



LATE QUATERNARY ARIDITY CHANGES ON THE SOUTHERN HEMISPHERE INFERRED FROM THE MARINE SEDIMENT RECORD OFF NAMIBIA AND CHILE

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The grain-size distributions of the terrigenous fraction of two deep-sea sediment cores from the SE Atlantic (offshore Namibia) and from the SE Pacific (offshore northern Chile) are unmixed into subpopulations and are interpreted as coarse aeolian dust, fine aeolian dust and fluvial mud. The downcore ratios of the proportions aeolian dust and fluvial mud are interpreted as paleo-continental aridity records of southwestern Africa and northern Chile. The two records show a relatively wet Last Glacial Maximum compared to a relatively dry Holocene. The changes in continental aridity in southwestern Africa and northern Chile are related to changes in the latitudinal position of the moisture-bearing Southern Westerlies, most probably driven by the sea-ice extent around Antarctica.