



The Dryline



The Official Newsletter of the National Weather Service in Amarillo

SHERMAN COUNTY EARNS STORMREADY® RECOGNITION

FROM TORNADOES TO FLOODS, SHERMAN COUNTY IS PREPARED

By Steve Drillette, Warning Coordination Meteorologist

Sherman County was presented with a NOAA National Weather Service (NWS) certificate recognizing local officials and citizens for their efforts in earning the distinguished StormReady® designation. The ceremony was held in the County Courthouse in Stratford on 14 January 2008.

The ceremony was led by Steve Drillette, Warning Coordination Meteorologist of the NWS Amarillo, along with the Meteorologist-In-Charge (MIC) José Garcia. Mr. Garcia presented Sherman County Emergency Manager Sandy Williams with a StormReady® certificate along with two StormReady® highway signs.



Fig. 1. MIC José Garcia presents Sherman County Emergency Manager Sandy Williams with StormReady® certificate.

StormReady® is a voluntary program, and is offered as a means of providing guidance and incentive to local and county officials interested in improving hazardous weather operations. To receive StormReady® recognition, communities are required to meet minimal criteria in hazardous weather preparedness, as established through a partnership of the NWS and federal, state, and local emergency management professionals.

“Sherman County officials are to be commended for their efforts in meeting and exceeding the StormReady® criteria,” said Mr. Garcia. “They have certainly demonstrated their dedication to enhancing the elements of the StormReady® program.”

The StormReady® status for Sherman County is valid for three years from the ceremony date.

SPRING 2008

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Forecaster Attends the American Meteorological Society Conference

By Christine Krause, Forecaster

In January, forecaster Matthew Kramar attended the 88th annual American Meteorological Society (AMS) meeting in New Orleans. This five-day conference contained a variety of presentations, with topics ranging from hydrology to GIS applications to radar technology to educational initiatives. One exciting aspect of the conference was the presentations on new products that are being developed for the NWS. These products, such as probabilistic warnings, offer decision makers more freedom and information. Outside of the conference hours, a tour of the city was available to the participants, where they were able to visit parts of the city devastated by Hurricane Katrina, and were able to observe the strides New Orleans has undertaken in rebuilding.

As part of the 17th Conference on Education, Matthew presented a poster containing information on Kids' Weather Hour, a program developed at NWS Amarillo. His poster (co-authored with John Brost) highlighted the use of NOAA All-Hazards Radio as an educational tool geared toward elementary school kids. Several



Fig. 2. Forecaster Matthew Kramar explains the Kids' Weather Hour at the American Meteorological Society Conference.

meteorologists from the public and private sectors came to discuss the Kids' Weather Hour program during Matthew's poster session, and showed much interest and enthusiasm. Following the conference, John Brost was interviewed by WeatherWise magazine about the Kids' Weather Hour program.

Kids' Weather Hour

Though the school year is drawing to a close, Kids' Weather Hour is still taking requests from classes wanting to participate in this fun and exciting program. School kids from across the Panhandles can have their weather questions answered live on NOAA Weather Radio (NWR) by National Weather Service meteorologists. For the past four years, hundreds of questions about weather, ranging from "Why is the sky blue?" to "How do tornadoes work?" were answered live on NWR. Students from participating classes will be eligible for prizes. If you are interested in Kids' Weather Hour, please e-mail John Brost at John.Brost@noaa.gov for information.



Fig. 3. JJ Brost answers kids' questions during a Kids' Weather Hour broadcast.

Wildfire Safety and Awareness

By Ken Schneider, Fire Weather Program Leader/IMET trainee

As the destructive 2006 fire season showed, fires are a dangerous part of life in the High Plains. With the 2008 wildfire season now in full swing, it is vitally important to prepare your family and your home in case a wildfire threatens your area.

Before the Fire

There are several things that you can do to keep yourself and your property safe from the dangers of wildfires, especially in areas near large grasslands and fields. Since fine fuels such as native grasses are the primary carrier of the fire, you need to remove all fine (dead grasses, leaves, etc.) and coarse fuels (dead branches, twigs, firewood, etc.) within 100 feet of any structure. Also, remove all dry leaf litter from roofs, rain gutters, decks and walkways. Mow grass regularly. Plant any fire-prone trees and shrubs far enough away from your home and far enough apart so that they will not ignite one another. Maintain a clean and green landscape at least 30 feet around all structures. Be sure to have a fire extinguisher (ABC type), and make sure that you and all members of your family know how to use it. Smoke alarms are recommended to be placed on each level and near every bedroom in your home.

When Fire Threatens

When a wildfire does threaten your home or structure, listen to a battery-operated NOAA All-Hazards radio for reports and evacuation information. Be sure to follow the instructions of the local officials in your area. Back your car into the garage or carport or park it in an open space facing the direction of escape. Close garage windows and doors, but leave them unlocked. Confine pets to one room and be sure to make plans to care for your pets in case you must evacuate. Arrange for temporary housing at a friend or relative's home outside of the threatened area.

When Asked to Evacuate

If you are ordered to evacuate, do so immediately. Wear protective clothing, such as

sturdy shoes, long pants, a long-sleeved shirt and gloves, and a handkerchief to protect your face. Lock your home. Tell someone where you are going. Be sure to choose a route away from the wildfire hazard. Remain alert for changes in the speed and direction of the smoke and fire.



If time allows, close all windows, doors, vents, and heavy drapes or window coverings before evacuating. Remove all lightweight curtains. Shut off all utilities and bottled gas. If you have a fireplace, open the damper and close the screens. Move furniture to the center of the home and away from windows and sliding glass doors.

Role of the National Weather Service (NWS)

Although the NWS does not predict fire starts, we do issue watches and warnings to alert the public of dangerous fire weather conditions which could lead to wildfires. A Fire Danger Statement will be issued for elevated fire conditions. When critical fire weather conditions are forecast, a Fire Weather Watch will be issued 24 to 72 hours in advance. If the critical fire weather conditions are occurring or are forecast to occur within 24 hours, a Red Flag Warning will be issued.



The majority of fires are caused by non-meteorological events. Vehicles, utility lines, electrical equipment, cigarettes thrown from vehicles, and even arson are the main causes of wildfires. When a Fire Weather Watch, Red Flag Warning, or Fire Danger Statement is issued by the NWS, people should react accordingly and avoid outdoor burning, avoid the use of electrical outdoor equipment, avoid driving over fine dead fuels such as grasses and properly dispose of smoking materials.

Improved Radar Resolution on the Horizon

By John Cockrell, Senior Forecaster and Radar Focal Point

National Weather Service meteorologists in Amarillo are looking forward to a major improvement in radar data display: Super Resolution Data. This upgrade will provide a significant increase in data resolution of radar reflectivity data,

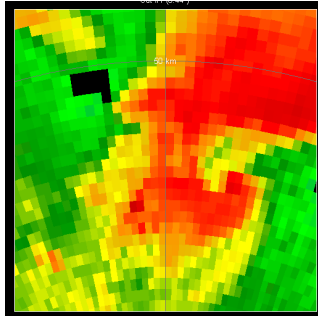


Fig. 4. Legacy Resolution

as well as Doppler velocity data. The enhanced resolution in the displayed data will allow warning meteorologists to detect smaller, more subtle features, and will extend the range of available Doppler velocity data. For a given range from the radar, the data resolution will be about eight times greater than our current display allows. This means that a feature which previously was displayed by an image (Fig. 4.) containing approximately 100 discrete image elements, will soon be presented by using about 800 discrete image elements (Fig. 5.). This will allow our meteorologists to see thunderstorm features with about eight times as much detail. The smallest detectable feature will be about

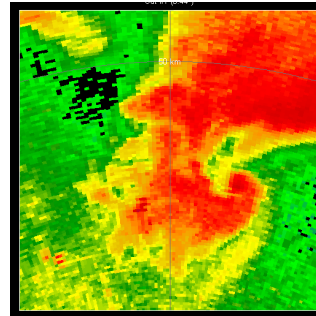


Fig. 5. Super Resolution

eight times smaller than we were able to see, prior to the upgrade. The improved resolution will present a clearer, better refined display of radar features. Super Resolution data are created by a finer range sampling along the radar beam, combined with a finer azimuthal sampling as the radar sweeps through its scan, owing to a narrower effective radar beam width. We expect that this enhancement will allow us to examine storm structure in greater detail, which will likely allow us to detect and observe thunderstorm processes occurring on a finer scale. This improved display, together with the extended Doppler velocity range, will assist us in the warning process. We expect that our ability to detect critical thunderstorm features will improve and enable us to improve our lead time on tornado warnings. The Super Resolution Data capabilities are expected to be available in early 2009.

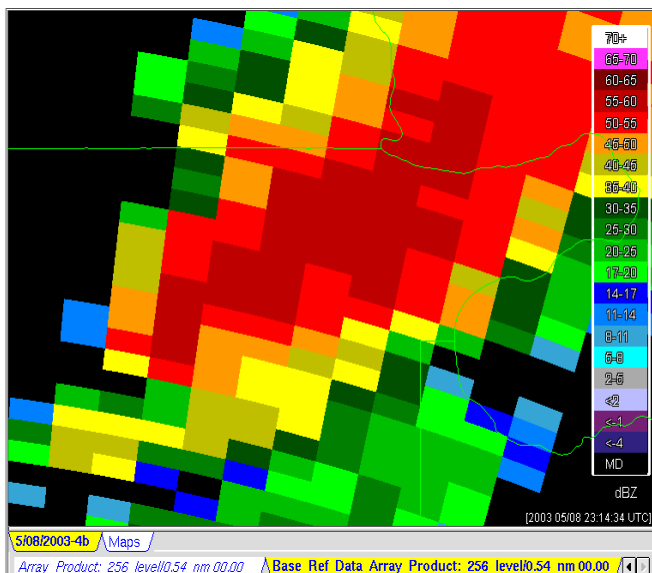


Fig. 6. Reflectivity comparison of current resolution (left) to Super Resolution data.

Weather Review and Outlook

By Chris Kimble, Meteorologist Intern,
and Richard Wynne, Science and Operations Officer

REVIEW OF WINTER 2008

The first few months of 2008 have been primarily dry and warm for the Texas and Oklahoma Panhandles. Though there were some days with cold temperatures and precipitation, the average temperature this winter season was more than one degree above normal (Table 1). The most notable weather event of the period was a potent winter storm which affected the region on March 2-3. The high temperature in Amarillo on March 2 was 74 degrees, but a strong cold front quickly dropped temperatures during the afternoon. Within a few hours the snow began. Though

snowfall accumulations with this storm were relatively light, the snow combined with strong north winds in excess of 50 mph to produce near-blizzard conditions during the overnight hours. Despite this and other minor storm systems, the season remained warm and dry overall as most storm systems lacked enough moisture to provide significant precipitation.

	AVG HIGH	AVG LOW	AVG TEMP	PRECIP	SNOW
JAN	52.6 (+3.7)	23.1 (+0.5)	37.8 (+2.0)	0.24 (-0.39)	2.7 (-2.1)
FEB	57.8 (+3.7)	25.9 (-1.1)	41.8 (+1.2)	0.59 (+0.04)	0.3 (-3.8)
MAR	64.5 (+2.3)	31.8 (-1.8)	48.2 (+0.3)	0.30 (-0.83)	3.5 (+1.8)

Table 1. Winter 2008 statistics for Amarillo, TX

OUTLOOK FOR SPRING 2008

The three-month outlooks for April, May and June have been issued by the Climate Prediction Center (CPC). The temperature outlook indicates an increased chance for above normal temperatures, especially across western portions of the Panhandles. Normally, maximum temperatures range from near 70° during April then rise to near 90° in late June. Minimum temperatures range from the upper 30s in April to the lower 60s in late June.

The precipitation outlook indicates a slightly greater chance for below normal precipitation during the period. Normal daily precipitation amounts during the period increase from 0.04" to 0.10". Normal precipitation for the period is around seven inches. The CPC expects that the current La Niña may weaken slightly during the April to June period. Normally, a La Niña episode brings warm and dry conditions to the southwestern United States, as well as the Texas and Oklahoma Panhandles, as the jet stream shifts to the North. A weaker La Niña may lessen these impacts.

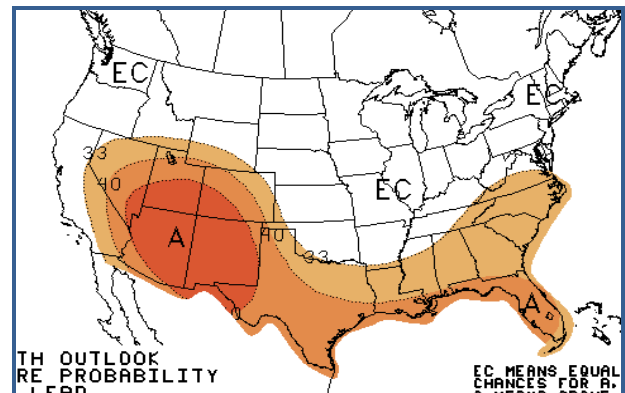


Fig. 7. April-June 2008 Temperature Outlook

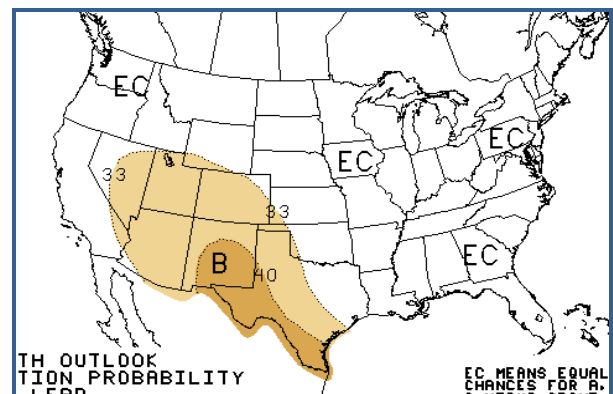


Fig. 8. April-June 2008 Precipitation Outlook

Amarillo Forecasters Earn Isaac Cline Award

By José Garcia, Meteorologist In Charge

National Weather Service (NWS) Amarillo forecasters were recognized for their outstanding work during the Winter of 2006/2007 and the record-breaking tornadic spring of 2007, with the recent announcement that they had won the Regional Level Isaac Cline Award. The award is named for Isaac M. Cline, who had a lengthy career in the U.S. Weather Bureau distinguished by his innovative forecasting and his development of dissemination techniques, combined with outstanding public service efforts. The most noteworthy and most difficult time of Mr. Cline's career came during the Galveston hurricane of 1900, the deadliest weather event in the history of the United States. His acute understanding of concurrent weather conditions, his advance predictions, and his heroic forecast and hurricane warnings saved several thousand lives. The NWS Isaac M. Cline Awards were established to identify and recognize operational excellence of employees in the delivery of products and services supporting and enhancing the achievement of NWS strategic and operating plans.

NWS Amarillo forecasters (Fig. 9) were recognized for producing excellent forecasts and warning services for the citizens of the Texas and Oklahoma Panhandles. Forecasters were involved in six major winter weather events, several high wind events and six major convective outbreaks in the 2006/2007 timeframe. During the spring of 2007, nearly sixty tornadoes touched down in their area of responsibility, surpassing the previous record for a season set in 1995. Several injuries and fatalities occurred with the tornadic events, but all were preceded with the issuance of timely, life-saving tornado warnings. Forecasters did an outstanding job of keeping customers and partners advised. Their coordination efforts were well received by many customers. Additionally, forecasters participated on numerous occasions in follow-up storm surveys. Many individuals worked long hours with short shift-turnarounds to perform these storm surveys.



Fig. 9. 2007 Local and Regional Isaac Cline Award recipients (left to right): John Cockrell, Matthew Kramar, John “JJ” Brost, Edward Andrade, Roland Nuñez, Ken Schneider, G. Mike Johnson and Lance Goehring. Not pictured: David Hennig and Jason Jordan.

This marks the fourth time since the award began in 1999 that individuals at the NWS Amarillo office have been recognized at the Regional level for their accomplishments. The Regional level award encompasses all offices in the NWS Southern Region which extends from New Mexico to Florida. Forecasters were also nominated to earn the award on a National level as well.



Fig. 10. Tornado touched down in Beaver County, OK on 28 March 2007. This was one of nearly 60 tornadoes that occurred during the record-breaking tornadic spring of 2007. Photo courtesy of Brandon Whittington.

In YOUR Community

National Weather Service Amarillo has participated in numerous outreach events since January 2008. In addition to the events shown below, we have many more photos from the times we have reached out to the community. They are located on our website at:

http://www.srh.noaa.gov/ama/outreach_events/outreach_event_front.htm



Fig. 11. WCM Steve Drillette speaks with Highland Park seventh grade students.



Fig. 12. HMT Steve Bilodeau explains the weather balloon process to Trinity Lutheran students.



Fig. 13. Elvis and NWS Amarillo join together to increase weather safety awareness at the Wal-Mart Safety Fair.

We would love to participate at your next event! To schedule the NWS Amarillo in your next community event, please e-mail Steve Drillette at steve.drillette@noaa.gov, or call 806-335-1121.

Chris Nuttall — January 2008 Employee of the Month

Chris is a Meteorologist Intern, and the newest member of our office. He is a member of our Data Acquisition staff as well as a member of the Science and Training Team. Chris is a 2005 University of Oklahoma graduate, earning a Bachelor of Science in Meteorology. Prior to arriving at NWS Amarillo, he was an Associate Weather Producer at KOTV in Tulsa, Oklahoma. Chris enjoys fishing, computers, camping, canoeing and watching movies, and recently, he has become an avid golfer.

Interested in becoming a Weather Spotter?

NWS Amarillo is in need of Weather Spotters who can relay storm reports during and after a storm event, especially in rural areas. These spotters help the NWS by ensuring all reports of hail, tornadoes, wind and wind damage are officially recorded. To join, sign up at:

<http://www.srh.noaa.gov/ama/spotter/>

or call us at:

806-335-1121

Join today!

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