Special Issue

Understanding the Weather Types and Rainfall and Its Relation with Erosion

Message from the Guest Editor

Currently, the study of weather types has many applications, from its classical application in meteorological studies about current events or future scenarios to other more novelty uses, like description of pollutants, the evolution of forest fires or, more recently, their influence on soil erosion. The improvement of geographic information systems allow us to use available high-quality satellite images to assess erosion by crossing field data of erosion under different atmospheric conditions. However, despite the emerging capacities and clear interest in automating the erosive capacity of the rain, and the promising findings that have been made, it has not yet been possible to properly model erosion. This Special Issue focuses on how synoptic weather types could be applied to rainfall and erosion. We seek research studies that examine and compare the different classifications of weather types and its applications to erosion. All the classifications are welcomed, using maps or objective criteria like the correlation method, the method of sum of squares, the cluster analysis, and the principal component analysis.

Guest Editor

Prof. Dr. María Fernández-Raga

Department of Chemistry and Applied Physics, University of Leon, Vegazana Campus S/N, 24071 Leon, Spain

Deadline for manuscript submissions

closed (10 May 2020)



an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 4.9



mdpi.com/si/36056

Atmosphere
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
atmosphere@mdpi.com

mdpi.com/journal/atmosphere





an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 4.9



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

Dr. Daniele Contini

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

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, Inspec, CAPlus / SciFinder, Astrophysics Data System, and other databases.

Journal Rank:

CiteScore - Q2 (Environmental Science (miscellaneous))

