1. Record Nr. UNINA9910455343203321

Titolo	Changes in the human-monsoon system of East Asia in the context of global change [[electronic resource] /] / editors Congbin Fu, J.R. Freney, J.W.B. Stewart
Pubbl/distr/stampa	Singapore ; ; Hackensack, NJ, : World Scientific, c2008
ISBN	981-283-242-4
Descrizione fisica	1 online resource (384 p.)
Collana	Monsoon Asia integrated regional study on global change ; ; v. 1
Altri autori (Persone)	FuCongbin FreneyJ. R (John Raymond) StewartJ. W. B
Disciplina	551.695
Soggetti	Monsoons - East Asia Climatic changes - East Asia Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	CONTENTS; Preface; Acknowledgments; Introduction; 1. Variability of Monsoon; 2. Atmospheric Composition; 3. Land Use Change; 4. Marine/Coastal Systems; 5. Driving Forces; Part I Variability of Monsoon; 1. Thermal-Dynamical E.ects of the Tibetan Plateau on the East Asian Monsoon Guoxiong Wu, Qiong Zhang, Anmin Duan and Jiangyu Mao E-mail: zhq@lasg.iap.ac.in; 1. Introduction; 2. Seasonal Transition of the Asian Monsoon; 3. Summer Climate over Subtropical Asia; 3.1. Summer heating and corresponding circulation; 3.2. Influence of mountain waves 4. Effects on Bimodality of the South Asian High in Summer4.1. Bimodality of the South Asian high; 4.2. Bimodality and the climate anomaly; 5. Discussion; Literature Cited; 2. Paleo-Monsoon Variations in East Asia Reconstructed from Terrestrial Records Li Li and Zhisheng An E-mail: anzs@loess.llqg.ac.cn; 1. Introduction; 2. History; 3. Past Monsoon Variability; 4. Discussion; Literature Cited; 3. Paleo-Monsoon Evolution and Variability Derived from Deep-Sea Sediments Pinxian Wang E-mail: pxwang@online.sh.cn; 1. Introduction; 2. Monsoon Evolution at Tectonic Time Scales

2.1. Land-sea distribution and initiation of the Asian monsoon system2.2. Uplift of plateau and stepwise development of monsoons; 3. Monsoon Response to Glacial Cycles; 3.1. Use of monsoon proxies; 3.2. Geographic di.erences in monsoon records; 3.3. Orbital forcing of monsoon variations; 4. Monsoon Variations at Millennial and Decadal Scales; 4.1. Millennial-scale variations; 4.2. Centennial- and decadal-scale variations; 5. Conclusions; Literature Cited
4. Late Quaternary Paleoclimate Simulations and Model Comparisons for the East Asian Monsoon Ge Yu, Sandy P. Harrison, Xing Chen and Yingqun Zheng E-mail: geyu33@hotmail.com1. Introduction; 2. Data Synthesis; 2.1. Chinese lake status database; 2.2. BIOME 6000 data sets for China; 2.3. Loess records; 3. Paleoclimate Simulations; 3.1. 6,000 years ago; 3.2. 21,000 years ago; 3.3. 35,000 years ago; 4. Implications; Literature Cited; 5. El Ni no and the Southern Oscillation-Monsoon Interaction and Interannual Climate Chongyin Li and Ronghui Huang E-mail: lcy@lasg.iap.ac.cn; 1. Introduction
2. Impacts of ENSO on the Asian Monsoon2.1. East Asian summer monsoon and ENSO; 2.1.1. Interannual variability of rainfall; 2.1.2. Impact of ENSO on summer rainfall; 2.2. East Asian winter monsoon and ENSO; 3. The Forced ENSO by an Anomalous Winter Monsoon; 3.1. Occurrence of ENSO and anomalous East Asian winter monsoon; 3.2. Dynamical impact of anomalous winter monsoon; 3.3. Numerical simulation of anomalous winter monsoon exciting ENSO; 4. Variability of Relationship between Asian Monsoon and ENSO; 5. Interannual Climate Variability; 6. Conclusions; Literature Cited
Part II Atmospheric Composition

Sommario/riassunto

This book is the first in a series of assessments of regional climate change. Irreversible changes to regional biogeochemistry, and terrestrial and marine ecosystem functioning are brought about by increases in population, intensified land use, urbanization, industrialization and economic development. These may have global as well as regional consequences. The objectives of the assessments are, (i) to better understand how human activities in regions are altering regional atmospheric, terrestrial, and marine environments, (ii) to provide a sound scientific basis for sustainable regional develo