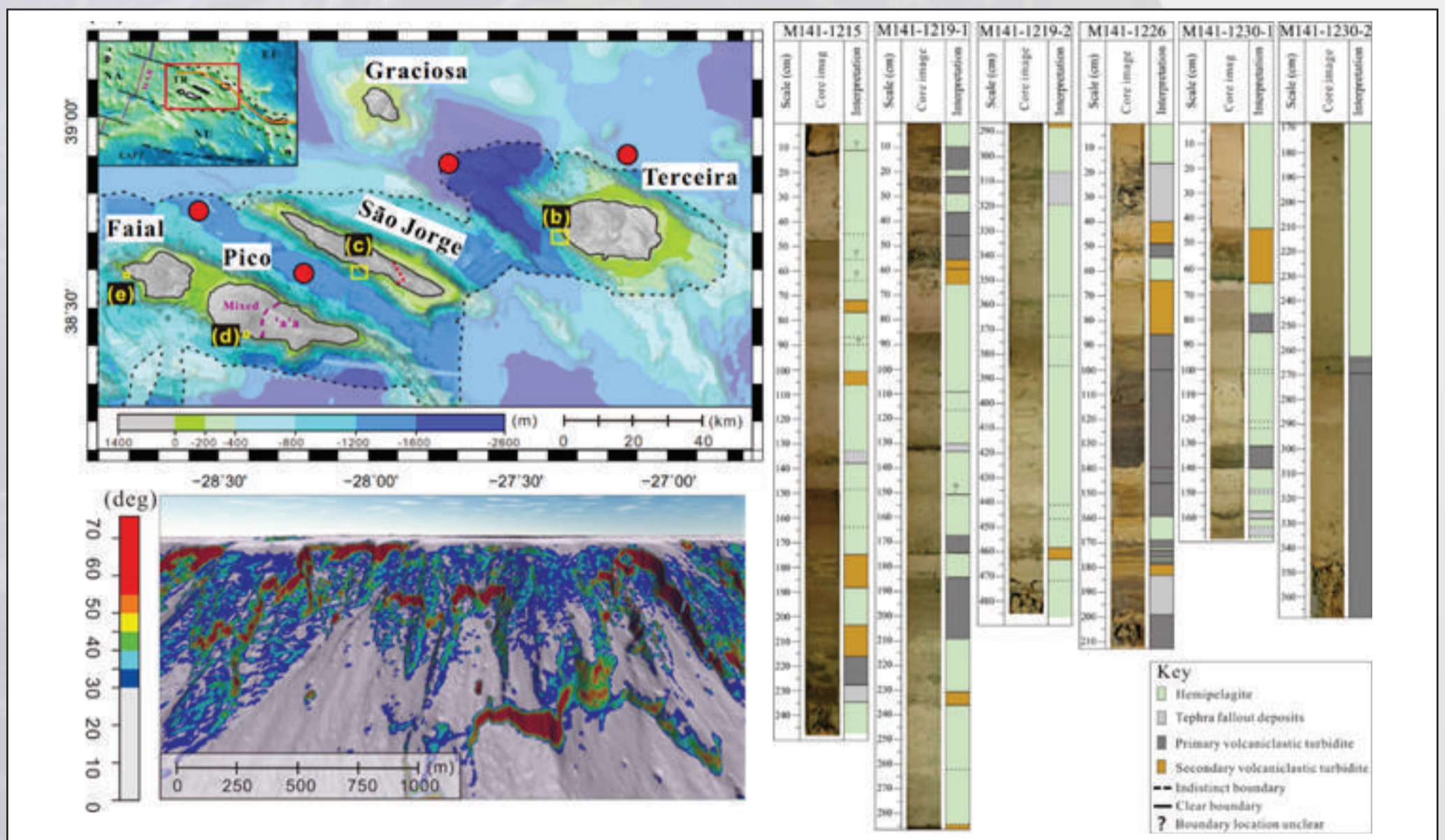


SOLID EARTH SEMINARS

HAZARDS AROUND VOLCANIC ISLANDS IMPLICATIONS FROM SEAFLOOR GEOMORPHOLOGY AND TURBIDITES IN SEDIMENT CORES, CENTRAL AZORES ISLANDS



WHAT'S THIS ABOUT?

Natural hazards have occurred frequently among the central Azores (Faial, Pico, São Jorge, and Terceira islands) considering abundant submarine landslide valleys and volcaniclastic beds in sediment cores. About 1200 submarine slope valleys were documented from the bathymetric data. 300+ were interpreted to be landslide-origin and produced by single failures, and 13 landslides would have generated tsunamis of 1-7 m at sources. Compared to São Jorge and Terceira islands, the more and smaller landslides on Faial and Pico Islands implied a greater future threat from a large earthquake that is not found in earthquake records. Sediment cores analyses suggested that 2/3 of the volcaniclastic beds originated from eruptions, whereas only 1/3 involved landslides. The low incidence of landslide-origin turbidites could be explained either only the largest landslides were preserved and/or more eruptions occurred. Radiocarbon datings indicate that turbidity currents have reached the core sites at a modest frequency since the last LGM (0.45 events/kyr).

ZOOM



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March 02
Wednesday: 13:00

PASS: 2021_RG234

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