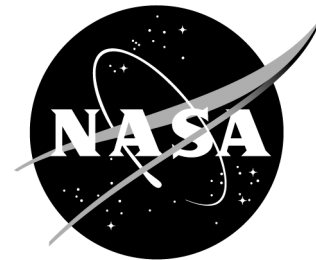


NewsRelease



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NASA LANGLEY SCIENTISTS TO PRESENT ATMOSPHERIC SCIENCE RESEARCH AT AGU

Scientists from NASA Langley Research Center in Hampton, Va., will report on new atmospheric science research at the American Geophysical Union (AGU) fall meeting in San Francisco, Dec. 6 -10, 2002. Highlights of scheduled sessions and papers follow:

Tracing Air Pollution Over the Pacific Ocean

The 2001 Transport and Chemical Evolution over the Pacific (TRACE-P) airborne field experiment, headed by NASA Langley, provided an opportunity for scientists to study the composition and chemical evolution of air as it moves away from Asia and across the Pacific Ocean. Scientists say the makeup of air originating in Asia largely corroborates current estimates of Asian emissions, except for unexpectedly large amounts of carbon monoxide and black carbon (soot) air pollution. Researchers will explain this result and others from TRACE-P observations in three sessions called "Transport and Effects of Anthropogenic Pollutants: TRACE-P." Dr. Daniel Jacob, TRACE-P mission scientist of Harvard University, and Dr. James Crawford, TRACE-P deputy mission scientist of NASA Langley, are the session conveners.

December 6 & 7 at 8:30 a.m.— Moscone Convention Center (MCC) 102, Sessions A51D and A61D; Poster Session, December 7 at 1:30 p.m.—MCC Hall D, Session A62A

- more -

A 3-D View of Air Pollution from Asia

A new software tool is giving scientists an opportunity to view earth science data like never before. Developed by VRCO Inc., the Virtual Global Explorer and Observatory software merges data collected from airborne and ground-based instruments as well as satellite observations to create a three-dimensional stereographic environment. The user can view, navigate and interact with the data. James Hoell, an SAIC scientist with NASA Langley's Atmospheric Sciences Data Center, will present examples from NASA's 2001 TRACE-P airborne field experiment. The three-dimensional visuals will show air pollutants and other atmospheric constituents originating in Asia and flowing across the Pacific Ocean.

December 6 at 4:20 p.m.—MCC 135, Session U52A

Science is S'COOL

For over six years, NASA Langley's Students' Cloud Observations On-Line (S'COOL) outreach project has been helping students study how clouds affect the Earth's energy balance. By comparing student observations with cloud measurements from the Clouds and the Earth's Radiant Energy System (CERES) instrument, scientists have gained useful information about the problem of cloud detection from space. Dr. Lin Chambers will report on how the S'COOL team continues to evaluate and improve their international outreach project.

Invited Paper, December 9 at 9:10 a.m.—MCC 270, Session ED11C

2002 Solar Storms Shine Light on the Earth's Energy Balance

An unprecedented series of observations from the Thermosphere-Ionosphere-Mesosphere Energetics and Dynamics (TIMED) satellite is allowing scientists to trace the flow of energy from the Sun to the Earth and determine the balance of energy throughout the planet's atmosphere. Dr. Martin Mlynczak will present results and new images from the Sounding of the Atmosphere using Broadband Emission Radiometry (SABER) instrument on TIMED that will show how the solar storms warmed the Earth, changed its energy balance and impacted the structure of the atmosphere.

Invited Paper, December 9 at 11:20 a.m.—MCC 134, Session SA11B