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Development of Precise Indexes for Assessing the Potential Impacts of Climate Change

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Most of the Indexes are based on air temperature, precipitation, air pressure, and sea surface temperature. However, very few such Indexes are utilized for future datasets. For future projection dataset and special simulations, those may need modifications or may lead to new discoveries. Futuristic datasets will provide new opportunities to define some new Indexes for climate change. High-resolution modeling has brought many new variables to analyze the weather and climate. Those new variables (cloud mixing ratio, buoyancy, etc.) can be utilized to define new Indexes. The new fields, e.g., thunderstorm, cloud physics, hydrology, aerosol science, ice melt, and biosphere, have a great impact on climate change. Appropriate Indexes can be put together to access and analyze the climate change and global warning issue. New insights based on new Indexes, themselves in turn based on new advances and variables, can provide new dimensions to the climate change science. Multidisciplinary disciplines may join to access climate change using Indexes from their filed.

Dr. Vinay Kumar *Guest Editor*









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Editor-in-Chief

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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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