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Application of Magnetic Susceptibility of Holocene deposits in survey on Caspian sea-level fluctuation

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Bed sediments of Caspian Sea from the West South basin have been investigated using sediment cores. Off shore regions are very sensitive to the natural change in the environment. Caspian Sea water-level oscillation is one of the most important factors that influences its environment. In this survey on sea-level fluctuation has been studied using Magnetic Susceptibility in sediments. Results of this study indicate that MS as an effective approach offers insights into the general character of sea level fluctuations. In general, variations in MS magnitude within sequence represent changes in the rate of detrital fractions supply to the marine system that is controlled by sea-level fluctuation. Based on the assumption that the average MS magnitude for the region is proxy for mean sea level, average MS is subtracted from each datum. Therefore positive MS values represent sea level fall and negative MS values represent sea level rise. This study presents an approach to reconstruct the sea level fluctuations during geological times.