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## **Channel Transfer Processes in the Zaïre Turbidite System (ZaiAngo Project)**

The Zaïre System was surveyed, from 1998 to 2001, in collaboration between TFE and IFREMER. Among collected data, seismic data used in this study include a regional survey (6 and 96 channel seismics), and several local studies (very high-resolution seismics).

The regional survey allowed to depict the Quaternary turbidite system as a succession of three individual fans linked to a common source, the present-day Zaïre Canyon (see Savoye et al., this volume). Channel transfer processes, most of them abrupt and definitive, revealed themselves as very important processes regulating the distribution of the 80 channel/levee systems recognized in the superficial parts of the fans.

Two of the high-resolution local studies were devoted specifically to these transfer processes, in an attempt to better image and understand sedimentary evolution at specific bifurcation points.

The first case study (A21/A22) appears as a true avulsion that occurred early in the history of the axial fan. It shows, successively, complex deposition of lobate basal HARP's, aggradational synchronous activity of both the ancient and new channels, then definitive abandonment of the ancient channel and prevailing aggradation from the newly formed channel.

The second case study (A25.3/A25.10, then A25.10/A26) shows two successive lateral transfers in opposite directions, resulting in the reestablishment of the new channel over its predecessor. This return transfer and the absence of HARP's, lead us to consider this type of transfer as a temporary, and may-by occasional event, rather than as a "classical" definitive avulsion (as described for A21/A22).