Special Issue

Seismic Physicochemical Anomalies in the Atmosphere and Upper Atmosphere: Causal Relationship to the Geological Environment

Message from the Guest Editors

This Special Issue aims to clarify the causal relationship between these physicochemical anomalies and the geological environment of the focal region. By integrating observational data, theoretical analysis, laboratory experiments, and investigations of historical earthquakes, we seek to unravel the mechanisms behind these anomalies and explore their potential applications for earthquake prediction, disaster prevention, and mitigation. Additionally, through an analysis of eyewitness testimonies and historical records of past earthquakes, we aim to identify the geological characteristics of focal regions in which similar phenomena have been observed, thereby contributing to the verification of related hypotheses. We hope that this Special Issue will serve as a platform for the integration of physics, chemistry, and geology in order to enhance our understanding of earthquake precursor phenomena. We look forward to receiving your contributions.

Guest Editors

Prof. Dr. Yuji Enomoto

Fii Center, Shinshu University, Ueda Campus, 3-15-1 Tokida, Ueda 386-8567, Nagano, Japan

Prof. Dr. Katsumi Hattori

Graduate School of Science, Center for Environmental Remote Sensing, Chiba University, Chiba 263-8522, Japan

Deadline for manuscript submissions

30 November 2025



an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 4.9



mdpi.com/si/234589

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

mdpi.com/journal/atmosphere





an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 4.9



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))

