Tip Sheet for NASA Langley Atmospheric Science Research

NASA Langley scientists will report on new atmospheric science research at the 2001 American Geophysical Union (AGU) meeting in Boston, May 29-June 2. Details of scheduled papers and poster sessions follow:

**Calibration of Meteorological Satellite Imagers**
A new technique for accurately calibrating satellite imager sensors, which are essential for remote sensing of the Earth's surface and atmosphere, presented by Louis Nguyen.
*Tuesday, May 29 at 9:15—Convention Center, Room 312, Session A21B*

**Solar Radiation Measurements at the Chesapeake Bay Lighthouse**
Validation results of the Clouds and the Earth’s Radiant Energy System (CERES) instrument from the CERES Ocean Validation Experiment (COVE) at the Chesapeake Bay lighthouse presented by Zhonghai Jin.
*Tuesday, May 29 at 10:20—Convention Center, Room 312, Session A21B*

**Further Assessment of Multi-Year Satellite Observations of Water Vapor**
Discussion of recent in-depth analyses of the Stratospheric Aerosol and Gas Experiment (SAGE) II water vapor data set for the stratosphere and upper troposphere presented by Er-Woon Chiou.
*Tuesday, May 29 at 10:35—Convention Center, Room 312, Session A21B*

**Reasons for Increased Ozone Amounts in Remote Regions during the Springtime**
New evidence suggests that long-range transport of pollution is responsible for increased ozone amounts during the springtime in remote regions of the Northern Hemisphere. Results from the Tropospheric Ozone Production about the Spring Equinox (TOPSE) field experiment presented by Edward Browell.
*Tuesday, May 29 at 2:30—Convention Center, Room 311, Session A22B*

**Quality of Halogen Occultation Experiment (HALOE) Measurements in the Mesosphere**
By considering a large set of individual satellite measurements, scientists have determined that the HALOE instrument is providing accurate temperature measurements that are representative of seasonal and periodic variations in the atmosphere. Presented by Ellis Remsburg.
*Wednesday, May 30 at 3:20—Convention Center, Room 210, Session SA32B*

**Future Satellite Could Provide New Insight Into Air Pollution and the Atmosphere**
A discussion of a future geostationary satellite as the ideal platform used to study tropospheric chemistry processes. The resolution of satellite instruments would provide unparalleled insight
into air pollution and the global atmosphere. Previous proposals and a new joint initiative will be highlighted. Invited presentation presented by Jack Fishman.

*Friday, June 1 at 10:45—Convention Center, Room 311, Session A51C*

**Model and Data Comparisons of Atmospheric Chemistry Compounds**

Reprocessed data from the LIMS (Limb Infrared Monitor of the Stratosphere) experiment with an improved algorithm shows much better agreement with previous models of stratospheric nitrogen compounds and ozone. Presented by Ellis Remsburg.

*Saturday, June 2 at 3:45—Convention Center, Room 312, Session A62A*

**Possible New Solar-Terrestrial Mechanism Affecting Odd Nitrogen and Ozone**

Comparisons of evidence of solar cycle-related fluctuations of odd nitrogen in the upper atmosphere and of observations related to the source of this fluctuation are made. Results, which suggest this process represents a new solar-terrestrial coupling mechanism affecting both odd nitrogen and ozone amounts in the stratosphere, presented by Linwood Callis.

*Saturday, June 2 at 2:20—Convention Center, Room 312, Session A62A*

**POSTER EXHIBITS**

**Data Products from Terra and Tropical Measuring Mission (TRMM) Satellites**

Four posters, highlighting results and future applications of programs that visualize and analyze Terra and TRMM data products, presented by John Olson, Nancy Ritchey, and Nichole Silvers.

*Tuesday, May 29 at 8:30—Convention Center, Hall C, Session U21A*

**Measurements of Coastal Ocean Albedo at COVE**

Clear-sky observations from COVE, a long-term radiation experiment, will be used to demonstrate how ocean albedo is affected by atmospheric and ocean characteristics presented by Ken Rutledge.

*Wednesday, May 30 at 8:30—Convention Center, Hall C, Session A31B*

**Evaluation of Terra Moderate-Resolution Imaging Spectroradiometer (MODIS) Sensor**

Discussion of aerosol and water vapor measurements presented by Richard Ferrare.

*Wednesday, May 30 at 8:30—Convention Center, Hall C, Session A31B*

**Validation of CERES Measurements**

Results from reflected solar radiation measurements at COVE presented by Wenying Su.

*Wednesday, May 30 at 8:30—Convention Center, Hall C, Session A31B*

**Interpretation of the Arctic Troposphere during the Springtime**

The use of aerosols and ozone measurements, studied during the Tropospheric Ozone Production about the Spring Equinox (TOPSE) experiment, to interpret elevated tropospheric ozone levels during the Arctic in the Spring. Presented by Bill Grant.

*Wednesday, May 30 at 1:30—Convention Center, Hall C, Session A32A*

**Students On-Line Atmospheric Research (SOLAR): Enhancing Earth Science Education**

Highlights of SOLAR activities, including a June 2001 workshop, presented by Susan Walters.

*Friday, June 1 at 1:30—Convention Center, Hall C, Session A52A*

**Development of Daily Global Tropospheric Ozone Distributions**

A new global empirical correction technique presented by Amy Balok.

*Friday, June 1 at 1:30—Convention Center, Hall C, Session A52A*

**Simulations of the Geosynchronous Imaging Fourier Transform Spectrometer (GIFTS)**

Evaluation of a New Millennium Program instrument presented by Nikita Pougatchev.

*Friday, June 1 at 1:30—Convention Center, Hall C, A52A*