



Sterling Reporter



Newsletter of NOAA's National Weather Service Baltimore/Washington Forecast Office

Volume 7, Issue 2

Fall 2008

Open House

Christopher Strong, Warning Coordination Meteorologist

On Saturday October 18th and Sunday October 19th, our doors will be opened to the public as we host our second semi-annual Open House. During the Open House weekend, the brand new Baltimore/Washington Forecast Office for the National Weather Service will be dedicated. Hours of operation will be 9am-5pm on Saturday and Noon-5pm on Sunday.



The Open House is a great chance to bring the family and learn a little bit about what goes into the daily forecasts as well as life saving watches and warnings that NWS issues 24 hours a day, 365 days a year. There will be exhibits, demonstrations, and talks about the various roles the National Weather Service plays in the weather forecasting enterprise in this country.

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MIC's Corner

James E. Lee, Meteorologist-In-Charge

Shortly after starting in my position here a little over four years ago, I was asked to attend a briefing at NWS Headquarters on the relocation of our office. Dulles Airport was planning to add a new runway to be in place by fall 2008. The position of the new runway would place its centerline 200 yards east of our facility, making our office fall within the runway safety zone. Therefore, our office was going to have to move.

Over the past four years, millions of dollars worth of resources has been poured into the design, development, and construction our new facility. About one year ago, heavy construction equipment broke ground one-half mile away from our office, and out of that has emerged our new facility. Since that time, our old radar has been disassembled and moved to Indiana and a new radar has been erected and is now operational. NOAA and NWS Eastern Region personnel have been dedicated to monitor construction and to plan and execute the seemingly-overwhelming transition of operational systems from our old building to the new, interacting with public utilities, and hundreds of contractors and vendors. I keep reminding myself that no great achievement comes without great work! It's now time to culminate this multi-year effort with our office move, which is scheduled to being the week of September 22nd. I anticipate our office to be completely moved and operational in our new facility no later than September 27th.

I am confident that our new building will be one of the top facilities in the NWS. The facility includes several highlights, including a larger operations area and conference room, an integrated upper air inflation building, a state-of-the-art lightning protection system, dedicated office space for all Weather Forecast Office (WFO) staff, and was also built green-friendly.

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New Office Building

Arthur Patrick, Electronic Systems Analyst

During the Open House weekend of October 18th and 19th, the brand new National Weather Service Baltimore/Washington Forecast Office will be dedicated. Our brand new 21st century, green-friendly building was constructed for us by the Metropolitan Washington Airports Authority (MWAA). This was due to their need of our land and current facility for the Dulles Airport expansion project.



The new building is slightly larger than 10,000 sq. ft. which is larger than the current facility. It offers a spacious forecast and warning operations area, offices for managers, and a large separate cubicle work area for forecasters to work on individual projects. The new building is designed for Leadership in Energy and Environmental Design (LEEDS) certification, which is a high standard for environmental conservation. Considerations for LEED include recycling construction debris and using recycled material in the construction. The Green Building Rating System™ encourages and accelerates global adoption of sustainable green building and development practices through the creation and implementation of universally understood and accepted tools and performance criteria.

The new building also includes a refurbished radar system that is collocated to the west of the new office. The Radiosonde Replacement System (RRS) that operates the weather balloon releases is attached to the east vestibule. Construction with this new building has been on a very fast pace over the past several months and we expected to move in during the week of September 22nd.

While we are moving, part of the forecast staff will relocate to the NWS office in State College, PA to continue forecast and warning operations.



Open House

Continued from Page #1...

There will be tours of our new facility and technology, with regular weather balloon launches for our site. There will also be tours of NOAA's Testing and Evaluations facility across the street, including their building sized wind tunnel and various environmental test chambers. At the end of each day, there will be a multimedia music show on 'Weather in Music and Prose'.

In addition to National Weather Service presentations and demonstrations, there will be various mobile command centers and exhibits from the various partners we work with. These include local state and federal government, internet groups, the University of Maryland and Howard University, NOAA agencies, the Red Cross, and the Skywarn Amateur Radio program.

If you're inclined to learn even more and become one of our registered weather spotters, we will be training new spotters each day during our Basics I Weather Spotter Training classes. These classes go over the basics of severe weather in the Mid-Atlantic, what to look for, and how you can protect yourself from the myriad of weather threats we face in this region.

So bring the family and come on down to the big event, meet some of our forecasters, and learn a bit about weather!

MIC's Corner

Continued from Page #1...

Our office will be celebrating this achievement by holding an Open House the weekend of October 18-19, 2008. Additionally, a Building Dedication Ceremony will be held at 1:00 PM on Saturday, October 18th, when various dignitaries, partners, and customers of the WFO will be providing remarks. Details of the Open House and Building Dedication Ceremony can be found in this edition of *The Sterling Reporter*.

Finally, I want give a fond public farewell to two of our General Forecasters, Steve and Sarah Rogowski, as Steve has recently accepted a promotion to the Senior Forecaster ranks at the Salt Lake City WFO. Best wishes to Steve and Sarah as they progress in their careers.

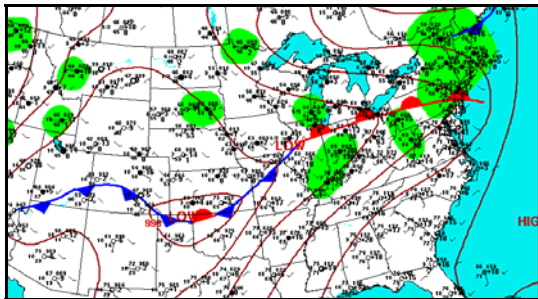
If you have any questions or comments about the NWS Baltimore/Washington Weather Forecast Office, please email me at James.E.Lee@noaa.gov, or phone me 703-260-0107, ext. 222.

June 4th Severe Weather Outbreak

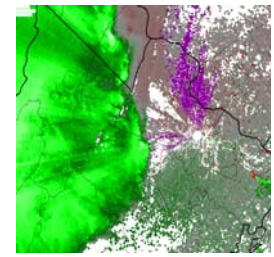
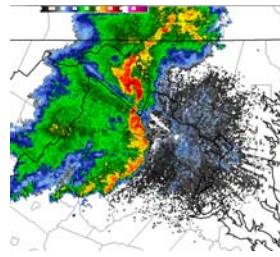
Steve Rogowski, General Forecaster

Severe weather outbreaks are rare – they occur when a myriad of weather parameters all come together in balance with each other. If you're an avid weather watcher, chances are you can identify the main players, moisture, wind shear (turning of strong winds above the ground), instability, and a cap (to keep the instability from being released too soon). This is what happened on June 4th, and the result will be remembered by many for years to come.

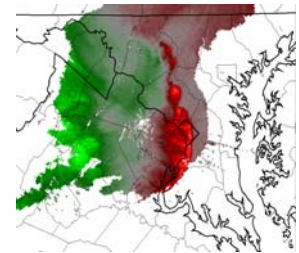
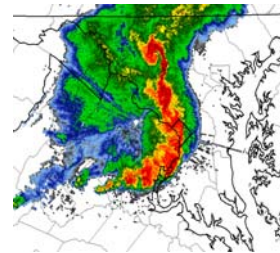
I remember walking into the office that Wednesday morning, after a warm front had lifted north into Pennsylvania the night before. It was one of those sticky mornings, and sky was clearing. All of this ahead of a MCV (Mesoscale Convective Vortex – or a fancy term for the mid altitude spin which was the result of a cluster of thunderstorms from the previous night), which was fast approaching the Mid Atlantic from the Ohio Valley. This was the dynamic source of lift which served to initiate and organize the thunderstorms that afternoon.



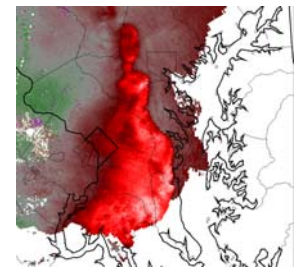
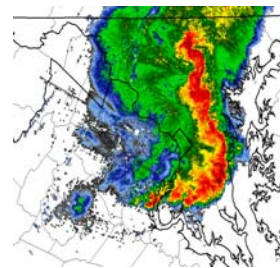
The region was upgraded to a moderate risk of severe weather after collaborating with the Storm Prediction Center at 9 am. A Tornado Watch was issued as a line of thunderstorms was forming west of the mountains shortly before 1 pm. The intense line of thunderstorms barreled through the region at 60 mph, reaching the Chesapeake Bay before 4 pm.



Thunderstorms gathered strength across north central Maryland, eastern West Virginia, and northern Virginia. Doppler Radar indicated rotation across far northern Fauquier County. The strongest winds were occurring in Jefferson County.



A line of thunderstorms continued to organize as the activity crossed the Washington metro area, with winds estimated between 60 and 70 mph.



The powerful line of storms accelerated east toward the Chesapeake Bay. In addition to strong straight-line winds, several circulations were evident developing across southern Anne Arundel and northern Calvert counties.

The National Weather Service Baltimore/Washington Forecast Office issued greater than 70 warnings for severe thunderstorms, high winds across the marine areas, and tornadoes. More than 200 reports of severe weather were documented, including several tornadoes.

Our office would like to thank the local emergency managers, broadcast meteorologists, amateur radio operators and Skywarn spotters who supported our operations during this major severe weather episode.

Student Volunteer Program

Sarah Rogowski, General Forecaster

The NWS Baltimore/Washington Student Volunteer Program offers college students majoring in meteorology the opportunity to gain operational research experience and also benefits local forecast programs. We welcomed three students from across the country to work with us this summer.



From left, Joe Wegman, Elizabeth Thompson and Ben Green

Joe Wegman is a senior meteorology major at SUNY Oswego originally from Fairfax, VA. He first became interested in weather after the Superstorm of 1993. His goal is to become a forecaster for the NWS. Joe continued his work from last summer on a climatology of lake enhanced upslope and upslope snow on the Allegheny Front of western Maryland, eastern West Virginia and far western Virginia.

Elizabeth Thompson is a junior meteorology major with a mathematics minor student at Valparaiso. She completed two case studies of high-impact weather events that specifically affected Washington, DC. The first case study involved a severe thunderstorm on the afternoon of Independence Day in 2006. The second case study assessed the impact of the February 2007 "Valentine's Day Storm". She reconstructed the development of each storm system and investigated the unique societal impacts the storm caused by affecting such a major metropolitan area. Elizabeth has been awarded a NOAA Hollings Scholarship and an associated research internship next summer and plans to attend graduate school upon earning her degree from Valparaiso.

Ben Green will be a junior this fall at Penn State University. This summer, he expanded upon the coastal flooding project that Kyle Tapley and Steve Rogowski started in 2007. In addition to an update of tidal gage climatology, verification of computer predicted tide levels was undertaken and a preliminary Sea Level Pressure classification of rapid rises in tide levels (due to meteorological factors) was created. After Penn State, Ben plans on attending graduate school and then helping foreign nations minimize weather-related damages.

More information on the local Student Volunteer Program can be found on our website at http://www.erh.noaa.gov/lwx/outreach/Student_Volunteer_Webpage.htm.

Outreach of Note – May through July

Nikole Listemaa, Senior Forecaster

May was a busy month for Outreach here at NWS Sterling. Our staff conducted four Skywarn Classes, three safety talks and two office tours. The Skywarn Classes were held in Baltimore, Page, Montgomery and Fauquier Counties. In total, around 100 people were trained to become Severe Weather Spotters. Chris Strong attended a "Weather Field Trip" Day at Camden Yards in the City of Baltimore. He addressed a crowd of around 2500 people and launched a weather balloon from mid-field. Chris also conducted a tour for Myles Henderson from the CBS affiliate in Charlottesville. Steve Zubrick conducted a tour for 17 NOAA Hollings Scholars.

In June, our office gave four safety talks, one tour and attended a conference. On July 13, Chris Strong attended Boy Scout day held NWS Headquarters in Silver Spring, MD. Chris talked to about 75 Boy Scouts about his experiences in the NWS. Chris also gave safety and preparedness talks in Anne Arundel County and Washington DC. Greg Schoor conducted an office tour for a Mother/Daughter team who were interested in weather. Nikole Listemaa and Chris Strong attended the MEMA Conference in Ocean City, MD.

In July, our office gave two office tours, two safety talks and visited the new 911 Center in Jefferson County, West Virginia. Steve Zubrick conducted a tour for Robert Braddock from the Department of Commerce. Mr. Braddock oversees the budget for NWS. The Howard University Weather Camp also came for their annual office tour on the 15th. Around 21 students attended while Chris Strong, Steve Zubrick, and Brian Lasorsa talked about safety and preparedness. Jim DeCarufel launched a weather balloon. Sarah Rogowski was a guest speaker at the Howard University/Noblis Wather Camp in Falls Church, VA. Chris Strong toured the new 911 Center in Jefferson County, West Virginia with our Skywarn Amateur Radio Coordinator Virginia Legowik.

DCA Climate Summary – May through July

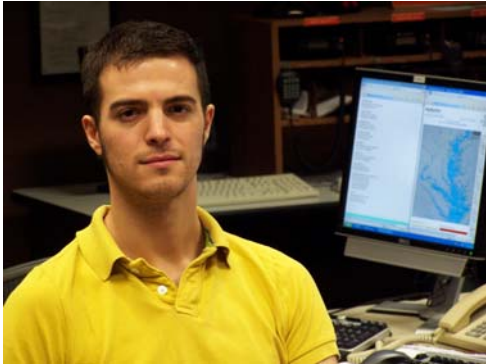
Brian LaSorsa, General Forecaster

At Reagan National Airport, the monthly average temperature for May of 2008 was slightly below normal. This was the first time monthly temperatures averaged below normal since April of 2007. However, both June and July's monthly temperatures averaged above normal. In fact, June of 2008 was the fourth warmest on record dating back to 1872. Precipitation for the month of May totaled up to 10.66 inches. This is only 0.03 inches behind the record of 10.69 set in 1953. Two daily rainfall records were set. On May 11th 2.63 inches of rain fell breaking the old record of 1.48 inches set in 1924. Rainfall of 2.22 inches on May 9th broke the old record of 1.13 inches set in 1919. Precipitation for June was also above normal, but most of that occurred in one day from severe thunderstorms on June 4th. A record 1.49 inches fell surpassing the old record of 0.81 inches in 1909. Precipitation for July of 2008 was close to normal.

Staffing News

Matthew Kramar from WFO Amarillo was selected to fill the Senior Forecaster vacancy left by Rick Winther.

After spending his formative years in New England (growing up in Connecticut), Matthew earned a B.A. Degree in Mathematics, Magna Cum Laude, from Dartmouth College in June 2000, and a M.S. in Meteorology from the University of Oklahoma in 2003.



Matthew joined the NWS in October 2003 as a Meteorologist Intern at Jackson, MS, and was promoted to General Forecaster in April 2004 at Amarillo, TX. In 2007, Matthew received both the local and regional Isaac Cline Award in Meteorology for excellent performance in products and services during the 2006-2007 winter season and the record-setting 2007 spring severe weather season. He also received the 2007 local Isaac Cline Award in Program Management for his development of the ECLAIRS software.

Welcome Matthew!

BWI Climate Summary – May through July

Brian LaSorsa, General Forecaster

The average monthly temperature for May of 2008 at Baltimore-Washington International was below normal for the first time since April of 2007. However, both June and July's monthly temperatures averaged above normal. Precipitation for May of 2008 was 7.77 inches. This is less than one inch behind the monthly record of 8.71 inches set in 1989. Three daily records for rainfall were set. On May 12th rain totaled 2.20 inches breaking the old record of 2.06 inches set in 1921. On May 11th, 1.49 inches fell breaking the previous record of 1.28 inches set in 1924. Finally, the May 9th rain total of 1.85 inches surpassed the old record of 1.41 inches in 1919. Precipitation for June and July was slightly above normal.

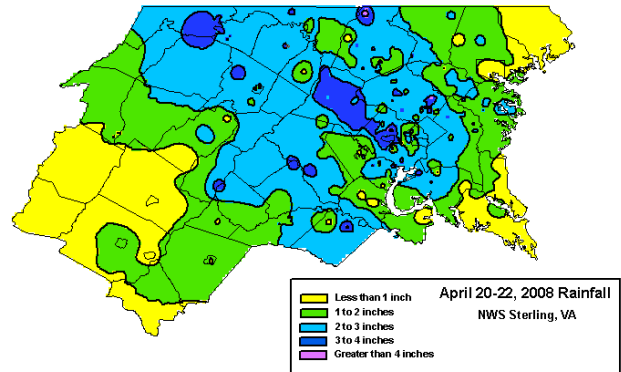
April – June Storm Data of Note

Sarah Rogowski, General Forecaster

More information on local severe weather events can be found on our website at

<http://www.erh.noaa.gov/lwx/Storms/Strmdata/>

A deep low pressure system moving east across the Great Lakes pushed a strong cold front across the region on late April 20th into early April 22nd, triggering numerous strong to severe thunderstorms. High moisture content and training storms lead to flooding across portions of the region with several road closures due to high water. Several storms produced damaging winds that downed trees and power lines. There were also two confirmed tornadoes in Charles and Prince Georges counties in Maryland and a confirmed tornado in Frederick County in Virginia.



A potent storm system crossed the region May 12th. Warm and moist air filtered in ahead of the system, bringing widespread showers and thunderstorms with heavy rain. Heavy rain began to overspread the region during the evening of the 11th and continued through the morning of the 12th. The pressure gradient with the low pressure system produced strong gusty winds during the late evening. With the ground already saturated dozens of trees and power lines fell across the region. The tight pressure gradient and strong southeasterly flow, despite the quarter moon phase, allowed tidal departures of 2 feet or more along the Chesapeake Bay in lower southern Maryland. Several roads were closed and homes flooded due to the high tides.

June was a very active severe weather month across the region. A series of strong cold fronts and upper level disturbances crossed the region throughout the month. These features would combine to trigger numerous strong to severe thunderstorms that produced damaging winds, downing trees and power lines, and large hail. There were 7 confirmed tornadoes on June 4th. (More information on the storms of June 4th can be found in a separate article on page 3.) In June, more than 600 severe weather reports were gathered through Emergency Management, law enforcement, local media, Skywarn Spotters, and NWS Storm Surveys. Heat was also a problem in June. A strong ridge of high pressure set up across the eastern United States for several days in early to mid June. High temperatures in the mid to upper 90s combined with dew points in the lower 70s allowed heat index values to reach near 105. Three heat related fatalities were reported across the Metro areas.

National Weather Service Baltimore/Washington Office Move

Christopher Strong, Warning Coordination Meteorologist

NOAA's National Weather Service Baltimore/Washington Weather Forecast Office (WFO) located in Sterling, Virginia, will move from its existing location adjacent to Dulles International Airport, to a new location about one-half mile away. This move is necessary in order for the airport to expand its runway System.

During the move week of September 22-26th, the NWS Baltimore/Washington WFO will establish temporary operations at the NWS State College, PA. The temporary operations will be staffed by forecast staff from the NWS Baltimore/Washington. From Monday, September 22 at 8:00 AM, through Friday, September 26 at 5:00 PM, NWS Baltimore/Washington staff will be present at three facilities 24x7 – the old facility, the new facility, and NWS State College.

All of our operational products during the transition, including forecasts, watches, and warnings, will be issued from NWS State College by NWS Baltimore/Washington WFO staff during the move week. The transition from the old facility to the new facility, and its impact to the public, customers, and partners of the NWS Baltimore/Washington WFO, is planned to be seamless.

Phone calls through the move week will still be taken on the old phone numbers at the old facility. New phone numbers will become operational at the new facility during the move week. After our move, our old phone numbers will be shut-down and replaced with a message containing the new numbers to call. All of our contact numbers will change – with the exception of our SKYWARN spotter (800) hotline which will remain the same. The new general office phone number at the new facility is:

703-996-2200 public line

The new office address is:

NOAA/National Weather Service
Baltimore/Washington Weather Forecast Office
43858 Weather Service Road
Sterling, VA 20166

If you have any questions, please contact Meteorologist-in-Charge Jim Lee at 703-260-0107, extension 222, or Warning Coordination Meteorologist Chris Strong at 703-260-0107, extension 223.



NWS Baltimore/Washington Weather Forecast Office Open House and Office Dedication

Saturday, October 18th 9AM to 5 PM

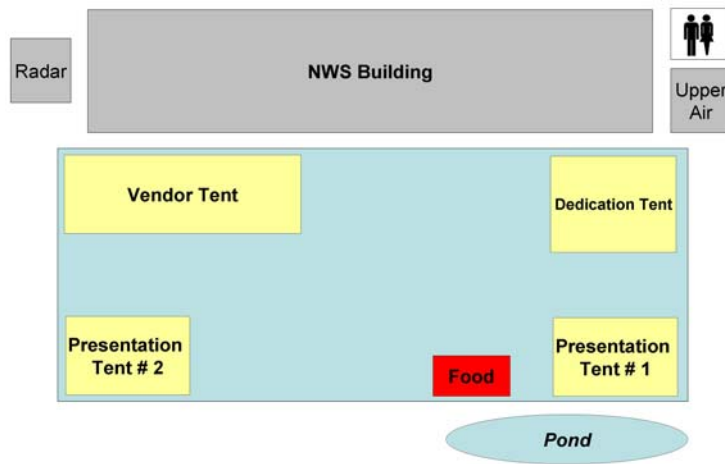
TIME	Tent #1 Presentations	Tent #2 Presentations
9:30 AM	Introduction	Tropical & Severe Weather
10:00 AM	Careers in Meteorology	Weather Jeopardy
10:30 AM	Forecast Process	Winter Weather
11:00 AM	Weather Jeopardy	Tropical & Severe Weather
11:30 AM	Observations	Careers in Meteorology
12:00 PM	BREAK	BREAK
1:00 PM	Dedication Ceremony – Dedication Tent	
2:00 PM	SKYWARN BASICS 1	Introduction
2:30 PM	SKYWARN cont.	Forecast Process
3:00 PM	SKYWARN cont.	Weather Jeopardy
3:30 PM	SKYWARN cont.	Winter Weather

Weather Balloons will be released every hour in the Weather Balloon Launch Area.

The “Weather in Music and Prose” presentation will be held in the Dedication Tent at 4:00 PM.

Sunday, October 19th 12 PM to 5PM

TIME	Tent #1 Presentations	Tent #2 Presentations
12:30 PM	Introduction	Observations
1:00 PM	Weather Jeopardy	Tropical & Severe Weather
1:30 PM	Winter Weather	Winter Weather
2:00 PM	SKYWARN BASICS I	Introduction
2:30 PM	SKYWARN cont.	Weather jeopardy
3:00 PM	SKYWARN cont.	Forecast Process
3:30 PM	SKYWARN cont.	Careers in Meteorology



No Drugs, Weapons, Alcohol, Backpacks, Briefcases or Smoking Allowed on Premises.

Attendees and Personal Belongings Subject to Search.

No Pets Allowed. Service Animals Permitted.

No Overnight Parking. Vehicles left will be towed at Owner's Expense.

Skywarn News

Skywarn Classes will resume in the early Fall. For more information on upcoming classes, check out the website:

<http://www.erh.noaa.gov/lwx/skywarn/classes.html>

ATTENTION ALL SKYWARN SPOTTERS:

Please email any changes to your contact information to Nikole Listemaa (Nikole.Winstead.Listemaa@noaa.gov).

Thanks to all Spotters for your reports. Please remember to provide storm reports as soon as possible. These reports are extremely valuable in the warning decision making process as well as for our verification effort. The ideal way to report hazardous weather is through phone or Amateur Radio. There are several ways to report.

Telephone: 1-800-253-7091

Radio Call Sign: WX4LWX

Email: LWX-Report@noaa.gov

**Please call or use Amateur Radio to report time-sensitive information such as tornadoes, hail, wind damage, flooding, ice accumulation, etc.*

What to Report:

Time (start and end)

Location (State, County, City/distance and direction from city – please be as specific as possible)

Tornado (circulation on the ground)

Funnel (not on the ground)

Storm Rotation/Wall Cloud

Hail: size compared to a coin and depth on ground

Heavy Rain: measured 1 inch or more (duration)

Flooding: water out of banks or covering roadways

Wind: 50 MPH or greater (measured or estimated)

Damage: generally downed trees and/or power lines

Snow Accumulation: every 2 inches, storm total

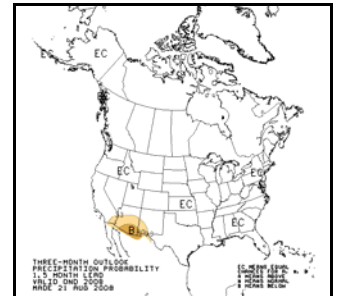
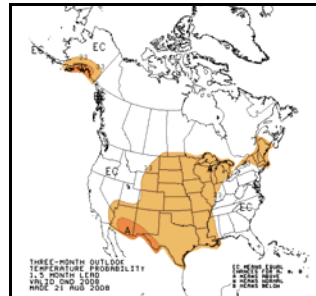
Are you interested in Amateur Radio? If so, visit SKYWARN at 147300.com or www.arrl.org.

Thank you for your time as a SKYWARN Spotter!



October - November – December Outlook

NOAA's National Weather Service Climate Prediction Center created these October – November – December temperature and precipitation outlooks during mid August. 'EC' means Equal Chance, 'A' stands for Above Normal, while 'B' is Below Normal. These are probabilistic forecasts; the forecast probability anomaly is the difference between the actual forecast probability of the verifying observation falling in a given category and its climatological value.



Climate Prediction Center outlooks, discussions and explanations are available at:

http://www.cpc.noaa.gov/products/predictions/long_range/index.php



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