

Lithostratigraphy and Provenance of the Syn-Orogenic Terrigenous Deposits of the “Dorsale Calcaire” (S. S.) (Northern Internal Rif, Morocco): Tectono-Sedimentary Evolution and Palinspastic Reconstruction

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The “Dorsale Calcaire” s. s. between Tétouan and Jebha shows a stratigraphic succession mainly consisting of a Triassic-Liassic carbonate platform followed by Middle Jurassic up to Paleocene-Lower Eocene condensed successions. The Tertiary succession usually shows Paleocene-Eocene carbonatoclastic lithofacies evolving to Late Oligocene-Burdigalian terrigenous and siliciclastic deposits.

The lithostratigraphy of the Upper Oligocene up to Upper Burdigalian syn-orogenic terrigenous and siliciclastic deposits of the “Dorsale Calcaire” s.s., displays a generalized coarsening-thickening upward trend and laterally, from the Internal to external areas, their petrofacies evolve from calcarenites to litharenites with more than 50% of siliciclastic detritus and locally also with some granitic pebbles inherited mainly from Ghomaride nappes basement. The tertiary structuration of the “Dorsale Calcaire” as “piggy-back basins” or “mixed-mode piggy-back basins” occurred since Chattian up to Upper Burdigalian. Since the Upper Burdigalian the whole of the Internal Domain thrusts the Mauritanian foredeep and this later starts to be involved into thrusts and stacked sheets. The Flysch Basin closure is fossilized by the deposition of transgressive Langhian deposits of the Lower Beni Issef “Post-nappes” Formation.

Key words : Dorsale Calcaire, syn-orogenic, terrigenous, siliciclastic piggy-back basins” or “mixed-mode piggy-back basins