

1. Record Nr.	UNINA9910830026903321
Titolo	The Antarctic Paleoenvironment: Pt. 2: A Perspective on Global Change
Pubbl/distr/stampa	[Place of publication not identified], : American Geophysical Union, 1993
ISBN	1-118-66806-5
Descrizione fisica	1 online resource (273 pages) : illustrations, maps
Collana	Antarctic research series ; ; 60
Disciplina	560.4509989
Soggetti	Paleoecology - Antarctica Paleogeography - Antarctica
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Southern Ocean influences on Late Eocene to Miocene deepwater circulation / James D Wright, Kenneth G Miller -- Late Eocene to Oligocene vertical oxygen isotopic gradients in the South Atlantic: implications for warm saline deep water / Gregory A Mead, David A Hodell, Paul F Ciesielski -- Eocene to Oligocene oceanography and temperatures in the Antarctic Indian Ocean / Enriqueta Barrera, Brian T Huber -- Fossils in the Sirius Group, Transantarctic Mountains: leaves and pollen and their climatic implications / Robert S Hill, Elizabeth M Trustwell -- Cenozoic glacial sequences of the Antarctic continental margin as recorders of Antarctic ice sheet fluctuations / Alan K Cooper, Stephen Eittrheim, Uri Ten Brink, Igor Zayatz -- Cenozoic sedimentary and climatic record, Ross Sea Region, Antarctica / Michael J Hambrey, Peter J Barrett -- Cenozoic southern mid- and high-latitude biostratigraphy and chronostratigraphy based on planktonic foraminifera / D Graham Jenkins -- Cenozoic Southern Ocean reconstructions from sedimentologic, radiolarian, and other microfossil data / Dave Lazarus, Jean Pierre Caulet -- The evolution of the Cenozoic southern high- and mid-latitude planktonic foraminiferal faunas / D Graham Jenkins -- Unusual silicoflagellate skeletal morphologies from the Upper Miocene-Lower Pliocene: possible ecophenotypic variations from the high-latitude Southern Oceans / Kevin McCartney, Sherwood W Wise -- Late Neogene Antarctic glacial history: evidence from Central Wright Valley / M L Prentice, J G

Bockheim, S C Wilson, L H Burckle, D A Hodell, C Schluchter, D E Kellogg -- Coastal East Antarctic neogene sections and their contribution to the ice sheet evolution debate / Patrick G Quilty -- 300-year cyclicity in organic matter preservation in Antarctic fjord sediments / Eugene W Domack, Tracy A Mashiotta, Lewis A Burkley, Scott E Ishman.

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Sommario/riassunto

Papers based on work presented at a conference held at the University of California, Santa Barbara, August 28-31 1991, entitled 'The Role of the Southern Ocean and Antarctica in Global Change : an Ocean Drilling Perspective.' Papers deal with paleoenvironmental data from the Antarctic, including geology, climate, fossils, sediments and the eustatic record.

Published by the American Geophysical Union as part of the Antarctic Research Series, Volume 60. The Antarctic continent and the surrounding Southern Ocean represent one of the major climate engines of the Earth: coupled components critical in the Earth's environmental system. The contributions in this volume help with the understanding of the long-term evolution of Antarctica's environment and biota. The aim of this and the preceding companion volume is to help place the modern system within a historical context. The environment and biosphere of the Antarctic region have undergone dynamic changes through geologic time. These, in turn, have played a key role in long-term global paleoenvironmental evolution. The development of the Southern Ocean itself, resulting from plate tectonism, created first-order changes in the circulation of the global ocean, in turn affecting meridional heat transport and hence global climates. Biospheric changes responded to the changing oceanic climatic states. Comprehension of the climatic and oceanographic processes that have operated at various times in Antarctica's history is crucial to the understanding of the present-day global environmental system. This knowledge will become increasingly important in parallel with concerns about anthropogenically caused global change. How vulnerable is the Antarctic region, especially its ice sheets, to global warming? The question is not parochial, given the potential of sea level change resulting from any Antarctic cryospheric development. Conversely, how much of a role does the Antarctic region, this giant icebox, play in moderating global, including sea level, change?.

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