



Evaluating the role of physical mechanisms as possible triggers for turbidity currents in a deep ocean seamount

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Resumen: Turbidity currents on continental margins are often attributed to cyclic climate variability and sea-level change, while the causes of deep ocean turbidites are as yet to be tested. The Atlantic Iberian margin provides a unique setting to contrast deep ocean and continental environments, including depression features that further protect from resuspension and erosion by along slope bottom currents. We present records of low-frequency, non-periodic, climate-independent turbidites from three exceptionally deep cores covering up to 426,000 years in the Tore seamounts area. Here we evaluate the possible role of a number of physical processes that, when combined, may induce sufficiently intense bottom boundary events and likely precondition the recurrence pattern of the observed deep ocean turbidites.

Palabras clave: internal-waves, meddies, turbidite, paleoceanography, Tore seamounts.