CEDAR 2003 Equatorial Ionospheric Imaging Workshop

New methods for remotely determing properties of the low-latitude ionosphere are being developed for the analysis of data from space-based ultraviolet imagers. Two recently launched satellites are providing a new global view of the ionosphere, through observation of the ultraviolet emissions produced by oxygen ion recombination. The TIMED satellite carries the GUVI instrument which spectrally separates the oxygen emissions, giving excellent views of the equatorial airglow, particularly on the nightside. Recent results from the NASA IMAGE satellite provide a different view from much higher altitudes but also image the ionospheric emissions. The CEDAR community plays an important part in this effort through the TIMED–CEDAR program, analyzing data from multiple ground–based observatories and the 4 instruments aboard TIMED satellite.

This workshop is convened for those working with the space– and/or ground–based data sets to discuss their respective observations, to determine days for correlative measurements, and to develop new analysis techniques which take advantage of the combined ground/space based assets for improving understanding of the dynamic equatorial ionosphere. All techniques which provide correlative information to the global FUV measurements are of interest.

Times of interest include any periods where TIMED is imaging low latitude ionospheric emissions, and the March–June and May–June periods of 2002 and 2003, respectively, when IMAGE measures the intensity and morphology of the nightside airglow bands. In this two hour workshop, it is hoped that the state and best future direction of correlative ionospheric imaging and remote sensing can be ascertained through presentation and discussion of recent results from both the ground– and space–based communities.

Those who are interested in presenting a summary of recent results should send a brief description of the work to a convener listed below. Please understand that, with the time constraints, 15 minute, AGU style presentations are not possible. Further information on the workshop and the availability of TIMED and IMAGE data for possible comparisons can be found at http://sprg.ssl.berkeley.edu/~immel/cedar_03.html

Conveners : Equatorial Ionospheric Imaging Workshop

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