

1. Record Nr.	UNINA9910164341803321
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Titolo	Demystifying Climate Models [[electronic resource]] : A Users Guide to Earth System Models // by Andrew Gettelman, Richard B. Rood
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2016
ISBN	3-662-48959-7
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XVII, 274 p. 62 illus., 58 illus. in color.)
Collana	Earth Systems Data and Models, , 2364-5830 ; ; 2
Disciplina	551.6011
Soggetti	Civil engineering Climate change Environmental sciences Civil Engineering Climate Change Management and Policy Math. Appl. in Environmental Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Introduction.-Components of the Climate System -- Climate Change and Global Warming -- Essence of a Climate Model -- Simulating the Atmosphere -- Simulating the Ocean and Sea Ice -- Simulating Terrestrial Systems -- Bringing the System Together: Coupling and Complexity -- Model Evaluation -- Predictability -- Results of Current Models -- Usability of Climate Model Projections by Practitioners -- Summary and Final Thoughts.
Sommario/riassunto	This book demystifies the models we use to simulate present and future climates, allowing readers to better understand how to use climate model results. In order to predict the future trajectory of the Earth's climate, climate-system simulation models are necessary. When and how do we trust climate model predictions? The book offers a framework for answering this question. It provides readers with a basic primer on climate and climate change, and offers non-technical explanations for how climate models are constructed, why they are uncertain, and what level of confidence we should place in them. It presents current results and the key uncertainties concerning them.

Uncertainty is not a weakness but understanding uncertainty is a strength and a key part of using any model, including climate models. Case studies of how climate model output has been used and how it might be used in the future are provided. The ultimate goal of this book is to promote a better understanding of the structure and uncertainties of climate models among users, including scientists, engineers and policymakers.
