



Atmospheric Processes Shaping Arctic Climate

Guest Editor:

Dr. Joseph Sedlar

1. Department of Meteorology,
Stockholm University,
Stockholm, Sweden
2. Cooperative Institute for
Research in Environmental
Science, University of Colorado
Boulder, Boulder, CO, USA
3. Swedish Meteorological and
Hydrological Institute,
Norrköping, Sweden

Deadline for manuscript
submissions:

closed (31 July 2019)

Message from the Guest Editor

Dear Colleagues,

This Special Issue is focused on soliciting papers that contribute to an improved understanding of atmospheric processes impacting Arctic climate. Examples of particularly interesting topics include (not an exhaustive list):

- Cloud microphysics and turbulence structure
- Aerosol composition and vertical distribution, and aerosol-cloud interactions
- Atmospheric and surface energy budgets
- Atmospheric advection and transport of heat and moisture to/from the high latitudes
- Feedback mechanisms
- Evolution of atmospheric processes (and their importance) under a rapidly changing Arctic climate

This call solicits process-level studies based on both observations and model simulations. This includes intensive observational field campaign studies, long-term in-situ observatories, satellite observations, and simulations from idealized models, weather forecast models, and global circulation models. Studies that encompass a broad range of spatial and temporal scales, ranging from aerosol concentrations and turbulence, up to midlatitude-Arctic linkages, are encouraged.

Dr. Joseph Sedlar





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Editor-in-Chief

Prof. Dr. Ilias Kavouras

Environmental, Occupational,
and Geospatial Health Sciences,
CUNY School of Public Health,
New York, NY 10027, USA

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

Atmosphere Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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