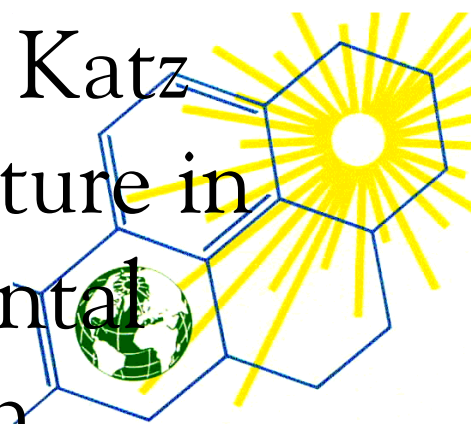


2006 Morris Katz
Memorial Lecture in
Environmental
Research



Dr. Anne R. Douglass
NASA Goddard Space Flight Center

Discoveries from EOS Aura

Thursday, September 21, 2006
2:30 p.m.

York University
Senate Chamber, N940 Ross Bldg.
4700 Keele Street, Toronto

Centre for Atmospheric Chemistry



Abstract

Aura, the third and final of three large observatories that are part of NASA's Earth Observing System, was launched July 15, 2004. Aura carries four instruments – the Microwave Limb Sounder (MLS), the Tropospheric Emission Spectrometer (TES), the Ozone Monitoring Instrument (OMI) and the High Resolution Dynamics Limb Sounder (HIRDLS), all of which measure atmospheric constituents. Aura measurements provide information to address broad questions about the Earth atmosphere, particularly concerning the recovery of the stratospheric ozone layer, tropospheric air quality, and climate change. TES has made the simultaneous measurements of carbon monoxide and ozone in the lower and upper troposphere. OMI continues to observe the total ozone column and measures columns of important pollutants like NO₂ at unprecedented horizontal resolution and coverage. MLS measures profiles of stratospheric ozone and constituents that affect ozone from the mesosphere into the upper troposphere. This talk will highlight results from Aura's first years in orbit, and will emphasize the way information from Aura and other satellites has contributed to the development, evaluation, and application of global chemistry climate models.

Biographical Sketch

Dr. Anne Douglass is an atmospheric scientist who specializes in stratospheric chemistry and transport. Her research emphasizes the development and analysis of predictive models and the quantitative evaluation of satellite, aircraft, and ground-based observations. She has more than 100 referred publications and has extensive collaborations with researchers in universities and other agencies. Other publications of note include contributions to United Nations ozone assessment documents and assessment of the impact of aircraft on the chemistry of the atmosphere. Dr. Douglass has worked for NASA since the early 1980's and has been the Deputy Project Scientist for both the Upper Atmosphere Research Satellite (UARS) and Aura. As a member of the UARS Project, she shared the 2002 William T. Pecora award for Understanding the Earth through Remote Sensing. She is a member of the steering committee for NASA's Global Modeling Initiative.

Dr. Douglass is a Fellow of the American Meteorology Society. She has served as Editor of the Journal of the

Atmospheric Sciences and as a member of the Middle Atmosphere Committee. As a member of the American Geophysical Union she has served on various committees. Dr. Douglass is the winner of a Clare Boothe Luce Award for Women in Mathematics and Science and a member of Phi Beta Kappa.

Dr. Douglass was featured in biographical profiles in the American Chemical Society educational magazine *ChemMatters* and in [A Hand Up: Women Mentoring Women in Science](#), a publication of the Association for Women in Science. She is mother of five grown children and has five grandchildren. Her interest include running, tap dancing and Ashtanga yoga. She uses her position as Girl Scout leader to try to bring opportunity to all girls. She grew up in New Jersey and majored in Physics at Trinity College (BA, 1971). She completed her graduate studies in physics at University of Minnesota (MS, 1975) and Iowa State University (PhD, 1980).

The Lectureship Fund

The Morris Katz Lectureship was made possible by the establishment of an Endowment Fund created through contributions from his family, his friends, his colleagues, private companies, universities and government. It is intended that this lectureship become self sustaining. Major contributions in support of this year's lecture have been made by:

The Centre for Atmospheric Chemistry
and
The Ontario Ministry of the Environment

If you share in Morris Katz' enthusiasm and commitment to having a cleaner environment, please make a contribution to support this ongoing educational activity. Send your contribution in care of: The Morris Katz Memorial Lectureship, Centre for Atmospheric Chemistry, York University, 4700 Keele Street, Toronto, Ontario, M3J 1P3 Canada.

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