ATS/CIRA Colloquium

Andrew Heidinger

Visiting CSU ATS from NOAA/NESDIS/STAR

Advances in Infrared Radiative Transfer Applied to the Atmospheric
Pathfinder Extended (PATMOS-x) Data Set

Radiation faculty candidate hosted by the radiation faculty search
committee
Sonia Kreidenweis, Colette Heald, Taka Ito, Chris Kummerow, Tom
Vonder Haar

Thursday, December 9, 2010

ATS room 101; Discussion will begin at 3:00pm
Refreshments will be served at 2:30pm in the coffee lounge

The Atmospheric Pathfinder Data Set is becoming a mature
and popular resource for satellite cloud climate studies. One of
the key activities of PATMOS-x is the use of physically based
algorithms to derive consistent time series from the 15 sensors
that contribute to the POES/AVHRR data record. In particular,
PATMOS-x employs innovative infrared (IR) radiative transfer
approaches in several key algorithms. In particular, the use of
these approaches is generating new information about the long-
term properties of cirrus clouds. PATMOS-x has now been
extended to include data from MODIS and this talk will present
some of the newer findings about clouds revealed by the
additional spectral information provided by MODIS.