



## **Sediment accumulation rates and gravity-induced processes evidenced offshore Algeria from coring results (MARADJA cruise)**

P. Giresse (1), H. Pauc (1), B. Savoye (2), G. Dan (2), J. Déverchère (3), **V. Gaullier** (1) and the MARADJA Team

(1) LEGEM E.A. 3678, Université de Perpignan, France, (2) IFREMER, Brest, France, (3) UMR 6538 Domaines Océaniques, Université de Bretagne Occidentale, Brest, France, (giresse@univ-perp.fr)

We used sedimentologic high-resolution techniques to analyse seven cores sampled on the Algerian margin during the Maradja cruise. Calculation of sediment accumulation rates was made possible by using AMS  $^{14}\text{C}$  analyses for time control. On the part of the margin located east of Algiers the sediment accumulation rates range between 0.2 and 0.8 mm.y<sup>-1</sup>. Near the base of the slope, the rates during the last high stand are lower than during the last transgression. The opposite succession is observed in a remote and deeper site (2711 m). Offshore Boumerdes and Aïn Taya, gravity-induced depositional features are scarce or modest, whereas they are recurrent and slightly developed off the Oued Sebaou mouth, especially in the deeper core of the eastern margin. Further West, on the Oran margin, the accumulation rates range between 0.2 and 0.5 mm.y<sup>-1</sup> and were higher during the transgressive interval than during the high stand. The three cores offshore Oran show that the turbiditic deposition reached its maximum extent during the transgressive phase. Generally, analysis of the sedimentary columns from the Oran margin indicates that a high gravity-induced accumulation took place throughout the last ~14,000 years BP. On the part of the margin located East of Algiers, the gravity sedimentation appears slightly uneven: off Oued Sebaou mouth, it was effective during the last ~14,000 years BP. However, it was largely interrupted during the same interval off Boumerdes and Aïn Taya, whereas many gravity structures have been identified in the underlaying Pleistocene deposits.