



The NWA: Connecting operational meteorologists in pursuit of excellence in weather forecasting, communication and service. No. 15 – 4

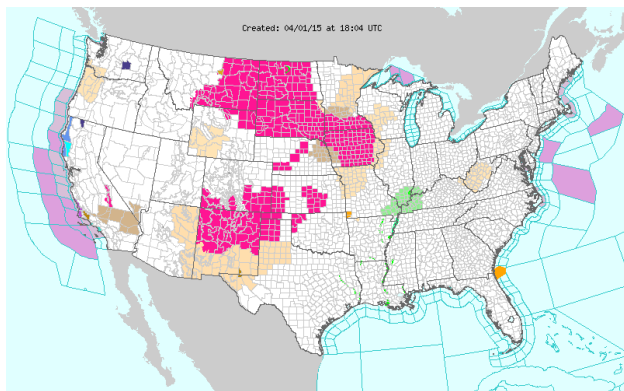
Newsletter APRIL

2015

Fire Season Trends Northward across Eastern Half of the Country

By Brent Wachter, Special Operations Committee Member NWA

Fire season 2015 has been trending northward across the United States, particularly the eastern half of the country as of late. This is due to a warming landscape and the interplay between snow melt, soil moistening and spring green-up. It was no April Fool's that Red Flag Warnings were issued by National Weather Service offices that serve the Northern Plains and upper Midwest on April 1. Red Flag Warnings are issued to highlight critical atmospheric and fuel conditions that lead to heightened fire danger and fire behavior. The hot pink areas shown in Figure 1 indicate Red Flag issuances on April 1, 2015, across portions of the Southwest, Northern Plains and upper Midwest.



*Fig 1. NWS hazards map valid 18z April 1, 2015
Graphic courtesy of the National Weather Service*

The potential for increased fire behavior and fire danger is tied to several variables. One variable that changes substantially, both temporally and spatially, across the landscape is the state of green-up. Green-up is largely tied to soil temperature/moisture and sky cover trends. Trends in green-up correlate well with the peak fire season migration from south to north across the eastern half of the country. Additional migrations are at times noted from east to west across the Great Plains/Texas to the Front Range of the Rockies. Green-up is important in all fuel types such as herbaceous forbs and broadleaf plants, grasses, shrubs and tree canopies. Fully leafed trees reduce the amount of solar radiation that reaches the ground, thus lessening fire danger, intensity and rates of spread. Shrubs and grass that are vibrant green tend to contain higher moisture than dormant or cured fuels and act to lower fire danger, intensity and rates of spread. Some fire managers use the growing season index

See FIRE, page 9

The Meteorological Satellite Applications Award Grant Now Open!

Undergraduate students are invited to write an original paper on meteorological satellite applications. The award winner will receive a \$500 grant, free registration at the NWA Annual Meeting to present their paper, and a stipend of \$500 to help cover travel and hotel expenses.

Applications must be submitted by 12:30 a.m. CDT on July 1, 2015. [Click for more.](#)

In Memoriam Ron Przybylinski



The National Weather Service lost one of its brightest scientists on March 12, with the passing of Ron Przybylinski. See page 4.

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Tracking the Severity of Winter

Winter seasons have significant societal impacts across all sectors ranging from direct human health and mortality to commerce, transportation and education. The question “How severe was this winter?” does not have a simple answer. At the very least, the severity of a winter is related to the intensity and persistence of cold weather, the frequency and amount of snow along with the amount and persistence of snow on the ground.

Dr. Barbara Mayes Boustead with the National Weather Service-Omaha and Steve Hilberg with the Midwestern Regional Climate Center (MRCC) have developed a tool to monitor and objectively index winter conditions across the U.S. The Accumulated Winter Season Severity Index (AWSSI) was developed to quantify and describe the relative severity of the winter season. The index uses commonly available data (maximum and minimum temperature, snowfall, snow depth). Daily scores are calculated based on scores assigned to temperature, snowfall and snow depth thresholds. The daily scores are accumulated through the winter season, allowing a running total of winter severity in the midst of a season as well as a final, cumulative value characterizing the full season. Accumulations of the temperature and snow components of the index are computed separately and then added together for the total index. This allows comparison of the relative contribution of each to the total score. Limitations of the index are it does not include wind (e.g. wind chill, blowing snow); and it does not include mixed precipitation or freezing rain explicitly (daily data does not distinguish the contributions of freezing rain and mixed precipitation).

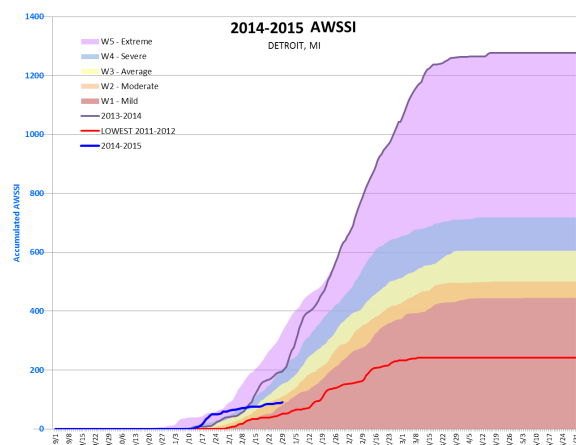
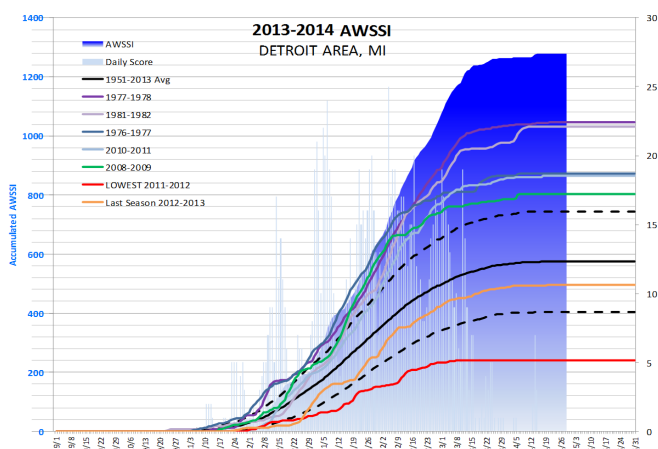
The index values can be compared to other years at the same location to gauge of the severity of a given winter. These values can also be compared at differing locations to compare winter severity among the various cities. Quintile scores of the AWSSI are determined for each location. The five categories are labeled as Mild, Moderate, Average, Severe and Extreme.

During the winter of 2013-2014 the AWSSI received a lot of attention because of the severity of the winter. The MRCC is in the process of implementing an interactive operational version of the AWSSI. For the 2014-2015 winter, the AWSSI is being calculated and updated regularly for the following locations: Blue Hill, Massachusetts; Chicago, Illinois; Champaign-Urbana, Illinois; Denver, Colorado; Detroit, Michigan; Duluth, Minnesota; Indianapolis, Indiana; Madison, Wisconsin; Minneapolis, Minnesota; Omaha, Nebraska; New York, New York; Philadelphia, Pennsylvania; Rapid City, South Dakota; and Washington, D.C. Updated interactive charts of the AWSSI are available for all the above locations which show the current winter and the historical quintile categories. The charts and updates can be found on the [AWSSI web page](#).

Additional background on the Accumulated Winter Severity Index can be found on this page as well, including a link to a [NWS Central Region webinar](#) by Barbara Mayes-Boustead that describes the development of the AWSSI.

This plot shows the accumulation of the AWSSI for Detroit, Michigan, for the winter of 2013-2014. The plot also includes plots of the average accumulation, plus and minus one standard deviation, the

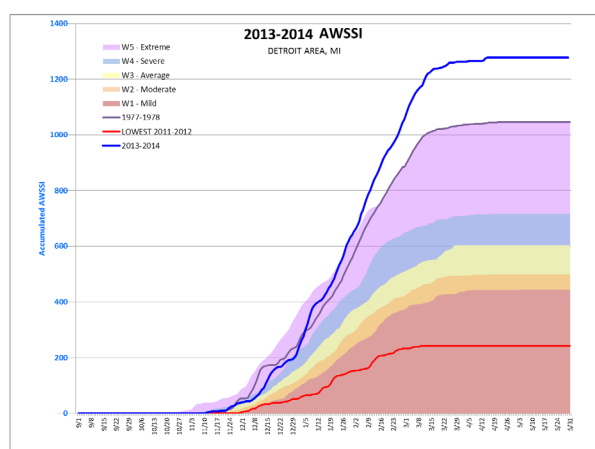
accumulation for the winter with the lowest score, and the top five highest winters. The end-of-season AWSSI value of 1271 was the highest for Detroit since 1950-1951, exceeding the previous maximum of 1046 in the winter of 1977-1978.



This plot shows the accumulation of the AWSSI for Detroit for the current winter through December 29, 2014.

PERCENTILE	CATEGORY
20th	W1 - Mild
40th	W2 - Moderate
60th	W3 - Average
80th	W4 - Severe
99th	W5 - Extreme

Table shows the percentile levels and corresponding descriptive categories.



This plot shows the accumulation of the AWSSI for Detroit during the winter of 2013-2014 along with the range of the five winter categories (quintiles).



A Strategic Look Back to Move Us Forward

By Elizabeth Page

Recently, I had the opportunity to join a meeting of the NWA Strategic Planning Committee. They are working on updating the NWA Strategic Plan and will be presenting it later this year. One of the priorities they are considering is trying to envision the forecaster of the future.

I began to think about what the job of the operational meteorologist of the future will entail, which led me to reflect back on what the future of operational forecasting looked like at the beginning of my career, and how it has actually evolved. When I joined the National Weather Service as an Intern in the early 1990s, modernization was in full swing. Doppler radar deployment was the focus of improved forecasting. AWIPS was changing the way we integrated datasets in forecasting operations. No longer would we evaluate model data and observations on one system, satellite on another and radar on still another. It was an exciting time to be in the NWS. At the same time, a huge initiative was underway to educate the workforce on the use of Doppler radar data in the context of mesoscale analysis and forecasting.

During that era, there were concerns that forecasters would become complacent and rely too much on numerical guidance and lose their meteorological thinking. The phrase “meteorological cancer” was coined by Len Snellman of the NWS (highlighted in [the transcript of a talk at the NWA Annual Meeting Awards Banquet](#) in 1991), supporting a push to keep meteorology in forecasting. He defined that term as the “increasing tendency of forecasters to abdicate practicing meteorological science and becoming more and more just a conduit of information generated by computers.” In the same talk, Len also encouraged forecasters to integrate this focus on the mesoscale with larger scale forcing mechanisms. He suggested that the forecast funnel gives forecasters a way to organize the large amount of data that they have available to them. The increased amount and temporal resolution of data has resulted in a shift from wishing for more information to being hit by a fire hose with a constant stream of an enormous amount of data. The challenge has become selecting the best data for the forecasting challenges that each shift presents.

New data sources continue to flow into our operations. Dual-pol radar data are now available, GOES-R is on the horizon, and blended NWP (Numerical Weather Prediction) will bring a different way to integrate model solutions. Our challenge is to embrace these new data sets and adapt our processes to exploit the information they provide.

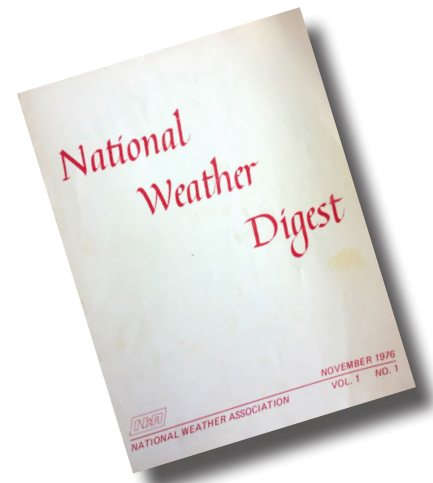
One of the interesting things that has developed as a result of increased accuracy in forecasts has been the focus on societal impacts of weather events. The weather enterprise has been addressing the question “What if the forecast is perfect, but people don’t pay attention?” So in addition to the continued effort to improve the accuracy of forecasts, additional efforts have been made to help forecasters craft their messages in a way that will help their customers take appropriate action.

I will admit to being concerned early in my career about how our role as meteorologists would change as the idea of automated forecasts began to emerge. What would our role be in forecasting? Would we still be needed? I’m happy to say that there is still a role for meteorologists in forecasting and the science is still an integral part of relaying our message to the public.

You can Google the “future of weather forecasting” and find many essays with ideas of where the field will go. What I look forward to is the unexpected directions we will move as we continue to grow our datasets and improve forecast guidance. I’m sure forecasters will be in a much different place in 40 years than we imagine it will be today. The key is to be adaptive while maintaining our scientific expertise and growing our forecast approach as our understanding of the atmosphere grows.

So what will the future of forecasting look like? How can we adapt our skills to meet new challenges and technology? Will we like what our careers become? The NWA is thinking about these questions too and is committed to working with our community to help it grow and adapt to future needs of our field.

NWA FLASHBACK!



This is the first issue of the National Weather Association National Weather Digest. We are happy to report that Editor Frances Holt is still a dedicated member. The first paper published in the Digest, “Operational Diagnostic Applications of Isentropic Analysis,” was authored by Louis Uccellini.

The Annual Meeting agenda in the back of the journal list these topics: A Panel Discussion on the Effects of Automation on Operational Meteorology, and Three views on Weather Dissemination and the News Media. [Click to see the Digest articles from Volume 1 to the final Volume 36.](#)

WEIGH IN ON PRECIP

NWA member Alan Sealls is doing a research project on the Probability of Precipitation (POP) and is asking NWA members to provide input for the research. Here is more information.

What’s in your rain chance? How many times have friends asked what a 40 percent chance of rain means? Is it a statistical probability or an areal coverage? In different regions and different weather patterns the percentage may have different interpretations.



[Take this short survey](#) to be a part of a paper on probability of precipitation. Alan is planning to present the results at upcoming NWA and AMS conferences. **The survey deadline is June 1.**

Welcome to the NWA!

New Members in
March 2015

Regular/Retired/Military

Robert Brasher
Mark Byers
Rachel Cobb
Justin Fritts
Stacy-Ann Gooden
Jonathan Guseman
Rick Hluchan
David Leach
Shawn Liebl

Jim Loznicka
Jarid Root
Samuel Shull
Michael Sparks
Jonathan Weant

Student

Matthew Chyba
Lauren Jerkowitz
Suzanna Lindeman

Courtney Maskell
Alexander McCarthy
Vanessa Przybylo
Yasuhiro Shinohara
Alex Sizemore
Derrick Snyder
Robert Stilwell
John Toohey
Ricardo Uribe
Hannah Wells

Remembering Ron Przybylinski

By Wes Browning and Sean Potter

The National Weather Service lost one of its brightest and most beloved scientists on March 12, with the passing of Ron Przybylinski the Science and Operations Officer (SOO) at NWS St. Louis. He died peacefully surrounded by family and friends.

As noted by NWS St. Louis Meteorologist-in-Charge Wes Browning, “Ron will be deeply missed by the many folks who had the great privilege to know him personally and to work with him over his long and very productive career in the National Weather Service and we extend our condolences to his family.”

Ron was well-known throughout the agency at all levels, not only as a great scientist, but also as a caring, engaging and thoughtful colleague. NWS Director Dr. Louis Uccellini remembers the important role Ron played in helping him adapt to the NWS operational culture after arriving at the agency more than a quarter century ago. “When I joined the NWS in 1989, after spending my entire career in the research community, Ron was instrumental in helping me see the tremendous potential of the SOO program and then navigate my way into the world of operations,” Uccellini said. “He was truly an expert in transitioning his research, and the research of others, into improvements in operational products and services. He was a friend, a trusted colleague, and simply a decent human being who was a joy to be around.”

During his 35-year career at NWS, Ron made major contributions to operational meteorology with his work in identifying radar signatures and favorable storm environments associated with strong and damaging winds. His research efforts in documenting quasi-linear convective systems (QLCSs) and their role in producing tornadoes and severe winds, and his lifelong dedication to mentoring and science sharing, aided countless warning forecasters and improved warning lead times across the agency.

Ron earned his bachelor's and master's degrees in meteorology at Saint Louis University in 1977 and 1981, respectively. He began his full-time career at the NWS Indianapolis Forecast Office in 1981. In 1991, he became the first SOO at the NWS Forecast Office in St. Louis, where he remained for the rest of his career.

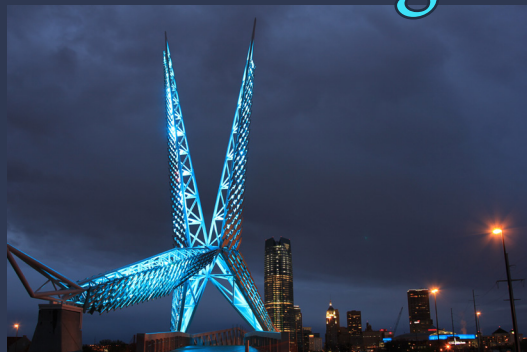
Ron's contributions extended far beyond both Indianapolis and St. Louis, however. During the late 1980s, Ron was instrumental in helping bring new, life-saving technology into operations by serving as a project leader on the Operational Test and Evaluation of the WSR-88D Doppler radar. He studied QLCSs and their associated winds and tornadoes throughout the 1980s, writing a seminal paper on bow echoes in 1995. He was an organizer and key participant in the Bow Echo and Mesoscale Convective Vortex Experiment, which ran from May 20 to July 6, 2003, out of Mid-America Airport in Mascoutah, Illinois.

Throughout his career, Ron enthusiastically shared his research with his peers at the NWS and with students at universities across the country. He mentored countless young NWS forecasters and provided scientific support to many NWS SOOs. He was a principal investigator on the severe straight-line winds component of the COMET Cooperative Project with Saint Louis University, and was also involved with the Cooperative Institute for Precipitation Studies (CIPS). Through his years of research efforts and operational experience, Ron became a recognized expert on QLCSs, bow echoes, mesoscale convective systems, as well as the convective winds and tornadogenesis associated with these thunderstorm structures. He was also a recognized expert on tornado damage assessment, and was on NWS's Quick Response Team — a group of experts who are rushed to assess damage from particularly damaging (>EF3) tornadoes.

Ron's most recent research efforts focused on detection of QLCS tornadoes. As a direct result of his research and training efforts, NWS St. Louis was able to triple average lead times during the December 31, 2010, QLCS tornado outbreak. Ron also participated heavily in the construction of COMET training, particularly on bow echoes, produced by the University Corporation for Atmospheric Research (UCAR). Ron helped organize two operational workshops on bow echoes and QLCS tornadoes, including one held in March 2011 in St. Louis. He published numerous scientific papers and gave many presentations at both American Meteorological Society (AMS) and NWA conferences. He served on the AMS Severe Local Storms Committee, and served twice as a Councilor of the NWA. He was the recipient of the NWA Operational Research Award in 1989 and the 2003 NWA T. Theodore Fujita Research Achievement Award “for outstanding applied research in radar analysis of severe storms and in forecasting of heavy rainfall and winter storms, and for incorporating research results, including the development of conceptual storm models into improving forecasting and warning operations.” In 2012 he was honored with the Charles L. Mitchell Award by the AMS “for improving NWS warnings through collaborative research and training in recognizing Doppler radar signatures associated with high wind events in quasi-linear convective systems.” In 2013 NOAA honored Ron with the Distinguished Career Award “for his work, which has improved our understanding of severe weather threats to our nation, including damaging straight-line winds and tornadoes.”

Ron's intense curiosity about the science of meteorology, his selflessness in working with countless young scientists across the country and his unwavering dedication to public service will live on in all those fortunate enough to have known or worked with him. Ron will truly be missed by his many friends and colleagues.

40th NWA Annual Meeting



SkyDance pedestrian bridge and downtown Oklahoma City.

It's our 40th Anniversary!
Power of the Past; Force of the Future

October 17 - 22

**Cox Convention Center
Oklahoma City, Oklahoma**

Schedule of Events

Saturday Oct. 17 - NWA Golf Outing & Climate Workshop
Sunday Oct. 18: Broadcast Meteorology Workshop
Sunday Oct. 18: 8th Annual Student Session
Oct. 19-22: General Sessions
Wednesday Oct. 21: NWA Annual Awards Luncheon

Location

Conference Hotel: The [Renaissance Oklahoma City Convention Center Hotel](#).

Reservations [may be made online](#), or call (800) 468-3571 and telling them you are attending the National Weather Association Meeting. The room block is open until 18 September 2015 or until full.

Conference Venue: Cox Convention Center in downtown [Oklahoma City](#).

Call for Abstracts

In addition to the traditional sessions on severe weather, weather and forecasting, etc., the Program Committee is specifically soliciting abstracts which relate to one of the following sub-themes. The poster abstract deadline is April 30.

- NWA's 40th Anniversary (History, Retrospective)
- Integration of New Technology (Dual-pol, GOES-R, MYRORSS, Proving Ground)
- Advances in Numerical Weather Prediction (Warn-on-Forecast, Storm-Scale Ensembles)
- Innovations in Communicating High-Impact Weather Events (Social Media, Commercial Services, Simplification)
- Case Studies of High-Impact Events

Abstracts should be sent via the online form on the NWA website at: [2015 NWA Annual Meeting Abstract Submission Form](#). If you are unable to submit your abstract via the online form, contact the NWA office at (405) 701-5167 or e-mail: exdir@nwas.org.

The Program Committee will notify presenters, via e-mail, regarding the disposition of their abstracts by the first week of June. A preliminary agenda will be posted on the NWA website by early August for presenters to review.

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.

Important dates

April 30: Poster presentation abstract deadline

Program Chairs

Program Committee

Co-Chairs:

Dr. Patrick Marsh

Techniques Development

Meteorologist

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John Ferree

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Coordinator

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Broadcaster Workshop

Program Chair:

Mike Goldberg

WTVR-TV

Richmond, VA 23230

mgoldberg@wtvr.com

Watch the meeting webpage for updates on hotel accommodations, exhibits, and more, or contact the NWA Office at (405) 701-5167 or exdir@nwas.org

Stay Connected!

Meeting hashtag: #Nwas15

Meeting updates will be posted on these NWA social media sites:

Facebook: www.facebook.com/nwasorg

Twitter: twitter.com/nwas

Google+:

<https://plus.google.com/115267406833207403491/posts>



A Look Back at Our Presidential History



The National Weather Association is celebrating its 40th Anniversary this year. The NWA Office reached out to past presidents and asked them for their most memorable or favorite moment from their time as NWA President. In last month's Newsletter we shared memories from two of our past presidents, Dr. Patrick S. Market (2011) and Jeffrey P. Craven (2014). This month we'll continue our walk down memory lane with two more past presidents.

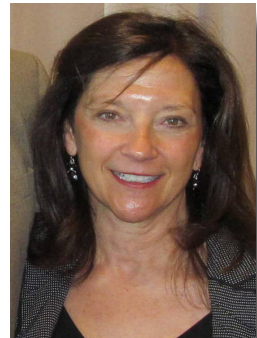
2007 Alan E. Gerard

"In thinking back on my time as NWA President, I would say that my most memorable event was the mid-year meeting. It was held in Raleigh at the new NWA office there, and much of our time was spent discussing rollout plans for the new NWA webpage. The developments of the association getting its own office space and a new, modern website were big steps for our organization, and I was excited that they were coming to fruition."



1997 Theresa Rossi

"It is truly difficult to pick just one moment because my entire experience as a member of the NWA is memorable. I was able to meet, make friends, and interact and network, with people from outside the National Weather Service, in the broadcast community, academia, other federal agencies, and the military. I was able to conduct, publish and present research on day to day operational forecasting problems, and learn from the research of others. I had the opportunity to assume leadership positions. In addition to NWA president, I served as Chair of the 2006 Annual Meeting Program Committee.



"The benefits I describe above are there for the entire membership, provided by the dedication, hard work and inspirations of the many who came before my presidency and continue to this day. I am very proud to have been able to play, what I consider to be, a very small part in this.

"If I have to pick just one memorable moment, it was the privilege to serve as president of the NWA, and it was a great honor to be the first woman to hold this office. It was the membership who elected me and I am forever grateful for their support."

FROM OUR MEMBERS



Goldwater Scholar Named

NWA Student Member Ben Toms has been named a 2015 Goldwater Scholar. This prestigious scholarship is awarded on the basis of potential and intent to pursue a career in mathematics, natural sciences or engineering. Toms, from Aurora, Colorado, is a junior at the University of Oklahoma. He won a Best Undergraduate Student Oral Presentation Award at the NWA 39th Annual Meeting in Salt Lake City, Utah, for Development of a Black Ice Numerical Weather Prediction Model. The NWA congratulates Ben Toms on his accomplishments and is proud to have him as a member.

If you have member or corporate member news you'd like to see in the NWA newsletter, please contact our Communications Coordinator Hulda Johannsdottir (hjohannsdottir@nwas.org).



http://www.nws.noaa.gov/com/weatherreadynation/#.VS_S15Nd98k

Spring Announcement from COMET

Wendy Schreiber-Abshire,
COMET Sr. Project Manager/Meteorologist

Read on for highlights of COMET's MetEd publications during the period October 2014 through March of 2015. Our new English-language distance-learning publications cover a broad array of topics. Hopefully there is something of interest to you. Click titles to access.

[Introduction to Tropical Meteorology, 2nd Ed.: Chapter 7: Synoptic and Mesoscale Systems \(2-3 hours\)](#)

In this chapter, we examine the wide variety of synoptic and mesoscale weather systems that affect the tropics.

[Introduction to Aircraft Meteorological Data Relay \(AMDAR\) \(<1.5 hours\)](#)

The audience for this lesson includes meteorological service managers and providers, observational development groups, the aviation industry, and others interested in benefiting from an aircraft-based observing system in their region.

[Overview of Watershed and Channel Sedimentation \(45 minutes\)](#)

This lesson provides an overview of the primary influences of watershed and channel sedimentation.

[Understanding Heights and Vertical Datums \(<1 hour\)](#)

This lesson provides a basic understanding of different vertical datums, how they are defined, some of their strengths and weaknesses, and how to choose the appropriate datum for a given application.

[Advanced Himawari Imager \(AHI\): What's Different from the GOES-R Advanced Baseline Imager \(ABI\) \(30 minutes\)](#)

This brief lesson provides an overview of the AHI on the Himawari-8 satellite and highlights its differences from the GOES-R ABI.

See COMET, page 7

COMET from page 6

[Microwave Remote Sensing: Land and Ocean Surface Applications, 2nd Ed. \(1.5–2 hours\)](#)

This lesson introduces the concepts and principles basic to retrieving important land and ocean surface properties using microwave remote sensing observations from polar-orbiting satellites.

[Introduction to Tropical Cyclone Storm Surge \(45 minutes\)](#)

This lesson introduces forecasters to the physical processes and impacts of tropical cyclone storm surge.

[Marine Weather Services Incident Response and Decision Support \(<1 hour\)](#)

This lesson follows an example spill event to help demonstrate marine forecasters' responsibilities for coordinating with emergency managers, other NOAA line offices, and governmental agencies, and outlines best practices related to effective communication.

[Assessing NWP with Water Vapour Imagery \(1 hour\)](#)

This lesson provides interactive guidance and discovery learning approach that allows forecasters to practice this important skill set.

We've gathered all our GOES-R related lessons into a self-paced online course:

[GOES-R Satellites Orientation Course](#) also available

[in Spanish: Curso de orientación sobre los satélites GOES-R](#)

We've also published other new translated materials including:

[El ABI del GOES-R: la próxima generación de imágenes satelitales](#)

[Circulaciones tropicales de mesoescala y locales](#)

[El GLM del GOES-R: introducción al sensor de rayos geoestacionario](#)

[Sistemas convectivos de mesoescala tropicales](#)

[Fundamentos de teledetección en el visible e infrarrojo](#)

Currently, these materials are freely available to everyone, courtesy of our primary sponsors: NOAA's NWS, NESDIS and NOS programs, EUMETSAT, the Naval Meteorology and Oceanography Command, the Meteorological Service of Canada, Bureau of Meteorology, the U.S. Army Corps of Engineers, and the Department of the Interior Bureau of Reclamation.

New JOM Papers

Two new articles have been published in the NWA's Journal of Operational Meteorology (JOM) since last month's Newsletter.

JOM 2015-6: Genesis of the Chickasha, Oklahoma, Tornado on 24 May 2011 as Observed by CASA Radar and Oklahoma Mesonet by Jerald A. Brotzge and Cynthia Morgan Luttrell.

JOM 2015-7: Independence Day Holiday Weekend 2010 Flood on the Southern Plains of West Texas by Jeffrey D. Vitale and John Lipe, and T. Todd Lindley.

There are four categories of papers that can be published in the JOM. [To see their names and descriptions, go to the JOM Call for Papers.](#) If you are interested in submitting a paper to JOM, [go to the website for author information.](#)

Thank you to the JOM authors, reviewers and editors for continuing to make JOM a success. You can read papers by logging on to the [NWA Member Portal](#) and clicking on the JOM link under Additional Member Resources on the right.



Figure 15 from JOM 2015-7. A survey following the event showing an area of overland flow nearly 1.6 km (1 mi) wide over US Route 380 between Post, Texas, and Tahoka, Texas.

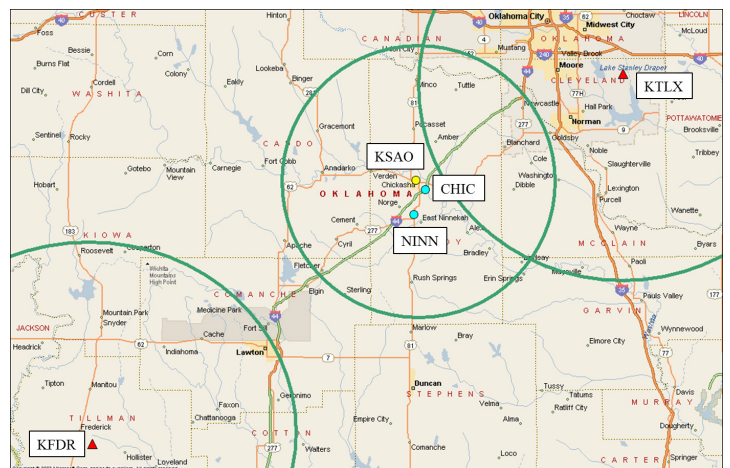


Figure 1 from JOM 2015-6. Map of southwestern Oklahoma showing the locations of two nearby WSR-88Ds and two nearby Oklahoma Mesonet sites.



WEEKLY UPDATE

[Click to see the Weekly Updates from NWA](#)

PROFESSIONAL DEVELOPMENT

2015 NWA sponsored Annual Meetings, Conferences and Special Events ([click titles to view websites](#))

August 12-13: 17th Annual High Plains Conference

This conference, sponsored by the High Plains Chapter of the AMS and the NWA, will be held in Goodland, Kansas. NWS Central Region Director Chris Strager will likely be keynote speaker, and NWA President-Elect Dave Freeman will be the banquet speaker.

October 17-22: 40th NWA Annual Meeting

The Renaissance Oklahoma City Convention Center Hotel is the host site for the meeting. Meetings will be held next door in the Cox Convention Center. It is our 40th anniversary, so plan to attend this informative meeting and celebration. See page 5 for details.

Other Meetings, Conferences and Special Events in 2015

May 10-15: 29th Annual Governor's Hurricane Conference

Touted as the nation's largest and best-attended conference focusing on hurricane planning, preparedness, response, recovery and mitigation will again be held in Orlando, Florida. This year's theme is Rethink Resilience, Connecting Capabilities for Stronger Communities.

May 11-12: 2015 Alaska Weather Symposium

This symposium will be held at the University of Alaska Anchorage Aviation Technology Center, Merrill Field in Anchorage, Alaska.

May 16-22: Safe Boating Week

The National Safe Boating Council will cover weather and non-weather related topics through the week, including marine briefing, safe navigation in fog, thunderstorms and hurricanes.

May 24-30: Hurricane Preparedness Week

The preparedness week will start with an overview of basics, then cover hazards, forecast process, having a plan, and actions to take.

June 7-13: Rip Current Preparedness Week

Rip currents can be killers. The United States Lifesaving Association estimates that the annual number of deaths due to rip currents on our nation's beaches exceeds 100.

June 15-18: 2015 National Hydrologic Warning Council Training Conference & Exposition

Held in Indianapolis, Indiana, this year a small sampling of presentations include: Hydrological Data Collection, USGS Fluvial Erosion Hazard (FEH) Mitigation Program and High Water Mark (HWM) Training Workshop, High Resolution Flash Flood Modeling and many more.

June 21-27: Lightning Safety Awareness Week

Summer is the peak season for one of the nation's deadliest and fastest weather phenomena – lightning. In the United States, an average of 51 people are reported killed each year by lightning, hundreds permanently injured.

August 25-27: Great Lakes Operational Meteorology Workshop

This workshop will be held in Grand Rapids, Michigan, and is designed to bring forecasters of all experience levels, media partners, and academia together to address the challenges and to share knowledge, experience and techniques.

November 13-18: IAEM 63rd Annual Conference and EMEX 2015

The theme is "Expanding the Spectrum of Emergency Management" and the conference will be held in Clark County, Nevada.

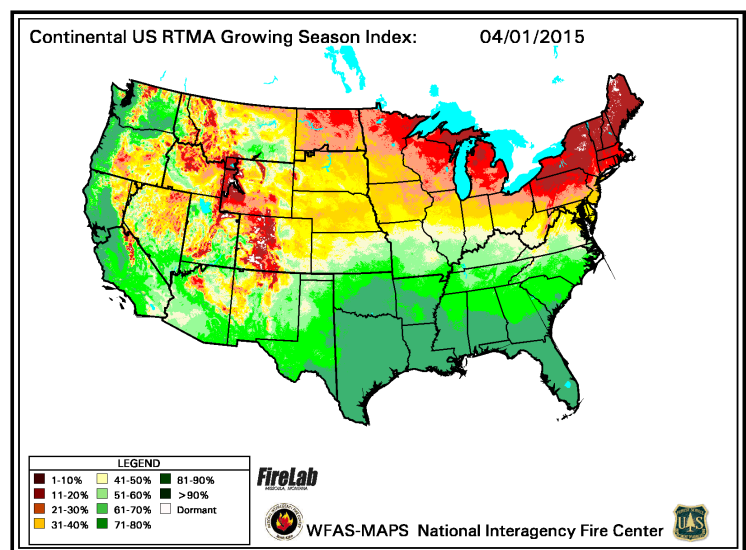
The NWA Events page has more information.

FIRE from page 1

(GSI/ Fig. 2) to track green-up conditions over time, especially within grass-shrub and tree canopy fuel types. Values near 50 typically indicate the initial flush of green-up within these fuels. However, green-up needs to be sufficient enough to offset the amount of dead or dormant grass and shrubs carried over from the previous year's growing season. Figure 3 shows transitional or initial green-up at the base of grass tufts, although this new growth is not sufficient to significantly lower fire spread, especially when critical weather is present. Thus, there is a general delay between when the landscape reaches a GSI value of 50 and fire spread-intensity potential lessens. Anecdotal evidence is also used to track peaks in the fire season from year to year. Land managers across the upper Midwest keep track of leaf emergence within oaks. When the oak leaves are no larger than a squirrel's ear, peak fire season has been achieved. Texas land managers study the ratio of live versus dead fuels based on the current growing conditions and how they impact fire spread (Table 1).



Fig. 3 Tufts of carryover dead grass with initial green-up found along the forest floor west of Los Alamos, New Mexico. Photo courtesy of NWS-Albuquerque Brent Wachter



*Fig. 2 Growing Season Index valid April 1, 2015
Graphic courtesy of the Wildland Fire Assessment System*

Type of Grass	Fire Spread	Live to Dead ratio
Cured	Not affected by any greenness present in the grass profile.	< 20%
Transitional	Grasses do not provide an effective barrier to fire spread in the presence of critical or extreme fire weather, but rates of spread are slowed due to the presence of some greenness.	20-75%
Effective Green	Grasses provide an effective barrier or retardant to fire spread even in the presence of critical to extreme fire weather.	75%

*Table 1. Impact of the ratio between live to dead grass on fire spread.
Information courtesy of the Texas State Forestry.*

IMPORTANT DATES

April 30: Annual Meeting poster presentation abstracts due

May 14: Scofield and Broadcast Scholarship application deadline

May 28: Reeves Memorial scholarship application deadline

June 1: Sol Hirsch Grant application deadline

October 17 - 22: 40th NWA Annual Meetings (see page 5)



Newsletter Submissions

We welcome Newsletter article submissions from members. Send articles by the 25th of each month to nwanewsletter@nwas.org 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 www.nwas.org/newsletters/.

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