

## Special Issue

# Mesoscale and Long-Range Circulations Driving Atmospheric Air Concentrations

### Message from the Guest Editor

The atmosphere is the medium of transit from the source to the receptor, and hence, meteorological conditions are the key factor, through atmospheric chemical reactions/transformations and dynamic processes, to understand the temporal and spatial variability, and the occurrence of high air concentrations. This Special Issue is devoted to all theoretical, modelling, and observational aspects to evaluate source-receptor relationship for pollutants. Studies on meso- and synoptic scales characterizing the atmospheric transport and dispersion of air concentrations are of interest. The topics of this special issue include the identification, characterization and assessment of the atmospheric behaviour and routes of pollutants, such as primary (e.g. VOCs, NO<sub>x</sub>), or secondary (e.g. ground-level O<sub>3</sub>, NO<sub>2</sub>), radioactive (e.g. radon, cesium,...) and biological (e.g. pollen), through the atmosphere from source to receptor points/regions, and the analysis of high air concentrations and the related meteorological conditions, and atmospheric transport and dispersion processes. Studies dealing with the use of atmospheric tracers to characterize mesoscale circulations are also within the scope.

### Guest Editor

Dr. Miguel Ángel Hernández-Ceballos

Department of Physics, University of Cordoba, 14071 Córdoba, Spain

### Deadline for manuscript submissions

closed (30 September 2021)



## Atmosphere

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*Atmosphere*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[atmosphere@mdpi.com](mailto:atmosphere@mdpi.com)

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## About the Journal

### 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!

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### 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

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