



Remote Sensing of Solar Radiation Absorbed by Land Surfaces

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Message from the Guest Editors

The Earth has a complex climate system driven, to a certain extent, by the amount of solar energy absorbed by the surface. This energy absorbed by the Earth's surface is usually calculated by combining two radiative variables:

1. Global Incoming Solar Radiation at the surface level;
2. Land Surface Albedo.

The global incoming solar radiation, composed of direct and diffuse components, essentially depends on the solar zenith angle, cloud coverage, aerosol load, gas absorption, and land surface albedo over bright surfaces. Land surface albedo has a complex dependency on the surface's properties (e.g., vegetation phenology, soil moisture, and land types).

Solar radiation absorbed by land surfaces is of vital importance for life on Earth, energy balance, and water and carbon cycles.

This Special Issue aims to publish recent developments in obtaining and validating these two variables. Review contributions are welcome, as well as papers showing applications for weather prediction, the energy sector, climate analysis, and the mitigation of the climate. Short communications giving constructive criticisms or discussing/amending previous studies are also welcome.





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