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François Guillocheau[1], Cécile Robin[2], Philippe Razin[3], Gilles Dromart[4], Spela Gorican[5], François Bechenec[6] (1) Géosciences Rennes, Université de Rennes-1, Rennes, France (2) University, Paris, France (3) Bordeaux University, Bordeaux, France (4) Université de Lyon 1, Lyon, France (5) Ljubjana University, Ljubjana, Slovenia (6) BRGM france, Nantes, France

**The Tethyan Margin of Oman: Short-Term Control (1-5 My) of the Middle / Upper Jurassic Carbonate Turbiditic Sedimentation**

The middle to upper Jurassic sediments of the fossil Tethyan passive margin of Oman consist of deep-sea carbonate turbidite deposits (Guwaysa Formation). They are mainly composed of ooïds and " muds " (silt to very fine sands) with a little siliciclastic component. The Guwaysa Formation (300 - 350 m in the most proximal setting) consist of a repetitive motif of 1 to 10 My duration made of coarse-grained sandy units (30 to 100 m thick) overlain by a more muddy one (20 to 50 m thick). The sandy units, coarsening-upward, is topped by a strongly amalgamated unit (top sandy unit, 1 to 10 m thick). Distally, over at least one hundred kilometers, the base sandy unit pinches out, whereas the top amalgamated sandy unit passes into an alternation of siliciclastic clays and carbonate muds with decimetric-thick carbonate sands (Bouma Tbc). These alternations compensate the lateral pinching-out of the basal sands. The muddy unit is again a coarsening-upward trend going from muds to muds/coarse sands to pebbles alternations.The coarse-grained sands to pebbles show nice evidences of by-pass deposits. Distally, they pass to muds and sands (Bouma Tbc), with no change of total thickness. This mean that these by-pass deposits did not feed large sandy deposits. These features can be explained by a change in both sea-level and carbonate production on the shelf, that will be discussed.