Paleoclimatic Changes Recorded in the Sediment Cores from the Eastern Arabian Sea

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Sediment cores from the eastern Arabian Sea were studied for isotopic, sedimenotogical, geochemical and environmental rock magnetic parameters. The I^{18} O, magnetic records exhibit major events at ~16 ka, 14.5 ka, 11.5 ka, 9.8/8.6 ka related to start and intensity of summer monsoons. These events are synchronous with that of the western Arabian Sea cores and the North Atlantic and suggest close connection between high latitude climate and tropical monsoon. The cores exhibit different stages of diagenesis at different sediment intervals. Rock magnetic parameters and redox sensitive elements in these cores suggest stronger reductive diagenesis, anoxic sedimentary conditions and low oxygenated bottom waters were characteristic of glacial sediments, whereas more oxygenated bottom waters prevailed during the Holocene.