

DISTRIBUTION AND STRUCTURE OF POST-MIOCENE DEPOSITS IN THE TUNISIAN STRAIT

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Post-Miocene deposits are extensively distributed in the Tunisian strait. They occur transgressively on older deposits, with a slight but obviously tectonic nature of dislocations and a predominance of newly formed geological elements and include two independent generations of post-Miocene volcanism. This complex can be regarded as an independent structural stage.

Post-Miocene deposits in the Tunisian strait are represented by a schistose mass of rocks and sediments characterized by an abruptly changing thickness. They transgressively overly older deposits so that their lower boundary coincides everywhere with the unconformity surface. It represents, simultaneously, the acoustic basement surface. The main tectonic elements determine fundamental differences in the inner structure and thickness of post-Miocene deposits.

On the Ragusa-African plate post-Miocene deposits are characterized by a quiet and gentle dip, as a rule, with comparatively small thicknesses (40-200 m), an absence of distinctly expressed tectonic folds. And yet they are cut by minor vertical faults penetrating here from the basement. In a number of places in these deposits mantling folds are recorded and a petering out of certain layers. In some cases local unconformably occurring beds are observed. A greater tectonic shattering and a more contrasting thickness distribution of Pliocene-Quaternary beds is recorded in the south-western sector.

In the marine extension of the Sicilian marginal depression post-Miocene deposits are substantially thicker (to 600 m), they occur without disturbance on the sloping south eastern flank and are obviously deformed on the opposite flank. On the folded flank these deposits are cut by large faults and horsts. Intraformational unconformities can be seen quite clearly.

Exceptionally complicated bedding conditions of post-Miocene deposits are recorded in the Alpine folded zone. Sometimes they disappear completely, while in other places their thickness comes to 800 m and these deposits fill out large extended grabens. Along with mantle folds, a great number of tectonic folds, faults, unconformities and gaps have been established. Especially numerous in post-Miocene deposits are volcanic bodies belonging to three independent generations. Judging by the nature of their junctions with the enclosing strata, the first generation is of a pre-Pliocene age, the second - a Middle Pliocene age and the third - a Holocene age.

It is obvious that the post-Miocene stage represents the latest stage in the geological evolution of this territory.