





an Open Access Journal by MDPI

From Local to Global Precipitation Dynamics and Climate Interaction

Guest Editors:

Prof. Dr. Rui A. P. Perdigão

Meteoceanics Interdisciplinary Centre for Complex System Science & CE3C, University of Lisbon, Lisbon, Portugal

Prof. Dr. Naresh Devineni

Department of Civil Engineering, City University of New York, New York, NY, USA

Deadline for manuscript submissions:

closed (31 January 2020)

Message from the Guest Editors

Dear Colleagues,

The Special Issue welcomes research on theoretical and applied aspects pertaining to the dynamics of precipitation and climate interactions, along with dynamical coevolution, feedbacks, and synergies among underlying earth system processes across spatio–temporal scales.

The Special Issue further encourages discussion on transdisciplinary methods in mathematical, statistical, and computational physics, with applications to data analysis and dynamic modeling, in order to shed light on precipitation complexity and predictability, along with underlying geophysical mechanisms.

Works that focus on investigating physical causality and inference of regional precipitation regimes, transitions, extremes, and their climate interactions using statistical and dynamical frameworks are also welcome.

The methodological debate may range from traditional, nonlinear, dynamic, stochastic-dynamic, kinematic-geometric, and information-theoretical developments to emerging frameworks in mathematical physics addressing non-ergodic, thermodynamically unstable processes and interactions.



