



Atmospheric Processes Shaping Arctic Climate

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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.

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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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