

Downslope Variations in Slope Channel Body Stacking Patterns in Outcrop, Magallanes Foreland Basin, Chile

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Abstract

Deep-water channels, which transport large volumes of detritus to the deep ocean, are highly variable along their length as they transect the continental slope. Slope channel systems have been imaged extensively using modern 3-D seismic reflection surveys and bathymetric methods in an attempt to understand their variability along continental slope profiles. While 3-D seismic surveys provide incredible insight into these systems, there is a paucity of detailed sedimentological data available with which to consider variation in formative processes over long distances. The study addresses this lack of fine-scale data through the examination of slope channel deposits along a 10 km-long depositional-dip-oriented slope profile in the Tres Pasos Formation of southern Chile. The Tres Pasos Formation was deposited on the prograding margin of a foreland basin that was characterized by >1000 m of water depth (Hubbard et al., 2010). The foreland basin was developed in response to Andean uplift during the Cretaceous.

References Cited

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