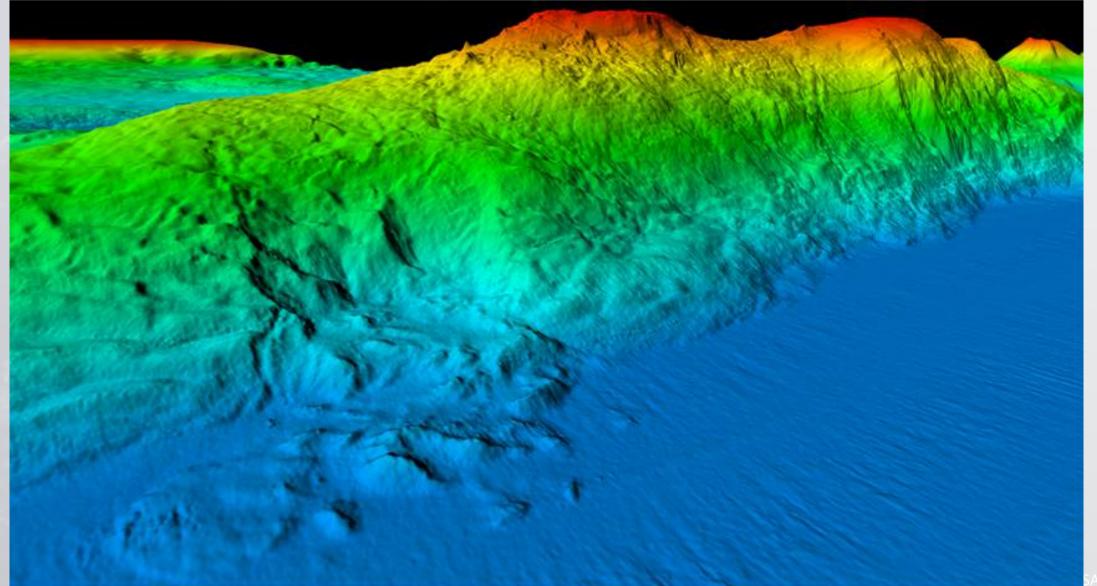
SOLID EARTH SEMINARS

SUBMARINE MASS-WASTING ALONG TECTONIC RIDGES: MORPHOLOGICAL STYLES AND ASSOCIATED GEOHAZARDS



Tectonic activity is a main trigger for recurrent mass-wasting along submarine ridges, with recent and buried Mass-Transport Deposits (MTDs) stacking along their flanks. Subsurface seismic data is thus key to understand MTD distribution and styles through time. Results from two case-studies will be presented: first, a 3D analysis focused on the styles of MTD deformation on the flanks of salt-cored ridges in the Espírito Santo Basin, offshore SE Brazil, where regional halokinesis is a key tectonic process; and second, 2D seismic data is used to assess the magnitude and distribution of Miocene to Recent MTDs on the frontal thrust flank of the Gorringe Bank, where regional tectonism is linked to the collision of the Eurasian and African tectonic plates. Two distinct morphological styles of MTDs can occur on the flanks of tectonic ridges, and the 3D distribution of mass-failure events is key to assess collapse-prone locations through time.





LISBOA

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PASS: RG234_SES https://videoconf-colibri.zoom.us/j/89018419156

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