

**SSEC/CIMSS
Seminar**

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Uranus' Seasonal Changes as Seen in the Near Infrared

Observations of Uranus in its approach to its 2007 equinox have revealed the planet to be far more dynamic and exciting than the "cue ball" imaged by Voyager 2 in 1986. Not only have observers seen latitudinal banding and bright cloud features, but also evidence that Uranus' atmosphere undergoes dramatic changes in its seasonal cycle.

The near-infrared spectra of Uranus acquired in 2006 and 2007 will be presented. Initial analysis of these spectra has revealed north-south asymmetries in Uranus' atmosphere, as well as substantial changes that have occurred during the 12-month interim. Also discussed is an ongoing project to investigate Uranus' atmospheric structure with radiative transfer modeling. These calculations make use of recent determinations of methane absorption coefficients, applied to model atmospheres with variable cloud heights and thicknesses. The goal of this project is to determine which atmospheric parameters are best able to produce the observed spectra, and how these parameters vary with location and time.

Friday, 4 September 2009

1:30 p.m.

Room AOSS 351