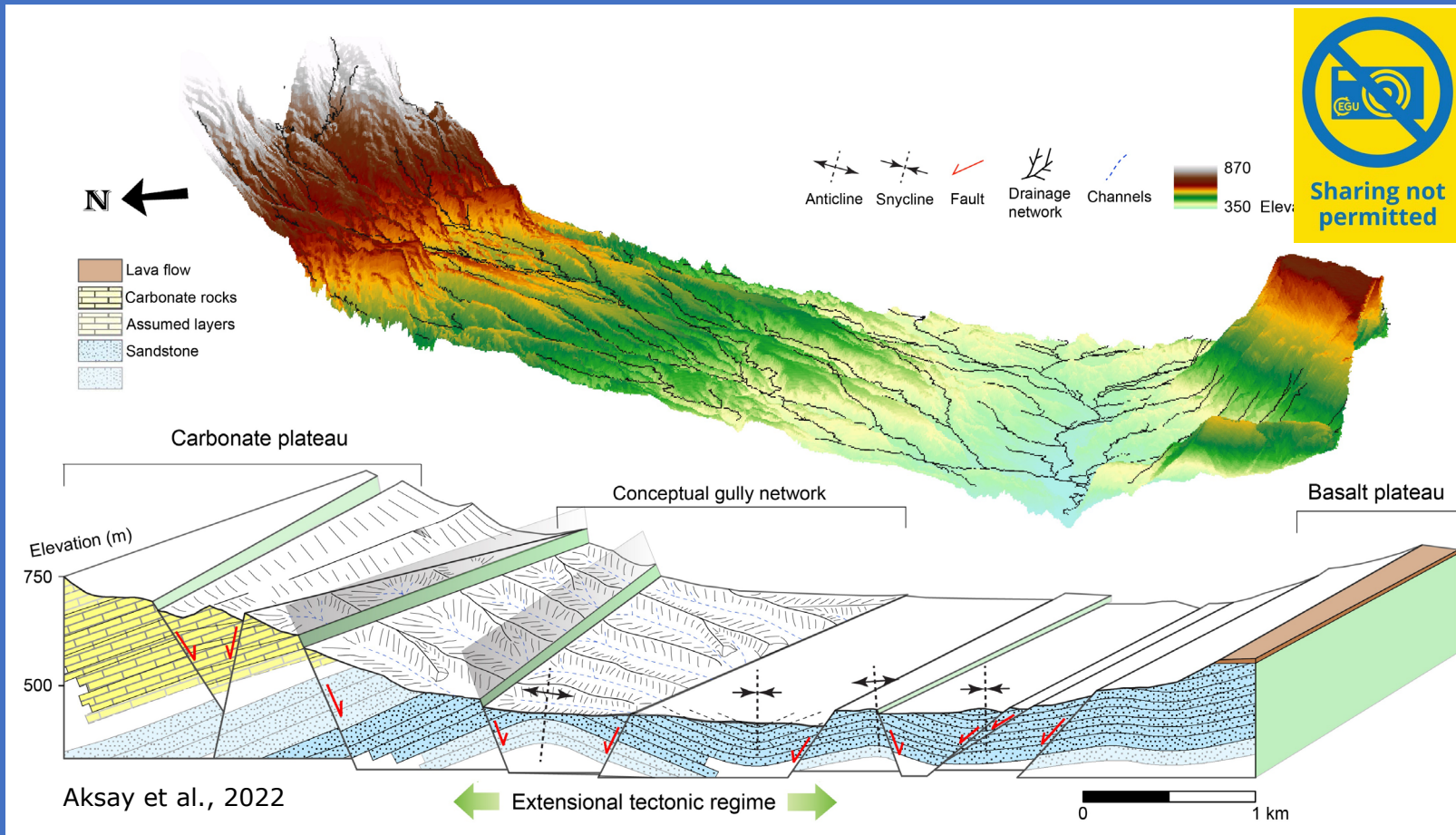
Jakob Wallinga
Alice Versendaal

NCL
Netherlands Centre for
Luminescence dating



Conclusions

- Geological and structural mapping combined with modern techniques
- Structurally controlled badland topography



Aksay, S., Schoorl, J.M., Veldkamp, A., Maddy, D., Demir, T., and Aytac, A.S., 2022. Structural control in Quaternary badland development in an extensional tectonic basin, western Turkey. *Geomorphology* (under revision).

