

NEWSLETTER

**National Weather
Association**

NO. 11 – 2 FEBRUARY 2011

Weather Across Borders Initiatives and Practices on the Texas-Mexico Border

Nezette Rydell, NWS WFO Boulder, Colo. and
Jeral Estupinan, NWS WFO Brownsville, Texas

The atmosphere doesn't recognize political borders and, as a result, weather threats and other hazards that have impacts on one side of the border very often impact family, friends and commerce on both sides.

Six to eight thousand American citizens cross the border into northern Mexico daily to work, most in "maquiladoras", factories in Mexico run by American companies such as GM and Motorola. Mexican citizens legally cross the border into the U.S. daily as guest workers, students, visitors and tourists. The Port of Brownsville and local airports make up a foreign trade zone through which the shipment of goods takes place with operators and managers that may speak both English and Spanish or only one or the other.

The Rio Grande forms the border between Texas and Mexico from El Paso to Brownsville. A large portion of the drainage basin is in Mexico. There is a long history of coordination along the length of the Rio Grande, especially in hydrology. The International Boundary and Water Commission (IBWC), a bi-federal agency, dates back to 1889. The

I think it's important to ensure every NWA member has an opportunity to see some of the outstanding work undertaken and being presented by their NWA colleagues. Therefore, this article has been requested as part of a series of professional development articles highlighting important work presented orally or via poster at the 35th NWA Annual Meeting. I hope this piece challenges you to continually find ways to enhance what many of you are already doing—providing outstanding operational weather support to your customers!

*Kenneth Carey
Chair, NWA Professional
Development Committee*

National Hurricane Center provides landfall forecasts for tropical cyclones to the government of Mexico. The West Gulf River Forecast Center in Fort Worth provides contingency and flood and flow forecasts to the Government of Mexico. WFOs along the Mexican border have historically been involved in sister city coordination activities, including annual workshops, river level and rainfall gauging.

See BORDERS, page 6

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NWA Members Earn their Weathercaster Seal of Approval

Name	Station	Location	Seal #	Date Qualified
Corey Christiansen	KMGH-TV	Bloomfield, Colo.	10051001	18 May 2010
Neville A. Miller	WCIV-TV	Mount Pleasant, S.C.	10071002	22 July 2010
Matthew D. Kinkade	WTVM-TV	Columbus, Ga.	10071003	22 July 2010

Congratulations to Corey, Neville and Matthew for this outstanding achievement!

The NWA is now
accepting
applications for
scholarships and grants!

See page 8 and
www.nwas.org
for details.

36th NWA Annual Meeting
Oct. 15-20, 2011- Birmingham, Alabama
Get Ready! Get Set! Start Planning for a GREAT Meeting!

*The End Game -
From Research and
Technology to Best Forecast
and Response*

Where: *Wynfrey Hotel*, in Hoover, 10 miles south of downtown Birmingham, Ala.

Our Theme: *The End Game - From Research and Technology to Best Forecast and Response.* Being a champion is not easy, in sports or in life. It takes not only a mastery of our chosen field, but also a passion, intensity, energy, focus and commitment that helps us to achieve our very best. It is easy to lose that passion in the day to day routine of our jobs. Weather is unique in that nearly every person can tell you why they got into it. The goal of the 2011 NWA Annual Meeting in Birmingham will be to help us find that original spark and connect to that passion in a fun and spirited environment of learning and networking.

Professional Development Opportunities: The 2011 Annual Meeting will include the Annual Broadcasters' Workshop and DVD swap, and the Fourth Annual Students' Session at the hotel (both on Sunday, Oct. 16). Student presentations will be reviewed by the NWA Weather Analysis and Forecasting Committee members, and monetary awards will be presented to the best presentations and posters in undergraduate and graduate student categories. The general session will be October 17-20, with the annual awards luncheon on Wednesday, Oct. 19.

Abstract Submission: The deadline for submissions of abstracts is June 1, 2011. Abstracts should be sent via the online form on the NWA Web site at: www.nwas.org/2011abstracts.html. Abstracts will be published in the Meeting Agenda as submitted, so please make sure that they have been carefully reviewed and edited before submission. If you are unable to submit your abstract via the online form, please contact the NWA office at (919) 845-1546 or email: exdir@nwas.org. Presenters will be notified regarding the disposition of their abstracts by July 15, 2011.

Annual Meeting Hotel Information: Wynfrey Hotel, 1000 Riverchase Galleria, Birmingham, AL 35244
Telephone: 1-205-987-1600 Website: <http://www.wynfrey.com>

NWA negotiated room rates are as follows:

Standard Guestroom: \$88.00 (Plus \$10 for each additional person up to a total of 4 per room)
Concierge Level Guestroom: \$128.00 (Plus \$10 for each additional person up to a total of 4 per room)
Rooms will be available at the negotiated rate until 9/21/2011 or until the block is full.

Reserve a room by calling 1-800-WYNFREY (1-800-996-3739) by Sept. 1 for the NWA Annual Meeting rate.

Online reservations: The group code for 36th Annual Meeting of the National Weather Association is **1B35Q3**. Go to the [Wynfrey website](http://www.wynfrey.com), click "Quick Reservations" on the left side, and enter your information and the group code to make a reservation in the block.

More Information on Birmingham, the Meeting and the Program Planning: Visit the [NWA2011 blog](http://www.nwa2011.org), maintained by the Birmingham Program Committee, for information on the event, the agenda, vendors, the hotel and the local area as well as breaking news. Follow the latest on Twitter [@NWAS2011BHM](https://twitter.com/NWAS2011BHM). We'll use the hashtag #NWAS2011 this year, so include that in your posts about the event. Use your Twitter accounts to send out information, and re-tweet liberally. A Facebook Event page will be available from the [NWA Facebook Page](https://www.facebook.com/NWA2011).

The Annual Meeting Program Committee Chair is Jim Stefkovich, Meteorologist in Charge, NOAA/NWSFO, 465 Weathervane Rd., Calera, AL 35040; (205) 664-3010, ext 222; annualmeeting@nwas.org.

Broadcaster Workshop Program Chair: Mike Goldberg, PO Box 2491, Glen Allen, VA 23058-2491; mike@mike-goldberg.com

For more information on exhibits, special accommodations, registration and overall meeting program, go online to www.nwas.org or contact the NWA office at (919) 845-1546 or by emailing: exdir@nwas.org.

Special Feature For The 36th NWA Annual Meeting: A joint meeting will be held with the 7th GOES Users' Conference! The GOES Users' Conference will be held in the Wynfrey Thursday Oct. 20 and Friday Oct. 21 with Thursday being a joint meeting of the two conferences. Thursday, we'll highlight the new operational capabilities to be provided by existing and future GOES satellites; we'll also solicit feedback from attendees regarding current and future needs by those using GOES information. NWA meeting attendees are urged to attend the Friday, Oct. 21 session of the GOES Users' Conference. Registration information will be forthcoming.

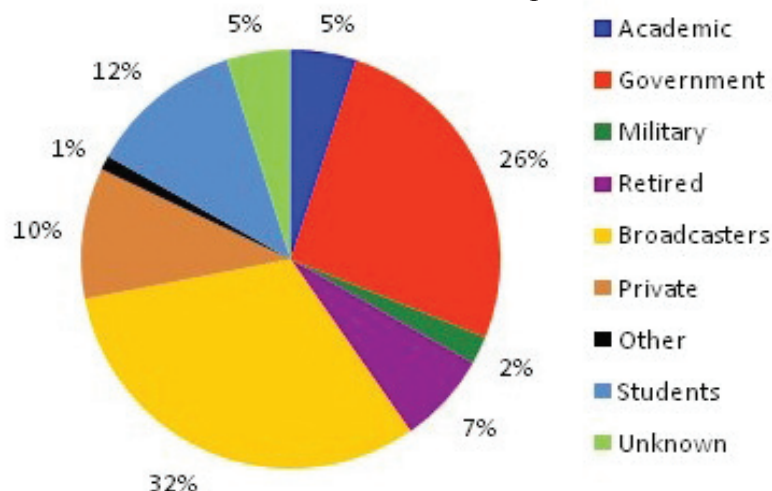
Membership and Marketing Committee Update

The NWA would like to extend a warm welcome to new members who joined in 2010!

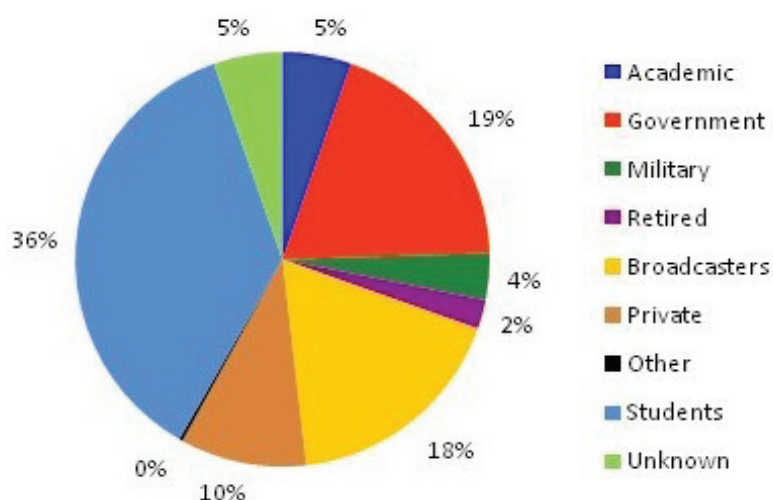
During 2010, the NWA added 355 new members, exceeding the Membership and Marketing Committee (M&M) goal of 300. We extend a special thanks to all NWA members who participated in outreach and recruiting efforts. A quick look at the new members shows that 129 (36%) are students, 68 (19%) are government scientists, 63 (18%) are broadcasters, and 35 (10%) are private sector.

A goal of our committee is to encourage every 2010 member to renew in 2011 and beyond. If you have questions about renewing, or have ideas to improve membership retention, please contact the NWA Office at exdir@nwas.org or the Membership and Marketing Committee at: marketing@nwas.org.

NWA Total Membership



2010 NWA New Members



President's Message: Looking Ahead



There is no way to deny it—October seems like a long way off. As I write this, there are several inches of snow on the ground, professional baseball players haven't yet reported for spring training, and the vernal equinox is weeks away. Yet the gears are already turning quickly for our next Annual Meeting in Birmingham, Ala., Oct. 15-20, 2011. The local planning committee is already hard at work, as is

the staff at our headquarters in North Carolina, all preparing for another excellent gathering.

I bring up the Annual Meeting this month for several reasons. First, whether you are a college freshman or seasoned professional, you have a unique opportunity to attend *the* premier gathering of operational meteorologists. Come and discover the state-of-the-art in modern weather analysis and forecasting. Better still, present your own work and inform your colleagues about your efforts and results. Coffee breaks, ice breakers and exhibits also abound for you to discuss projects in an informal setting. Moreover, Birmingham is a vibrant modern city that simply must be explored in your free time. I firmly believe that our NWA Annual Meeting is where a great deal of business gets

done in operational meteorology, and I invite you to attend. If you are a returning attendee, then you know well the value of this conclave; welcome back, and please encourage others to come along. Electronic communications (e-mail, IM, Facebook, Twitter, etc) are critical in the modern professional area, but ***nothing can replace face-to-face contact.***

Second, planning is all. Budgets may be loosening some, but they are still tight in certain areas of private industry, academia and the government sector. In that vein, it may be just as well that our Annual Meeting is several months away. In some sectors, funds for travel may be found from non-traditional sources. In particular, I am thinking about our NWA student members, and their need to learn the value of national meetings like this one. Therefore, I am now asking each of our NWA student members and their faculty to explore, if necessary, campus resources, such as your student government(s), to attend the NWA Annual Meeting in October. You will not regret it.

Finally, if you choose to present your work, remember that abstracts are due June 1, 2011, which is only three months away. How time flies. I'll look for you in Birmingham.

Patrick Market
NWA President

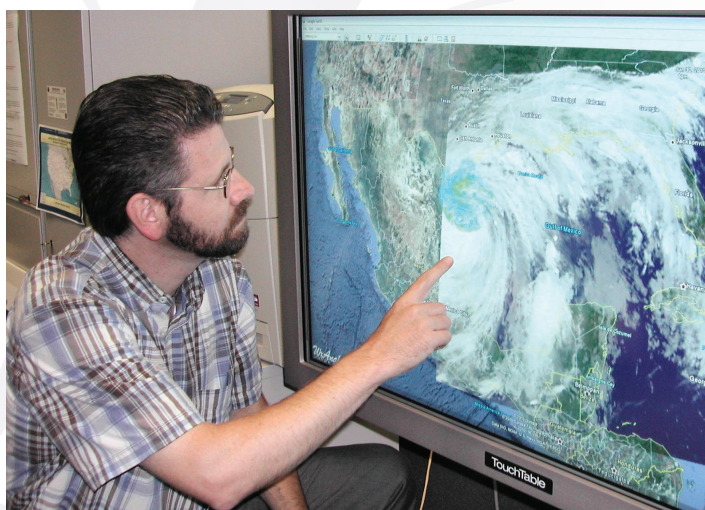
NASA's Public Private Partnership to Infuse New Technology and NASA Data into Weather and Emergency Response Operations

Dave Jones and Stephen D. Ambrose

*Article partially reprinted from
NASA Technology Innovation Magazine, November 2009*

Through a joint effort between private corporations and funding from the National Aeronautics and Space Administration (NASA), federal officials are focusing on improving how they communicate and collaborate in real-time to visualize the potential impacts that threaten communities and deliver much improved information to decision makers and citizens.

NASA has embarked on an important public/private partnership that will result in enhancing the decision making process among agencies involved in emergency management: The Federal Emergency Management Agency (FEMA), the National Weather Service (NWS), and to test the technology and procedures, the Texas Governor's Division of Emergency Management (GDEM). The goal of this effort is to expand



Jack Settelmaier of NWS Southern Region Headquarters using the touch screen technology to display satellite data of Hurricane Alex in 2010.

and enhance data visualization and collaboration capabilities that were developed for military and intelligence applications by making new touch screen technology for data visualization available to emergency managers. Just two days after this new touch screen technology was installed, the Southern Region Headquarters of the NWS and the Department of Homeland Security's FEMA Region VI HQ were collaborating and displaying NASA data. Just recently, another touch screen device was set up to connect the Texas GDEM for improved and enhanced decision-making.

The technological key to making such collaboration possible is a touch screen product being developed by the private sector that is based on commercial-off-the-shelf (COTS) hardware and software (see figure). It is being introduced into the civil sector as an innovative capability based on proven military and intelligence technology. It also makes use of spatial data and metadata information. For data retrieval, it will use the appropriate Web Service as defined by Open Geospatial Consortium (OGC) best practices to access data sources that adhere to open-consensus standards. The system permits a significant increase in the amount and type of geoscience and Geographic Information System (GIS) data available to forecasters and others for improved decision support, and for media and emergency management use for briefings to management, first responders and the media. The system also has the capability to be used in the NWS AWIPS II.

In summary, this partnership will deliver critical NWS and NASA data and products to decision makers, the media and the public. FEMA will be connected directly with the NWS operations conducting active briefings through interactive discussions about a developing environmental situation with live data in real-time. Emergency managers will be able to draw upon the strengths of the NWS to support preparation, response and recovery missions.

Attention Students! Another NWA Grant Opportunity

The NWA invites all undergraduates to write an original paper on the study and use of satellite remote sensing data in weather analysis and forecasting. Themes of the paper may include original research, case studies, development of a technique/algorithm, or a survey of applications.

One author will receive the NWA Meteorological Satellite Applications Award, a grant of \$500, and be invited to present a poster at the NWA 36th Annual Meeting in Birmingham, Ala., on Oct. 15-20, 2011.

Details can be found on the NWA website at:
nwas.org/grants/NWAMETSATAwardGrant.php

Any questions can be directed to Ralph Ferraro, Chair, NWA Remote Sensing Committee, at: Ralph.R.Ferraro@noaa.gov



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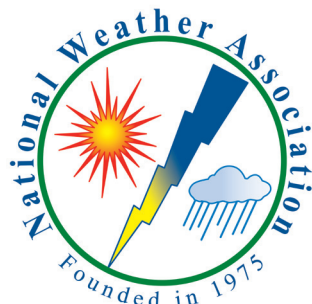
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Just as the atmosphere doesn't recognize borders, neither do radio and television waves. Telemundo, Univision and Fox Spanish language broadcasts have large audiences on both sides of the border. In a 2007 poll, 62% of American citizens in the Rio Grande Valley said they got their primary news and information from Televisa, a Mexican broadcast company. Consistency of message on both sides of the border is critical to ensuring an appropriate response to weather threats and warnings. Social scientists and experience have shown hearing the warning, preparedness and mitigation messages in one's primary language is critical as well.

WFO Brownsville and other forecast offices with border area responsibility have developed a number of practices and initiatives to further support this coordination and collaboration. English and Spanish language information on local impacts for winds, rain and flooding as well as round-the-clock interviews are provided during hurricane landfall in southern Texas and northern Mexico. Information support for wrap-up stories is provided to media partners on both sides of the border. When there is a weather story in northern Mexico, we have learned we will be asked to provide weather information support, even when the event did not occur in our County Warning Area. We spin-up for that support whenever it may be needed.

Following Hurricane Alex and TD #2 in 2010, over 20 inches of rain fell in the mountains of northern Mexico (Figure 1). This water eventually made its way into the Rio Grande, resulting in the highest water levels since Hurricane Beulah in 1967. WFO Brownsville issued their first Spanish language graphical forecast, known in the NWS as a [GraphiCast](#), which was quickly picked up by local print and broadcast media (Figure 2). English and Spanish language GraphiCasts were produced throughout the long-lived river flood.

WFO Brownsville routinely sends email watch/warning/advisory messages and email briefings on local impacts to emergency management and media communities on both sides of the border. Cold fronts are numbered according to the convention used by Servicio Meteorológico Nacional to ensure proper coordination of winter events. The City of Brownsville hosted multiple workshops at which the WFO provided basic weather information and weather hazard training to emergency responders and media partners in Mexico. Press releases and tropical season outlooks are translated and distributed. Support is provided for Televisa-sponsored hurricane workshops in person, via remote broadcast and via Internet/Skype. WFO Midland developed a low flow project in collaboration with IBWC, U.S. Customs and Border Patrol, and Big Bend National Park. WFO El Paso provides winter weather and monsoon information for Spanish language media and emergency management and partners with Protección Civil to provide weather

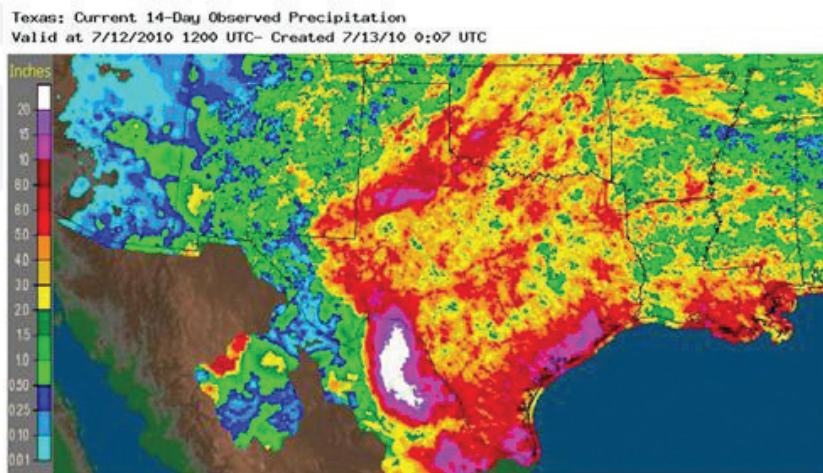


Figure 1. 14 Day Observed Precipitation. Valid July 12, 2010 1200 UTC.



Figure 2. GraphiCast issued by WFO Brownsville on August 17, 2010.

hazards training for the Maquiladora Association in Juarez.

There are considerations and challenges in cross-border work. Border crossing is time consuming and subject to constraints of government agencies. Fluency in Spanish at the local level is critical for cross-border collaborative success. Finally, we are mindful of the governance issues involved. We are not responsible for forecasts or warnings in Mexico.

Continued and improved collaboration and coordination between National Weather Service offices, the West Gulf River Forecast Center and our colleagues across the border is a proven recipe for saving lives. Consistency of message is crucial. Briefing local impacts in both English and Spanish is critical. Cross-border coordination saves lives and dollars. It is the very essence of our mission.

Editor's note: More information about NWS GraphiCasts can be found at: www.weather.gov/infoservicechanges/GraphicalShortTermForecastrev1.pdf

Recent changes in the NWA Publications Arena

There has been some turnover in the NWA Publications Committee that I would like to bring to your attention. First, in January, I officially became Committee Chair for the 2011–2013 term, replacing Jeff Craven. However, Jeff will remain as a committee member through 2013. Second, new members to the Publications Committee for 2011–2013 include Michael Brown, Dan Lindsey and Pablo Santos.

Some changes also have occurred with the editors for the NWA Digest, EJOM and Newsletter. For the Digest, long-term Chief Editor Gary Ellrod has stepped down with Tony Lupo assuming that role, and Paul Croft has agreed to join as a second Digest Editor. The Electronic Journal of Operational Meteorology (EJOM), continuing its recent tradition of a three-year rotating cycle for editors, has chosen Steven Weiss as the new Editor-in-Training for 2011 (to be Assistant Editor in 2012 and Editor in 2013). Finally, Janice Bunting has decided to

move on from her Newsletter Contributing Editor duties after seven years of service. Winnie Crawford currently is transitioning to this role from the Publications Committee.

Another major initiative over the past several months has been the scanning of Digest articles into Portable Document Format (PDF), which are linked directly from the NWA Digest page. This project is nearing completion, with most of the articles converted for optical character recognition (OCR). It has been rewarding to make these past Digest articles available, which is consistent with the NWA's mission to connect operational meteorologists in pursuit of excellence in weather forecasting, communication and service.

Please visit: www.nwas.org/committees/publications.

Matthew Bunkers
Chair, Publications Committee

2011 NWA Sponsored Annual Meetings & Conferences

March 11-13: The 36th Annual Northeastern Storm Conference

The Lyndon State College chapter of the AMS & NWA will host this conference in Taunton, Mass. at the Taunton Holiday Inn. <http://meteorology.lyndonstate.edu/ams/>

March 12: The 2011 National Storm Conference

This free, annual event organized by The Texas Severe Storms Association (TESSA) will be held at the Colleyville Center in Colleyville, Texas. The North Texas Chapter of the AMS/NWA is a sponsor. www.tessa.org

March 26: The 9th Annual Great Lakes Meteorology Conference

Sponsored by the NW Indiana AMS/NWA Chapter will be held at Valparaiso University. One of the keynote speakers will be Dr. Christopher Weiss from Texas Tech University speaking about VORTEX 2. www.valpo.edu/student/nwa/conference/

March 31–April 2: 15th Annual Severe Storms & Doppler Radar Conference

Sponsored by the Central Iowa NWA Chapter, it will be in Ankeny, Iowa. www.iowa-nwa.com/conference/

Aug. 4-6: 15th Annual High Plains Conference

This annual conference sponsored by both the Wichita and High Plains Chapters of the AMS/NWA will be held at the Wichita Marriott in Wichita, Kan. Details will be posted at <http://www.wichita-amsnwa.org>

Oct. 15-20: 36th National Weather Association Annual Meeting

Scheduled for Birmingham, Ala. See [page 2](#) for details or see www.nwas.org

Oct. 20-21: 7th GOES Users' Conference

Also to be in Birmingham, Ala., its first day being a joint meeting with the 36th Annual NWA Meeting. Details will be available later this spring.

Other Meetings & Conferences in 2011

March 8-10: 2nd Midwest Bow Echo Workshop

This workshop is cosponsored by the NWS and the Earth and Atmospheric Sciences Department at Saint Louis University. This workshop will be held on the University campus and is free, but registration is desired.

www.crh.noaa.gov/lx/?n=bow_echo

March 15-16: The 2011 Alaska Weather Symposium (AWS '11)

The sponsors invite you to attend at the University of Alaska Fairbanks. The Symposium provides a forum for the exchange of operational and research information related to weather in the Alaska environment. Participation from academic, research, government, military and private sectors is encouraged.

<http://weather.arsc.edu/Events/AWS11/>

April 4-8: NOAA Satellite Direct Readout Conference

The U.S. National Oceanic and Atmospheric Administration's (NOAA) National Environmental Satellite, Data and Information Service (NESDIS) will be hosting this Conference in Miami, Fla. The conference is the follow-up to NOAA's successful 2008 Direct Readout Conference. The Theme of the 2011 conference is, "Real-Time Access for Real-Time Applications." <http://directreadout.noaa.gov>

April 18-22: 2011 National Hurricane Conference

This annual conference will be held at the Hyatt Regency in Atlanta, Ga. www.hurricanemeeting.com

June 18: 2nd Annual Raleigh StormFest

The North Carolina Museum of Natural Sciences will host this large public outdoor event in downtown Raleigh, N.C. Details will be available later this spring.

Oct. 3-5: Ice and Freezing Fog Workshop

Environment Canada will host a workshop on ice and freezing fog in St. John's, Newfoundland, Canada.

http://collaboration.cmc.ec.gc.ca/science/arma/FRAM_2

Students and Teachers!

Applications now being accepted for 2011 NWA Scholarships and Grants

All applications are available Online! This year, the NWA is offering six scholarship opportunities and one grant for university students. Four scholarships will be available this spring and two in the fall. Additionally, there will be seven education grants for K-12 Teachers.

NWA Scholarship

Application Closing Date

Broadcast Meteorology Scholarship	March 15 th
David Sankey Minority Scholarship	April 15 th
AccuWeather Undergraduate Scholarship	May 15 th
Dr. Roderick A. Scofield Scholarship	May 15 th
Meteorological Satellite Application Award Grant	June 15 th
2010 Sol Hirsch Education Fund Grant for K-12 Teachers	June 1 st
Arthur C. Pike Scholarship	Oct. 25 th
Cassens/Phillips Family Undergraduate Scholarship	Oct. 25 th

Information for scholarships and grants is available at:

http://www.nwas.org/committees/ed_comm/application

<http://www.nwas.org/grants/>

Dates 2 Remember

- March 11-13:** 36th Northeast Storm conference, Taunton, Mass.
- March 12:** TESSA 2011 National Storm Conference, Colleyville, Texas
- March 26:** 9th Great Lakes Meteorology Conference, Valparaiso, Ind.
- Mar 31-Apr 2:** 15th Severe Storms & Doppler Radar Conference, Ankeny, Iowa
- April 4-8:** NOAA Satellite Direct Readout Conference, Miami, Fla.
- April 14-18:** National Hurricane Conference, Atlanta, Ga.
- Aug. 4-6:** 15th Annual High Plains Conference, Wichita, Kan.
- Oct. 15-20:** 36th National Weather Association Annual Meeting, Birmingham, Ala.
- Oct. 20-21:** 7th GOES Users' Conference, Birmingham, Ala.

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Submit newsletter items directly to the NWA office or to nwanewsletter@nwas.org. Material received by the 25th will be considered for the next month's issue.

Members receive the Newsletter and *National Weather Digest* as part of their regular, student or corporate membership privileges. Printed Newsletter subscriptions are available for \$25 per year plus extra shipping costs outside U.S. Single copies are \$3. **Address, phone number, email and affiliation changes can now be made online:** member.nwas.org.

Connecting operational meteorologists in pursuit of excellence in weather forecasting, communication, and service.

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