



Global Gridded Soil Information Based on Machine Learning

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Message from the Guest Editors

Dear Colleagues,

Recent technological advances in both remote sensing and soil mapping approaches and progress in establishing harmonized soil profile datasets have opened up the potential to derive global gridded soil information. Machine learning algorithms are among the most frequently used tools for data preprocessing and describing the complex relationship between soil properties and environmental covariates with the ability to assess the uncertainty of the predictions. This Special Issue is dedicated to machine learning-based methods in:

- proximal and digital global mapping of soil properties;
- computing systems/algorithms/approaches using Earth observation data to derive global gridded soil datasets;
- preprocessing Earth observation data to feed into global soil mapping;
- data-intensive computing methods for incorporating Earth observation data for predictive soil mapping;
- optimizing temporal resolution to globally track the changes of soil properties;
- uncertainty assessment of the derived gridded soil information;
- specifying algorithms to local soil specificities;
- the engagement of remote sensing data with digital soil mapping;
- other related topics.





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Message from the Editor-in-Chief

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