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.

Guest Editors

Prof. Dr. Alexander Olchev

Department of Meteorology and Climatology, Faculty of Geography, Lomonosov Moscow State University, 119991 Moscow, Russia

Dr. Yulia Mukhartova

Faculty of Physics, Lomonosov Moscow State University, 119991 Moscow, Russia

Deadline for manuscript submissions

closed (31 December 2022)

Atmosphere

an Open Access Journal by MDPI

Impact Factor 2.3
CiteScore 4.9

mdpi.com/si/120289

Atmosphere
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
atmosphere@mdpi.com

mdpi.com/journal/atmosphere

Atmosphere

an Open Access Journal by MDPI

Impact Factor 2.3
CiteScore 4.9

mdpi.com/journal/atmosphere

MDPI

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

Dr. Daniele Contini
Institute of Atmospheric Sciences and Climate (ISAC), National Research Council (CNR), Str. Prv. Lecce-Monteroni km 1.2, 73100 Lecce, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, Inspec, CAPlus / SciFinder, Astrophysics Data System, and other databases.

Journal Rank:

CiteScore - Q2 (Environmental Science (miscellaneous))