

2012 Workshop: Sprites Jets and TGFs

Long title

Lightning Effects in the Middle and Upper Atmosphere

Conveners

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Description

This workshop will cover all aspects of coupling between lightning and the ionosphere/thermosphere/mesosphere system. Results from observational, theoretical and modeling studies regarding the energetic coupling of lightning activities with the middle and upper atmosphere will be presented and discussed. Contributions on sprites, jets, elves, terrestrial gamma ray flashes, and related electromagnetic effects are welcome, as are those on related topics, such as the local and global effects of these processes, the characteristics of lightning responsible for these phenomena, and other related nonlinear electromagnetic wave/ionosphere interactions. We are also interested in developments of new observational instruments and remote sensing techniques as well as future observation campaigns. The workshop will be consisting of scheduled short presentations. Students are strongly encouraged to contribute to this workshop.

Davis Sentman memorial talk

Justification

This workshop is justified by the fact that the discussion subjects are directly relevant to an urgent problem identified in the CEDAR Strategic Plan in understanding the electrodynamic interactions linking the SAIR region to the magnetosphere and lower atmosphere - transient luminous events such as jets and sprites have never been adequately integrated to describe the electrical system of Earth.

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