



Evolution of climate and biodiversity along the Chilean coast

The Pacific coast of South America experienced numerous dramatic climatic changes during the Cenozoic Era. Mollusks along this coastline provide one of the main exceptions from the latitudinal diversity gradient of decreasing species numbers toward the poles. From 42°S southward, coincident with the onset of the mosaic coastline of the southern Chilean fiordlands, species numbers show a twofold to threefold increase compared to the central Chilean coast. The Neogene and Quaternary fossil record (= since ca. 23 million years ago) of central and southern Chile was used to test hypotheses on the origin of this unusual pattern. Contrary to previous suggestions, no evidence was found for an accumulation of biodiversity since the Eocene, or for the northward spread of Antarctic taxa into southern mid-latitudes. Rather, the data suggest that the mosaic coastline south of 42°S was colonized after the retreat of the glaciers from their marine termini since the later Pleistocene, by taxa that were already present along the Chilean coast.



Speaker: Steffen Kiel, Department of Palaeobiology,
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Date: **Wednesday 20 September, 13h15**

Place: Ahlmannsalen, Geoscience Building

The lecture will be streamed and you can watch it live here
<https://connect.sunet.se/bolincentre>. It will also be saved on the Bolin Centre website.