

P/SS Department Colloquium

Global-scale Observations of the Limb and Disk (GOLD) Mission

Friday, February 21, 2014
OPS 140
4:00 – 5:00pm

Meet and greet in OPS 140 at
3:30

Abstract: The GOLD mission will provide unprecedented imaging of the Earth's space environment and its response to forcing from the Sun and the lower atmosphere. The mission, which NASA selected in April 2013, will fly a far ultraviolet imaging spectrograph and is scheduled for launch into a geostationary (GEO) orbit in 2017 as a hosted payload on a commercial communications satellite. From this vantage point GOLD will make images with approximately thirty-minute cadence that cover most of a hemisphere.

Fundamental parameters that will be derived from these measurements include composition (O/N₂) and temperature of the neutral atmosphere on the dayside disk. Imaging of atmospheric composition, at only a daily cadence, has already provided many new insights into the behavior of the Thermosphere-Ionosphere system. Combining composition with simultaneous temperature images will provide revolutionary insights into the behavior of the T-I system and its response to external forcing.



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