

Special Issue

Lithosphere–Atmosphere– Ionosphere Coupling Processes for Pre-, Co-, and Post-earthquakes

Message from the Guest Editors

The lithosphere–atmosphere–ionosphere interaction processes are an essential topic for seismo-ionospheric research. The energy exchange among different layers of heat, geochemical materials, electromagnetic emissions, vibrations, and perturbations can affect the ionospheric plasma parameters, electromagnetic field, ionospheric current, and energetic particles. This Special Issue is aimed at investigating the dynamics and electromagnetic environment via multi-parameter analysis from a variety of ground- and space-based detections, such as ground vibrations, the geomagnetic field, ULF/ELF/VLF/LF electromagnetic field, etc. By case or statistical study for phenomena of pre-, co-, and post-earthquake, it is expected to validate coupling channels among geospheres during the earthquake preparation and fault rupture process. Digital models are encouraged to improve the process analysis and basic coupling theory. The ionospheric tomography and AI methodologies for big data analysis are invited for further development of dynamic mechanisms and earthquake prediction models.

Guest Editors

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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

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