

Advances in Meteorology, Climatology and Atmospheric Physics

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Editors

Advances in Meteorology, Climatology and Atmospheric Physics

 Springer

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Preface

The Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP) is organized on a biennial basis holding a long history of 22 years, dating back to the early 1990s. This year it is co-organized by the National and Kapodistrian University of Athens (Department of Atmospheric Physics – Meteorology and Laboratory of Climatology and Atmospheric Environment), the Hellenic Meteorological Society and the Mariolopoulos-Kanaginis Foundation for the Environmental Sciences. COMECAP Conferences provide the opportunity for the dissemination of new knowledge in the framework of Meteorology, Climatology and Atmospheric Physics, hosting experts, scientists and mainly young researchers to present their recent research studies and share their innovating ideas.

COMECAP 2012 covers various topics related to the science of the Atmospheric Environment, which is in fact an interdisciplinary field, giving the opportunity to understand the physical systems and environmental processes in an integrated manner. The papers presented at COMECAP 2012 cover a spectrum of topics that include Atmospheric Physics and Radiation, Dynamic and Synoptic Meteorology, Applied Meteorology and Climatology, Climate Dynamics and Changes, Weather Analysis and Forecasting and Extreme Events, Mesoscale and Micro-meteorology, Remote Sensing and Satellite Meteorology, Air Quality (Indoor and Outdoor), Bio-meteorology and Bioclimatology, Agricultural Meteorology, Hydrology and Hydro-meteorology. It is worth mentioning that 177 full papers were finally accepted to be published at the Conference Proceedings after peer revision against 210 abstracts initially submitted. The published papers in this book are classified into three main sections, as reflected in the title of the Conference: 50 papers in Meteorology, 67 in Climatology and 60 in Atmospheric Physics.

Finally, it is my pleasure and privilege to acknowledge the contribution of the authors, the members of the Scientific Committee, the appointed reviewers and especially the members of the Organizing Committee, for their valuable efforts on the production of this book, as well as our Sponsors.

I wish you all a fruitful Conference and a pleasant stay at the beautiful city of Athens.

The Conference Chairman

Professor Costas G. Helmis

Address of the Hellenic Meteorological Society (HMS)

The Hellenic Meteorological Society, member of the European Meteorological Society, proudly presents the Proceedings of the International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2012), in collaboration with the Department of Atmospheric Physics – Meteorology and Laboratory of Climatology and Atmospheric Environment of the National and Kapodistrian University of Athens. For the first time, the accepted scientific papers are published, after peer revision, in Springer book series under the title “Advances in Meteorology, Climatology and Atmospheric Physics”. This fact improves the level of the Conference as far as the quality of presentations and the dissemination of recent knowledge of our climate system from the regional to the global scale are concerned.

The Hellenic Meteorological Society has co-organized the previous biennial conferences in Thessaloniki (May 21–23, 1992, and September 29–30, 1994), Athens (September 25–27, 1996, and September 22–25, 1998), Thessaloniki (September 28–30, 2000), Ioannina (September 25–28, 2002), Nicosia (September 28–30, 2004), Athens (May 24–26, 2006), Thessaloniki (May 28–31, 2008) and Patras (May 25–28, 2010). All these conferences have been carried out by the members of the Hellenic Meteorological Society and our foreign colleagues from disciplines associated with the study of atmospheric environment.

The achievement of COMECAP 2012 is due to the great efforts of the Organizing Committee towards the success and quality of the Conference as well as the Sponsors who granted this scientific event. The Hellenic Meteorological Society wishes to express its gratitude to everybody mentioned and the participants, who presented their scientific papers, contributing to the better understanding of the physical processes of our climate system.

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