

Tentative Outline

Special Thematic Issue for Current Topics in The Open Atmospheric Science Journal

Special issue on Lightning effects on electric and communication infrastructures
Guest Editors: Dr. Renato Procopio, Dr. Mansueto Rossi, Dr. Massimo Brignone

Aims & Topics

Modern electric infrastructures are becoming more and more complex for the introduction of new technologies like Renewable Energy Sources (RES) and Distributed Generation (DG), determining also an meaningful role of Information and Communication Technologies. This has increased the effects of fast transients (as the ones produced by lightning strikes) occurring in the electric and communication infrastructures, making it necessary to have at disposal powerful tools for the analysis of such events with limited computational efforts.

Keywords: Infrastructure, Renewable, Communication, Technologies, Powerful, Energy

Subtopics

The subtopics of interest for this special issue include

- Mechanism of thunderclouds charging
- Physics of lightning flash development
- Lightning Location Systems and, more in general, lightning detection and monitoring
- Lightning prediction tools and assimilation in Numerical Weather Prediction models
- Lightning currents and electromagnetic fields modeling
- Lightning performance of power transmission and distribution networks
- Lightning protection systems and insulation coordination

Schedule

Timeline for submission: September 30, 2018

Peer Review: October 31, 2018

Announcement of acceptance by the Guest Editors: December 31, 2018

Contacts

Guest Editor: Dr. Renato Procopio

Affiliation: University of Genova, Italy

Email: renato.procopio@unige.it

Guest Editor: Dr. Mansueto Rossi

Affiliation: University of Genova, Italy

Email: mansueto.rossi@unige.it

Guest Editor: Dr. Massimo Brignone

Affiliation: University of Genova, Italy

Email: massimo.brignone@unige.it

Any queries should be addressed to: toascj@benthamopen.org