



State-of-Art in Regional Climate Models

Guest Editors:

Dr. Bo Huang

Industrial Ecology Programme
(IndEcol), Norwegian University
of Science and Technology
(NTNU), NO-7491 Trondheim,
Norway

Dr. Huidong Li

Department of Earth Sciences,
Uppsala University, 62167 Visby,
Sweden

Dr. Jimy Dudhia

Mesoscale and Microscale
Meteorology Laboratory,
National Center for Atmospheric
Research (NCAR), Boulder, CO
80307-3000, USA

Deadline for manuscript
submissions:

closed (30 April 2022)

Message from the Guest Editors

This Special Issue intends to collect the ongoing studies involving the development and application of regional climate models supporting the analysis of climate change at the local level, and development of impact, adaptation and risk studies at different scales. This issue aims to collect the enormous advances made in the context of regional climate models in recent years. Their increasing use in multiple fields of applications is forcing the scientific community working with regional climate models to improve their performance more and more, for example through the implementation of increasingly complex and realistic physical parameterizations and numerical schemes or techniques, such as two-way nesting, and many others. Studies are being developed for the realization of coupling of atmospheric models with soil and hydrology models and/or oceanic models, in order to develop detailed and realistic representation of the entire Earth system. Moreover, very high resolutions allows improvements also in representation of some large-scale features due to an adequate representation of small-scale processes.





an Open Access Journal by MDPI

Editor-in-Chief

Dr. Daniele Contini

Institute of Atmospheric Sciences
and Climate (ISAC), National
Research Council (CNR), Str. Prv.
Lecce-Monteroni km 1.2, 73100
Lecce, Italy

Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, Inspec, CAPlus / SciFinder, Astrophysics Data System, and other databases.

Journal Rank: CiteScore - Q2 (*Environmental Science (miscellaneous)*)

Contact Us

Atmosphere Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/atmosphere
atmosphere@mdpi.com
[X@Atmosphere_MDPI](https://twitter.com/Atmosphere_MDPI)