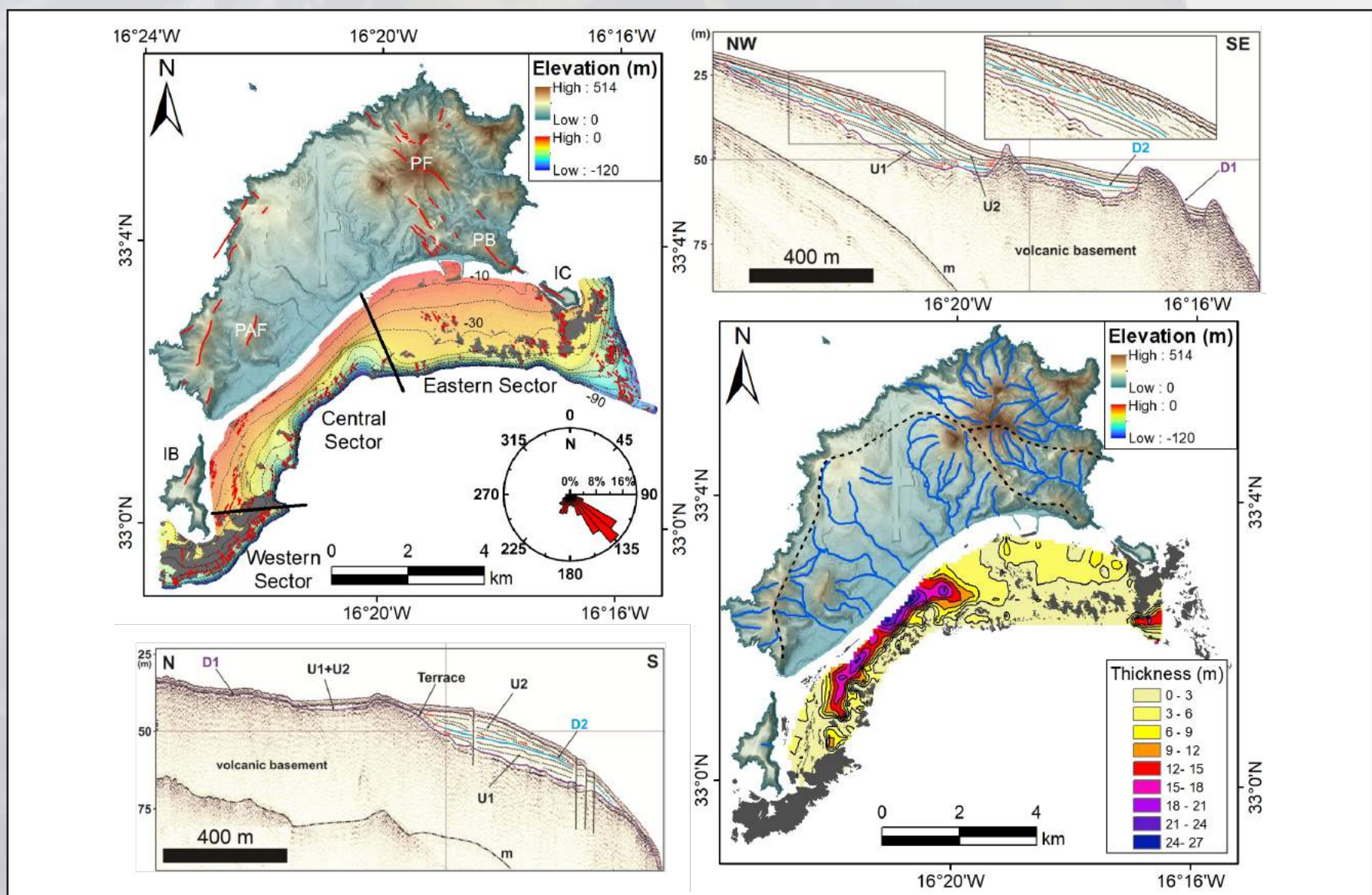


SOLID EARTH SEMINARS

MORPHO-STRATIGRAPHIC CHARACTERIZATION OF THE SOUTHERN SHELF OF PORTO SANTO ISLAND (MADEIRA ARCHIPELAGO): INSIGHTS FOR LARGE-SCALE INSTABILITY PROCESSES AND POST-LGM SEDIMENTARY ARCHITECTURE



WHAT'S THIS ABOUT?

Multibeam bathymetric and seismic reflection profiles of the southern shelf of Porto Santo Island are used to map its seabed morphology and seismic stratigraphy. In general, the shelf consists of an erosive rocky surface mostly covered by sediments. On the Western and Eastern sectors two sets of submerged erosional terraces have been mapped at different depths (35-45 m, 50-75 m). A pattern of dykes, which are more resistant to erosion than the evolving outcrops, showed directions similar to the structural features outcropping on the island (NNE-SSW and NW-SE). The shelf edge presents an arcuate shape that strongly matches the coastline configuration, suggesting the occurrence of an old large-scale landslide event. Further incisions on the shelf edge imply subsequent and more recent mass-movement processes. The sedimentary cover on the shelf is highly variable both in thickness and internal architecture, mainly due to different shelf width and sediment pathways from the coast.

ZOOM



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MARCH 10

Wednesday: 13:00

PASS: RG234_SES

<https://videoconf-colibri.zoom.us/j/89018419156>