Special Issue

Precipitation Monitoring and Databases

Message from the Guest Editor

To improve disaster-causing precipitation forecasts, accurate observation as well as high-resolution numerical models are needed. Many satellite-derived precipitation products exist; however, "final products" often involve rain-gauge based observation. Namely, in order to monitor accurate precipitation, both satellite estimates and numerical forecasts require rain-gaugebased observations. Machine learning techniques, such as neural networks, have been used for meteorological forecasts. Accurate monthly and/or daily precipitation products are also key for monitoring agricultural/hydrological early warming purposes. Recently, meteorological databases have been developed not only on a national scale but also for individual river basins. For this Special Issue, we welcome studies on developing precipitation databases from all aspects, with no limit on regions, periods, or time scales. Our scope includes all precipitation monitoring techniques and products. As for methodology, case studies, statistical analyses, numerical modeling, observational methods, and validating precipitation products are all welcome.

Guest Editor

Prof. Dr. Akiyo Yatagai

Graduate School of Science and Technology, Hirosaki University, 3 Bunkyocho, Hirosaki 036-8561, Aomori, Japan

Deadline for manuscript submissions

closed (25 April 2024)



an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 4.9



mdpi.com/si/189288

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))

