



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

No. 13 – 4

Newsletter A P R I L

2013

Free Lightning Webinars

Vaisala, an NWA corporate member, is offering a series of free lightning webinars describing various aspects of lightning as a phenomenon and the intricacies of its detection. The webinar topics range from general lightning-related information, such as how it is detected, and specific application-related lightning issues like lightning detection at airports and for energy and transmission systems. The speakers include Vaisala's own scientists as well as outside experts.

There are nine webinars, three of which have already taken place:

- Introduction to Lightning (recording available)
- Precision Lightning Detection Networks (recording available)
- Global Lightning Detection (recording available)
- Applications of Lightning Data in Airports (May 28)
- Lightning Network Performance Validation Techniques (June 25)
- Energy and Transmission System Applications of Lightning Data (August 27)
- Meteorological Applications of Lightning Data and Lightning Safety (September 24)
- Cloud Lightning Discharges and Their Detection, Total Lightning (October 29)
- Applications of Lightning Data in Defense (November 26)

Visit [the Lightning Webinars page](#) for links to previously done webinars as well as links to registration for the other webinars, which take place at 9-10 a.m. Pacific Time.

In memoriam ...

Ted Fathauer (1946-2013)

We were saddened to hear of the passing of Ted Fathauer, NWA charter member and long-time Meteorologist In Charge of the National Weather Service (NWS) Forecast Office in Fairbanks, Alaska. Ted's enthusiasm for weather and life touched many over the years.

[Click to read more about Ted's life](#)

Steve Harned



*NWA President Bruce Thomas (left) and American Meteorological Society (AMS) President Dr. Marshall Shepherd in the lobby of The Marriott Hotel at Metro Station in Washington, D.C., April 3, 2013.
See President's Message page 3.*

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Who is Sol Hirsch?

For 20 years, the National Weather Association has awarded over \$70,000 in grants to K-12 teachers to help improve the education of their students, school and/or community in the science of meteorology. The vast amount of this grant money came from member contributions to the "Sol Hirsch Education Fund Grants". Sol Hirsch, charter member of the NWA and NWA Executive Director 1981-1992, envisioned the grants and began the program when he retired from the NWA. Many NWA members who have joined over the last decade or so may not know much about Mr. Hirsch. Let us introduce him to you.

Sol Hirsch began his weather career in the U.S. Army Air Corps in 1943 when he was selected to attend school for observers at Chanute Air Force Base. He served as an observer at a number of air bases until 1946 when he chose to leave the service and return to college under the GI Bill. He returned to the City College of New York in 1946 and received a B.S. degree with a major in meteorology in 1950. Mr. Hirsch began work for the U.S. Weather Bureau in that same year by accepting an appointment as a weather observer in Baltimore, Md. He instituted service at the new Friendship Airport and was soon promoted to the Observer-Briefer category and continuing in that capacity until 1952 when he was promoted to the forecaster grade. As a forecaster he prepared forecasts for Baltimore City, Md., and Delaware zone forecasts and, for a period, the two state forecasts. A number of radio broadcasts originated from the weather office each day through a local radio station and Mr. Hirsch delivered several thousand during the period from 1952 to 1962.

In 1962 he accepted a promotion to work in the newly formed Weather Bureau satellite program. This program grew in leaps and bounds and soon became an independent agency, and after a series of name changes became known as the National Environmental Satellite Service. The program was based in Suitland, Md., and involved a daily round-trip commute in excess of 100 miles. In 1966 he enrolled in an evening program at Johns Hopkins University receiving a master's degree in management science in 1971. In 1978 there was a temporary assignment to the Joint Agricultural Weather Facility in Washington, D.C., as a satellite specialist in a program sponsored by National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). In 1980 Mr. Hirsch retired after more than 30 years of public service.

Upon retiring, Mr. Hirsch, in concert with three other retired meteorologists, organized a private consulting firm called Intercon Weather Consultants, which was located in the Suitland, Md., area. In 1988 the members of the consulting company decided to retire again and, consequently, Mr. Hirsch formed a new company called Capitol Weather Consultants.

In 1981, Mr. Hirsch was selected for the job of Executive Director for the NWA. During his 11 years as Executive Director (1981-1992), he was well-known for stressing education and training for all people to be weather-wise and stressing continuing education for operational meteorologists. The Sol Hirsch NWA Education

Fund providing grants to teachers was a most fitting tribute to his legacy. He continued as Executive Director in the Temple Hills, Md., office until the beginning of 1993 when he retired. He remained active with the NWA Education Committee for many years after retiring.

Sol Hirsch is a charter member of the NWA and charter member of both the Association of American Weather Observers and the International Weather Watchers, two amateur weather organizations that unfortunately are no longer in existence. Mr. Hirsch served on the boards of three volunteer organizations and is president of one. He and his wife Shirley have six children and 13 grandchildren and continue to reside in Baltimore, Maryland. He celebrated his 90th birthday earlier this year.

Please consider contributing to the Sol Hirsch Education Fund Grants. It is easy to do from the "Donate to NWA Funds" link at the upper left on the NWA homepage or during the dues renewal process.

Steve Harned and Kevin Lavin



Former Executive Director Kevin Lavin (l-r), current Executive Director Steve Harned and Sol Hirsch.

NATIONAL WEATHER DIGEST

Look for the final National Weather Digest soon! Starting in January, the Digest and the Electronic Journal of Operational Meteorology (EJOM) merged to form the all-electronic articles through the Journal of Operational Meteorology (JOM) available on the NWA website!

Together with AMS

Our friends at the American Meteorological Society held their annual 2013 Washington, D.C. Forum on April 2-4. Our Executive Director, Steve Harned, and I attended the meeting. There were many excellent speakers and panel discussions making up the three day forum, with topics ranging from the commercialization of weather and climate to renewable energy. These far reaching topics will affect our members and friends in operational meteorology for years to come.

On our first day at the conference, AMS President Dr. Marshall Shepherd welcomed us to the meeting (see page 1), and then joined our organization through the NWA website. He is a full professor and the Director of the Atmospheric Sciences Program at the University of Georgia where he is a strong advocate for education and advancements in the science of meteorology. We welcomed Dr. Shepherd as one of our newest academic members and I invited him to be part of our annual meeting this October in Charleston, S.C.

We attended a working lunch with stakeholders in the American Weather Enterprise and were given a sincere invitation for the NWA to have a seat at the table in charting its future direction. We as an organization of nearly three thousand operational meteorologists and students need to be more active in this debate and work more closely with the decision makers in Washington, D.C., that fund the research-to-operations (R2O) programs to keep our science of meteorology moving forward. This is where attending AMS and NWA meetings and forums will pay dividends in the future.

Dr. Louis Uccellini, a founding member of the NWA and current Director of the NWS, spoke of the path to the future and of the importance of R2O for the advancement of forecasting. His message was echoed by Dr. Kathy Sullivan, Acting Under Secretary of Commerce and Acting NOAA Administrator, who spoke about the importance of environmental intelligence, which is the information gathered from NOAA's sensors on multiple platforms such as ships, satellites, buoys, radars and surface-based instruments. One of the primary roles of NOAA's NWS is to provide this vital weather information to the American public and private sectors. All of this is critical to the overall mission of building a Weather-Ready Nation and keeping our NWS second to none.

Bruce Thomas, NWA President

Do you have your NWA Seal?

Through the NWA Broadcaster Seal of Approval program, the NWA grants Seals of Approval to NWA member weathercasters in radio and television who meet or exceed the standards set by the NWA.

The Broadcast Meteorology Committee, with the approval of the NWA Council, is responsible for the review and update of the Seal of Approval guidelines, qualifications, and procedures, to ensure the Seal remains credible and relevant.



Visit www.nwas.org and click on the seal logo for information on the NWA Weathercaster Seal of Approval.

Extended Abstracts for the NWA 38th Annual Meeting

For the second consecutive year, the NWA will offer the option of submitting an extended abstract to its annual meeting. Whether you have an oral or poster presentation you will be able to submit a short paper to further describe your research project. This provides others the opportunity to learn more about your work after the conference is over—especially those who cannot attend. Moreover, this gives researchers an option of citing your work in a more formal way than via a PowerPoint presentation or poster. The extended abstract is a particularly good option if, for some reason, you cannot attend the NWA 38th Annual Meeting (e.g., travel decisions affected by budgets or weather). If you write an extended abstract you should ensure it undergoes an “in-house” review prior to submitting it because it will not be formally peer-reviewed by the NWA. Finally, the template for creating your extended abstract, along with upload instructions, will be available from the NWA 38th Annual Meeting page in the near future. (See page 6 for more meeting info!)

Matthew J. Bunkers
NWA Publications Committee Chair

[Click for a 2012 example
of an extended abstract](#)

Three New JOM Articles

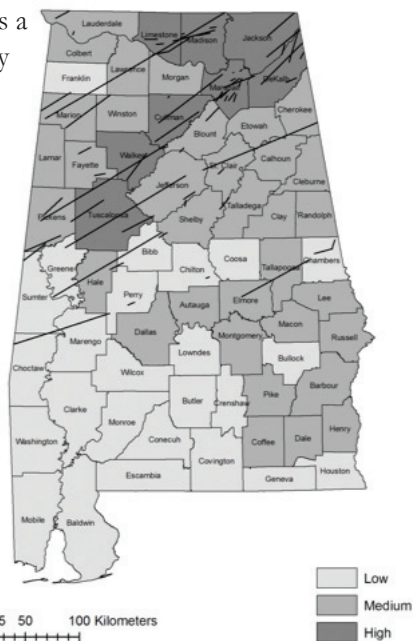
Since our last update, three articles have been published in the NWA's new journal, the Journal of Operational Meteorology. You can read these articles by logging on to [the Member Portal](#) and clicking on the Journal of Operational Meteorology (JOM) link under Additional Member Resources on the right.

A Climatological Perspective on the 2011 Alabama Tornado Outbreak

by Phillip Chaney of Auburn University in Auburn, Ala., and Jonathan Herbert and Amy Curtis of Jacksonville State University in Jacksonville, Ala.

This article presents a tornado climatology for Alabama based on tornadoes that affected the state during the 1981-2010 period. A county-level risk index was produced from this climatology.

This is Figure 5 in the article. It shows tornado risk index based on the number and strength of tornadoes that hit each county in the 1981-2010 time period overlaid with tornado tracks from 27 April 2011. There were 62 tornadoes in Alabama during this event, resulting in 248 deaths in the state.

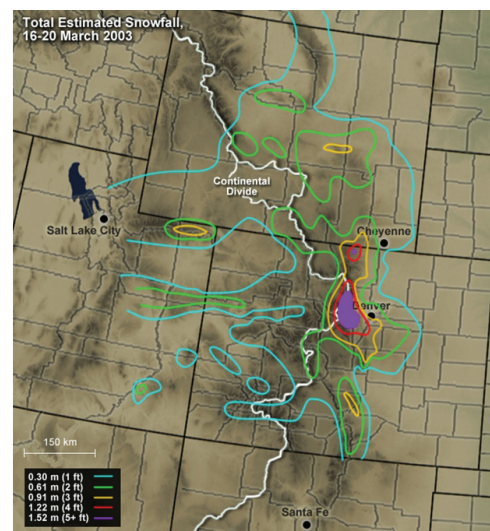


Extreme Snowfall Variations and Cold-Air Damming in the Front Range Heavy Snowstorm of 17-19 March 2003

by Douglas Wesley of Compass Energies in Denver, Colo., Greg Poulos of V-Bar, LLC, in Golden, Colo., John Snook of the Colorado Avalanche Information Center in Boulder, Colo., Pat Kennedy of Colorado State University, Fort Collins, Colo., Mike Meyers of NWS Grand Junction, Colo., and Greg Byrd of COMET in Boulder, Colo.

Their article examines the dynamics and thermodynamics associated with the major March 17-19, 2003, snowstorm that impacted the Colorado Front Range to improve understanding of precipitation distributions associated with upslope flow, blocking, and cold-air damming. The several aspects of the storm are described in detail using radar, surface, and high-resolution nested model data. This Figure shows the estimated snowfall over the region.

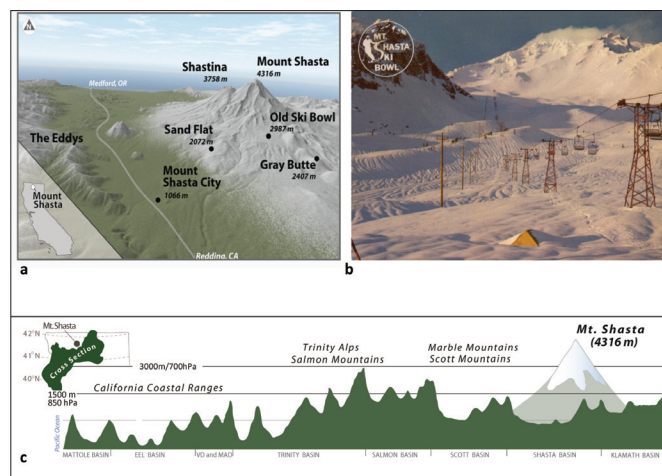
Total estimated snowfall (m) over the central Rocky Mountain region for the period March 17-19, 2003. The purple-shaded areas represent > 1.5 m, or more than 5 ft, of accumulation. A snow depth of 1 m corresponds to 39.4 in. This is Figure 1 in the article.



They Just Don't Make Storms Like This One Anymore: Analyzing the Anomalous Record Snowfall Event of 1959

by Cassandra Hansen of the Department of Geography at the University of Nevada in Reno, Nev. (UNR), Michael Kaplan of the Division of Atmospheric Sciences at the Desert Research Institute in Reno, Nev. (DRI), Scott Mensing of the Department of Geography at UNR, Jeffrey Underwood of the Department of Geology and Geography at Georgia Southern University in Statesboro, Ga., John Lewis of the Division of Atmospheric Sciences at DRI and NSSL in Norman, Okla., K. C. King of the Division of Atmospheric Sciences at DRI, and Jake Haugland of the Department of Geography at UNR.

This study examined the synoptic features associated with a historic snowfall during February 1959 on Mt. Shasta in northern California. While the analysis was challenging due to sparse and coarse-resolution atmospheric observations and the absence of satellite imagery, it has contributed to the understanding of synoptic and mesoscale dynamics associated with extreme snowstorm events. The authors used the NCEP/NCAR reanalysis datasets, regional sounding and precipitation data, archived newspaper articles, and reminiscences from long-term residents of the area in their analysis of this storm. This is Figure 1: a) is a Map of the Mount Shasta region with black dots representing weather stations; b) is the Mt. Shasta Old Ski Bowl chair lift after the 1959 snowstorm where record snowfall was measured and c) shows the levation profile starting at the eastern edge of the Pacific Ocean to just east of Mt. Shasta. Eastward moving storms must pass over three mountain ranges before reaching Mt. Shasta.



ATTENTION TEACHERS AND STUDENTS!

Applications now being taken for 2013 NWA Scholarships and Grants

This year, the NWA is offering seven scholarship opportunities and one grant for university students who are members of the NWA. Four scholarships will be available this spring and three in the early fall. Additionally, there will be four education grants for K-12 Teachers

**All applications are available Online!
Information for scholarships and
grants are available at:**

www.nwas.org/committees/ed_comm/application/
www.nwas.org/grants/

(At time of printing, the application period for the Broadcast Meteorology Scholarship and the David Sankey Minority Scholarship had closed.)

NWA Scholarships and Grants

Application Closing Date

Dr. Roderick A. Scofield Scholarship	May 15th
The Ken Reeves Memorial AccuWeather Undergraduate Scholarship	May 31st
Meteorological Satellite Application Award Grant	July 1st
2012 Sol Hirsch Education Fund Grant for K-12 Teachers	June 1st
Arthur C. Pike Scholarship	October 25th
Phillips Family Undergraduate Scholarship	October 25th
Dr. Bob Glahn NWA Scholarship in Statistical Meteorology	October 25th

Central Alabama Chapter of the NWA

Bill Murray, Vice President

<http://groupsplaces.com/CentralAlabamaNWChapter/>

On March 11, the Central Alabama Chapter of the NWA convened its first meeting of the year at Vulcan Park in Birmingham. Thirty people, including broadcasters, NWS forecasters, government meteorologists, emergency managers and hobbyists, attended the meeting.

President Tara Golden called the meeting to order and minutes and financials were approved by Secretary Jessica Talley. Vice President Bill Murray reported on membership, the new chapter website and committee opportunities.

The chapter's goal of raising \$500 for a new scholarship was nearly reached. Scholarship Committee Chair Ryan Stinnett immediately started putting together his team to choose a deserving awardee.

Kevin Laws, the Science and Operations Officer at the NWS in Birmingham, then taught a superb course in dual-pol radar product interpretation. He also spoke about initiatives the Birmingham office has taken to lower its false alarm rate for tornado warnings, while actually increasing its probability of detection.

The June 20 meeting will be highlighted by talks from retired National Hurricane Center Director Bill Read. Mr. Read will speak to students in Montgomery at 11:30 a.m. followed by a chapter meeting with members from the capital city. A regular chapter meeting will follow in Birmingham at 7 p.m. with members from the state's largest city.



Caption: An excellent crowd showed up for the Central Alabama Chapter's first meeting of 2013.

NWA 38th Annual Meeting

October 12 - 17, 2013

Charleston, S.C.

<http://nwas.org/meetings/nwa2013/>

High-Impact Weather Communications: Finding Calm in the Eye of the Storm



Hurricanes Sandy and Isaac in 2012 put further emphasis on a critical question facing the weather enterprise: How do we encourage people to take appropriate action when high-impact weather is threatening them and their property? This issue is certainly not new, but the proliferation of avenues which citizens receive such information (which can be conflicting at times) has brought this topic to an even higher level of importance. The main goal of the conference is the sharing of physical and social science in order to determine how the weather enterprise can encourage people to take appropriate action during high-impact weather events, while realizing there are still limitations of each discipline

Schedule of Events and Meeting Overview

The 2013 NWA Annual Meeting will include the annual Broadcaster Workshop, and the Sixth Annual Student Session, both on Sunday, October 13. The general sessions will be held October 14-17. The NWA annual awards luncheon will be held on Wednesday, October 16.

Contact Info

Annual Meeting Program Committee Chair:
Frank Alsheimer

Science and Operations Officer
National Weather Service Forecast Office
Charleston, SC
annualmeeting@nwas.org

Broadcaster Workshop Program Chair:
Mike Goldberg
WTVR-TV
Richmond, VA 23230
mgoldberg@wtvr.com

For more information on exhibits, special accommodations, registration and the overall meeting program, keep checking this web page and the links above or contact the NWA office at (919) 845-1546 or exdir@nwas.org.

Social Media

The NWA will provide updates on this Web page, on the NWA Facebook Page, Twitter and other social media. Please use the hashtag #NWA13 for any tweets associated with the 2013 Annual Meeting.

Abstract Submission (New extended deadline!)

Submit abstracts for both oral and poster presentations by 1 July 2013.

Abstracts should be sent via the online form on the NWA Web site at: www.nwas.org/2013abstracts.html. 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 via e-mail regarding the disposition of their abstracts by late August 2013 from the Program Committee. A preliminary agenda will be posted on the NWA Web site by early September for presenters to review and proofread.

Students, please complete the abstract submission form section regarding student awards. If you concur, your presentations will be reviewed by the NWA Weather Analysis and Forecasting Committee members. Monetary awards will be presented to the best oral presentations and posters in undergraduate and graduate student categories.

Extended Abstracts

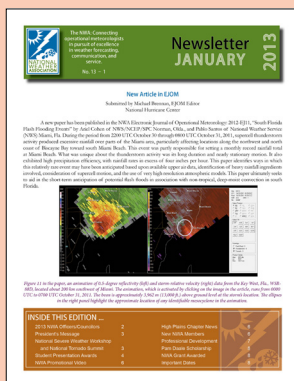
If authors wish to expand their abstracts and presentation material into a more complete paper, that will be accommodated as well. This will allow the extended abstract to be cited as with papers from other conferences that publish such manuscripts (i.e., preprints). See page 3 for additional details!

Meeting Location
North Charleston Convention Center
5001 Coliseum Drive
North Charleston, SC 29418

Host Hotel (Right next door to the meeting!)
Embassy Suites North Charleston
5055 International Boulevard
North Charleston, South Carolina, 29418

Newsletter Submissions

We welcome Newsletter article submissions from members. Send articles to nwanewsletter@nwas.org by the 25th of the month for publication in the following month's edition at the earliest. Information about the Newsletter and a link to author guidelines can be found at <http://www.nwas.org/newsletters/>.



New NWA Members in March 2013

Regular/Military/Retired

Daryl R. Bargiband
Jeri J. Conaway II
Joshua David Eachus
Ryan T. Ellis
Steven E. Heicher
Roger R. Hill
Brian D. Inman
Robert Scheinhartz
Wendy Sellers
Ryan Stinnett
Stephen Szulborski
Alvin L. Tatum Jr

Students

Cameron C. Batiste
Joseph Martin Bauer
Keith G. Bryant
Natalie Cantu
Brandon J. Fudali
Marcus Lebron Hereford
Todd C. Hunter
Anthony Walter Lyza
Janice Marie Maldonado-Jaime
Nicholas L. Merianos
Bowen Pan
Paul Rubio
Somara Theodore
Bryce Touchstone

2013 NWA sponsored Annual Meetings, Conferences and Special Events

Oct. 12–17: The 38th NWA Annual Meeting

Will be held in Charleston, S.C. at the North Charleston South Carolina Convention Center with the meeting hotel being the Embassy Suites located next door. See page 6 and <http://www.nwas.org/meetings/nwa2013/>.

Other Meetings, Conferences and Special Events in 2013

May 19–23: World Environmental & Water Resources Congress

This is sponsored by the American Society of Civil Engineers and will be held at the Duke Energy Convention Center in Cincinnati, Ohio. This conference will discuss economic stresses, developing technologies, and emerging requirements in water management. Topics include decision support tools for drought monitoring and forecasting, advances in rainwater capture and reuse, emerging contaminants in groundwater, past floods, alternate water supply planning, and hazardous, toxic, and radioactive waste. <http://content.asce.org/conferences/ewri2013/index.html>.

May 26–30: The 2013 Joint Scientific Congress of the CMOS, CGU, and CWRA

It will be held at TCU Place in Saskatoon, SK, Canada. Presentations are encouraged for all areas of interest of CMOS (Canadian Meteorological and Oceanographic Society), CGU (Canadian Geophysical Union), and CWRA (Canadian Water Resources Association). The theme is Bridging Environmental Science, Policy and Resource Management. Please visit the Congress Web site for contacts and further information.

Sept. 16–20: The 19th AMS Satellite Meteorology, Oceanography and Climatology Conference and the 2013 EUMETSAT Meteorological Satellite Conference

This international conference will be held in Vienna, Austria. Session topics include current and future satellites, instruments and their applications, climate, calibration and characterization, and data access for easy utilization. The overarching theme will be water vapor, clouds, and precipitation, and the use of current and planned Earth observation systems to improve our understanding and adequately monitor trends and variability in the global hydrological system. For more information, please visit www.conferences.eumetsat.int.

Sep 23–26: Virtual US-Canada Border Conference

This conference via Webinar will cover many topics related to weather along the US-Canada Border. Details on the conference purpose and recommended audience at: http://www.crh.noaa.gov/bis/?n=nws_border_conference. Abstracts due June 30, 2013.

Severe Weather Sweet Tooth

Shelby Latino

Membership and Marketing Committee Student Member



At Mississippi State University's [11th Annual Southeast Severe Storms Symposium](#) NWA Membership and Marketing Committee student member, Shelby Latino, baked and decorated four cakes, each one representing a panel from a typical radar display of a supercell thunderstorm. In the top left of the picture, the base reflectivity cake shows an apparent hook echo. In the top right, the base velocity is showing a couplet. The bottom left is showing vertically integrated liquid signifying where a hail core may be present, and the bottom right shows the correlation coefficient used to identify a tornado debris signature. The cake received lots of attention on Twitter in addition to getting over 150 "likes" and over 200 "shares" on the NWA's Facebook page. Shelby is thankful for all of the help and support she had from her fellow members of the [East Mississippi Chapter](#) of the NWA and AMS, and happy that everyone at the symposium enjoyed the cake.

IMPORTANT DATES

April 4 - 6: 17th Annual Severe Storms and Doppler Radar Conf., Ankeny, Iowa

April 15: Application period for NWA Broadcast Scholarship Closes

April 15: Application period for NWA Sankey Scholarship Closes

May 15: Application period for NWA Scofield Scholarship Closes

Oct. 12-17: 38th NWA Annual Meeting, Charleston, S.C.

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Submit newsletter items to nwanewsletter@nwas.org using the Instruction for Authors at http://www.nwas.org/newsletters/newsletter_instructions.php.

Members receive the Newsletter and *National Weather Digest* as part of their regular, student or corporate membership privileges.

Address, phone number, email and affiliation changes can now be made online: member.nwas.org.

Address Service Requested

National Weather Association
228 W. Millbrook Rd.
Raleigh, NC 27609-4304