



## The Hydrological Cycle and Its Relations with Climate: Latest Advances and Prospects

Guest Editors:

**Prof. Dr. Claudio Cassardo**

Department of General Physics,  
University of Turin, Via Pietro  
Giuria, 1, 10125 Torino, Italy

**Prof. Dr. Silvia Ferrarese**

Department of General Physics,  
University of Turin, Via Pietro  
Giuria, 1, 10125 Torino, Italy

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### Message from the Guest Editors

The hydrological cycle describes the transfer of water, a primary component for life of all living beings, in all its three phases between the Earth (including the snow/ice components, the groundwater and the exchange with vegetation) and the atmosphere. Meteorological events can produce strong accelerations in some of those transfers, while climate regulates the balance at regional scale. As a result of the balance, some areas can be rich in water and other poor, determining the water resources available for that region. Sometimes, events of intermediate scale between meteorology and climate (weeks to seasons) produce an alteration of regional balance, causing events of drought or floods that are able to produce severe damages to persons and infrastructures, and/or to have negative economic consequences. Climatic changes, occurring at present and projected for the near or far future, pose a further challenge, as they have an impact on several components of the hydrological cycle.





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## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**  
Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## Message from the Editor-in-Chief

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*Applied Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
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