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Bruno Savoye¹, Alain Morash², e ZaïAngo team³ (1) IFREMER, 29280 Plouzané, France (2) Total Fina Elf, Pau, France (3) Ifremer Total Fina Elf, Brest, France

The ZaïAngo Project: a Major Research Project for Deep Offshore Industry.Morphology, Seismic Structure and deposits of the Congo deep-sea fan

Recent oil discoveries in mud-dominated turbidite systems have sparked a definite interest -- new in the oil industry, which had neglected such turbiditic systems up until now. These sediment accumulations appear fairly substantially different from the models described on outcrops in tectonic contexts of intracratonic basins. The distinctive feature of these systems is the concentration and channelling of the terrigenous bed load from the mouth of large rivers (or the edges of platforms) to the abyssal plain. The study of the present Zaire turbiditic system appears a way to obtain the information required to develop a reliable depositional model of this type of system. The ZaïAngo project is an integrated study of the Gabon Congo Angola margin, leaded jointly by IFREMER and Total-Fina-Elf. Since 1998, nine cruises were conducted over the area from 400 m to 5200 m water depth. Collected data include Simrad EM12 bathymetric and acoustic imagery, high-resolution seismic profiles, 3.5 kHz acoustic profiles, deep-tow sidescan sonar and seismic, ROV dives and piston cores. As the ZaïAngo data set is unique, the Zaïre fan is going to become a usefull case study for oil industry, as Mississsippi and Amazone fans are. It allows to appreciate the turbiditic Zaïre system in its totality, almost for its recent part. The Zaire turbidite system is comparable in size with the Amazon or the Mississippi. The present channel is 760 km long and highly meandering. It is bordered in its distal part by thin levees and runs into a complex of distal lobes.