

2011 Workshop: Thermospheric Winds

Long title

Recent Thermospheric Wind Measurements From Ground-based Instrumentation and Associated Modeling Efforts

Conveners

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Description

The neutral winds are crucial to the dynamics of both the thermosphere and ionosphere, yet there is very little instrumentation deployed that will provide a global understanding of neutral wind behavior. This workshop provides a forum to present and discuss topics associated with modeling of, observations of and the techniques for measuring the thermospheric winds from ground-based instrumentation. The workshop will include [but not be limited to] observations and modeling of the neutral winds and advances in Fabry Perot Interferometry, including new instruments and measurements, inversion methods, daytime measurements, etc. It is hoped that the workshop will bring both experimentalists and modelers together to discuss both consistencies and discrepancies between the two fields of research. The two sessions (one on neutral winds and one on measurement techniques) will start with presentations made by 3-5 invited speakers talking about recent results (each ~15-min in duration) and then will be opened for contributed talks (each ~10-min in duration). It is the intent to have an informal, open discussion addressing various issues associated with thermospheric wind measurements and observations, how data is processed, and how such data is being incorporated into modeling efforts. Ideally, we encourage feedback on how modeling efforts compare to measurements.

Justification

In the past few years there have been a large number of instruments fielded that are making thermospheric wind measurements. A discussion of how these measurements are being made, along with comparisons to various thermospheric wind models, is needed by the CEDAR community.

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