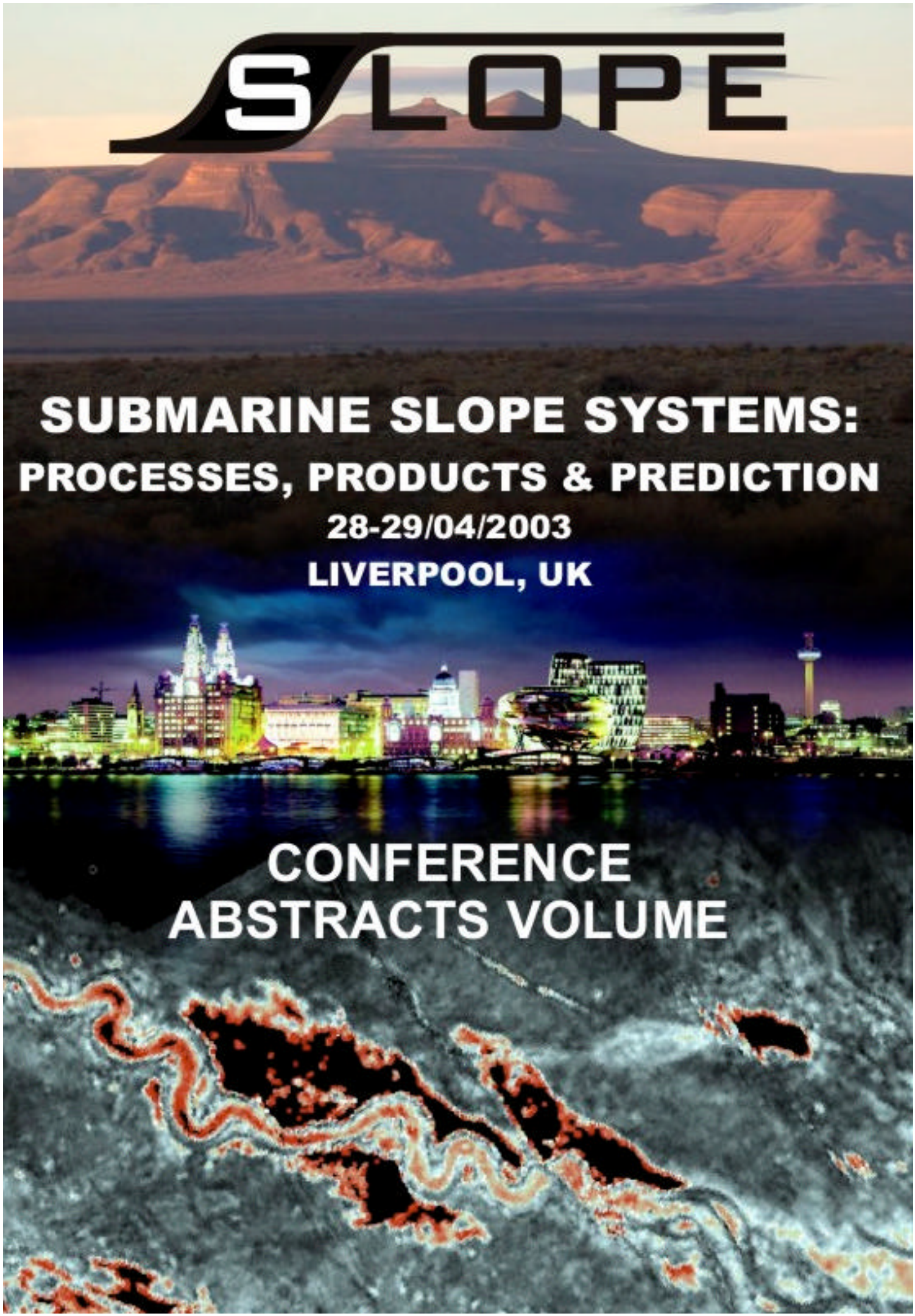
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SHELF-MARGIN WEDGES AND LATERAL ACCRETION OF UPPER SLOPES IN THE GULF OF CADIZ MARGIN (SOUTHWEST IBERIAN PENINSULA)

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The aim of this paper is to study the different development and preservation shown by some of the most recent regressive shelf-margin wedges in the Gulf of Cadiz margin, particularly in relation to the build up of palaeo-upper slopes. A extensive grid of high-resolution seismic profiles (Uniboom system) was analysed, in order to determine the stacking patterns and internal structure of those marginal wedges.

The shelf-margin regressive wedges show several common characteristics, such as: 1) They are distributed over the palaeo-outer shelves and palaeo-upper slopes, generally showing moderate and increasing thickness towards the shelf-break and upper slopes, where the main depocentres are located. 2) Thickness distribution maps show elongated, laterally homogeneous depocentres. 3) Seismic facies show contrasting patterns on the outer shelf and upper slope domains. Progradational configurations, generally low-angle parallel- or tangential-oblique, are dominant on the outer shelves. Inclined reflectors usually occur on the upper slopes, usually paralleling the previous slope profile. However, an aggradational pattern is usually identified, as toplap and onlap are the most frequent reflector terminations. 4) The boundary between outer shelf and upper slope facies show different representation, although shelf facies truncation and erosional to toplap surfaces are common.

As a consequence of this regional distribution, successive stacking of regressive wedges leads to margin progradation and lateral accretion of the upper slope, which can be considered a depositional domain in the study area. These slope facies have a high preservation potential, as enough accommodation space was made available during successive lowstand stages. Additionally, erosive processes were not favoured during these intervals, as seismic facies seem to suggest stillstand to slowly rising sea-levels. The present study can be used as a model to understand the build-up of the upper slope domain in areas with moderate to high fluvial supply and high lateral redistribution by oceanographic agents.