1.	Record Nr.	UNINA9910821462003321
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	Titolo	Energy balance climate models / / Gerald R. North and Kwang-Yul Kim
	Pubbl/distr/stampa	Weinheim, Germany : , : Wiley-VCH, , 2017 ©2017
	ISBN	3-527-68383-6 3-527-68381-X 3-527-69884-1
	Edizione	[1st edition]
	Descrizione fisica	1 online resource (370 pages)
	Collana	Wiley Series in Atmospheric Physics and Remote Sensing
	Disciplina	551.60113
	Soggetti	Climatic changes - Mathematical models
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Climate and Climate Models -- Global Average Models -- Radiation and Vertical Structure -- Greenhouse Effect and Climate Feedbacks -- Latitude Dependence -- Time Dependence in the 1-D Models -- Nonlinear Phenomena in EBMs -- Two Horizontal Dimensions and Seasonality -- Perturbation by Noise -- Time-Dependent Response and the Ocean -- Applications of EBMs: Optimal Estimation -- Applications of EBMs: Paleoclimate.
	Sommario/riassunto	Written by renowned experts in the field, this first book to focus exclusively on energy balance climate models provides a concise overview of the topic. It covers all major aspects, from the simplest zero-dimensional models, proceeding to horizontally and vertically resolved models. The text begins with global average models, which are explored in terms of their elementary forms yielding the global average temperature, right up to the incorporation of feedback mechanisms and some analytical properties of interest. The effect of stochastic forcing is then used to introduce natural variability in the models before turning to the concept of stability theory. Other one dimensional or zonally averaged models are subsequently presented, along with various applications, including chapters on paleoclimatology, the inception of continental glaciations, detection of signals in the climate system, and optimal estimation of large scale

quantities from point scale data. Throughout the book, the authors work on two mathematical levels: qualitative physical expositions of the subject material plus optional mathematical sections that include derivations and treatments of the equations along with some proofs of stability theorems. A must-have introduction for policy makers, environmental agencies, and NGOs, as well as climatologists, molecular physicists, and meteorologists.