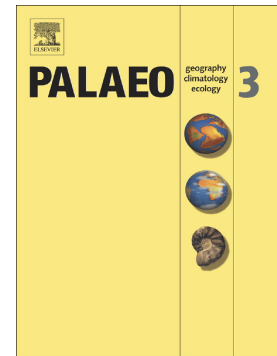


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## **A multiproxy study of the ocean-atmospheric forcing and the impact of sea-level changes on the southern Cape coast, South Africa during the Holocene**

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### **Abstract**

A multiproxy approach, focusing on biological proxies, was undertaken to determine the influence of sea-level changes along the southern Cape coast and the variability of water masses over the central Agulhas Bank region during the Holocene. A 30.47 m sedimentary core extracted from the coastal lake, Eilandvlei, shows continuous deposition for the last 9000 years. Microfossils were classified based on salinity and habitat, diatoms were further defined by their temperature preferences as either warm- or cold-water species. The composition of the assemblages is strongly linked to fluctuations in marine inflow into the system and the extent of freshwater inputs to the lake as recorded at the core site. Paleoproductivity improved during

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