

Special Issue

Greenhouse Gas Exchange between Terrestrial Ecosystems and the Atmosphere: Field Measurements and Model-Based Analysis

Message from the Guest Editors

The overall goal of this Special Issue is to bring together new results of greenhouse gas (GhG) flux measurements in the field and modelling studies of the land surface–atmosphere interaction on the local and regional scales. The importance of these studies relates to the significant effect of increased anthropogenic GhG emission on modern climate change and the large contribution of terrestrial ecosystems to the global carbon budget. For this Special Issue, we invite scientists working in meteorology, climatology, ecology, biogeochemistry and atmospheric physics to contribute new experimental and modelling studies of the forest–atmosphere interactions on local and regional scales. Contributions can include, but are not limited to, the following: field measurements of GhG fluxes using various measuring techniques, modelling of the land surface–atmosphere interaction, assessing the response of GhG fluxes to environmental changes, application of remote sensing data to derive the surface GhG fluxes, etc.

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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

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