

**AMERICAN METEOROLOGICAL SOCIETY
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RELEASE**

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**AMERICAN METEOROLOGICAL SOCIETY – JUNE SCIENCE
HIGHLIGHTS**

Following are story ideas and tips about upcoming AMS meetings, papers in our nine peer-reviewed journals, and other happenings in the atmospheric and related sciences community.

Changes in Cold Places: Air Pollution and Arctic Warming – That is the topic of the next AMS Environmental Science Seminar on Capital Hill is scheduled for Wednesday, May 31, 2006 at 12 p.m. in the Russell Senate Office Building, Room 385. The speakers will be Dr. Drew Shindell, Research Scientist at the NASA Goddard Institute for Space Studies, New York; and Dr. Dan Lubin, Research Physicist and Senior Lecturer at the Center for Atmospheric Sciences, Scripps Institution of Oceanography, La Jolla, Calif. The Arctic is presently exhibiting the largest and most diverse responses to anthropogenic climate warming; these include some of the largest surface temperature increases, rapid retreat of sea ice, and recently documented melting of glacial ice. The seminar will discuss the science of the contribution of ozone pollution to this warming. The public is invited. For more information see <http://www.ametsoc.org/atmospolicy/EnvironmentalScienceSeminarSeries.html>

Does it Seem Cloudier? A paper appearing in the May issue of the *Bulletin of the American Meteorological Society* finds that despite large inadequacies in monitoring long-term changes in global cloudiness and satellite observations, data from a small network of military stations suggest increasing trend in U.S. total cloud cover from 1976 to 2004. Scientists Aiguo Dai, Tom Karl, Bomin Sun and Kevin Trenborth's study show that the U.S. total cloud cover has been increasing steadily since the late 1970s at about 1.4% (of sky) per decade. They turned to the military stations because they found that new automated observing systems have induce

discontinuities in surface temperature and other records and that climate researchers can no longer make full use of the historical records of the last 100–150 yr to study the climate. The paper is available online at <http://ams.allenpress.com/pdfserv/10.1175%2FBAMS-87-5-597>

Anthropogenic Warming of the Oceans: Observations and Model Results – A paper in the 15 May issue of the AMS *Journal of Climate* looks at the model results of the causes of ocean warming. The ocean's density and heat capacity are orders of magnitude greater than the atmosphere's; it is the thermal flywheel that stabilizes the climate system. Indeed, 84% of observed climate warming of the earth system (oceans, atmosphere, cryosphere, continents) over the past 50 yr has gone to heat the oceans; only 3% has gone to heat the atmosphere (Levitus et al. 2005). This paper explores a number of issues related to detection and attribution of ocean warming, including an evaluation of natural climate variability (internal and external) in the coupled climate models, the possible influence of sampling on the results, an estimate of the strength of model heat uptake uncertainty (compared to signal strength), the role of the surface heat flux components and advection in accomplishing the ocean warming, and the possible effects of seasonally biased observations. For a copy of the paper, contact Stephanie Kenitzer.

Continuing Dialogue on Hurricanes and Climate Change – The May issue of the *Bulletin of the American Meteorological Society* contains two Comment papers addressing the relationship between hurricanes and climate change. Both Comments are online. "Hurricanes and Global Warming—Potential Linkages and Consequences" by Richard A. Anthes, Robert W. Corell, Greg Holland, James W. Hurrell, Michael C. MacCracken and Kevin E. Trenberth (<http://ams.allenpress.com/pdfserv/10.1175%2FBAMS-87-5-617>) and Reply to "Hurricanes and Global Warming Potential Linkages and Consequences" by Roger Pielke Jr., Christopher Landsea, Max Mayfield, Jim Laver and Richard Pasch (<http://ams.allenpress.com/pdfserv/10.1175%2FBAMS-87-5-622>)

New Railroads and Weather Book --Attention railroad and weather enthusiasts — the American Meteorological Society (AMS) has just published a new book that will put you on "track" to understanding the significant impact that weather and climate have had on America's railroad history. The book titled "Railroads and Weather: From Fogs to Floods and Heat to Hurricanes, the Impacts of Weather and Climate on American Railroading" by Stanley Changnon—a climatologist, railroad enthusiast, and seasoned author—explains all facets of railroading as they relate to the weather. Highlights include descriptions of the most damaging weather events, such as Hurricane Diane in 1955, which damaged 11 and bankrupted 2 major East Coast railroads; the Midwest's great flood of 1993, American railroading's most damaging event in history; West Coast storms of winter 1996–97; and Hurricane Katrina in 2005, a success story in railroad readiness and response. The book costs \$24.95 for AMS members and \$29.95 for

nonmembers. For more information see www.ametsoc.org/pubs/books/index.html To order call (617) 227-2426 ext. 204 or 209, or email amsorder@ametsoc.org

On the Meeting Front -- The AMS' 12th Conference on Cloud Physics/12th Conference on Atmospheric Radiation will take place July 10-14 in Madison, Wisc. For details see <http://www.ametsoc.org/MEET/fainst/madison2006.html>

The 12th Conference on Mountain Meteorology is scheduled for August 28 through September 1 in Santa Fe, NM. The program is online at <http://www.ametsoc.org/MEET/fainst/SantaFe2006.html>

The 23rd Conference on Severe Local Storms will be held November 6-10 in Saint Louis, Mo. Details will be online shortly.

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