

Supporting Information for

SEISMICALLY TRIGGERED ANOXIA AND BRINE SPILLOVER DURING THE CE 365 CRETE MEGA-EARTHQUAKE IN THE EASTERN MEDITERRANEAN SEA

SM5

EVIDENCE OF SUBMARINE SLOPE INSTABILITIES

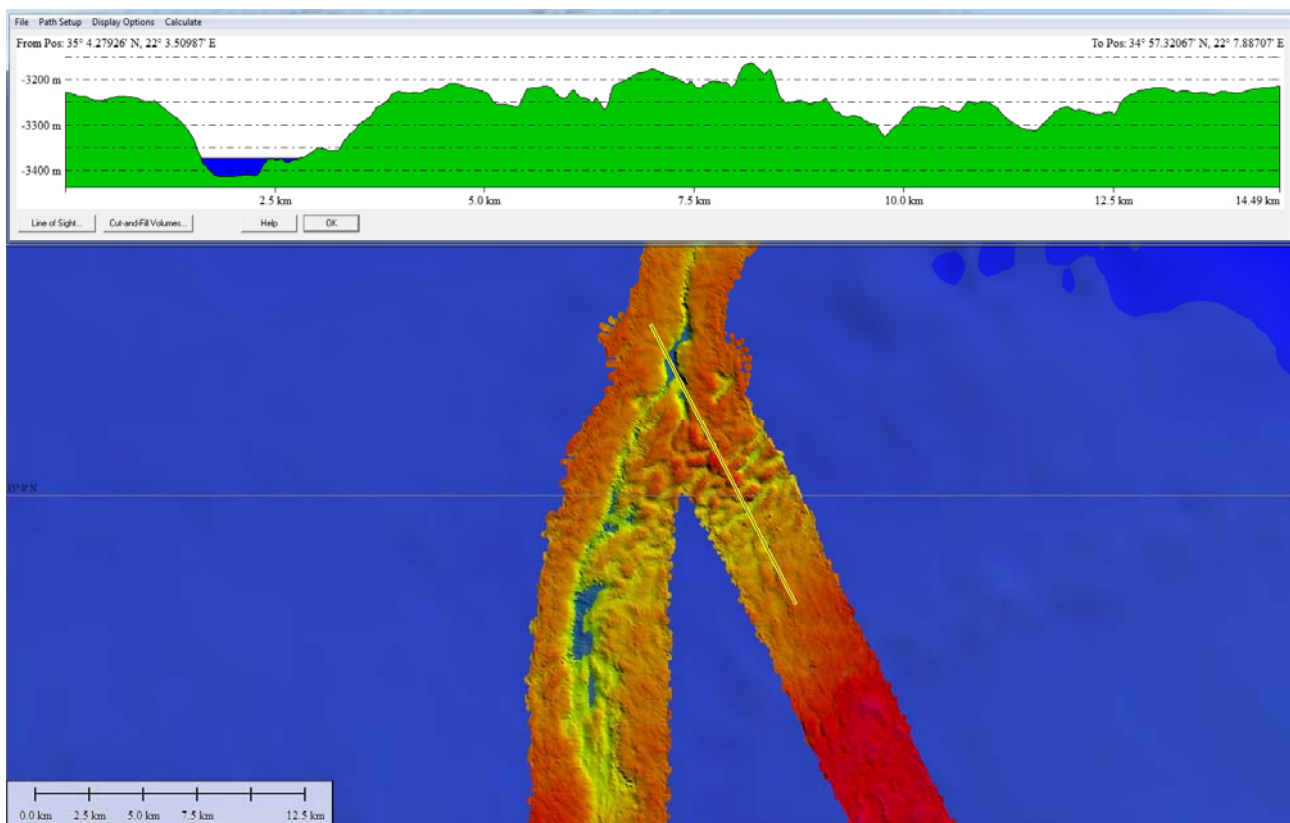


Figure SM5_1– Bathymetric profiles across the cobblestone morphology SE of the Hephaestus basin that is likely related to the interplay between active tectonics and evaporite dissolution (Kastens, 1981).

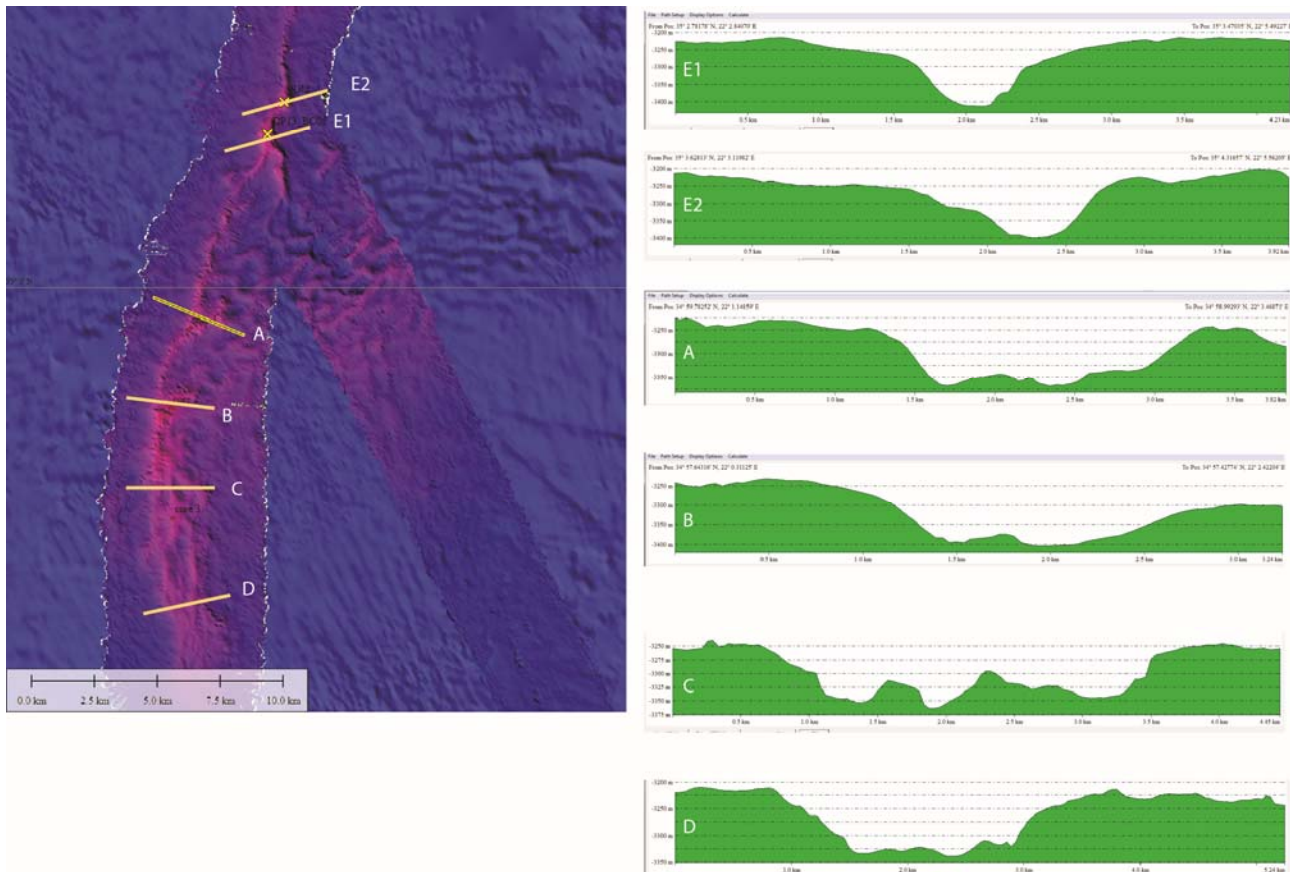


Figure SM5_2– Bathymetric profiles across the Hephaestus and Kryos brine lakes highlight evidence of slump deposits and mass wasting features in the basin’s floor. Using bathymetric data, submarine slumping and mass wasting processes can be identified by characteristic morphological features on the seafloor. These include steep headscarps, concave-up slope profiles, and disrupted or hummocky terrain downslope, often indicating displaced sediment blocks. Additionally, the presence of slide scars, flow channels, and accumulation zones at the base of slopes can further support the interpretation of past mass movement events (Clare et al., 2020).

References

- Clare et al. (2020). A consistent global approach for the morphometric characterization of subaqueous landslides. Geological Society, London, Special Publications Volume 477, Issue 1, 2019
<https://doi.org/10.1144/SP477.15>
- Kastens, K. A. (1981). *Structural causes and sedimentological effects of “Cobblestone Topography” in the Eastern Mediterranean Sea*. University of California.