

# SOLID EARTH SEMINARS

THE DENUDATION OF VOLCANIC ISLANDS AND ITS DETRITAL  
RECORD. LESSONS FROM CAPE VERDE



WHAT'S THIS  
ABOUT?

Because basalts are among the most weathering vulnerable silicate rocks in the Earth and do not produce much sand, the geological record may be underrepresented in terms basalt-derived material. Soils and sediments collected from Cape Verde, an archipelago placed in a sub-tropical setting that includes islands of substantially different age, have been used to investigate the factors that control the denudation of volcanic islands, the sources for the sediments found in their shelves and the fate of the volcanic material. Basalt weathering is taking place rapidly in the “young” Fogo island, but their soils may already include a discernible exotic component, particularly in areas most exposed to dominant winds. The incorporation of biogenic material derived from the evolving shelves and detritus associated with the exhumation of basement units have a much larger influence on the composition of sediments from “old” islands, accounting for the prevalence of non-volcanic material in some fluvial and beach sands.

ZOOM



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Tuesday: 13:00

IDL Meeting Room or PASS: 2021\_RG234

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