



Carbon Emission and Transport: Measurement and Simulation

Guest Editors:

Dr. Cheng Hu

Prof. Dr. Wei Xiao

Dr. Qitao Xiao

Deadline for manuscript
submissions:
closed (20 August 2023)

Message from the Guest Editors

Carbon is one of the main elements in both natural and anthropogenic environments. Gaseous carbon (i.e. carbon dioxide (CO₂), methane (CH₄), and carbon monoxide (CO)) are known as main greenhouse gases or air pollutants. Hence, the study of their flux (including sources and sinks) or transport (in soil, rivers or atmosphere) from both natural and anthropogenic sources is essential to better understand regional or global carbon cycles. Here, to improve our scientific knowledge of the carbon cycle via both observation and modeling, we are organizing this Special Issue titled “Carbon Emission and Transport: Field Measurement and Model Simulation” in the journal *Atmosphere*. Any papers related to carbon flux and transport (especially for CO₂, CH₄, and CO) are warmly welcome to this issue; papers can focus on observations or model simulations, from natural or anthropogenic sources and can be at the field, city, regional, or even global scale, using field observations, model simulations, meta-analyses, or a combination of the above methods. Regions of interest include but are not limited to forests, grassland, rivers, wetlands, waters, and urban areas.





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Editor-in-Chief

Prof. Dr. Ilias Kavouras

Environmental, Occupational,
and Geospatial Health Sciences,
CUNY School of Public Health,
New York, NY 10027, USA

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!

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Contact Us

Atmosphere Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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