



Tropical Cyclone Evolution: Changes in Structure, Intensity, and Environmental Interactions

Guest Editor:

Dr. Joshua Cossuth
Office of Naval Research,
Arlington, VA 22217, USA

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submissions:
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Message from the Guest Editor

Dear Colleagues,

This call targets the phenomenology of tropical cyclones as it relates to better discerning how and why they change. Aspects of change in the state of tropical cyclone structure, strength, movement, and/or environmental interaction are the cause of error in forecasting and belie the completeness of our scientific understanding. Analyses of tropical cyclone data to understand how changes in tropical cyclone character occur enable a greater understanding into their nature and foster an enhanced capability to predict their evolution.

Contributions to this Special Issue can apply to tropical cyclone case studies through climatologies, regionally or globally, from synoptic scales through small physics scales. Analyses may include (1) global or mesoscale numerical weather prediction systems, (2) field campaign studies, (3) satellite, air, sea, or ground base observing, and/or (4) other idealized, statistical, or historical data. Overall, manuscripts in this collection should convey scientific insight into some aspect of tropical cyclone evolution, providing a better understanding of why a change in their nature occurs.

Dr. Joshua Cossuth
Guest Editor





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Editor-in-Chief

Dr. Daniele Contini

Institute of Atmospheric Sciences
and Climate (ISAC), National
Research Council (CNR), Str. Prv.
Lecce-Monteroni km 1.2, 73100
Lecce, Italy

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, Grosspeteranlage 5
4052 Basel, Switzerland

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