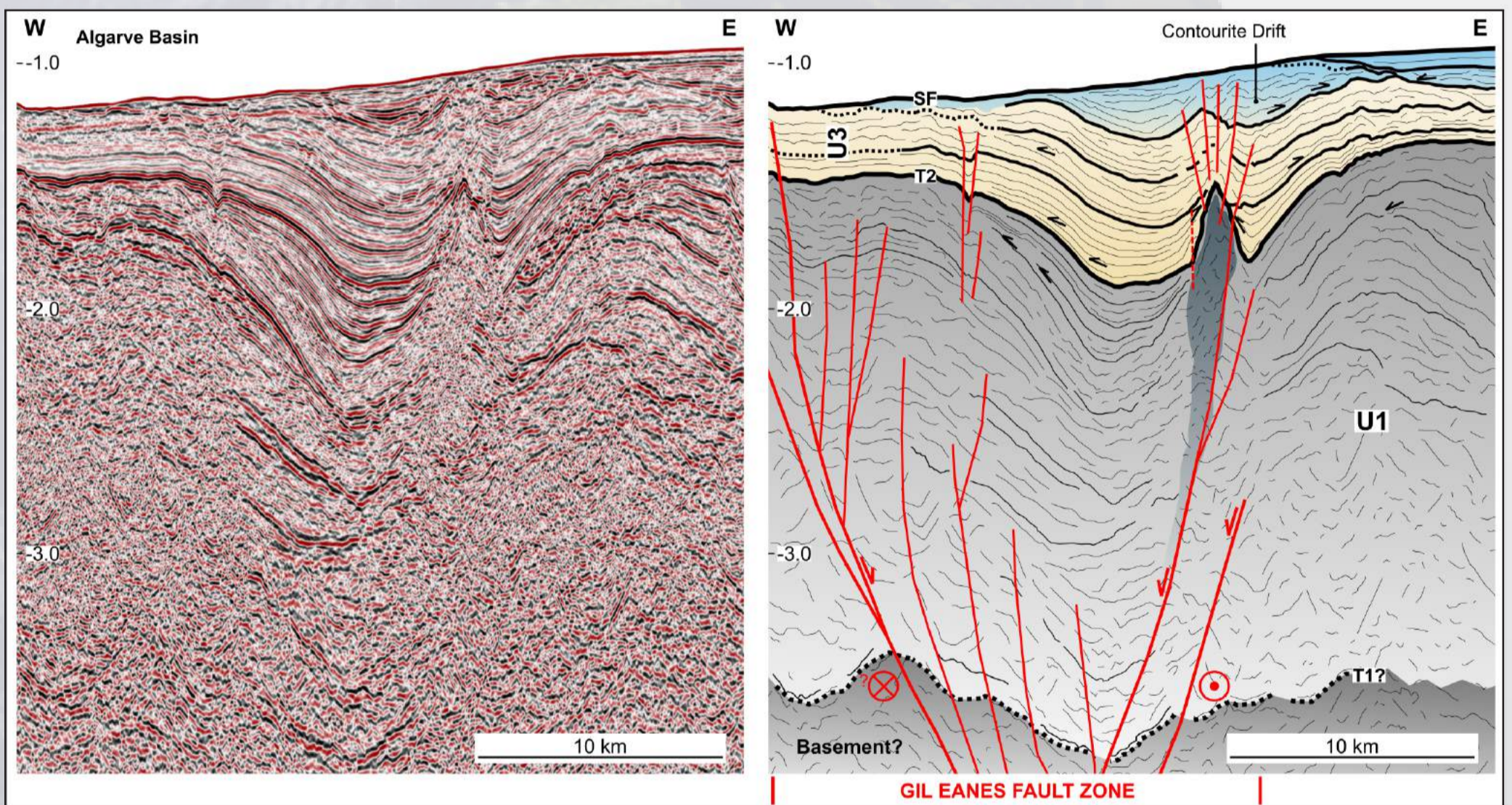


SOLID EARTH SEMINARS

STRUCTURAL CONTROL AND TECTONO-SEDIMENTARY EVOLUTION OF THE GULF OF CADIZ SINCE THE LATE MIOCENE: IMPLICATIONS FOR THE CONTOURITE DEPOSITIONAL SYSTEM



WHAT'S THIS ABOUT?

The Gulf of Cadiz Contourite System developed due the interaction of the Mediterranean Outflow Water with the SW Iberian continental middle slope, in an intricate tectonic setting – on the Betic Orogeny foreland and near the Nubia-Eurasia plate boundary. This study investigates how tectonic activity controlled on the evolution of the contourite system, tectonostratigraphic and structural analysis of an extensive 2D multichannel seismic reflection dataset complemented by multibeam bathymetry and seismicity records. Three important tectonic structures were identified: the dextral strike-slip Gil Eanes Fault Zone, the Cadiz Fault and the Albufeira-Guadaluquivir-Doñana Basement High. The combined interpretation of seismic profiles, bathymetric data, regional tectonostratigraphy and earthquake distribution, reveals four tectonic domains delimited by the structures mentioned before. Contourite features show different characteristics for each of these domains, with tectonic subsidence or uplift, the presence of structural obstacles and fault-related depressions being the main controls of their sedimentary evolution at a basin-wide scale.

ZOOM



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PASS: 2021_RG234

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