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Nota di contenuto	Quaternary Environmental Change in the Tropics; Contents; List of contributors; Preface; Acknowledgements; I: Global contexts; CHAPTER 1: Introduction; 1.1 Why the tropics matter; 1.1.1 Defining the tropics; 1.1.2 Importance of the tropics; 1.2 Development of ideas; 1.2.1 Early ideas about tropical environmental change; 1.2.2 The twentieth century revolution; 1.2.3 Advances in modelling; 1.3 Establishment of the tropical climate system; 1.4 Drivers of tropical environmental change; 1.5 The tropics as drivers of change; 1.5.1 The tropics and greenhouse gas concentrations 1.5.2 Impacts of low latitude volcanic eruptions 1.5.3 Dust emissions from the tropics and subtropics; 1.6 Extra-tropical forcing; 1.7 Organisation of the volume; Acknowledgements; References; CHAPTER 2: Contemporary climate and circulation of the tropics; 2.1 Introduction; 2.2 Diurnal and local processes; 2.3 Planetary context; 2.4 Regional circulation systems; 2.4.1 Jet streams; 2.4.2 Subtropical highs and trade winds; 2.4.3 Equatorial trough zone; 2.4.4 Monsoons; 2.4.5 Equatorial zonal circulations; 2.5 Climatic variability; 2.5.1 Southern

Oscillation and El Nino; 2.5.2 Indian Monsoon  
2.5.3 Northeast Brazil2.5.4 Sahel; 2.5.5 Timescales of variability; 2.6  
Concluding remarks; References; II: Regional environmental change;  
CHAPTER 3: Tropical oceans; 3.1 Tropical oceans in the global climate  
system; 3.1.1 Modern climatology; 3.1.2 El Nino-Southern Oscillation  
and its relatives; 3.1.3 Solar and volcanic radiative forcing of tropical  
oceans; 3.1.4 Tropical oceans and monsoons; 3.1.5 The tropical oceans  
as part of the global conveyor belt; 3.2 Reconstructing past ocean  
conditions; 3.2.1 Proxies for SST and SSS; 3.2.2 Reconstructing  
continental climate using marine archives  
3.3 Tropical oceans throughout the Quaternary3.3.1 Glacial-interglacial  
cycles; 3.3.2 Early Quaternary (the '41-kyr world'); 3.3.3 Mid-  
Pleistocene Transition; 3.3.4 Late Quaternary (the '100-kyr world'); 3.4  
The past 20 000 years; 3.4.1 The Last Glacial Maximum; 3.4.2 Glacial  
termination: an active role for the tropics?; 3.4.3 History of the  
equatorial Pacific and the state of ENSO; 3.4.4 The Holocene; 3.5  
Outlook; References; CHAPTER 4: Africa; 4.1 Introduction; 4.2 Potential  
climate forcing factors; 4.3 Mediterranean North Africa  
4.3.1 Contemporary climate and sources of palaeoenvironmental  
information4.3.2 Longer records; 4.3.3 The Last Glacial Maximum;  
4.3.4 The last glacial-interglacial transition; 4.3.5 The Holocene; 4.4  
The Sahara and the Sahel; 4.4.1 Contemporary climate and sources of  
palaeoenvironmental information; 4.4.2 Longer records; 4.4.3 The Last  
Glacial Maximum; 4.4.4 The last glacial-interglacial transition; 4.4.5  
The Holocene; 4.5 Equatorial Africa; 4.5.1 Contemporary climate and  
sources of palaeoenvironmental information; 4.5.2 Longer records;  
4.5.3 The Last Glacial Maximum  
4.5.4 The last glacial-interglacial transition

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### Sommario/riassunto

The global climate changes that led to the expansion and contraction  
of high latitude ice sheets during the Quaternary period were  
associated with equally dramatic changes in tropical environments.  
These included shifts in vegetation zones, changes in the hydrology  
and ecology of lakes and rivers, and fluctuations in the size of  
mountain glaciers and sandy deserts. Until recently it was thought that  
such changes were triggered by fluctuations in the distribution of polar  
ice cover. Now there is increasing recognition that the tropics  
themselves have

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