

Radiolarian changes since the last glacial period in the Conrad Rise and their relation to the oceanic environments

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It is well known that the oceanic circulation in the Southern Ocean plays an important role in the global climate changes. For reconstruction of the past ocean circulation in the Southern Ocean, siliceous microfossils such as diatoms and radiolarians preserved abundantly in deep-sea sediments are widely used as paleoceanographic proxies. Fossil assemblages of diatoms (phytoplankton) indicate usually surface water environments, while radiolarians (zooplankton) can be used as indicator for not only surface but also intermediate and deep water conditions because of their discrete habitat depths for each species. In this study, quantitative analysis of radiolarians was conducted for core COR-1bPC (54°S) from Conrad Rise in the Indian Ocean sector of the Southern Ocean.

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