



## Soil Moisture Observation Using Remote Sensing and Artificial Intelligence

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Deadline for manuscript  
submissions:

**30 September 2024**

### Message from the Guest Editors

Soil moisture (SM) is a key state variable that plays an important role in linking energy and carbon cycles, as well as terrestrial water in various hydrological and meteorological applications. The impact of SM in evapotranspiration, photosynthesis, runoff, soil respiration, flood events, surface heat flux partitioning, and droughts is very prominent. Thus, the seasonal variability of SM is a key element for land capacity to act as a carbon sink. Remotely sensed data offers the derivation of SM data on a global scale. Additionally, remotely sensed data for SM has advanced enormously in recent years. Artificial intelligence (AI) techniques have been integral in every field, including the processing of remote sensing (RS) data. AI achieves high performance, high accuracy, and is correlated with low statistical errors as a rapid decision tool under changing climate conditions.

This Special Issue aims to showcase studies covering different applications of different AI techniques on different types of remote sensing data from a variety of sensors for soil moisture. Multiscale studies and studies related to ecosystem services are welcome.





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## Message from the Editor-in-Chief

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