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Soggetti	Climatic changes Physical geography Atmospheric science Environmental sciences Geochemistry Climate Change Earth System Sciences Climate Change Management and Policy Atmospheric Sciences Environmental Science and Engineering
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Data and Methods -- Climate Change Historical Simulations and Projections -- Comparisons among Multi-model Ensemble Methods -- Responsibility for Historical Climate Change Induced from Developed and Developing World Anthropogenic Carbon Emissions -- Responsibility for Historical Climate Change Induced from Developed and Developing World Anthropogenic Sulfur Emissions -- Transferred Responsibility for Historical Climate Change Induced from Carbon Trade between Developed and Developing World.
Sommario/riassunto	This atlas and reference resource assembles the latest research findings on the responsibility and obligation of human society for historical climate change. It clearly and quantitatively estimates to what extent the developed and developing world are responsible for historical climate change with regard to anthropogenic carbon and

sulfur emissions as well as global carbon trade, and so provides a potential tool to address the controversial issue of carbon emission reduction in international climate negotiations. Since the quantitative attribution of historical climate change is calculated based on CMIP5 models, the fidelity of these models in representing the observed climate change is also evaluated. In addition to evaluation, future climate change based on CMIP5 models is also shown both on global and regional scales (especially for China and its surrounding areas ) in terms of surface air temperature, precipitation, sea surface temperature, atmospheric circulations and Arctic Sea ice. The atlas also makes various comparisons among different multi-model ensemble methods in order to obtain the most reliable estimation.

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