Special Issue

Application of Statistical Methods and Machine Learning to Large-Scale Climate Informatics

Message from the Guest Editor

The increasing popularity of sophisticated statistical methods and machine learning in climate science has afforded a unique opportunity to bridge some of these gaps in understanding within the climate system. We invite researchers to contribute original research articles, as well as review articles, that help address the current limitations in climate system understanding utilizing sophisticated statistical methods and machine learning. Topics of interest include, but are not limited to:

- Teleconnections and their relationships to large-scale climate system problems
- Climate downscaling studies implementing machine learning techniques
- Coupling of climate systems using machine learning methods
- Applications of advanced statistical methods and machine learning in climate modelling studies
- Regional climate studies that implement state-of-the-art statistical methods
- Relationships between climate processes and smaller-scale atmospheric phenomena

Other topics, as well as review articles addressing possible future lines of investigation will also be considered.

Guest Editor

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Deadline for manuscript submissions

closed (30 June 2019)

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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!

Editor-in-Chief

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