2014 Workshop: CEDAR GEM Modeling Challenge

Long title
CEDAR-GEM Modeling Challenge
CEDAR-GEM
Conveners
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Description

The CEDAR- GEM Modeling Challenge, focuses on various scientific and operational aspects of the performance of magnetosphere and ionosphere models and addresses challenges of model data comparisons and metrics studies. This year, we will discuss

1. Quantifying storm impact on the ionosphere/thermosphere
    1. possible ways to quantify storm effects on TEC
    2. quantifying the storm effects on neutral density/satellite drag using orbital averaged density
2. Model data comparison for high inclination and polar orbiting satellites (e.g., ISS FPMU Ne and Te data, and DMSP Poynting flux data)
3. Auroral boundaries validation study
4. Swapping tools of high latitude drivers

Agenda

Incomplete list of presentations:

Different Drivers for the TIEGCM for December 2006 (pdf) by Emery et al.

Justification

One of outstanding challenges to understand the solar-terrestrial relationship is to better understand magnetosphere-ionosphere (M-I) coupling processes. The

workshop will address M-I coupling that is relevant to one of scientific goals of the Decadal Survey for Solar and Space Physics. This workshop will also address the CEDAR Strategic Thrust #5 as the workshop will facilitate collaboration among modelers, data providers and research communities in order to address the differences between various modeling approaches, to track model improvements over time, and to provide feedback for further model improvement.

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