The Dryline

The Official Newsletter of the National Weather Service in Amarillo

Rare October Tornado Impacts the Southern Texas Panhandle

By John "JJ" Brost, General Forecaster

Over the past 26 years, over 600 tornadoes have impacted the Texas and Oklahoma Panhandles. However, only one percent of these tornadoes occurred between midnight and 100 AM. Historically, the month of October has had only five tornadoes within the Texas and Oklahoma Panhandles during this same period. These records imply that the probability of experiencing a tornado in the month of October between the hours of midnight and 100 AM is much less than one percent, meaning the 17 October 2007 tornado was very rare. So what caused this rare tornado? Like most severe weather situations, a number of factors played out during the evening hours that allowed the thunderstorms to become tornadic.

Southerly winds brought warm temperatures and abundant low-level moisture, producing an unstable atmosphere capable of supporting thunderstorm development. Furthermore, the wind direction was changing with height, from the southeast at the surface to the west just above the surface, which created conditions favorable for rotating storms. Finally, an upper level low pressure system was approaching the Panhandles from the west, providing the lift needed for storm initiation.

The atmosphere was primed for severe thunderstorms. However, there was still some concern over the potential for tornadic storms, based on the time of year. The first storms developed just south of the Texas Panhandle around 1000 PM and became severe as they moved into southern Deaf Smith and Randall counties. The tornadic storm moved into southern Randall County just before midnight and produced the tornado around 1216 AM. The tornado lasted for about 20 minutes and had a 12 mile path length, starting 10 miles east southeast of Buffalo Lake and ending 8 miles west southwest of Palo Duro Canyon State Park. The maximum wind speed of 110 MPH. This places the tornado in the high-end-EF1 range.

Fortunately, there were no reports of injuries from this tornado, but several structures were damaged with multiple power lines and trees snapped or knocked over. This tornado was the last tornado of the year, bringing the 2007 tornado total in the Texas and Oklahoma Panhandles to 58 — a new record.

Fig. 1. Barn damaged by late season tornado

WINTER 2008

National Weather Service Reviews Weather for 2007

By Chris Kimble, Meteorologist Intern and John Brost, General Forecaster

The Texas and Oklahoma Panhandles are known for active and rapidly changing weather and 2007 was no exception. Major tornado outbreaks, winter storms, flooding, dry spells, strong winds, single digit temperatures and triple digit heat are just a few of the weather extremes from this past year. The year brought significant tornado outbreaks in March, April and May with rare tornadoes in February and October. There were 58 confirmed tornadoes in the Texas and Oklahoma Panhandles in 2007, shattering the old record of 46 tornadoes in the active 1995 season.

2007 SUMMARY FOR AMARILLO

High: 101 °F, August 8th and 20th
Low: 4 °F, February 15th
Average High: 70.4 °F (0.1° above normal)
Average Low: 45.0 °F (1.4° above normal)
Average Temperature: 57.7 °F (0.7 °F above normal)
Precipitation: 22.50 inches (2.79 inches above normal)
Snow: 21.4 inches (3.5 inches above normal)

January – February – March

The year 2007 began very cold, with Amarillo enduring the coldest January since 1979. The large winter storm which buried the western Oklahoma Panhandle in as much as four feet of snow at the very end of 2006 left its mark on the area. Snow from this storm and subsequent snowfalls remained on the ground into early March. The first major winter storm of the year occurred on 19-20 January. This system brought widespread 7 to 10 inches of snow across the entire Texas and Oklahoma Panhandles, with 8.5 inches in Amarillo. A long cold spell followed this storm, allowing snow to remain on the ground in Amarillo for 18 consecutive days from mid-January through early February. This was the tenth longest period with snow on the ground since records began. By the middle of February, the weather pattern began to shift, and the region experienced above-normal temperatures and below-normal precipitation through the middle of March. One exception was a rare early-season tornado which occurred near McLean, TX on 23 February. This may have been a sign of things to come, as the spring severe weather season began much earlier than normal this year. A record tornado outbreak occurred on 28 March as at least 15 tornadoes touched down across the eastern portions of the area. Unfortunately 3 people were killed that evening, the first tornado fatalities in the area since 1995. The precipitation from this and other thunderstorm events near the end of March helped make this the third wettest March on record in Amarillo.

MONTH	JAN	FEB	MAR
AVG HIGH	41.5 (-7.4)	53.4 (-0.7)	66.5 (+4.3)
AVG LOW	21.4 (-1.2)	25.5 (-1.5)	40.3 (+6.7)
AVG TEMP	31.5 (-4.3)	39.5 (-1.1)	53.4 (+5.5)
PRECIP	0.95 (+0.32)	0.29 (-0.26)	4.00 (+2.87)
SNOW	9.1 (+4.3)	5.7 (+1.6)	Trace (-1.7)
HIGHS ≤ 32	5 (+0.4)	5 (+2.4)	0 (-0.7)

The 28 March tornado outbreak was unprecedented for so early in the season. Three of the tornadoes were rated EF3, with winds of 138 mph or higher.

Fig. 2: Tornado in southern Beaver County, OK on 28 Mar 2007. (Courtesy of Brandon Whittington)

April – May – June

The active weather pattern that began in March continued through the early summer. Cold weather returned to the Panhandles in early April. Snowfall occurred on 7 April, when 1 to 2 inches fell across the southern and western Texas Panhandle. The last major winter event impacted the area on 13-14 April, as areas north of Interstate 40 received 3 to 6 inches of snowfall. This was particularly interesting because less than 24 hours before the snow fell, severe thunderstorms had brought damaging winds to parts of the area. Then, on 21 April the second major tornado outbreak of the year occurred. That evening, 14 tornadoes touched down across the western Texas and Oklahoma Panhandles. The most noteworthy tornado was an EF2 tornado which caused widespread damage and injured 14 people in the town of Cactus, TX. The active severe weather season continued into May with three tornadoes touching down across the southeast Texas Panhandle on 5 May. The next major outbreak occurred on 23 May when severe thunderstorms developed along a stationary front stretching across the northeast Texas Panhandle, producing 14 tornadoes in this area. Another tornado outbreak occurred on May 31st when 7 tornadoes touched down across the western Oklahoma Panhandle. Severe weather continued into June, with the most significant event occurring on 19 June. Severe thunderstorms dropped large hail in the central and eastern Oklahoma Panhandle before evolving into a major windstorm, producing wind gusts of up to 90 mph as it dropped southward through the eastern Texas Panhandle. As this active severe weather season finally began to draw to an end, the Panhandles region benefitted from a cool start to the summer. Historically, June is the month in which the hottest temperatures and the most 100° days occur; this was not the case in 2007 as the hottest temperature was only 93°.

MONTH	APR	MAY	JUN
AVG HIGH	65.1 (-5.5)	75.7 (-2.9)	84.5 (-2.9)
AVG LOW	40.7 (-1.0)	52.9 (+1.4)	60.1 (-1.0)
AVG TEMP	52.9 (-3.3)	64.4 (-0.8)	72.3 (-2.0)
PRECIP	0.65 (-0.68)	5.40 (+2.90)	2.71 (-0.57)
SNOW	1.1 (+0.3)	0	0
RAINY DAYS	13	16	14

Because the storms on 23 May kept redeveloping over the same areas, heavy rain fell and significant flooding occurred. Record flooding occurred along the Wolf Creek in Ochiltree and Lipscomb counties as rainfall amounts approached 10 inches.

July – August – September

The unusually cool summer continued through July with the hottest temperature for the summer only reaching 95°. The cool pattern came to an abrupt end in early August when the more typical summer heat arrived. High temperatures for the month were well-above-normal, with two days of 100° heat in Amarillo. The Oklahoma Panhandle was even hotter, with Guymon recording 14 days with 100° temperatures or hotter, including 11 days in a row from the 5-15 August. Generally dry conditions persisted across the area through the end of the summer and continued into September. One exception was a major flash flood event which impacted the city of Canyon, TX on 9 September. Heavy rain fell over the city, causing numerous road closures and water damage in some homes and businesses. An off-duty National Weather Service employee in Canyon measured over 7 inches of rainfall from this storm.

MONTH	JUL	AUG	SEP
AVG HIGH	89.8 (-1.2)	93.0 (+4.3)	84.7 (+2.9)
AVG LOW	64.3 (-1.0)	66.4 (+2.6)	60.1 (+3.8)
AVG TEMP	77.0 (-1.2)	79.7 (+3.4)	72.4 (+3.3)
PRECIP	1.83 (-0.85)	0.88 (-2.06)	3.55 (+1.67)
HIGHS ≥ 95°F	2 (-7.3)	14 (+7.8)	1 (-1.1)
HIGHS ≥ 100°F	0 (-1.7)	2 (+1.3)	1 (+0.7)

October – November – December

The warm and dry trend continued into the autumn months, with the big story of the early fall being the rare tornado which occurred in the early morning hours of 17 October (see cover story). There were other severe storms in October which brought hail to parts of the area, but by the end of the month, the pattern had shifted to dry and warm and the convective season came to an end. In fact, there was no measurable precipitation in Amarillo for 36 consecutive days from mid-October until the latter part of November. There were also 5 days in November when the high temperature climbed to 80° or warmer, which is the most ever for the month of November. Cold air finally arrived in the Panhandles for the first time of the season on Thanksgiving Day, with the first snowfall of the season falling the morning after Thanksgiving. Gradually the cold air eroded and the unseasonable warmth returned, and by December 7th Amarillo had warmed to 77°. This record warmth was not felt in most of the Panhandles, however. A slow-moving arctic cold front had stalled across the Texas Panhandle, leaving most of the area in cold air and fog. A distance of only 30 miles separated locations which saw upper 70s from locations that remained in the 30s. Eventually the cold air did return to all of the area, with several minor winter storms impacting the region during December. Portions of the Panhandles received a mix of freezing rain, sleet, and snow from 9-11 December and again on the 15 December. Another strong winter storm impacted the area on the 22 December. Only 1.5 inches of snow fell that morning, but winds up to 53 mph caused near-blizzard conditions and significant blowing and drifting snow. One last winter storm moved through the Panhandles from 25-27 December. Most locations received 1 to 3 inches of snow, with a few areas across the Oklahoma and Northern Texas Panhandles measuring up to 4 inches.

MONTH	OCT	NOV	DEC
AVG HIGH	76.5 (+4.7)	63.3 (+4.9)	50.0 (+0.2)
AVG LOW	47.4 (+2.8)	33.2 (+1.4)	25.7 (+1.6)
AVG TEMP	61.9 (+3.7)	48.2 (+3.1)	37.8 (+0.8)
PRECIP	0.95 (-0.55)	0.08 (-0.60)	1.21 (+0.60)
SNOW	0 (-0.4)	0.8 (-1.6)	4.7 (+1.0)
HIGHS ≤ 32°F	0 (-0.1)	1 (+0.1)	4 (+0.3)

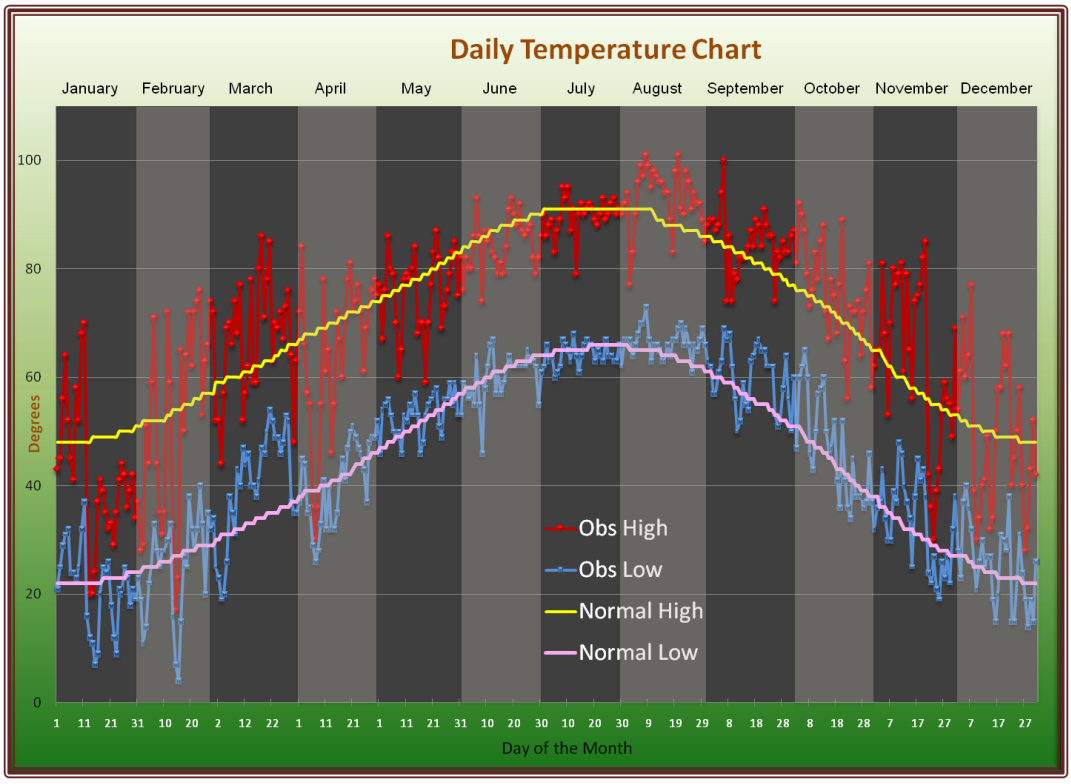


Fig. 3: High and low temperature chart for the year 2007 compared to normal.

Weather Outlook

By Richard Wynne, Science and Operations Officer

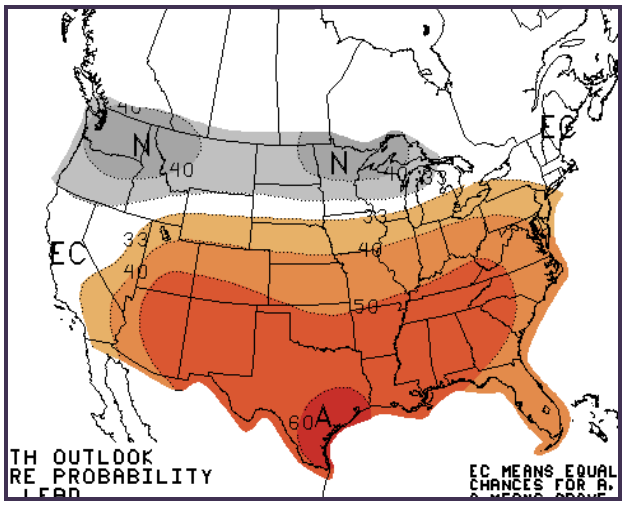


Fig. 4. January-March 2008 Temperature Outlook

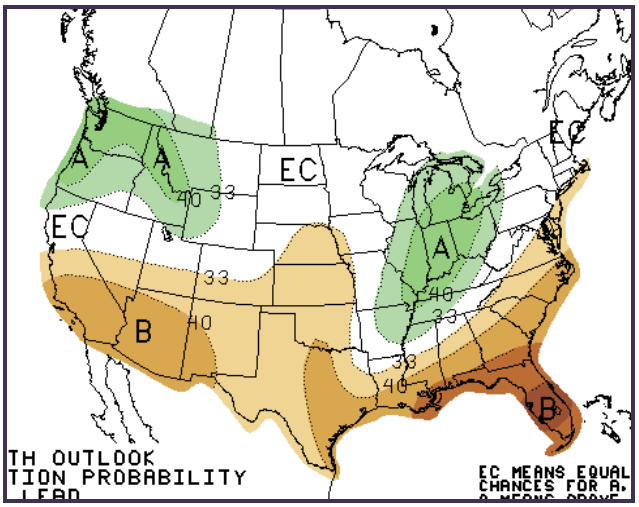


Fig. 5. January-March 2008 Precipitation Outlook

Temperatures

The latest 3-month outlooks issued by the Climate Prediction Center (CPC) covers January, February, and March (JFM). The outlook continues to show the best chances for "above-normal" temperatures in the Texas and Oklahoma Panhandles during the 3-month period. The breakdown for Amarillo shows a 49% chance for above-normal, a 31% chance for near-normal, and a 20% chance for below-normal temperatures. Maximum temperatures start out in the upper 40s in January and then increase to the lower 60s in March. The minimums are in the upper teens and lower 20s in January and then increase into upper 20s and lower 30s by late March.

Precipitation

Chances remain slightly favorable for below-normal precipitation over the next three months in the Texas and Oklahoma Panhandles. Monthly precipitation amounts normally start out the year less than one inch and increase to between one and two inches in March. Climatologically we will be moving out of the driest portion of the year.

El Niño/La Niña

The CPC scientists agree that we are still in a La Niña pattern, but the analyses show that the Panhandles may not be as dry as first indicated. As a result, the chances for below-normal precipitation are not as great as in previous outlooks for JFM. Normally, during La Niña episodes, both the Pacific and Polar jet streams shift northward taking moisture-bearing weather systems over the northern U.S. This tends to leave the southwest U.S. in a dry and warm weather pattern.

FORECASTING WINTER WEATHER TYPE

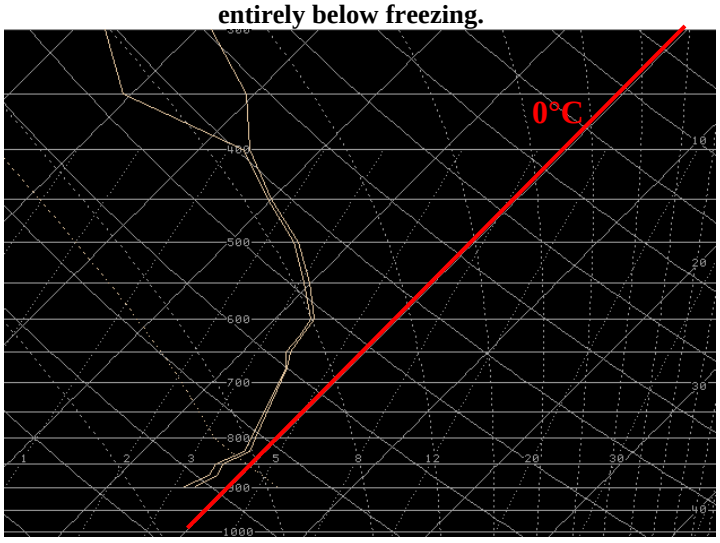
By Matthew Kramar
General Forecaster and Science and Training Team Leader

One of the most challenging aspects of forecasting the weather in the Texas and Oklahoma Panhandles is precipitation type during the winter months. It is certainly not unheard of to see temperatures of 60° at Amarillo the day after a winter storm, or to see every form of winter precipitation fall in a 24-hour period. With the winter season well-in-place, an article on winter weather forecasting seemed increasingly appropriate. In this edition of *Science Corner*, we will explain the challenges a meteorologist faces in trying to determine winter precipitation type—and will illuminate why it is often difficult to identify precisely when and where each type will occur.

To help illustrate the conditions needed for each precipitation type, we will need to examine how temperature changes with height through the atmosphere. This is most easily seen in the Skew-T diagram, which is obtained generally only twice a day with the release of a weather balloon. In this diagram, temperature (right line in the following figures) and dewpoint (left line in the following figures) are plotted from the surface to over 100,000 ft. into the atmosphere. When the temperature and dewpoint lines are close together, the relative humidity is high and clouds tend to form. What will concern us most is the low- to mid-levels, where the temperatures can reach values warmer than 32º F on occasion.

"What is the difficulty, then? If the temperature at the ground is below freezing, everything will fall as snow!" a reader might surmise. If only it were that easy! Read on, and we will highlight the varied precipitation types, and what a forecaster has to look for to determine each type of precipitation.

Fig. 6. Example of an atmospheric Skew-T-Log-P sounding supportive of snow. The red line is a depiction of the freezing line. Since the temperature profile (brown) is entirely to the left of the freezing line, the atmosphere is entirely below freezing.



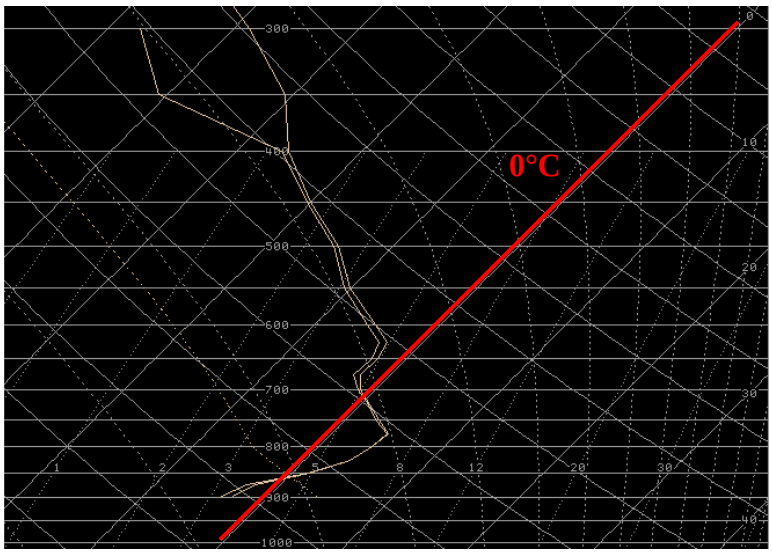
SNOW

In the winter, it is usually the case that all precipitation forms initially as snow, since the clouds that form it are generally in air that is at or below freezing. What happens to those snowflakes thereafter is entirely dependent on the temperature profile below the cloud layer. For snow to fall, the atmosphere below the cloud layer should be entirely below freezing, i.e., both temperature and dewpoint remain left of the 32º F (0º C) line as seen in red in Fig. 6. This prevents the flakes from melting before they reach the ground. This is the easiest type of precipitation to predict when precipitation is expected in the wintertime (especially when temperature profiles are well-forecast), because there is little other option given the proper conditions. It is possible, however, for snow to fall at temperatures *above* 32ºF (and has fallen in the Panhandles even at 37ºF)! This snowfall occurs because the warm layer is very shallow, and does not give the snow enough time to melt before reaching the ground. As the snow falls through the warmer layer, it helps to cool the ambient air temperature, which in turn makes the environment more supportive of snow.

FREEZING RAIN

Occasionally a very shallow cold air mass becomes situated in the Southern Plains. By virtue of its temperature and shallowness, this air mass is very dense and is difficult to displace. As weather systems approach from the west, they are able to transport warm, moist air from the subtropics toward the east, causing it to flow atop the shallow cold air. This situation can result in the production of liquid precipitation because the cloud layer is above-freezing. (If the saturated layer extends above the warm layer, precipitation may form aloft as snow, and melt as it falls through the warm layer.) The rain then falls through the very shallow cold layer at the surface, and freezes on contact with exposed surfaces. The profile that supports freezing rain (Fig. 7) shows a shallow sub-freezing layer beneath a deeper, super-freezing warm layer. Particularly damaging ice storms can result when the warm layer is unstable, which can result in thunderstorms producing very heavy rain.

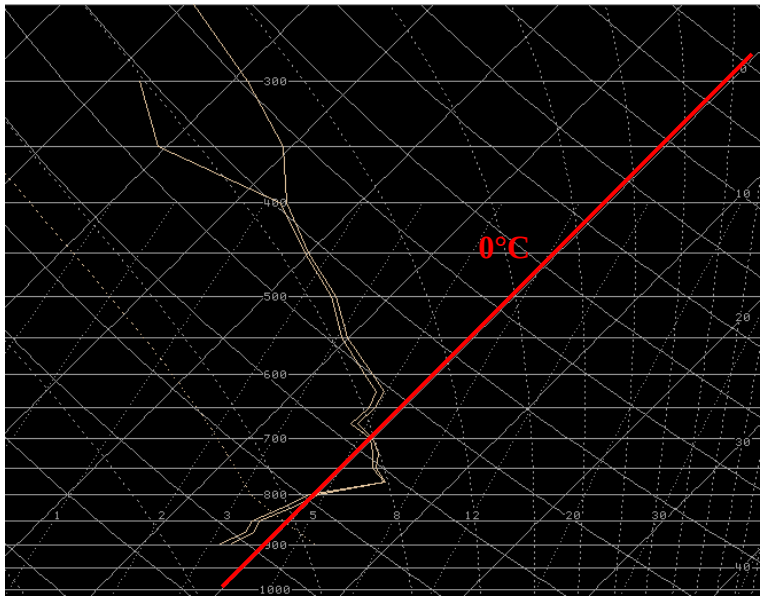
Fig. 7. Example of an atmospheric Skew-T-Log-P sounding supportive of freezing rain. The red line is a depiction of the freezing line. The temperature profile (brown) has a substantial portion above freezing, with a very shallow cold air mass near the surface (note the portion of the temperature profile to the left of the red line toward the bottom of the sounding).



SLEET

Sleet results from an environment very similar to that of freezing rain. The primary difference between the two environments is the depth and/or severity of the cold air. Sleet is merely a result of the freezing process: raindrops falling through the near-surface cold air freeze into small ice pellets owing to their extended exposure to the cold air. Often, sleet occurs as the environment transitions from being supportive of freezing rain to being supportive of snow because the depth of the low-level cold air is increasing. A typical sleet sounding appears in Fig. 8. Compare this sounding to that in Fig. 7 to see their similarities. Notice the deeper sub-freezing layer near the surface in the sleet sounding.

Fig. 8. Example of an atmospheric Skew-T-Log-P sounding supportive of sleet. The red line is a depiction of the freezing line. Like the freezing rain profile (Fig. 7), there is a layer in which temperature climbs above freezing, but the cold near-surface air is deeper, allowing the raindrops to freeze before reaching the ground.

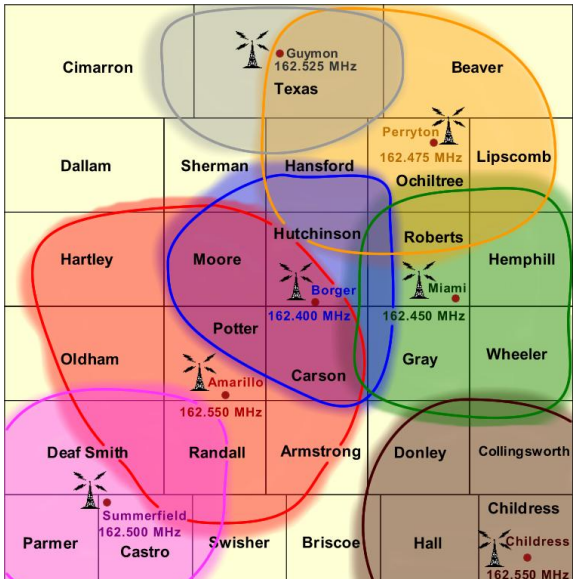


Now that the variety of temperature profiles that may be encountered in winter weather forecasting has been sampled, it is easy to understand how much of a challenge the forecaster faces when all of these types of precipitation are possible somewhere in the Panhandles. The forecaster's toughest job is determining the temporal changes in the temperature profile—that is, when and where layers aloft will warm above freezing or cool below freezing. Computer models provide a way to visualize this temperature profile, but they are often incorrect. Any variation in this temperature profile can make or break a winter weather precipitation forecast, such that one city (say, Vega) could experience a snowstorm of 12 inches while thirty miles to its east (say, Amarillo) a mix of rain and freezing rain results.

Kids' Weather Hour

The fourth year of Kids' Weather Hour is well underway. The fall season alone allowed more than 100 students the opportunity to send in weather questions to be answered live on NOAA Weather Radio by National Weather Service meteorologists. For the past three years, hundreds of questions about weather ranging from, "Why is the sky blue?" to "How do tornadoes work?" were answered live on NOAA Weather Radio. This year will mark the fourth anniversary of Kids' Weather Hour and we at the NWS are very excited to participate again in this fun and interesting program. Plus, with the installation of new radio transmitters across the Panhandles this year, NOAA Weather Radio will be able to reach even more schools. If you are interested in Kids' Weather Hour, or information on whether your area is in current or future transmitter range, please contact John Brost by e-mail at John.Brost@noaa.gov.

Fig. 9. NOAA Weather Radio listening areas in the Texas and Oklahoma Panhandles.



Chris Kimble — October 2007 Employee of the Month

Chris has been with NWS Amarillo since 2006. As a Meteorologist Intern, Chris is learning NWS operations as he prepares to be a General Forecaster. He is a graduate of the University of Oklahoma, where he earned a Bachelor of Science in Meteorology. Prior to arriving in Amarillo, Chris worked as a student employee at NWS Memphis near his hometown. He is co-focal point for our climate program, and recently, he became the team leader for the Dryline newsletter. He spends his off-time playing tennis, ping-pong and swimming. In addition, he has traveled to all 50 states.

Storm-Based Warnings…Tomorrows Technology Today

By Christine Krause, General Forecaster

On 1 October 2007, the National Weather Service began a new way of warning for storms. Instead of issuing warnings on a county-by-county basis, the National Weather Service is evolving toward more geographically-specific warnings for tornadoes, severe thunderstorms, floods and marine hazards. The National Weather Service has transitioned toward utilizing storm-specific polygons in their warning process. Storm-based warnings provide more specific information about the location and direction of the severe weather. This new warning methodology also reduces the likelihood of needlessly alarming people outside the threat. The storm-based concept allows the National Weather Service to:

1. Focus on the true area threatened by a storm. This in turn reduces false alarms.
2. Support weather radio evolution to alert areas smaller than a county.
3. Support the development of graphical products that show where the greatest threats exist.

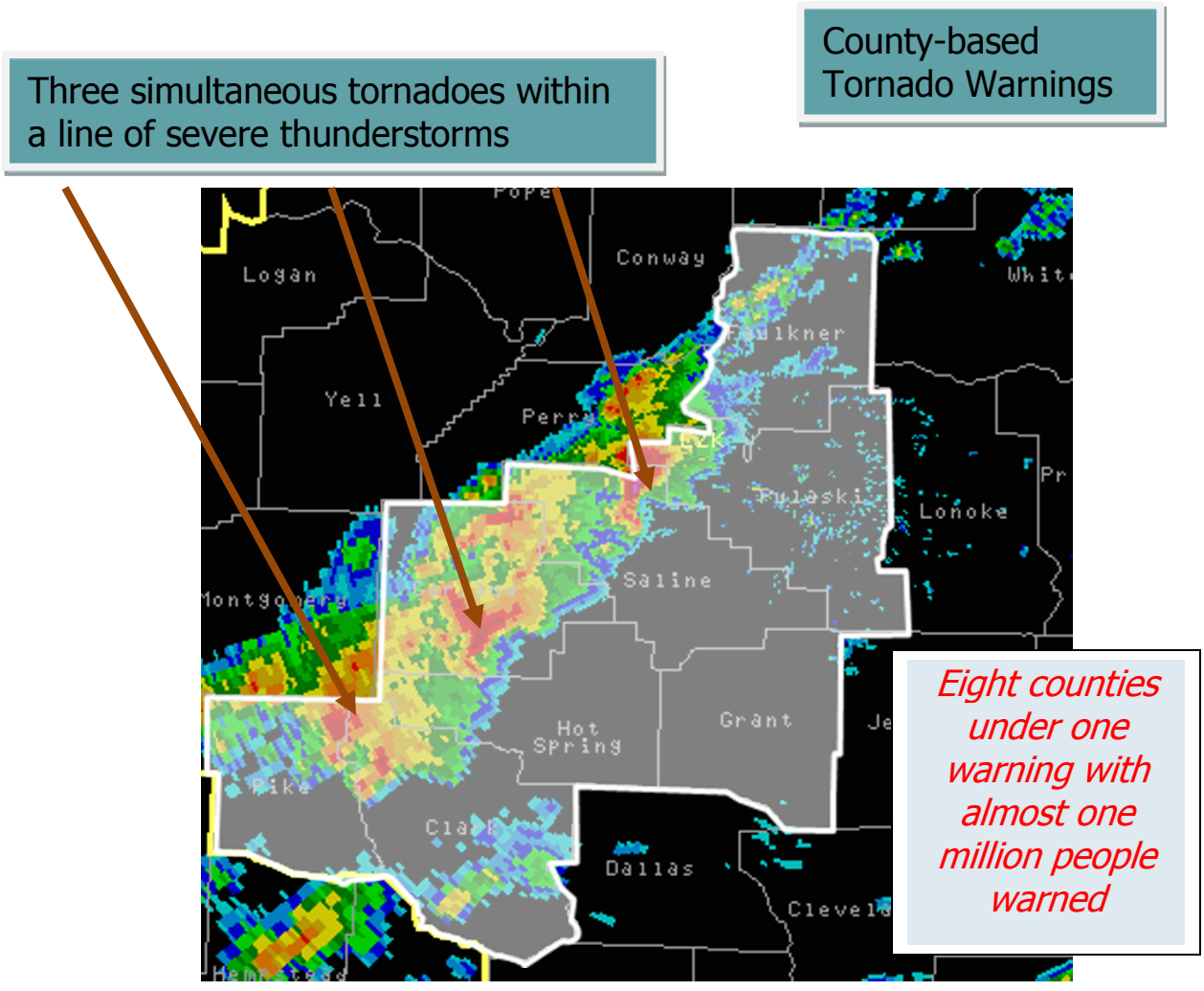


Fig. 10. Example of County-based warnings

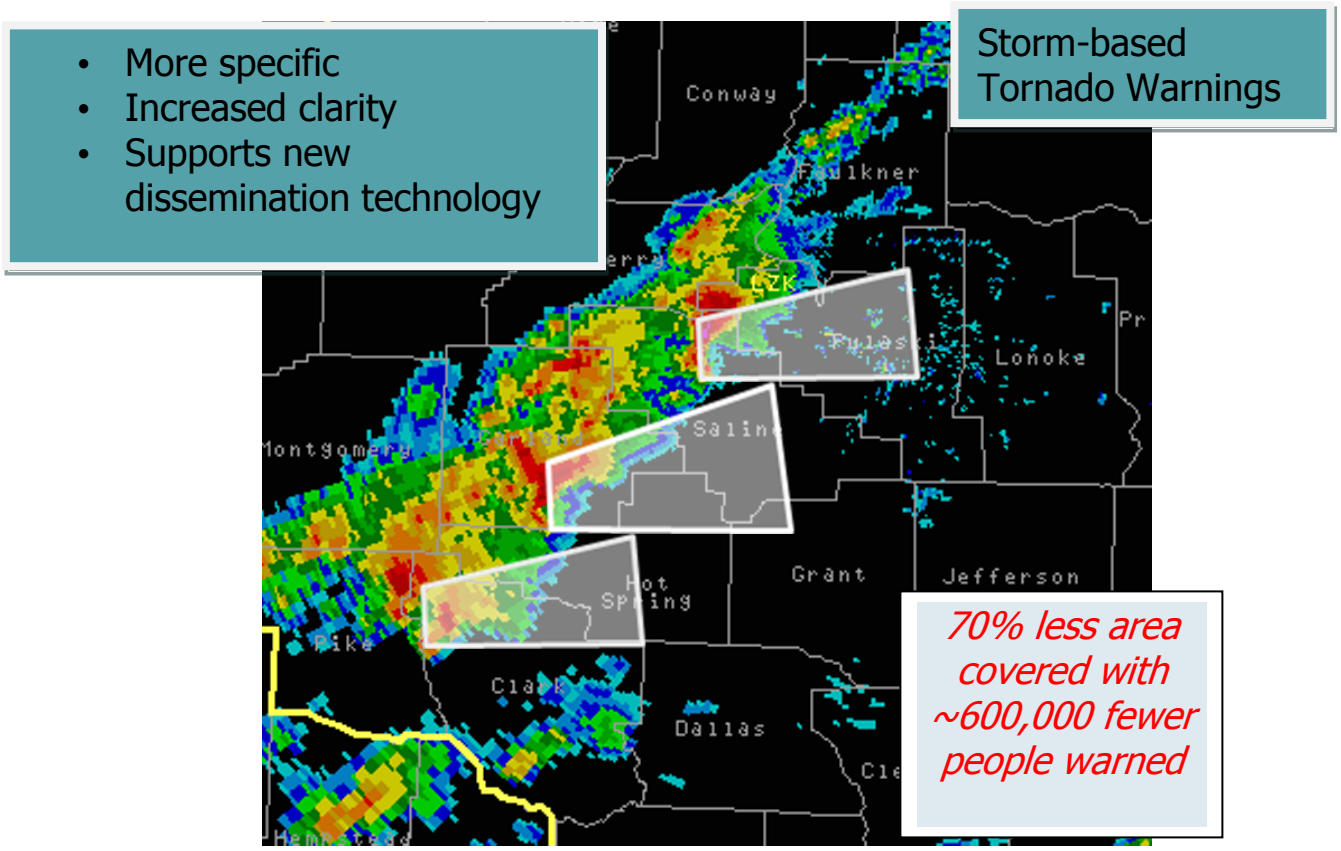


Fig. 11. Example of Storm-based warnings

Storm-based warnings are displayed graphically and are extremely adaptable to cell phones, PDAs and web technology. The Emergency Alert System is geared toward counties, so your NOAA Weather Radio will still alarm you if there is a warning anywhere in the county, but the message will provide more specific information about the storm's location and movement. With all of this new technology in mind, imagine every car equipped with the capability to alert you if you enter a warned area; imagine all overhead traffic signs are similarly equipped; imagine digital TVs that automatically come on when a warning is issued for your specific area, similar to what NOAA Weather Radio does today.

Storm-based warnings are a fundamental change in NWS warning procedures and in software requirements for private weather vendors. NOAA Weather Radio All-Hazards, the Emergency Alert System, and many tornado sirens are based on county-wide warning standards. These will have to be updated over time, but the advantages are tremendous as the new storm-based warning concept is a major enhancement in how the public receives life-saving weather information.

Oferal Wise — November 2007 Employee of the Month

Oferal is an Electronics Technician and specializes in the Automated Surface Observation System (ASOS). He also serves as a focal point to our Safety and Environmental and the Facilities program. He has 30 years combined federal service, including 20 years in the U.S. Army. Oferal received his education at Central Texas University in Killeen, TX, where he earned an Associate degree in General Studies; University of Phoenix in Phoenix, AZ, earning a Bachelor of Science in Information Systems; and completed many credit hours in various schools across the nation. He is married with four children. During his free time, Oferal enjoys being a handyman.

NOAA National Weather Service Honors Moore County Emergency Operations Center with StormReady® Commendation Award

By Steve Drillette, Warning Coordination Meteorologist

The NOAA-National Weather Service (NWS) honored Moore County, Texas Emergency Operations Center (EOC) and Coordinator Tommy Brooks with a StormReady® Commendation Award in a local ceremony on 25 October. Brooks and his staff were recognized for their timely, life-saving actions on 21 April 2007 when a strong EF2 tornado struck the town of Cactus in the Texas Panhandle.

Fig. 12: Moore County EOC Staff receive StormReady® Commendation Award

The StormReady® Commendation Award is designed to recognize formally a community or county in which lives and/or property have been saved as a result of the successful implementation of the StormReady® program.

During the early afternoon hours of 21 April, NWS Amarillo conducted a conference call with the area emergency managers and storm spotters to discuss expected severe weather during the late afternoon and evening hours. Later that afternoon, the Storm Prediction Center in Norman, OK issued a Tornado Watch for much of the Texas Panhandle. Moore County storm spotters were quickly activated and directed to the southwest part of the county.

Soon after NWS Amarillo issued a Tornado Warning, spotters confirmed two tornadoes on the ground and notified the EOC and the NWS via phone and HAM radio. Noting that one of the tornadoes was tracking toward Cactus, Brooks immediately notified the police chief and sounded the town's sirens, giving the citizens a 12 minute lead time before the tornado struck. "There is little doubt that the criteria set forth by the StormReady® program was instrumental in minimizing the casualties during that event," said Jose Garcia, Meteorologist in charge of the NWS Amarillo.

Moore County was recognized as a StormReady® county on 26 April 2006. As a result of the tornado safety training and the early warning provided, casualties from the Cactus tornado were minimal. While the tornado destroyed or damaged nearly 350 homes, there were no fatalities and only 13 injuries.

"Given the town's population of approximately 2,600 and the fact that a large majority of the residents live in mobile homes, the potential for widespread death or injuries was very real," said Bill Proenza, director of the NWS Southern Region. "The lack of fatalities and minimal injuries is a tribute to the office's early warning and excellent response by Brooks and his EOC team."

Prior to the county becoming StormReady®, there was only one siren in the town and it could only be sounded by Cactus. In October 2006, Brooks was successful in obtaining a new system covering Cactus and the adjacent community of Etter. There are now three sirens in the area which can be activated from the Cactus Police Department, the Moore County Sheriffs' Office or from the Moore County EOC.

Steve Drillette, Warning Coordination Meteorologist for the NWS Amarillo urges more communities to apply for StormReady® designation. "StormReady® helps makes communities safer. We will gladly work with any community or county in working to achieve StormReady® status." Visit www.stormready.noaa.gov or www.srh.noaa.gov/ama/stormready/index.htm for additional information on the StormReady® program.

In YOUR Community...

The National Weather Service in Amarillo has participated in numerous outreach events since October 2007. We would love to participate in an event ***In YOUR Community***!! To schedule the NWS in your next community event, please email Steve Drillette at steve.drillette@noaa.gov , or call 806-335-1121.

October 2 – Severe Weather Safety Program, Wellington, TX
Warning Coordination Meteorologist (WCM) Steve Drillette gave a weather safety presentation to 35 youth from the Wellington Opportunity Center for after school students.

October 4 – Combined Federal Campaign (CFC) Chili Cookoff, Amarillo, TX
Hydrometeorological Technician (HMT) Steve Bilodeau and his wife, Jeannie, represented National Weather Service (NWS) Amarillo at the CFC Chili Cookoff at the Veterans Administration Medical Center in Amarillo, TX. Over 200 people were present. Also, Steve's chili won 2nd place in the *Hotter Than Hot* category.

October 18 – Chamber Mega-market, Amarillo, TX
WCM Steve Drillette represented NWS Amarillo at this networking event. 180 people attended.

October 20 – Fannin Middle School History Festival, Amarillo, TX
HMT Steve Bilodeau participated in the annual school event where over 200 people attended.

October 21 – St. Thomas Health Fair, Amarillo, TX
Observing Program Leader (OPL) Tabatha Tripp and Pacific Weather Observer Tony Derda shared weather information with 150 people in attendance.

October 24 – Amarillo Independent School District/Chamber Business Tour and Luncheon, Amarillo, TX
Eighteen high school students toured the NWS Amarillo office. WCM Steve Drillette and Senior Forecaster (SF) Ken Schneider represented the NWS at the luncheon.

October 24 – Spellman & Associates Open House, Amarillo, TX
Science and Operations Officer (SOO) Richard Wynne shared information on various training opportunities.

October 25 – StormReady® Commendation Award Ceremony, Dumas, TX
Moore County Emergency Management was recognized for measures taken during the Cactus tornado. 30 local officials attended. Meteorologist-In-Charge (MIC) José Garcia and WCM Steve Drillette presented the award to Moore County Emergency Manager Tommy Brooks.

October 25 – District Disaster Committee (DDC) Organizational Meeting, Amarillo, TX
WCM Steve Drillette joined 14 DDC members at this meeting, facilitated by the Department of Public Safety.

October 30 – Carson County Local Emergency Planning Committee Meeting, White Deer, TX
WCM Steve Drillette joined 14 local officials for a Wind Farm Tabletop Exercise.

November 11 – Fire Weather Workshop, Woodward, OK
SF Ken Schneider and WCM Steve Drillette attended the annual workshop, sponsored by Oklahoma State University.

November 9 – NWS Office Tour, Amarillo, TX
Eighty students from Lakeside Elementary toured the NWS Amarillo office.

November 10 – Veteran's Day Parade, Amarillo, TX
HMT Steve Bilodeau represented the NWS Amarillo in the parade down the famous Sixth Street, where over 500 spectators were present.

November 11 & 14 – Panhandle Association of Pupil Transportation, Amarillo, TX
Twelve attended a weather hazards safety presentation at the Region 16 facility. SOO Rich Wynne and HMT Steve Bilodeau represented NWS Amarillo.

November 15 – Regional Emergency Management Meeting, Dumas, TX
MIC José Garcia and Information Technology Officer (ITO) Scott Plischke presented information on IEM Chat and storm-based warnings. Twelve were in attendance.

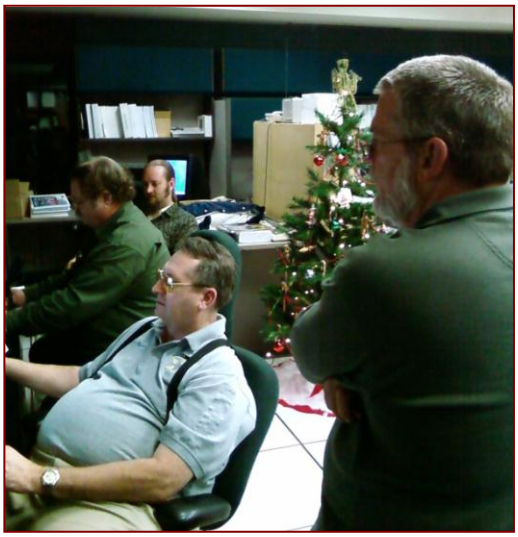
November 16 – Bonham Middle School Career Fair, Amarillo, TX
SF Roland Nuñez shared weather safety and career information to nearly 200 students and teachers.

November 19 – StormReady Recognition Ceremony, Wellington, TX
MIC José Garcia and WCM Steve Drillette presented a certificate of recognition to the City of Wellington. Judge John James received the award on behalf of the city.

November 20 – NWS Office Tour, Amarillo, TX
ITO Scott Plischke hosted 15 West Texas A&M Elementary Education Majors as they toured NWS Amarillo.

November 20 – NWS Office Tour, Amarillo, TX
ITO Scott Plischke hosted 45 West Texas A&M Elementary Education Majors as they toured NWS Amarillo.

30 November – 1 December Skywarn Recognition Event
NWS Amarillo and local HAMS (amateur radio storm spotters) participated with dozens of NWS offices across the nation; coordinated by Electronic Systems Analyst (ESA) Ken Hunter.
——————►



November 30 – Center City Christmas Lights Parade, Amarillo, TX
HMT Steve Bilodeau, SOO Rich Wynne and MIC José Garcia participated at the annual Christmas Lights Parade through downtown Amarillo. ▼

December 5 – NWS Office Tour, Amarillo, TX
ITO Scott Plischke provided an Amarillo College student a tour of NWS Amarillo.

December 3-7 – Texas Homeland Security Conference, San Antonio, TX
WCM Steve Drillette delivered a Skywarn presentation to 50 participants and hosted a booth for hundreds participating at the conference.

December 21 – StormReady Site Visit, Guymon, OK
WCM Steve Drillette and Amarillo EM Kevin Starbuck evaluated the StormReady status of Texas County.

Christine Krause — December 2007 Employee of the Month

Christine is our newest forecaster. She has been with the NWS since 1995, serving as a student employee at NWS Chicago and, most recently, as a General Forecaster at NWS Goodland, KS. Christine earned a Bachelor of Science in Meteorology from Northern Illinois University. She became the team leader for our Iron Chef Amarillo program, a member of our Marketing and Outreach team, and an assistant focal point in Hydrology. During her free time, this Chicago native enjoys cooking, decorating, gardening, reading, traveling, and going to museums, participating in outdoor activities such as hiking and boating, and exercising.

The Dryline_____1900 English Road, Amarillo, TX 79108
www.srh.noaa.gov/ama 806.335.1121

•José Garcia—*Publisher and Meteorologist-In-Charge*
• Chris Kimble—*Editor-in-Chief*
• Matthew Kramar—*Editor*
• Roland Nuñez—*Editor*
• Christine Krause—*Editor*
•Richard Wynne—*Science and Operations Officer*
•Steve Drillette—*Warning Coordination Meteorologist*