



The Complex Scenarios Causing CO₂ Increase in the Atmosphere

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Message from the Guest Editors

Dear Colleagues,

Earth outgassing, ecosystems' respiration, and human-related CO₂ emissions occur at the solid-earth-to-gaseous-envelope boundary. Geological CO₂ emissions occur from volcanic and tectonic zones. Industries, farmlands and mobility by car deliver various gases, aerosols and solid particulates into the atmosphere. Recent studies have attempted to improve the estimations of CO₂ delivered by geological sources, but several areas are still underestimated, even if data are available from various surveillance programs. The model-based evaluation of CO₂ released in both urban and natural zones is not yet satisfactory for quantifying the effects on global climate change.

This Special Issue of *Atmosphere* focuses on the CO₂ emissions in various ecosystems. We invite researchers to submit original research manuscripts on this topic, including case studies in cities, natural zones, forests, and seismic and volcanic zones. We welcome papers focusing on techniques, methods, applications, and models for fostering knowledge on both the sources and fate of atmospheric CO₂. The possible effects of CO₂ outgassing and consequent risk assessment are also welcome.

