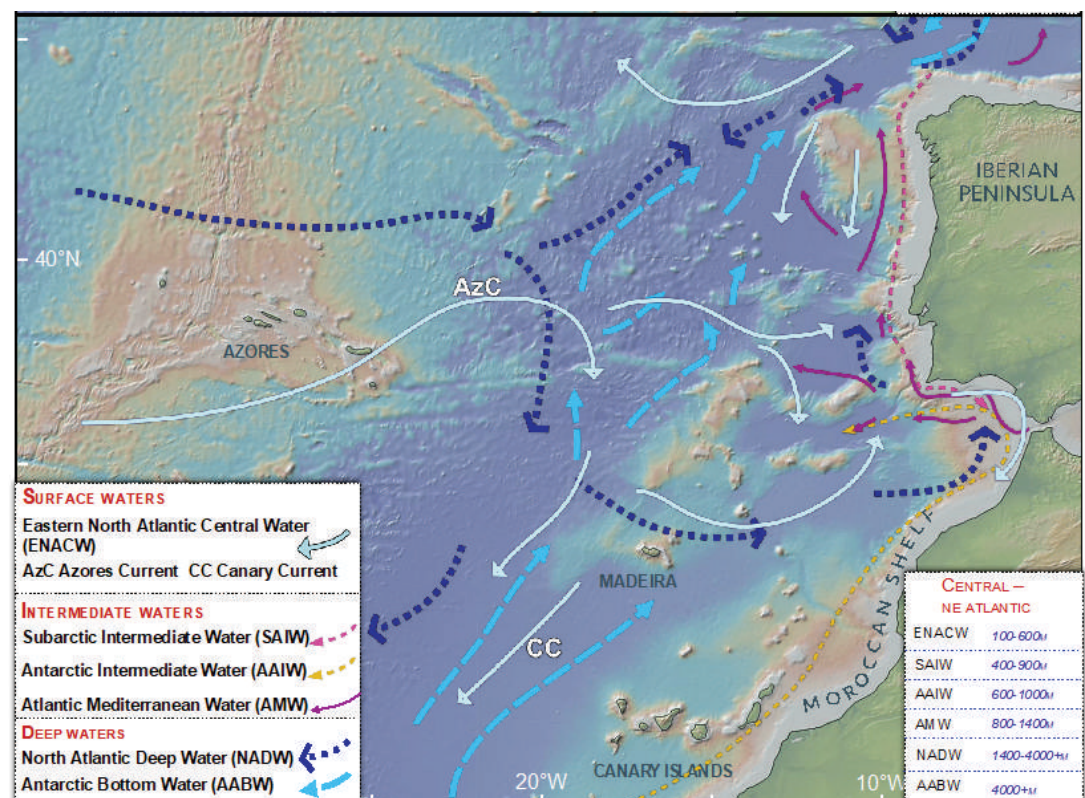
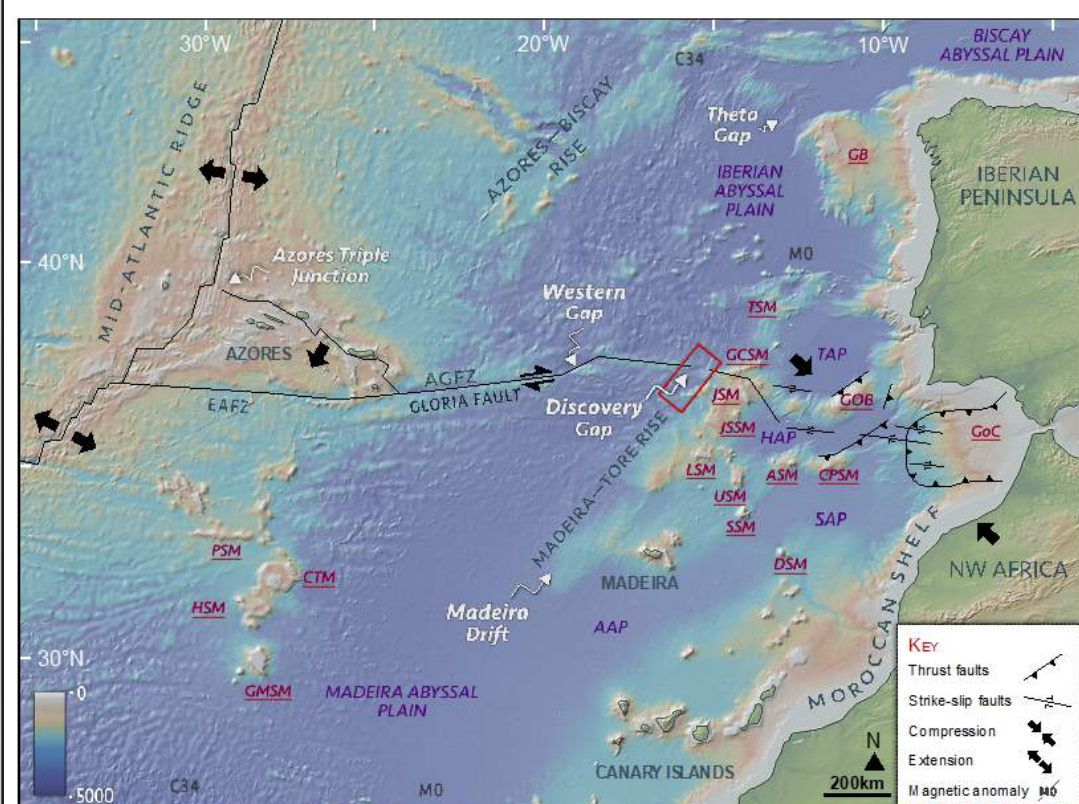


SOLID EARTH SEMINARS

SEDIMENTARY PROCESSES IN THE DISCOVERY GAP (CENTRAL-NE ATLANTIC): AN EXAMPLE OF A DEEP MARINE GATEWAY



WHAT'S THIS
ABOUT?

Deep marine gateways constrict and intensify bottom water, helping exchange deep-water masses, sediment and biota between abyssal plains. However, the depositional processes in these gateways and the paleoceanographic implications remain poorly understood. Based on new data from the Discovery Gap (Azores—Gibraltar Fracture Zone) collected in 2019, the key Late Quaternary sedimentary processes have been determined. The erosional/depositional features, adjacent to topographic highs, point to a north-directed bottom water, identified as the Antarctic Bottom Water (AABW) from hydrological data. Pelagic, hemipelagic, reworked pelagic/hemipelagic and fine-grained contourite sedimentary facies have been identified, whose facies associations point to variable AABW presence, linked to climatic changes. The results of this study highlight the value of deep marine gateways in understanding the paleo-circulation of deep waters and the influence of climate on the deep ocean.

ZOOM



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November 03
Wednesday: 13:00

PASS: 2021_RG234

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