

1. Record Nr.	UNINA9910830645403321
Titolo	Amazonia and global change [[electronic resource]] / Michael Keller ... [et al.]
Pubbl/distr/stampa	Washington, D.C., : American Geophysical Union, c2009
ISBN	1-118-67034-5 1-118-67236-4
Descrizione fisica	1 online resource (576 p.)
Collana	Geophysical monograph ; ; 186
Altri autori (Persone)	KellerMichael <1960->
Disciplina	577.34/1409811 577.34140981
Soggetti	Rain forest ecology - Amazon River Region Biosphere - Research - Amazon River Region Climatic changes - Amazon River Region Amazon River Region Climate
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	Title Page; Contents; Preface; Section I: People and Land Change; People and Environment in Amazonia: The LBA Experience and Other Perspectives; The Changing Rates and Patterns of Deforestation and Land Use in Brazilian Amazonia; Selective Logging and Its Relation to Deforestation; The Spatial Distribution and Interannual Variability of Fire in Amazonia; The Expansion of Intensive Agriculture and Ranching in Brazilian Amazonia; Scenarios of Future Amazonian Landscapes: Econometric and Dynamic Simulation Models; Road Impacts in Brazilian Amazonia; Small Farmers and Deforestation in Amazonia Section II: Atmosphere and ClimateUnderstanding the Climate of Amazonia: Progress From LBA; Characteristics of Amazonian Climate: Main Features; The Amazonian Boundary Layer and Mesoscale Circulations; Natural Volatile Organic Compound Emissions From Plants and Their Roles in Oxidant Balance and Particle Formation; Biomass Burning in Amazonia: Emissions, Long-Range Transport of Smoke and Its Regional and Remote Impacts; Aerosol Particles in Amazonia: Their Composition, Role in the Radiation Balance, Cloud Formation, and Nutrient Cycles

Modeling the Regional and Remote Climatic Impact of Deforestation; Evapotranspiration; Global Warming and Climate Change in Amazonia: Climate-Vegetation Feedback and Impacts on Water Resources; Section III: Terrestrial Ecosystems; Biogeochemistry and Ecology of Terrestrial Ecosystems of Amazonia; Nutrient Limitations to Secondary Forest Regrowth; The Maintenance of Soil Fertility in Amazonian Managed Systems; Sources and Sinks of Trace Gases in Amazonia and the Cerrado; The Production, Storage, and Flow of Carbon in Amazonian Forests
Changes in Amazonian Forest Biomass, Dynamics, and Composition, 1980-2002; Ecosystem Carbon Fluxes and Amazonian Forest Metabolism; The Regional Carbon Budget; The Effects of Drought on Amazonian Rain Forests; Soil Carbon Dynamics; Ecophysiology of Forest and Savanna Vegetation; Section IV: Surface Water; Surface Waters in Amazonia: Key Findings and Perspectives; The Role of Rivers in the Regional Carbon Balance; Water and Chemical Budgets at the Catchment Scale Including Nutrient Exports From Intact Forests and Disturbed Landscapes; Floodplain Ecosystem Processes
Effects of Climatic Variability and Deforestation on Surface Water Regimes; Section V: Conclusions and Vision for the Future; Results From LBA and a Vision for Future Amazonian Research; Index

Sommario/riassunto

Published by the American Geophysical Union as part of the Geophysical Monograph Series, Volume 186. Amazonia and Global Change synthesizes results of the Large-Scale Biosphere-Atmosphere Experiment in Amazonia (LBA) for scientists and students of Earth system science and global environmental change. LBA, led by Brazil, asks how Amazonia currently functions in the global climate and biogeochemical systems and how the functioning of Amazonia will respond to the combined pressures of climate and land use change, such as Wet season and dry season aerosol concentrations and their
