1. Record Nr. UNINA9910480435903321

Autore	Weaver C. Douglas
Titolo	Mirrors and Microscopes : Historical Perceptions of Baptists
Pubbl/distr/stampa	Crownhill : , : Authentic Media, , 2015 ©2015
ISBN	1-84227-912-2
Descrizione fisica	1 online resource (265 pages)
Collana	Studies in Baptist History and Thought Ser.
Disciplina	286
Soggetti	Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910299434603321

Autore	Wang Yuan
Titolo	Aerosol-Cloud Interactions from Urban, Regional, to Global Scales / / by Yuan Wang
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2015
ISBN	3-662-47175-2
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (100 p.)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053
Disciplina	363.7392
Soggetti	Atmospheric science Physical geography Climatology Air - Pollution Atmospheric Sciences Earth System Sciences Atmospheric Protection/Air Quality Control/Air Pollution
Lingua di pubblicazione	Inglese

Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Doctoral Thesis accepted by Texas A&M University, College Station, USA"--T.p.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- Numerical model description -- Impacts of urban pollution on thunderstorms -- Aerosol effects on the stratocumulus and evaluations of microphysics -- Impacts of asian pollution outflows on the pacific storm -- Conclusions.
Sommario/riassunto	The studies in this dissertation aim at advancing our scientific understandings about physical processes involved in the aerosol-cloud-precipitation interaction and quantitatively assessing the impacts of aerosols on the cloud systems with diverse scales over the globe on the basis of the observational data analysis and various modeling studies. As recognized in the Fifth Assessment Report by the Inter-government Panel on Climate Change, the magnitude of radiative forcing by atmospheric aerosols is highly uncertain, representing the largest uncertainty in projections of future climate by anthropogenic activities. By using a newly implemented cloud microphysical scheme in the cloud-resolving model, the thesis assesses aerosol-cloud interaction for distinct weather systems, ranging from individual cumulus to mesoscale convective systems. This thesis also introduces a novel hierarchical modeling approach that solves a long outstanding mismatch between simulations by regional weather models and global climate models in the climate modeling community. More importantly, the thesis provides key scientific solutions to several challenging questions in climate science, including the global impacts of the Asian pollution. As scientists wrestle with the complexities of climate change in response to varied anthropogenic forcings, perhaps no problem is more challenging than the understanding of the impacts of atmospheric aerosols from air pollution on clouds and the global circulation.