2011 Workshop: TIEGCM and CMIT Working Group

Long title Thermosphere-Ionosphere-Electrodynamics General Circulation Model and Coupled Magnetosphere-Ionosphere-Thermosphere Model Working Group CEDAR-GEM Conveners Stan Solomon Mike Wiltberger Ben Foster Slava Merkin Pete Schmitt Description

The TIE-GCM and CMIT Working Group workshop is a forum for developers and users of these models to exchange information, describe recent results, and obtain assistance in their use and interpretation. Overview talks describing the models will be presented, tutorials on model use and output analysis will be provided, and talks describing modeling issues, model usage, and comparison with measurements, are solicited. Developers and users of similar types of models are also encouraged to present results and comparisons. Our objective is for an informal workshop with plenty of time for questions and discussion.

Agenda

TIE-GCM Workshop, 10:00:

TIE-GCM overview, Stan Solomon, HAO/NCAR

Nuts & bolts, Ben Foster, HAO/NCAR

High-latitude potential, Dan Weimer, VT

Electrodynamics, Astrid Maute, HAO/NCAR

Thermosheric temperature variations, Doug Drob, NRL

Neutral density variations, Chin Lin, AFRL

Low-latitude ionospheric irregularities, John Retterer, AFRL

Comments, questions, suggestions, discussion

CMIT Workshop, 13:30:

Introduction, Stan Solomon, HAO/NCAR

LFM/MIX, Slava Merkin, JHU/APL

Infrastructure and documentation, Pete Schmitt, HAO/NCAR

Running the model at CCMC, Lutz Rastaetter, GSFC/CCMC

Boris correction and FLR results, Seth Caludepierre, Aerospace Corp.

Dayside magnetic field at GEO, Sunhak Hong, NOAA

Comments, questions, suggestions, discussion

Justification

This workshop concerns the development and use of coupled models of the magnetosphere-ionosphere-thermopshere system, engaging both CEDAR and GEM communities. A 2-hour workshop, focused on the TIE-GCM, will be followed by a 2-hour workshop focused on the CMIT model (of which the TIE-GCM is a major component).

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