



Ionospheric and Magnetic Signatures of Space Weather Events at Middle and Low Latitudes: Experimental Studies and Modelling

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

In the context of space weather, it is important to understand the physical mechanisms acting at the level of the Sun in the interplanetary environment, as well as the Earth's thermosphere and the ionosphere. This Special Issue will therefore include articles reviewing mechanisms that have been known for several decades, as well as new original findings.

In the equatorial zone, certain particular geophysical phenomena exist, such as the equatorial fountain, the PRE (pre-reversal enhancement of the eastward electric field), and the equatorial electrojet (EEJ). This Special Issue will therefore include articles concerning the perturbations generated by solar disturbances on these equatorial parameters through the electrodynamic coupling between high and low latitudes. Special attention will be given to the use of GNSS data to characterize the scintillations of the electromagnetic signal due to plasma irregularities and equatorial plasma bubbles (EPB).

Prof. Dr. Christine Amory-Mazaudier
Guest Editor





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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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