

AMERICAN METEOROLOGICAL SOCIETY – NOVEMBER SCIENCE HIGHLIGHTS

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

AMS ANNUAL MEETING PROGRAM ONLINE

The 88th AMS Annual Meeting will be held 20–24 January 2008 at the Ernest N. Morial Convention Center in New Orleans, Louisiana. The 2008 Annual Meeting is being organized around the broad theme of “Enhancing the Connectivity between Research and Applications for the Benefit of Society.” This is an important topic that will shape our weather, ocean, climate, and environmental enterprise for many years to come. Our nation’s economy, well-being, and safety will depend on successful efforts in this area from all sectors of our Society—academia, private, and government—and will require all of us to participate in and be engaged in discussing how we might enhance mutual interactions between research and applications.

Several important and complementary events have been planned to leverage the interest, participation, and expertise in this theme, including the following:

- A special WeatherFest focus on hurricanes and other tropical storms on Sunday
- An opening plenary session at noon on Monday (with a cash and carry lunch available) featuring Mayor Nagin of New Orleans
- A one-day session examining the "Impacts of 2007's Weather: Major Stories of the Year"
- A Town Hall Meeting moderated by Craig Fugate of the Florida Division of Emergency Management on “Joining Researchers, Forecasters, and Users to Tackle Challenges in Tropical Cyclone Prediction”
- An opportunity to tour the Katrina-affected neighborhoods and volunteer for helping the local New Orleans Habitat for Humanity

More detailed press advisories with session highlights and press briefings will follow in the coming weeks. The complete program is available online at <http://ams.confex.com/ams/88Annual/techprogram/MEETING.HTM>

Media are invited to attend the scientific sessions and interview the experts throughout the week. To register see <http://www.ametsoc.org/meet/annual/newsroom.html>

FEDERAL CLIMATE POLICY WORKSHOP: GREENHOUSE GAS EMISSION FEES

The AMS Policy Program will host the first in a series of workshops on federal climate policy on Tuesday, November 13 at the UC Washington Center in Washington, D.C. The

one-day workshop will focus on greenhouse gas emission fees (often called carbon taxes) as a policy tool for mitigating climate change. This is the first in a series that explore unmet climate policy needs and search for the principles of effective federal policy design. The event will bring together a broad group of influential and engaged participants in climate policy discussions, including policy makers, researchers, business leaders, and members of the NGO community. Talks and discussions will: 1) identify the pros and cons of emission fees, 2) explore the design principles that can help make climate policies environmentally effective, economically beneficial, and politically feasible, and 3) clarify remaining needs for moving forward with effective federal climate policies. Media are invited to attend but should register with Stephanie Kenitzer by November 9. For more information see

<http://www.ametsoc.org/atmospolicy/cpmtg07.html>

WIND BURSTS ACCOMPANY EL NINO

Could strong westerly wind bursts across the Pacific Ocean lead to better El Niño forecasts? The question is addressed in a paper in the September issue of the *AMS Journal of Atmospheric Sciences*. According to researchers at Harvard and Princeton University, episodes of strong westerly winds over the tropical Pacific Ocean, known as westerly wind bursts, have accompanied every significant El Niño event of the past 25 years. The westerly wind bursts cause oceanic Kelvin waves, which are directly related to subsequent warming in the eastern equatorial Pacific and have been shown to play an important role in the initiation of El Niño events. Scientists have typically considered the winds a random event related El Niño and thus having limited use in predictability of the climate event. However, this study observed that the winds are modulated by the sea surface temperatures and therefore have a strong deterministic element which raises the hope that ENSO's predictability time is longer than would be expected otherwise. For a copy of the paper, contact Stephanie Kenitzer.

FIREFLUX

Grass fires, though not as intense as forest fires, present a major threat to life and property during periods of drought in the Great Plains. Recently major wildland grass fires in Texas burned nearly 1.6 million acres and destroyed over 730 homes and 1320 other buildings. The fires also killed 19 people, more than 100,000 livestock, and caused more than \$628 million in damage. A paper in the September issue of the *Bulletin of the American Meteorological Society* summarizes the findings of a 2006 field experiment of an experimental burn to measuring the turbulence and dynamics of wildland grass fires in an effort to improve fire models. For a copy of the paper see

<http://ams.allenpress.com/perlserv/?request=get-abstract&doi=10.1175%2FBAMS-88-9-1369>

CAN CLOSE CALLS HELP DEFINE WARNING ACCURACY?

A paper in the October issue of the *AMS Weather and Forecasting* takes a look at the false-alarm rate and potential changes to more accurately represent the numbers of actual

false alarms. The national false-alarm rate (FAR) for tornado warnings issued by the National Weather Service in 2003 was 0.76. That means given four tornado warnings, only one was associated with an actual tornado. By definition, a false alarm in meteorology is “an event ...forecast to occur that did not.” An ideal forecast would have an FAR of 0.00, but the uncertainties in forecasting technology, uncertainties in forecasting science, and uncertainties in verification likely make this an unattainable goal. The National Weather Service’s goal for 2010 is to reduce this value to 0.70. Conventional wisdom is that false alarms reduce the public’s willingness to respond to future events. This paper questions this conventional wisdom and argues that the metrics used to evaluate false alarms do not accurately represent the numbers of actual false alarms or the forecasters’ abilities because current metrics categorize events as either a hit or a miss and do not give forecasters credit for close calls. The paper also reviews how the FAR is measured, how humans respond to warnings, and what are alternative approaches to measure FAR. For a copy contact Stephanie Kenitzer.

50 YEARS OF RESEARCH, ROUGH RIDES, AND NAME CHANGES

The October issue of the *Bulletin of American Meteorological Society* features a history of the National Hurricane Research Project created after the disastrous Atlantic hurricane season of 1954. The goal of the National Hurricane Research Project (NHRP) was to advance tropical cyclone science and improve forecasts. In the late 1950s, NHRP pioneered quantitative observations with instrumented aircraft and shaped the modern understanding of tropical cyclones. By the early 1960s, it was intimately involved in Project STORMFURY, the U.S. Government's hurricane modification program. During this time, it was collocated with the Miami, Florida, hurricane forecast office, and became a permanent laboratory. Read all about the 50 years of research and rough rides online at <http://ams.allenpress.com/perlserv/?request=get-abstract&doi=10.1175%2FBAMS-88-10-1566>

With more than 12,000 members, the AMS (<http://www.ametsoc.org>) is the nation's leading professional society for those involved in the atmospheric and related sciences.

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