Special Issue

Application of Machine Learning in Atmospheric Sciences and Climate Physics

Message from the Guest Editor

Nowadays, the development of Information Technologies has led to a new era in computation, affecting almost all fields in Science and Engineering. Specifically, Machine Learning techniques have proven to be excellent tools to cope with difficult problems that arise in a huge variety of applications in Atmospheric Science and Climate Physics. This Special Issue deals with machine learning methods in atmospheric and climate sciences, from a broad range, from the viewpoints of both algorithms and applications. Articles discussing new algorithms with applications in atmospheric or climate problems, or revisited algorithms providing good solutions to difficult problems in atmospheric science and related areas, are welcome. Alternative applications with a close connection to atmospheric science, such as renewable energy resource evaluation (wind, solar), will be also considered if the article highlights the relationship between machine learning and atmospheric science. Articles discussing machine learning algorithms for climate change problems are especially welcome.

Guest Editor

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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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