The Dryline

The Official Newsletter of the National Weather Service in Amarillo

Summer 2007 Weather Summary

By Chris Kimble, Meteorologist Intern

Summer 2007 began cooler than normal for the Panhandles region, with mild temperatures lasting into early August. Amarillo did not experience its first 90° day until 6 June, which is almost one month later than normal. Extreme heat was rare through most of the summer, and through the end of July, Amarillo only saw 25 days with high temperatures 90° or hotter and only one day of 95°. Normally through July, Amarillo sees 37.5 days with 90° or above and 16.6 days with 95° or above. Amarillo did not see 100° heat at all through the end of July. The average high temperature for the months of June and July was 87.2° which is 2.1° below the normal high temperature of 89.3° for this period.

Temperature Departures from Normal at Amarillo				
	JUN	JUL	AUG	JUN-AUG
Maximum	-2.9	-1.0	+4.3	+0.1
Minimum	-1.0	-1.2	+2.6	+0.2
Average	-2.0	-1.2	+3.4	+0.2

Fig. 1. Summer 2007 Temperature Departure from Normal at Amarillo

Though the first few months of summer started off unusually mild, August compensated for it. Amarillo recorded 24 days with high temperatures 90° or above (normal is 16.5 days), 14 days 95° or above (normal is 6.1 days), and 2 days 100° or above (normal is 0.7 days) (Figs. 2-4). The average high temperature in August was 93.0°, which is 4.3° above the normal high temperature of 88.7°. The Oklahoma Panhandle experienced even hotter temperatures this August. Guymon recorded 26 days of temperatures 90° or above, including 21 days 95° or above, and 14 days 100° or hotter. Guymon also endured 20 consecutive days with high temperatures at or above 90°, and 11 consecutive days with high temperatures 100° or above.

Fall 2007

Days 90° or hotter at Amarillo				
	JUN	JUL	AUG	Year To Date
2006	19	23	11	72
2007	5	20	24	49
Normal	12.8	19.9	16.5	54.0

Fig. 2. 2006 vs. 2007 Comparison of Amarillo temperatures at or above 90°

Days 95° or hotter at Amarillo				
	JUN	JUL	AUG	Year To Date
2006	13	9	1	31
2007	0	2	14	16
Normal	5.6	9.3	6.2	22.7

Fig. 3. 2006 vs. 2007 Comparison of Amarillo temperatures at or above 95°

Days 100° or hotter at Amarillo				
	JUN	JUL	AUG	Year To Date
2006	1	1	0	2
2007	0	0	2	2
Normal	2.2	1.7	0.7	4.9

Fig. 4. 2006 vs. 2007 Comparison of Amarillo temperatures at or above 100°

Summer weather patterns tend to be stagnant as the jet stream shifts northward into Canada. This shift brings the same type of weather for weeks or months, much like this summer. For most of June and July, the weather pattern across the central United States was dominated by a strong high pressure system over the Rocky Mountains and the Northern Plains. As a result, upper-level low pressure systems formed and persisted across the Southern Plains, producing below-normal temperatures and above-normal precipitation. The Panhandles region did not see the extensive flooding and heavy rains that other parts of Texas and Oklahoma experienced early in the summer, but the weather pattern remained cool and wet and kept the extreme heat at bay. A shift in the weather pattern began in early August, as the upper-level high pressure that had remained in place across the Northern Plains finally shifted to the south. This brought much warmer temperatures and drier conditions to the Southern Plains through the end of the month.

LOOKING AHEAD (SEP-OCT-NOV)

The fall months are a time of transition from the stagnant weather patterns of summer to the more rapid changes that often occur in winter. Severe storms are not uncommon, but the convective season normally comes to an end in October. Cold fronts begin pushing through the region early in the fall, with the first freezing temperatures normally occurring in October. Snow can fall as early as September, but is more common later in the season. Last year, the first widespread freezing temperatures occurred on 31 October 2006. The first major winter storm occurred on 29-30 November 2006, when Amarillo received 7.2 inches of snow and near-blizzard conditions.

AMARILLO NORMALS								
	Average High	Average Low	Average Temperature	Average Precipitation	Average Snowfall	DAYS ≥ 100°	DAYS ≥ 90°	DAYS ≤ 32°
SEP	81.8	56.3	69.1	1.88	T	0.3	7.0	0.2
OCT	71.8	44.6	58.2	1.50	0.4	0.0	0.8	2.3
NOV	58.4	31.8	45.1	0.68	2.4	0.0	0.0	15.9

Fig. 5. Amarillo Normal Temperatures and Precipitation

Average first 32°: 20 October (earliest 21 September 1983 – 31°).
Average first measurable snow: 19 November (earliest 29 September 1984 – 0.3 inch).

Interpreting CPC Products

By Chris Kimble, Meteorologist Intern and Climate Co-Focal Point

The Climate Prediction Center (CPC) issues long-term forecasts of average temperature and precipitation for the entire United States. These forecasts are intended to assist users in long-term planning, such as in the agriculture industry and others that may be greatly impacted by seasonal climate fluctuations. The CPC issues several types of forecast products, but sometimes it can be difficult for users to understand how to interpret the products.

All temperature and precipitation outlook products follow the same basic design. The 30-year climatological normal period (currently 1971-2000) is divided into three equal groups consisting of the warmest third, the coldest third, and the middle third. These categories can be thought of as "well-above-normal," (top ten warmest) "well-below-normal," (top ten coldest) and "near-normal." This concept is illustrated in Table 1 using the observed values for average temperature in Amarillo for the January-March periods of 1971-2000. The CPC issues a probabilistic forecast for each of the three categories, indicating the percent chance that the actual average temperature will fall in each of these categories.

Average Temperature JANUARY – MARCH	
45.3	1986
45.1	2000
44.5	1992
44.4	1999
43.6	1976
43.5	1974
43.5	1995
43.0	1981
42.8	1972
42.6	1991
42.3	1990
41.7	1971
41.7	1989
41.5	1997
41.4	1998
41.1	1994
40.7	1977
40.7	1996
40.2	1982
40.2	1987
40.0	1973
39.5	1985
39.2	1975
38.8	1980
38.6	1984
38.4	1993
38.3	1983
38.3	1988
37.0	1979
35.6	1978

Table 1. Average temperatures for January-March of 1971-2000. The shaded colors indicate into which forecast category each observed value would fall.

The temperature and precipitation outlook products are available as 6-10 day outlooks, 8-14 day outlooks, one month outlooks, and three month outlooks. The three month temperature outlook is one of the most commonly-used products issued by the CPC.

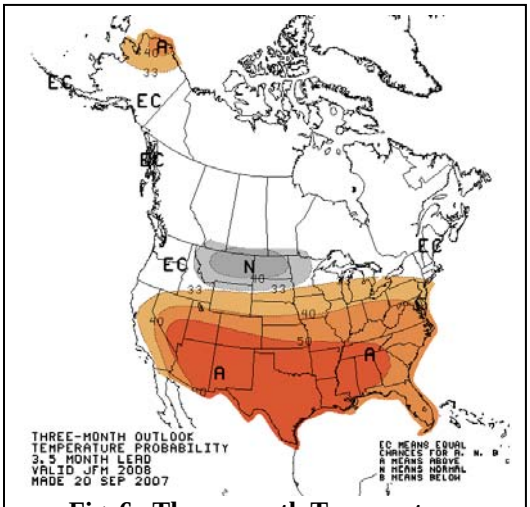


Fig. 6. Three-month Temperature Outlook for January-March 2008

The three month temperature outlook for January-March 2008 (Fig. 6) depicts a large area of orange across the Southern United States, which indicates where the CPC expects a high likelihood of well-above-normal temperatures. This does not mean that the temperature is forecast to be above-normal for this period, but it means that the CPC has assigned the greatest probability to the well-

above-normal category. There is still a small probability assigned to the below- and near-normal categories. The area of grey on the map indicates an area where the CPC has assigned the highest probability to the "near-normal" category. Areas in white and marked "EC" are places where the CPC has assigned equal chances to all three categories. In these locations there is not enough confidence to favor one category over the other, and all three categories are just as likely to occur.

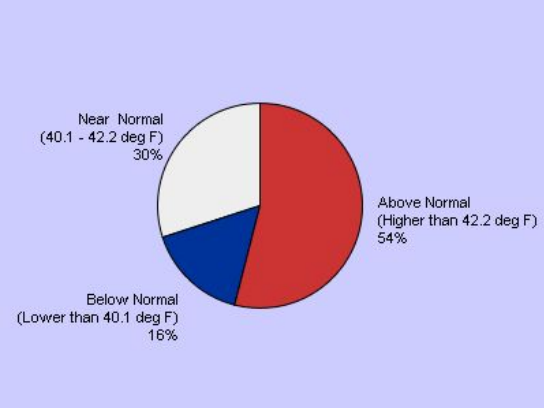


Fig. 7. The L3MTO for Amarillo valid for the period JAN-MAR 2008. The probabilistic forecast for each category is given, as well as the average temperature values which correspond to each of these categories.

One other type of product that the CPC has recently begun to issue is the Local 3-Month Temperature Outlook (L3MTO). This product is designed to give an even more specific forecast for several individual climate stations. The 3-Month temperature forecast is created on a large scale and designed for climate regions the size of medium-sized states. But the L3MTO applies local statistics to the climate region forecast and produces an even more specific (and hopefully more accurate) forecast for individual climate sites within each climate region. An example of the L3MTO product for Amarillo for January-March 2008 is shown in Fig. 7. The breakdown of the probabilities for each of the three categories gives a clear illustration of why a high probability for above-normal does not mean zero probability for below-normal. The L3MTO is available for eight locations in the Texas Panhandle and hundreds of sites nationwide.

It is important to note that CPC forecasts are for average temperature and precipitation over a long period of time. Even in an above-normal climate period there can still be very cold days. The outlook indicates into which category the average temperature for the entire period is most likely to fall. CPC Products are available at http://www.cpc.ncep.noaa.gov/ and are also on the NWS Amarillo website under the local climate section http://www.weather.gov/climate/climate_prediction.php?wfo=ama.

John "JJ" Brost
July 2007 Employee of the Month

JJ serves NWS Amarillo as a General Forecaster. Since he arrived in 2004, he has led the office Web Team and Fun FISH team (our office morale program). JJ is better known as the voice of Kids' Weather Hour – a program designed to answer weather questions by participating elementary children over a live NOAA Weather Radio broadcast. He is a graduate of Arizona State University, where he earned a Bachelor of Science in Meteorology. JJ enjoys playing sports and video games.

Weather Outlook

By Richard Wynne, Science and Operations Officer

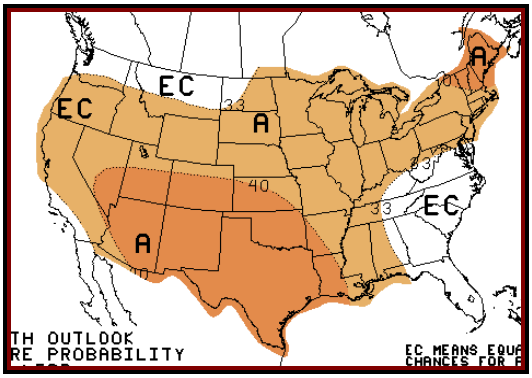


Fig. 8. October-November-December 2007 Temperature Outlook

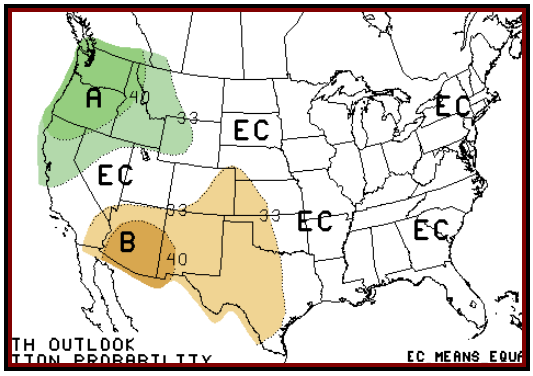


Fig. 9. October-November-December 2007 Precipitation Outlook

Temperatures

The latest 3-month outlooks issued by the Climate Prediction Center (CPC) cover October, November and December (OND). This projection (Fig. 8) shows a 45% chance for above-normal, a 33% chance for near-normal, and a 22% chance for below-normal temperatures. Normal maximum temperatures start out in the lower to middle 70s during October, then drop to the lower to middle 50s in December, while minimum temperatures are in the middle and upper 40s in October, falling into the middle and upper 20s by late December.

Precipitation

For precipitation, the chances slightly favor below-normal values (Fig. 9) over the next three months for the Texas and Oklahoma Panhandles. Normally, the Panhandles receive around 2.79 inches of rain in the OND period. Climatologically, we are moving into the driest portion of the year for the area.

El Niño/La Niña

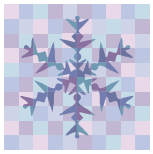
The CPC synopsis notes that we are shifting toward a La Niña pattern for the next few months. Climatologists noticed that the eastern Pacific waters are cooling from the west coast of South America westward to the International Date Line. Tropical easterly winds are strengthening, which tends to have a cooling effect on the waters of the eastern Pacific. During La Niña episodes, both the Pacific and polar jet streams shift northward over North America, taking moisture-bearing weather systems over the northern United States. This weather pattern tends to leave the southwest United States dry and warm.

Richard Wynne -- August 2007 Employee of the Month

Rich has been the Science and Operations Officer since 1994, leading all technology transfer and training activities. His expertise was instrumental in the transition to AWIPS--our operational computing system. Before arriving, Rich was an Agricultural Meteorologist for the NWS agricultural program at College Station, Texas. He earned meteorology degrees at Northern Illinois University (Bachelor of Science) and Iowa State University (Master of Science), and completed courses in Agricultural Engineering at Texas A&M University. Rich spends his free time boating, gardening, creating stained glass and listening to swing music.

Winter Is Coming – Are You Prepared?

By Roland Nuñez, Senior Forecaster



The days are getting shorter and the return of winter is just around the corner. Unlike severe thunderstorms, a major winter storm can last for several days. Heavy snowfall, freezing rain, sleet, cold temperatures and high winds can immobilize a city or region, and people can become trapped at home or in a car without utilities or other assistance.

Before winter arrives, NWS Amarillo encourages you to practice the following steps before and during the upcoming winter weather season.

Before the Storm Strikes

Vehicle preparation

It is not too early to prepare your vehicle for the winter. Here are some steps you can take to ensure your vehicle is ready for a severe winter season.

Winterize. Check the following items on your vehicle:

- Battery
- Antifreeze
- Ignition system
- Heater Brakes
- Brakes
- Thermostat
- Defroster
- Wipers
- Windshield washer fluid
- Lights, including hazard lights
- Exhaust system
- Oil level, if necessary replace with winter grade oil.
- Tires, preferably all-weather tires

Winter Storm Survival Kit. These items may become necessary when you are traveling during a winter storm:

- Mobile phone, charger and batteries
- Blankets/sleeping bags
- First-aid kit
- Knife
- Water container
- Extra clothing
- High-calorie, non-perishable food
- Large empty can to use as emergency toilet.
- Small can and waterproof matches to melt snow for drinking water.
- Sand or cat litter for tire traction
- Shovel
- Windshield scraper or brush
- Tool kit
- Tow rope
- Battery booster cables
- Compass and road map

Travel plans:

- Keep your gas tank near full to avoid ice in the tank and fuel lines.
- Avoid traveling alone.
- Let someone know your timetable and primary and secondary routes.

Home and Office preparation

Primary concerns are loss of heat, power and telephone service and a shortage of supplies if storm conditions continue for more than a day. You should keep the following items in case of an emergency:

- Flashlight and extra batteries
- Battery-powered NOAA All-Hazard Radio
- Extra food and water
- Extra medicine and baby items
- First-aid supplies
- Heating fuel
- Emergency heat source
- Fire extinguisher, smoke alarm

During a Winter Storm

If Outside

Find shelter. Try to stay dry and cover all exposed body parts.

If no shelter is available,

- Build a lean-to, windbreak or snow cave for protection from the wind.
- Build a fire for heat and to attract attention.
- Place rocks around the fire to absorb and reflect heat.
- Melt snow for drinking water. Eating snow will lower your body temperature.

If In a Vehicle

Stay in your vehicle:

- You could become disoriented in wind-driven snow and cold.
- Run the motor about 10 minutes each hour for heat.
- Open the window a little for fresh air to avoid carbon monoxide poisoning.
- Make sure the exhaust pipe is not blocked.

Be visible to rescuers:

- Turn on the dome light at night when running the engine.
- Tie a colored cloth, preferably red, to your antenna or door.
- After snow stops falling, raise the hood to indicate you need help.

Exercise. From time to time, move arms legs, fingers and toes vigorously to keep blood circulating and to keep warm.

If Inside

Stay inside! When using alternate heat from a fireplace, wood stove, space heater, etc., use fire safeguards and properly ventilate.

When no heat is available:

- Close off unneeded rooms.
- Stuff towels or rags in cracks under doors.
- Cover windows at night.
- Eat and drink. Food provides the body with energy for producing its own heat. Keep the body replenished with fluids to prevent dehydration.
- Wear layers of loose-fitting, lightweight, warm clothing. Remove layers to avoid overheating, perspiration and subsequent chill.

What To Listen For During The Winter

NWS Amarillo issues outlooks, watches, warnings and advisories for all winter hazards. Here's what they mean:

Winter Storm Outlook is issued in the Hazardous Weather Outlook when conditions are favorable for a hazardous winter weather event to develop in the next 2-7 days. It is intended to provide information to those who need considerable lead time to prepare for the event.

Winter Storm Watch is issued when conditions are favorable for a hazardous winter weather event to develop, but the occurrence is uncertain. Watches are issued 12 to 36 hours in advance of the event, and intended to provide enough lead time.

Winter Storm Warning is issued when hazardous winter weather is occurring, imminent, or has a high probability of occurrence. Life-threatening severe winter conditions (heavy snow, blowing snow, ice, sleet and/or wind chills) are occurring or will begin within 24 hours.

A Winter Weather Advisory is used to highlight any hazardous winter weather that causes significant inconveniences, and if caution is not exercised, may lead to life-threatening situations.

CALL FOR COOP OBSERVERS

By Tabatha Tripp, Hydrometeorological Technician, and Chris Kimble, Meteorologist Intern

The Cooperative Observer Program (COOP) is a nationwide climate monitoring network of approximately 12,000 volunteer citizens and institutions that observe and report weather information on a 24-hour basis. These observations form the backbone of temperature and precipitation records used in determining the climate of the United States.

These observations include 24-hour maximum and minimum temperatures, 24-hour liquid precipitation, snowfall, and snow depth. Climatic atlases for the U.S. are based on decades of observations from cooperative observers across the nation. This cooperative weather network is a vital part of the nation's infrastructure, and is one of the most comprehensive observing networks for monitoring these weather elements anywhere in the world.

Now is your opportunity to be a part of this important program to provide weather information for your city! If you or someone you know would like to become a cooperative weather observer, please contact Tabatha Tripp at the National Weather Service by calling (806) 335-1121 for more information. Internet access is required for reporting the data. Volunteers are welcome from all over the Texas and Oklahoma Panhandles, but there is a special need for observers in and near the following locations:

In the Texas Panhandle:
Canadian, Dalhart, Miami, Spearman, Stinnett, Sunray,
Texline, Wildorado and northwestern Roberts County

In the Oklahoma Panhandle:
Bryans Corner, Kenton and Keyes

José Garcia — September 2007 Employee of the Month

For 16 years, José has provided leadership to NWS Amarillo as the first Warning Coordination Meteorologist (1991-1993) and now as our Meteorologist-In-Charge (1993-current). He has also served at NWS Albuquerque and the National Meteorological Center in Washington D.C., now known as the Hydrometeorological Prediction Center, during his 25 year career. José was educated at the University of Texas at Austin, where he earned a Bachelor in Engineering (Atmospheric) Science, and at Texas A&M University, receiving a Master of Public Administration. He was the first winner of the National Isaac Cline Award for Leadership. José loves all sports and is a big fan of the Texas Longhorns, San Antonio Spurs, Houston Astros and Dallas Cowboys. His other hobbies include refereeing soccer games (youth through college) and playing poker.

NWS Spotters & Cooperative Observers Attend Annual Appreciation Day

By Steve Drillette, Warning Coordination Meteorologist

NWS Amarillo held its 7th annual Appreciation Day on Saturday, 11 August 2007. Appreciation Day is one way our office chooses to recognize and express its gratitude for all of its volunteers, partners and valued customers. Approximately 100 people were in attendance to share their weather experiences and to enjoy a complimentary meal. This year, NWS Amarillo prepared and served the meal, which included smoked chicken and brisket, grilled hotdogs and all the trimmings. In addition, NWS staff provided in-depth office tours and gave away numerous door prizes.

Fig. 10. Brandon Whittington (right) receives 2007 "Spotter of the Year" Individual award from WCM Steve Drillette.

For the first time in what will become an annual recognition, "Spotter of the Year" awards were presented to an individual and group who demonstrated exemplary service during severe weather. The Individual award was presented to Mr. Brandon Whittington (Fig. 10) of Booker, Texas. Brandon provided excellent reports on numerous severe weather events that affected the eastern Oklahoma and northeastern Texas Panhandles. Brandon was the first to report the touchdown of the 28 March killer tornado that struck Beaver County, Oklahoma. During the entire life span of the tornado, Brandon continuously provided critical information to the NWS. The "Spotter of the Year" Group award went to the Potter & Randall Counties Amateur Radio Emergency Service (ARES) / Radio Amateur Civil Emergency Service (RACES) organization (Fig. 11). These amateur radio spotters, also known as HAMS, are the longest serving spotter group in the Panhandles. The net control, or "dispatch center," is located at the NWS Amarillo office and allows reports to be received at the NWS office directly. The HAMS were critical in all of the big tornado outbreaks, but also provided timely reports in many of the less significant severe weather events. "Storm spotters serve as the eyes and ears for the NWS," said Meteorologist-In-Charge Jose Garcia. "No doubt, the information they provide is an essential part of the warning process."

Fig. 11. Potter/Randall Counties ARES/ RACES team earned 2007 "Spotter of the Year" Group award. From left to right, Howard Palecheck, Ronnie Kerr, Bob Sanders, Chip Andrews and Vernon Alexander.

Once again, the NWS Amarillo would like to thank Wal-Mart of Amarillo for sponsoring the Appreciation Day. Without their generous support, the success of the event would not be possible!

In YOUR Community...

The National Weather Service in Amarillo has participated in numerous outreach events since July 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.

July 14 Weather Safety Program, Dallas, TX
MIC Jose Garcia gave weather safety presentations to members of the North Texas Soccer Association

July 26 NWS Office Tour, Amarillo, TX
Students from Footprints Day School toured the Amarillo NWS office.

July 30 NWR Program at Senior Citizens Center, Stratford, TX
WCM Steve Drillette and HMT Steve Bilodeau spoke to local residents on the benefits of weather radio and also programmed radios.

July 31 NWS Office Tour, Amarillo, TX
A second group of students from Footprints Day School toured the Amarillo NWS office.

August 3 NWS Office Tour, Amarillo, TX
A third group of students from Footprints Day School toured the Amarillo NWS office.

August 11 NWS Spotter Appreciation Day, Amarillo, TX
7th annual Spotter & Cooperative Observer Appreciation Day was held at the NWS office.

← *Meteorologist-In-Charge José Garcia, Electronic Technician Dave Wilburn and General Forecaster Jason Jordan are ready to serve your barbeque needs.*

August 18 KidFest, Amarillo, TX
NWS staffed a booth at Amarillo's first KidFest event, and interacted with thousands of children at Thompson Park.

HMT Tabatha Tripp and Senior Forecaster Roland Nuñez visit with a few of the many children at KidFest →

August 18 Polk Street Block Party, Amarillo, TX
NWS Amarillo served as the official weather observers at the annual Center City event.

August 20 NWR Program, Wellington, TX
WCM Steve Drillette provided the local Lions Club a program on the benefits of weather radio.

August 25 Top of Texas Rodeo Parade , Pampa, TX
HMT Steve Bilodeau and wife Jeannie represented the Amarillo NWS in a local rodeo parade.

September 11 ARES Meeting , Amarillo, TX
WCM Steve Drillette presented the local Amateur Radio group with the group Storm Spotter of the Year Award.

September 12-13 Chamber BBQ, Amarillo, TX
NWS staff participated in the annual Chamber BBQ event.

General Forecaster J.J. Brost serve one of many hungry guests at the Chamber BBQ. →

September 15 Tri-State Rodeo Parade, Amarillo, TX
HMT Steve Bilodeau, along with other staff, represented the NWS Amarillo in a local parade.

← *HMT Steve Bilodeau and his wife Jeannie, join Pacific Weather observer, Tony Derda at the Tri-State Rodeo Parade.*

September 17 Senior Citizens Health Fair, Amarillo, TX
Senior Forecaster Roland Nuñez provided weather safety information to senior citizens at the Tri-State Fair.

September 20-21 NWS Office Tour, Amarillo, TX
Local Home School Association toured the Amarillo NWS over a two day period.

Changes to Aviation Forecasts

By Mike Johnson, General Forecaster and Aviation Focal Point

On September 30, 2007, the National Weather Service retired the Transcribed Weather Broadcast (TWEB) products for the Continental United States. The TWEB products were forecasts of visibility, wind, sky cover and weather conditions along a route between specified airports. These forecasts were issued every six hours. The TWEBs were discontinued because of a lack of demand.

The Amarillo NWS will continue to support the aviation community by producing Terminal Aerodrome Forecasts (TAFs) for Amarillo, Dalhart and Guymon, which can be found at http://www.srh.noaa.gov/ama/Aviation/index.htm. These are point forecasts for the individual airports that include the same meteorological fields contained in the TWEBs. These forecasts are produced every six hours and are amended as conditions warrant.

Foreign Students Visit Amarillo

By Matthew Kramar, General Forecaster, and Ed Andrade, Senior Forecaster

José Conde Most college students spend their summers working, traveling or just relaxing. Not so for José Conde, one of several students from the University of Puerto Rico—Mayaguez who secured internships with National Weather Service Forecast Offices (NWS WFO) throughout the country. José was the residential guest of Forecaster JJ Brost and Electronics Technician David Wilburn during his stay of several weeks (Fig. 12).

Fig. 12. José Conde (center) poses with hosts Dave Wilburn (left) and JJ Brost.

José was able to experience all aspects of operations at NWS WFO Amarillo, from sunny days to severe thunderstorms—in fact, on one day during his tenure, a high-based mesocyclone was visible from the office window while larger than golfball size hail fell at WFO Amarillo, the first time in at least four years that hail larger than quarter size was measured at the office itself.

In addition to observing forecasting operations, José was tasked with the completion of a project under the supervision of local forecasters. In collaboration with Forecaster Matthew Kramar, Science and Operations Officer Richard Wynne, and Forecasters Jason Jordan and JJ Brost, José examined one of the several tornado outbreak cases from the Texas Panhandle this year. His project, entitled *The 21 April Tornado Outbreak—A Classic Severe Weather Setup for the Texas and Oklahoma Panhandles*, examined the synoptic-scale (weather system-scale) features that contributed to this tornado outbreak, and identified some reasons why tornado intensity and quantity seemed to increase near- and especially after-dark (which is somewhat unusual, although was very common this year).

He took home with him a glimpse into life in the Panhandles—from sightseeing in the Palo Duro Canyon to experiencing a severe thunderstorm, and through his project, a wealth of meteorological knowledge to apply to his present and future coursework.

Fig. 13. Helge Tuschy at Appreciation Day

Helge Tuschy The NWS Amarillo also hosted another guest from overseas this summer. Helge Tuschy (Fig. 13) is from Bad Schussenried in the southern part of Germany and is a fourth year meteorology student at the University of Innsbruck in Austria. He came to the United States to observe National Weather Service operations in the United States and then compare them to weather service operations in Germany and Austria. Helge worked rotating shifts and assisted the forecasters by analyzing surface and upper air maps. He also sat with some of the forecasters and observed daily operations regarding the public and aviation forecast programs as well as the warnings program. Helge spent one month in Amarillo from mid July through mid August. He also visited the NWS in Amarillo in 2002 and 2004.

Kids Weather Hour

Kids Weather Hour will once again allow school kids from across the Panhandles to send in weather questions to be answered live on NOAA Weather Radio (NWR) 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 NWR. This year will mark the fourth anniversary of Kids' Weather Hour and we here at the Weather Service are very excited to participate again in this fun and exciting program. Also, with the installation of new transmitters across the Panhandles, NWR will be able to reach even more schools this year.

Recently, we mailed information packets to every elementary school in the Amarillo, Borger, Guymon, Pampa and Perryton listening areas. This information is designed to help school teachers register their classes for a future Kids' Weather Hour broadcast. Students from participating classes will be eligible for prizes, and every school involved in our program receives one free NOAA Weather Radio courtesy of BWXT Pantex.

If you are interested in Kids' Weather Hour or information on whether your area is in current or future transmitter range, please send an e-mail to John Brost at John.Brost@noaa.gov for information.

Farewell to Fellow Employees

Once again, there have been some recent staff changes at NWS Amarillo. In July, the office bade farewell to Journeyman Forecaster **David Hennig** (Fig. 14). David graduated from Texas A&M University before serving in the Air Force for five years, providing weather support during the U.S. war in Afghanistan. David began his NWS career at Amarillo in 2002. Not only was David an outstanding forecaster, he served in many roles within the office: he was the program leader for the computer workstations that the staff use to perform their jobs; he managed the operational programming for this system and kept the staff informed and updated on software changes; he was also the leader of the Gridded Forecast team and was instrumental in educating the staff on ways to improve the accuracy of our forecasts. David has been promoted to a Senior Forecaster position in Midland, Texas.

(Continued on next page)

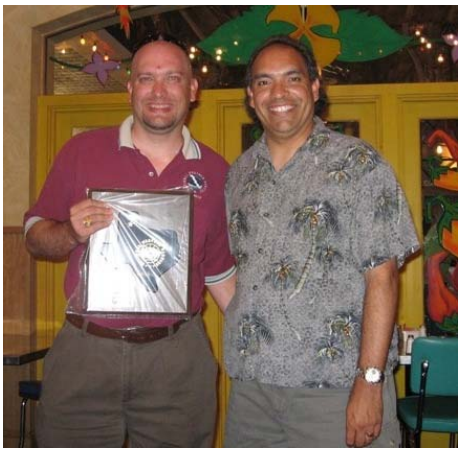


Fig. 14. David Hennig (left) and José Garcia.

At the end of August, the staff also said goodbye to our Observing Program Leader, **Glen Woodall** (Fig. 15), who retired after 48 years of federal service. He spent the first 20 years of his service to our country in the United States Coast Guard and then retired as a Chief Boatswain Mate. Immediately following his Coast Guard career, Glen began his new career with the National Weather Service. He spent 21 of his 28 National Weather Service years at offices in Alaska. He served as the Official in Charge at St. Paul Island and as a Hydro-Meteorological Technician at Fairbanks. For the past seven years, Glen served as the Observing Program Leader at NWS Amarillo.

Fig. 15. Glen Woodall

Winter Weather Awareness Day
December 11, 2007

WFO Amarillo encourages everyone to prepare for this coming winter. For Winter Weather Safety Information go to:

http://www.srh.noaa.gov/ama/winter_weather_awareness/index.htm

To schedule a Winter Weather Safety presentation for your school or organization, call NWS Amarillo at 806-335-1121

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*
•Richard Wynne—*Science and Operations Officer*
•Steve Drillette—*Warning Coordination Meteorologist*