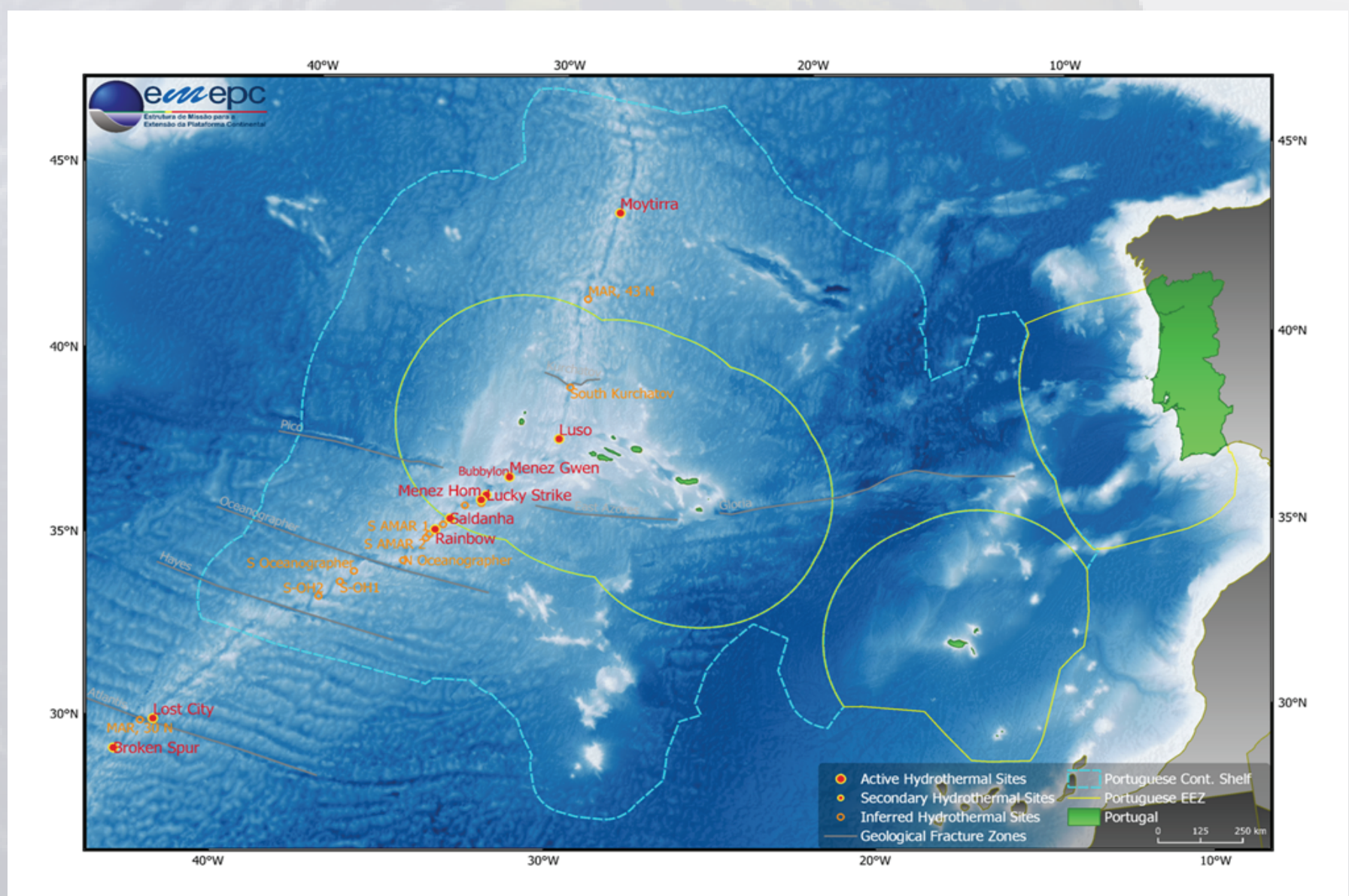


SOLID EARTH SEMINARS

DIVERSITY OF HYDROTHERMAL SYSTEMS ON THE PORTUGUESE SEAFLOOR: AN UNTAPPED POTENTIAL FOR THE UNDERSTANDING OF DEEP-SEA MINERALIZATION



WHAT'S THIS ABOUT?

Several hydrothermal fields (HFs) have been identified within the Portuguese EEZ and many more are yet to be discovered, particularly when we consider the extended continental shelf, an area that covers up to 2.4 million km². The majority of these HFs are located in the Mid-Atlantic Ridge (MAR), where most segments are under the influence of the Azores' mantle anomaly and the triple junction between the Eurasian, Nubian and North American plates. The first HF was discovered in 1997 (Lucky Strike) whereas the last one (Luso) was discovered in 2018. They revealed a variety of geological settings (e.g., on ridge axis, detachment faults and/or under interference of Azores volcanic anomalies), host rocks (mafic and/or ultramafic) and mineralization processes. A summary of the different types of hydrothermal fields will be presented, with a focus on lower-temperature and less vigorous fields, such as Luso, Menez Gwen and Saldanha. This diversity of HFs makes MAR an ideal laboratory for comparative studies of seafloor hydrothermal systems, which can advance our knowledge of their origin, dynamics and mineralization processes.

ZOOM



Ágata Alveirinho Dias

May 18

Wednesday: 13:00

PASS: 2021_RG234

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