DEPOSITIONAL CONDITIONS OF PLEISTOCENE ALLUVIAL FAN DEPOSITES IN THE GÜZELYURT BASIN (TURKISH REPUBLIC OF THE NORTHERN CYPRUS)

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ABSTRACT.- The alluvial fan deposites are widely distributed in the Güzelyurt basin. In the southern pan of the Güzelyurt basin, these deposites unconformably overlie the units of Middle-Late Cretaceous Troodos massive, Late Miocene-Early Pliocene Myrtou Marls and Late Pliocene Athalassa formation. Towards the north, they are unconformably overlain by recent alluvium deposits. The fan deposites are deposited by high-viscosity debris flows and braided streams dominated by sheet-flood events. Six different lithofacies are recognized; (A) Clast supported conglomerates are hyper-concentrated debris flow deposits, (B) Matrix supported conglomerates represent mud flow deposits, (C) Thick bedded sandy conglomerates represent sheet-flood and braided-stream deposits, (D) Clast supported, thick bedded conglomerates with interbedded sandstones are suggested as a braided-stream deposits, (E) Thirs bedded sandstones and conglomerates represent sheet-flood deposits by very shallow migrating channels on a broad, planar surface during upper-flow regime, (F) Caliche bearing mudstones represent distal sheet-flood deposits in semiarid dimates At the end of the Late Pliocene, due to the rapidly uplifting of the Troodos massive, the coarse-very coarse pebbles of alluvial sediments are deposited as the inner fan deposites over the Pliocene sediments. As from Middle Pleistocene, the other alluvial fan fades are deposited together with relatively the coarse facies. The depositional conditions and the caliche concentrations in the alluvial fan deposites indicate a semi-arid climate.