



## Interaction Processes between Atmosphere and Sea-Land-Snow-Ice in the Polar Regions

Guest Editors:

**Dr. Mauro Mazzola**

National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC)

**Dr. Angelo P. Viola**

National Research Council of Italy, Institute of Atmospheric Sciences and Climate (CNR-ISAC)

Deadline for manuscript submissions:

**closed (15 November 2019)**

### Message from the Guest Editors

Dear Colleagues,

The air temperature in the Arctic has increased in the last decades at a rate of 2–3 times that of the global average temperature and sea ice is reaching new negative records from year to year. Even in the Antarctic, the ice sheets have experienced a melting acceleration in the last two decades

The above considerations justify the need to conduct further studies of the processes occurring in these areas of the planet. Only a greater understanding of the processes of interaction between all these components can help us to improve the models and therefore our knowledge of the future evolution of the Polar regions and, consequently, of the global climate.

This Special Issue will collect contributions that will promote this general aim, including these specific topics: atmospheric deposition, mass and heat fluxes over ocean, exchanges with the snowpack, ice and snow albedo, permafrost thawing and carbon release, particle nucleation from biota, etc.

Dr. Mauro Mazzola

Dr. Angelo P. Viola

*Guest Editors*





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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

## 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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## Contact Us

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Atmosphere Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
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