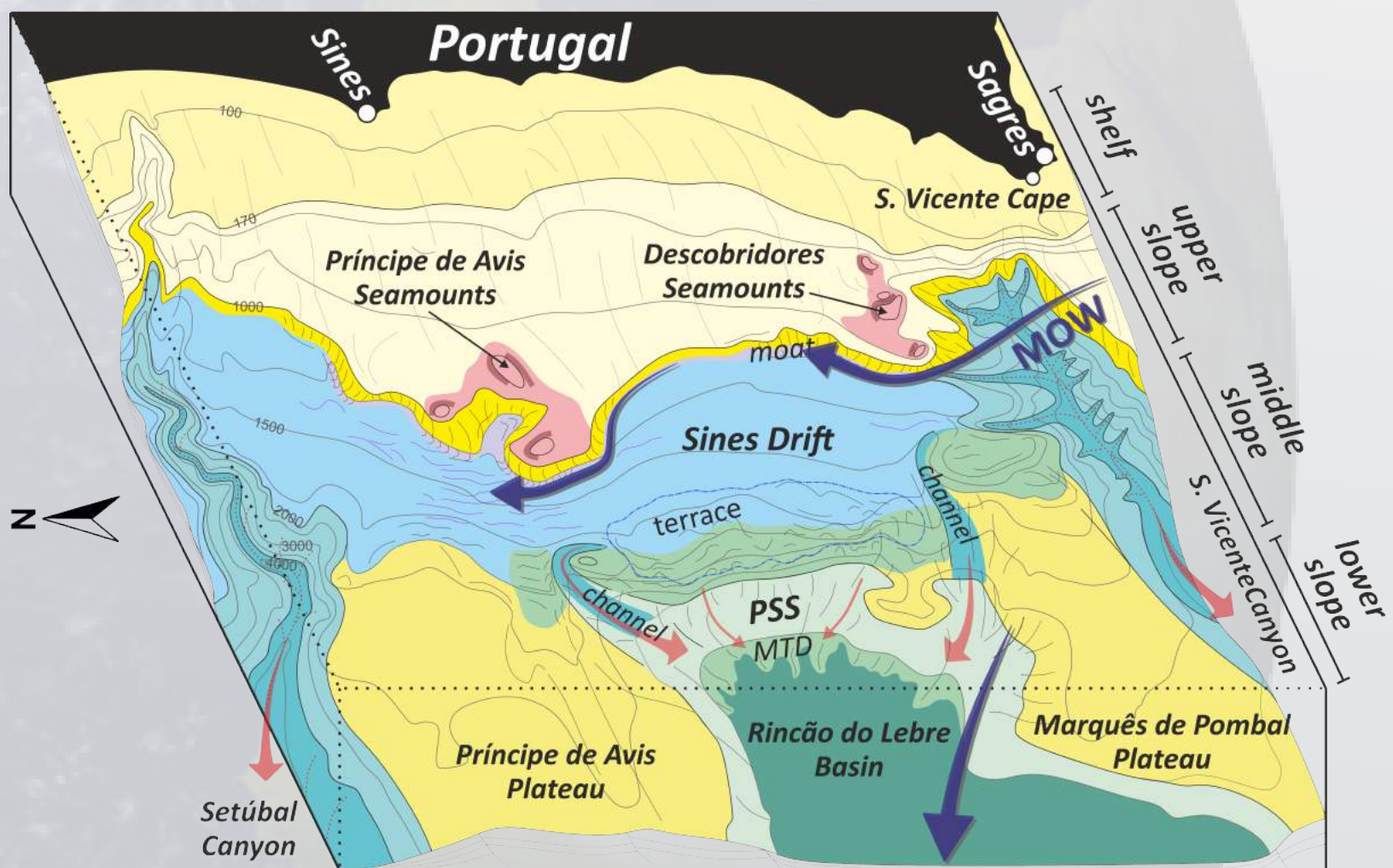


SOLID EARTH SEMINARS

THE SINES CONTOURITE DEPOSITIONAL SYSTEM ALONG THE SW PORTUGUESE MARGIN: ONSET, EVOLUTION AND CONCEPTUAL IMPLICATIONS

SOUTHWEST PORTUGUESE MARGIN



The Sines Contourite Depositional System (CDS), located in the SW Portuguese margin, is a central segment of the Iberian Contourite Depositional Complex, built under the influence of the Mediterranean Outflow Water (MOW). This work presents the onset and evolution of this system using multibeam bathymetry, seismic reflection lines, and well data. Six seismic units of Late Miocene through Holocene age have been identified, which defined three evolutionary stages for drift construction: a) an *initial stage* (5.33 – 2.5 Ma); b) a *growing stage* (2.5 – 0.7 Ma); and c) a *maintenance stage* (0.7 Ma – present). The development of the Sines CDS was constrained in the long-term by seafloor paleomorphologies, inherited from the Mesozoic rifting phases, which provided accommodation space for drift growth and locally enhanced the along-slope bottom-current. At the short-term, climatic fluctuations modulated changes in bottom-current density and intensity, creating sedimentary cycles in the Quaternary depositional record.

ZOOM



**WHAT'S THIS
ABOUT?**

Sara Rodrigues
(Royal Holloway, London, UK)

July 7
Wednesday: 13:00

PASS: 2021_RG234

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