



## Waves and Wave Climate Analysis and Modeling

Guest Editors:

**Dr. Takvor Soukissian**

Institute of Oceanography,  
Hellenic Centre for Marine  
Research, 19013 Anavyssos,  
Greece

**Dr. Joanna Staneva**

Institute of Coastal Research,  
Helmholtz Centre Geesthacht,  
Max-Planck-Str. 1, 21502  
Geesthacht, Germany

Deadline for manuscript  
submissions:

**closed (31 January 2020)**

### Message from the Guest Editors

Dear Colleagues,

The aim of this Special Issue is to provide recent advances in the field of wind waves modeling and wave climate. This topic encompasses various probabilistic and statistical aspects and multivariate methods, including extreme value analysis methods and models, directional wave statistics, multivariate probability distributions, etc. Wave models are used for operational forecasting purposes, wave climate synthesis and analysis, wave climate change studies, coastal impact assessments, etc. The topic is also highly relevant to different engineering applications, such as wave interaction with coastal and offshore structures and design of coastal works.

Topics of interest for the Special Issue include but are not limited to:

- Probabilistic methods for wave climate analysis
- Wind-wave modeling
- Directional wave climate analysis
- Synergy of wind wave model with satellite and in situ observations
- Extreme waves
- Applications

Dr. Takvor Soukissian

Dr. Joanna Staneva

*Guest Editors*





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](http://www.mdpi.com)

[mdpi.com/journal/atmosphere](http://mdpi.com/journal/atmosphere)  
[atmosphere@mdpi.com](mailto:atmosphere@mdpi.com)  
[X@Atmosphere\\_MDPI](https://twitter.com/Atmosphere_MDPI)