



Tectono-Stratigraphic Evolution of the Lake Van, Turkey

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Lake Van is situated in eastern Anatolia. It is the largest soda lake in the world. It also ranks the fourth-lake on earth by volume. It formed during the Pleistocene when the volcanic edifice of the Nemrut Volcano locally blocked the valley of the River Euphrates. It has a closed drainage system with several perennial streams that carry large amounts of sediments from the surrounding high mountains and accumulate them in today's lake. However, these sediments also crop out as terraces at various altitudes of the surrounding elevated areas, indicating that a series of changes in base- or water-level of the lake occurred.

The exposed sediments display characteristic facies, stratigraphic sequence, well-developed sedimentary structures and scattered fossils that provide invaluable data on physical, chemical and biological conditions of their depositional sub-environments. Recognition of these sub-environments and their arrangement in space and time may contribute tremendously to our understanding of local tectonics and paleoclimate of the Lake Van Basin. These presentation deals with such topics.