





an Open Access Journal by MDPI

Frontiers in Quantifying CO₂ Uptake by Forests

Guest Editors:

Dr. Georg Jocher

Department of Matters and Energy Fluxes, Global Change Research Institute, CAS, 60300 Brno, Czech Republic

Dr. Natalia Kowalska

Department of Matters and Energy Fluxes, Global Change Research Institute, CAS, 60300 Brno, Czech Republic

Prof. Dr. John D. Marshall

Ecophysiology Unit, Department of Forest Ecology and Management, Swedish University of Agricultural Sciences (SLU), 901 83 Umeå, Sweden

Deadline for manuscript submissions:

closed (17 December 2021)

Message from the Guest Editors

Dear Colleagues,

Forests capture the primary greenhouse gas carbon dioxide (CO₂) from the atmosphere and are therefore considered an important aspect in tackling climate change issues. To assess the effectivity of forests in removing CO₂ from the atmosphere and to set climate change mitigating actions on a solid basis, it is fundamental to accurately quantify CO₂ uptake by forests.

This Special Issue invites contributions dealing with forest CO₂ capture dynamics in all kinds of forest ecosystems across the globe. Specifically of interest are new developments in quantifying forest CO₂ uptake, methodological problem discussions, method improvements, method intercomparisons and synthesis studies.

The overall aim of this Special Issue is to offer a comprehensive overview of the state of the art of methods to quantify forest CO₂ uptake. The synergy of the contributions to this Special Issue may optimize our understanding of forest CO₂ capture dynamics by reducing approach-related uncertainties.











an Open Access Journal by MDPI

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

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!

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))

Contact Us